SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION

This Section must be completed for all projects.

Facility/Project Identification
Facility Name: Rush Specialty Hospital

Street Address: Northwest Corner of Harrison and Loomis Street (legal description provided)					
City and Zip Code: Chicago 6					
County: Cook	Health Service Area: V	l Health Planning Area: A-02			
Applicant(s) [Provide for ea		0.220)]			
Exact Legal Name: Rush Univ					
Street Address: 1725 West Ha	·				
City and Zip Code: Chicago, I					
Name of Registered Agent: Ca	<u> </u>				
	ess: 1700 West Van Buren Str	eet, Suite 301			
Registered Agent City and Zip					
	er: K. Ranga Rama Krishnan,				
	est Van Buren Street, Suite 30	1			
CEO City and Zip Code: Chica					
CEO Telephone Number: 312	-942-6886				
Type of Ownership of Ap	plicants				
	_				
Non-profit Corporation		rtnership			
For-profit Corporation		vernmental			
Limited Liability Comp	oany ∐ So	le Proprietorship			
Compounding a seed live in	and liability as as a since as a second	avide on Illinois contificate of most			
	led liability companies must pr	ovide an Illinois certificate of good			
standing.	wide the name of the state in a	which they are organized and the name and			
	er specifying whether each is				
address of each partit	er specifying whether each is	a general or illilleu partilet.			
ADDEND DOCUMENTATION AS AT	TACUMENT 4 IN NUMERIC SECUR	NITIAL OPPORT AFTER THE LACT PAGE OF THE			
APPEND DOCUMENTATION AS <u>AT</u> APPLICATION FORM.	TACHMENT 1, IN NUMERIC SEQUE	NTIAL ORDER AFTER THE LAST PAGE OF THE			
		,			
	receive ALL correspondence	or inquiries]			
Name: Mark J. Silberman and	Juan Morado Jr.				
Title: CON Counsel	adlandar Canlair O Airrir ff LL	<u> </u>			
	edlander Coplan & Aronoff LLI				
Address: 71 South Wacker Dr		UO			
Telephone Number: 312.212.4		do@hanaaahlaw.aam			
E-mail Address: MSilberman@	<u>voeneschiaw.com</u> and <u>Jiviorac</u>	io(@peneschiaw.com			
Fax Number: 312.767.9192	and a factor of the state of th				
	n who is also authorized to disc	cuss the application for permit]			
Name: Katherine B. Fishbein					
Title: Assistant General Couns					
Company Name: Rush Univer	-	1,00040			
	en Street, Suite 301 Chicago, I	L 00012			
Telephone Number: 312-942-					
E-mail Address: Katherine fis	npein@rush.edu				
Fax Number: 312-942-4233					

SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION

This Section must be completed for all projects.

Facility/Project Identification

Facility Name: Rush Specialty Hospital
Street Address: Northwest Corner of Harrison and Loomis Street (legal description provided)
City and Zip Code: Chicago 60612
County: Cook Health Service Area: VI Health Planning Area: A-02
Applicant(s) [Provide for each applicant (refer to Part 1130.220)]
Exact Legal Name: Rush University Medical Center
Street Address: 1725 West Harrison Street, Suite 364
City and Zip Code: Chicago, IL 60612
Name of Registered Agent: Carl Bergetz
Registered Agent Street Address: 1700 West Van Buren Street, Suite 301
Registered Agent City and Zip Code: Chicago, IL 60612
Name of Chief Executive Officer: Dr. Omar Lateef
CEO Street Address: 1725 West Harrison Street, Suite 364
CEO City and Zip Code: Chicago, IL 60612
CEO Telephone Number: 312-942-6886
Time of Ourseachin of Applicants
Type of Ownership of Applicants
Non-profit Corporation
☑ Non-profit Corporation ☐ Partnership ☐ For-profit Corporation ☐ Governmental
Limited Liability Company Sole Proprietorship Other
 Corporations and limited liability companies must provide an Illinois certificate of good
standing.
 Partnerships must provide the name of the state in which they are organized and the name and
address of each partner specifying whether each is a general or limited partner.
APPEND DOCUMENTATION AS <u>ATTACHMENT 1</u> , IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE
APPLICATION FORM.
Primary Contact [Person to receive ALL correspondence or inquiries]
Name: Mark J. Silberman and Juan Morado Jr.
Title: CON Counsel
Company Name: Benesch Friedlander Coplan & Aronoff LLP
Address: 71 South Wacker Dr., Suite 1600, Chicago, IL 60606
Telephone Number: 312.212.4952 and 312.212.4967
E-mail Address: MSilberman@beneschlaw.com and JMorado@beneschlaw.com
Fax Number: 312.767.9192
Additional Contact [Person who is also authorized to discuss the application for permit]
Name: Katherine B. Fishbein
Title: Assistant General Counsel
Company Name: Rush University Medical Center
Address: 1700 West Van Buren Street, Suite 301 Chicago, IL 60612
Telephone Number: 312-942-6886
E-mail Address: Katherine fishbein@rush.edu
Fax Number: 312-942-4233

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Facility/Project Identification
Facility Name: Rush Specialty Hospital
Street Address: Northwest Corner of Harrison and Loomis Street (legal description provided)
City and Zip Code: Chicago 60612
County: Cook Health Service Area: VI Health Planning Area: A-02
Applicant(s) [Provide for each applicant (refer to Part 1130.220)]
Exact Legal Name: Rush Partners, LLC
Street Address: 1653 West Congress Parkway
City and Zip Code: Chicago, IL 60612
Name of Registered Agent: Carl Bergetz
Registered Agent Street Address: 1700 West Van Buren Street, Suite 301
Registered Agent City and Zip Code: Chicago, IL 60612
Name of Chief Executive Officer: Wayne Keathley, President
CEO Street Address: 1700 West Van Buren Street, Suite 301
CEO City and Zip Code: Chicago, IL 60612
CEO Telephone Number: 312-942-6886
Type of Ownership of Applicants
Non-profit Corporation Partnership
For-profit Corporation Governmental
☐ Sole Proprietorship ☐ Other
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Fax Number: 312.767.9192
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Title: Assistant General Counsel
Company Name: Rush University Medical Center
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Telephone Number: 312-942-6886
E-mail Address: Katherine fishbein@rush.edu
Fax Number: 312-942-4233

Page 3

SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION

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Facility/Project Identification
Facility Name: Rush Specialty Hospital
Street Address: Northwest Corner of Harrison and Loomis Street (legal description provided)
City and Zip Code: Chicago 60612
County: Cook Health Service Area: VI Health Planning Area: A-02
Applicant(s) [Provide for each applicant (refer to Part 1130.220)]
Exact Legal Name: Select Medical Corporation
Street Address: 4714 Gettysburg Road
City and Zip Code: Mechanicsburg, PA 17055
Name of Registered Agent: The Corporation Trust Company
Registered Agent Street Address: Corporation Trust Center- 1209 Orange Street
Registered Agent City and Zip Code: Wilmington, DE 19801
Name of Chief Executive Officer: David S. Chernow
CEO Street Address: 4714 Gettysburg Road
CEO City and Zip Code: Mechanicsburg, PA 17055
CEO Telephone Number: 717-972-1100
Type of Ownership of Applicants
Type of Ownership of Applicants
☐ Non-profit Corporation ☐ Partnership
For-profit Corporation Governmental
Limited Liability Company Sole Proprietorship Other
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ADDENIC DOCUMENTATION AS ATTACHMENT 4 IN NUMERIC OFFICIAL ODDER AFTER THE LAST RACE OF THE
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Drive on Contact [Days on to making All as making all as making a spin making a
Primary Contact [Person to receive ALL correspondence or inquiries] Name: Mark J. Silberman and Juan Morado Jr.
Title: CON Counsel
Company Name: Benesch Friedlander Coplan & Aronoff LLP
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Telephone Number: 312.212.4952 and 312.212.4967
E-mail Address: MSilberman@beneschlaw.com and JMorado@beneschlaw.com
Fax Number: 312.767.9192
Additional Contact [Person who is also authorized to discuss the application for permit]
Name: Patrick O'Donnell Title: Director of Business Development Strategy
Title: Director of Business Development Strategy Company Name: Select Medical Corporation
Address: 4714 Gettysburg Road, Mechanicsburg, PA 17055 Telephone Number: 717-972-1100
E-mail Address: pjodonnell@selectmedical.com
Fax Number: N/A
I ax mullipel. m/A

Page 4

SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION

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Facility/Project Identification
Facility Name: Rush Specialty Hospital
Street Address: Northwest Corner of Harrison and Loomis Street (legal description provided)
City and Zip Code: Chicago 60612
County: Cook Health Service Area: VI Health Planning Area: A-02
Applicant(s) [Provide for each applicant (refer to Part 1130.220)]
Exact Legal Name: Select Illinois Holdings, Inc.
Street Address: 4714 Gettysburg Road
City and Zip Code: Mechanicsburg, PA 17055
Name of Registered Agent: The Corporation Trust Company
· · · · · · · · · · · · · · · · · · ·
Registered Agent Street Address: Corporation Trust Center- 1209 Orange Street
Registered Agent City and Zip Code: Wilmington, DE 19801
Name of Chief Executive Officer: David S. Chernow
CEO Street Address: 4714 Gettysburg Road
CEO City and Zip Code: Mechanicsburg, PA 17055
CEO Telephone Number: 717-972-1100
Type of Ownership of Applicants
Non-profit Corporation Partnership
For-profit Corporation Governmental
☐ Limited Liability Company ☐ Sole Proprietorship ☐ Other
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Title: CON Counsel
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Telephone Number: 312.212.4952 and 312.212.4967
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Fax Number: 312.767.9192
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Title: Director of Business Development Strategy
Company Name: Select Medical Corporation
Address: 4714 Gettysburg Road, Mechanicsburg, PA 17055
Telephone Number: 717-972-1100
E-mail Address: pjodonnell@selectmedical.com
Fax Number: N/A

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Street Address: Northwest Corner of Harrison and Loomis Street (legal description provided)
City and Zip Code: Chicago 60612
County: Cook Health Service Area: VI Health Planning Area: A-02
Applicant(s) [Provide for each applicant (refer to Part 1130.220)]
Exact Legal Name: Rush Specialty Hospital, LLC
Street Address: 4714 Gettysburg Road
City and Zip Code: Mechanicsburg, PA 170550
Name of Registered Agent: CT Corporation System
Registered Agent Street Address: 208 South LaSalle Street, Suite 814
Registered Agent City and Zip Code: Chicago, IL 60604
Name of Chief Executive Officer: David S. Chernow
CEO Street Address: 4714 Gettysburg Road
CEO City and Zip Code: Mechanicsburg, PA 17055
CEO Telephone Number: 717-972-1100
<u> </u>
Type of Ownership of Applicants
☐ Non-profit Corporation ☐ Partnership
For-profit Corporation Governmental
\[\begin{align*} \begin{align*} \left \text{Sole Proprietorship} \end{align* \] Other \[\begin{align*} \left \text{Sole Proprietorship} \] \[\begin{align*} Sol
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E-mail Address: MSilberman@beneschlaw.com and JMorado@beneschlaw.com
Fax Number: 312.767.9192
Additional Contact [Person who is also authorized to discuss the application for permit]
Name: Patrick O'Donnell
Name: I attick o Bonnell
Title: Director of Business Development Strategy
Title: Director of Business Development Strategy
Title: Director of Business Development Strategy Company Name: Select Medical Corporation
Title: Director of Business Development Strategy Company Name: Select Medical Corporation Address: 4714 Gettysburg Road, Mechanicsburg, PA 17055

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

Post Permit Contact

[Person to receive all correspondence subsequent to permit issuance-THIS PERSON MUST BE EMPLOYED BY THE LICENSED HEALTH CARE FACILITY AS DEFINED AT 20 ILCS 3960]

EMPLOYED BY THE LICENSED HEALTH CARE FACILITY AS DEFINED AT 20 ILCS 3960]
Name: Thomas Mullin
Title: Executive Vice President Operations
Company Name: Rush Specialty Hospital
Address: 4714 Gettysburg Road
Telephone Number: 717-972-1100
E-mail Address: tpmullin@selectmedical.com
Fax Number: N/A
Site Ownership
[Provide this information for each applicable site]
Exact Legal Name of Site Owner: Rush University Medical Center
Address of Site Owner: 1700 West Van Buren Street, Suite 301 Chicago, IL 60612
Street Address or Legal Description of the Site:
Proof of ownership or control of the site is to be provided as Attachment 2. Examples of proof of ownership

APPEND DOCUMENTATION AS <u>ATTACHMENT 2</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

are property tax statements, tax assessor's documentation, deed, notarized statement of the corporation

Operating Identity/Licensee

Provide this information	for each	applicable	facility and	insert after	this pa	ge.1

attesting to ownership, an option to lease, a letter of intent to lease, or a lease.

	11		1 3 3		
Exact Le	egal Name: Rush Specialty Hospital, L	.LC			
Street A	Address: Northwest Corner of Harrison	and Loon	nis Street (legal description pro	vided)	
	Non-profit Corporation For-profit Corporation Limited Liability Company Corporations and limited liability comp Partnerships must provide the name of each partner specifying whether each Persons with 5 percent or greater in ownership.	of the state is a gene	e in which organized and the na ral or limited partner.	ame and a	address of
	DOCUMENTATION AS <u>ATTACHMENT 3</u> , IN N TION FORM.	IUMERIC S	EQUENTIAL ORDER AFTER THE LA	ST PAGE C	OF THE

Organizational Relationships

Provide (for each applicant) an organizational chart containing the name and relationship of any person or entity who is related (as defined in Part 1130.140). If the related person or entity is participating in the development or funding of the project, describe the interest and the amount and type of any financial contribution.

APPEND DOCUMENTATION AS <u>ATTACHMENT 4</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT - July 2018 Edition

Flood Plain Requirements

[Refer to application instructions.]

Provide documentation that the project complies with the requirements of Illinois Executive Order #2006-5 pertaining to construction activities in special flood hazard areas. As part of the flood plain requirements, please provide a map of the proposed project location showing any identified floodplain areas. Floodplain maps can be printed at www.FEMA.gov or www.illinoisfloodmaps.org. This map must be in a readable format. In addition, please provide a statement attesting that the project complies with the requirements of Illinois Executive Order #2006-5 (http://www.hfsrb.illinois.gov). NOTE: A SPECIAL FLOOD HAZARD AREA AND 500-YEAR FLOODPLAIN DETERMINATION FORM has been added at the conclusion of this Application for Permit that must be completed to deem a project complete.

APPEND DOCUMENTATION AS <u>ATTACHMENT 5</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

Historic Resources Preservation Act Requirements

[Refer to application instructions.]

Provide documentation regarding compliance with the requirements of the Historic Resources Preservation Act.

APPEND DOCUMENTATION AS $\underline{\mathsf{ATTACHMENT}}$ 6, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

DESCRIPTION OF PROJECT

1.	P	'roject	Cla	assiti	ca	tion	
					_		

[Check	k those applicable - refer to Part 1110.20 and Part 1120.20(b))]
Part	1110 Classification :	
\boxtimes	Substantive	
	Non-substantive	

2. Narrative Description

In the space below, provide a brief narrative description of the project. Explain **WHAT** is to be done in **State Board defined terms**, **NOT WHY** it is being done. If the project site does NOT have a street address, include a legal description of the site. Include the rationale regarding the project's classification as substantive or non-substantive.

Rush Specialty Hospital, LLC ("Rush Specialty Hospital" or "RSH"), proposes to establish a 100-bed freestanding specialty hospital dedicated to providing long-term acute care and comprehensive inpatient rehabilitation services. The facility will be five stories and will be located in Chicago, Illinois, HSA 6. Importantly, this hospital will be located alongside the Illinois Medical District. While the facility does not have an assigned address at this time, the facility will be constructed on the Northwest corner of Harrison Street and Loomis Avenue. The proposed sites upon which this structure will sit currently has the following assigned addresses: 1404-1555 West Congress Parkway, 500-532 South Loomis Avenue, 1400-1554 West Harrison Street, 501-531 South Ashland Avenue.

The proposed facility will be comprised of 56 comprehensive rehabilitation beds and 44 long-term acute care beds. Rush University Medical Center will file a Certificate of Exemption to discontinue its existing 59-bed comprehensive rehabilitation unit, the actual discontinuation of which will be contingent upon approval of this project. The discontinuation of its 59-bed unit is envisioned to be effective upon the licensing and opening of the proposed 100 bed-hospital. This will be done so as to avoid any disruption in access to this necessary care. However, the ultimate impact of this proposed project will be to reduce the bed inventory for the comprehensive rehabilitation category of service by three beds.

This is classified as a substantive project because it proposes the establishment of a healthcare facility.

Rush Specialty Hospital is a joint venture project between the Rush University Medical Center and Select Medical Corporation. Select Illinois Holdings, a Delaware corporation, is a subsidiary of Select Medical Corporation also a Delaware corporation, and will maintain a 73.5%% ownership interest in the Licensee, Rush Select Hospital, LLC. Rush University Medical Center, an Illinois corporation through its subsidiary Rush Partners, LLC will maintain a 26.5% ownership interest in the Licensee.

As proposed the total project cost is \$109,549,205.

Project Costs and Sources of Funds

Complete the following table listing all costs (refer to Part 1120.110) associated with the project. When a project or any component of a project is to be accomplished by lease, donation, gift, or other means, the fair market or dollar value (refer to Part 1130.140) of the component must be included in the estimated project cost. If the project contains non-reviewable components that are not related to the provision of health care, complete the second column of the table below. Note, the use and sources of funds must be equal.

Project Costs	s and Sources of Fund	s	
USE OF FUNDS	CLINICAL	NONCLINICAL	TOTAL
Preplanning Costs	\$593,952	\$629,570	\$1,223,522
Site Survey and Soil Investigation	0	0	0
Site Preparation	\$1,792,016	\$1,899,476	\$3,691,492
Off Site Work	\$441,367	\$467,833	\$909,200
New Construction Contracts	\$34,490,182	\$36,558,406	\$71,048,588
Modernization Contracts	0	0	0
Contingencies	\$3,438,838	3,645,049	\$7,083,887
Architectural/Engineering Fees	\$2,005,000	\$3,133,795	\$5,138,795
Consulting and Other Fees	\$3,127,358	\$3,314,891	\$6,442,249
Movable or Other Equipment (not in construction contracts)	\$3,536,694	\$3,748,774	\$7,285,468
Bond Issuance Expense (project related)	0	0	0
Net Interest Expense During Construction (project related)	\$1,773,935	\$1,880,310	\$3,654,245
Fair Market Value of Leased Space or Equipment	0	0	0
Other Costs to Be Capitalized	\$1,491,170	\$1,580,589	\$3,071,759
Acquisition of Building or Other Property (excluding land)	0	0	0
TOTAL USES OF FUNDS	\$52,690,512	\$56,858,693	\$109,549,205
SOURCE OF FUNDS	CLINICAL	NONCLINICAL	TOTAL
Cash and Securities	\$52,690,512	\$56,858,693	\$109,549,205
Pledges			
Gifts and Bequests			
Bond Issues (project related)			
Mortgages			
Leases (fair market value)			
Governmental Appropriations			
Grants			
Other Funds and Sources			
TOTAL SOURCES OF FUNDS	\$52,690,512	\$56,858,693	\$109,549,205

NOTE: ITEMIZATION OF EACH LINE ITEM MUST BE PROVIDED AT <u>ATTACHMENT 7</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

Related Project Costs Provide the following information, as applicable, with respect to any land related to the project that will be or has been acquired during the last two calendar years:
Land acquisition is related to project ☐ Yes ☒ No Purchase Price: \$ N/A Fair Market Value: \$ N/A * As noted above, RUMC already owns the land to be used for this project.
The project involves the establishment of a new facility or a new category of service Yes No
If yes, provide the dollar amount of all non-capitalized operating start-up costs (including operating deficits) through the first full fiscal year when the project achieves or exceeds the target utilization specified in Part 1100.
Estimated start-up costs and operating deficit cost is \$6,983,149
Project Status and Completion Schedules
For facilities in which prior permits have been issued please provide the permit numbers.
Indicate the stage of the project's architectural drawings:
☐ None or not applicable ☐ Preliminary
Schematics
Anticipated project completion date (refer to Part 1130.140): December 31, 2024
Indicate the following with respect to project expenditures or to financial commitments (refer to Part 1130.140):
 ☐ Purchase orders, leases or contracts pertaining to the project have been executed. ☐ Financial commitment is contingent upon permit issuance. Provide a copy of the contingent "certification of financial commitment" document, highlighting any language related to CON Contingencies ☑ Financial Commitment will occur after permit issuance.
APPEND DOCUMENTATION AS <u>ATTACHMENT 8</u> , IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.
State Agency Submittals [Section 1130.620(c)]
Are the following submittals up to date as applicable? Cancer Registry APORS All formal document requests such as IDPH Questionnaires and Annual Bed Reports been submitted All reports regarding outstanding permits Failure to be up to date with these requirements will result in the application for permit being deemed incomplete.

Page 11

Cost Space Requirements

Provide in the following format, the **Departmental Gross Square Feet (DGSF)** or the **Building Gross Square Feet (BGSF)** and cost. The type of gross square footage either **DGSF** or **BGSF** must be identified. The sum of the department costs **MUST** equal the total estimated project costs. Indicate if any space is being reallocated for a different purpose. Include outside wall measurements plus the department's or area's portion of the surrounding circulation space. **Explain the use of any vacated space.**

		Gross Square Feet		Amount of Proposed Total Gross Square Feet That Is:			
Dept. / Area	Cost	Existing	Proposed	New Const.	Modernized	As Is	Vacated Space
REVIEWABLE							
Comprehensive							
Physical Rehab			16,666	16,666			
Beds							
LTACH Beds			15,173	15,173			
Physical Therapy			10,741	10,741			
Clinical Storage			7,108	7,108			
Patient Care Staff			5,654	5,654			
Rehab Hallway			10,329	10,329			
Space			10,329	10,329			
Total Clinical	\$52,690,512		65,671	65,671			
NON- REVIEWABLE							
Administrative			4,626	4,626			
BOH Circulation			2,595	2,595			
Circulation			11,924	11,924			
Elevator Shaft			1,848	1,848			
Kitchen			2,994	2,994			
Interstitial Space			3,397	3,397			
Mechanical Shaft			1,515	1,515			
Mechanical/ Electrical/ Data			5,798	5,798			
Public Space			9,629	9,629			
Storage			1,474	1,474			
Support			2,802	2,802			
Vertical Circulation			3,556	3,556			
Mechanical				•			
Penthouse			8,180	8,180			
Shell Space			8,898	8,898			
Total Non-clinical	\$56,858,693		69,236	69,236			
TOTAL	\$109,549,205		134,907 GSF	134,907 GSF			

APPEND DOCUMENTATION AS <u>ATTACHMENT 9</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

Facility Bed Capacity and Utilization - NOT APPLICABLE

Complete the following chart, as applicable. Complete a separate chart for each facility that is a part of the project and insert the chart after this page. Provide the existing bed capacity and utilization data for the latest Calendar Year for which data is available. Include observation days in the patient day totals for each bed service. Any bed capacity discrepancy from the Inventory will result in the application being deemed incomplete.

FACILITY NAME:		CITY:				
REPORTING PERIOD DATES	S: Fro	om:	to:	to:		
Category of Service	Authorized Beds	Admissions	Patient Days	Bed Changes	Proposed Beds	
Medical/Surgical						
Obstetrics						
Pediatrics						
Intensive Care						
Comprehensive Physical Rehabilitation						
Acute/Chronic Mental Illness						
Neonatal Intensive Care						
General Long-Term Care						
Specialized Long-Term Care						
Long Term Acute Care						
Other ((identify)						
TOTALS:						

The Application must be signed by the authorized representatives of the applicant entity. Authorized representatives are:

- in the case of a corporation, any two of its officers or members of its Board of Directors;
- in the case of a limited liability company, any two of its managers or members (or the sole manager or member when two or more managers or members do not exist);
- in the case of a partnership, two of its general partners (or the sole general partner, when two or more general partners do not exist);
- in the case of estates and trusts, two of its beneficiaries (or the sole beneficiary when two or more beneficiaries do not exist); and
- in the case of a sole proprietor, the individual that is the proprietor.

This Application is filed on the behalf of Rush System for Health in accordance with the requirements and procedures of the Illinois Health Facilities Planning Act. The undersigned certifies that he or she has the authority to execute and file this Application on behalf of the applicant entity. The undersigned further certifies that the data and information provided herein, and appended hereto, are complete and correct to the best of his or her knowledge and belief. The undersigned also certifies that the fee required for this application is sent herewith or will be paid upon request.

Kus	a d
SIGNATURE	SIGNATURE
K Ranga Rame Krishnan, MB, ChB	Carl Bergelz, JO
PRINTED NAME	PRINTED NAME
Chief Executive Officer	Chief Legal Officer
PRINTED TITLE	PRINTED TITLE
Notarization: Subscribed and sworn to before me this 30 m day of June, 2021	Notorization: Subscribed and sworn to before me this day of
Signature of Novary	Signature of Notary
Seal "OFFICIAL SEAL" Maritza Ramses	Seal
Notary Public, State of Illinois	
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- in the case of estates and trusts, two of its beneficiaries (or the sole beneficiary when two or more beneficiaries do not exist); and
- in the case of a sole proprietor, the individual that is the proprietor.

This Application is filed on the behalf of Rush System for Health in accordance with the requirements and procedures of the Illinois Health Facilities Planning Act. The undersigned certifies that he or she has the authority to execute and file this Application on behalf of the applicant entity. The undersigned further certifies that the data and information provided herein, and appended hereto, are complete and correct to the best of his or her knowledge and belief. The undersigned also certifies that the fee required for this application is sent herewith or will be paid upon request.

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K Ranga Rama Krishnan, MB, ChB PRINTED NAME	PRINTED NAME
Chef Executive Officer PRINTED TITLE	Chier Legal Officer PRINTED TITLE
Notarization: Subscribed and sworn to before me this day of	Notarization: Subscribed and sworn to before me this 304 day of 1000, 2021
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Signature of Notary Seal	Signature of Notari "OFFICIAL SEAL" Seal Maritza Ramses
*Insert the EXACT legal name of the applicant	Notary Public, State of Illinois My Commission Expires February 27, 2022

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This Application is filed on the behalf of Rush University Medical Center in accordance with the requirements and procedures of the Illinois Health Facilities Planning Act. The undersigned certifies that he or she has the authority to execute and file this Application on behalf of the applicant entity. The undersigned further certifies that the data and information provided herein, and appended hereto, are complete and correct to the best of his or her knowledge and belief. The undersigned also certifies that the fee required for this application is sent herewith or will be paid upon request.

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PRINTED NAME	Carl Bergetz, JD PRINTED NAME	-
PRINTED TITLE	PRINTED TITLE	-
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Chief Executive Officer	General Course)	
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*Insert the EXACT legal name of the applicant		Notary Public, State of Illinois My Commission Expires February 27, 2022

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This Application is filed on the behalf of Rush Partners, LLC in accordance with the requirements and procedures of the Illinois Health Facilities Planning Act. The undersigned certifies that he or she has the authority to execute and file this Application on behalf of the applicant entity. The undersigned further certifies that the data and information provided herein, and appended hereto, are complete and correct to the best of his or her knowledge and belief. The undersigned also certifies that the fee required for this application is sent herewith or will be paid upon request.

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SIGNATURE	SIGNATURE
PRINTED NAME	PRINTED NAME
General Counsel, Rush University Medical Center, its sole Member PRINTED TITLE	PRINTED TITLE
Notarization: Subscribed and sworn to before me this 300 day of June, 202	Notarization: Subscribed and sworn to before me this day of
Marta Parnses	Signature of Notary
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This Application is filed on the behalf of Rush Select Holdings, LLC in accordance with the requirements and procedures of the Illinois Health Facilities Planning Act. The undersigned certifies that he or she has the authority to execute and file this Application on behalf of the applicant entity. The undersigned further certifies that the data and information provided herein, and appended hereto, are complete and correct to the best of his or her knowledge and belief. The undersigned also certifies that the fee required for this application is sent herewith or will be paid upon request.

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Maroin F. Sachson

PRINTED NAME

EVP - Hospital Operations

EVP + CFO

PRINTED TITLE PRINTED TITLE

Amanda J. Atland Amanda J. Atland
Signature of Notary
Signature of Notary

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AMANDA J. ALTLAND, Notary Public
Cumberland County

*Insert the Commission Expires October 4, 2023

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- in the case of a sole proprietor, the individual that is the proprietor.

This Application is filed on the behalf of Select Medical Corporation in accordance with the requirements and procedures of the Illinois Health Facilities Planning Act. The undersigned

certifies that he or she has the authority to execute and file this Application on behalf of the applicant entity. The undersigned further certifies that the data and information provided herein, and appended hereto, are complete and correct to the best of his or her knowledge and belief. The undersigned also certifies that the fee required for this application is sent herewith or will be paid upon request. SIGNATURE PRINTED NAME EVP + CFO Notarization: Notarization: Subscribed and sworn to before me Subscribed and sworn to before me this 29 day of dune 3003 this <u>300</u> day of <u>3000 3003</u>() Signature of Notary Signature of Notary Seal Seal Commonwealth of Pennsylvania - Notary Seal Commonwealth of Pennsylvania - Notary Seal AMANDA J. ALTLAND, Notary Public AMANDA J. ALTLAND, Notary Public he EXACTISTED Explication **Cumberland County** *Insert Commission Expires October 4, 2023 Commission Number 1260902 Commission Number 1260902

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This Application is filed on the behalf of Select Illinois Holdings, LLC in accordance with the requirements and procedures of the Illinois Health Facilities Planning Act. The undersigned certifies that he or she has the authority to execute and file this Application on behalf of the applicant entity. The undersigned further certifies that the data and information provided herein, and appended hereto, are complete and correct to the best of his or her knowledge and belief. The undersigned also certifies that the fee required for this application is sent herewith or will be paid upon request.

SIGNATURE

SIGNATURE

SIGNATURE

PRINTED NAME

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PRINTED NAME

EVP- Hospital Operations EVV + CFO
PRINTED TITLE
PRINTED TITLE

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Subscribed and sworn to before me this 30 day of 3000 Motarization:

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AMANDA J. ALTLAND, Notary Public

Cumberland County

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Page 21

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This Application is filed on the behalf of Rush Specialty Hospital, LLC in accordance with the requirements and procedures of the Illinois Health Facilities Planning Act. The undersigned certifies that he or she has the authority to execute and file this Application on behalf of the applicant entity. The undersigned further certifies that the data and information provided herein, and appended hereto, are complete and correct to the best of his or her knowledge and belief. The undersigned also certifies that the fee required for this application is sent herewith or will be paid upon request.

manda J. Atland Amanda J. Atland

Commonwealth of Pennsylvania - Notary Seal AMANDA J. ALTLAND, Notary Public Cumberland County

Commission Number 120002

AMANDA J. ALTLAND, Notary Public Cumberland County My Commission Expires October 4, 2023

Commission Number 1260902

Commonwealth of Pennsylvania - Notary Seal

Page 22

SECTION III. BACKGROUND, PURPOSE OF THE PROJECT, AND ALTERNATIVES - INFORMATION REQUIREMENTS

This Section is applicable to all projects except those that are solely for discontinuation with no project costs.

1110.110(a) – Background of the Applicant

READ THE REVIEW CRITERION and provide the following required information:

BACKGROUND OF APPLICANT

- 1. A listing of all health care facilities owned or operated by the applicant, including licensing, and certification if applicable.
- 2. A listing of all health care facilities currently owned and/or operated in Illinois, by any corporate officers or directors, LLC members, partners, or owners of at least 5% of the proposed health care facility.
- For the following questions, please provide information for each applicant, including corporate officers or directors, LLC members, partners and owners of at least 5% of the proposed facility. A health care facility is considered owned or operated by every person or entity that owns, directly or indirectly, an ownership interest.
 - a. A certified listing of any adverse action taken against any facility owned and/or operated by the applicant, directly or indirectly, during the three years prior to the filing of the application.
 - b. A certified listing of each applicant, identifying those individuals that have been cited, arrested, taken into custody, charged with, indicted, convicted or tried for, or pled guilty to the commission of any felony or misdemeanor or violation of the law, except for minor parking violations; or the subject of any juvenile delinquency or youthful offender proceeding. Unless expunged, provide details about the conviction and submit any police or court records regarding any matters disclosed.
 - c. A certified and detailed listing of each applicant or person charged with fraudulent conduct or any act involving moral turpitude.
 - d. A certified listing of each applicant with one or more unsatisfied judgements against him or her.
 - e. A certified and detailed listing of each applicant who is in default in the performance or discharge of any duty or obligation imposed by a judgment, decree, order or directive of any court or governmental agency.
- 4. Authorization permitting HFSRB and DPH access to any documents necessary to verify the information submitted, including, but not limited to official records of DPH or other State agencies; the licensing or certification records of other states, when applicable; and the records of nationally recognized accreditation organizations. Failure to provide such authorization shall constitute an abandonment or withdrawal of the application without any further action by HFSRB.
- 5. If, during a given calendar year, an applicant submits more than one application for permit, the documentation provided with the prior applications may be utilized to fulfill the information requirements of this criterion. In such instances, the applicant shall attest that the information was previously provided, cite the project number of the prior application, and certify that no changes have occurred regarding the information that has been previously provided. The applicant can submit amendments to previously submitted information, as needed, to update and/or clarify data.

APPEND DOCUMENTATION AS <u>ATTACHMENT 11</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM. EACH ITEM (1-4) MUST BE IDENTIFIED IN ATTACHMENT 11.

Criterion 1110.110(b) & (d)

PURPOSE OF PROJECT

- 1. Document that the project will provide health services that improve the health care or well-being of the market area population to be served.
- 2. Define the planning area or market area, or other relevant area, per the applicant's definition.
- 3. Identify the existing problems or issues that need to be addressed as applicable and appropriate for the project.
- 4. Cite the sources of the documentation.
- 5. Detail how the project will address or improve the previously referenced issues, as well as the population's health status and well-being.
- 6. Provide goals with quantified and measurable objectives, with specific timeframes that relate to achieving the stated goals **as appropriate**.

For projects involving modernization, describe the conditions being upgraded, if any. For facility projects, include statements of the age and condition of the project site, as well as regulatory citations, if any. For equipment being replaced, include repair and maintenance records.

NOTE: Information regarding the "Purpose of the Project" will be included in the State Board Staff Report.

APPEND DOCUMENTATION AS <u>ATTACHMENT 12</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM. EACH ITEM (1-6) MUST BE IDENTIFIED IN ATTACHMENT 12.

ALTERNATIVES

1) Identify **ALL** the alternatives to the proposed project:

Alternative options must include:

- A) Proposing a project of greater or lesser scope and cost;
- B) Pursuing a joint venture or similar arrangement with one or more providers or entities to meet all or a portion of the project's intended purposes; developing alternative settings to meet all or a portion of the project's intended purposes;
- C) Utilizing other health care resources that are available to serve all or a portion of the population proposed to be served by the project; and
- D) Provide the reasons why the chosen alternative was selected.
- 2) Documentation shall consist of a comparison of the project to alternative options. The comparison shall address issues of total costs, patient access, quality and financial benefits in both the short-term (within one to three years after project completion) and long-term. This may vary by project or situation. FOR EVERY ALTERNATIVE IDENTIFIED, THE TOTAL PROJECT COST AND THE REASONS WHY THE ALTERNATIVE WAS REJECTED MUST BE PROVIDED.
- 3) The applicant shall provide empirical evidence, including quantified outcome data that verifies improved quality of care, as available.

APPEND DOCUMENTATION AS <u>ATTACHMENT 13</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

SECTION IV. PROJECT SCOPE, UTILIZATION, AND UNFINISHED/SHELL SPACE Criterion 1110.120 - Project Scope, Utilization, and Unfinished/Shell Space

READ THE REVIEW CRITERION and provide the following information:

SIZE OF PROJECT:

- 1. Document that the amount of physical space proposed for the proposed project is necessary and not excessive. This must be a narrative and it shall include the basis used for determining the space and the methodology applied.
- 2. If the gross square footage exceeds the BGSF/DGSF standards in Appendix B, justify the discrepancy by documenting one of the following:
 - a. Additional space is needed due to the scope of services provided, justified by clinical or operational needs, as supported by published data or studies and certified by the facility's Medical Director.
 - b. The existing facility's physical configuration has constraints or impediments and requires an architectural design that delineates the constraints or impediments.
 - c. The project involves the conversion of existing space that results in excess square footage.
 - d. Additional space is mandated by governmental or certification agency requirements that were not in existence when Appendix B standards were adopted.

Provide a narrative for any discrepancies from the State Standard. A table must be provided in the following format with Attachment 14.

SIZE OF PROJECT						
DEPT / SERVICE			DIFFERENCE	MET		
	BGSF/DGSF	STANDARD		STANDARD?		
Comprehensive Rehabilitation Beds	16,666 GSF (56 Beds)	36,960 GSF 660 GSF per bed	20,294 GSF Below	Yes		
Long-Term Acute Care Beds	15,173 GSF (44 beds)	29,040 GSF 660 GSF per bed	13,867 GSF Below	Yes		

APPEND DOCUMENTATION AS <u>ATTACHMENT 14</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

PROJECT SERVICES UTILIZATION:

This criterion is applicable only to projects or portions of projects that involve services, functions or equipment for which HFSRB <u>has established</u> utilization standards or occupancy targets in 77 III. Adm. Code 1100.

Document that in the second year of operation, the annual utilization of the service or equipment shall meet or exceed the utilization standards specified in 1110.Appendix B. **A narrative of the rationale that supports the projections must be provided.**

A table must be provided in the following format with Attachment 15.

	UTILIZATION							
	SERVICE	HISTORICAL UTILIZATION (PATIENT / PATIENT DAYS)	PROJECTED UTILIZATION	STATE STANDARD	MEET STANDARD?			
YEAR 1	Comp. Rehab. Beds	1477 patients (21,018 patient days)	1,164 Patients 81%	85%	NO			
YEAR 2	Comp. Rehab Beds	1477 patients (21,018 patient days)	1,221 Patients 85%	85%	YES			
YEAR 1	LTACH	599 patients (20,019 patient days)	389 Patients* 81%	85%	NO			
YEAR 2	LTACH	599 patients (20,019 patient days)	409 Patients* 85%	85%	YES			

APPEND DOCUMENTATION AS <u>ATTACHMENT 15</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

UNFINISHED OR SHELL SPACE:

Provide the following information:

- 1. Total gross square footage (GSF) of the proposed shell space.
- 2. The anticipated use of the shell space, specifying the proposed GSF to be allocated to each department, area or function.
- 3. Evidence that the shell space is being constructed due to:
 - a. Requirements of governmental or certification agencies; or
 - b. Experienced increases in the historical occupancy or utilization of those areas proposed to occupy the shell space.
- 4. Provide:
 - Historical utilization for the area for the latest five-year period for which data is available;
 and
 - b. Based upon the average annual percentage increase for that period, projections of future utilization of the area through the anticipated date when the shell space will be placed into operation.

APPEND DOCUMENTATION AS <u>ATTACHMENT 16</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

ASSURANCES:

Submit the following:

- 1. Verification that the applicant will submit to HFSRB a CON application to develop and utilize the shell space, regardless of the capital thresholds in effect at the time or the categories of service involved.
- 2. The estimated date by which the subsequent CON application (to develop and utilize the subject shell space) will be submitted; and
- 3. The anticipated date when the shell space will be completed and placed into operation.

APPEND DOCUMENTATION AS <u>ATTACHMENT 17</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

* HFSRB staff and members will note that this application presents more referrals than those which are necessary to meet the project utilization standards. This is not an error. The need for these services is overwhelming but it is the intention of RUMC to continue to its pattern of referring patients to other existing providers. This is being done to minimize any adverse impact upon area providers while allowing Applicants to meet an unquestionable need for access to LTAC services.

B. Criterion 1110.205 - Comprehensive Physical Rehabilitation

- 1. Applicants proposing to establish, expand and/or modernize the Comprehensive Physical Rehabilitation category of service must submit the following information:
- 2. Indicate bed capacity changes by Service: Indicate # of beds changed by action(s):

Category of Service	# Existing Beds	# Proposed Beds
		56

3. READ the applicable review criteria outlined below and **submit the required documentation for the criteria**:

APPLICABLE REVIEW CRITERIA	Establish	Expand	Modernize
1110.205(b)(1) - Planning Area Need - 77 III. Adm. Code 1100 (formula calculation)	Х		
1110. 205(b)(2) - Planning Area Need - Service to Planning Area Residents	Х	Х	
1110.205(b)(3) - Planning Area Need - Service Demand - Establishment of Category of Service	Х		
1110.205(b)(4) - Planning Area Need - Service Demand - Expansion of Existing Category of Service		Х	
1110.205(b)(5) - Planning Area Need - Service Accessibility	Х		
1110.205(c)(1) - Unnecessary Duplication of Services	Х		
1110.205(c)(2) - Maldistribution	Х		
1110.205(c)(3) - Impact of Project on Other Area Providers	Х		
1110.205(d)(1), (2), and (3) - Deteriorated Facilities			Х
1110.205(d)(4) - Occupancy			Х
1110.205(e)(1) - Staffing Availability	Х	Х	
1110.205(f) - Performance Requirements	Х	Х	Х
1110.205(g) - Assurances	Х	Х	

APPEND DOCUMENTATION AS <u>ATTACHMENT 19</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

L. 1110.265 - Long Term Acute Care Hospital

- 1. Applicants proposing to establish, expand and/or modernize Long Term Acute Care Hospital Bed projects must submit the following information:
- 2. Indicate bed service(s) and capacity changes by Service: Indicate # of beds changed by action(s):

	Category of Service	# Existing Beds	# Proposed Beds
\boxtimes	LTACH		44

3. READ the applicable review criteria outlined below and **submit the required documentation for the criteria**:

APPLICABLE REVIEW CRITERIA	Establish	Expand	Modernize
1110.265(b)(1) - Planning Area Need - 77 III. Adm. Code 1100 (formula calculation)	Х		
1110.265(b)(2) - Planning Area Need - Service to Planning Area Residents	X	Х	
1110.265(b)(3) - Planning Area Need - Service Demand - Establishment of Category of Service	X		
1110.265(b)(4) - Planning Area Need - Service Demand - Expansion of Existing Category of Service		Х	
1110.265(b)(5) - Planning Area Need - Service Accessibility	Х		
1110.265(c)(1) - Unnecessary Duplication of Services	Х		
1110.265(c)(2) - Maldistribution	Х		
1110.265(c)(3) - Impact of Project on Other Area Providers	Х		
1110.265(d)(1), (2), and (3) - Deteriorated Facilities			Х
1110.265(d)(4) - Occupancy			Х
110.265(e) - Staffing Availability	Х	Х	
1110.265(f) - Performance Requirements	Х	Х	Х
1110.265(g) - Assurances	Х	Х	

APPEND DOCUMENTATION AS <u>ATTACHMENT 29</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

The following Sections <u>DO NOT</u> need to be addressed by the applicants or co-applicants responsible for funding or guaranteeing the funding of the project if the applicant has a bond rating of A- or better from Fitch's or Standard and Poor's rating agencies, or A3 or better from Moody's (the rating shall be affirmed within the latest 18-month period prior to the submittal of the application):

- Section 1120.120 Availability of Funds Review Criteria
- Section 1120.130 Financial Viability Review Criteria
- Section 1120.140 Economic Feasibility Review Criteria, subsection (a)

SECTION VI. 1120.120 - AVAILABILITY OF FUNDS

The applicant shall document that financial resources shall be available and be equal to or exceed the estimated total project cost plus any related project costs by providing evidence of sufficient financial resources from the following sources, as applicable [Indicate the dollar amount to be provided from the following sources]:

	1			
\$109,549,205	a)	Cash and Securities – statements (e.g., audited financial statements, letters from financial institutions, board resolutions) as to:		
		 the amount of cash and securities available for the project, including the identification of any security, its value and availability of such funds; and 		
		 interest to be earned on depreciation account funds or to be earned on any asset from the date of applicant's submission through project completion; 		
	b)	Pledges – for anticipated pledges, a summary of the anticipated pledges showing anticipated receipts and discounted value, estimated timetable of gross receipts and related fundraising expenses, and a discussion of past		
	c)	fundraising experience. Gifts and Bequests – verification of the dollar amount, identification of any conditions of use, and the estimated timetable of receipts;		
	d)	Debt – a statement of the estimated terms and conditions (including the debt time period, variable or permanent interest rates over the debt time period, and the anticipated repayment schedule) for any interim and for the permanent financing proposed to fund the project, including:		
		 For general obligation bonds, proof of passage of the required referendum or evidence that the governmental unit has the authority to issue the bonds and evidence of the dollar amount of the issue, including any discounting anticipated; 		
		 For revenue bonds, proof of the feasibility of securing the specified amount and interest rate; 		
		3) For mortgages, a letter from the prospective lender attesting to the expectation of making the loan in the amount and time indicated, including the anticipated interest rate and any conditions associated with the mortgage, such as, but not limited to, adjustable interest rates, balloon payments, etc.;		
		For any lease, a copy of the lease, including all the terms and conditions, including any purchase options, any capital improvements to the property and provision of capital equipment;		

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

5) For any option to lease, a copy of the option, including all terms and conditions.
e) Governmental Appropriations – a copy of the appropriation Act or ordinance accompanied by a statement of funding availability from an official of the governmental unit. If funds are to be made available from subsequent fiscal years, a copy of a resolution or other action of the governmental unit attesting to this intent;
f) Grants – a letter from the granting agency as to the availability of funds in terms of the amount and time of receipt;
g) All Other Funds and Sources – verification of the amount and type of any other funds that will be used for the project.
TOTAL FUNDS AVAILABLE

APPEND DOCUMENTATION AS $\underline{\text{ATTACHMENT 33}}, \text{IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.}$

SECTION VII. 1120.130 - FINANCIAL VIABILITY

All the applicants and co-applicants shall be identified, specifying their roles in the project funding or guaranteeing the funding (sole responsibility or shared) and percentage of participation in that funding.

Financial Viability Waiver

The applicant is not required to submit financial viability ratios if:

- 1. "A" Bond rating or better
- 2. All the project's capital expenditures are completely funded through internal sources
- 3. The applicant's current debt financing or projected debt financing is insured or anticipated to be insured by MBIA (Municipal Bond Insurance Association Inc.) or equivalent
- 4. The applicant provides a third-party surety bond or performance bond letter of credit from an A rated guarantor.

See Section 1120.130 Financial Waiver for information to be provided

APPEND DOCUMENTATION AS <u>ATTACHMENT 34</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

The applicant or co-applicant that is responsible for funding or guaranteeing funding of the project shall provide viability ratios for the latest three years for which **audited financial statements are available and for the first full fiscal year at target utilization, but no more than two years following project completion.** When the applicant's facility does not have facility specific financial statements and the facility is a member of a health care system that has combined or consolidated financial statements, the system's viability ratios shall be provided. If the health care system includes one or more hospitals, the system's viability ratios shall be evaluated for conformance with the applicable hospital standards.

	Į.	Historical 3 Years				
Enter Historical and/or Projected Years:	2017	2018	2019	YR2		
Current Ratio	N/A	N/A	N/A	4.11		
Net Margin Percentage	N/A	N/A	N/A	11%		
Percent Debt to Total Capitalization	N/A	N/A	N/A	15%		
Projected Debt Service Coverage	N/A	N/A	N/A	6.98		
Days Cash on Hand	N/A	N/A	N/A	77.77		
Cushion Ratio	N/A	N/A	N/A	8.60		

* PROJECTED RATIOS FOR RUSH SPECIALTY HOSPITAL MEETS ALL HFSRB FINANCIAL REVIEW CRITERIA

Provide the methodology and worksheets utilized in determining the ratios detailing the calculation and applicable line item amounts from the financial statements. Complete a separate table for each co-applicant and provide worksheets for each.

Variance

Applicants not in compliance with any of the viability ratios shall document that another organization, public or private, shall assume the legal responsibility to meet the debt obligations should the applicant default.

APPEND DOCUMENTATION AS $\underline{\mathsf{ATTACHMENT}}$ 35, IN NUMERICAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

SECTION VIII. 1120.140 - ECONOMIC FEASIBILITY

This section is applicable to all projects subject to Part 1120.

A. Reasonableness of Financing Arrangements

The applicant shall document the reasonableness of financing arrangements by submitting a notarized statement signed by an authorized representative that attests to one of the following:

- 1) That the total estimated project costs and related costs will be funded in total with cash and equivalents, including investment securities, unrestricted funds, received pledge receipts and funded depreciation; or
- 2) That the total estimated project costs and related costs will be funded in total or in part by borrowing because:
 - A) A portion or all the cash and equivalents must be retained in the balance sheet asset accounts in order to maintain a current ratio of at least 2.0 times for hospitals and 1.5 times for all other facilities; or
 - B) Borrowing is less costly than the liquidation of existing investments, and the existing investments being retained may be converted to cash or used to retire debt within a 60-day period.

B. Conditions of Debt Financing

This criterion is applicable only to projects that involve debt financing. The applicant shall document that the conditions of debt financing are reasonable by submitting a notarized statement signed by an authorized representative that attests to the following, as applicable:

- 1) That the selected form of debt financing for the project will be at the lowest net cost available;
- 2) That the selected form of debt financing will not be at the lowest net cost available, but is more advantageous due to such terms as prepayment privileges, no required mortgage, access to additional indebtedness, term (years), financing costs and other factors:
- That the project involves (in total or in part) the leasing of equipment or facilities and that the expenses incurred with leasing a facility or equipment are less costly than constructing a new facility or purchasing new equipment.

C. Reasonableness of Project and Related Costs

Read the criterion and provide the following:

1) Identify each department or area impacted by the proposed project and provide a cost and square footage allocation for new construction and/or modernization using the following format (insert after this page).

COST AND GROSS SQUARE FEET BY DEPARTMENT OR SERVICE									
	Α	В	С	D	Е	F	G	Н	T
Department (list below)	Cost/Squ New	are Foot Mod.	Gross S Ne Circ	W	Gross Sq. Ft. Mod. Circ.*		Const. \$ (A x C)	Mod. \$ (B x E)	Total Cost (G + H)
Comprehensive Physical Rehabilitation	\$278.35		65,671				\$18,279,796		\$18,279,796
LTACH	\$246.84		65,671				\$16,210,386		\$16,210,386
Contingency	\$52.36		65,671				\$3,438,838		\$3,438,838
TOTALS	\$577.55		65,671				\$37,929,020		\$37,929,020
* Include the percentage (%) of space for circulation									

D. Projected Operating Costs

The applicant shall provide the projected direct annual operating costs (in current dollars per equivalent patient day or unit of service) for the first full fiscal year at target utilization but no more than two years following project completion. Direct cost means the fully allocated costs of salaries, benefits and supplies for the service.

E. Total Effect of the Project on Capital Costs

The applicant shall provide the total projected annual capital costs (in current dollars per equivalent patient day) for the first full fiscal year at target utilization but no more than two years following project completion.

APPEND DOCUMENTATION AS <u>ATTACHMENT 36</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

SECTION IX. SAFETY NET IMPACT STATEMENT

SAFETY NET IMPACT STATEMENT that describes all the following must be submitted for <u>ALL SUBSTANTIVE</u> PROJECTS AND PROJECTS TO DISCONTINUE HEALTH CARE FACILITIES [20 ILCS 3960/5.4]:

- 1. The project's material impact, if any, on essential safety net services in the community, to the extent that it is feasible for an applicant to have such knowledge.
- 2. The project's impact on the ability of another provider or health care system to cross-subsidize safety net services, if reasonably known to the applicant.
- 3. How the discontinuation of a facility or service might impact the remaining safety net providers in a given community, if reasonably known by the applicant.

Safety Net Impact Statements shall also include all of the following:

- 1. For the 3 fiscal years prior to the application, a certification describing the amount of charity care provided by the applicant. The amount calculated by hospital applicants shall be in accordance with the reporting requirements for charity care reporting in the Illinois Community Benefits Act. Non-hospital applicants shall report charity care, at cost, in accordance with an appropriate methodology specified by the Board.
- 2. For the 3 fiscal years prior to the application, a certification of the amount of care provided to Medicaid patients. Hospital and non-hospital applicants shall provide Medicaid information in a manner consistent with the information reported each year to the Illinois Department of Public Health regarding "Inpatients and Outpatients Served by Payor Source" and "Inpatient and Outpatient Net Revenue by Payor Source" as required by the Board under Section 13 of this Act and published in the Annual Hospital Profile.
- 3. Any information the applicant believes is directly relevant to safety net services, including information regarding teaching, research, and any other service.

A table in the following format must be provided as part of Attachment 37.

Safety Net	Information per	PA 96-0031			
	CHARITY CARE				
Charity (# of patients)	Charity (# of patients) Year Year Year				
Inpatient					
Outpatient					
Total					
Charity (cost in dollars)					
Inpatient					
Outpatient					
Total					
	MEDICAID				
Medicaid (# of patients)	Year	Year	Year		
Inpatient					
Outpatient					
Total					
Medicaid (revenue)					
Inpatient					
Outpatient					
Total			·		

APPEND DOCUMENTATION AS <u>ATTACHMENT 37</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

SECTION X. CHARITY CARE INFORMATION

Charity Care information MUST be furnished for ALL projects [1120.20(c)].

- 1. All applicants and co-applicants shall indicate the amount of charity care for the latest three <u>audited</u> fiscal years, the cost of charity care and the ratio of that charity care cost to net patient revenue.
- 2. If the applicant owns or operates one or more facilities, the reporting shall be for each individual facility located in Illinois. If charity care costs are reported on a consolidated basis, the applicant shall provide documentation as to the cost of charity care; the ratio of that charity care to the net patient revenue for the consolidated financial statement; the allocation of charity care costs; and the ratio of charity care cost to net patient revenue for the facility under review.
- 3. If the applicant is not an existing facility, it shall submit the facility's projected patient mix by payer source, anticipated charity care expense and projected ratio of charity care to net patient revenue by the end of its second year of operation.

Charity care" means care provided by a health care facility for which the provider does not expect to receive payment from the patient or a third-party payer (20 ILCS 3960/3). Charity Care <u>must</u> be provided at cost.

A table in the following format must be provided for all facilities as part of Attachment 39.

	CHARITY CARE		
	Year	Year	Year
Net Patient Revenue			
Amount of Charity Care (charges)			
Cost of Charity Care			_

APPEND DOCUMENTATION AS <u>ATTACHMENT 38</u>, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

SECTION XI. SPECIAL FLOOD HAZARD AREA AND 500-YEAR FLOODPLAIN DETERMINATION FORM

In accordance with Executive Order 2006-5 (EO 5), the Health Facilities & Services Review Board (HFSRB) must determine if the site of the CRITICAL FACILITY, as defined in EO 5, is located in a mapped floodplain (Special Flood Hazard Area) or a 500-year floodplain. All state agencies are required to ensure that before a permit, grant or a development is planned or promoted, the proposed project meets the requirements of the Executive Order, including compliance with the National Flood Insurance Program (NFIP) and state floodplain regulation.

	Program (NFIP) and state floodplain regulation.	
1.	Applicant: Rush Specialty Hospital, LLC, 1400-1554 943-5000	West Harrison Street, Chicago, IL 60612, 312-
	Draight Location: 4400 4554 West Hawings Street Ch	siegge II 60642 Cook County West Township
2.	Project Location: 1400-1554 West Harrison Street, Cl	nicago, il 60612, Cook County, West Township
	You can create a small map of your site showing the Service Center website (https://msc.fema.gov/portal/hd the Search bar. If a map, like that shown on page 2 is s	ome) by entering the address for the property in shown, select the Go To NFHL Viewer tab above
	the map. You can print a copy of the floodplain map b	y selecting the icon in the top corner of the
	page. Select the pin tool icon and place a pin on yo	our site. Print a FIRMETTE size image.
	If there is no digital floodplain map available select the You will then need to use the Zoom tools provided to lo FIRMette tool to create a pdf of the floodplain map.	
	IS THE PROJECT SITE LOCATED IN A SPE Yes No X	CIAL FLOOD HAZARD AREA:
	IS THE PROJECT SITE LOCATED IN THE 5	00-YEAR FLOOD PLAIN? NO
	If you are unable to determine if the site is in the map county or the local community building or planning depa If the determination is being made by a local official, ple	artment for assistance.
	FIRM Panel Number:	Effective Date:
	Name of Official:	Title:
	Business/Agency:	Address:
	(City) (State) (ZIP Code) (Telephone Number)	
Sig	nature:	Date:
	NOTE: This finding only means that the property in gu	estion is or is not in a Special Flood Hazard Area

<u>NOTE</u>: This finding only means that the property in question is or is not in a Special Flood Hazard Area or a 500-year floodplain as designated on the map noted above. It does not constitute a guarantee that the property will or will not be flooded or be subject to local drainage problems.

If you need additional help, contact the Illinois Statewide Floodplain Program at 217/782-4428

After paginating the entire completed application indicate, in the chart below, the page numbers for the included attachments:

NO.		PAGES
1	Applicant Identification including Certificate of Good Standing	38 – 45
2	Site Ownership	46 – 49
3	Persons with 5 percent or greater interest in the licensee must be identified with the % of ownership.	50 - 51
4	Organizational Relationships (Organizational Chart) Certificate of Good Standing Etc.	52
5	Flood Plain Requirements	53 – 54
6	Historic Preservation Act Requirements	55 – 56
7	Project and Sources of Funds Itemization	57 – 60
8	Financial Commitment Document if required	61
9	Cost Space Requirements	62 – 64
10	Discontinuation	n/a
11	Background of the Applicant	65 – 90
12	Purpose of the Project	91 – 155
13	Alternatives to the Project	156 – 158
14	Size of the Project	159
15	Project Service Utilization	160 – 161
16	Unfinished or Shell Space	162
17	Assurances for Unfinished/Shell Space	163
19 20	Comprehensive Physical Rehabilitation Acute Mental Illness	164 – 202 n/a
21	Open Heart Surgery	n/a
22	Cardiac Catheterization	n/a
23	In-Center Hemodialysis	n/a
24	Non-Hospital Based Ambulatory Surgery	n/a
25	Selected Organ Transplantation	n/a
26	Kidney Transplantation	n/a
27	Subacute Care Hospital Model	n/a
28	Community-Based Residential Rehabilitation Center	n/a
29	Long Term Acute Care Hospital	203-230
30	Clinical Service Areas Other than Categories of Service	n/a
31	Freestanding Emergency Center Medical Services	n/a
32	Birth Center	n/a
Financia	ll and Economic Feasibility:	
33	Availability of Funds	231 – 43
34	Financial Waiver	432 – 434
35	Financial Viability	435 – 437
36	Economic Feasibility	438 – 442
37	Safety Net Impact Statement	443 – 448
38	Charity Care Information	449 – 454

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

ATTACHMENT 1 Type of Ownership of Applicants

Included with this attachment are:

- 1. The Certificate of Good Standing for Rush Specialty Hospital, LLC
- 2. The Certificate of Good Standing for Rush System for Health
- 3. The Certificate of Good Standing for Rush University Medical Center
- 4. The Certificate of Good Standing for Rush Partners, LLC
- 5. The Certificate of Good Standing for Rush Select Holdings, LLC
- 6. The Certificate of Good Standing for Select Medical Corporation
- 7. The Certificate of Good Standing for Select Illinois Holdings, Inc.

ATTACHMENT 1 Rush Specialty Hospital, LLC Certificate of Good Standing



Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF

DELAWARE, DO HEREBY CERTIFY "RUSH SPECIALTY HOSPITAL, LLC" IS DULY

FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD

STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF THIS

OFFICE SHOW, AS OF THE TWENTY-EIGHTH DAY OF APRIL, A.D. 2021.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "RUSH SPECIALTY HOSPITAL, LLC" WAS FORMED ON THE TWENTY-THIRD DAY OF NOVEMBER, A.D. 2020.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE BEEN ASSESSED TO DATE.

4215965 8300 SR# 20211490159

You may verify this certificate online at corp.delaware.gov/authver.shtml

Jeffrey W. Bullock, Secretary of State

Authentication: 203084730

ATTACHMENT 1 Rush University System for Health Certificate of Good Standing

File Number

5852-111-6



To all to whom these Presents Shall Come, Greeting:

I, Jesse White, Secretary of State of the State of Illinois, do hereby certify that I am the keeper of the records of the Department of Business Services. I certify that

RUSH SYSTEM FOR HEALTH, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON SEPTEMBER 22, 1995, ADOPTED THE ASSUMED NAME RUSH UNIVERSITY SYSTEM FOR HEALTH ON JANUARY 29, 2019, APPEARS TO HAVE COMPLIED WITH ALL THE PROVISIONS OF THE GENERAL NOT FOR PROFIT CORPORATION ACT OF THIS STATE, AND AS OF THIS DATE, IS IN GOOD STANDING AS A DOMESTIC CORPORATION IN THE STATE OF ILLINOIS.



In Testimony Whereof, I hereto set

my hand and cause to be affixed the Great Seal of the State of Illinois, this 27TH

day of

MAY

A.D.2021

Authentication #: 2114700784 verifiable until 05/27/2022 Authenticate at: http://www.cyberdriveillinois.com

ATTACHMENT 1 Rush University Medical Center Certificate of Good Standing

File Number

0200-214-1



To all to whom these Presents Shall Come, Greeting:

I, Jesse White, Secretary of State of the State of Illinois, do hereby certify that I am the keeper of the records of the Department of Business Services. I certify that

RUSH UNIVERSITY MEDICAL CENTER, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON JULY 21, 1883, APPEARS TO HAVE COMPLIED WITH ALL THE PROVISIONS OF THE GENERAL NOT FOR PROFIT CORPORATION ACT OF THIS STATE, AND AS OF THIS DATE, IS IN GOOD STANDING AS A DOMESTIC CORPORATION IN THE STATE OF ILLINOIS.



In Testimony Whereof, I hereto set

my hand and cause to be affixed the Great Seal of the State of Illinois, this 27TH

day of

MAY

A.D.2021

Authentication #: 2114700758 verifiable until 05/27/2022 Authenticate at: http://www.cyberdriveillinois.com

ATTACHMENT 1 Rush Partners, LLC **Certificate of Good Standing**

File Number

0708932-5



To all to whom these Presents Shall Come, Greeting:

I, Jesse White, Secretary of State of the State of Illinois, do hereby certify that I am the keeper of the records of the Department of Business Services. I certify that

RUSH PARTNERS LLC, HAVING ORGANIZED IN THE STATE OF ILLINOIS ON JULY 25, 2018, APPEARS TO HAVE COMPLIED WITH ALL PROVISIONS OF THE LIMITED LIABILITY COMPANY ACT OF THIS STATE, AND AS OF THIS DATE IS IN GOOD STANDING AS A DOMESTIC LIMITED LIABILITY COMPANY IN THE STATE OF ILLINOIS.



In Testimony Whereof, I hereto set

my hand and cause to be affixed the Great Seal of the State of Illinois, this 27TH MAY A.D.

day of

2021

Authentication #: 2114700862 verifiable until 05/27/2022 Authenticate at: http://www.cyberdriveillinois.com

ATTACHMENT 1 Rush-Select Holdings, LLC Certificate of Good Standing



Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF

DELAWARE, DO HEREBY CERTIFY "RUSH-SELECT HOLDINGS, LLC" IS DULY

FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD

STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF THIS

OFFICE SHOW, AS OF THE TWENTY-EIGHTH DAY OF APRIL, A.D. 2021.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "RUSH-SELECT HOLDINGS, LLC" WAS FORMED ON THE EIGHTEENTH DAY OF SEPTEMBER, A.D. 2020.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE BEEN ASSESSED TO DATE.

3694941 8300 SR# 20211490010

You may verify this certificate online at corp.delaware.gov/authver.shtml

Jeffrey W. Bullock, Secretary of State

Authentication: 203084705

ATTACHMENT 1 Select Medical Corporation Certificate of Good Standing



Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF

DELAWARE, DO HEREBY CERTIFY "SELECT MEDICAL CORPORATION" IS DULY

INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD

STANDING AND HAS A LEGAL CORPORATE EXISTENCE SO FAR AS THE RECORDS

OF THIS OFFICE SHOW, AS OF THE TWENTY-EIGHTH DAY OF APRIL, A.D.

2021.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL REPORTS HAVE BEEN FILED TO DATE.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "SELECT MEDICAL CORPORATION" WAS INCORPORATED ON THE TENTH DAY OF DECEMBER, A.D. 1996.

AND I DO HEREBY FURTHER CERTIFY THAT THE FRANCHISE TAXES HAVE BEEN PAID TO DATE.

2682481 8300 SR# 20211489736

You may verify this certificate online at corp.delaware.gov/authver.shtml

Authentication: 203084688

ATTACHMENT 1 Select Illinois Holdings, Inc. Certificate of Good Standing



Page 1

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF

DELAWARE, DO HEREBY CERTIFY "SELECT ILLINOIS HOLDINGS, INC." IS

DULY INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN

GOOD STANDING AND HAS A LEGAL CORPORATE EXISTENCE SO FAR AS THE

RECORDS OF THIS OFFICE SHOW, AS OF THE TWENTY-EIGHTH DAY OF APRIL,

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL REPORTS HAVE BEEN FILED TO DATE.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "SELECT ILLINOIS HOLDINGS, INC." WAS INCORPORATED ON THE SIXTEENTH DAY OF SEPTEMBER, A.D. 2020.

AND I DO HEREBY FURTHER CERTIFY THAT THE FRANCHISE TAXES HAVE BEEN PAID TO DATE.

3676438 8300 SR# 20211489903

A.D. 2021.

You may verify this certificate online at corp.delaware.gov/authver.shtml

)

Authentication: 203084701

This site is owned by Rush University Medical Center, an Illinois not for profit corporation. The property owner proposes to enter into a lease agreement with Rush Specialty Hospital, LLC. Attached as evidence is a notarized letter from an officer of Rush University Medical Center attesting to ownership. As part of its long-term plan, Applicants intend to evaluate the potential for a transaction involving a ground lease of the property to a third party developer and lease of the facility to the joint venture entity. If an appropriate option arises during the developmental stage, Applicants hereby acknowledge both that any such transaction would first require financial commitment of this project as well as the appropriate filing of a Certificate of Exemption application. As of the filing of this project, no agreement exists or is being evaluated, but the possibility is being included, herein, in the interests of ultimate transparency. In all potential scenarios, the licensee will remain unchanged, as will control of the facility, as that term is defined by this Board.

Rush University Medical Center 1653 West Congress Parkway Chicago, IL 60612 www.rush.edu



June 30, 2021

Courtney Avery Board Administrator Illinois Health Facilities and Service Review Board 525 West Jefferson Street, 2nd Floor Springfield, Illinois 62761

Re: Attestation of Site Ownership

Dear Ms. Avery:

As representative of Rush University Medical Center, I, Carl Bergetz, hereby attest that the site of the proposed Rush-Select Specialty Hospital, located at 1404-1555 West Congress Parkway; 500-532 South Loomis Avenue; 1400-1554 West Harrison Street, and 501-531 South Ashland Avenue in Chicago, IL, 60607 is owned by Rush University Medical Center.

Furthermore, I attest that the proposed location for the Rush-Select Specialty Hospital, located at 1404-1555 West Congress Parkway; 500-532 South Loomis Avenue; 1400-1554 West Harrison Street, and 501-531 South Ashland Avenue in Chicago, IL, 60607, is not located in a flood zone.

Sincerely,

Carl Bergetz, JD General Counsel

Rush University Medical Center

Subscribed and sworn to before me this 30H day of June . 2021.

Notary Public

"OFFICIAL SEAL"
Maritza Ramses
Notary Public, State of Illinois
y Commission Expires February 27, 2022

Seal

RUSH is an academic health system comprising Rush University Medical Center, Rush University, Rush Copley Medical Center and Rush Cak Park Hospital.



Select Medical Corporation 4714 Gettysburg Road Mechanicsburg, PA 17055 www.selectmedical.com

June 16, 2021

Rush University Medical Center 1725 W. Harrison, Suite 364 Chicago, IL 60612

Letter of Intent (Ground Lease)

Dear Rush University Medical Center:

This letter will serve as a letter of intent ("LOI") confirming the basic terms of the lease described below. The summary of terms is as follows:

Tenant: Rush Specialty Hospital, LLC ("Rush Specialty Hospital")

Rush University Medical Center ("Rush") Landlord:

Premises: That certain parcel of undeveloped land located on Loomis Street

between West Congress Parkway and West Harrison Street in

Chicago, Illinois, containing approximately 1.27 acres.

Use: Development and operation of a five-story medical facility, which

will be used for long-term acute care, inpatient rehabilitation and ancillary use, and any other use approved by Rush-Select Holdings, LLC ("Rush-Select"). Any change in use of the Premises to be

approved by Rush as more fully set forth in the Lease.

Site Development: Tenant, Rush-Select, or a developer engaged by Tenant would enter

into construction contracts to develop the improvements described herein. The parties will discuss campus and site improvements for support of the Premises, and allocation of associated costs on mutually agreeable terms, as more fully set forth in the Lease.

Lease Upon expiration of Due Diligence Period.

Commencement:

Lease Term: Fifty (50) years

Renewal Term(s): None

Rent: \$276,606.00

Rent Escalation: Yearly increases based upon CPI.

Expenses: NNN

Parking & Access: Landlord will provide access to the Premises. Landlord will provide

access to the Premises. Landlord shall develop the parcel adjacent to the Premises for parking ("Parking Lot") and Landlord and Tenant shall enter into an agreement to allow occupants of the Premises to

use the Parking Lot.

Security Deposit: None

Environmental: The Lease shall contain customary representations of the Landlord

that Landlord has received no notice of any environmental hazards and that Landlord shall indemnify Tenant from and against environmental liabilities prior to the date of the Lease Term. Tenant will be responsible for environmental liabilities arising by the acts of Tenant, its subtenants, agents, contractors and assigns following

commencement of the Lease Term.

Due Diligence: Landlord shall prove access to relevant property information,

including: survey; title report; environmental and geotechnical reports; plans and specifications for the subject property; land development plans and approvals; building, zoning and environmental violations, and all other permits and public documents related to the Premises. Tenant shall complete its due diligence within thirty (30) days of the execution of the Ground

Lease ("Due Diligence Period").

Condition of Premises: Tenant takes the Premises in its AS IS and WHERE IS condition.

Transfer Taxes: To the extent the entrance into this Lease is taxable by the state in

which the Premises is located, or any subdivision thereof, Landlord or Tenant shall pay the tax as required by statute or ordinance.

Brokers: No real estate brokers have been involved in the transaction on

behalf of either Landlord or Tenant.

No binding agreement or contract will exist regarding the proposed transaction or any other matter unless and until the parties have negotiated, mutually agreed to and executed the applicable definitive documents. Neither party shall be bound by any written or oral representations or negotiations between them, either directly or through any broker, agent, finder or other intermediary, unless reduced to a writing signed by both parties.

If you agree with the terms of this Letter of Intent, please sign in the space provided and return the signed copy to us.

RUSH SPECIALTY HOSPITAL, LLC By Select Unit Management, Inc., its manager By:______ AGREED AND ACCEPTED: RUSH UNIVERSITY MEDICAL CENTER By:_____ Name: Title:

ATTACHMENT 3 Operating Licensee

The operating entity will be Rush Specialty Hospital, LLC. Attached as evidence of the entity's good standing is a Certificate of Good Standing issued by the Illinois Secretary of State.

<u>Delaware</u>

Page 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF

DELAWARE, DO HEREBY CERTIFY "RUSH SPECIALTY HOSPITAL, LLC" IS DULY

FORMED UNDER THE LAWS OF THE STATE OF DELAWARE AND IS IN GOOD

STANDING AND HAS A LEGAL EXISTENCE SO FAR AS THE RECORDS OF THIS

OFFICE SHOW, AS OF THE TWENTY-EIGHTH DAY OF APRIL, A.D. 2021.

AND I DO HEREBY FURTHER CERTIFY THAT THE SAID "RUSH SPECIALTY HOSPITAL, LLC" WAS FORMED ON THE TWENTY-THIRD DAY OF NOVEMBER, A.D. 2020.

AND I DO HEREBY FURTHER CERTIFY THAT THE ANNUAL TAXES HAVE BEEN ASSESSED TO DATE.

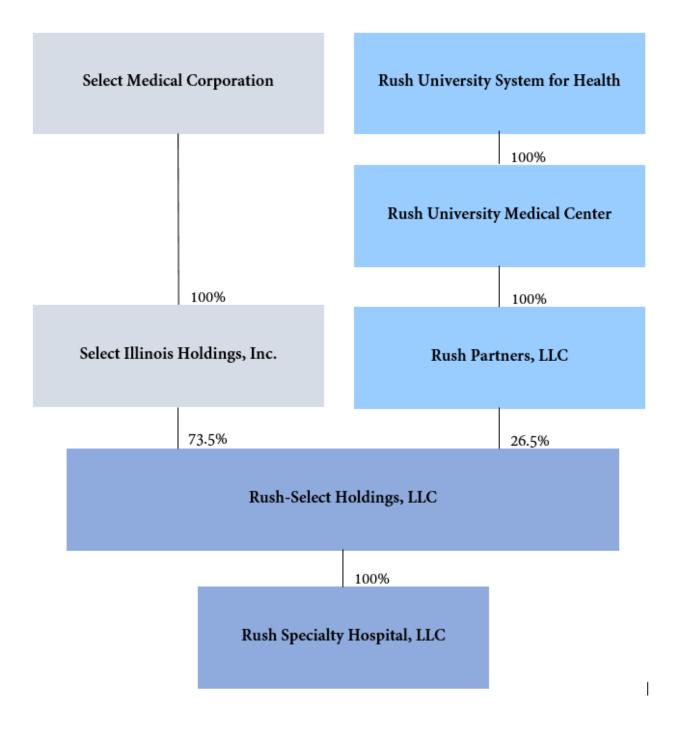
4215965 8300 SR# 20211490159

You may verify this certificate online at corp.delaware.gov/authver.shtml

Jeffrey W. Bullock, Secretary of State

Authentication: 203084730

ATTACHMENT 4 Organizational Chart



ATTACHMENT 5 Flood Plain Requirements



June 28, 2021

Courtney Avery Board Administrator Health Facilities and Services Review Board 525 W Jefferson Street, Floor 2 Springfield, IL 62761

Re: Rush-Select Specialty Hospital, LLC Flood Plain Requirements

Dear Ms. Avery:

As representative of Rush-Select Specialty Hospital, LLC, I, Thomas Mullin, affirm that the proposed location for the establishment of Rush-Select Specialty Hospital complies with Illinois Executive Order #2005-5. The proposed location is 1404-1555 West Congress Parkway; 500-532 South Loomis Avenue; 1400-1554 West Harrison Street, and 501-531 South Ashland Avenue in Chicago, IL, 60612 is not located in a flood plain, as evidence please find enclosed a map from the Federal Emergency Management Agency ("FEMA").

I hereby certify this true and is based upon my personal knowledge under penalty of perjury and in accordance with 735 ILCS 5/1-109.

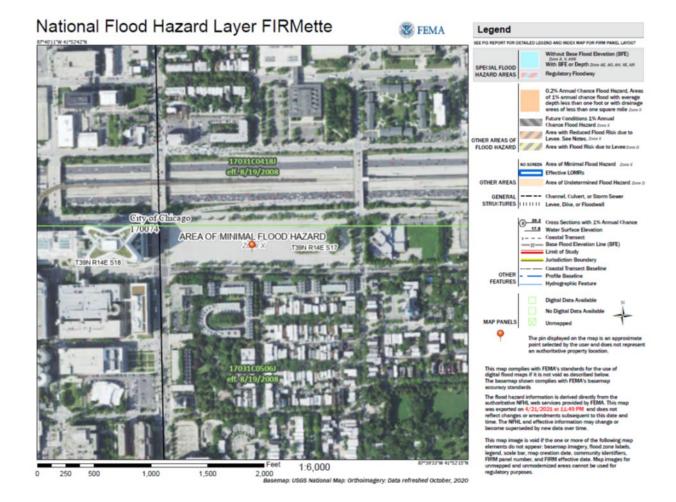
Sincerely,

Thomas Mullin

Executive Vice President, Hospital Operations

Rush-Select Specialty Hospital, LLC

ATTACHMENT 5 Flood Plain Requirements



ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

ATTACHMENT 6 Historic Preservation Act Requirements

The applicant submitted a request for determination to the Illinois Department of Natural Resources - Preservation Services Division. A final determination was received on May 19, 2021 and is enclosed with this application.

ATTACHMENT 6 Historic Preservation Act Requirements



JB Pritzker, Governor Colleen Callahan, Director

Mailing address: State Historic Preservation Office, 1 Old State Capitol Plaza, Springfield, IL 62701

Cook County

PLEASE REFER TO:

SHPO LOG #011042221

Chicago

1404-1555 West Congress Parkway, 500-532 South Loomis Avenue, 1400-1554 West Harrison Street, 501-531 South Ashland Avenue IHFSRB

*New construction, Rush-Select Specialty Hospital

May 19, 2021

Juan Morado Benesch, Friedlander, Coplan and Aronoff LLP 71 S. Wacker Dr., Suite 1600 Chicago, IL 60606

Dear Mr. Morado:

The Illinois State Historic Preservation Office is required by the Illinois State Agency Historic Resources Preservation Act (20 LC\$ 3420, as amended, 17 IAC 4180) to review all state funded, permitted or licensed undertakings for their effect on cultural resources. Pursuant to this, we have received information regarding the referenced project for our comment.

Our staff has reviewed the specifications under the state law and assessed the impact of the project as submitted by your office. We have determined, based on the available information, that no significant historic, architectural or archaeological resources are located within the proposed project area.

According to the information you have provided concerning your proposed project, apparently there is no federal involvement in your project. However, please note that the state law is less restrictive than the federal cultural resource laws concerning archaeology. If your project will use federal loans or grants, need federal agency permits, use federal property, or involve assistance from a federal agency, then your project must be reviewed under the National Historic Preservation Act of 1966, as amended. Please notify us immediately if such is the case.

This clearance remains in effect for two (2) years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the IL Human Skeletal Remains Protection Act (20 ILCS 3440).

Please retain this letter in your files as evidence of compliance with the Illinois State Agency Historic Resources Preservation Act.

If further assistance is needed please contact Jeff Kruchten, Chief Archaeologist at 217/785-1279 or Jeffery kruchten tilinois gov.

Sincerely,

Carey L. Mayer Deputy State Historic Preservation Officer

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Project Costs	s and Sources of Fund	s	
USE OF FUNDS	CLINICAL	NONCLINICAL	TOTAL
Preplanning Costs	\$593,952	\$629,570	\$1,223,522
Site Survey and Soil Investigation	0	0	0
Site Preparation	\$1,792,016	\$1,899,476	\$3,691,492
Off Site Work	\$441,367	\$467,833	\$909,200
New Construction Contracts	\$34,490,182	\$36,558,406	\$71,048,588
Modernization Contracts	0	0	0
Contingencies	\$3,438,838	3,645,049	\$7,083,887
Architectural/Engineering Fees	\$2,005,000	\$3,133,795	\$5,138,795
Consulting and Other Fees	\$3,127,358	\$3,314,891	\$6,442,249
Movable or Other Equipment (not in construction contracts)	\$3,536,694	\$3,748,774	\$7,285,468
Bond Issuance Expense (project related)	0	0	0
Net Interest Expense During Construction (project related)	\$1,773,935	\$1,880,310	\$3,654,245
Fair Market Value of Leased Space or Equipment	0	0	0
Other Costs to Be Capitalized	\$1,491,170	\$1,580,589	\$3,071,759
Acquisition of Building or Other Property (excluding land)	0	0	0
TOTAL USES OF FUNDS	\$52,690,512	\$56,858,693	\$109,549,205
SOURCE OF FUNDS	CLINICAL	NONCLINICAL	TOTAL
Cash and Securities	\$52,690,512	\$56,858,693	\$109,549,205
Pledges			
Gifts and Bequests			
Bond Issues (project related)			
Mortgages			
Leases (fair market value)			
Governmental Appropriations			
Grants			
Other Funds and Sources			
TOTAL SOURCES OF FUNDS	\$52,690,512	\$56,858,693	\$109,549,205

PROJECT COST DETAIL

Preplanning Costs		
	Feasibility Assessments	\$ 652,545
	Arch./Consult. Selection	<u>\$ 570,977</u>
		\$ 1,223,522
Site Preparation		
	Driveways and Walkways	\$ 230,000
	Parking	\$ 2,543,892
	Demo and Site Clearing	\$ 431,600
	Exterior Signage	\$ 27,500
	Landscaping	\$ 362,000
	Flag Pole	\$ 5,500
	Exterior Lighting	\$ 75,000
	Fencing	\$ 16,000
		\$ 3,691,492
Off Site Work		_
	Public Sidewalks & Drives	\$ 462,175
	Parkway Landscaping	\$ 207,025
	Street Restoration	\$ 140,000
	Street Lights	<u>\$ 100,000</u>
		\$ 909,200
New Construction Contracts		\$ 71,048,588
Contingencies		\$ 7,083,887
Architectural and Engineering		
	Design	\$ 5,138,795
		\$ 5,138,795

Consulting and Other Fees			
	Zoning and Local Approvals	\$	130,000
	CON-Related	\$	105,000
	Moving/Commissioning	\$	40,000
	Interior Signage	\$	184,101
	Artwork	\$	110,240
	Construction Management	\$	5,477,460
	Misc./Other (Soft Cost)	\$	395,448
		\$	6,442,249
Moveable Equipment			
	Patient Rooms	\$	3,272,358
	Therapy	\$	1,810,803
	Gym	\$	486,807
	Pharmacy	\$	19,595
	Furniture	\$	440,960
	Misc. (Shared Clinical and Bldg. Ops Equipment)	<u>\$</u>	1,254,946
		\$	7,285,468
Other Costs to be Capitalized			
	IT System	\$	2,320,264
	Security System	\$	177,000
	Kitchen Equipment	\$	<u>574,495</u>
		\$	3,071,759
Net Interest During Construction			
		\$	3,654,245
TOTAL USES OF FUNDS		\$ 1	09,549,205

Preplanning Costs

Preplanning costs are based upon costs expended to date for the location of the facility at the proposed site. The clinical preplanning costs are estimated to be \$593,952, which is approximately 1.4% of the construction contracts plus contingencies plus equipment costs.

Site Preparation

Project site costs are based upon the proposed site location within the City of Chicago on the Near West Side. The clinical site preparation costs are estimated to be \$1,792,016, which is approximately 4.7% of the construction and contingency costs.

New Construction Contracts

The proposed project will be a newly constructed freestanding 100-bed specialty hospital located in the City of Chicago, near the Illinois Medical District on the Near West Side. The facility will be a 5 story 135,280 gross square foot building. The project building costs are based on national architectural and construction standards and adjusted to compensate for several factors. As reported by Crain's Chicago Business, Jones Lang LaSalle, a Chicago based real estate service firm conducted a nation study of construction costs and found that construction costs in Chicago were 19.4 higher than the national average, and third highest in the nation. Coupled with the unexpected increases in labor and raw material costs due to the COVID-19 pandemic, the project's costs are higher than originally planned but are consistent with Rush University Medical Center and Select Medical Corporation's experience in developing facilities. The clinical construction costs are estimated to be \$34,490,182 or \$525.20 per clinical square foot.

Contingencies

The Project's contingencies costs are designed to allow the construction team an amount of funding for unforeseeable event related to construction. Clinical construction costs for contingencies are estimated to be \$3,438,838, or 9.9% percent of projected clinical new construction costs.

Architectural/Engineering Fees

The clinical project cost for architectural/engineering fees are projected to be \$2,005,000 or 5.2% of the new construction and contingencies costs.

Consulting and Other Fees

The Project's consulting fees are primarily comprised of construction management fees and additional state/local fees, and other CON related costs.

Moveable Equipment Costs not in Building Contract

The Project's moveable equipment costs are estimated costs for the entire hospital facility.

Other Costs that are to be Capitalized

The Project's other costs to be capitalized include miscellaneous expense associated with the project.

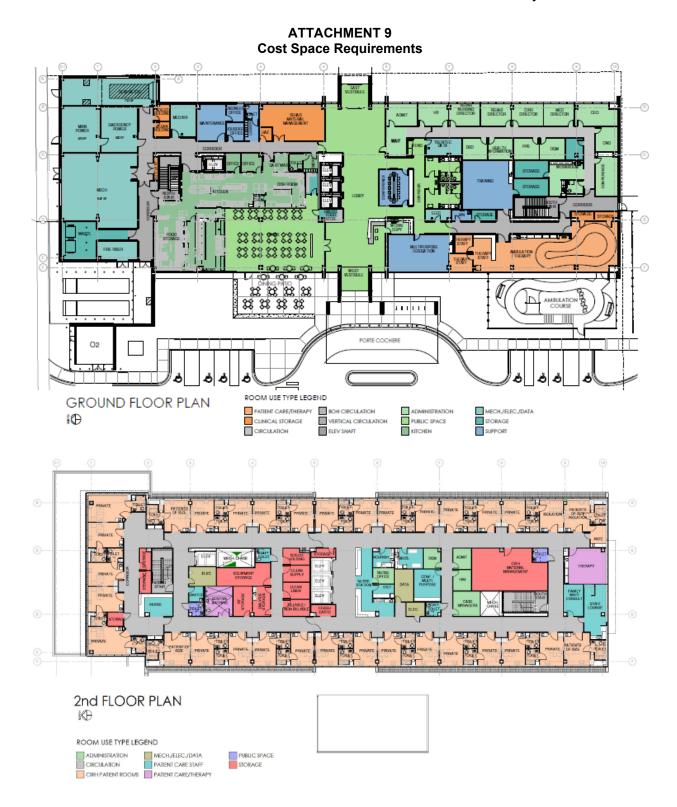
ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

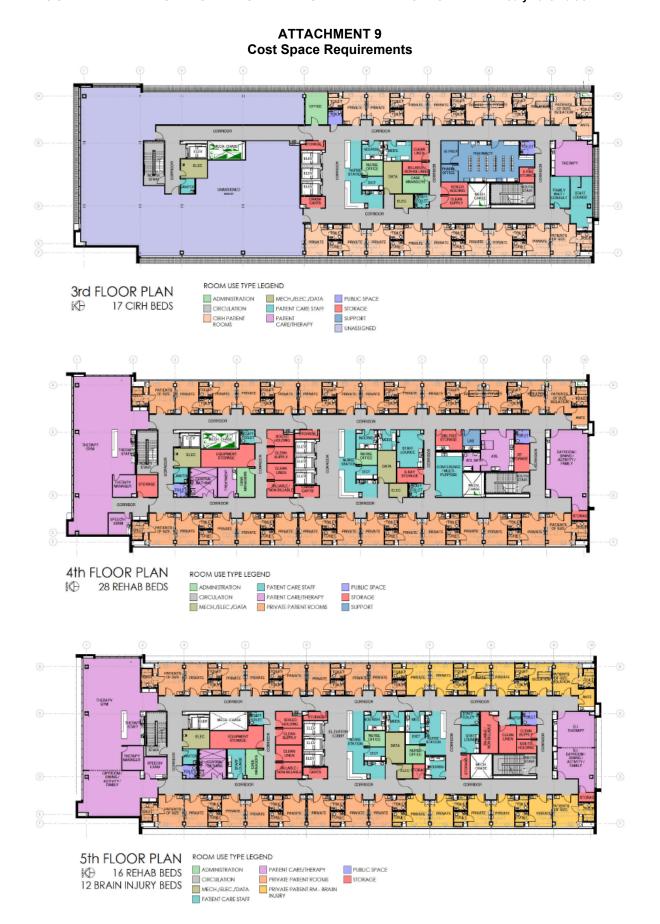
ATTACHMENT 8 Project Status and Completion Schedules

The proposed project plans are still at a schematic stage. The proposed project completion date is December 31, 2024. Financial commitment for the project will occur following permit issuance, but in accordance with HFSRB regulations.

ATTACHMENT 9 Cost Space Requirements

	Cost	Gross Square Feet		Amount of Proposed Total Gross Square Feet That Is:			
Dept. / Area		Existing	Proposed	New Const.	Modernized	As Is	Vacated Space
REVIEWABLE							
Comprehensive Physical Rehab Beds			16,666	16,666			
LTACH Beds			15,173	15,173			
Physical Therapy			10,741	10,741			
Clinical Storage			7,108	7,108			
Patient Care Staff			5,654	5,654			
Rehab Hallway Space			10,329	10,329			
Total Clinical	\$52,690,512		65,671	65,671			
NON- REVIEWABLE							
Administrative			4,626	4,626			
BOH Circulation			2,595	2,595			
Circulation			11,924	11,924			
Elevator Shaft			1,848	1,848			
Kitchen			2,994	2,994			
Interstitial Space			3,397	3,397			
Mechanical Shaft			1,515	1,515			
Mechanical/ Electrical/ Data			5,798	5,798			
Public Space			9,629	9,629			
Storage			1,474	1,474			
Support			2,802	2,802			
Vertical Circulation			3,556	3,556			
Mechanical Penthouse			8,180	8,180			
Shell Space			8,898	8,898			
Total Non-clinical	\$56,858,693		69,236	69,236			
TOTAL	\$109,549,205		134,907 GSF	134,907 GSF			





The following information is provided to illustrate the qualifications, background and character of the Applicants, and to assure the Health Facilities and Services Review Board that the proposed hospital will provide a proper standard of health care services for the community.

Rush Specialty Hospital, LLC

- 1. The proposed project is joint venture project brought forth by Rush University Medical Center and Select Medical Corporation. The ownership of Rush Specialty Hospital, LLC is reflected in Attachment 4.
- 2. Rush Specialty Hospital, LLC and Select Medical Corporation do not have a direct ownership interest in any other health care facility in Illinois. However, Rush University Medical Center does maintain an ownership interest in excess of 5% in multiple healthcare facilities. Those facilities are described in the enclosed certification letter. The applicants certify that there have been no adverse actions taken during the three (3) years prior to filing of this application. A letter certifying to the above information is included at Attachment 11.
- 3. We have included a letter authorizing access to the HFSRB and IDPH to verify information contained in the application at Attachment 11.

Background of Rush University System for Health

Rush University System for Health ("Rush") is a nationally-recognized system anchored by Rush University Medical Center located in the Illinois Medical District, with additional hospitals in Aurora (Rush Copley Medical Center) and Oak Park (Rush Oak Park Hospital), ambulatory surgical treatment centers, its newly approved Ambulatory Care Building, and more than 30 clinical locations across the Chicago area. Rush University System for Health is consistently recognized for exceptional patient care, education, research and community partnerships.



Rush University Medical Center.

Rush University Medical Center ("RUMC") is an academic medical center that includes a 727-bed hospital serving adults and children and Rush University. For more than 180 years, the Medical Center has been leading the way in developing innovative and often life-saving treatments. Rush has been part of the Chicago landscape longer than any other healthcare institution in the city. The Great Chicago Fire destroyed the original Rush Medical College in 1871 and the faculty rebuilt the Medical College at its present location at the corner of Polk and Harrison in 1876.

RUMC has grown from an 80-bed teaching hospital founded in 1882 as Presbyterian Hospital to the hospital that it is today with over 700 beds, 19,284 medical/surgical admissions, 66,757 emergency room visits, and 588,885 outpatient visits as of 2019. RUMC provides medical/surgical, pediatric, intensive care, obstetrics/gynecological, neonatal, AMI and Rehabilitation services across these beds. RUMC is a flourishing center for research and education. This hospital is an anchor facility in the Illinois Medical District located on the city's near west side.

Rush's Commitment to Health Equity

Rush maintains a strong commitment to Chicago and is a national leader in builder healthier communities through the promotion of health equity and dismantling of barriers to health. RUMC named structural racism and economic deprivation as among the root causes for neighborhood-based racial health inequities and proposed an organizational anchor mission and equity strategy to begin to address the social and structural determinants of health that underpinned these racial health inequities. Like many other health systems Rush began the shift to value-based care and population health, with the goal of improving the health of the individuals and diverse communities they serve through the integration of outstanding patient care, education, research, and community partnerships. Rush developed five pillars to guide their health equity strategy in 2016, and they include:

1. Name and eliminate racism.

Rush has stated that if structural racism, economic deprivation, and neighborhood conditions were afflictions at the root cause of health inequities, that they had an obligation as an academic health system to name these as the first step in identifying ways to address these inequities.

2. Adopt an anchor mission.

Rush launched an "anchor mission" to hire, purchase, invest and volunteer locally. Rush is focusing on hiring locally and developing talent, utilizing local labor for contracts and projects, buying and sourcing locally, investing locally and ensuring retirement readiness, and volunteering locally.

Rush Anchor Mission Initiatives Rush University Medical Center Anchor Mission initiatives. Invest locally and Employment · Local labor for Local purchasing · Impact investing in Employee preference capital projects program local communities engagement in local initiative Prime vendor • 403(b) plan autocommunities Apprenticeship Diversity hiring engagement Career escalation and Leveraging and contracts enrollment employee expertise development · Working credit (e.g., teaching skills · Payroll card · Fifth Third eBus (financial education) Source: The authors. NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

Rush is one of the largest employers on Chicago's West Side with a hearty supply chain, and this pillar guides them to focus on community health and wealth-building. The impact of the Anchor Mission initiatives has spanned a range of areas. Some examples include:

- RUMC spending on its Anchor Mission initiatives was \$7.9 million in fiscal year (FY) 2019, \$8.4 million in FY 2020, and has reached \$4.1 million through Q2 of FY 2021.
- RUMC has invested \$6.0 million over 3 years in West Side social impact projects.
- RUMC has opened 16 employment application hubs in Anchor Mission communities to support local hiring.
- RUMC hiring of individuals from Anchor Mission communities has increased over time: from 16.1% of all hires in FY 2018 to 18.2% through Q2 of FY 2021.
- The percentage of RUMC employees contributing at least 6% of their income to a 403(b) retirement plan has increased from 68% in FY 2019 to 80.1% through February 2021.

3. Create wealth-building opportunities for employees.

Internal listening sessions determined that many employees experienced extreme financial distress and were not saving for retirement. Many of Rush's employees lived in the low-income neighborhoods that Rush was trying to elevate. Rush initiated a pension reform program to significantly increase retirement savings, raised entry hourly wages to \$15 per hour, launched healthcare career pathways for incumbent employees, and offered financial wellness and credit training. At the same time, Rush's long-standing Diversity Leadership Council made achieving demographic parity in leadership positions a critical part of the strategy. It was not enough to support low-wage employees: the medical center leadership representation needed to better reflect the demographics of our communities.

4. Eliminate healthcare inequities.

Rush established the Health Equity Governance Committee to report on performance projects that address racial, ethnic, gender and age inequities. Rush began screening patients for social determinants of health, including food, transportation, access to primary care and more. The health system launched a home visiting program for homebound patients who live with chronic illness and for postpartum mothers who live in communities with low life expectancy. With a gift from BMO Financial Group this year, the Rush BMO Institute for Health Equity will be established. This will allow Rush to maintain their most concentrated investment in health equity yet, and organize and coordinate all of their strategies for eliminating health inequities under a single umbrella.

5. Address the social and structural determinants of health.

Rush partnered with other hospitals in Chicago so they could collectively make a greater impact. Consisting of Rush and five other hospitals, West Side United is able to invest millions back into the community and hire West Side employees. The partnership will work toward cutting Chicago's 14-year life expectancy gap between wealthy and low-income communities by 50 percent by 2030.

West Side United: Reduce the Life Expectancy Gap Between the Chicago Loop and the West Side by 50% by 2030

Addressing the five main drivers of life expectancy by focusing on four impact areas



¹Coronary heart disease, stroke, diabetes

Source: West Side United Metrics Working Group decomposition analysis.

NEJM Catalyst (catalyst.nejm.org) @ Massachusetts Medical Society

In its first 3 years, the West Side United project and its participating hospitals invested \$7.6 million in impact investments in West Side projects (by combining the investments of hospitals and the American Medical Association); raised \$3 million to establish four career pathways in health care; launched health outcomes projects targeting hypertension control and maternal infant outcomes across West Side hospitals, clinics, and support for community-based organizations; hired more than 2,000 West Side employees; and raised \$835,000 to support local businesses.



²Overall and gun related

The investments made by Rush has undoubtedly allowed them to lead the way in addressing large health inequities and seeking to positively affect social determinants of health in the communities they serve on the West Side of Chicago. Many portions of these communities have been overlooked and underresourced over the years. The population of these areas have been deeply affected by decades of structural racism and economic deprivation, leading to higher levels of poverty and unemployment as well as more crowded housing and lower rates of education and health insurance. These inequities give rise to illnesses that shorten lives, including diabetes, asthma, heart disease, and depression. Nowhere is Rush's commitment to community felt more deeply than in their work with the West Side United project.



Rush opens new warehouse to create jobs to improve health, 2019.

Rush's Office of Community Health Equity and Engagement ("CHEE") works to enable and support RUMC in fulfilling its commitment to improve the quality of life within Rush's diverse neighboring communities through initiatives and partnerships. These efforts work to allow everyone to attain equal access to the building blocks of good health: safe housing, quality education, family-supporting jobs, reliable transportation, health food and other essentials. CHEE has a network of programs to achieve this goal, including the Rush Education and Community Hub that works to close access gaps with programs for students from preschool through college; School-Based Health Centers that address students' primary, preventative and mental health needs; and the Adolescent Family Center, where young people ages 12 to 25 can receive confidential, age-competent healthcare.



A Rush healthcare provider provides pediatric care to a baby as part of the Adolescent Family Center.

RUMC ranked 17th out of almost 3,000 hospitals in the *U.S. News and World Report*'s 2020-2021 Best Hospital rankings. RUMC also ranked in the top 50 hospitals in eleven specialties, with two in the top ten and three the highest ranked programs in Illinois. This is an especially great honor - fewer than 5% of U.S. hospitals receive high enough scores to rank nationally in even one specialty.

Rush Copley Medical Center in Aurora and Rush Oak Park Hospital have spread the core mission of Rush to other parts of the Chicagoland area with critical healthcare needs. Collectively they provide 411 hospital beds to the community, over \$6.6 million in charity care, and over 320,000 outpatient visits in 2019. These additional centers of healthcare have expanded the reach of the heartfelt compassion of Rush professionals as well as increased the availability of a broad range of services to a growing and diverse community. RUMC, Rush Copley Medical Center, and Rush Oak Park Hospital all consistently receive high marks for quality and patient experience from the Centers for Medicare & Medicaid Services.

Rush's excellence in providing high quality medical care shined during the ongoing COVID-19 pandemic. RUMC was the epicenter for the City of Chicago and provided critical analytic data and information for the entire state. RUMC would go on to be one of the first COVID-19 testing for the city, and ultimately helped distribute vaccines not only to patients of Rush facilities but throughout various neighborhoods by setting up pop-up clinics deep within hard-to-reach communities such as Austin and Englewood.



Rush healthcare professionals studying data analytics during the COVID-19 pandemic.

Rush has been named to the 2020 Center for Companies That Care Honor Roll, a national list recognizing both for-profit and not-for-profit employers for outstanding workplace practices and active community involvement. Rush was chosen in recognition of the support it provided to front-line healthcare workers and to the surrounding community, specifically its commitment to investigating the social determinants of health, including poverty, racial inequity and access to care.

RUMC Rehabilitation Care Unit

RUMC's existing inpatient rehabilitation services at the facility consist of a 59 bed unit and outpatient services. The outpatient services are currently offered in partnership with Select Medical Corporation and the inpatient services benefit, as well, from Select's consultation. RUMC's existing rehabilitation services provide the highest level of care to assist patients in achieving their best outcome. Recovering from a major injury, accident or illness can be the greatest challenge of a person's lifetime. Patients receive customized care based on their unique physical, emotional and spiritual needs. RUMC oversees rehabilitation treatment with a physiatrist, a physical medicine and rehabilitation doctor, to manage the patient's care throughout their treatment.

The connection between the inpatient rehab units and the patient's Rush doctors is seamless, allowing Rush doctors to communicate quickly and monitor progress. Both RUMC and Rush Copley Medical Center are accredited by the Commission for Accreditation of Rehabilitation Facilities (CARF) for meeting CARF's high quality standards.

As Rush continues to grow, it maintains its commitment to outreach and patient care. This commitment shows that any facility supported by Rush will go beyond providing the proper standard of healthcare services to the community and extend into actual improvement in the community.

Rush's commitment to quality is also unquestionable, having its clinical programs nationally ranked by U.S. News and World Reports, and ranking #1 in Vizient quality rankings.

RUSH By the Numbers FY20

Quality

11 Nationally ranked clinical programs (U.S. News)

#1 In Vizient quality rankings

A1 Moody's rating stable outlook

A+ S&P rating stable outlook

AA- Fitch rating stable outlook

\$4.9 BILLION Total Assets

\$2.66 Billion

Total operating revenue

\$163.4 Million Research revenue

4.4% Operating cash flow margin

258 days Cash on hand





Patient Statistics

1,124 Authorized beds
49,387 Admissions
44,269 Surgeries
172,032 ED visits
1,097,709 Outpatient visits

People

13,410 FTEs

7,110

937 Employed physicians



2,146 Total number of students

Consider that four of RUMC's programs are ranked #1 with 11 of them ranked in the top 10. Rush has been honored with the American Hospital Association's Equity of Care Award, and Magnet has recognized RUMC, Rush Oak Park Hospital, and Rush Copley Medical Center.

RUSH Honors & Awards



Vizient, ranked Rush University Medical Center No. 1 in the 2019 Quality and Accountability Study



Honor Roll Hospital 17th in Nation, 2nd in State 11 ranked clinical programs incl. **2** in the top **10**



11 Rush University programs among top 10 incl. 4 ranked #1



Award by American Hospital Association (2019)



Magnet recognized at RUMC, ROPH and RCMC.



CHIME/HIMSS Most Wired Stage 7 Acute



8 Epic Stars and Honor Roll



Rush University Medical Center and Rush Oak Park Hospital received **five-stars** from the Centers for Medicare and Medicaid Services (CMS). Rush Copley Medical Center received four stars. (2021)



LGBTQ Healthcare Equality Leader HOSPITAL SAFETY GRADE

RUMC, ROPH and RCMC received 'A' grades (Spring 2021)



RUMC winner of 2020 "Best Places to Work for Disability and Inclusion"

Rush's commitment to providing safety net services is not only limited to the patients it serves, but also to training the next generation of healthcare providers. With over 40 educational degree programs, 9 of those programs in the College of Nursing having been ranked by U.S. News and World Report's Best Graduate Schools, with four of its programs being ranked #1 Nationally.

Rush University

- > Expertly trained health professionals
- > Continuing Education and Workforce Development Programs
- > Regional clinical data networks











40

Educational degree programs

1,600

Basic, clinical and population studies



U.S. News & World Report's Best Graduate Schools survey ranked 9 programs in the College of Nursing with four programs (Doctor of Nursing Practice, NP Peds Acute Care, NP Peds Primary Care, NP Mental Health) ranked #1 nationally.



2 of the College of Health Sciences programs are ranked among the top 10 in the nation.

Learn. Discover. Thrive.

Bachelor's programs: 3

Master's programs: 14

PhD programs: 3

Professional doctorate programs: 17

Certificate programs: 4

ORUSH

Equity Is Excellence:

Rush Institute for Health Equity Case for Support in Brief

A baby born today in Chicago's Loop is likely to live to 82. But just seven 'L' stops away, in West Garfield Park, life expectancy drops below 70, an average lifespan not seen in our nation's affluent communities since the 1950s. More than half of premature deaths on Chicago's West Side are due to cancer, heart disease, stroke, diabetes and infant mortality.

Recognizing the injustice of growing gaps in health outcomes, locally and nationally, <u>Rush University System for Health (RUSH)</u> became one of the first academic health systems to make health equity a strategic priority. Now, we're making our most concentrated investment in health equity yet: the establishment of the Rush Institute for Health Equity.

RUSH's Health Equity Leadership

RUSH's health equity strategy builds on our decades-long history of community engagement and partnerships. Two of our programs have become international models for this work. Established in 2017, RUSH's <u>Anchor Mission Strategy</u> set corporate targets for improving the economic and physical health of our local communities through hiring, buying and sourcing, investing and volunteering. And in 2018, propelled by philanthropic gifts and grants, RUSH launched <u>West Side United</u>. This health equity collaborative mobilizes six "anchor" health care institutions and numerous community partners to build health and economic wellness on Chicago's West Side.

Most recently, RUSH affirmed its leadership in community health and social care. In 2020 we accepted hundreds of transfers of critically ill COVID-19 patients from West and South Side safety net hospitals, without screening for insurance. When COVID-19 vaccines became available, our longstanding relationships with community leaders and community-based organizations allowed us to quickly increase community confidence and bring distribution into the neighborhoods, homeless shelters and even the homes of West Side residents with limited mobility. And when the Black Lives Matter movement came to the forefront in 2020, RUSH leaders sparked the effort to name racism a public health crisis and commit to efforts that address the social and health impacts of racism.

The Rush Institute for Health Equity: A Model for Lasting Change

Building on our longstanding commitment to the communities we serve, the Rush Institute for Health Equity will provide the tools and resources to pilot, scale and sustain RUSH's most promising and effective health equity programs and research. Dedicated teams in the Institute will organize and coordinate the Rush system's many health equity initiatives and institutional partnerships under a single umbrella. The Institute will ensure this work is guided by community voices and aided by rigorous program design, implementation, research, evaluation, education and workforce development.

Top Priorities of the Institute and Areas for Investment

RUSH seeks \$100 million in philanthropic support over the next 10 years — including a minimum of \$40 million in startup funds within the next five years — to launch the Rush Institute for Health Equity and accelerate key programs within it. Investment in the following areas of focus, which we believe are most likely to strengthen the health and vitality of our hospitals' surrounding communities, will help realize our vision:

- Education and Workforce Development: The Institute will improve
 educational and career opportunities for students, health care professionals and
 community members alike. This will create multi-generational change as we
 prepare tomorrow's health experts, build wealth in our communities and fill gaps in
 the health care workforce.
- Community Clinical Practice: The Institute will deliver high-quality care
 when, where and how neighborhoods need it most. With rigorous evaluation and
 community input, RUSH will launch, scale and replicate effective clinical
 programs to address the greatest health disparities affecting local communities.
- Community Engagement: The Institute will lead innovative community
 partnerships that target social and health inequities. This will include grant
 making to community-based organizations, improving social service systems, and
 leveraging economic power to benefit community partners on the West Side.
- Health Equity Research: The Institute will combine community wisdom with academic rigor to test and pilot new ways to improve health outcomes. Communitybased research will result in evidence-based solutions to address disparities.

Additionally, to make an immediate impact, we must invest in the Institute's ability to evaluate and measure its programs; execute and apply data and research; and coordinate, scale and sustain its most successful programs.

Achieving Equity Together

Equity is more than the aim of the Rush Institute for Health Equity: It's our purpose and moral imperative. We cannot truly achieve excellence in health care without equity, and we cannot achieve equity alone. We need your partnership to eliminate the Chicago region's health equity gap.

Bringing an unprecedented level of rigor and focus to RUSH's health equity efforts, this Institute will effectively target the social and structural factors that shorten lives and stifle economic vitality. What's more, the gains we achieve locally will make RUSH's approach a model for health systems everywhere. Together with our friends and donors, RUSH will give more of our neighbors, across the Chicago area and beyond, a better chance at long, healthy lives.

Background of Select Medical Corporation

Select Medical Corporation ("Select Medical") was founded in 1996 as a regional provider of outpatient physical rehabilitation. In three years, Select Medical went from a small start-up to a diversified healthcare company with a national presence. More than 20 years later, Select Medical has maintained its commitment to deliver exceptional patient care experience that promotes healing and recovery in a compassionate environment. Select Medical has helped define the nation's standard of excellence in specialized hospital and rehabilitative care. The Select Medical of today encompasses four areas of expertise:

- 1. Long Term-Acute Care ("LTAC" or "CIR" which stands for critical illness recovery);
- 2. Inpatient medical rehabilitation;
- 3. Outpatient physical therapy; and
- 4. Occupational medicine.

Select Medical delivers care and support to more than 46,000 talented healthcare professionals across the U.S. giving care to over 80,000 patients every day.

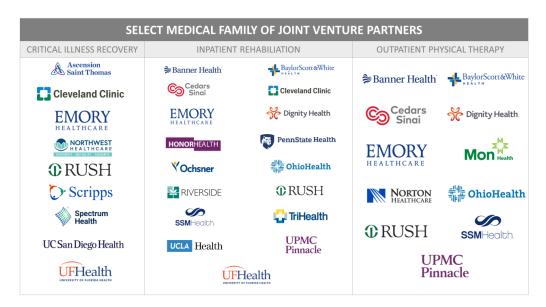
Select Medical is committed to the "continuum of care" to assist patients in healing, restoring function and returning to their everyday life. This means care starting with critical illness recovery, through inpatient rehabilitation and extending into outpatient rehabilitation. The specialty care teams that oversee this continuum are committed to quality, safety and positive clinical outcomes. These teams are led by physicians across different specialties. Together, they build a treatment plan that meets the patient's recovery goals.



Some of the first therapists to receive specialty training and certification to help survivors live well beyond cancer under Select Medical's ReVital cancer rehabilitation program, 2017.

Select Medical is now the leader in post-acute care as one of the largest operators of critical illness recovery hospitals, rehabilitation hospitals, outpatient rehabilitation clinics, and occupational health centers in the United States based on number of facilities. As of December 31, 2020, we operated 99 critical illness recovery hospitals in 28 states, 30 rehabilitation hospital in 12 states, and 1,788 outpatient rehabilitation clinics in 37 states and the District of Columbia.

Select has partnerships with over 20 world-class health systems, including academic medical centers like RUSH, that have a focus on post-acute care. These partnerships have helped elevate and advance health care across the country. As of July 2021, Select's existing JV partners include (in addition to RUSH):



Cleveland Clinic and Select jointly own and operate three inpatient rehabilitation hospitals located throughout the greater Cleveland region. The inpatient rehabilitation partnership was recognized by Newsweek Magazine in 2020 as the Best Physical Rehabilitation Centers in Ohio. Newsweek's rankings were based on quality of care, service, follow-up care, accommodations and amenities relative to in-state competition. The rankings list the top 15% of facilities in the 20 states with the highest number of physical rehabilitation centers, according to the Centers for Medicare & Medicaid Services.



Cleveland Clinic (OH)

Kessler Institute for Rehabilitation, part of Select Medical's national post-acute care network is now ranked the No. 2 rehabilitation hospital in the nation by U.S. News & World Report. Kessler is one of only 12 rehabilitation hospitals to be named to the prestigious Best Hospitals list for 2019/2020 – and is the only rehabilitation hospital in New Jersey to be recognized. This marks the 27th consecutive year that Kessler has been ranked one of the nation's top hospitals for rehabilitation.

Baylor Scott and White Institute for Rehabilitation-Dallas was recognized by U.S. News as "high performing" in medical rehabilitation, one of just seven hospitals from across the country to achieve this special recognition – and the only one in North and Central Texas. The annual U.S. News & World Report rankings for rehabilitation are based on an independent, three-year survey of board-certified physiatrists (physicians specializing in physical medicine and rehabilitation). It is designed to identify those rehabilitation hospitals that excel in the treatment of individuals with complex injuries or challenging medical diagnoses -- such as stroke, brain injury, spinal cord injury, neurologic diseases, orthopedic trauma, amputation, cancer or cardiac conditions – and serve as a guide for patients, families and doctors in making informed decisions about where to receive care.



Banner Rehabilitation Hospital – Phoenix, AZ

Select Medical's inpatient rehabilitation hospitals have been recognized by US News & World Report as some of the best in the country. 98% of former patients recommend care from Select Medical. Its commitment to strategically progressive yet responsible growth led to the company's recognition as one of "America's Best-In-State (Pennsylvania) Employers 2020" in Pennsylvania by Forbes. Its rehabilitation hospitals in Ohio and Florida were recognized as the "Best Rehabilitation Center" in Ohio and Florida, respectively.



Riverside Rehabilitation Hospital – Yorktown, VA



Dignity Rehabilitation: 60 bed, free standing inpatient rehabilitation hospital opened in 2019

Eight of the Select Medical Rehabilitation Hospitals hold ten Joint Commission Disease accreditations, including stroke, brain injury and amputee. The Joint Commission is an independent, not-for-profit organization that credits and certifies healthcare organizations and programs in the United States for meeting certain performance standards. All of Select Medical's critical illness recovery hospitals are Joint Commission Accredited with one exception located in Virginia, which is Det Norske Veritas accredited. Twelve Select Medical Rehabilitation Hospitals hold twenty-two CARF accreditations in the following categories: stroke, spinal cord injury, brain injury, amputee and outpatient services.

Recently, four of Select Medical's inpatient rehabilitation hospitals have been recognized among the nation's "Best Hospitals" for rehabilitation by U.S. News & World Report. They include:

- No. 4 Kessler Institute for Rehabilitation
- No. 13 Baylor Scott & White Institute for Rehabilitation Dallas
- No. 26 Emory Rehabilitation Hospital
- No. 34 OhioHealth Rehabilitation Hospital

This marks the 29th consecutive year that Kessler Institute has been named among the nation's best rehabilitation hospitals. BSWIR-Dallas returns to the national rankings and it is the first time to be included for both Emory and OhioHealth. "To be recognized among the more than 1,100 rehabilitation hospitals and units across the country is testimony to the exceptional care, treatment and outcomes our hospitals provide and underscores the hard work, expertise and dedication of every team member," said IRH Division President Jeff Ruskan. The 2021-2022 rankings are based on a new methodology that combines key outcomes data, measures of scope of services and reputation.



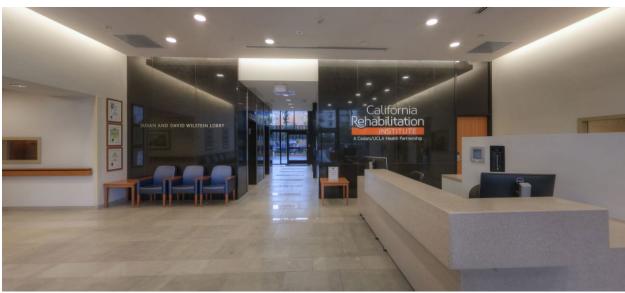
SSM Rehabilitation: 60, bed free standing rehabilitation in Bridgeton (St. Louis, MO)



Northshore Medical Complex - Lacombe, LA

Select Medical's critical illness recovery hospital division was the recipient of the 2018 Mid-Atlantic Alliance for Performance Excellence ("MAAPE") Recognition Award. MAAPE is a not-for-profit corporation that helps all types of organizations improve their performance and outcomes. Select Medical's critical illness recovery hospitals performed at:

- 90% at or above average on the National Healthcare Safety Network (NHSN) Catheter-Associated Urinary Tract Infection (CAUTI) Outcome Measure
- 97% at or above average on the NHSN Facility-wide Inpatient Hospital-onset Clostridium Difficile Infection (CDI) Outcome Measure
- 90% at or above average on the long-term acute care data set quality measure percent of residents/patients with new or worsened pressure ulcers



Cedars Sinai and UCLA Health – California Rehabilitation Institute (CA) 138 bed, free standing inpatient rehabilitation in Century City (Los Angeles) Top three Best Physical Rehabilitation Centers in California per Newsweek

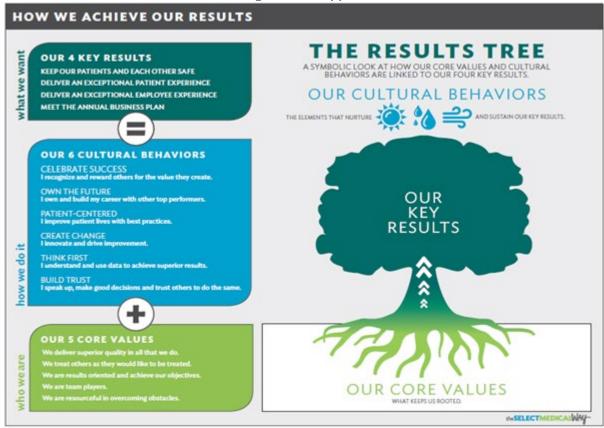


Ochsner Rehabilitation Hospital
5 story free standing post-acute care facility
including long-term acute care, skilled nursing, and inpatient rehabilitation

Select Medical has also formed its own Patient Safety Organization ("PSO") in 2018 under the Agency for Healthcare Research and Quality. This confirms Select Medical's commitment to safety first in all of its ventures. The PSO works in collaboration with the existing committees that focus on quality and safety, adding another layer of focus on data, trends, best practices, and recommendations from the field. The PSO is an additional resource, raising the bar for excellence across the Select Medical organization. Select Medical hospital partners receive information about trends, opportunities for improvement and best practices. This is achieved through the PSO reviewing data from Select Medical hospitals and others that offer this information. This is used to identify 'best practices' at their hospitals. Each quarter, the findings are circulated into a PSO newsletter highlighting data and information that will help each hospital further enhance and improve its care delivery.

As one of the country's largest operators of critical illness recovery hospitals, rehabilitation hospitals, outpatient rehabilitation clinics and occupational health centers, Select Medical provides world-class post-acute care to more than one million patients on the road to recovery every year.

Select Medical's ability to deliver this level of high quality, outcomes-based care is anchored in our culture -- The Select Medical Way -- which includes five core values, six cultural behaviors and four key results.



Evidence-based research has shown that patients make major strides faster when advanced robotics are integrated into rehabilitation treatment programs - especially patients recovering from a stroke, spinal cord or brain injury. Select Medical has utilized rehabilitation technologies for several years. Through an Advanced Technology Committee, Select Medical continuously scouts for and evaluates new rehabilitation technologies that yield solid, evidence-based outcomes. Re-locating the existing RUMC rehabilitation unit in the new facility will allow for patients to benefit from this commitment to utilizing the newest technologies in rehabilitation care.

As Select Medical has grown, it has maintained its commitment to clinical quality and operational excellence. Regardless of the hospital, center, or clinic, Select Medical is devoted to helping others and achieving outcomes that improve quality of life. Select Medical is known throughout the United States for the highest quality of patient care, staying true to its five core values: 1) delivering superior quality in all that it does, 2) treating others as they wish to be treated, 3) staying results-oriented to achieve its objectives, 4) being team players and 5) always being resourceful in overcoming obstacles.

Diversity Equity and Inclusion at Select Medical Corporation

Select lives and demonstrates the principles of Diversity, Equity, and Inclusion as guiding tenets each and every day, and remains committed to seeing the world through the eyes of its most important constituents: its patients and their families, fellow employees, joint venture partners, referral sources and prospective colleagues.

Across its national footprint, Select serves highly diverse communities and continually strives to hire, retain and celebrate a similarly diverse workforce. Consistent with its values, they foster a culture of inclusion and equality. Its nearly 50,000-person workforce finds strength and pride in its ability to see and treat each other as ONE. Together, they strive to restore and nurture life, healing with empathy and compassion for all and condemning racism and discrimination of any kind.

Select Medical is also committed to giving back to the communities it serves. This nearly 25-year spirit of giving is deeply woven into the fabric of the organization. Thousands of its employees volunteer their time and expertise to support important causes and programs that help those in need within 47 states and the District of Columbia. Select Medical actively contributes to more than 100 organizations that support individuals of varying races, genders and disabilities. Whether caring for patients, helping a colleague, or volunteering in the community, Select believes we are all here to make the world a better, healthier place for all.

With that, Select Medical is committed to the following key goals:

- To provide regular education and training on our cultural norms of respect, equality, empathy and compassion, where its employees and patients are valued. They consistently evaluate and update these resources and education, including the expansion of training and education specific to diversity and inclusion.
- To seek to attract the best and brightest talent from around the country utilizing Circa to provide access to a network of more than 15,000 diverse community partners.
- To actively retain and develop its workforce within an environment that fosters mutual respect and trust within an inclusive environment to achieve operational excellence, empower individuals to reach their full potential and deliver superior patient care and customer service.
- To be committed to colleagues' growth and career success. As such, they dedicate resources to foster growth within our employee population through numerous developmental programs.
- To promote employees from within the organization, as appropriate.
- To listen and respond to concerns and input through its local, regional and shared services human resources and leadership team. Employees have access to our intranet resources and regular communication distributions including email, video messages and podcasts. All of these methods of outreach reinforce our values and celebrate demonstrations of *The Select Medical Way* in action.
- To demonstrate how Select cares for its employees through benefits and employee resource programs, including a Charitable Foundation for those in need of help as a result of natural disasters such as hurricanes, tornadoes and wild fires.
- To hold itself accountable by consistently measuring and analyzing its results.
- To promote diversity regardless of race, gender, disability status, veteran status, sexuality, creed or nationality.
- To deploy Affirmative Action Planning, reporting and measurement of success specific to key diversity goals in progress.

These principles will be evident in the operation of the proposed facility.

ATTACHMENT 11 Background of Applicant RUSH Certification and Authorization Letter

Rush University Medical Center 1653 West Congress Parkway Chicago, IL 60612 www.rush.edu



June 30, 2021

Courtney Avery Board Administrator Illinois Health Facilities and Service Review Board 525 West Jefferson Street, 2nd Floor Springfield, Illinois 62761

Re: Certification and Authorization

Dear Ms. Avery:

As representative of Rush University System for Health, Rush University Medical Center, and Rush Partners, LLC, I, Carl Bergetz, give authorization to the Health Facilities and Services Review Board and the Illinois Department of Public Health (IDPH) to access documents necessary to verify the information submitted including, but not limited to: official records of IDPH or other state agencies, the licensing or certification records of other states, and the records of nationally recognized accreditation organizations.

I further verify that, Rush University System for Health has ownership interest in the following Illinois healthcare facilities:

- Rush University Medical Center
- Rush Oak Park Hospital
- Rush Copley Medical Center
- Rush Surgicenter at the Professional Bldg, Ltd.
- Rush Oak Book Surgery Center, LLC
- Rush-Copley Surgicenter, LLC

Additionally, none of the health care facilities listed above have been cited for an adverse action in the past three (3) years.

I hereby certify this is true and based upon my personal knowledge under penalty of perjury and in accordance with 735 ILCS 5/1-109.

Sincerely,

Carl Bergetz, JD Chief Legal Officer

Rush University System for Health

RUSH is an academic health system comprising Rush University Medical Center, Rush University, Rush Copley Medical Center and Rush Oak Park Hospital.

ATTACHMENT 11 Background of Applicant Select Medical Corporation Certification and Authorization Letter



July 6, 2021

Courtney Avery
Board Administrator
Illinois Health Facilities and Service Review Board
525 West Jefferson Street, 2nd Floor
Springfield, Illinois 62761

Re: Certification and Authorization

Dear Ms. Avery,

As representative of Select Medical Corporation, and Select Illinois Holdings, Inc., I, Martin F. Jackson, give authorization to the Health Facilities and Services Review Board and the Illinois Department of Public Health (IDPH) to access documents necessary to verify the information submitted including, but not limited to: official records of IDPH or other state agencies, the licensing or certification records of other states, and the records of nationally recognized accreditation organizations.

I further verify that Select Medical Corporation and Select Illinois Holdings, Inc., have no ownership interest in any Illinois healthcare facilities, and as such we have no adverse actions to report for the past three (3) years.

I hereby certify this is true and based upon my personal knowledge under penalty of perjury and in accordance with 735 ILCS 5/1-109.

Executive Vice President & Chief Financial Officer

Select Medical Corporation

Select Medical | 4714 Gettysburg Road, Mechanicsburg, PA 17055 | selectmedical.com

ATTACHMENT 11 Background of Applicant Rush Specialty Hospital Certification and Authorization Letter



August 3, 2021

Courtney Avery Board Administrator Illinois Health Facilities and Service Review Board 525 West Jefferson Street, 2nd Floor Springfield, Illinois 62761

Re: Certification and Authorization

Dear Ms. Avery,

As representative of Rush-Select Holdings, LLC and Rush Specialty Hospital, LLC, I, Thomas Mullin, give authorization to the Health Facilities and Services Review Board and the Illinois Department of Public Health (IDPH) to access documents necessary to verify the information submitted including, but not limited to: official records of IDPH or other state agencies, the licensing or certification records of other states, and the records of nationally recognized accreditation organizations.

I further verify that Rush-Select Holdings, LLC, and Rush Specialty Hospital, LLC, have no ownership interest in any Illinois healthcare facilities, and as such have no adverse actions to report for the past three (3) years.

I hereby certify this is true and based upon my personal knowledge under penalty of perjury and in accordance with 735 ILCS 5/1-109.

Sincerely,

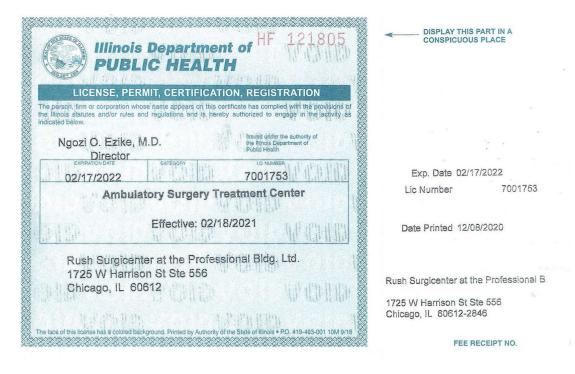
RUSH-SELECT HOLDINGS, LLC RUSH SPECIALTY HOSPITAL, LLC

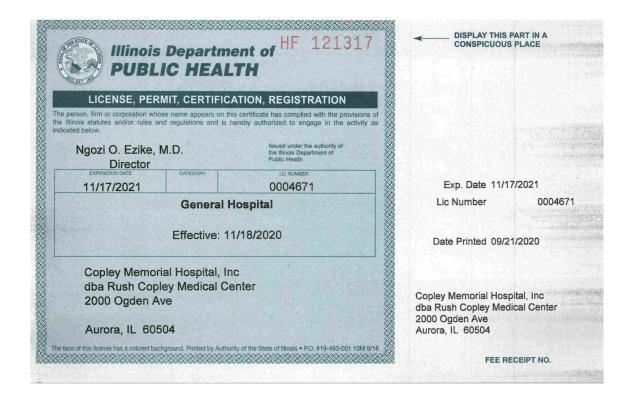
By Select Unit Management Inc., their manager

Thomas Mullin

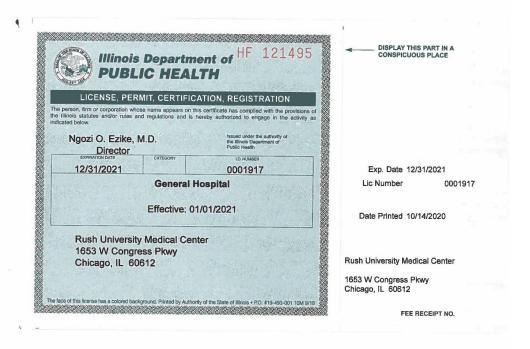
Executive Vice President

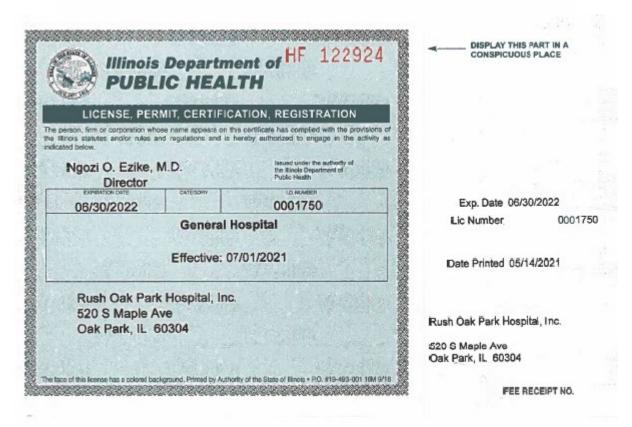
ATTACHMENT 11 Background of Applicant Rush System for Health- Healthcare Facility Licenses



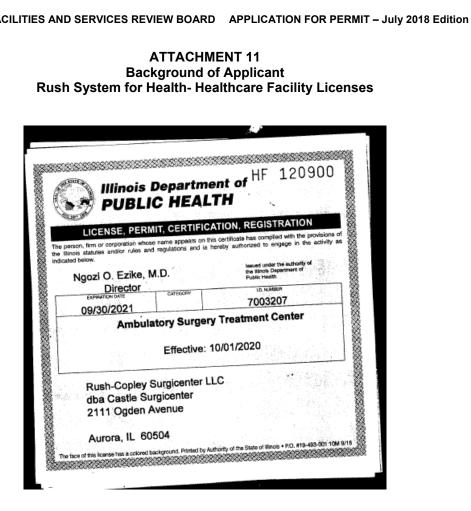


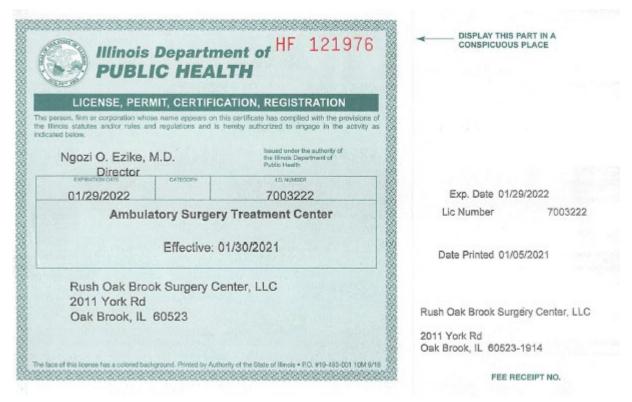
ATTACHMENT 11 Background of Applicant Rush System for Health- Healthcare Facility Licenses





Background of Applicant Rush System for Health- Healthcare Facility Licenses





This project is designed to meet the growing need for inpatient rehabilitation services and to address the identified need for increased access to Long-Term Acute Care services in the community. It reflects the joint commitment of two leaders in healthcare, Rush University Medical Center ("RUMC") and Select Medical ("Select") to create Rush Specialty Hospital ("RSH"), a 100 bed specialty hospital with 59 rehabilitation beds and 44 Long-Term Acute Care ("LTAC") beds.

Importantly, this project has the support of other local providers such as The University of Illinois-Chicago Hospital who has acknowledged the need for these services and whose patients would benefit from increased access to these services. Of further importance is the fact that this project would provide these critically important services which are otherwise unavailable within the Medical District. Of the utmost importance is the fact that the overwhelming need for this project is derived from the existing historical patient population already served by RUMC (as reflected in the referrals accompanying and justifying this project).

Rush University Medical Center has historically provided Inpatient Rehabilitation services within this community and remains committed to meeting the needs of its patient population. The 59 inpatient-rehabilitation beds that are currently operated as a unit within the RUMC hospital will be discontinued and 56 of those beds will re-established within RSH. There will allow for a *reduction in the number of rehabilitation beds in the state's inventory* for this category of service. The result of moving this project from an inpatient unit into a standalone specialty hospital will notably enhance the ability to provide quality care to this existing patient population today and into the future.

Select Medical operates nearly 100 long-term acute care hospitals and more than 25 inpatient rehabilitation hospitals, and while Select operates many outpatient physical therapy clinics within Illinois, including RUMC's outpatient clinic, this will be its first licensed healthcare facility in Illinois. The existing history between RUMC and Select, the institutional experience and commitment to the provision of this care, combined with their familiarity with the proposed patient population makes this an ideal joint venture. The result with be increased access to necessary care being provided by world-class providers.

Herein we address the need for both service lines being served by this project, inpatient rehabilitation and LTAC.

Inpatient Rehabilitation

RUMC is already a leader in inpatient rehabilitation care. RUMC is accredited by the Commission for Accreditation of Rehabilitation Facilities (CARF) evidence of its commitment and ability to meet and maintain CARF's high quality standards. These are services that are critically necessary. Consider that recovering from a major injury, accident or illness can be the greatest challenge of a person's lifetime. RUMC has historically assisted in navigating this process by providing exceptional care and compassionate support at every stage of a patient's rehabilitative journey. The needs of the patient population has, however, reached a point where modernization and advancement of these services is warranted and the establishment of a dedicated specialty hospital is the option which makes the most sense.

Intensive Inpatient Rehabilitation requires a certain continuity of care that is currently available at RUMC and will continue with the new facility. Rush doctors are proximate and available to the inpatient rehab units it currently operates. This allows the medical and rehabilitation teams to quickly communicate, allows for the monitoring of a patient's progress and facilitates seamlessly providing care, as needed, while a patient is completing their rehabilitation and working towards restoring the functionality. These features will be able to be replicated by the establishment of a nearby specialty hospital, but the overall patient experience and rehabilitation services will be able to be improved with the establishment of a new modern facility.

The benefits of a specialty hospital dedicated, in part, to the provision of inpatient rehabilitation are significant. Recently post-acute care patients still have the benefit of hospital-level infection control measures available outside of an acute care setting. The importance of this is evident from both a healthcare delivery perspective when considering reduced incidences of post-acute-care infection, but also for maximizing the patient-experience. Consider some of the lessons learned throughout treating COVID-19. It is unquestionable that patients have expressed hesitancy regarding acute care hospital stays and have made healthcare decisions driven by minimizing their stay within an acute care hospital. The lack of available inpatient rehabilitation services *outside* of an acute care hospital setting undoubtedly resulted in some patients foregoing rehabilitation services from which they might have benefitted solely to avoid being in an acute-care hospital setting. A facility of this nature both improves access to care, modernizes the care available, and importantly can allow patients to avoid the concerns related to extending a stay within a "hospital" where COVID is being treated, but still obtain appropriate care within an hospital setting.

More importantly, there are resources within this facility that cannot be replicated within an acute care hospital setting. The advanced rehabilitation gyms and specialized therapy rooms employ enhanced equipment and technology to support and supplement the services being provided by specialized rehabilitation nurses, therapy teams, and ancillary services all supported by routine physician oversight and multidisciplinary coordination. Simply put, this model allows for better care provided in a better environment that is specifically designed to maximize patient recovery and individual's return to normalcy.

The current inpatient rehabilitation unit at the Johnston R. Bowman Center has served the community with high quality care for many years. It is, however, dated and due for an upgrade to help enhance quality of care and overall patients, staff, and community experience. In order to effectively attract quality health care professionals and continue serving the community with the level of excellence it expects, an updated environment with the latest technology and a state-of-the-art facility will provide that opportunity.

Rush, being a national leader in Neurology, Neurosurgery, Orthopedics and Gerontology, sees a comprehensive rehabilitation demand that currently exceeds its capacity and is currently being provided in an environment in which meeting tomorrow's needs will be a notable challenge. Having more space to operate will allow more patients to receive care that they require. Modernizing inpatient rehabilitation facilities would enhance the Physical Medicine & Rehabilitation Residency program as it would allow Rush to care for more medically complex rehabilitation patients to include individuals with traumatic brain and spinal cord injuries and neurological conditions such as Multiple Sclerosis, Parkinson's and Guillen Barre.

There is also a question of industry standards and patient expectations. The current unit is designed for all semiprivate rooms – more than one patient per room. The industry standard and expectation in the inpatient rehabilitation industry is private rooms. This has been found to help enhance operational and staffing efficiency, quality of care, and patient satisfaction. COVID-19 highlighted the need to have as much space as possible between patients to help mitigate the risk of infection spread. Additional space concerns also apply to the therapy gym areas. Due to its age, the size is inadequate to provide ample therapy to each patient to maximize recovery and rehabilitation efforts.

Another factor is the change in regulatory standards to which the current space are held as compared to those for the new facility. For example, patient bathrooms are not up to ADA compliant standards. Due to its age, the space was ADA compliant when designed but no longer meets current ADA standards. Expanding the bathrooms in the current unit is not a viable option within the current building and floor plan infrastructure. The size of the bathrooms creates an obstacle for patients and staff alike. Patients often need the assistance of staff when using the bathroom and the current size creates obstacles and potential safety concerns for staff to efficiently provide assistance. Bathrooms are the highest areas of safety risk for both staff doing the training and assisting with shower and toileting needs, as well as the patients.

Finally, the equipment utilized in the current unit is dated. Upgrades and innovation are frequently happening across the rehabilitation industry and the existing space and its equipment are due for an upgrade. One example is that there is a particular need for ceiling mounted patient lifts in the rooms and in the therapy gyms, including ambulation racks. With weight bearing requirements and installation infrastructure needs, the age and existing structure would not adequately support the equipment requirements. This is but one example of the type of care and advancements available in the modernized facility that cannot be supported within the existing unit.

Also, a specialized facility employs specialized staff. As this Board has often heard, repetition can provide the foundation for excellence. Establishment of a dedicated specialty hospital will allow for the employment, training, and utilization of dedicated and experienced rehabilitation nurses, physical therapists, occupational therapists, speech-language pathologists, therapeutic recreational specialists, dietitians, social workers and admissions coordinators - all with the common goal of providing world-class patient care. Appropriate interplay and communication takes place with the primary care physicians already familiar with patients' history and goals, as well as with the acute care team whose care preceded the need for comprehensive rehabilitation services. This project will primarily meet the needs of existing RUMC patients, thus minimizing the impact upon other providers outside of the service area. However, the facility is right sized to allow for increased access to providers whose patient populations require access to this care. The system is set up to allow all involved providers to meet regularly to discuss a patient's progress, address any issues that arise, ensure safety and well-being, and implement a common plan towards the established goals of the patient.

Throughout the experience, the most important member of the process is the patient. The new facility will allow for improved access to therapy rooms and equipment. Family involvement and support is a key component to the process. In a post-COVID world, we have learned the importance of offering necessary care outside of an acute-care setting. This is an inherent advantage offered by the establishment of a specialty hospital outside of (but adjacent to) the general hospital setting. Moreover, as discussed more fully below, this allows for the repurposing of the existing rehabilitation unit for the RUMC patient population.

Rehabilitation hospitals are inpatient hospitals where patients can go to receive acute care that includes physical therapy, occupational therapy, speech therapy, and related treatments that focus on helping patients rebuild functional and cognitive skills following events like stroke, spinal cord injuries, brain injuries, hip replacements, or similar conditions. Everything we do, every day, is focused on helping patients achieve the best possible outcome and preparing them for a successful transition back home.

Select also provides inpatient rehabilitation care at multiple locations where their care focuses on Brain Injury, Spinal Cord Injury, Stroke, Amputation, Neurological Disorders, Orthopedic Conditions, Pediatric, Cancer Rehabilitation. One example of the increased opportunities which become available through this project is the increased access to and utilization of technology to maximize the recovery of the patient population.

We have all experienced how integrally technology has become intertwined into every aspect of our lives and rehabilitation is no exception. Select Medical relies upon evidenced-based research that has demonstrated patients make notably major strides forward, faster, when integrating advanced robotics into patients' rehabilitation treatment programs. When you have patients who are recovering from strokes, spinal cord or brain injury, this is particularly true. Consider the following from the Select Medical website (https://www.selectmedical.com/advanced-robotics-and-rehabilitation-technologies/):

Robotic technology allows patients to perform a much higher number of specific repetitive movements during a treatment session as compared to a conventional session. More repetitive movement is accomplished through the equipment's sensors that monitor, assist and provide precise support for a patient's position and movements.

Concentrated repetition in rehabilitation treatment plays an important role in a process called neuroplasticity, which is the brain's ability to reorganize by creating new neural pathways. Simply put, it is this ability to reconnect the flow of communication from brain to body, that helps patients relearn how to walk and perform everyday life activities. By increasing the intensity of repetitions, robotics technology blended with the expert skills of a licensed therapist, can enhance a patient's recovery process.

Select Medical has utilized rehabilitation technologies for several years. Through an Advanced Technology Committee, the post-acute care provider continuously scouts for and evaluates new rehabilitation technologies that yield solid, evidence-based outcomes. That's why it has expanded its treatment program to include advanced robotics in 23 of its inpatient rehabilitation hospital therapy gyms across the U.S.

In addition to the clinical benefits derived from these technologies, there are subjective advantages as well. Patients are highly engaged and motivated to accomplish goals based on the video game "challenge and reward" model that guides the therapy experience, according to therapists. The equipment is also fully customizable to support the therapists' treatment plans and abilities of the patient at every stage of recovery.

The model which Select Medical employs utilizes robotics in its hospital therapy gyms, and is envisioned for this hospital, is an undertaking that is notably more challenging to employ within the confines of an inpatient rehabilitation unit inside of an acute care hospital. This is especially true when compared to a dedicated specialty hospital that has been designed for these specific purposes. While the specific equipment available and utilized varies from hospital to hospital based upon a variety of factors, mostly driven by patient need, some examples of the equipment utilized include:

<u>ArmeoSpring</u>: a robotic arm that helps retrain self-initiated movement for the upper extremities (from shoulder to fingers).

Lokomat: which is a fixed, lower body exoskeleton with a treadmill that uses robotics along with a body weight support harness to retrain patients in how to walk.

<u>Bioness H200</u>: This is a hand rehabilitation system that assists patients with weakened or paralyzed limbs regain the skills they need to improve their daily lives. It employs a wireless system to assist in regaining the skills needed for reaching, grasping, opening and closing of the hand. This technology uses Functional Electrical Stimulation to mimic electrical brain signals, and in doing so helps to reactivate impaired muscles.

<u>Bioness L300 Go</u>: This technology also employs Functional Electrical Stimulation to advance a thigh and foot drop system to stimulate specific muscles to help patients walk more naturally with improved speed and balance.

<u>Bioness Integrated Therapy System (BITS)</u>: Utilizes a large touch screen digital display with programmed exercises to improve physical, visual, auditory and cognitive abilities of individuals with deficits in these areas.

RT300 Electrical Stimulation Bike: A stationary bike that uses Functional Electrical Stimulation to help patients who have weak or paralyzed muscles perform peddling movements with their arms and legs.

<u>LiteGait</u>: Is a mobile system offering bodyweight support that is used for gait and balance training and is utilized to bridge the gap between treadmill gait training and free over ground walking.





Eight Select Medical Rehabilitation Hospitals (each hospital is either a joint venture or wholly owned by Select Medical Corporation) hold 10 Joint Commission Disease accreditations, including: stroke, brain injury and amputee.

- Baylor Scott & White Rehabilitation Hospital, Fort Worth (Stroke)
- Baylor Scott & White Rehabilitation Hospital, Dallas (Stroke)
- Baylor Scott & White Rehabilitation Hospital, Frisco (Stroke)
- Baylor Scott & White Rehabilitation Hospital, Lakeway (Stroke)
- Denton Rehabilitation Hospital (Stroke, Amputee)
- Emory Rehabilitation Hospital (Stroke, Brain Injury)
- Helen M. Simpson Rehabilitation Hospital (Stroke)
- SSM Health Rehabilitation Hospital (Stroke)

Select Medical's facilities have also received accreditation from the Commission on Accreditation of Rehabilitation Facilities ("CARF") which is a non-profit accreditor of health and human services. To obtain CARF accreditation, providers must demonstrate meeting established standards designed to demonstrate their commitment to being among the best facilities available. The accreditation also demonstrates Select Medical's commitment to enhance its performance, manage its risk, and distinguish its service delivery. This same commitment will be reflected in the current project.

Twelve Select Medical Rehabilitation Hospitals hold 22 CARF accreditations, in the following categories:

- Stroke
- Spinal cord injury
- Brain injury
- Amputee
- Outpatient services.

Those facilities and their CARF accreditation are:

- California Institute for Rehabilitation (Stroke, Spinal Cord Injury)
- HonorHealth Rehabilitation Hospital (Stroke)
- Kessler Institute for Rehabilitation, West Orange (Stroke, Spinal Cord Injury, Brain Injury, Amputee)
- Kessler Institute for Rehabilitation, Chester (Stroke, Brain Injury, Amputee)
- Kessler Institute for Rehabilitation, Saddle Brook (Stroke, Brain Injury, Amputee)
- Kessler Institute for Rehabilitation, Marlton (Stroke)
- OhioHealth Rehabilitation Hospital (Stroke)
- Penn State Health Rehabilitation Hospital (Stroke)
- SSM Health Rehabilitation Hospital, Bridgeton (Stroke)
- SSM Health Rehabilitation Hospital, Richmond Heights (Stroke)
- SSM Health Rehabilitation Hospital, Lake St. Louis (Stroke)
- West Gables Rehabilitation Hospital (Stroke, Brain Injury, Outpatient)

RUMC is also a celebrated provider in this area.

The Rush Stroke Program was recertified with the Joint Commission's Gold Seal of Approval and the American Heart Association's Heart-Check mark for Advanced Certification for Comprehensive Stroke Centers. This certification recognizes hospitals that have the most advanced level of stroke care for patients. Rush has held this designation, the highest of three advanced levels of certification for stroke programs by the Joint Commission, since 2013, and is one of only eight such centers in Illinois.

Continuing to provide access to this level of care and the necessary after care is fundamentally important. When you consider the primary source of need for this project, as evidenced by the referral letters, is driven by the existing patient population being served by RUMC it is evidence how imperative this project is.

Stroke is a leading cause of death and adult disability in the United States (Source: American Heart Association/American Stroke Association). On average, someone suffers a stroke every 40 seconds, someone dies of a stroke every four minutes and 795,000 people suffer a new or recurrent stroke each year.

Heart disease and stroke are, respectively, the first and third leading causes of death, and also the major causes of disability in Illinois. In 2017 there were 25,393 deaths in Illinois due to heart disease and 6,021 deaths due to stroke. Deaths due heart disease and stroke combined (31,414) represent almost 29 percent of all deaths in Illinois in 2017 (109,726). (Source: IDPH). Illinois residents need improved access to this care and warrant access to care at the highest level of excellence that is evident in the care provided by RUMC and Select Medical.

The setting in which a stroke patient receives post-acute rehabilitative care is significant factor in the likelihood of the patient returning home and experiencing the full capability of functional improvement. Inpatient rehabilitative facilities are designed to provide hospital-level care to patients as they receive intensive multi-disciplinary care and begin their road to recovery.

Medicare has specific criteria for an individual to be eligible for care in an inpatient rehabilitation facility. Specifically, Medicare requires the patient to:

- Have a medical condition that requires rehabilitation services (PT, OT, Speech, etc.);
- Require at least three hours of therapy at least five days a week (or 15 hours within seven consecutive days);
- Be capable of actively participating in and benefitting from an intensive therapy program;
- Need medical supervision, being seen face-to-face routinely (at least three times a week) to allow for active management and revision of the proposed treatment plan as needed; and
- Benefit from an interdisciplinary approach, thus necessitating the weekly team conferences that ensure everyone is working together.

This multidisciplinary approach benefits patients and increases the likelihood of individuals meeting their post-rehabilitation goals. Post-stroke patients can benefit from neurological care, physical therapy, occupational therapy, speech therapy, language therapy, as well as rehabilitation nursing. Working together improves outcomes, promotes the patient's return home, and prioritizes return to maximized functionality.

Long-Term Acute Care

Long-term acute care focuses upon the treatment of patients with serious medical conditions that require care on an ongoing basis but no longer require intensive care or extensive diagnostic procedures. Many patients, but not all, enter Long-Term Care Hospitals from an Intensive Care Unit (ICUs) or other acute care setting. It maintains its own place on the continuum of care, often after the patient has undergone acute care hospitalization but prior to (or while working towards the goal of) the patient being appropriate for comprehensive rehabilitation.

The need for increased LTAC beds is driven by several factors, primarily meeting the needs of the existing patient population. The care to be provided related to this category of service includes:

Cardiac and Heart Failure

The purpose of this care is to coordinate highly trained cardiac care teams to remain at the forefront of heart disease research through long-standing relationships with the American Heart Association. The model employs physicians, nurses, rehabilitation therapists, pharmacists and nutritionists working together to create a treatment and recovery plan that is unique to each patient's cardiac condition to provide the best possible outcome. The conditions in which this care proves necessary and in which the applicants have expertise is in the treatment of:

- Congestive heart failure
- Valvular heart disease
- Congenital heart diseases
- Enlarged heart (cardiomyopathy)
- Peripheral vascular disease
- Post-myocardial infarction with complications (heart attack)
- Post-cardiac surgery

Infectious Disease

During the treatment of patients who are chronically ill and have been so for an extended period of time, infections can and, in fact will, occur. Thus, the ability to manage and treat such developments is of critical importance. Select Medical has developed a clinical Antibiotic Stewardship Program that is employed by its infectious disease teams. It reflects years of experience in this critical industry and results from specific and specialized training to reduce or eliminate infections during the period of critical illness recover. Specifically, this facility will be equipped to tackle:

- Bacterial, viral and fungal infections
- Sepsis
- Surgical wound infections
- Infected pressure ulcers
- Skin infections (cellulitis)
- Bone infections (osteomyelitis)

Medically Complex Treatment

Treating medically complex patients requires a unique level of care. One of the fundamental advantages to a dedicated specialty hospital providing this care is that it allows for a comprehensive interdisciplinary team approach across the continuum of care and, ultimately, provides the best chance of recovery and quality of life for the patient. The process involves the interdisciplinary team developing a care plan that is customized to the medical needs of each patient.

These services include everything from nursing and respiratory care to nutritional support, medication management and rehabilitation therapy with the singular focus of getting the patient well enough to be discharged.

Based upon the needs of the patient, their overall complexity, the services available include:

- Daily physician assessments
- Low patient-to-nurse ratios
- 24-hour respiratory therapy
- Physical, occupational and speech therapies to promote independence
- Clinical dietitian and nutritional counseling
- Radiology and laboratory services
- Clinical pharmacy
- Individualized case management
- Respiratory care, including ventilator weaning and tracheostomy care
- Telemetry and other specialized monitoring
- IV medications and critical drips
- Dialysis
- Chest tubes
- Wound care
- Prolonged IV antibiotics
- Isolation
- Post-operative care
- Pain management

The types of patients generally are managing issues related to:

- Infectious disease
- Cardiovascular disease
- Prolonged surgical recovery
- Uncontrolled diabetes
- Cardiovascular disease
- Cancer
- Renal failure
- Sepsis
- Obesity
- Long-term IV medications
- Malnutrition

Neurological and Post Trauma

Neurological post-trauma patients are generally recovering from the following conditions:

- Stroke
- Brain injury
- Spinal cord injury
- Neurological illness
- Seizure disorder
- Paralysis

The focused teams provide advanced neurological treatment for patients who have suffered a complex brain injury. These individuals are monitored 24/7 as they progress through a highly customized care plan with the ultimate goal of stabilization and progression towards conversion towards rehabilitation care and their ultimate path towards recovery and return towards as much normalcy as can be returned to their daily lives.

Pulmonary and Ventilator Weaning

On an annual basis, Select Medical's pulmonary teams treat more than 11,000 ventilator-dependent patients. The care of these patients is led by board-certified pulmonologists, pulmonary program managers, respiratory therapists, nursing and rehabilitation professionals, pharmacists and nutritionists, Select Medical is proud to lead the country in ventilator liberation (weaning). The conditions with which the patients are dealing include:

- Mechanical ventilator dependence
- Chronic lung disease (such as COPD and emphysema)
- Neuromuscular disorders
- Acute respiratory ailments
- Pneumonia
- Post-surgical complications
- Spinal cord injury
- Stroke
- Brain injury
- Metabolic encephalopathy

All critical illness recovery hospitals are required to adhere to strict, evidence-based respiratory protocols to receive a Select Medical "Pulmonary Center of Excellence" designation.

Wound Care

You cannot provide care to patients with this degree of medical complexity without being highly skilled and experienced with wound care. Due to the limited mobility of the patient population, despite aggressive focus on nutrition and patient repositioning, skin integrity issues are often unavoidable. Thus, wound care specialists treat patients suffering from pressure ulcers and other wounds and treat the following conditions:

- Severe and complicated skin ulcers
- Vascular ulcers
- Arterial ulcers
- Non-healing surgical wounds
- Wound infections
- Bone infections (osteomyelitis)
- Amputations
- Burns
- Severe skin infections

The increasing medical complexity of patients and reflects the necessary partnership of acute and post-acute care to preserve life in circumstances previously thought impossible. Despite this fact, some area providers have stepped out of the marketplace, whether due to a lack of financial resources or a lack of commitment to this care is not known. What is known, however, is the need for this care continues to grow. This project is justified by an internal need, referrals from the existing, historical, and projected patient population of RUMC, and further supported by local area hospitals who need increased access to these services.

WHY THIS PROJECT MAKES SENSE

The marriage of LTAC services with inpatient rehabilitation services makes complete sense from both a healthcare delivery perspective, in maintaining successful patient outcomes as a priority, and when considering the primary concerns driving the need for increased access to this care.

For too long, the continuum of care in Illinois was forced to compensate for a notable gap that existed between acute care hospitals and the post-acute skilled nursing care so ably provided by Illinois' nursing homes. The result of this gap was that some patients stayed too long in an acute care hospital and others were moved too quickly to receive care in a skilled nursing facility. What was the result? Despite the best intentions and significant efforts of the healthcare providers committed to providing this care - the result was undermining the long-term success of the patients maximizing their return to the fullest functioning of their daily lives. For too long there was only one facility dedicated to world-class post-acute rehabilitation care, tucked away in the Gold Coast of Chicago. This did not provide the access to care Illinoisans deserved.

Providers have come to Illinois to help close this gap but, unquestionably, increased access to care is needed. This project is designed to meet this documented need.

This Board has seen projects justified entirely by statistical analysis evidencing the absence of care in various regions of Illinois. Those projects have rightfully been approved. This Board has seen projects necessitated by shifting patient care delivery models or changes in reimbursement. Those projects, too, have been rightfully approved. This project is justified by the historical and projected referrals for RUMC. This project reflects the actual need for actual services by actual people who, without access to this care, will not be able to live the best lives available to them. That is what makes this project so critical and that is why this project, too, should be approved.

One of the significant considerations advanced by this project is not only the continuum of care, but also the importance of continuity of care. The physical and institutional proximity of this hospital to the RUMC system is of paramount importance to the likelihood of positive outcomes. It allows for easier exchange of necessary information, seamless communication between acute care and post-acute care providers, and fundamentally improves patient experience and outcome.

Another significant consideration is that family involvement is fundamentally important to the long-term prognosis of these patients. Having already (on a primary basis) sought care from RUMC, the absence of these services creates avoidable obstacles in the success of these patients. Proximity matters. This facility is as easily accessible as is its acute-care counterpart. Patients and families facing long and challenging recoveries should not have additional stumbling blocks placed in their way. Increasing the access of this patient population to these services in the same service area in which they are obtaining primary care and acute care will significantly improve outcomes which will significantly improve lives. While proximity is important for patients, it cannot be understated how important it is to have proximity to RUMC physicians.

The medical complexity of this patient population remains an important consideration. Despite unquestionably excellent care, patients will experience setbacks. Proximity to and coordination with the acute care team is inherently facilitated in the model proposed by this project. This is equally true for patients served by RUMC and those being referred to by other providers. UI Health has provided referrals to justify this project as well as submitting a letter of support, reflecting an acknowledged need for these services in this area and to be provided by these applicants. That is both reflective of the need for this care as well as the excellence of the teams proposing to provide this care.

The joining together of world class providers, each committed to serving this patient population and each having already evidenced excellence in the provision of this care is a recipe for success. This project will increase access to necessary care for a patient population that has evidence the need for this care in this area. As discussed below in the alternative section, significant thought has been given to the design of this project. The size and the services have been evaluated based upon some providers leaving the area, other providers re-entering the area, and with an eye towards what future needs are likely to exist. The project is right-size but has designed within it the flexibility to meet the future needs of this patient population, whatever that proves to be.

It is expected there will be challenges to this project rooted in a desire to protect market share and avoid competition. However, as discussed in the alternatives section below, this project reflects an addition of necessary services designed to meet existing need and support future growth. This project is not intended to obviate the need for other existing providers. RUMC has historically supported multiple other providers by making referrals to existing facilities. The intention is that these referrals will continue and that the volume of referrals will not be notably impacted. This can best be evidenced by the fact that the applicants have presented sufficient referrals that would justify a facility with notably more beds than are being proposed. If this has ever occurred, this occurs rarely. Why, therefore, would the applicants present a project smaller than the referrals they have available? The answer is simple and is in line with the rules and spirit of the Certificate of Need program and process. The purpose of this project is not to bypass the utilization of existing providers - it is not intended to have an adverse impact upon area providers - to the contrary, it is designed to minimize the impact upon other area providers while still establishing additional services where they are sorely needed.

Consider the following: Rush documented, on an annual basis, an average of over 400 patient days where it was unable to find placement in an LTAC setting for patients whose conditions warranted the provision of LTAC services. There were multiple reasons. Sometimes it was due to capacity (although multiple area facilities have 'mothballed' beds that have been held on the books for years despite never having been set up). Sometimes it was due to the fact that patients were uninsured. Other times it was due to the patient's immigration status. RUMC provided these patients care - because it is committed to being the safety net provider for the community it serves, committed to charity care, and because these patients needed care. However, the inability to place these patients in the proper setting carries with it multiple adverse impacts. It resulted in increased and avoidable costs, it resulted in patients being held in an acute-care setting when a post-acute care option would have been more appropriate, and it resulted in the potential that others requiring acute care faced avoidable obstacles in being able to access necessary care. All of these negative consequences are avoidable with the approval of this project.

Consider the following: 400 patient days, presuming an average length of stay of 33 days, would justify 12 fully utilized LTAC beds all on its own. That is 12 fully utilizable beds simply meeting the needs of indigent and underserved individuals that no other healthcare facilities are caring for. These individuals need access to this care and it is a core tenet of this Board to facilitate this type of access to care. Moreover, given the significant expense accompanying the types of care provided by this proposed facility and the longstanding commitment of RUMC to charity care, it is essential to expand these available lines of services for both LTAC and inpatient rehabilitation with a provider, like Rush, committed to charity care. There would be no adverse impact upon other facilities, there would be immediate financial relief by avoiding unnecessary expenses in the acute care setting, and most importantly these patients would be able to receive the care they need in the appropriate setting.

Once this Board considers the additional historical and proposed referrals that support this application it becomes evident that this facility can justify the establishment of far more than the number of beds being sought. However, committed to complying with both the spirit and the letter of the CON laws, this project was designed to minimize the adverse impact upon other area providers. The result may be a slower ramp-up period and, potentially, the need to return before the HFSRB to either add additional beds or to repurpose the identified shell space. However, the applicants are sufficiently confident in the need for these proposed services - both the need they proposed today and the likelihood of additional need tomorrow - that they are presenting a project that will allow them to demonstrate the need for the services, show the lack of adverse impact upon other area providers, and then, with the future approval of this Board, ultimately right size the project to meet future need.

Rehab Impairment Codes (RIC): Inpatient Rehabilitation	
ORTHOPEDICS	24%
STROKE	24%
GENERAL REHAB	20%
TRAUMATIC BRAIN INJURY	16%
NEURO	9%
SPINAL CORD INJURY	8%

When you consider the underlying conditions that this facility will treat, it is important to ask the question of whether the proposed patient population truly has sufficient access to this type of care at the quality level at which it is being proposed. Consider the demographics of the patient population served by RUMC. The majority of patients historically seen at RUMC are Black or Latino. Moreover, as a committed partner alongside the Medical District, this project will not just serve RUMC patients (although the need for this project could be justified by RUMC referrals alone).

Other area providers, such as UIHealth, have stepped forward to support this project. UIHealth, in 2019, showed an inpatient population comprising of 43.6% Medicaid and over 30% Medicare. Its patient population is over 50% Black and approximately 25% Latino. Intent upon being able to see the unmet needs of the communities it serves being met, UIHealth evidenced its support through the submission of a referral letter to support this project. These patient populations are the communities in need of increased access to this care and these communities will be served by the establishment of this facility.

Importantly, Rush and Select have both the financial wherewithal and the commitment to meeting the needs of this community, regardless of payer. Access to care is a more significant issue for the uninsured and underinsured communities this facility will serve. Evaluating access to care includes a question of evaluating healthcare equity. This is a project that is designed to, and in fact will, improve access to care for the very populations this Board is designed to protect.

These patient demographics hold true when you consider samplings of the recent rehabilitation and LTAC patients at RUMC. Consider the following summary, reflecting 1055 rehabilitation patients seen over a recent 18 month period, with an average patient age of 61, reflecting 56% male patients and 44% female patients:

Black or African American	41%
White	38%
Other/Unknown	16%
Asian/Pacific Islander	5%

Ethnicity:

Not Hispanic or Latino	82%
Hispanic or Latino	17%
Other/Unspecified	1%

Evaluating the impact of insufficient access to care is highlighted when you consider the secondary line of services at issue.

Neurology	22.8%
Neurosurgery (non-spine)	13.6%
Oncology	11.9%
Medicine	8.9%
Ventilator Support	7.4%
Cardiac Surgery	6.8%
Neuro Spinal Surgery	6.5%
General Surgery	6.4%
Cardiology	3.1%
Rehabilitation	2.7%
Orthopedics (non-spine)	2.0%
Gastroenterology	1.4%
Ortho Spinal Surgery	1.0%
Thoracic Surgery	1.0%
Trauma	0.9%
Hematology Other	0.7%
Abdominal Transplant	0.7%

Vascular Surgery	0.5%
ER Services	0.5%
Obstetrics	0.5%
Otolaryngology	0.3%
Other Spinal Surgery	0.2%
Urology	0.1%

This is equally true when looking at a sample of 484 LTAC patients over the same period of time. The average LTAC patient was 59 years old, 54% male and 46% female.

Race	

Black or African American	41%
White	38%
Other/Unknown	18%
Asian/Pacific Islander	3%

Ethnicity:

Not Hispanic or Latino	78%
Hispanic or Latino	21%
Other/Unspecified	1%

For these patients, the secondary services lines from which these patients came and the services for which this project would increase access to include:

Ventilator Support	33.9%
Medicine	15.5%
General Surgery	9.9%
Oncology	8.1%
Cardiology	6.2%
Gastroenterology	5.4%
Cardiac Surgery	5.2%
Neurology	4.8%
Orthopedics (non-spine)	1.7%
Trauma	1.4%
Hematology Other	1.2%
Thoracic Surgery	1.2%
Vascular Surgery	1.0%
Urology	1.0%
Neurosurgery (non-spine)	1.0%
Otolaryngology	0.6%
Er Services	0.6%
Rehabilitation	0.6%
Abdominal Transplant	0.2%
Neuro Spinal Surgery	0.2%
Obstetrics	0.2%

This applicant is **committed to the provision of safety net services**. As described in the background of applicant section, Rush's entire strategy for providing care is based on delivering health care services to patients with barriers to maintain healthcare. Those barriers may include a lack of insurance, special needs, and ethnic or cultural characteristics. RUSH is also unique in their commitment because of their robust community efforts through West Side United and their medical university which allows them to support teaching, research to the ultimate benefit of the community.

The Illinois Medical District

The Illinois Medical District ("IMD") provides a premier location for the establishment of the joint venture between RUMC and Select Medical. This area of Chicago is one of the largest urban medical districts in the country and has a thriving community of healthcare providers, researchers, educators and patients. Through the special-use zoning of the area and the Illinois Medical District Commission, the IMD brings together both institutions and individuals to reach common goals. The variety of medical and educational institutions located in the IMD are surrounded by a rapidly changing urban community. The IMD incorporates four medical centers and hospitals and is continuously growing to foster the surrounding community's needs.

RUMC is a pillar of this area, working in tandem with IMD leadership to achieve a coordinated vision of care, education, and growth. IMD's current plan for expansion incorporates designing and populating the more underutilized sites of the area with institutional, office, research and educational space as well as increases in retail, amenities, housing and open space.





Images:
The District houses a wide variety of building types and styles, shown to the left:
1. UIC's Student Union Building
2. Stroger Hospital Campus
3. UIHHSS
4. UIHHSS
Laboratory Building





IMD leadership along with the leadership of four medical center institutions and the surrounding community are constantly working towards harmonious growth in this area to serve the community. The joint institution built between RUMC and Select Medical would be a seamless addition to this area. The commitment to community and passion for innovation shown by both of these institutions separately ensure that their cooperative efforts would bring the exact type of cutting-edge resources that the IMD is known

The proximity between RUMC and the proposed facility would ensure the same continuum of care that is currently offered by current Rush and Select Medical institutions, with the additional benefit of the extensive resources of RUMC. Patients would be able to not only rely on the providers at the proposed facility, but additionally their healthcare providers at RUMC. This project brings together two world-class organizations who are dedicated to providing access to necessary categories of service that the IMD is without and that the community RUMC serves clearly needs.

Unlike all other categories of service, the 'need' for LTAC services is not gauged by a single HSA but, rather, is considered by looking at the needs and utilization of several. It carries with it the potential illusion that these services are not needed. However, an honest assessment of the need for these services along with a critical look at the strategic decisions of various competitors reveals that the appearance of an excess of capacity is just that - an illusion. As previously mentioned, on average RUMC experiences over 400 patient days each year where it is forced into treating patients who warranted being in LTAC beds but no beds were available. Add to this the burden upon residents reliant upon RUMC if a family member requiring significant care is forced to be transferred to a facility several miles away, simply to accommodate the preferences of providers - rather than the needs of patients. There is a real need for the services in this community by the providers these residents rely upon and it is incumbent upon this Board to consider the documented need for this care.

As a recognized national leader in this industry, Select Medical continues to seek improvement, not only in its daily performance but in the continued direction of the industry. Having joined together with market competitors to reach out to President Biden and Vice-President Harris, as illustrated by enclosed letter, its priority is not avoidance of competition but, rather, improvement of patient care. The foresight and advocacy that exists at the leadership level is embodied throughout the company down to equal advocacy and commitment to the patients for whom they care.









January 11, 2021

Hon. Joseph R. Biden Jr The President-Elect 1401 Constitution Ave., NW Washington, DC 20230 Hon. Kamala D. Harris The Vice President-Elect 1401 Constitution Ave., NW Washington, DC 20230

Dear President-Elect Biden & Vice President-Elect Harris:

We offer our congratulations on your historic election victory to the offices of President and Vice President of the United States. We wish you and your new Administration the very best as you prepare to take office and address the many issues facing our country due to the COVID-19 pandemic and related challenges.

Our companies are four, large, national hospital and health systems specializing in Post-Acute Care. Together, we employ almost 200,000 Americans in almost all states. We are long-standing members of the American Hospital Association.

We are proud to be playing a significant role in responding to the nation's public health crisis. As you prepare to lead the nation, we wanted to offer our thoughts on the role of our hospitals for the pandemic and for the future beyond. With that in mind, we offer the following thoughts about the state of "Post-Acute Care" in the United States.

"Post-Acute Care" is care provided to patients after a stay in a general hospital, also known as a short-term acute care hospital (STACH). Since 1983, the average patient stay in a STACH has significantly decreased to just under five daysⁱ as patients have moved to hospitals like the ones we own and operate for extended care targeted towards recovery.

Our four companies – Encompass Health, Kindred Healthcare, Select Medical, and Vibra Healthcare –deliver services that span the Post-Acute Care continuum:

- 300 Inpatient Rehabilitation Facilities (IRFs)
- 175 Long-Term Care Hospitals (LTCHs)
- 250 Home Health Agencies (HHAs)
- 2,100 Outpatient Clinics, and
- 84 Hospice locations

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We partner and work closely with general acute care hospitals to provide a continuum of post-acute services to our patients, collectively serving more than two million patients annually. The overwhelming majority of patients treated in our hospitals are Medicare beneficiaries. Many of our hospitals are consistently ranked as among the best in the nation and are operated through joint ventures with some of our country's leading academic medical centers and largest hospital systems. A brief snapshot of each of our companies is noted below:

Encompass Health: Based in Birmingham, AL, Encompass Health offers both hospital-based and home-based care through inpatient rehabilitation facilities (137 hospitals), home health (242 locations), and hospice (83 locations) services across 39 states. Encompass Health employs more than 42,000 employees.

<u>Kindred Healthcare</u>: Based in Louisville, KY, Kindred operates 64 transitional care hospitals (all certified by Medicare as LTCHs), 22 inpatient rehabilitation hospitals, 10 sub-acute units, 101 inpatient rehabilitation units (hospital-based), and 4 behavioral health services locations across 34 states with 24,000 employees.

<u>Select Medical</u>: Based in Mechanicsburg, PA, Select Medical operates 101 critical illness recovery hospitals (all certified by Medicare as LTCHs), 29 inpatient rehabilitation hospitals, as well as over 2,000 occupational health and physical therapy clinics across 46 states. Select Medical employs 50,000 employees.

<u>Vibra Healthcare</u>: Based in Mechanicsburg, PA, Vibra operates 45 specialty hospitals, transitional care units/facilities, and hospital-based outpatient physical therapy locations in 14 states. Vibra employs more than 6,000 employees.

Our post-acute hospitals vary in the levels of care they deliver and the payment systems under which they operate. Most of the patients admitted to LTCHs have just been discharged from a general hospital and require extended intensive and specialized care delivered by physician specialists. Respiratory conditions, including the need for prolonged mechanical ventilation, serious trauma, and other neurological conditions account for many of these admissions.

IRFs are rehabilitation hospitals whose patients need intensive therapy provided through a rehabilitative, physician-led, team-oriented approach to care. Many IRF patients are recovering from the debilitating effects of traumatic injuries, strokes, spinal cord injuries, brain injuries, orthopedic and neurological conditions, and other serious injuries. LTCHs and IRFs are both hospitals that offer specialized services and longer hospital stays that prioritize recovery and discharges to lower levels of care, if not directly to home.

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Skilled Nursing Facilities (SNFs), in contrast, are not hospitals. They provide nursing, therapy and short-term rehabilitation in a facility setting that also serves long-term resident populations receiving support for multiple activities of daily living, mostly supported by aides who provide this direct hands-on care.

HHAs also offer nursing and therapy but in a home setting. Direct hands-on support with activities of daily living may also be part of a beneficiary's home health service.

Together, these four services are typically referred to as the "Post-Acute Care continuum." Before COVID-19, hospitals typically discharged about half of their Medicare inpatients to one of these four settings of careⁱⁱ, and it is not unusual for patients to receive services across more than one site of care following hospital discharge.

We greatly appreciate your long-time support of the nation's hospitals and your commitment to securing quality healthcare for all Americans – particularly during these challenging times. Having served on the frontline of the fight against COVID-19, we know well the nature and difficulty of the many decisions in front of you. We stand ready to help. We are writing to offer you our support during the transition period and beyond. We also want to update you and your team on how our hospitals have been contributing to the fight against COVID-19, share feedback we have heard from some of our fellow constituents in the LTCH and IRF space, and offer our thoughts on several of the related policy issues that are either pending or will need to be addressed in the early months of your Administration.

COVID-19: Our Role, Observations, and Recommendations

The Role of LTCHs and IRFs in a COVID-19 Environment

In two respects, LTCHs and IRFs have emerged as a critical component of the public health response to COVID-19. First, our hospitals have helped **relieve hospital capacity constraints** and manage patient surges in intensive care units (ICUs). Second, our hospitals have **filled gaps in the Post-Acute Care continuum** created by the challenges SNFs face in handling STACH referrals while they also work to prevent or manage COVID-19 outbreaks among their long-stay resident population.

Relieve Hospital Capacity Constraints and Support ICU-Level Patients. As the first site of care managing a diverse population (including COVID and non-COVID patients and other routine admissions), STACHs have faced capacity constraints in their ICUs. We have helped relieve these constraints through our collective breadth of services, expertise, and resources for steady-state acute patients – delivered via a tighter clinical model that is focused on a specific patient spectrum. For example, we have demonstrated how to successfully deliver clustered care via COVID-specific units or wings, and have worked locally with many of our hospital partners to develop specialized programs intended to ease the pressure on STACHs and their employees. Furthermore, our

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hospitals have done this while also maintaining traditional long-term ICU care services and medical rehabilitative care for other recovering patients. Our ability to pivot quickly depending on the throughput of the general acute care hospital has been critical. In certain markets our hospitals continue to be the only facilities admitting COVID-positive patients. iii Our high-level of care has enabled our hospitals to work and learn collaboratively with STACHs to best manage COVID-19 patients, engendering a level of trust and transparency that we believe will strengthen our partnerships going forward.

Fill Gaps in Post-Acute Care Continuum. The ability to utilize LTCH and IRF capacity has been especially vital as the share of post-acute discharges to SNFs has declined. Patients and clinicians have expressed concerns about COVID-19 exposure during the course of post-acute recovery and rehabilitation in SNFs due to the prevalence of infections among the long-stay, nursing home resident population also occupying these buildings. Second quarter 2020 Medicare fee-for-service claims data analysis shows that the share of STACH discharges to SNFs decreased during the Public Health Emergency (PHE); in May 2020, 15% of STACH discharges were to SNFs, compared to 19% of discharges in May 2019. SNFs have been particularly challenged to accept patients with positive COVID-19 test results. Having operated under low Medicaid reimbursement rates and slim total margins for the past two decades, SNFs came to this moment with significant vulnerabilities (e.g., few private rooms, minimal respiratory equipment, less staff support around the clock, and challenges around consistently maintaining or executing necessary infection control practices) that hampered their ability to operate during the PHE. SNFs are continuing to experience challenges; for example, as of October 25th, 38% of the nation's roughly 15,000 nursing homes have yet to use a COVID-19 point-of-care test.

Depending on the patient needs, we have seen providers in other Post-Acute Care settings step into the gap left by nursing home inadequacies. HHAs have received patients who may have otherwise gone to SNFs (for example, compared to May 2019, HHAs almost doubled their share of total STACH discharges, receiving close to 20% of STACH discharge volume in May 2020^{vi}), while LTCHs and IRFs have leveraged existing capabilities and expertise to admit and support, without disruption, patients with more intensive needs. The relatively more advanced infection control protocols and PPE training common among hospital-licensed IRFs and LTCHs – as compared to SNFs – have supported this effort. Furthermore, our hospitals' specialty respiratory care and physician-led team-oriented approach to rehabilitative care is also playing an important role in COVID-19 patient stabilization and recovery. As we do this important work every day, regardless of a PHE, our hospitals have been prepared to take patients without delay.

Indeed, SNF operators report to us that the pandemic has compelled them to re-assess their own competencies and evaluate what an appropriate admission looks like for their facility. Patient mortality rates from COVID-19 within nursing homes confirm this sentiment. For example, as of early May 2020, nearly half of all the COVID-related deaths (252 fatalities) in Boston occurred within the city's nursing homes and assisted living facilities, vii while an LTCH in a large system

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serving the greater Boston area treated 286 COVID-19 patients, with few readmissions to the STACH, the majority discharged to home health, and two deaths. viii

Observations

The important work LTCHs and IRFs performed – and continue to perform – has been greatly supported by the CARES Act-3711 and CMS waivers. The waivers have helped ensure a COVID-specific care delivery structure that is aligned with patient-centered decisions. Specifically, the waivers enhance our hospitals' ability to manage the local patient population, thereby becoming a better partner to STACHs. The waivers have had multiple beneficial effects, including providing acute care hospitals with expanded bed and throughput capacities and importantly, providing an ongoing hospital-level-of-care for the patient following discharge from the STACH. Furthermore, the waivers have permitted LTCHs to provide specialized, intensive care, and IRFs to provide critical rehabilitation and therapy services to patients who without the waivers would not be admitted due to their respective medical diagnoses. For example, in the northeast, the waivers have helped a large LTCH reestablish their oncology program, which included performing active chemotherapy onsite. The stable yet critical profile of an oncology patient aligns with the type of care regimen delivered by LTCHs. However, without waivers, LTCHs and IRFs would not have the flexibility they require to admit many of these patients.

Our significant footprint across the United States has been instrumental to maintaining strong operations in an ongoing COVID-19 environment. Our initial response during the PHE depended upon our large employee base and centralized supply chains, without which we would not have been able to develop consistent operational modes that could flex with the changing nature of the pandemic. The waivers ensure we are able to cover our costs in these areas, especially those related to meeting workforce demands such as having adequate supplies of PPE and testing. Importantly, the financial relief the waivers provide has helped us solidify our leadership role in the industry, as we have helped our fellow Post-Acute Care constituents. For example, during the pandemic, Kindred provided support to SNF partners in local markets based on request and need. In Dallas, Kindred's LTCH hospitals provided fit testing for N95 respirator masks to staff members at three regional SNFs. Kindred's intervention ensured these SNFs received adequate training and also preserved the safety of their staff.

Despite these successes, the strain COVID-19 is placing upon our healthcare system exposed what we believe are two impediments to public health. One issue is that we have lacked national, strategic guidance to states and local public health leaders on how best to deploy and support Post-Acute Care providers in their geographies. As a result, there have been extreme inconsistencies in approaches to using Post-Acute Care to relieve hospital capacity and serve patients post discharge. The other issue is the challenge of maintaining a robust healthcare workforce.

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Recommendations

To these ends, we would like to share COVID-specific recommendations that not only address the capacity constraints we face today, but also the need to distribute a vaccine and prepare our systems for a better response to the next public health crisis. These recommendations include (1) developing a deliberate, national Post-Acute Care COVID-19 strategy that ensures optimal allocation of post-acute resources, (2) maintaining flexibility in patient care throughout public health emergencies, (3) allocating federal funds to support the healthcare workforce, and (4) revisiting Post-Acute Care policy proposals.

- 1. Develop National Post-Acute Care COVID-19 Strategy. Wide variation in the state and local response to STACH capacity constraints suggests the need to approach Post-Acute Care resources strategically, systemically, and from a public health perspective. Our national goal should be collaboration between public health and health system professionals to ensure optimal use of Post-Acute Care resources going forward. Accordingly, we recommend that the U.S. Department of Health and Human Services convene a cross-agency Post-Acute Care workgroup to create a federal strategy and provide guidance to state and local healthcare leaders on approaches to achieving optimal, system-wide resource allocation methods across a region's post-acute service settings and providers. Importantly, these resources should be tapped not just during patient surges but also as we distribute vaccines and work to prevent future crises. A resource that may be helpful to this effort is a paper published in the Journal of the American Geriatric Society, Post-Acute Preparedness in a COVID-19 World*. The paper organizes recommendations for governmental agencies across a four-stage framework.
- 2. Maintain Patient Care Flexibility Throughout the PHE. We recommend maintaining waivers throughout the COVID-19 PHE and analyzing their effectiveness and implications in order to prepare for future PHEs. We discussed earlier our hospitals' ability to quickly transition during the COVID-19 PHE, whether it has been developing COVID-specific units, admitting difficult/complex patients, or otherwise addressing the needs of our STACH and Post-Acute Care partners on a regional basis. Xi The waivers supported our work and have helped reduce delays in care for both COVID-19 and non-COVID-19 populations.
- 3. Allocate Federal Resources to Supporting the Healthcare Workforce. We recommend the Administration replenish dedicated funding to support our collective healthcare workforce, which has been strained even more than the hospitals in which we provide care. Extensive capital costs, including spending in PPE-related supplies and technology to treat and protect our patient population, have been incurred alongside significant labor costs stemming from our overextended front-line healthcare personnel. We expect these costs to increase as we invest in additional resources to address the surging patient population,

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especially as our hospitals supplement care workers who require quarantine after being exposed to COVID-19 patients.

4. Revisit Post-Acute Care Policy Proposals. We believe your Administration has a significant opportunity to revisit, revise, and improve on the Post-Acute Care policy discussions of the last ten years. The COVID-19 PHE has laid bare areas in need of extensive review and assessment. This includes discussion of appropriate reimbursement models and the overall funding of post-acute hospitals and facilities to support emergency situations such as COVID-19. However, the PHE also highlighted strong points within Post-Acute Care, including the critical care and surge management capabilities of IRFs and LTCHs, how improved communication can break down typical care silos, and how with modification of certain reimbursement-induced structures, physicians can make site of care decisions that are in the best interest of the patient, independent of prospective payment system eligibility criteria. Together these observations can influence refreshed healthcare policy that is more attuned to the services provided in the Post-Acute Care continuum today, and more importantly, to the needs of our patient populations.

In the next section, we summarize the last ten years of Post-Acute Care policy focus, discuss how disruption in the sector warrants a reevaluation of approaches to Post-Acute Care policy reform, and provide recommendations for further study and public discussion.

Background on Post-Acute Care Policy, Disruption of the Sector, and Recommendations for Research

Background on Post-Acute Care Policy

We recognize Post-Acute Care policy has been a long-time focus for policymakers and Medicare experts. This focus has been underscored by concerns over the uneven geographic distribution of Post-Acute Care providers, unexplained geographic variation in per capita Post-Acute Care spending, siloed care delivery experience of Medicare beneficiaries, and a perceived overlap in patient profiles across sites of care. The policy response to date has been to foster value-based care and data collection initiatives that are intended to reduce post-acute inefficiencies and improve care coordination.

Value-Based Care Initiatives and Demonstrations. With the passage of the Affordable Care Act (ACA), the Centers for Medicare and Medicaid Services (CMS) undertook several value-based care initiatives that aimed to reduce inefficiencies and improve quality and outcomes across the Post-Acute Care continuum. Accountable care and bundled payment demonstrations, in particular, were designed to enable doctors, hospitals, and healthcare providers to collectively select the most appropriate post-acute setting for patients at time of discharge, more efficiently coordinate care delivery, avoid unnecessary duplication of services, and reduce medical errors^{xiii}. CMS evaluations have found that these demonstrations have succeeded in reducing length of stay in the SNF setting,

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and in some cases, have effectively reallocated resources to focus on well-structured care transitions from the STACH to the post-acute setting that support a reduction in unnecessary costs^{xiv}.

The Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT Act). The IMPACT Act authorized centralized quality, resource, and patient assessment measures for the four major Post-Acute Care providers (LTCHs, IRFs, SNFs, HHAs). A primary purpose of this structure was to obtain more consistent and comparable data about patients in various post-acute settings to facilitate improvements in discharge planning, coordination of care, research, and patient outcomes. A secondary purpose was to better compare data across post-acute settings to study alternative payment models, including what has recently been referred to as a unified Post-Acute Care payment system. Importantly, the IMPACT Act requires MedPAC to make recommendations on potential post-acute payment reforms after appropriate research and reports have been completed, leveraging the new IMPACT Act required data. There is a popular misconception that the IMPACT Act requires post-acute unification (or a similar unified payment reform), however, no such requirement exists under that law. CMS and MedPAC have also publicly acknowledged their roles are first to research and recommend, but the misconception has persisted, nonetheless.

Disruption of the Sector

Post-Acute Care has changed a great deal since passage of the ACA and the IMPACT Act. Past policy initiatives have been eclipsed by significant changes, including permanent disruption to care patterns caused by global events (such as COVID-19), evolution in the delivery, accessibility, and cost of Post-Acute Care, the construction of financial models (with varying levels of success) to contain Post-Acute Care spending, and rapid development of home-based care models.

COVID-19 disruption of the Post-Acute Care continuum. We know that discharge patterns have been significantly disrupted (see above regarding changes in STACH discharges to HHAs and SNFs specifically), in part because of closer collaboration between STACHs and our hospitals, and in even larger part because of the challenges SNFs have faced in taking post-acute patients while protecting their long-stay residents. The emergency nature of COVID-19 may wax and wane, but the pandemic has highlighted many systemic issues in our Post-Acute Care system that must be addressed at a local level, in order to reestablish the primacy of patient care and better prepare for the next event.

Reduction in geographic variation. Though Post-Acute Care has historically had the largest variation in high versus low hospital referral region (HRR) spending, this ratio has declined more than other sites of care (e.g., compared to physician and inpatient settings) since 2007, ^{xv} suggesting that population health and value-based care, as well as other FFS payment changes, have helped in reducing the variation. Our view is that while geographic variation may remain a concern, the

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breadth and degree of it are shifting, and therefore policies aimed at geographic variation should be reconsidered in the context of changing market dynamics.

Growing support for and interest in physician-led risk models. Direct contracting and value-based payments in Medicare Advantage are examples of physician-led models that have gained momentum over the past few years. These initiatives are built around financial alignment structures intended to prevent inpatient admissions, encourage appropriate discharge placement, and enhance care coordination. These tenets are also critical to our own businesses, and we believe these models represent an encouraging step toward achieving more cost-efficient, patient-centered care. As a pre-requisite to engaging in these models, we believe there is an urgent need to first establish more effective communication structures among STACHs, payers, and post-acute providers. This can start with key stakeholder discussions that foster more physician collaboration and integration and support policy development and research aimed towards improving patient outcomes and the patient experience across the continuum of care (see *Recommendations for Research*).

Increasing evaluation of telehealth and virtual care. Continued investment in technological platforms, buoyed by the arrival of more sound reimbursement structures, have accelerated adoption of telehealth by providers and patients over the past couple of years. However, while the rate of adoption has increased, many health plans and systems are still in the early stages of piloting these various offerings. Therefore, it will be crucial to study the impacts that telehealth and virtual care have had on patient access to care and outcomes prior to recommending any particular technology-centric solution (see *Recommendations for Research*). As we evaluate the capabilities of telehealth and virtual care, there may be opportunities to pilot these platforms within our inpatient settings, for example, to help even out geographic access to LTCH and IRF capabilities, better understand population health, and track patients' episodes of care post-discharge.

Recommendations for Research

We believe the aforementioned changes warrant reconsideration of the best approach to drive value and efficiency in the Post-Acute Care delivery system. Your incoming Administration, and the urgent need to overcome the COVID-19 pandemic, presents an opportunity to bring together providers, payers, and thought leaders to study different alternatives and determine the path forward for Post-Acute Care. Our suggestions for this critical research include:

Analyzing utilization of Post-Acute Care throughout and following the pandemic. We recommend quantitative and qualitative work to study evolution in Post-Acute Care utilization and the role of different settings of care over the last five years, including how the pandemic has impacted utilization, choice of setting, and changes in clinical care patterns.

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Studies on the optimal use of Post-Acute Care in physician-led risk models. We recommend regular stakeholder convenings that include inpatient hospitals, physicians, Post-Acute Care providers, payers, beneficiaries and their advocates to discuss how best to serve the frailest beneficiaries with the most complex care needs now and, in the future, with a specific focus and study on how physician-led risk models manage Post-Acute Care and support efficient transitions in care.

Examination of how telehealth can improve access to high quality care for critically ill patients. We recommend examining how telehealth can even-out access to and utilization across the Post-Acute Care continuum. Telehealth has traditionally been utilized for outpatient services, but became especially useful during the pandemic as it enabled providers to virtually treat individuals who were asymptomatic or had a mild case of the virus, without taxing any of the typical brick and mortar resources (or PPE). We believe lessons from this experience may be more broadly applicable.

We encourage you to reach out to our company leadership for any additional assistance you or your COVID-19 task force may need throughout the duration of this pandemic and in future public health emergencies. You have our full support and cooperation. Together our companies stand ready to partner and participate in this work going forward. We remain optimistic about the future and look forward to working with you to realize your vision for this country.

Very truly yours,

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SELECT MEDICAL

VIBRA HEALTHCARE

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Executive Chairman & Co-Founder

Brad Hollinger Chairman & CEO

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

ATTACHMENT 12 Purpose of the Project

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SOURCES

HCUP.

ii Trella Health.

iii Feedback per interviews performed by ATI Advisory, a third-party consulting firm. Details will be included in upcoming research paper published by ATI Advisory.

iv ATI Advisory analysis of 100% Medicare FFS claims incurred January 2019 –May 2020 and paid through June 2020.

V Kaiser Health.

vi ATI Advisory analysis of 100% Medicare FFS claims incurred January 2019 –May 2020 and paid through June 2020.

vii WBUR.

viii Per interview with President of Partners Continuing Care & Spaulding Rehabilitation Network, performed by ATI Advisory, a third-party consulting firm.

ix Feedback per interviews performed by ATI Advisory, a third-party consulting firm. Details will be included in upcoming research paper published by ATI Advisory.

x Journal of the American Geriatrics Society.

xi Feedback per interviews performed by ATI Advisory, a third-party consulting firm. Details will be included in upcoming research paper published by ATI Advisory.

xii Feedback per interviews performed by ATI Advisory, a third-party consulting firm. Details will be included in upcoming research paper published by ATI Advisory.

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SYSTEMATIC REVIEW PROTOCOL

Effectiveness of robotic assisted rehabilitation for mobility and functional ability in adult stroke patients: a systematic review protocol

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Review question/objective: The objective of this review is to synthesize the best available evidence on the effectiveness of robotic assistive devices in the rehabilitation of adult stroke patients for recovery of impairments in the upper and lower limbs. The secondary objective is to investigate the sustainability of treatment effects associated with use of robotic devices.

The specific review question to be addressed is: can robotic assistive devices help adult stroke patients regain motor movement of their upper and lower limbs?

Keywords Rehabilitation; robot; robotic; robotic assisted rehabilitation; stroke

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Background

S troke is a leading cause of long-term disability and is the third most common cause of mortality in developed countries with 15 million people suffering a stroke yearly.1 Different parts of the brain control different bodily functions. If a person survives a stroke, the effects can vary, depending on the location of brain damage, severity and duration of the stroke. Broadly, the effects of stroke can be physical, cognitive or emotional in nature. In terms of the physical effects of stroke, the loss of motor abilities of the limbs presents significant challenges for patients, as their mobility and activities of daily living (ADLs) are affected. The upper or lower limbs can experience weakness (paresis) or paralysis (plegia), with the most common type of limb impairment being hemiparesis, which affects eight out of 10 stroke survivors.2 Other physical effects of stroke are loss of visual fields, vision perception, difficulty swallowing(dysphagia), apraxia of speech, incontinence, joint pain or neuropathic pain (caused by inability of the brain to correctly interpret sensory signals in response to stimuli on the affected limbs). Cognitive effects of stroke are aphasia, memory loss and vascular dementia. Stroke patients can lose the ability to understand

Correspondence: Kenneth Lo, kenneth Log adelaide edu.au There is no conflict of interest in this project DOI: 10.11124/JBISRIR-2016-002957 speech or the capacity to read, think or reason, and normal mental tasks can present big challenges, affecting their quality of life. The drastic changes in physical and cognitive abilities caused by stroke also lead to emotional effects for stroke patients. Stroke survivors can experience depression when they encounter problems in doing tasks that they can easily do pre-stroke. Along with depression, they can experience a lack of motivation and mental fatigue.

For stroke patients, rehabilitation is the pathway to regaining or managing their impaired functions. There is no definite end to recovery but the most rapid improvement is within the first six months post stroke.3 Before a patient undergoes rehabilitation, an assessment is first done to determine if a patient is medically stable and fit for a rehabilitation program. If the patient is assessed to be suitable, then depending on the level of rehabilitative supervision required, the patient could undergo rehabilitation in various settings - as an in-patient/outpatient (at either a hospital or nursing facility) or at home.3,4 Rehabilitation should be administered by a multi-disciplinary team of physiotherapists, occupational therapist, speech therapist and neuropsychologists, who work together to offer an integrated, holistic rehabilitation therapy.4 Depending on the type of impairment, rehabilitation specialists will assess the appropriate therapies needed and set realistic goals for patients to achieve. Generally, stroke patients should be given a minimum of 45 min for each therapy session over at least five days per

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week, as long as the patient can tolerate the rehabilitation regimen.³

One of the main goals in stroke rehabilitation is the restoration of motor skills, and this involves patients undergoing repetitive, high-intensity, taskspecific exercises that enable them to regain their motor and functional abilities.^{5,6} It is theorized that the brain is plastic in nature and that repetitive exercises over long periods can enable the brain to adapt and regain the motor functionality that has been repeatedly stimulated.⁷ This involves the formation of new neuronal interconnections that enable the re-transmission of motor signals.⁸

Over the years, a number of robotic assistive devices have been used to rehabilitate patients based on high repetitions of task-specific exercises.9 These robotic assistive devices provide consistent and repetitive cycles over long periods and help train the limbs of patients to keep receiving and sending signals from and back to the brain and thereby regain their motor abilities. Such devices are also complex in nature involving interactive automation, sensors and dynamic control logic and are able to function without much intervention from physiotherapists. Several devices have been used for rehabilitation of both upper limb (e.g. ARMin, MIT-MANUS, NeReBot and T-Wrex) and lower limb (e.g. Lokomat, Gait Trainer, G-EO System and Hybrid Assistive Leg). 10,11 As an example, for patients who are unable to walk, there are gait-training devices such as the Lokomat that help patients to recover their walking ability. Initially, the physiotherapist will set the patient up with the device and start a software program that cycles through the various stages of walking. The patient's lower limbs will be moved by the device and the physiotherapist is able to set the pace of the simulated walking and the amount of guidance force to assist movement of the legs and extent of body weight support.

In comparison, for conventional rehabilitation of the lower limbs without assistive devices, it would require at least two physiotherapists to train a patient to walk, and the pace and pattern of walking may not be consistent. It is also physically strenuous for the physiotherapists to sustain the exercise over long periods, thus affecting the rehabilitation progress of the patient. The labor-intensive nature of conventional physiotherapy places great strain on physiotherapists. Coupled with the requirements of stroke patients for medical care and intensive rehabilitation exercises (which frequently entail one-to-one manual interaction with therapists), therapist time and organizational budgets, it is not always possible to provide an optimal rehabilitation program for patients. 10 Therefore, it is hoped that with robotic assistive devices, better rehabilitation progress can be achieved for patients together with alleviation of time and physical demands on physiotherapists. With the assistance of robots, physiotherapists will be able to concentrate more on functional rehabilitation during individual training sessions and supervision of multiple patients simultaneously during robot-assisted therapy sessions. This approach would maximize the expertise and time of physiotherapists, thus improving the effectiveness of the rehabilitation program.10

There have been clinical studies to determine the effectiveness of robotic assistive devices in the rehabilitation of stroke patients. 12 However, these studies presented a mixed picture of the effectiveness of robotic devices. One study on lower limbs reported an improvement in a motor movement scale (Fugl-Meyer Assessment lower extremity score) but not for another motor scale (leg score of Motricity Index) and also stated no improvement on a walking scale (Functional Ambulation Category). 13 Others reported that there was no statistically significant difference between robotic assisted therapy and conventional therapy, 14,15 while one study that investigated walking speeds and distance found that conventional therapy was more effective than robotic assisted therapy.16 There were also various types of study designs. Some studies examined not just robot-assisted rehabilitation but combinations of robot-assisted rehabilitation and non-conventional physiotherapies (e.g. functional electrical simulation [FES], constraint induced therapy [CIT], transcranial direct current stimulation or motor imagery) versus conventional therapies in three-arm studies. 17-19 Other studies involved patients in a randomized controlled crossover trial with or without a washout period.20,21

Typically, in studies, authors used different scales for their primary and secondary outcomes. These scales were used to measure motor movement, motor strength/duration, walking speed or functional activities. With various outcome scales used, it will be a challenge to compare the results of clinical trials, ²² and the suitability of certain scales will also depend on the modality of the robotic therapy given.

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As an example, for arm muscle strength outcome, it will be better if patients have less assistive guidance force provided (or conversely, more resistive guidance force provided) and minimal gravity support during therapy sessions.23 Also, in a trial with multiple outcome measures, testing multiple simultaneous hypotheses at set P values could lead to increased risk of Type I errors.²⁴ To mitigate this, Feise²⁴ recommended that researchers facing multiple outcome measures select a primary outcome measure or use a global assessment measure. As robotic devices are primarily designed to enable movement of a particular limb, 10 a suitable measurement scale that reflects the design function of the device is necessary to accurately determine the effectiveness of these devices. In view of this, scales that measure movement abilities of the paretic limbs should be used, such as Fugl-Meyer Scale Assessment (upper extremity) for the upper limbs or Functional Ambulation Category for the lower limbs.

A preliminary search of PubMed, Embase, JBI Database of Systematic Reviews and Implementation Reports and Cochrane Library identified three systematic reviews that have been conducted in this topic area. ²⁵⁻²⁷

These reviews included a variety of outcome measures for motor function, muscle strength, walking capacity and walking velocity. Mehrholz et al. 25,26 found that robot-assisted arm training improved ADLs, arm function and muscle strength of the paretic arm, and for the lower limbs walking was improved but not for walking velocity or walking capacity. Prange et al.27 found that arm control improved but not functional ability. The proposed systematic review being undertaken has different aspects to the previous reviews. First is the selection of the outcome measure to examine primarily the motor movement of the paretic limbs in order to have a meaningful comparison across studies.22 Second is the analysis approach toward multiple-arm studies. In the first two reviews, 25,26 the results of the arms of robotic intervention groups, some with additional forms of non-conventional treatment, were pooled together for comparison against the control group. In this review, only the arm of robotic intervention group (without other forms of nonconventional treatment, e.g. FES) will be compared to the control group to clarify the effects of the intervention. The current review also seeks to address the question of sustainability of the treatment effects; for example, is the improved motor movement ability measured at the end of intervention period maintained post intervention? If the outcome measure is maintained (or improved) during follow-up measurements after intervention, then the effect of rehabilitation can be considered as being sustainable. From analyzing the intervention sustainability, it is hoped that the optimal duration and frequency of rehabilitation that generate the best sustainability outcome can be identified. This could assist rehabilitation specialists to formulate a suitable proportion of robotic assisted therapy in their treatment protocols. Lastly, there have been new studies²⁸⁻³³ published since these existing systematic published since these existing systematic reviews were conducted, and this review seeks to incorporate the most recent trial findings.

The diverse range of outcomes and study designs does not provide a clear determination of the effectiveness of robotic assisted rehabilitation, and it is the intent of this review to provide clarity to the discussion and offer useful recommendations for clinical practice. In this review, robotic assisted therapies for both upper and lower limbs will be evaluated to gain a detailed understanding of the effectiveness of robotic devices in these two areas to which a large proportion of rehabilitation efforts is devoted.

Inclusion criteria

Types of participants

The current review will consider studies that include adult stroke patients (18 years and older) of all genders, regardless if stroke is due to ischemic or hemorrhagic causes. Patients with pre-existing impairments that are not caused by stroke, such as disabilities due to spinal cord injuries, Parkinson's disease, multiple sclerosis and traumatic brain injuries (caused by accidents, falls, infections, tumors or chemical toxins), will be excluded. Study participants may be new stroke patients or repeat stroke patients at acute, sub-acute or chronic stages of their stroke, so long as they have been accepted into a formal rehabilitation program. Only trials where the rehabilitation setting is either in-patient or outpatient will be included. Home rehabilitation patients will be excluded due to potential confounding of treatment adherence. The rehabilitation program can be conducted at hospitals, nursing facilities or across multi-centers, and only physical impairments related to upper and lower limbs will be considered.

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Types of intervention(s)

The current review will consider studies that evaluate rehabilitation of stroke patients using interactive, automated electromechanical equipment (i.e. assistive robotics). The types of robotic assistive devices can be varied (e.g. either robotic exoskeletons or endeffectors for gait training), as long as interventions involve electromechanical assistive devices with automation, sensors and dynamic control logic that help patients regain their motor abilities. Interventions involving the devices below are not considered as robotic rehabilitation devices as they do not exhibit assistive automation that robotic devices have:

- Non-interactive devices that deliver passive motion such as treadmills, static body-weightassisted treadmills, bicycles, static walking aids, static orthoses (such as ankle-foot orthoses addressing foot drop) or pure mechanical trainers (e.g. Reha-Slide, Reha-Slide duo).
- Standalone video games controlled solely by patient without automated assistive feature, such as Nintendo Wii.
- Rehabilitation programs using non-conventional therapies such as acupuncture, FES, transcranial direct current stimulation, motor imagery, biofeedback and CIT.

The intervention group can have or not have an added conventional physiotherapy component. If the intervention group has an added conventional physiotherapy component, this can involve non-interactive static devices.

The intervention should not contain other types of non-conventional therapy (e.g. FES, transcranial direct current stimulation, motor imagery or CIT). For multiple-arm studies, only results of the intervention arm with robotic assisted rehabilitation will be compared to the control arm. The intervention arm with a combination of robotic assistive devices and non-conventional therapy will be excluded from analysis.

Comparator

As control groups, patients do not receive robotic assisted rehabilitation but receive only conventional physiotherapy or no physiotherapy treatment at all. The conventional physiotherapy treatment, however, may include non-interactive static devices (e.g. bicycles, treadmills and acupuncture).

The amount of therapy treatment in both intervention and control groups should be the same in terms of frequency and duration, that is, dosematched. For example, if patients in the intervention group undergo 60 min of therapy using a robotic assistive device on top of a conventional physiotherapy component, then in the control group the patients should also undergo additional 60 min of conventional physiotherapy. Therefore, the total amount of therapy planned for patients (in terms of frequency per week, duration of a therapy session and overall rehabilitation period) should be the same for both groups. This does not apply if, in the control group, patients do not receive conventional physiotherapy.

For robotic assisted rehabilitation, the duration of therapy will consist of time for the patient to be set up with and be taken out of the robotic device, thus limiting the time for exercising the paretic limb (e.g. for Lokomat, a robotic exoskeleton device, actual exercise time can range from 35 to 40 min in a 60-min therapy session). Although the actual exercise duration can be less than the allocated duration of therapy, it can still be considered as being equivalent to the duration of a conventional physiotherapy session, as during a conventional therapy session not the full duration will be used for exercising. There will also be time for patients to prepare or rest in between exercises. In addition, some trials do not provide a breakdown of actual exercise duration but only the duration of a therapy session.

Outcomes

The current review will consider studies that include the outcome measure of the amount of motor movement demonstrated by the paretic limbs. To have an accurate point of reference across studies, only studies that have used scales that measure motor movement will be considered for the review.

For outcome measure of upper limbs, the Fugl-Meyer Assessment^{3.5} (upper extremity score) is the preferred scale. If a study does not use this scale, then an alternative measurement scale that quantifies upper limb motor movement (e.g. upper limb Motricity Index³⁶) will be considered.

For outcome measure of lower limbs, the Functional Ambulation Category³⁷ is the preferred scale. If a study does not use this scale, then an alternative measurement scale that quantifies walking will be considered, for example Barthel Index³⁸ (ambulation item) or Functional Independence Measure³⁹ (walking item).

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Another aspect that will be examined is the level of ADLs attained after the intervention. For outcome measure of ADLs, Functional Independence Measure is the preferred scale. If a study does not use this scale, then an alternative measurement scale that quantifies the level of ADLs will be considered, for example, the Barthel Index. As ADLs involve usage of both upper and lower limbs, a global ADL measurement combining both subgroups of upper and lower limbs will be considered.

In clinical trials, patient outcomes at different stages of the rehabilitation process are measured. Usually measures are taken at pre-, mid- and post-intervention stages but some studies will continue to take follow-up measurements in the months after the end of the intervention therapy. For this review, measurements taken at pre- and post-intervention therapy will be included for analysis. Follow-up measurements taken after the intervention has ended will also be compared to measurements taken at the end of the intervention to examine the sustainability of the treatment effect.

Types of studies

The current review will consider experimental study designs of randomized controlled trials. For studies with crossover design, only the first study period will be considered for inclusion, as it is not clear if carry-over effects will have diminished sufficiently during the washout period. Also, given the context of rehabilitation where it is likely and desired for patients to retain the effects of rehabilitative training, the two different phases will have a dependence on each other. Thus, it will be confounding if both the first and second study periods of crossover trials are used to assess the effectiveness of robotic assistive devices.

Search strategy

The search strategy aims to find published and unpublished studies. A three-step search strategy will be utilized in this review. An initial limited search of PubMed will be undertaken followed by analysis of the text words contained in the title and abstract, and of the index terms used to describe the article. A second search using all identified keywords and index terms will then be undertaken across all included databases. Third, the reference list of all identified reports and articles will be searched for additional studies. Studies published in English will be considered for inclusion in this review and a date

limit starting from 2000 will be set, as automated robotic devices have been increasingly used since 2000, together with an associated increase in the number of studies undertaken.

The databases to be searched include: PubMed, Embase, CINAHL, Cochrane Central Register of Controlled Trials (CENTRAL) and PEDro (Physiotherapy Evidence Database).

The search for unpublished studies will include: Mednar, ProQuest Dissertations & Theses, Clinical-Trials.gov, Google Scholar

Initial search terms to be used will be:
Robotics[mh] OR Robot*[tw] OR Exoskeleton
Device[mh] OR Exoskeleton*[tw] OR Gait Trainer[tw] OR Lokomat[tw] AND Rehabilitation[mh]
OR Rehabilitation[tw] OR Habilitation[tw] AND
Stroke[mh] OR Stroke*[tw] OR "Cerebrovascular
Accident" OR Cerebral[tw] OR "Cerebral Stroke"
OR "Cerebrovascular Stroke" OR "Acute Stroke"
OR "Sub-acute Stroke" OR "Subacute Stroke"

Assessment of methodological quality

Papers selected for retrieval will be assessed by two independent reviewers for methodological validity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute Meta Analysis of Statistics Assessment and Review Instrument (JBI-MAStARI) (Appendix I). Any disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer.

Data extraction

Data will be extracted from papers included in the review using the standardized data extraction tool from JBI-MAStARI (Appendix II). The data extracted will include specific details about the interventions, populations, study methods and outcomes of significance to the review question and specific objectives. In the event of specific data of interest being absent from published articles, corresponding authors will be contacted to request access to the relevant data.

Data synthesis

Quantitative data will, where possible, be pooled in statistical meta-analysis using JBI-MAStARI. All results will be subject to double data entry. Effect sizes expressed as odds ratio (for categorical data)

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and weighted/standardized mean differences (for continuous data) and their 95% confidence intervals will be calculated for analysis. Heterogeneity will be assessed statistically using I^2 and the standard chisquare. Where statistical pooling is not possible, the findings will be presented in narrative form including tables and figures to aid in data presentation where appropriate. Sub-groups that may be considered for analysis include upper limb interventions, lower limb interventions, acute patients (i.e. less than three months post stroke), sub-acute/chronic patients, duration and frequency of intervention.

Acknowledgements

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ATTACHMENT 12 Purpose of the Project

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Review Article

Robotics in Lower-Limb Rehabilitation after Stroke

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With the increase in the elderly, stroke has become a common disease, often leading to motor dysfunction and even permanent disability. Lower-limb rehabilitation robots can help patients to carry out reasonable and effective training to improve the motor function of paralyzed extremity. In this paper, the developments of lower-limb rehabilitation robots in the past decades are reviewed. Specifically, we provide a classification, a comparison, and a design overview of the driving modes, training paradigm, and control strategy of the lower-limb rehabilitation robots in the reviewed literature. A brief review on the gait detection technology of lower-limb rehabilitation robots is also presented. Finally, we discuss the future directions of the lower-limb rehabilitation robots.

1. Introduction

Stroke is an illness that has a high potential of causing disability in the aged [1]. With the increase in the elderly, stroke has become a common disease, which often leads to motor dysfunction or even permanent disability [2]. There are about 795,000 people in the United States each year, and about 191,000 people in Japan who have had a new stroke or recurrent stroke [3]. The number of new stroke patients in China is about 200 million each year [4]. According to the national stroke statistics, stroke morbidity, mortality, and recurrence rate increase with age [5]. At the same time, stroke incidence showed a younger trend in recent years. As a result, the rehabilitation training of stroke survivors has become a major social problem urgently. However, traditional manual therapies such as physical therapy (PT) and occupation therapy (OT) mainly depend on the experience of the therapist, and it is difficult to meet the requirements of high-intensity and repetitive training [6]. Due to the serious shortage of physiotherapists, the treatment cannot be guaranteed [7]. As a result, the demand for advanced rehabilitation equipment is significantly increasing, which will help patients to perform accurate, quantitative, and effective training [8]. Rehabilitation robotics is an emerging field expected to be a solution for automated training. Over the past decade, rehabilitation robots received increasing attention from researchers as well as rehabilitation physicians. The application of rehabilitation robot can release the doctors from heavy training tasks, analyze the data of the robot during the training process, and evaluate the patient's rehabilitation status. Due to the advantages of their accuracy and reliability, rehabilitation robots can provide an effective way to improve the outcome of stroke or postsurgical rehabilitation.

Nowadays, there have been several published review papers on lower-limb rehabilitation robot. However, very few details of control strategies, driving modes, training modes, and gait perception were given to the lower-limb rehabilitation robot.

In this paper, we systematically reviewed the current development of lower-limb rehabilitation robot, providing a classification, a comparison and a design overview of the driving modes, training paradigm, control strategy, and gait perception. The rest of the paper is organized as follows. Section 2 described the development of robots. Section 3 introduced the driving modes of the lower-limb rehabilitation robot. Section 4 presented control strategies, including position control, force signal control, and biological medical signal control. In Section 5, the training pattern of the robot was recommended. In Section 6, different techniques of the gait perception were analyzed. In Section 7, limitations of

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the study and future direction of development were discussed and summarized.

2. Development of Lower-Limb Rehabilitation Robots

In recent years, various types of lower-limb rehabilitation robots have been developed to enhance the motor function of paralyzed limbs in stroke patients. In general, lower-limb rehabilitation robots can be divided into two categories, that is, exoskeleton robots and end-effector robots [9]. For example, Lokomat [10], BLEEX [11], and LOPES [12, 13] are typical exoskeleton robots, while Rutgers Ankle [14] and Haptic Walker [15] are end-effector robots. According to their rehabilitation principles, exoskeleton robots can be divided into treadmill-based and leg orthoses, while the end-effector robots have footplate-based and platform-based types. An overview of recent representative robots and their characteristics are demonstrated in Table 1.

2.1. Treadmill-Based Exoskeleton Robots. The Lokomat, LokoHelp, Lopes, and Active Leg Exoskeleton (ALEX) belong to the typical treadmill-based exoskeleton robots. Treadmillbased exoskeleton robots are usually composed of a weight support system and runs on a treadmill through the lower-limb exoskeleton frame.

In 2001, the Swiss Federal Institute of technology in Zurich [33] developed the four freedom exoskeleton type gait rehabilitation robot Lokomat, with the use of treadmills. The exoskeleton can drive the leg of the patient to realize the gait motion in the sagittal plane, and the four rotary joints are driven by four DC motors to drive the precision ball screw transmission.

LokoHelp is a gait-training robot, which was developed and produced by a German company, consisting of three parts, a leg brace device, treadmill system, and suspension weight system. It can achieve the basic gait rehabilitation training and help patients complete the downhill exercise. In addition, the equipment adopts a modular design method, which is easy to assemble, disassemble, and adjust, in order to realize the training of different slope. Clinical experimental studies on LokoHelp have proved that [34, 35] the rehabilitation effect of the robot system is almost the same as that of the traditional gait training method, but it significantly reduces the required human resources and the physical exertion of the participants.

The Biomedical Engineering Laboratory at the University of Twente [36], Holland, has developed a lower extremity-powered exoskeleton gait rehabilitation robot (LOPES) [37, 38]. A LOPES single leg has 2 degrees of freedom in the hip joint and 1 degree of freedom in the knee joint. LOPES divided the patient's recovery into two stages: patient dominant and robot driven, and different control algorithms are used to make the walking training of the patients closer to the actual situation.

The School of Mechanical Engineering, Delaware University, has developed an active walking training robot called ALEX. It consists of a moving bracket, lower extremity exoskeleton orthosis, and a control system. Each leg has four degrees of freedom, two degrees of freedom of the hip joint, and one degree of freedom of knee and ankle joints. The back of ALEX, using mechanical mechanisms to balance the gravity of the human body, can help patients achieve gravity balance and altitude adjustment [39, 40].

2.2. Leg Orthoses and Exoskeletons. The Active Ankle-Foot Orthosis (AAFO) [41], Knee-Ankle-Foot Orthosis (KAFO), Berkley Lower Extremity Exoskeleton (BLEEX), and Hybrid Assistive Limb (HAL) belong to the leg orthoses and exoskeletons.

Yonsei University, Seoul, Korea, developed a single degree of freedom hinge anlde-foot orthoses AAFO. The orthosis uses a polypropylene material, which is lightweight and has a certain degree of flexibility. Moreover, the joint uses a hinge structure; the driving part adopts the series elastic actuator. The contact between the foot and the ground is determined by installing a contact switch on the foot [42] and using the plantar state machine on the ankle foot orthosis control. The gait is divided into 6 phases to prevent foot drop in foot slap orthosis and toe drag stage [43].

In 2004, Dr. H. Kazerooni of the University of California-Berkeley [44] designed the lower-limb exoskeleton robot BLEEX (Berkeley Lower Extremity Exoskeleton), and designers called it "weight-bearing and energy independent exoskeleton." According to the force of the exoskeleton, the inverse dynamic model of the exoskeleton is used as the feedforward controller and the joint angle sensor is used to judge the movement period of each leg and control the coordinated movement of the exoskeleton. Through the experimental study of four patients with paraplegia, the exoskeleton robot can help patients achieve natural walking [45].

In 2005, the Department of Mechanical Engineering of the Ottawa University [46] in Canada developed the Knee-Ankle-Foot Orthosis (KAFOs), to help users of weak extensor improve the gait. This orthosis does not use drive and provides the power with the ingenious mechanical structure and the position of the spring, and it controls the flexion and extension of the knee joint through opening and shutting off the solenoid. The robot control system is simple, and it mainly uses the plantar force to control on-off solenoid and complete assist standing control.

Hybrid Assistive Limb (HAL) is a wearable lower-limb rehabilitation robot developed by the University of Tsukuba, Japan. The original purpose of the device was to assist patients with lower-limb motor dysfunction to complete the routine activities such as walking, standing, sitting, and going up- and downstairs [47]. At present, a fifth generation of the products has been developed, a whole body wearable robot, which can assist the upper and lower limb movement [48]. Notably, some clinical and experimental studies showed that HAL can provide weight support for the subjects and can help them complete their daily walking activities.

2.3. Foot Plate-Based End-Effector Devices. The foot plate-based end-effector devices [49] consist of the Gait Trainer GTI, Haptic Walker, and the G-EO Systems.

Gait Trainer (GTI) is a suspension weight loss gait rehabilitation robot, developed by the Free University Berlin,

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TABLE 1: Overview of recent lower-limb rehabilitation robots.

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Groups	Devices	Researchers	Actuated DoF	Driving modes	Control strategies	Training modes
	Lokomat [101]	Zurich Switzerland	Two-leg DoFs	Motor drive	Position control Patient-cooperative strategy Posture control	Passive mode Active assist mode
	LokoHelp [16]	Woodway & LokoHelp Group	Two-leg DoFs	Treadmill drive, standalone driving device not required	Trajectory tracking control	Passive mode Active assist mode
Treadmill-based exoskeleton robots	ALEX [17]	Banala and Agrawal et al. from University of Delaware, US	Seven DoFs for translations and rotation of a kg	Motor drive	Assist-as-needed control	Active mode
	Lopes [18, 19]	Reneman et al. From university of Delaware, US	Three rotational DoFs in each leg	SEA (series elastic actuator) drive	Impedance	Active mode Active assist mode
	AAFO [20]	Seoul and Korea from Yousei University	Two motion DoFs for ankle joint	SEA (series elastic actuator) drive	Force/impedance control	Active mode
	KARO [21]	The Department of Mechanical Engineering of the Ottawa University	Free motion DoFs in sagital plane for ankle and knee	No driver, using the location of mechanical structure and spring to provide tailwind	Force control	Active assist mode
Leg orthoses exoskeleton robots	HAL [22]	University of Tsukuba, Japan	Full-body exoskeleton for arms, legs	Motor drive	Automomous control Automatic mixture control	Active assist mode
	BLEEX [23, 24]	Kazeroom et al. from University of California, US	Seven DoFs for each leg in hip, lance, and ankle joints	Hydraulic drive	EMG signal control Force control	Passive mode
	Rutgers ankle [25]	Girone et al. of Rutgers University	Six DoFs ankle and foot based on a Stewart platform	Pneumatic drive	Impedance control Force control	Active mode Passive mode Active resist mode
Platform-based end-effector robots	ARBOT [26, 27]	Saglia et al. from Istituto Italiano di Tecnologia, Italy	Two and e DoFs in plantar/dor siflexion, inversion/eversion	Motor drive	Position control	Passive mode Active assist mode Active resist mode
	Parallel ankle robots [28, 29]	Xie et al. from the University of Auckland New Zealand	Three ankle DoFs provided by 4-axis parallel robot	Motor drive	EMG-based evaluation and adaptive control	Active mode Passive mode
	Gait Trainer GTI [30]	The Free University Berlin, Germany	Two footplates for foot/leg movement	Motor drive	Trajectory tracking control	Passive mode Active mode
Footplate-based and-effector robots	Haptic Walker [31]	Hesse et al. from Charite University Hospital, Germany	Arbitrary movement DoFs for two feet	Motor drive	Trajectory tracking control	Passive mode Active mode
	G-EO Systems [32]	Reha Technology AG, Switzerland	Two footplates for walking and dimbing DoFs	Motor drive	Position control Trajectory tracking control	Active assist mode

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Germany. It was based on the movement of the lower limb to stimulate the muscles of the lower limb orderly and assist the patient to complete gait training. However, because of the interaction between the foot pedal and the patient's foot, the force feedback of the lower limbs was weak, and the feeling of walking was larger than that of natural walking. In addition, the robot's gait training strategy emphasized repetitive passive motion, while ignoring the importance of active participation. GTI was an early device for lower-limb rehabilitation, and there were many clinical trials in the world [50–54]; the system reduces the physical strength consumption significantly and also saved the medical resources for rehabilitation.

In 2003, Hesse et al. proposed the concept of Haptic Walker based on virtual reality technology. They developed as a foot motion simulator 6 degrees of freedom, with the use of hanging weight loss to realize the arbitrary trajectory and the attitude motion in the sagittal plane, such as walking on the rough surface or the lawn, tripping, and so forth. In the virtual reality control mode, the patient wore a helmet display and a six-degree-of-freedom force sensor was installed on the foot pedal; the patient felt the virtual reality scene and interacted with the virtual scene. The virtual scene and music can also improve the monotonous training atmosphere and enhance the training interest of patients, to achieve the purpose of psychotherapy. The virtual walking rehabilitation training robot was the first device to realize the foot walking along the programmable free trajectory, and redundant hardware and software emergency stop circuits were set up on security as measures.

Compared to other sports platform, a robot actuated by foot in Italy is driven by the pedal with lower-limb movement. The robot added a new way of walking, such as obstacle, step, and slope road. The training rich mode and the active and passive control mode can be a more effective targeted training [55]. The computer comes with a huge data integration system, which can monitor the patient's rehabilitation index in real time. This robot uses pedal structure, which is very comfortable and is easy to use for the patient. However, due to the lack of auxiliary devices in the legs, the patient's muscle strength is too strong or too weak to get the appropriate adjustment, so a doctor is also needed from the side to help [56].

2.4. Platform-Based End-Effector Robots. The Ruegst ankle, ARBOT, and parallel ankle robots belong to the platform based on end-effector robots.

The first truly fully used for ankle rehabilitation robot system was the "Rutgers ankle" proposed by Girone et al. of Rutgers University [57]. It was a robot system based on the Stewart platform [58] with virtual reality, force feedback, and remote control [59]. The mechanism was composed of a fixed platform, a movable platform, and six telescopic branched chains that were connected with the movable platform. It could carry out six independent movements with 6 degrees of freedom. The Stewart platform used six double acting cylinders to drive six degrees of freedom motion, and the virtual reality based human-computer interactive game provided by the host makes the training process no longer

boring. Through the received data, doctors could understand the movement of the ankle joint, and then use the network to control, evaluate, and guide the patients to carry out the appropriate rehabilitation training.

In comparison, exoskeleton robots are usually fixed in various parts of the human limb, while producing different forces/torques. However, for different patients, these exoskeleton robots may not be able to restore the patient's limb function due to its disadvantages and poor adaptability. The end-effector robot is usually at a certain point in contact with the patient's body. Because there is no restriction on the movement of human, the end effector is easier to adapt to different patients [60].

3. Driving Mode of Lower-Limb Rehabilitation

The choice of driving mode directly effects the system scheme of the exoskeleton robot, such as structure design and control system, and it is the basis of exoskeleton robot design. At the moment, the common drive modes of an exoskeleton robot are hydraulic drive, motor drive, pneumatic drive, and SEA (series elastic actuator) [61, 62]. There are other drive modes, such as pneumatic muscle and electronic rod. We summarize different driving modes in Table 2.

Nowadays, the rehabilitation exoskeleton robot mostly used motor drive mode; the robot just needs to bear the body weight and assist hemiplegic patients in common activities, such as walking and going up and down the stairs. Compared with other drive modes, motor drive mode has many advantages, like easy control, no pollution, low noise, and so forth. Hydraulic drive mode is much simpler, smaller, and lighter than other modes. Under the same load, the hydraulic drive is much better than the other driving methods.

In summary, the drivers, such as hydraulic, motor, pneumatic, and SEA (series elastic actuator) are limited by the power, mass, and volume, and the consequence of noise on people in the work is serious. Although the development of artificial muscles plays an important role in the problems, there are some technical challenges to overcome. Another important aspect is the drivers' energy problem. The usable energy, such as nonrechargeable battery, rechargeable battery, and small internal combustion engine, has both merits and limitations, so the potential and perpetual method to solve these problems is to develop new technologies, like electrochemical fuel cell and wireless energy transmission.

4. Control Strategies for Lower-Limb Rehabilitation Robots

According to the different signals that are obtained from the initiative intention, the control strategy between robot and patients is divided into three parts:

- (1) Position control
- (2) Force signal control
- (3) Biological medical signal control.

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		TABLE 2: Overview of driving modes for renabilitation robot.	enablimation robot.	
Drive types	Definition	Advantages	Disadvantages	Representative works
Hydraulic drive [63-65]	Taking the liquid as the actuating medium for energy transmission and control	(1) High reliability (2) Simple structure (3) Worlding stability (4) Low inertia (5) The overload protection is easily realized (6) It can realize stepless speed regulation.	(1) It is sensitive to oil temperature and looding change (2) The hydraulic oil can be compressed (3) The working fluid is easy to leak; high noine: low energy efficiency; low drive speed.	BLEEX series, University of California Berkeley, UK
Motor drive [66–68]	Using electric equipments and adjusting the circuit parameters for power transmission and control	(1) The cable for connection has advantages of energy transfer convenient, signal transform quickly (2) High level stundard (3) Easily to achieve automatic control (4) Simple structure (5) Nompoliuting.	(1) It has poor balance of movement (2) It is easily influenced by external load (3) Large inertia (4) Slow change (5) Large volume (6) Harye.	HAL series, Tsukuba Univer of Cyberdyne, Japan
Preumatic drive [69-71]	Taking the compressed air as the actuating medium for energy transmission and control	(1) Simple structure (2) Low cost (3) Small gas viscosity (4) It can realize stepless speed regulation (5) Nonpolluting (6) Little resistance losing (7) Fire and explosion prevention, high flow rate (8) Working in high temperature.	(1) The gas is easy to be compressed and leak: (2) The speed is easy to change under the load the load the load in the load of the load the load that the sealer was anot be used under low temperature (4) The gas is difficult to sealed (5) Working pressure is usually smaller than 0.8 Mpa, which only applies to small power driving. Unsuitable for high-power system.	Ankle-foot orthosis of Michi University, USA
SEA (series elastic actuator) drive		(1) High control precision (2) High security (3) Weaken inertia impaction (4) Reducing the friction losses	(1) Rigidity is restricted by elastic components (2) Large volume (3) Heavy (4) Complicated structure	The Exoskeleton of the Delav State University [72]

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- 4.1. Position Control. The position control method is trajectory-tracking control, which is to drive the lower limbs to walk on the fixed mode. The gait is formed by a proportional position feedback controller and joint angles and suitable for lower limb muscle strength. Hornby confirmed the efficacy of trajectory tracking control, which can increase the speed and durability of patients with incomplete spinal cord injury. Zhang et al. established the trajectory tracking control of the 5 connection model, which can enhance the participation of the patients and make the training more personalized [73].
- 4.2. Force Signal Control. In this control strategy, force signal is produced by limb contraction and interactions with mechanical structure. The interaction force can be directly measured by force and moment sensor in the elegant mechanical structure design, which can be evaluated by the kinetics models of the human-computer interactive system. Compared with biological medical signal, force signal has a better determinacy, which can better reflect the motion intention of the patient, so the control based on force signal is feasible and relatively steady. However, the acquisition of interaction force usually requires mechanical structure, which is less available than biological medical signal detection, so the applicable range of interactive controlling are limited. In the interaction control strategy, between rehabilitation robot and patient, there are two most widely used methods: hybrid force/position control and impedance control [74].
- 4.2.1. Force/Position Hybrid Control. To resolve the control problems of robot in a constrained environment [75], Raibert proposed the force/position hybrid control strategy. Sometimes, we should control the position of the robot on some specific directions, but on the other directions, we should control the interaction force between the mechanical structure and the outside world. Therefore, when the robot contacts the outside world, the task space of robot would be split into two subspaces in the force/position hybrid control strategy. The subspaces are position subspace and force subspace, and it will complete the tracking control over position and force in the corresponding subspace [76]. The interaction control of lower-limb rehabilitative robot is aiming to provide a safe, comfortable, and flexible place for treatment and healing, and it does not need accurate force trace control, so force/position hybrid control strategy is uncommonly used in interactive controls.

Lokomat achieved a new cooperative gait training strategy by using force/position hybrid control method [77]. The control of lower limb gait orthosis is a two-stage process. In the step stage, according to the dynamic model to control the power of the orthosis to provide reasonable support for patients, it is difficult to accurately assess the relevant kinetics model. Therefore, we just control the position of orthosis in the standing stage. Besides that, gait stages of the limbs are monitored in real time, as the converting signals of hybrid control in the two stages. This strategy can help patients to walk freely, and it requires active and full engagement of the limbs of patients. Therefore, it is an active rehabilitation training, which is highly intention-oriented and stimulates the patients to participate positively and with initiative in the rehabilitative training; it will accelerate the recovery process.

4.2.2. Impedance Control Impedance control is different from force/position hybrid control. It focuses on realizing the flexibility of the rehabilitation robot, which avoids excessive force between the mechanical structure and limbs. This method could provide a natural, comfortable, and safe touch interface and avoid secondary damage effectively. An additional advantage of impedance control is that the achievement of impedance control is independent of the prior knowledge [78]. In the control of interaction force between robot and patients, impedance control has a more extensive application.

In the robot control field, the theory of impedance control was first proposed by Hogan [79], and it was the spread of damping control and rigidity control. Seen from the approach of realization, impedance control can be divided into two categories: one is based on torque and the other is based on position. The first one is based on forward-facing impedance equations, but the explicit expressions of impedance equations do not exist in the control structures generally. The second one is based on reverse impedance equations, which is also called admittance control. It usually adopts a typical double closed-loop control structure; the outside loop controls the force and the inner loop controls the position. The impedance control based on position is easier to realize [80, 81] position servo control, more mature, and stable. Aiming at Gait Trainer (GTI) of lower-limb rehabilitative robot, Hussein proposed an adaptive impedance control algorithm for gait training [82].

- 4.3. Biological Medical Signal Control. Surface electromyogram (sEMG) and electroencephalogram (EEG) are mostly used in interactive controlling of lower-limb rehabilitative robot. Since these signals are both using nonintrusive ways to get, the ways of obtaining the sEMG and EEG are operable and do not need a medical expert and its performance can get guarantees.
- 4.3.1. The Control Based on sEMG. EMG signal is the electrical activity produced by the skeletal muscle [83, 84]. According to different measurement methods, it is mainly composed of sEMG and iEMG (intramuscular EMG). sEMG is a signal obtained by attaching electrodes to the surface of the skin, while iEMG is a signal obtained by inserting a needle electrode into the muscle tissue beneath the skin. Compared with the active signal, sEMG has the following advantages:
 - The acquisition of sEMG is simple and does not require a complex mechanical structure design.
 - (2) The force signal is just the embodiment of all muscle groups, and sEMG can reflect the degree of activity of specific muscle groups, which can be more detailed monitoring and control of the movement of the limbs.

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- (3) The interactive control based on sEMG has more flexibility, which can realize the control of the healthy limb to the diseased limb according to the coordination of the body movement.
- (4) sEMG has higher sensitivity and resolution than the active force signal, and it is more suitable to use sEMG to detect active motion intention for the patients with lower limb autonomy.

The challenges of interactive control method based on sEMG are as follows. First, through the human skin, to collect sEMG signal has great randomness, and in order to obtain the signals, which have high signal-to-noise ratio and can truly reflect the muscle activity, we need to find an effective way to filter out the interference of sEMG. Secondly, the single channel sEMG only reflects the activity of specific muscles, in order to obtain the active motion intention of the patients, which is usually necessary to combine multiple muscle activities. In contrast, the response of the force signal to the active intention is more direct.

The interactive control strategy based on sEMG can be divided into two categories:

- (1) Using the remaining EMG of diseased limbs. This method can not only stimulate the patients' awareness of active participation but also encourage patients to control the contraction of limb muscles during exercise. But for severely paralyzed patients, their diseased limbs have almost completely lost their motor function and cannot complete muscle contraction independently; the sEMG signal is so weak that it is difficult to be detected. The first scheme is not applicable in this case.
- (2) Using the motion coordination of the left and right limbs or upper and lower limbs and EMG signals of the healthy limbs control the movement of the paralyzed limb. This method in active participation of patients is less than the first strategy, but it provides an active training program for severely paralyzed patients.

4.3.2. The Control Based on EEG. The EEG signal is the electrical activity of the brain [85], which is collected by electrodes attached to the scalp, and it represents the voltage fluctuations caused by the flow of ions between the neurons in the brain.

The most important advantage of interactive control based on EEG is that it is limited to the extent of physical disability; even if the patient has completely lost the motor function of the lower limb, as long as the brain can produce motion control signals, the method is equally applicable. This method is particularly suitable for patients with complete spinal cord injury, and their brain function is normal, but the control signal transduction pathway is cut off, so the muscles of the limbs completely lost control. The interactive control based on EEG is equivalent to the reconstruction of the brain control signal transmission path outside the body,

and the motor and functional electrical stimulation device are used as the actuator to regain the control of the limb motor function.

This method is limited to the paralyzed patients whose brain motor control function is normal, but it is not suitable for patients with brain damage caused by stroke and other reasons, because the brain motor function area of the patients has been damaged and it has not been able to produce the EEG signal of normal limb movement control. Secondly, compared with the sEMG signal, the resolution of EEG on limb movement intention is low and the EEG signal has a greater randomness, in which changes in expression, mood, and attention will easily effect the EEG signal generated by

At present, the research in this area is mainly focused on offline classification knowledge and regression analysis; the knowledge pointed out the potential of the interactive control of lower-limb rehabilitation robot based on the EEG, but the actual application and the experimental results are almost none. Compared with offline research, real-time interactive control is facing more challenges. First, the real-time acquisition of the EEG signal is not possible to have the integrity of the data used in offline research; the accuracy of the identification may be affected. Secondly, it is necessary to ensure the real-time performance of interactive control, which requires the use of EEG signal for motion recognition, more importantly, to predict. Finally, in real-time interactive control, the patient will not be able to complete the actual physical movement independently, the acquisition of the EEG signal corresponds to the movement of the brain, and this has not been considered in the study of the existing lowerlimb rehabilitation robot.

5. Training Modes of Lower-Limb Rehabilitation Robot

The effectiveness of lower-limb rehabilitation robots and treatment depends largely on its training mode [86], which will assist the patient in different patterns of movement according to the patient's recovery [87]. Figure 1 shows two typical control modes for rehabilitation robots: passive mode and active mode [89]. Recently, more subdivided training modes for lower-limb rehabilitation have been proposed. An overview of modes for rehabilitation robot is illustrated in Table 3.

The rehabilitation-training mode is divided into four kinds, which includes the passive mode, the active assist mode, active mode, and active resist mode.

In the passive mode, the patient lost muscle strength and could not complete the active movement. We can only rely on the help of external forces to achieve the patient's passive training. The robot's legs drive people's legs for rehabilitation training, and the lower-limb rehabilitation robot should provide sufficient strength for passive training. The advantage of this model is through the repeated exercise to promote the recovery of limb motor function and reduce muscle atrophy, but the patient lacks motivation.

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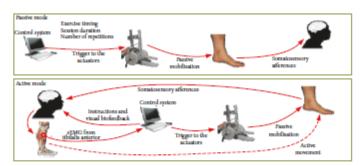


FIGURE 1: Passive and active control modes [88].

TABLE 3: Overview of training modes for rehabilitation robot.

Training modes	Characteristics	Representative works		
Passive mode	The robot helps the patient track the predetermined trajectory through repeated tracking control for passive training.	Ankle robot and gait orthosis [90–92] Gait Trainer (GTI) [30] LOPES [93]		
Active mode	When the patient has a certain initiative, the rehabilitation robot will diange its trajectory or assistance force.	AAFO [20] LOPES [93] ALEX [17]		
Active assist mode	A kind of "active" mode. The patient does not need any help to move the limb. When the threshold value reaches a certain standard, it will trigger the robot.	HAL [22] KAFO [21] G-EO Systems [32]		
Active resist mode	A kind of "active" mode. When the patient moves the limb, the robot provides resistance to make the exercise more challenging.	ARBOT [94, 95] Rutgers ankle [25]		

In the active mode, the muscles of the patient have certain strength and the active motion of the smaller torque can be performed on the rehabilitation equipment. When the patient wants to move his joint or limb, the robot device will use an external assist force as needed. It requires the robot to perceive the state of the patient and the force/torque when following the patient's movement. This model can be modified according to the patient's intention, thereby greatly enhancing the initiative of patients.

In the active assist model, the muscles have certain strength, but without the help of the robot legs, patients cannot be fully trained. This allows the patient to move without the help of a robot, which can improve the patient's ability to exercise independently.

In the active resistance model, the mechanical leg provides a certain force, which is opposite to the direction of the leg to achieve the purpose of strengthening muscle training. This model is suitable for patients with high recovery, and resistance makes the movement more challenging and can enhance muscle strength in patients.

At present, there are a number of other training methods, such as mirror motion and isotonic and isokinetic exercise patterns. Although these new training patterns are similar from the therapist's view, they are also trying to provide assistance or resistance to the patient in the course of robotic therapy.

6. Gait Detection Technology

Accurate signal is the foundation of control; the quantitative feedback information is helpful for developing reasonable rehabilitation strategy according to the state of patients. Therefore, the choosing of sensor, which can detect the information of human computer interaction, is crucial. Gait detection technology consists of three primary parts: plantar sensing technology, limb sensing technology, and mixed sensing technology.

Plantar sensing technology: it can judge the different gaits by detecting the man-machine forces or the ground reaction forces of foot using sensor.

Limbs sensing technology: it uses sensors to detect motion intention of the lower limbs or the torso:

- (1) The sensing technology based on angle sensor
- (2) The sensing technology based on EMG [96] sensor
- (3) The sensing technology based on BCI [97].

Mixed sensing technology can be applied to identify and judge the human gaits using two or more sensors together.

Combining of the detection information of all kinds of sensors, the control system can obtain accurate movement

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information to make sure that the exoskeleton robot will work effectively and reliably.

At present, there are two main ways for detecting motion intention, as shown in Table 4. One is human robot interaction based on physical models (pHRI) [100]. It is mainly used for detecting interaction information between patient and exoskeleton, such as position information, force information, and so forth. Although there are some kinds of lag in time, and the sensors' installations effect the comfort ability, this method is of high reliability. The other is human robot interaction based on cognition (cHRI) [100]. Using this method, motion intention of patients, as input signals for controller, is gained through the identification of EMG [96] signals. Patching the sensors on the skin directly is very comfortable, but the sweat on the skin can seriously effect measurement precision, and it also cannot ensure the one-to-one mapping relationship between the EMG signals and the joint torque. At the same time, the misjudgments of the controller can cause secondary damage. Obviously, we can accurately judge for motion intention by fusing the two kinds of signals. The detection method of human robot interaction information is presented in Table 4.

The exoskeleton rehabilitation robot uses many kinds of sensors to detect gait, but the detection methods still have many problems, such as vulnerability to interference, inaccurate judgment, and poor adaptability. Therefore, the development of BCI technology and sensor technology are crucial to solve the current problems.

7. Discussion

In this paper, the development of lower-limb rehabilitation robot, training mode, driving mode, control strategy, and gait detection technology are reviewed. The lower-limb rehabilitation robot has many advantages, and it has shown encouraging clinical outcomes and rehabilitation efficiency. Although most of the lower-limb rehabilitation robots can provide systematic and long-term treatment, there are still some disadvantages and deficiencies summarized as follows:

- The mechanical structure and control system of rehabilitative robot need to be improved. During rehabilitation training, it lacks exact control in real time for patients' joints angles, torque, speed, etc.
- (2) The recently developed robots in domestic and abroad are mainly on motor rigid drive. The system is lacking in flexibility, and the actuator structure of rehabilitation robot is overly complex and large with low portability. At the same time, the security and comfort also need further improvement.
- (3) The feedback mechanism of rehabilitative effect should be consummated. It could not give an accurate feedback to the limbs' position and force during rehabilitation training, which causes low training efficiency and directly effects the evaluation of rehabilitation training.

TABLE 4: Detection method of human robot interaction information.

HRI	Detection signal	Detection method
pHRI	Kinematics information Force/torque information	Angle sensor, acceleration sensor Pressure sensor, torque sensor
cHRI	Muscle motility information Brain motility information	EMG, sEMG [98] EEG [99]

- (4) For a flexible robot, we need to develop a more advanced high polymer as flexible material. Moreover, the driving force still needs to be improved.
- (5) Patients' motivation involved in the training plays a very important role in stroke rehabilitation. However, most training paradigms are rigid and boring. Task-oriented training paradigm with interesting games such as whack-a-mole can make the training more enjoyable.
- (6) The lower-limb rehabilitation robot still faces numerous technological challenges, including the biomechanics, neurophysiology, human-computer interaction (HCI), and ergonomics.

The current lower-limb rehabilitation robots, to some extent, can provide a simple training program for patients and has a certain effect on rehabilitation. In our opinion, future researches on lower-limb rehabilitation robot should focus on the following aspects:

- (1) System design of lower-limb rehabilitation robot: the mechanical structural design is the foundation of robotic system, which needs to achieve some major objectives, such as compact, multi-DOF, great flexibility, various kinds of training methods and motions, better comfort, and high matching between human and computer.
- (2) The control strategies and motion pattern design of lower-limb rehabilitation robot: due to the individual difference of the patients, the robot should perceive state information of patient's force and position, to adopt corresponding training mode and control strategy. Future researches, such as adaptability and stability of control system, the applications of sensor technique, and the design of control algorithm, are required. Therefore, the robot should not only meet the demand of low weight, fast response, and large output torque but also have some characteristics similar to animal skeleton muscles, such as pliability and reliability. Therefore, it is important to research the optimizing design method for energy saving based on active and passive mode, the energy technology of high energy density, and wireless transmission technology.
- (3) The design of gait detection system: the lower-limb rehabilitation robot should be able to detect and

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perceive the information of interaction forces and motion position between the patient and rehabilitation robot. On the one hand, the robot should provide appropriate assistance, when the patient could not complete motion by himself. On the other hand, the robot should decrease the assist force or increase the resistance properly, when the motor ability of paralyzed lower extremity improves remarkably.

- (4) Security protection mechanism: the robot must be designed to meet the safety requirements of clinical rehabilitation training, while preventing damage. In order to ensure security of rehabilitation training, two important issues should be considered when designing the lower-limb rehabilitation robots: mechanism design (hardware) and control system (software).
- (5) Rehabilitation effect assessment system: by combining the detection of EMG signals and EEG signals. We should explore the inherent relationship between the rehabilitation effectiveness and the train parameters and develop new assessment strategies to verify the effectiveness of the lowerlimb rehabilitation robot.
- (6) The VR technology has been proved to be an effective tool in neurorehabilitation. On the one hand, the interesting and varied virtual scene in VR improves more motivation of patients comparing with the training course in traditional training. On the other hand, the immersive VR environment can effectively stimulate human brain mirror neurons in the motor cortex and promote the recovery of the nerve. However, VR cannot provide physical feedback to the paralyzed limb; the robot can compensate for this defect. Therefore, the combination of rehabilitation robot and VR technology is the future development direction. However, before the application, the following core issues must be addressed:
 - (i) The exact factors in the design of VR, which stimulate patients' motor cortex mirror neurons, should be explored in the future.
 - (ii) The vertigo problem of VR, which limits the application of VR system, must be solved.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

Authors' Contributions

Xue Zhang and Zan Yue contributed equally to this paper.

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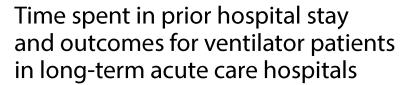
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RESEARCH ARTICLE

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Abstract

Background: Long-term acute care hospitals (LTACHs) treat mechanical ventilator patients who are difficult to wean and expected to be on mechanical ventilator for a prolonged period. However, there are varying views on who should be transferred to LTACHs and when they should be transferred. The purpose of this study is to assess the relationship between length of stay in a short-term acute care hospital (STACH) after endotracheal intubation (time to LTACH) and weaning success and mortality for ventilated patients discharged to an LTACH.

Methods: Using 2014–2015 Medicare claims and assessment data, we identified patients who had an endotracheal intubation in STACH and transferred to an LTACH with prolonged mechanical ventilation (defined as 96 or more consecutive hours on a ventilator). We controlled for age, gender, STACH stay procedures and diagnoses, Elixhauser comorbid conditions, and LTACH quality characteristics. We used instrumental variable estimation to account for unobserved patient and provider characteristics.

Results: The study cohort included 13,622 LTACH cases with median time to LTACH of 18 days. The unadjusted ventilator weaning rate at LTACH was 51.7%, and unadjusted 90-day mortality rate was 43.7%. An additional day spent in STACH after intubation is associated with 11.6% reduction in the odds of weaning, representing a 2.5 percentage point reduction in weaning rate at 18 days post endotracheal intubation. We found no statistically significant relationship between time to LTACH and the odds of 90-day mortality.

Conclusions: Discharging ventilated patients earlier from STACH to LTACH is associated with higher weaning probability for LTACH patients on prolonged mechanical ventilation. Our findings suggest that delaying ventilated patients' discharge to LTACH may negatively influence the patients' chances of being weaned from the ventilator.

Keywords: Ventilator weaning, Mortality, Length of stay

Background

The number of critically ill patients receiving ventilator care has grown considerably over the last several years [1]. While the use of ventilator support has extended the life of patients, those who survive face poor prognosis, with high 1-year mortality rates [2, 3]. A key step

to maximize the recovery of these patients is liberating them from the ventilator. However, only about half of patients are liberated from mechanical ventilation upon hospital discharge [3].

In the U.S., many critically ill patients on ventilators are discharged to long-term acute care hospitals (LTACHs) to wean off the ventilator. These specialty hospitals, of which there are fewer than 400 in the nation, have an average length of stay of over 25 days and care for critically ill patients requiring an extended inpatient hospital

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stay [4]. In 2017, roughly 44% of Medicare fee-for-service (FFS) patients on prolonged mechanical ventilation (PMV) (defined as 96 or more consecutive hours on a ventilator) and discharged alive from a short-term acute care hospital (STACH) to a post-acute care setting were admitted to an LTACH, compared to 3% of all hospitalized Medicare FFS patients. ¹

To support discharge decisions, many hospitals and payers use proprietary or commercial clinical guidelines to help in patient placement assessments. These guidelines provide criteria for when it is appropriate for a ventilated patient to be admitted to an LTACH. In 2005, a consensus statement from the National Association for Medical Direction of Respiratory Care (NAMDRC) recommended that prolonged mechanical ventilation be defined as the need for 21 consecutive days or longer on mechanical ventilation for at least 6 h a day (abbreviated "21-day requirement") [5]. Based on this recommendation, private health plans covering Medicare beneficiaries (Medicare Advantage plans) often cite failure to meet the 21-day requirement as a key reason for prior-authorization denials for admission to an LTACH.

In this study, we assess the relationship between length of stay in a STACH after endotracheal intubation and mortality and weaning success for ventilated patients discharged to an LTACH. Earlier discharged to an LTACH for ventilator weaning services may have two conflicting effects. First, patients transferred earlier may experience improved outcomes due to receipt of specialized ventilator weaning services at LTACHs. On the other hand, if early transfer patients are less stable, requiring a level of care only available in an intensive care unit (ICU), discharging ventilated patients too early to an LTACH may negatively affect outcomes. We use an instrumental variable approach to conduct the analysis in recognition that STACH discharge decisions may be influenced by patient complexity and financial consideration not readily observed in administrative data.

Methodology

We constructed our study cohort, explanatory variables, and outcomes using 2014–2015 Medicare claims and assessment data. The Medicare claims data were used to study services provided by STACHs, LTACHs, inpatient rehabilitation facilities (IRFs), skilled nursing facilities (SNFs), and home health agencies (HHAs). We used assessment data from the Minimum Data Set to analyze stays in nursing homes (NHs). We obtained dates of admissions and discharges, patient demographic information, and clinical diagnosis codes and procedure

Our study population consisted of Medicare beneficiaries who were aged 65 or older, discharged from a STACH between January 1, 2014 and June 30, 2015, and, subsequently, admitted to an LTACH. We limited the analytic sample to Medicare beneficiaries who: (1) received a tracheostomy (ICD 9 procedure codes: "311","312","3121","3129") at the STACH; (2) were on prolonged mechanical ventilation at the STACH and LTACH; (3) spent at least one day in an ICU during the STACH stay; (4) were admitted to an LTACH same or next day after discharge from STACH; and (5) died in the LTACH or were discharged from the LTACH to another hospital, IRF, SNF, NH, hospice, or home with or without home health care.

Our sample exclusions included: (1) beneficiaries who had Medicare Advantage coverage during the month of LTACH stay and the following month; (2) beneficiaries who did not have continuous Part A coverage during the month of LTACH stay and the following month; (3) beneficiaries who were admitted to a STACH for the non-surgical treatment of cancer; (4) beneficiaries who had conditions that were not suitable to wean, such as quadriplegia, or amyotrophic lateral sclerosis; (5) beneficiaries who discharged from a STACH or LTACH against medical advice; (6) beneficiaries who exhausted Medicare benefits during a STACH or LTACH stay; and (7) beneficiaries who had overlapping stays in a STACH or LTACH based on dates of admission and discharge in claims or had a missing admission or discharge date. We also excluded outlier cases in terms of days from intubation at the STACH to LTACH transfer ("time to LTACH"), defined as those with days outside of the 1st and 99th percentiles of the time to LTACH distribution, from the analysis.

We examined two clinical outcomes: ventilator weaning during LTACH stay and mortality. A patient was considered to have weaned off the ventilator if he/she was discharged alive from the LTACH and not on mechanical ventilation in the next observed setting after discharge from the LTACH. We measured mortality within 90 days starting at day of LTACH admission. We performed logistic regression to estimate the outcomes.

The key explanatory variable in the analysis was "time to LTACH" (TTL), which was defined as the length of time between endotracheal intubation (ICD 9 procedure code: "9604") in the STACH to discharge from STACH.

codes for each hospitalization and LTACH transfer. We used LTACH Compare data available on the Centers for Medicare & Medicaid (CMS) website to obtain LTACH characteristics on quality during 2014 and 2015. Ethical & Independent Review Services determined that a waiver from the requirement to obtain HIPPA authorization was justified for this research project.

¹ Based on authors' analysis of Medicare FFS claims data.

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We adapted a risk-adjustment model developed by Kahn et al. to examine in-LTACH mortality for a ventilated population [6]. In addition to TTL, we obtained clinical information from the STACH stay and constructed risk-adjustment variables based on the model developed by Kahn et al. for 90-day mortality rates among patients admitted to LTACHs for ventilator weaning. Patient characteristics included: age, gender, STACH stay procedures and diagnoses (coronary artery bypass graft (CABG), dialysis, hypotension, percutaneous transluminal coronary angioplasty (PTCA), stroke, thrombocytopenia, trauma, and valve replacement), and Elixhauser comorbid conditions during STACH stay. We also controlled for two CMS LTACH quality measures obtained from LTACH Compare: 30-day all-cause unplanned readmission rate and percent of patients with new or worsened pressure ulcers [7]. We added these quality proxy measures, which are readily available from CMS and validated, to control for differences in patient outcomes that may be related to LTACH quality and correlated with TTL.

TTL may be correlated with factors unobservable from claims and assessment data, such as STACH preferences, STACH quality, payer differences, and patient severity. The direction of the correlation is unclear as factors determining TTL may be complex. For example, patients who stay longer in the acute care hospital may be sicker or it may reflect STACH physician preference to keep the patient under his or her direct care longer. On the other hand, patients who have shorter lengths of stay may be less acutely ill or debilitated or may be discharged sooner by hospitals to limit financial losses on complex patients. We accounted for the potential endogeneity of TTL by using instrumental variable (IV) estimation. The IV used in the analysis was the residual from a linear regression of LTACH daily census of all patients on LTACH daily census of ventilator patients. By constructing the IV based on this regression residual, our IV is not correlated with LTACH daily census of ventilator patients, which may be correlated with outcomes if there is a volume-quality relationship for treating ventilator patients.

Since the models for outcomes were non-linear, we used two-stage residual inclusion (2SRI) estimation to conduct the IV analysis [8]. In the first stage, we used TTL as the dependent variable, and we included IV and all the other covariates as independent variables. The model we used was generalized linear model (GLM) with a Gaussian distribution, a log-link function and robust standard errors. We obtained the residuals from the GLM to include in the second stage. Specifically, in the second stage, we use logistic regression, in which the outcome variables were weaning or 90-day mortality, and the explanatory variables included TTL, residual from the first stage GLM, age categories, gender, and all

the clinical conditions and comorbidities. We used bootstrapping (500 replications) to approximate the asymptotically correct standard errors.

For the weaning outcome, we conducted two sets of sensitivity analysis. In the first set of sensitivity analysis, we only considered a patient to have weaned if he/she met the original definition (i.e., patient discharged alive from the LTACH and not on mechanical ventilation in the next setting after LTACH discharge) and the patient was alive in the next setting for at least 7 days. In the second set of sensitivity analysis, we excluded patients who went to hospice after LTACH discharge from our analytic sample.

For the logistic regression and the 2SRI IV analysis, we calculated the odds ratio and marginal effects for TTL. We considered a p value less than 0.05 to be statistically significant. All the analyses were performed with STATA 16.0 (StataCorp LLC, College Station, Texas).

Results

Our study cohort included 13,622 Medicare beneficiaries who had an endotracheal intubation in a STACH and were discharged to an LTACH between January 1, 2014 and June 30, 2015 (Table 1). Average length of stay in the STACH prior to admission to the LTACH was 24.0 days, and the average number of days between endotracheal intubation and discharge from STACH was 19.6 days. The number of days to LTACH after endotracheal intubation had a median of 18 and interquartile range of [13, 24]. Some of the common diagnoses in the study cohort included congestive heart failure (45.8%), cardiac arrhythmias (52.7%), chronic pulmonary disease (48.3%), and fluid and electrolyte disorders (78.7%).

Patients who were weaned off the ventilator at the LTACH, on average, were younger (68.7 vs. 72.7) and had shorter time in STACH between endotracheal intubation and discharge to LTACH (19.1 days vs. 20.2 days). In addition, patients who weaned were less likely to have 19 of the 31 Elixhauser comorbidities examined. Similar to patients who weaned, patients who survived the 90-day period post LTACH admission were younger (68.6 vs. 73.2) with shorter TTL (19.2 vs. 20.2 days). They were also less likely to have 20 of the 31 Elixhauser comorbidities examined.

The unadjusted ventilator weaning rate at LTACHs in our study cohort is 51.7%, indicating that more than half of the patients in our study weaned from the ventilator at the LTACH and were discharged alive (Table 2). Weaning rates were lower in our sensitivity analyses. Unadjusted weaning rate was 47.1 and 48.0% when weaned patients were required to remain alive for 7 days following discharge from LTACH or when excluding patients discharged from LTACH to hospice,

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Table 1 Patient characteristics

	All	Weaned at LTACH	Not Weaned at LTACH	Alive in 90 Days	Expired in 90 Days
No, of Cases	13,622	7046	6576	7668	5954
Time to LTACH					
Mean	19.6	19.1	20.2	19.2	20.2
25th percentile	13.0	13.0	14.0	13.0	14.0
Median	18.0	17.0	18.0	18.0	18.0
75th percentile	24.0	23.0	25.0	23.0	25.0
Age	70.6	68.7	72.7	68.6	73.2
Male	50.4%	50.2%	50.7%	49.3%	51.9%
Prior STACH LOS	24.0	23.2	24.9	23.3	25.0
Prior STACH Procedures and Diagnoses					
Dialysis	15.2%	13.2%	17.5%	12.4%	18.9%
PTCA	1.6%	1.4%	1.7%	1.6%	1.5%
CABG	3.9%	3.8%	4.1%	3.6%	4.4%
Valve Replacement	2.8%	2.6%	3.0%	2.4%	3.3%
Hypotension	10.9%	11.2%	10.6%	11.1%	10.6%
Thrombocytopenia	15.9%	15.5%	16.3%	15.0%	17.0%
Stroke	13.5%	15.0%	12.0%	14.1%	12.7%
Trauma	9.8%	10.7%	8.8%	10.2%	9.3%
Exlihauser Comorbidity	45.007	40.504	E4 407	44.504	51.10/
Congestive Heart Failure	45.8%	40.5%	51.4%	41.6%	51.1%
Cardiac Arrhythmias	52.7%	48.6%	57.0%	49.3%	57.0%
Valvular Disease	12.3%	10.6%	14.2%	10.7%	14.4%
Pulmonary Circulation Disorders	15.4%	13.6%	17.2%	14.6%	16.4%
Peripheral Vascular Disorders	12.1%	11.5%	12.7%	11.2%	13.3%
Hypertension, Uncomplicated	39.3%	42.7%	35.7%	43.0%	34.7%
Paralysis	8.9%	10.3%	7.5%	10.1%	7.4%
Other Neurological Disorders	44.3%	44.6%	44.1%	44.7%	43.8%
Chronic Pulmonary Disease	48.3%	45.2%	51.5%	47.3%	49.5%
Diabetes, Uncomplicated	30.0%	30.3%	29.7%	29.7%	30.3%
Diabetes, Complicated	8.9%	8.3%	9.6%	8.2%	9.8%
Hypothyroidism	13.9%	13.8%	14.0%	13.3%	14.5%
Renal Failure	30.2%	26.3%	34.3%	25.9%	35.7%
Liver Disease	9.1%	9.0%	9.3%	8.7%	9.7%
Peptic Ulcer Disease Excluding Bleeding	1.7%	1.7%	1.7%	1.8%	1.6%
AIDS/HIV	0.4%	0.4%	0.5%	0.4%	0.5%
Lym phoma	1.1%	1.0%	1.2%	0.8%	1.4%
Metastatic Cancer	1.4%	0.9%	2.1%	0.8%	2.3%
Solid Tumor Without Metastasis	3.7%	2.6%	4.9%	2.4%	5.4%
Rheumatoid Arthritis/Collagen Vascular	3.7%	3.9%	3.4%	3.8%	3.5%
Coagulopathy	19.9%	19.3%	20.5%	18.6%	21.5%
Obesity	21.3%	23.4%	19.0%	24.0%	17.7%
Weight Loss	42.8%	40.9%	44.8%	40.5%	45.7%
Fluid and Electrolyte Disorders	78.7%	78.6%	78.9%	78.4%	79.2%
Blood Loss Anemia	1.8%	1.8%	1.7%	1.7%	1.8%
Deficiency Anemia	4.1%	4.5%	3.7%	4.4%	3.7%
Alcohol Abuse	5.8%	6.9%	4.6%	6.7%	4.7%
Drug Abuse	3.2%	4.3%	2.0%	4.1%	2.1%
Psychoses	3.1%	3.8%	2.4%	3.6%	2.5%
Depression	11.6%	13.1%	10.0%	13.3%	9.5%
Hypertension, Complicated	28.4%	25.0%	32.1%	13.3%	9.5% 33.5%
Number of Elixhauser comorbidities (mean)	6.0	5.9	6.2	24.4% 5.9	6.2

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Table 1 (continued)

All of the variables in Table 1, except for the prior STACHLOS and the number of Elixhauser comorbidities, were included in the risk adjustment model. Age categories were included as indicator variables (age categories: < = 70.71-75.76-80.81+)

Table 2 Unadjusted outcomes

	Overall sample size	Outcome rate	Correlation coefficient between outcome and time to LTACH
Weaned at LTACH	13,622	0.517	- 0.0629
Weaned at LTACH and alive for at least 7 days after discharge	13,622	0.471	- 0.0623
Weaned at LTACH, excluding patients discharged to hospice	13,202	0.480	- 0.0652
90-day Mortality	13,622	0.437	0.0570

Table 3 Relationship between Time to LTACH and Outcomes

Outcomes	Univariate Logist	ic Regression	Multivariate Logistic Regression		Instrumental Variable Regression	
	Odds ratio	P value	Odds ratio	P value	Odds ratio	P value
Weaned at LTACH	0.986	< 0.001	0.990	< 0.001	0.884	0.005
Weaned at LTACH and alive for at least 7 days after discharge	0.986	< 0.001	0.990	< 0.001	0.857	0.001
Weaned at LTACH, exclud- ing patients discharged to hospice	0.986	< 0.001	0.990	< 0.001	0.866	0.001
90-day Mortality	1.013	< 0.001	1.007	0.001	1.046	0.327

respectively. The 90-day mortality rate was 43.7 percent. The correlation coefficient between TTL and ventilator weaning ranged between -0.0623 and -0.0652 (depending on weaning definition), and the correlation coefficient between TTL and 90-day mortality was 0.0570.

Next, we examined the relationship between TTL and outcomes (probability of weaning and mortality) using logistic regression. Without controlling for any patient characteristics, each additional day in STACH after endotracheal intubation is associated with a 1.4% decrease in the odds of weaning from the ventilator in the LTACH (Table 3). When we control for patient clinical characteristics, each additional day in STACH after endotracheal intubation is associated with a 1% reduction in the odds of weaning off the ventilator at the LTACH. This decrease from 1.4 to 1.0% suggests that patient clinical characteristics accounts for some of the negative relationship between time to LTACH and weaning probability. This relationship holds when weaned patients are limited to those who not only wean from the ventilator but also remain alive for at least 7 days after discharge

from LTACH and when the study cohort excludes patients who were discharged from LTACH to hospice.

Our estimation of ventilator weaning probability using IV yielded that an additional day spent in STACH after endotracheal intubation is associated with 11.6% reduction in the odds of weaning off the ventilator in LTACH (Table 3). If we define ventilator weaning as weaning off of ventilator and being alive for at least 7 days post discharge from LTACH, the odds of weaning decreases by 14.3% for each additional day in STACH after endotracheal intubation. When we exclude patients discharged from LTACH to hospice, we find that an additional day in STACH is associated with a 13.4% reduction in odds of weaning off ventilator at LTACH.

Because the models are non-linear, the effects of TTL on outcomes vary at different points in the TTL distribution. To better understand the relationship between TTL and the probability of weaning from ventilator at LTACH, we examined the average predicted probability of weaning if patients were discharged to an LTACH at 13, 18, and 24 days after endotracheal intubation, which correspond to the 25th, 50th, and 75th percentile of the TTL distribution in the study cohort (Table 4). Based

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Table 4 Average Adjusted Outcomes at Select Values of Time to LTACH

	Adjusted probability at LTACH	of being weaned	Adjusted probability of being weaned at LTACH and alive for at least 7 days after discharge from LTACH		Adjusted probability of being weaned at LTACH, excluding patients discharged to hospice	
Time to LTACH	Logistic Regression without IV	IV Estimation	Logistic Regression without IV	IV Estimation	Logistic Regression without IV	IV Estimation
13 days (25th percentile)	0.534	0.667	0.486	0.651	0.496	0.651
17 days	0.524	0.570	0.477	0.537	0.486	0.542
18 days (median)	0.521	0.545	0.475	0.507	0.484	0.514
19 days	0.519	0.520	0.473	0.478	0.481	0.487
24 days (75th percentile)	0.507	0.397	0.461	0.341	0.469	0.354

on instrumental variable estimation results, the average predicted probability of weaning is 54.5% at the median time to LTACH of 18 days post endotracheal intubation. The average adjusted probability of weaning decreases by 2.5 percentage points to 52.0% at 19 days. The average adjusted probability of being weaned decreases by 27 percentage points from 66.7 to 39.7% when time to LTACH increases from 13 to 24 days. We consistently observed reductions in the average adjusted probability of weaning with an increase in time to LTACH under alternative definitions of weaning. For example, when weaned patients are defined as those who wean from the ventilator at LTACH and remain alive for at least 7 days post discharge from LTACH, the probability of weaning decreases by 31 percentage points from 65.1 to 34.1% between 13 and 24 TTL days. When the study cohort excludes patients discharged to hospice, the average predicted probability of weaning decreases by 29.7 percentage points from 65.1 to 35.4% between 13 and 24 TTL days.

Without controlling for patient characteristics, we found that an additional day in a STACH before discharge to an LTACH is associated with 1.3% increase in the odds of 90-day mortality among LTACH patients on PMV (OR=1.013, p value<0.001) (Table 3). Controlling for patient clinical characteristics, an additional TTL day is associated with 0.7% increase in the odds of 90-day mortality (OR=1.007, p value=0.001). When we used instrumental variable estimation, we found no statistically significant relationship between TTL and the odds of 90-day mortality after admission to LTACH (OR=1.046, p value=0.327).

We conducted diagnostic tests on the instrumental variable to assess its validity. We found that the F-statistic on the excluded instrument in the first-stage regression was 23.34 (25.43 when patients discharged to hospice are excluded) (See Additional file 1: Table S1). This F-statistic is greater than the Stock-Yogo critical value of 16.38, supporting that the instrument is strongly related to TTL. There is no test for the exogeneity of the instrument

when there is only one instrumental variable for the one endogenous variable. Although we cannot assess the relationship between the instrument and unobservable characteristics, we examined the relationship between instrument and observable characteristics. Specifically, we divided the TTL into quartiles and assessed whether the average patient characteristics varied across the quartiles. We provide this information in Supplemental Material (Additional file 1: Table S2).

Discussion

The number of patients on prolonged mechanical ventilation has increased over the recent decades due to advances in intensive care medicine. For example, in the US, rate of endotracheal intubation in the adult population more than doubled between 1993 and 2012 [1]. In the U.S., LTACHs are a common care setting for patients to attempt to wean, after an extended period on a ventilator. However, our understanding of the outcomes for these chronically critically ill patients and how to improve their outcomes has lagged, resulting in an important knowledge gap [3, 9].

In this study, we examine ventilator weaning and mortality rates among Medicare beneficiaries treated with PMV in LTACHs after receiving an endotracheal intubation in a STACH. Our findings contribute to our understanding of both the outcomes for patients with PMV and the determinants of their outcomes. We found that about 51.7% of patients in our study population weaned from the ventilator at LTACH; 47.1% of the patients weaned and remained alive for at least 7 days after discharge from LTACH. We also found that more than half (56.3%) of the study population was alive within 90-days of being admitted to the LTACH. The median time between endotracheal intubation and admission to LTACH was 18 days, with an interquartile range of 11 days (13 to 24). Our study revealed that the variation in time spent in STACH after endotracheal intubation is associated with the patient's probability of being weaned during the

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subsequent LTACH stay. Patients discharged to LTACHs earlier have higher risk-adjusted odds of weaning. In particular, we found that an additional day spent in STACH after endotracheal intubation reduces the odds of weaning by 11.6% for patients discharged to LTACHs. This represents a reduction of weaning probability from 54.5 to 52.0% for patients at median TTL of 18 days. We found no statistically significant relationship between TTL and 90-day mortality.

Our findings are consistent with previous research documenting that patients on PMV have poor prognosis. In their meta-analysis of prior research findings, Damuth and co-authors reported pooled one-year mortality rate of 73% and ventilator weaning rate of 47% based on studies that examine outcomes for ventilator patients treated in post-acute hospitals [3]. Compared to previous studies of LTACH patients included in Damuth et al's metaanalysis, our study has the largest sample size (13,622 cases) as it includes Medicare FFS beneficiaries patients treated in all LTACHs in the US during the study period. The largest previous study of LTACH patients by Scheinhorn et al., examining ventilator weaning, included 1,419 patients treated in 23 LTACHs and reported a ventilator weaning rate of 54.1% [10]. The higher weaning rate in Scheinhorn et al. study as compared to 51.7% in our study may be partially due to differences in population exclusions between the two studies. Scheinhorn et al. excluded patients admitted to LTACH for end-of-life care (terminal weaning) and for home ventilator training whereas our study did not implement these exclusions.

Our study has limitations that should be considered in reviewing our results. First, due to data limitation, we identify ventilator weaning based on Medicare claims and assessment data in the next care setting following the LTACH stay instead of assessment data from the LTACH. Although the ventilator weaning rate in our study falls within benchmarks from prior studies, including the Ventilation Outcomes Study, the measurement of ventilator weaning based on next setting may have limited accuracy in measuring weaning at LTACH. Second, although we present supporting evidence on the exogeneity of our instrumental variable, we are unable to confirm its exogeneity due to lack of such a test in the case of a single instrument. Third, patients discharged home from LTACH are included in the weaned group although we do not have data on these patients' ventilator use after discharge from LTACH. Since some of the patients discharged home may be on hospice or end-of-life care, we used alternative measures of weaning outcomes that include patients who die soon after LTACH discharge in the non-weaned group. Finally, our analysis is based on patients who are enrolled in traditional Medicare. Therefore, our findings may not be generalizable to patients covered by Medicare Advantage or other commercial plans.

LTACHs are an important care setting for ventilated patients. In 2013, half of all LTACHs had at least 21.7% of their patients on a ventilator [6]. The introduction of patient criteria in Medicare LTACH payment policy starting in 2016, which reduced payments for cases that did not spend at least 3 days in an intensive care unit prior to admission, has increased the proportion of LTACH patients on a ventilator, further underscoring the importance of LTACHs as specialized treatment facilities for ventilated patients [11]. The number of patients on PMV is likely to continue to grow in the coming years, as a result of continued treatment improvements that keep critical ill patients alive longer and the aging of the U.S. population.

By providing specialized ventilator weaning units, LTACHs may offer benefits to patients and, more broadly, the healthcare system. Shorter TTL may improve weaning outcomes in LTACHs due to: (1) use and earlier implementation of weaning protocols; (2) use and earlier implementation of a rehabilitation model of care, including early and frequent ambulation; and (3) use of multidisciplinary team approach of care which brings together nurses, pharmacists, physicians, nutritionists, pastoral care, social workers and often psychologists. Rak et al. found that high-performing LTACHs in the treatment of ventilated patients differed from lower performers in the promotion of interdisciplinary communication and coordination through, for example, the use of care protocols and interdisciplinary team [12]. Short-term acute care hospitals may be less able to focus on the specific needs of these patients in their intensive care units [13]. In addition, studies have found that hospital volume of ventilated patients may be positively correlated with survival [14–17]. LTACHs may also relieve pressure on hospital intensive care units, reducing over-crowding which may improve outcomes [18].

Even if some ventilated patients may benefit from LTACH care, not all patients on a ventilator in a short-term acute care hospital may be appropriate to receive care in an LTACH. Some patients may be able to wean off a ventilator at the STACH, while others may have such poor prognosis that weaning is highly unlikely. In these cases, transfer to an LTACH may increase health-care spending with little measurable benefits. As a result, who should be transferred to an LTACH for ventilator weaning care and the timing of the transfer are key clinical questions in the treatment of patients with PMV requiring investigation.

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Conclusions

Our findings have important implications for the treatment of chronically critically ill patients on prolonged mechanical ventilation. While LTACHs may offer specialized services and support to treat mechanical ventilator patients who are difficult to wean and expected to be on mechanical ventilator for a prolonged period of time, identifying such patients prospectively based on clinical characteristics has proven to be difficult due to lack of clinical evidence. Partially due to this difficulty in identifying candidates for LTACH care, clinical guidelines have emphasized a "test of time", such as minimum 21 days in a STACH, before transfer to an LTACH. Our findings show that timing of patients' discharge to LTACH may negatively influence the patients' chances of weaning from the ventilator. Earlier access to LTACH care is associated with higher weaning probability for LTACH patients, suggesting patients may benefit from earlier discharge to LTACH and raising questions as to the clinical value of "test of time" approaches to LTACH transfer.

The current COVID-19 pandemic and the widespread use of mechanical ventilation in the treatment of COVID-19 patients has put a spotlight on the outcomes and treatment alternatives of patients on prolonged mechanical ventilation. In preparation for the surge of COVID-19 patients, some have argued that LTACHs can play an important role in freeing up capacity in STACHs by caring for non-COVID-19 patients and serving as overflow setting for COVID-19 patients [19]. Our findings suggest that discharging non-COVID-19 PMV patients earlier to LTACHs during a potential surge of COVID-19 patients may not bring about tradeoffs in patient outcomes. On the contrary, earlier discharge to LTACHs may increase the odds of ventilator weaning for these patients. In addition, while available data are limited, studies indicate that some patients with critical illness from COVID-19 will be intubated and on prolonged ventilation. Some of these patients may face challenges in weaning from the ventilator, and LTACHs are likely to treat some of these patients. An important question for future research is to better understand the appropriate care and care setting for COVID-19 patients on PMV.

Abbreviations

FFS: Fee-for-service; GLM: Generalized linear model; HHA: Home health agency; ICU: Intensive care unit; IRF: Inpatient rehabilitation facility; IV: Instru-mental variable; LTACH: Long-term acute care hospital; LOS: Length of stay; NAMDRC: National Association for Medical Direction of Respiratory Care; NH: Nursing home; PMV: Prolonged-mechanical ventilation; SNF: Skilled nursing facility; STACH: Short-term acute care hospital; TTL: Time between endotracheal intubation in the STACH and discharge from STACH to LTACH.; 2SRI: Two-stage residual inclusion.

Supplementary Information

The online version contains supplementary material available at https://doi org/10.1186/s12890-021-01454-1

Additional file 1. Instrumental Variable Diagnostics.

Authors' contributions

BD, LK, and SS designed the study and acquired the data; BD, LK, JX, and SS analyzed the data; BD, LK, JX, JV interpreted the findings; BD, LK, JX drafted the manuscript, BD, LK, JX, JV revised the manuscript, All authors read and approved the final manuscript.

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Availability of data and materials

The data used in this study was obtained from Centers for Medicare & Medicaid Services (CMS) under a Data Use Agreement (DUA), and therefore, they are not publicly available but may be requested by submitting a DUA request

Declarations

Ethics approval and consent to participate

This research was conducted in accordance with the Declaration of Helsinki. E&I Review Services, an independent ethical review board, reviewed the study design and determined that formal IRB review is not required (E&I ID: 17140). E&I determined that this research fulfilled requirements for a waiver from the requirement to obtain Health Insurance Portability and Accountability Act (HIPAA) Authorization under 45 CFR 164.512(i)(2). Therefore, no further permissions or consent were required to analyze the datasets used in this study

Consent for publication

Not applicable

BD and LK are employed by KNG Health Consulting, LLC, which has conducted consulting for National Association of Long-Term Hospitals (NALTH). JX, and SS were employed by KNG Health Consulting, LLC at the time the study was conducted. LK serves Director of Policy and Research for NALTH. JV served as the Chief Medical Officer for NALTH.

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Long-Term Acute Care Hospitals Extend ICU Capacity for COVID-19 Response and Recovery



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The COVID-19 pandemic has presented novel challenges for the entire health-care continuum, requiring transformative changes to hospital and post-acute care, including clinical, administrative, and physical modifications to current standards of operations. Innovative use and adaptation of long-term acute care hospitals (LTACHs) can safely and effectively care for patients during the ongoing COVID-19 pandemic. A framework for the rapid changes, including increasing collaboration with external health-care organizations, creating new methods for enhanced communication, and modifying processes focused on patient safety and clinical outcomes, is described for a network of 94 LTACHs. When managed and modified correctly, LTACHs can play a vital role in managing the national health-care pandemic crisis.

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KEY WORDS: critical care; health-care utilization; mechanical ventilation

A major threat of SARS-CoV-2 is that hospitals have experienced a dramatic surge in laboratory-confirmed COVID-19 cases and have reached ICU bed or ventilator utilization capacity. ^{1,2} Analysts in health policy and systems research have recently indicated that long-term acute care hospitals (LTACHs) could provide a significant resource to increase the capacity of care venues able to treat patients with both active and downstream sequelae of COVID-19.³ LTACHs are specialized hospitals that provide prolonged acute and intensive care for patients with chronic or persistent critical illness, while focusing on patient

recovery and return to a functional life.⁴ Because LTACH care "focuses on continued medical stabilization, management of critical infusions, optimizing respiratory status, and facilitation of functional recovery," it has led a number of physician-researchers to conclude that the LTACH clinical setting is conducive to the ongoing treatment of patients with COVID-19 who require hospitalization and post-acute care.

Approximately 16% of hospitalized COVID-19 patients require treatment in the ICU;^{5,6} many of these patients also require mechanical ventilation (MV). Care for MV

ABBREVIATIONS: LTACH = long-term acute care hospital; MV = mechanical ventilation; PPE = personal protective equipment; RE = resilience engineering; VOH = virtual operational huddle

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1894 Special Features

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patients is a primary specialization in LTACHs, which have experienced critical care clinicians and respiratory therapists in an accredited acute care hospital setting. Patients with COVID-19 can develop post-ICU syndrome ⁸⁻¹¹ or chronic critical illness that requires more intensive and prolonged hospitalization, as well as specialized interventions. ¹²

Although LTACH staff have the skills necessary for treatment of COVID-19 patients, extensive preparations and transformations are required for treating patients with a highly virulent virus. Many of the changes required to adequately and safely treat potentially infectious patients are similar to adaptations made by traditional hospitals. 13,14 However, additional clinical, operational, and environmental changes are required for LTACHs to treat COVID-19 patients because of the extended time required for patient recovery while limiting virus transmissibility. 15 The following is a description of the preparation and rapid dissemination and implementation of changes to a distributed, nationwide network of 94 LTACHs in response to the COVID-19 pandemic. Many of the operational changes and strategies presented here may aid other LTACHs and health systems in adapting for the treatment of critically ill patients during surge periods.

Setting

The network of 94 LTACHs considered here spans 27 states yet shares a similar operating model, with central management by the parent organization.¹⁶ Network LTACHs provide intensive, prolonged hospital-level care, including 24-hour nursing and respiratory therapy services, staffing ratios commensurate with patient acuity, and ancillary services such as physical, occupational, and speechlanguage rehabilitation. Most LTACH patients are referred from an ICU where they have been treated for at least 3 days, the primary admission criterion used by Centers for Medicare & Medicaid Services. 17 LTACHs facilitate recovery from critical illnesses through specific processes designed to improve functional recovery, providing more extensive services than skilled nursing facilities or inpatient rehabilitation hospitals, which serve patients of lesser acuity and different treatment requirements. Unlike skilled nursing facilities and inpatient rehabilitation hospitals, LTACHs are licensed, accredited, and certified as acute care hospitals, with comparable acute medical/surgical floors, telemetry, and ICU capability. LTACHs provide evidence-based strategies for liberation from prolonged mechanical ventilation that emphasize reducing adverse ventilator-associated events, including pneumonia and infection, while ensuring personal nutrition needs. 18,19 The multidisciplinary approach of

LTACHs includes intensivists, nurses, respiratory therapists, physical therapists, pharmacists, dietitians, subspecialist physicians, and case managers.²⁰

Pandemic-Related Modifications

Transforming an LTACH hospital or hospital system into an effective and efficient operation to treat patients during a pandemic requires new pathways for enhanced communication, increased collaboration with external health-care organizations, and modification of processes that are focused on patient safety and clinical outcomes. Typically, health-care process improvements occur through redesigning, managing constraints and resources in parallel, eliminating redundant steps, and synchronizing tasks,²¹ which was demonstrated by the University of Washington Medicine's Post-Acute Care Network health system's threephased approach in response to the COVID-19 pandemic.²² Many of the changes made in response to the pandemic may become standard practice.²³ With the urgency of a health system-wide COVID-19 response, institutions benefit from resilience engineering (RE), or the rapid development of processes specifically designed to respond to changes. RE is associated with the ability of an organization to recover quickly to a stable state, allowing it

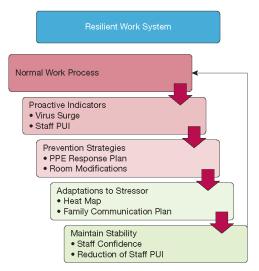


Figure 1 – Resilient work system flow chart, highlighting system changes as a response to the COVID-19 pandemic and patient needs. Components of a resilient work system include characterization of normal work processes, development of proactive indicators and prevention strategies, which lead to adaptations to stressors, resulting in maintenance of stability. Successful process changes become part of normal work processes, completing the cycle. PPE = personal protective equipment; PUI = patients under investigation.

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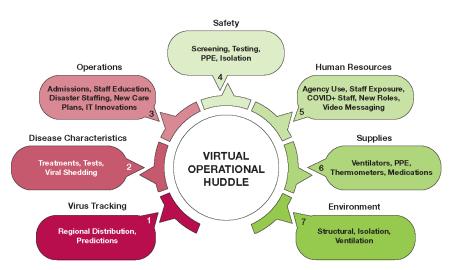


Figure 2 – Schematic of the virtual operational huddle, a central hub used at all network long-term acute care hospitals. Components of the virtual operational huddle include leadership updates, discussions of all major issues, and opportunities for improvement encountered in each department and segment related to hospital operations. PPE = personal protective equipment.

to continue operations during and after the presence of significant stresses (Fig 1). 24-27 After examining our normal work processes, three levels of modifications using RE were made to our LTACHs, depending on their location and responsiveness to the needs of regional hospitals: (1) transforming LTACHs into a COVID-19 treatment center; (2) preparing LTACHs to admit and treat COVID-19 recovery patients; and 3) preparing LTACHs to treat non-COVID-19 ICU overflow patients. Many of these additional processes were similar to those developed by traditional hospitals in response to the pandemic but required personalization and further adaptation to fit into the LTACH workflow, to provide treatment for COVID-19 patients and those recovering from the consequences of COVID-19 infection.

An ongoing awareness of the status of a system is important for designing resilient processes. ²⁸ As such, a vital component of our LTACH's resilient work system was a central hub communication network, similar in concept to clinical daily huddles and rounds shown to be effective in providing quality patient care, but controlled centrally through the conveyance of essential information in an emergency management and incident command center design. ²⁹⁻³¹ Our version of the central hub, called the virtual operational huddle (VOH), began on March 3, 2020, and served as a real-time review of the current status of hospital operations throughout the network (Fig 2). The VOH included daily communication with more than 100 executive and regional senior leaders and

staff in support of critical functions in hospital operations, including clinical, administrative, human resources, supply and logistics, legal, compliance, and quality. Each VOH started with a summary of COVID-19 incidence by region, with emphasis on county locations near LTACHs in the network. We developed a heat map application based on data from the Johns Hopkins COVID Dashboard (Fig 3). Each regional leader in the network shared the heat map results with individual LTACH administrators, who communicated with local acute care hospitals to more effectively assist them in responding to surges of COVID-19 patients.

Resilient work systems must be flexible enough to manage and not merely reduce variability, especially with rapidly evolving COVID-19 information and care recommendations. After a VOH review of potential surge locations, we provided an updated clinical review of COVID-19 infections and potential treatments and therapies, together with a review of the most current literature, current US clinical trials, and an epidemiological review of infection and mortality projection models, augmented by an infectious disease physician specialist. This up-to-date information allowed LTACH staff to effectively make preparations to treat COVID-19 recovery patients and, if necessary, treat those with active infection.

During the VOH, success and opportunities of operational changes included the development of

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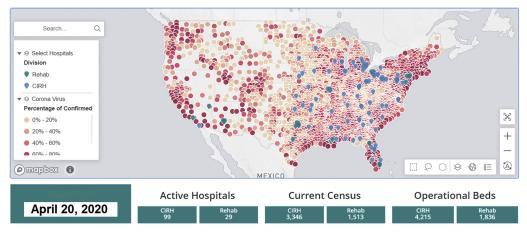


Figure 3 – COVID-19 heat map, adapted for use during the virtual operational huddle to allow LTACHs to be more responsive to regional needs. COVID-19 heat map with LTACH locations shown in blue COVID-19 data from Johns Hopkins²⁹ was downloaded, and COVID-19 cases in counties surrounding LTACH network hospital locations were incorporated into a US map. CIRH = Critical Illness Recovery Hospital; LTACH = long-term acute-care hospital.

updated procedures and timing for screening COVID-19 infection, the effective use of personal protective equipment (PPE) (with a buddy system to ensure adequate protection), additional precautionary hygiene practices, and a review of available resources. We developed contingency plans to account for staff quarantine or prolonged illness, to maintain staffing ratios for treating COVID-19 recovery patients and non-COVID-19 ICU overflow patients. A 2% increase in staff-to-patient ratios was necessary in several LTACHs to maintain the necessary level of services. We established a dedicated COVID-19 e-mail box to triage and address all questions from LTACH staff, along with Frequently Asked Questions documents and allemployee messaging via a dedicated network portal site, to keep everyone abreast of updated guidelines for PPE, testing, and self-quarantine procedures after exposure.

Modifications for treating COVID-19 patients, which were polymerase chain reaction laboratory-confirmed COVID-19 positive through nasal swabs, also included physical and environmental changes throughout the LTACH network. Proper ventilation systems were constructed together with structural changes to facilitate clinical activities for the COVID-19 patients. Supply requirements were determined centrally with backup plans for all LTACHs and triage plans for equipment redistribution if needed. A daily PPE tracking tool was developed, together with tracking the location of ventilators that could be sent across the country to

LTACHs in need. In addition to higher staffing ratios to limit the spread of infection, we experienced a higher rate structure for employees and agency staff to work in the COVID-19 environment, increased supplies (eg, PPE), additional transfer costs to move equipment such as ventilators to regions with higher COVID-19 outbreaks, and costs associated with COVID-19 tests. Overall, additional expense related to the COVID-19 pandemic represents approximately 2% to 3% of our total operating expenses for the year. Individual LTACHs may experience different expense increases, depending on the geographic region and the degree of pandemic impact.

Local ICU capacity and projected needs dictated the type of LTACH response to accepting COVID-19 patients. A total of 992 adult (≥18 years) COVID-19-positive patients were admitted to 94 LTACHs from March through May 2020 (Table 1), with a dramatic 53% increase in the proportion of COVID-19 patients from April to May. In situations in which ICU beds were filled with an overwhelming increase in community infections, the aforementioned infrastructure changes allowed LTACHs to be transformed into acute care COVID-19 hospitals. Most of our LTACHs were already equipped to treat patients directly from the ICU; enhanced infection precautions were made at these locations to minimize the chance of horizontal transmission of the COVID-19 virus. Many COVID-19 patients were mechanically ventilated on arrival to the LTACH setting (48.1%) (Table 1). In regions of lower

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TABLE 1 Characteristics of Patients With COVID-19 Treated in 94 LTACHs Admitted March Through May 2020

Characteristic	Patients With COVID-19 n = 992 (13.2%)	Non-COVID-19 Patients n = 6,497 (86.8%)	Measure of Association ^a
Demographics			
Age, mean (SD)	64.1 (13.0)	64.7 (14.0)	0.01 ^b
Female, No. (%)	439 (44.3)	2,845 (43.8)	-0.01 ^{c,d}
Race, No. (%)			0.01 ^{c,e}
Asian	13 (1.3)	40 (0.6)	
Black	302 (30.4)	1,232 (19.0)	
White	572 (57.7)	4,673 (71.9)	
Other	105 (10.6)	552 (8.5)	
LTACH Region, No. (%) ^f			0.01 ^{c,e}
East North Central	488 (49.2)	1,875 (28.9)	
South Atlantic	196 (19.8)	1,758 (27.1)	
Middle Atlantic	116 (11.7)	577 (8.9)	
East South Central	64 (6.5)	834 (12.8)	
Mountain	45 (4.5)	357 (5.5)	
West North Central	44 (4.4)	449 (6.9)	
West South Central	29 (2.9)	485 (7.5)	
Pacific	10 (1.0)	121 (1.9)	
South Central	0 (0)	41 (0.6)	
LTACH admission			
STACH length-of-stay in days, mean (SD)	26.7 (13.2)	19.6 (13.8)	0.17 ^{b,c}
Patients requiring invasive mechanical ventilation, No. (%)	447 (48.1)	2,871 (44.2)	0.08 ^{c,d}
Patients with a tracheostomy in-place, No. (%)	469 (62.2)	3,178 (48.9)	0.08 ^{c,d}
LTACH Course			
LOS, mean, days (SD)	26.7 (19.2)	31.5 (22.6)	-0.07 ^{b,c}
Discharge disposition, No. (%) ^g			0.01 ^e
Mortality	141 (14.3)	1,133 (17.6)	
Home	212 (21.5)	1,186 (18.4)	
STACH (readmission)	87 (8.8)	644 (10.0)	
Lower level of care ^h	524 (53.0)	3,135 (48.7)	
Other ⁱ	24 (2.4)	344 (5.3)	

 $^{{\}rm LOS} = {\rm length} \ {\rm of} \ {\rm stay}; \ {\rm LTACH} = {\rm long-term} \ {\rm acute-care} \ {\rm hospital}; \ {\rm STACH} = {\rm short-term} \ {\rm acute-care} \ {\rm hospital}.$

COVID-19 case volume, our LTACHs adapted to the more complex course of the prolonged COVID-19 patient population. COVID-19 patients stayed, on average, 26.7 days in the LTACH. Recovery support programs such as physical therapy, occupational therapy, and respiratory therapy were modified for COVID-19 patients, with the addition of a more structured cognitive therapy rehabilitation program. For

example, an increased frequency of therapy treatments with reduced durations were made because of COVID-19 patients' advanced deconditioned status and low endurance level, allowing for longer recovery time between sessions. More than 20% of COVID-19 patients recovered sufficiently to be discharged home (n = 212), whereas others required ongoing treatment at a lower-level-of-care facility (n = 524; 53%) (Table 1).

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Point-biserial correlation coefficient, Goodman and Kruskal lambda, or phi coefficient were used to indicate the strength of a measure's relationship to a patient having COVID-19 based on the statistic's divergence from zero, and in the case of b and d, whether there was either a negative or positive relationship.

Approximate significance at the .001 level for the test of association.

No network LTACH facilities are located in the New England region.

 $^{^9}$ 7,430 of the 7,489 total patients were discharged at the time of analysis.

hLower level of care includes inpatient rehabilitation hospitals and skilled nursing facilities.

[&]quot;Other" includes left against medical advice, LTACH, nursing home, federal hospital, hospice, and unknown.

One stress adaptation to the pandemic was alteration of the care processes associated with patient-family services. We constructed a novel family support program in response to a necessary no-visitor policy implemented to protect patients and staff. We expedited this program's development to fill the emotional void resulting from distancing, because close family communication is essential for the healing process. 33-36 This centrally managed program consisted of outpatient clinic staff redeployed from the parent health organization, including therapists, athletic trainers, and administrative staff. These additional staff members in each LTACH were specially trained on family and surrogate communication to provide clinical updates and support during the acute and recovery phases of COVID-19. Twice daily, these individuals discussed clinical results and functional status with patients' families, fielded questions and requests from the family regarding their loved one, and facilitated family-clinical team communication. End-of-life issues were handled by nursing staff together with attending and palliative care physicians. Enhanced virtual support was also provided to families for patients with COVID-19 who died during their LTACH stay (n = 141, 14.3%) (Table 1).

The challenge with any work system modification is to develop prevention strategies, which adequately address complex, dynamic, and unstable systems. Processes arising from prevention strategies need to be dynamically stable and should contain specific adaptations for the system to remain under control. We developed adaptations that included wide-ranging strategies for physicians, clinical staff, and health-care partners, including local acute hospitals, in-network inpatient rehabilitation hospitals, and regional skilled nursing facilities. The VOH was critical in providing effective coordination of all LTACHs in the network based on varying levels of COVID-19 prevalence. Responding rapidly to virus surges in different locations was critical for ensuring adequate time for preparing all LTACHs to flexibly serve in any necessary capacity. During this time, LTACHs have continued to treat non-COVID-19 patients, with some patients at earlier stages in their critical illness admitted from the ICU to offload ICU resources, with a total of 6,497 patients admitted to our LTACH network without confirmed infection (Table 1). Based on our application data and LTACH EHR databases analyzing and projecting future surges and cold spots, modifications necessary to transform LTACHs acute care COVID-19 hospitals have been

removed so the LTACHs could efficiently care for COVID-19 recovery patients and noninfected patients with chronic critical illness.

Discussion

After many modifications to the hospitals and hospital operations, approximately 1,000 COVID-19-positive patients and COVID-19 recovery patients were treated in 94 LTACHs from March through May 2020. We demonstrate that by following a resilient work system structure, LTACHs can rapidly adapt and transform within the health-care continuum from an LTACH to the role of a "Critical Illness Recovery Hospital" that can safely manage acutely ill patients with more severe clinical manifestations of SARS-CoV-2. LTACH care represents a unique combination of hospital acute care and longer-term recovery as a post-acute venue. With enhanced strategies coupled with accurate selection for admission, COVID-19-positive patients and COVID-19 recovery patients can be treated in LTACHs safely alongside patients without COVID-19.

Because many patients with COVID-19 respiratory failure require prolonged MV, LTACHs are positioned to help enhance and ensure recovery. LTACHs have developed specialized strategies for liberation from prolonged mechanical ventilation, promoting physical recovery through innovative therapies and nutrition programs while reducing the risk of adverse ventilator-associated events, including pneumonia and infection. LTACHs also require high-acuity nursing capabilities to treat patients with chronic critical illness.

In addition to providing treatment for patients with severe response to the virus, LTACHs also provide care for COVID-19-positive patients who require support during recovery. The long-term sequelae of post-COVID patients fits the LTACH model of care. Post-acute care has been recognized as required for COVID-19 patient recovery; respiratory physiotherapy and other post-acute rehabilitation are necessary to return these individuals to functional levels as quickly as possible. 37-42 Even with a less severe COVID-19 response, therapy may be required to counteract muscle weakness that could delay patient recovery. 17

With the rising number of cases and hospitalizations with the COVID-19 pandemic, the primary concerns of the health-care community continue to include resource shortages and overcrowding, as hospital and ICU capacity reaches critical volumes in many locations, ⁴³ supporting the need for alternative treatment venues

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such as LTACHs in response to this burden. After repurposing nonclinical hospital space (eg, lobbies, hallways), hospitals, local governments, and relief organizations have also employed nonclinical spaces such as convention centers, parking structures, and field tents, and have triaged patients using telehealth services. The critical care staffing pool of specially trained physicians, nurses, and respiratory therapists is also strained, as the demand for ICU beds and critical care services has skyrocketed in many parts of the country. LTACHs provide a source of additional high-acuity beds and well-experienced critical care staff to help support hospitals during this pandemic.

Our network of 94 LTACHs has demonstrated preparation and implementation of modifications that support the treatment of active COVID-19 patients and patients recovering from moderate-to-severe response to COVID-19 infection. We show that LTACHs successfully play a dual role as a substitute for ICU beds in regions with high COVID-19 surge levels and as a post-ICU provider or partner in the continuum of care. LTACHs have a critical role to play in caring for patients during COVID-19 pandemic and future crises that overwhelm our health-care system.

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Author contributions: A. M. G. takes responsibility for the content of the manuscript, including the data and analysis. A. M. D. and W. O. B.-C. had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis. K. S. M. and S. I. H. contributed substantially to the study design, data analysis and interpretation, and the writing of the manuscript.

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ATTACHMENT 13 Alternatives to the Project

Significant thought has been given to this project. The intended lines of services have always been focused upon LTAC and comprehensive rehabilitation services. This is the area in which both of these applicants have identified need and have exhibited excellence. However, having begun the design process prior to COVID and having applied the lessons learned throughout the pandemic and in preparing for a post-pandemic world, this project has been reevaluated, reconsidered, and redesigned on multiple occasions. Assumptions were challenged and, as discussed more fully below, new information was considered resulting in the project, as proposed.

1. Maintain the Status Quo and Not Seek to Establish a New Facility

There are several issues with regards to the proposal of simply continuing on without change, as would be reflected in maintaining the status quo. First and foremost is the fact that the evident and growing need for LTAC services would go unmet. Moreover, while the existing inpatient hospital unit has ably served this community for an extended period of years, there are inherent limitations with regards to the scope and spectrum of services that can be provided as part of a hospital unit and there are so many significant advantages that can be brought to the patient experience and improved outcomes from the establishment of a dedicated line of service within a specialty hospital. While there would be no financial cost to this alternative, this project is far more about improving access to quality care than about anything else, and since the healthcare cost would be too significant, this alternative was not selected.

2. Renovate Existing Rehabilitation Unit, Only

Part of the motivation behind this project is to allow for the ultimate renovation and repurposing of the space in which the rehabilitation unit is currently located. The unit is located in the Johnston R. Bowman building which was originally constructed in 1977. RUMC undertook a strategic evaluation of the building and have determined that significant investment is required to update the facility operational systems. While RUMC is able to provide award winning care in the space in which the rehabilitation unit is located, it is not built to current standards. However, modernized space does allow for utilization of modernized services. An assessment was made as to whether or not simply modernizing this space would be sufficient to meet patient needs. Ultimately, this alternative was rejected for three primary reasons: (1) the entire Bowman building where the unit is located requires renovation and the cost to renovate this specific space sufficient to bring it up to current licensing provisions, was excessive compared to the benefit the space was able to afford and would be inconsistent with RUMC's proposed future use of the building; (2) to meet the current industry standard of private rooms would necessitate converting rooms currently designated and utilized for double occupancy into private rooms and, given the limitations on available space, this would require bringing the bed count down to 42 beds, well below the amount needed; and (3) this option would leave the evident need for LTAC services unmet. Based upon the cost-benefit analysis and the adverse impact upon access to necessary care, this option was not selected.

3. Establish a Different Sized Facility

This project has been designed with significant thought, having given consideration of establishing both a smaller and a larger facility. The core concept behind establishing a smaller unit would be if there were concerns that less services than are being proposed will be needed. No such concern exists. In fact, to the contrary, there is a firm belief that the services needed will ultimately exceed those services being proposed. Thus, whether or not to propose more services was assessed. The core rationale for establishing a larger unit would be to be able to meet the needs for these services beyond the proposed service area.

ATTACHMENT 13 Alternatives to the Project

This project has been envisioned and justified virtually entirely from internal referrals from RUMC. As a result, the confidence is overwhelming that there will not be 'less' of a need than is proposed. In fact, based upon the announcement that Kindred was closing one of its facilities and the overwhelming need for services, there was significant consideration of establishing a larger facility. The referrals available notably exceed the proposed services being established, in part because this facility is being designed to provide services in addition to those already available, not in lieu of those services.

There are multiple reasons why this project might be proposed as larger than is currently proposed. Kindred's announced closure resulted in the question of whether or not additional services should be added to the proposed facility since the need for this project and the need for these services was identified prior to the announcement of Kindred's closure. Another reason for a larger facility was the potential that this facility will become a destination facility for residents throughout Illinois. Consider the fact that the RUMC campus (adjacent to which this project is proposed) is accessible to significant portions of Illinois, extending down into portions of Central Illinois, in the same time that it can take to get from the RUMC campus to downtown Chicago. There is the real potential this facility could become a destination facility.

When world-class healthcare providers such as RUMC and Select join together to provide access to necessary services, it is expected that there will be a larger draw for services than the designed service area. In balancing the short and long term interests of the community, the conclusion was not to present a larger project than is proposed, but to allow for sufficient flexibility to enable this to occur. Since the applicants are confident of both the clear need for these services and of the potential for the actual need to exceed the capacity of this facility, shell space has been built into this project that would allow for the addition of beds (either rehabilitation or LTAC) and office space is being built out to clinical standards. The applicants acknowledge the need to return to the HFSRB with regards to any use of the shell space prior in accordance with HFSRB regulations.

Lastly, applicants are aware of the aspect of HFSRB regulations related to minimizing adverse impact upon existing facilities. RUMC has referred and will continue to refer patients to other area facilities for LTAC care. It is not common that a project will be proposed where the historical referrals available exceed the proposed number of beds to be established. However, this project is not intended to divert patients away from existing facilities but, rather, to ensure that sufficient services exist to allow for continuity of care, improved access to care, increased commitment to the existing patient population, and promotion of the Illinois Medical District. This project is an AND rather than an OR. Therefore, as discussed elsewhere within this application, RUMC envisions being able to maintain its referrals to and utilization of other area facilities while also fully utilizing the proposed facility in accordance with HFSRB regulations. It is for this reason that: (1) while the project will receive a negative finding regarding adverse impact upon existing facilities a review of the facts yields this to be untrue; and (2) the establishment of a larger facility was not pursued.

ATTACHMENT 13 Alternatives to the Project

4. Close the Rehabilitation Units at RUMC and Utilize Other Existing Facilities

As detailed above, there are inherent limitations that accompany the utilization of a hospital based unit and unquestionable benefits from a facility dedicated to the provision of specialized care. RUMC has the opportunity to repurpose the space in which the inpatient rehabilitation is currently housed, an aspect of this project that, with the approval of this project, will produce additional residual benefit to the patient population served by RUMC. Thus, it became worthwhile to address the question of whether or not it was worth considering discontinuation of the unit regardless of the pursuit of this project, as designed. Ultimately, the conclusion was no. There are simply not enough existing facilities to meet the needs, current and future, of the patient volume RUMC has documented. Given the fact that Kindred is closing one of its facilities, even considering the services that the Westlake replacement project is proposing, there is still insufficient access to care to meet the needs of this critically ill and medically complex patient population. Moreover, the trends and the needs of patients requiring comprehensive rehabilitation are to increase and improve access to care, not to limit access - which is what would occur if the unit were closed without the accompanying approval of this project. Moreover, the facilities at issue are outside of the services area and, simply put, are incapable of meeting the needs of the RUMC patient referrals. When you consider these services are also intended to address patient volumes from UIC and other area facilities, a need for these services would be left unmet. Finally, there are so many benefits arising from a continuity of care, this alternative was not pursued.

5. Project As Proposed

As evidenced throughout this application, described in the purposes of the project section, and detailed throughout the alternatives section, this project - as proposed - is the right project for this community and this patient population. Consider the following:

- This project is entirely supportable by internal referrals:
- It is further supported by referrals from UI Health;
- The project is supported by UI Health because of the acknowledged need for increased access to these services, especially to the patient populations served by these systems;
- The project is planned on land already owned;
- The project is right sized to meet existing healthcare needs today and to be able to pivot to meet future needs of this community;
- The project will be located adjacent to the Medical District and will bring services that are
 otherwise unavailable within the Medical District:
- The presumed basis for opposition will be competitors seeking to protect their own market share. Which, given that the CON program is designed to prioritize the need for increased access to care for underserved and indigent populations and not to protect against competition, this is an insufficient basis for denial of a project; and
- This project is brings together two world class providers with the singular goal of increasing access to necessary care in a manner entirely consistent with the needs of the community, the principles of the CON program, and the mandate of the Medical District.

For these reasons, this is the alternative that was selected and we would encourage the Board members to support and approve this project.

ATTACHMENT 14Size of the Project

The square footage identified in this application for the proposed project includes 56 comprehensive rehabilitation beds and 44 long-term care acute beds. The state standard for both categories is 660 GSF per bed, and with this project's 100 beds and other clinical areas there will be a total of 65,671 GSF of clinical space. The project is necessary, not excessive, and consistent with the standards identified in Appendix B of 77 Illinois Admin Code Section 1110, as documented below.

SIZE OF PROJECT								
DEPT / SERVICE	PROPOSED STATE DIFFERENCE MET							
	BGSF/DGSF	STANDARD		STANDARD?				
Comprehensive	16,666 GSF	36,960 GSF	20,294 GSF	Yes				
Rehabilitation Beds	(56 Beds)	660 GSF per bed	Below					
Long-Term Acute Care	15,173 GSF	29,040 GSF	13,867 GSF	Yes				
Beds	(44 beds)	660 GSF per bed	Below					

Dept. / Area	Proposed	New Const.
Total Clinical Space		
Comprehensive Physical Rehab Beds	16,666	16,666
LTACH Beds	15,173	15,173
Therapy	10,741	10,741
Clinical Storage	7,108	7,108
Patient Care Staff	5,654	5,654
Rehab Hallway Space	10,329	10,329
Total Clinical Space	65,671	65,671

ATTACHMENT 15 Project Service Utilization

The projected utilization for this project is based on historical patient volume and the need for 100 total beds and is supported by the enclosed physician and patient letters. The Applicants have identified 1,477 rehabilitation patients who were referred to receive care in the last 12 months, and 599 long-term acute care acute patients who were referred to receive care in the last 12 months.

On average during the last year, Rush University Medical Center has identified 414 patient days where they were unable to place patients into a long-term acute care bed due to bed availability in the GSA. Because of a lack of bed availability at area LTACH facilities, these patients remained at Rush University Medical Center utilizing ICU or Medical Surgical beds, thereby impacting the hospital's flexibility to utilize those beds for other patients. While the state inventory reflects an excess of beds for the LTACH category of service, it is important to note that not all LTACH beds in the approved state inventory are set-up and in use. According to annual surveys submitted by facilities offering LTACH services in the GSA, only 68% of the beds are currently set up in the GSA.

The project utilization of this facility is based on the utilization target criteria found in 77 III. Admin. Code Section 1100.630(c).

	UTILIZATION						
	DEPT. / SERVICE	HISTORICAL UTILIZATION (PATIENT DAYS) (TREATMENTS) ETC.	PROJECTED UTILIZATION	STATE STANDARD	MEET STANDARD?		
YEAR 1	Comp. Rehab. Beds	1477 patients (21,018 patient days)	1,164 Patients 81%	85%	NO		
YEAR 2	Comp. Rehab Beds	1477 patients (21,018 patient days)	1,221 Patients 85%	85%	YES		
YEAR 1	LTACH	599 patients (20,019 patient days)	389 Patients* 81%	85%	NO		
YEAR 2	LTACH	599 patients (20,019 patient days)	409 Patients* 85%	85%	YES		

^{*} HFSRB staff and members will note that this application presents more referrals than those which are necessary to meet the state utilization standards for this service. This is not an error. The need for these services is overwhelming but it is the intention of RUMC to continue to its pattern of referring patients to other existing providers. This is being done to minimize any adverse impact upon area providers while allowing Applicants to meet an unquestionable need for access to LTAC services.

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¹ RML Specialty Hospital approved for 86 beds and only 69 are in operation; Kindred Hospital Chicago North is approved for 133 beds and only has 79 in operation.

ATTACHMENT 15 Project Service Utilization

Hospital Profile - CY 2019	Kindred	Hospital Chi	cago North					Chicag	0	Page 1
Ownership, Manage	ment and Ge	neral Informa	tion			Patients by	Race		Patients by Etl	nnicity
ADMINISTRATOR NAME:	Richard Cer	ceo			W	nite	3	5.3% I	Hispanic or Latino	: 6.3
ADMINSTRATOR PHONE:	773-279-26	84			Bla	ack	5	7.4%	Not Hispanic or La	atino: 89.7
OWNERSHIP:	VENTAS, IN	IC .			An	nerican Indian		0.3%	Jnknown:	4.0
OPERATOR:	KINDRED T	HC CHICAGO	, LLC		As	ian		1.8% L	icense Number:	4937
MANAGEMENT:	For Profit Li	mited Liability			Ha	waiian/ Pacific		0.2%	Site Number:	4937
CERTIFICATION:	Long-Term	Acute Care			Un	known			HPA:	A-01
FACILITY DESIGNATION:									HSA:	€
ADDRESS	2544 W. Mo			ITY: Chicago		COUNTY	Suburb	an Cook	(Chicago)	
		_	acility Utili:	zation Data by	/ Category	of Service				
	Authorized CON Beds	Peak Beds	Peak		Innetient	Observation	Average	Average		Staffed Bed
Clinical Service	12/31/2019	Setup and Staffed	Census	Admissions	Davs	Davs	Length of Stav	Daily Census	Occupancy Rate %	Occupancy Rate %
Medical/Surgical	0	0	0	0	0	0	0.0	0.0	0.0	0.0
0-14 Years		-		o	ō	-	-			-
15-44 Years				0	0					
45-64 Years				0	0					
65-74 Years				0	0					
75 Years +				0	0					
Pediatric	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Intensive Care	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Direct Admission				0	0					
Transfers				0	0					
Obstetric/Gynecology	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Maternity				0	0					
Clean Gynecology				0	0					
Neonatal	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Long Term Care	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Swing Beds			0	0	0		0.0	0.0	0	
Total AMI	31			647	3,723	0	5.8	10.2	2 32.9	
Adolescent AMI		0	0	0	0	0	0.0	0.0	0	0.0
Adult AMI		30	19	647	3,723	0	5.8	10.2	2	34.0
Rehabilitation	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Long-Term Acute Care	133	79	61	495	15986	0	32.3	43.8	32.9	55.4
Dedicated Observation	0					0				
Facility Utilization	164			1,142	19,709	0	17.3	54.0	32.9	

Hospital Profile - CY 2019		ecialty Hospi		'				Chicag	-	Page 1
Ownership, Manag			tion			Patients by			Patients by Et	
ADMINISTRATOR NAME:	James R. P	rister			W	hite	2	5.6%	Hispanic or Latino:	
ADMINSTRATOR PHONE:					Bla	ack			Not Hispanic or L	
OWNERSHIP:	Advocate H	Advocate Health & Hospital Corporation			An	American Indian		0.0% Unknown:		0.0%
OPERATOR:	RML Health	Providers Lim	nited Partner	ship		ian			License Number:	5678
MANAGEMENT:	Not for Prof					waiian/ Pacific			Site Number:	5678
CERTIFICATION:	Long-Term	Acute Care			Ur	ıknown			HPA:	A-02
FACILITY DESIGNATION: ADDRESS	3435 W. Va	n Buren St.	С	ITY: Chicago		COUNTY	: Suburb		HSA: (Chicago)	6
		F		zation Data by	/ Category				, ,	
Clinical Service	Authorized CON Beds 12/31/2019	Peak Beds Setup and Staffed	Peak Census	Admissions	Inpatient Days	Observation Days	Average Length of Stay	Average Daily Census	Occupancy	Staffed Bed Occupancy Rate %
Medical/Surgical	0	0	0	0	0	0	0.0	0.	0.0	0.0
0-14 Years				0	0					
15-44 Years				0	0					
45-64 Years				0	0					
65-74 Years				0	0					
75 Years +				0	0					
Pediatric	0	0	0	0	0	0	0.0	0.	0.0	0.0
ntensive Care	0	0	0	0	0	0	0.0	0.	0.0	0.0
Direct Admission				0	0					
Transfers				0	0					
Obstetric/Gynecology	0	0	0	0	0	0	0.0	0.	0.0	0.0
Maternity				0	0					
Clean Gynecology				0	0					
Neonatal	0	0	0	0	0	0	0.0	0.	0.0	0.0
Long Term Care	0	0	0	0	0	0	0.0	0.	0.0	0.0
Swing Beds			0	0	0		0.0	0.	0	
Total AMI	0			0	0	0	0.0	0.	0.0	
Adolescent AMI		0	0	0	0	0	0.0	0.	0	0.0
Adult AMI		0	0	0	0	0	0.0	0.	0	0.0
Rehabilitation	0	0	0	0	0	0	0.0	0.	0.0	0.0
Long-Term Acute Care	86	69	69	589	22733	0	38.6	62.	3 72.4	90.3
Dedicated Observation	0					0				
Facility Utilization	86			589	22,733	0	38.6	62.	3 72.4	

ATTACHMENT 16 Unfinished or Shell Space

The proposed facility will have 8,656 GSF of shell space located on the third floor of the facility. At this time the Applicants have not determined the use of the shell space, and understand their obligation to submit a CON application to develop and utilize the shell space, regardless of the capital thresholds in effect at the time or categories of service involved. The applicants have designed this project to not only meet the needs of the community today but also the future. As was previously mentioned in the application, this facility will right-size the rehabilitation unit transitioning from Rush University Medical Center to the proposed facility, and establish long-term acute care services at the facility. Based on the Applicant's experience and with an expected increase in bed utilization between 3-5% per year the shell space may be need to be developed as early as 2028. Development of the space will be based on historical utilization and to accommodate a growing need for these services in the community.

ATTACHMENT 17 Assurances



August 3, 2021

Courtney Avery
Board Administrator
Illinois Health Facilities and Service Review Board
525 West Jefferson Street, 2nd Floor
Springfield, Illinois 62761

Re: Assurances - Shell Space

Dear Ms. Avery,

As representative of Rush-Select Holdings, LLC, and Rush Specialty Hospital, LLC, I, Thomas Mullin, hereby attest that the applicant will submit a Certificate of Need application to develop and utilize the shell space, regardless of the capital thresholds in effect at the time or the categories of service involved. At this time there is not an estimated date by which the CON application will be submitted or the shell space will be completed and placed into operation.

Sincerely,

RUSH-SELECT HOLDINGS, LLC RUSH SPECIALTY HOSPITAL, LLC

By Select Unit Management Inc., its manager

Thomas Mullin

Executive Vice President

ATTACHMENT 19 Comprehensive Physical Rehabilitation

1110.205(b)(1) - Planning Area Need - 77 III. Adm. Code 1100

The proposed project seeks to establish a 56 comprehensive rehabilitation beds in the GSA. Rush University Medical Center will file a Certificate of Exemption to discontinue its existing 59-bed comprehensive rehabilitation unit, and the actual discontinuation will be contingent upon approval of this project. The discontinuation of its 59-bed unit is envisioned to be effective upon the licensing and opening of the proposed 100 bed-hospital. This will be done so as to avoid any disruption in access to this necessary care. The proposed project seeks to re-establish only 56 of the existing 59 beds currently in the HSA's inventory. As such, the end result will be a net reduction of 3 beds in the HSA for this category of service, and the health care needs of the population served will still be met.

ATTACHMENT 19 Comprehensive Physical Rehabilitation

1110.205(b)(2) - Planning Area Need - Service to Planning Area Residents

The Applicants attest that the primary purpose of the project is to provide necessary health care to the residents of HSA 6, which is where the proposed project will be physically located. The Applicants are able to document that over 80% of the proposed patients to be treated at the facility reside within HSA 6. As evidence, the Applicants are in including a list of historical patient data for the past 12 months, including the patient zip code for these individuals. The Applicants have also provided several referral letters from physicians associated with both Rush University Medical Center, and UI Health another hospital located in the Illinois Medical District. Currently, Rush University Medical Center operates the only comprehensive rehabilitation unit in the Illinois Medical District which is home to four acute care hospitals- UI Health, Rush University Medical Center, Stroger Hospital, and Hines VA Hospital.

Listed below is the population totals, listed by zip code, for the projected service area for this Project.

ZIP Code	Population: total (2019 ACS estimate) by ZIP Code
60534	10,452
60638	58,669
60402	62,960
60652	43,447
60620	67,711
60629	110,029
60632	89,857
60636	30,024
60621	28,018
60609	60,939
60619	72,597
60637	47,300
60653	33,154
60615	40,590
60649	46,633
60141	302
60153	23,578
60546	15,405
60130	13,927
60305	10,970
60707	43,093
60171	10,076
60634	75,082
60304	17,782
60301	2,831
60302	31,620
60804	82,383
60623	81,283
60644	46,591

Total	2,726,4	50
60611	33,22	24
60601	15,08	83
60603	1,09	52
60605	29,00	60
60626	50,54	44
60660		
60640	69,30	
60613	50,76	
60657	70,99	
60645	47,2	
60659	42,73	
60625	79,44	
60618	94,90	
60610		
60654	20,02	
60602	1,1	
60606	3,28	
60661	10,3	
60614	71,9	
60604		23
60616	54,19	
60607	29,29	
60622	53,73	
60612	33,73	
60647	87,63 87,63	
60608	80,0	
60712	12,43	
60630	•	
60641	28,56 69,88	
60646	34,89	
60651 60624	63,49	
60639	88,20	
60600	00.00	

ATTACHMENT 19 Comprehensive Physical Rehabilitation

Department of Neurological Sciences Rush University Medical Center Professional Building 1725 W. Harrison St. Suite 1106 Chicago, IL 60612 Tel: 312.563.1022 Fax: 312.942.2380 www.rush.edu/neuro James Conners, MD, MS
Chairperson, Department of Neurological Sciences
Co-Director, Neurosciences Service Line
Associate Professor of Neurological Sciences
Medical Director Comprehensive Stroke Program
Rush Medical College, Rush University
Rush University System for Health



July 12, 2021

Courtney Avery Board Administrator Health Facilities and Services Review Board Illinois Department of Public Health 525 West Jefferson Street, Second Floor Springfield, Illinois 62761

Re: Proposed Referrals for Rush Specialty Hospital

Dear Ms. Avery,

I am Neurologist and the Chairman of the Department of Neurology. The focus of my group is neurologic conditions. This letter contains the referral documentation required per III. Admin. Code Section 1110.205(b)(3)(A)-(B). Over the past twelve months, my group has cared for 377 patients who required comprehensive rehabilitation care from the geographic service area. Please find enclosed with this letter a list of zip codes for the 377 patients who have received this care.

Based on my historical referrals to licensed Illinois healthcare facilities, I anticipate referring 370 patients each year to the Rush Specialty Hospital as proposed by the applicant. I certify that the patients I propose to refer reside within the applicant's proposed geographic service area.

I further certify that the aforementioned referrals have not been used to support another pending or approved certificate of need permit application. The information provided in this letter is true and accurate to the best of my knowledge.

Physician's Signature

Date 7/12/21

(Please Print/Type Name)

Notarization:

Subscribed and sworn to before me this 12 day of July 2021

Seal:

Signature of

"OFFICIAL SEAL"
Velia Zavala
Notary Public, State of Illinois
My Commission Expires October 5, 2022

ATTACHMENT 19 Comprehensive Physical Rehabilitation

Historical Patient Data for the Previous 12 Months

Neurologic Surgery Department Rehabilitation Historical Patient Data

Patie	nt Zip Codes
ZIP	Total # of Patients
60644	15
60612	14
60651	14
60628	11
60411	11
60616	10
60609	10
60623	9
60624	8
60632	8
46375	7
60505	7
60607	7
60617	6
60430	6
60901	6
60443	6
60608	5
60622	5
60304	5
60629	5
60620	5
60643	5
60466	4
60639	4
60417	4
60619	4
60402	4
60637	4 4
60419	
60543 60827	4 3
60641	3
60099	3
46304	3
60087	3
00007	J

Patie	ent Zip Codes
ZIP	Total # of Patients
60605	3
46342	3
60618	3
60636	3
60475	3
60610	3
60649	3
60010	3
60640	2
60805	2
60621	2
60804	2
60401	2
60130	2
60464	2
60453	2
60554	2
60462	2
60526	2
60302	2
46383	2
60053	2
60484	2
60098	2
60657	2
60502	2
60123	2
60922	1
60966	1
46368	1
60645	1
46392	1
60652	1
60152	1
78759	1
46574	1
60118	1
60429	1
60428	1
60014	1
60050	1

Patie	ent Zip Codes
ZIP	Total # of Patients
47403	1
60538	1
60018	1
60546	1
61081	1
60406	1
60950	1
46360	1
60410	1
60614	1
89117	1
60455	1
46556	1
60527	1
60642	1
60301	1
60654	1
60155	1
60189	1
60638	1
60076	1
60056	1
60195	1
60534	1
60487	1
60016	1
46390	1
60564	1
46408	1
60504	1
48219	1
20904	1
80112	1
60560	1
60471	1
37821	1
60633	1
60548	1
60073	1
60634	1
60169	1

Patio	ent Zip Codes
ZIP	Total # of Patients
60503	1
60445	1
60412	1
60426	1
60089	1
60459	1
60463	1
60478	1
60046	1
60449	1
60432	1
61103	1
60131	1
60031	1
60148	1
46320	1
53168	1
63031	1
46410	1
33928	1
60467	1
60048	1
60181	1
60030	1
60154	1
60104	1
60585	1
46350	1
Grand Total	377

ATTACHMENT 19 Comprehensive Physical Rehabilitation

Department of Surgery Jelke Building 1750 W. Harrison St. Suite 789 Chicago, IL 60612 Tel: 312.942.5471 Fax: 312.942.2867 Alfonso_Torquati@rush.edu www.rush.edu



Alfon so Torquati, M.D., M.S.C.I., E.A.C.S. Rush University Medical Center Helen Shedd Keith Professor of Surgery Chair, Department of Surgery



July 19, 2021 Courtney Avery Board Administrator Health Facilities and Services Review Board Illinois Department of Public Health 525 West Jefferson Street, Second Floor Springfield, Illinois 62761

Re: Proposed Referrals for Rush Specialty Hospital

Dear Ms. Avery,

I am surgeon and the Chairman of the Department of Surgery. The focus of my group is General Surgery, Plastic Surgery, Transplant, and Urology. This letter contains the referral documentation required per Ill. Admin. Code Section 1110.205(b)(3)(A)-(B). Over the past twelve months, my group has cared for 36 patients who required comprehensive rehabilitation care from the geographic service area. Please find enclosed with this letter a list of zip codes for the 36 patients who have received this care.

Based on my historical referrals to licensed Illinois healthcare facilities, I anticipate referring 30 patients each year to the Rush Specialty Hospital as proposed by the applicant. I certify that the patients I propose to refer reside within the applicant's proposed geographic service area.

I further certify that the aforementioned referrals have not been used to support another pending or approved certificate of need permit application. The information provided in this letter is true and accurate to the best of my knowledge.

Physician's Signature Date 7/19/202
(Please Print/Type Name) AlFouso Torqueti, mo
Notarization: Date 7/19/202

Subscribed and sworn to before me this 19th day of huly 2021

"OFFICIAL SLAL"
Maritza Ramses
Notary Public, State of Illinois
My Commission Expires February 27, 2022

Rush is an academic health system comprising Rush University Medical Center, Rush Capley Medical Center and Rush Oak Park Hospital,

ATTACHMENT 19 Comprehensive Physical Rehabilitation

General, Plastic, Transplant, and Urology Surgery Department Rehabilitation Historical Patient Data

Dala		
Patient Zip Codes		
ZIP	Total # of Patients	
60617	3	
60632	2	
60305	1	
61354	1	
60046	1	
60616	1	
60108	1	
60628	1	
60016	1	
60421	1	
60644	1	
60404	1	
46319	1	
46360	1	
60609	1	
60637	1	
60505	1	
60162	1	
60098	1	
60624	1	
60430	1	
60659	1	
60457	1	
60647	1	
60467	1	
60453	1	
60185	1	
60064	1	
60950	1	
60426	1	
61821	1	
60559	1	
60103	1	
Grand Total	36	

Micheel J. Liptay, MD, FACS The Mary and John Bent Professor of Surgery and Chairman Department of Cardiovascular and Thoracic Surgery Director, Rush Lung Center

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

ATTACHMENT 19 Comprehensive Physical Rehabilitation

Department of Cardiovascular and Thoracic Surgery Rush University Medical Center Professional Building

Professional Building 1725 West Harrison Street Suite 1754 Chicago, IL 60612 Tel: 312,942,5320 Fax: 312,942,12,13 rush.edu michael_liptay@rush.edu



July 15, 2021

Courtney Avery Board Administrator Health Facilities and Services Review Board Illinois Department of Public Health 525 West Jefferson Street, Second Floor Springfield, Illinois 62761

Re: Proposed Referrals for Rush Specialty Hospital

Dear Ms. Avery,

I am thoracic surgeon and the Chairman of the Department. The focus of my group is cardiothoracic and vascular surgery. This letter contains the referral documentation required per III. Admin. Code Section 1110.205(b)(3)(A)-(B). Over the past twelve months, my group has cared for 84 patients who required comprehensive rehabilitation care from the geographic service area. Please find enclosed with this letter a list of zip codes for the 84 patients who have received this care.

Based on my historical referrals to licensed Illinois healthcare facilities, I anticipate referring 80 patients each year to the Rush Specialty Hospital as proposed by the applicant. I certify that the patients I propose to refer reside within the applicant's proposed geographic service area.

I further certify that the aforementioned referrals have not been used to support another pending or approved certificate of need permit application. The information provided in this letter is true and accurate to the best of my knowledge.

Notarization: Signature of Notary:

Subscribed and sworn tedbefore me

sth day of July 2021 Seal:

"OFFICIAL SEAL"
Maritza Ramses
Notary Public, State of Illinois
My Commission Express Echrony 27, 2022

7/5/21

ATTACHMENT 19 Comprehensive Physical Rehabilitation

Cardiothoracic and Vascular Surgery Department Historical Rehabilitation Patient Data

Patient Zip Codes		
ZIP	Total # of Patients	
60651	5	
60632	4	
60644	4	
60649	3	
60628	3	
60659	3	
60643	2	
60647	2	
60302	2	
60629	2	
60409	2	
60612	2	
60623	2	
46350	2	
61341	2	
60639	2	
60614	1	
60630	1	
60714	1	
60608	1	
60586	1	
60641	1	
60491	1	
60619 60505	1 1	
60130	1 1	
60435	1	
60624	1	
60467	1	
60660	1	
60640	1	
60617	1	
60120	1	
60411	1	
60004	1	
60636	1	
60305	1	

Patient Zip Codes	
ZIP	Total # of Patients
60417	1
60506	1
60153	1
60503	1
60616	1
60148	1
60605	1
60185	1
60618	1
98569	1
60610	1
60646	1
60010	1
61032	1
60426	1
46323	1
60450	1
61265	1
60428	1
60638	1
60538	1
Grand Total	84

ATTACHMENT 19 Comprehensive Physical Rehabilitation

Department of Internal Medicine

1717 West Congress Parkway Suite 1004, Kellogg Bldg. Chicago, IL 60612

Tel: 312.942.6600 Fax: 312.942.5271 www.rush.edu jochen_reiser@rush.edu



Jochen Reiser, MD, PhD The Ralph C. Brown, MD Professor Chairman

July 7, 2021

Courtney Avery Board Administrator Health Facilities and Services Review Board Illinois Department of Public Health 525 West Jefferson Street, Second Floor Springfield, Illinois 62761

Re: Proposed Referrals for Rush Specialty Hospital

Dear Ms. Avery,

I am nephrologist and the Chairman of the Department of Internal Medicine. The focus of my group is medical subspecialties and hospital medicine. This letter contains the referral documentation required per III. Admin. Code Section 1110.205(b)(3)(A)-(B). Over the past twelve months, my group has cared for 336 patients who required comprehensive rehabilitation care from the geographic service area. Please find enclosed with this letter a list of zip codes for the 336 patients who have received this care.

Based on my historical referrals to licensed Illinois healthcare facilities, I anticipate referring 330 patients each year to the Rush Specialty Hospital as proposed by the applicant. I certify that the patients I propose to refer reside within the applicant's proposed geographic service area.

I further certify that the aforementioned referrals have not been used to support another pending or approved certificate of need permit application. The information provided in this letter is true and accurate to the best of my knowledge.

Signature

Date 7/7/21

(Please Print/Type Name) ____Jochen Reiser, MD, PhD

Jula le-

Notarization:

Subscribed and sworn to before me

this 7th day of July

Jochen Reiser, MD, PhD

Ralph C. Brown MD Professor

Signature of Notary

BERNICE PEREZ OFFICIAL SEAL Notary Public - State of Illinois Commission Expires Jun 21, 2023

ATTACHMENT 19 Comprehensive Physical Rehabilitation

Internal Medicine Department Historical Rehabilitation Patient Data

Rehab Zip Codes		
ZIP	Total	
60608	17	
60623	17	
60644	14	
60612	11	
60651	10	
60632	8	
60624	8	
60616	7	
60620	6	
60628	6	
60639	6	
46307	6	
60649	6	
60629	5	
60643	5	
60101	5	
60411	5	
60642	5	
60634	5	
60607	5 4	
60619	4	
60586	4	
60653	4	
60617 60443	4	
60613	4	
60609	4	
	4	
60636 60638	4	
60641	4	
60637	3	
60804	3	
60102	3	
60707	3	
60505	3	
60409	3	
60660	3	
00000	J	

Rehab Zip Codes		
ZIP	Total	
60302	3	
60546	3	
60402	3	
60621	2	
60432	2	
60513	2	
60453	2	
60532	2	
60657	2	
60901	2	
60191	2	
60463	2	
60618	2	
46304	2	
60610	2	
60459	2	
60631	2	
60630	2	
60640	1	
60540	1	
60106	1	
60053	1	
46347	1	
85120	1	
21401	1	
60448	1	
60091	1	
33873	1	
60622	1	
46408	1	
60154	1	
60020	1	
46373	1	
60656	1	
22191	1	
60647	1	
60089	1	
60189	1	
60438	1	
60805	1	
46391	1	

Rehab Zip Codes		
ZIP	Total	
60056	1	
60615	1	
60659	1	
60083	1	
46405	1	
60162	1	
60559	1	
60429	1	
60525	1	
60626	1	
60050	1	
60803	1	
60538	1	
60605	1	
60099	1	
60954	1	
60517	1	
60521	1	
60123	1	
60046	1	
60827	1	
60645	1	
46342	1	
60915	1	
60422	1	
61874	1	
61571	1	
46375	1	
60301	1	
34714	1	
60455	1	
46394	1	
60305	1	
60473	1	
60194	1	
46506	1	
60067	1	
60565	1	
60706	1	
49038	1	
60434	1	

Rehab Zip Codes			
ZIP	Total		
60169	1		
60016	1		
60077	1		
60423	1		
60484	1		
60543	1		
47946	1		
60564	1		
60449	1		
60548	1		
60433	1		
60435	1		
60501	1		
60130	1		
65020	1		
Grand Total	336		

Richard W. Byrne, MD The Roger C. Bone, MD Presidential Chair Professor & Chairman

Vincent C. Traynelis, MD The A. Walson Armour and Sarah Armour Presidential

Emeritus Richard D. Penn, MD

Stephan Munich, MD

Clinical Faculty
George Bovis, MD
Tibor Boco, MD
Juan C. Jimenaz, MD
Dean Karahalios, MD
Kevin V. Kelly, MD
Martin G. Luken, III, MD
Shaun O'Leary, MD
Thomas R. Mizen, MD

John Ruge, MD Andrew Zelby, MD

Michael Chen, MD

R. Webster Crowley, MD Lorenzo F. Muñoz, MD

Stephan Munich, MD

Patti Raksin, MD Lorenzo Muñoz, MD

Padlatric Neurosurgery Lorenzo F, Muñoz, MD

Stereotectic & Funct Richard W. Byrne, MD Sepehr B. Sani, MD

Shella Dugan, MD

Spine & Peripheral Nerve Vincent C, Traynells, MD, Director Harel Deutsch, MD Richard G, Fessier, MD, PhD

Physical Medicine & Rehabilitation

Ricardo B. V. Fontes, MD, PhD Jonathon Myers, MD John E. O'Toole, MD, MS Sepehr B. Sani, MD

Neuro-Oncology Richard W. Byrne, MD Lorenzo F. Muñoz, MD R. Mark Wiet, MD

Academic Faculty
Richard W. Byrne, MD
Michael Chen, MD
Michael Chen, MD
R. Website Crowdey, MD
Harel Deutsch, MD
Shella Dugan, MD
Richard G. Fessler, MD, PhD
Richard G. Fessler, MD, PhD
Lerenzo F. Muñoz, MD
John E. O'Toole, MD, MS
Sepahr B. Sanl, MD
Vincent C. Traynells, MD
Stephan MD

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT - July 2018 Edition

ATTACHMENT 19 Comprehensive Physical Rehabilitation

Department of Neurosurgery Rush Medical College 1725 W. Harrison St. Suite 855 Chicago, IL 60612

Tel: 312.942.6644 Fax: 312.942.2176 www.rush.edu



July 14, 2021

Courtney Avery Board Administrator Health Facilities and Services Review Board Illinois Department of Public Health 525 West Jefferson Street, Second Floor Springfield, Illinois 62761

Re: Proposed Referrals for Rush Specialty Hospital

Dear Ms. Avery,

I am neurosurgeon and the Chairman of the Department. The focus of my group is neurologic surgery. This letter contains the referral documentation required per III. Admin. Code Section 1110.205(b)(3)(A)-(B). Over the past twelve months, my group has cared for 179 patients who required comprehensive rehabilitation care from the geographic service area. Please find enclosed with this letter a list of zip codes for the 179 patients who have received this care.

Based on my historical referrals to licensed Illinois healthcare facilities, I anticipate referring 170 patients each year to the Rush Specialty Hospital as proposed by the applicant. I certify that the patients I propose to refer reside within the applicant's proposed geographic service

I further certify that the aforementioned referrals have not been used to support another pending or approved certificate of need permit application. The information provided in this letter is true and accurate to the best of my knowledge.

Date 07/08/2021

(Please Print/Type Name) Richard W. Byrne, MD

alar.

Signature of Notary:

Physician's Signature

Notarization:

Subscribed and sworn to before me day of

Seal:

OFFICIAL SEAL Maritza Ramses Notary Public, State of Illinois y Commission I spices February 27, 2022

Richard W. Byrne, MD Roger C. Bone Chair Professor and Chairman Department of Neurosurgery, Rush Medical College

Rush is a not-for-profit health care, education and research enterprise comprising Rush University Medical Center, Rush University, Rush Oak Park Hospital and Rush Health.

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Neurosurgery Department Historical Rehabilitation Patient Data

Rehab Zip Codes		
ZIP	Total	
60651	6	
60624	5	
60430	4	
60433	4	
60609	4	
60608	4	
60623	3	
60644	3	
60628	3	
60653	3	
60074	3	
60612	3	
60614	3	
60302	3	
60561	2	
60630	2	
60050	2	
60646	2 2	
60610 60632	2	
60475	2	
60543	2	
60538	2	
60438	2	
60130	2	
60629	2	
46375	2	
60452	2	
60468	2	
60137	2	
60142	2	
60707	2	
60124	2	
60643	2	
60804	2	
60634	_ 1	
60554	1	
-		

Rehab Zip Codes				
ZIP	Total			
60076	1			
60521	1			
60970	1			
47713	1			
60491	1			
60471	1			
60046	1			
60411	1			
60025	1			
46360	1			
60516	1			
60453	1			
61443	1			
60304	1			
60031	1			
60153	1			
60193	1			
60639	1			
46534	1			
60419	1			
97007	1			
60657	1			
60401	1			
60617	1			
60611	1			
60622	1			
46383	1			
60184	1			
60062	1			
60605	1			
60169	1			
60618	1			
60013	1			
60462	1			
61114	1			
60448	1			
60181	1			
60010	1			
60680	1			
60631	1			
60432	1			

Rehab Zip Codes				
ZIP	Total			
60649	1			
60148	1			
61081	1			
60914	1			
60402	1			
46304	1			
60636	1			
60056	1			
60616	1			
60615	1			
60525	1			
60126	1			
60067	1			
60084	1			
60641	1			
85209	1			
60901	1			
61364	1			
60174	1			
97214	1			
60527	1			
60565	1			
60422	1			
46341	1			
60155	1			
60660	1			
60546	1			
46556	1			
60619	1			
60459	1			
60564	1			
60714	1			
60506	1			
60455	1			
60440	1			
52722	1			
60053	1			
60154	1			
60954	1			
60104	1			
60089	1			

Rehab Zip Codes					
ZIP Total					
60409	1				
60091	1				
Grand Total	179				

ATTACHMENT 19 Comprehensive Physical Rehabilitation

1611 W. Harrison St. Orthopedic Building Suite 201 Chicago, IL 60612 Tel: 312-942-4867 Fax: 312-942-2101 www.rush.edu joshua.jacobs@rushortho.com



Joshua J. Jacobs, MD



July 19, 2021

Courtney Avery
Board Administrator
Health Facilities and Services Review Board
Illinois Department of Public Health
525 West Jefferson Street, Second Floor
Springfield, Illinois 62761

Re: Proposed Referrals for Rush Specialty Hospital

Dear Ms. Avery,

Rush Medical College
Vice Dean for Research
Rush University Medical Center
The William A. Hark, MD/Susanne G. Swift
Professor & Chairman
Department of Orthopedic Surgery

I am orthopedic surgeon and the Chairman of the Department. The focus of my group is orthopedic surgery. This letter contains the referral documentation required per Ill. Admin. Code Section 1110.205(b)(3)(A)-(B). Over the past twelve months, my group has cared for 20 patients who required comprehensive rehabilitation care from the geographic service area. Please find enclosed with this letter a list of zip codes for the 20 patients who have received this care.

Based on my historical referrals to licensed Illinois healthcare facilities, I anticipate referring 20 patients each year to the Rush Specialty Hospital as proposed by the applicant. I certify that the patients I propose to refer reside within the applicant's proposed geographic service area.

I further certify that the aforementioned referrals have not been used to support another pending or approved certificate of need permit application. The information provided in this letter is true and accurate to the best of my knowledge.

Physician's Signature

Date 7-9-2021

(Please Print/Type Name) Joshua J. Jacobs

Notarization:
Subscribed and swafn to before me

This Andrew (Augustus)

This Andrew (Augustu

Rush is a not-for-profit health care, education and research enterprise comprising grash university Medical Center, Rush University, Rush Oak Park Hospital and Rush Health,

Orthopedic Surgery Department Historical Rehabilitation Patient Data

Rehab Zip Codes			
ZIP	Total		
46341	2		
60564	2		
60156	1		
46407	1		
60516	1		
60631	1		
45371	1		
46324	1		
60532	1		
60164	1		
46373	1		
60613	1		
35810	1		
60423	1		
60201	1		
60653	1		
60707	1		
47944	1		
Grand Total	20		

ATTACHMENT 19 Comprehensive Physical Rehabilitation



University of Illinois Hospital & Clinics 1740 W Taylor Street Suite 1400, M/C 593 Chicago, IL 60812-4325 Phone 312,996,3900

July 8, 2021

Courtney Avery Board Administrator Health Facilities and Services Review Board Illinois Department of Public Health 525 West Jefferson Street, Second Floor Springfield, Illinois 62761

Re: Proposed Referrals for Rush Specialty Hospital

Dear Ms. Avery,

I am the Chief Medical Officer at UI Health in the Illinois Medical District. This letter contains the referral documentation required per Ill. Admin. Code Section 1110.205(b)(3)(A)-(B). Over the past twelve months, my hospital has cared for 445 patients who required comprehensive rehabilitation care from the geographic service area. Please find enclosed with this letter a list of zip codes for the 445 patients who have received this care.

Based on the historical referrals to licensed Illinois healthcare facilities, I anticipate my case management team referring 164 patients each year to the Rush Specialty Hospital as proposed by the applicant. I certify that the patients I propose to refer reside within the applicant's proposed geographic service area.

I further certify that the aforementioned referrals have not been used to support another pending or approved certificate of need permit application. The information provided in this letter is true and accurate to the best of my knowledge.

1 - Mullet

Physician's Signature ____

(Please Print/Type Name) Terry Vanden Hock, M.O.

Date_

ate 7/6/202

Notarization:

Subscribed and sworn to before me

this & day of

Seal:

Signature of Northry

"OFFICIAL SEAL"
GUADALUPE ALMANZA
Notary Public, State of Illinois

UI Health Historical Rehabilitation Patient Data

Rehab Zip Codes ZIP Total			
	Total		
60608	31		
60620	23		
60609	22		
60628	21		
60623	19		
60629	15 15		
60644	15 14		
60624 60619	13		
60619	13		
60634	10		
	9		
60632 60639	9		
60649	8		
60643	8		
46342	7		
60651	7		
60653	6		
60617	6		
60636	5		
60647	5		
60641	5		
60607	5		
60622	5		
60621	4		
60616	4		
60804	4		
60085	4		
60646	3		
60638	3		
46368	3		
60625	3		
60626	3		
61604	2		
60429	2		
60419	2		
11211	2		

Rehab Zip Codes				
ZIP	Total			
60660	2			
60457	2			
46341	2			
60448	2			
60605	2			
60655	2			
46392	2			
60712	2			
46409	2			
60640	4			
60446	2			
60411	2			
60443	2			
60615	2			
38618	2			
60423	2			
60188	2			
60435	2			
60193	2			
60657	2			
60402	2			
60707	2			
46320	2			
62526	2			
60611	2			
60618	2			
60409	2			
60466	2			
61610	1			
46408	1			
46402	1			
60473	1			
49913	1			
60478	1			
60637	1			
60517	1			
60645	1			
60544	1			
60656	1			
60555	1			

ZIP Total 61102 1 60585 1 60012 1 60586 1 46319 1 60013 1 46404 1 60014 1 60018 1 60436 1 60436 1 60436 1 60436 1 60436 1 60407 1 61109 1 60070 1 61109 1 60073 1 60613 1 60614 1 46385 1 32428 1 60417 1 60133 1 6042 1 60142 1 46405 1 60433 1	Rehab Zip Codes				
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60012					
60586 1 46319 1 60013 1 46404 1 60014 1 60432 1 60018 1 60436 1 60026 1 46410 1 60610 1 60827 1 60070 1 61109 1 60073 1 60002 1 60613 1 60404 1 46385 1 32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1					
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46410 1 60610 1 60827 1 60070 1 61109 1 60073 1 60002 1 60613 1 60404 1 60614 1 46385 1 32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1					
60610 1 60827 1 60070 1 61109 1 60073 1 60002 1 60613 1 60404 1 60614 1 46385 1 32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1					
60827 1 60070 1 61109 1 60073 1 60002 1 60613 1 60404 1 60614 1 46385 1 32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1					
60070 1 61109 1 60073 1 60002 1 60613 1 60404 1 60614 1 46385 1 32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1	60610	1			
61109 1 60073 1 60002 1 60613 1 60404 1 60614 1 46385 1 32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1	60827	1			
60073 1 60002 1 60613 1 60404 1 60614 1 46385 1 32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1	60070	1			
60002 1 60613 1 60404 1 60614 1 46385 1 32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1	61109	1			
60613 1 60404 1 60614 1 46385 1 32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1	60073	1			
60404 1 60614 1 46385 1 32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1	60002	1			
60614 1 46385 1 32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1	60613	1			
46385 1 32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1	60404	1			
32428 1 60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1	60614	1			
60417 1 60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1	46385	1			
60089 1 60642 1 60133 1 60426 1 60142 1 46405 1 60152 1	32428	1			
60642 1 60133 1 60426 1 60142 1 46405 1 60152 1	60417	1			
601331604261601421464051601521	60089	1			
60426 1 60142 1 46405 1 60152 1	60642	1			
60142 1 46405 1 60152 1	60133	1			
46405 1 60152 1	60426	1			
60152 1	60142	1			
	46405	1			
60433 1	60152	1			
	60433	1			
60154 1	60154	1			
60652 1	60652	1			
60156 1	60156	1			
60440 1	60440	1			
60160 1	60160	1			
33029 1	33029	1			
60163 1	60163	1			
60447 1	60447	1			

Rehab Zip Codes			
ZIP	Total		
60169	1		
60453	1		
60172	1		
61068	1		
60181	1		
61103	1		
46303	1		
60455	1		
46350	1		
61764	1		
60630	1		
78744	1		
60305	1		
46307	1		
Grand Total	445		

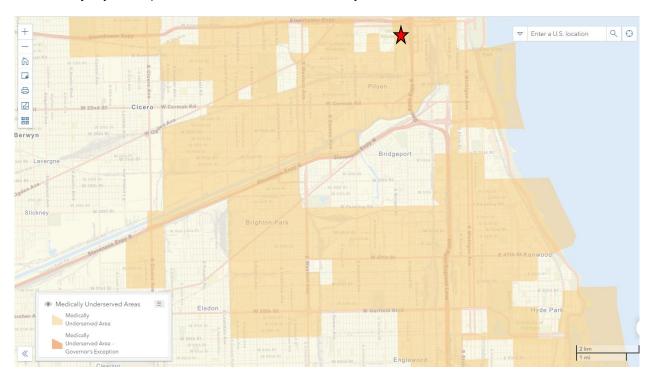
1110.205(b)(3) - Planning Area Need - Service Demand -Establishment of Comprehensive Physical Rehabilitation Category of Service

This application involves the re-location of an existing 59 bed unit at Rush University Medical Center facility to the proposed facility within the same HSA. Included with this application are multiple referral letters from Rush University Medical Center physician and the UI Health Chief Medical Officer. The letters provide historical patient information for 1,477 patients who have been historically referred for rehabilitation services. Furthermore, the various communities where the facility is to be located and where the majority of patients reside is designated a medically underserved area as defined by Health Resources & Services Administration (https://data.hrsa.gov/tools/shortage-area/mua-find). As evidence, a map from the HRSA is enclosed with this attachment. According to the most recent inventory there is an excess of stations, however, this project is a re-location of an existing unit and will have no effect on the inventory or distribution of services of area providers.

Rehabilitation Unit			
Physician Name	Specialty / Source	# of Proposed Referrals	# of Historical Referrals
Connors	Neurology	370	377
	General Surgery, Plastic Surgery, Transplant,		
Torqauti	Urology	30	36
Liptay	Cardiothoracic and Vascular Surgery	80	84
Reiser	Internal Medicine	330	336
Byrne	Neurosurgery	170	179
Jacobs	Orthopedics	20	20
UI Health	Chief Medical Officer	164	445
	Total	1164	1,477

1110.205(b)(5) - Planning Area Need - Service Accessibility

The number of beds that are being proposed by this application are necessary to improve access for planning area residents. The proposed facility is located in a medically underserved population ("MUA") and the majority of the patients that benefit from the facility reside in the same MUA.



*

Denotes the location for the proposed facility.

ATTACHMENT 19 Comprehensive Physical Rehabilitation

1110.205(c)(1)(2)(3) - Unnecessary Duplication of Services, Maldistribution, Impact of Project on Other Area Providers

The proposed facility will be located on a lot that currently has the following assigned addresses: 1404-1555 West Congress Parkway, 500-532 South Loomis Avenue, 1400-1554 West Harrison Street, 501-531 South Ashland Avenue. Included with this attachment is a list of zip code areas within 10 miles of the proposed facility site, the total population of the identified zip codes areas, and the name and locations of all existing facilities offering this category of services within 10 miles of the proposed site.

The proposed facility will not result in the maldistribution of services. This aspect of the project involves the modernization and relocation of the existing hospital based rehabilitation unit into a specialized facility and, in fact, reduces the overall number of licensed rehabilitation beds to reflect the needs of this community. The impact on the state inventory will be a reduction of 3 licensed rehabilitation beds.

There are 563 approved beds in the 10 mile GSA surrounding the proposed facility, despite the fact that only 505 are currently set up. What this means is that even if every single set up bed were fully utilized 100% of the time, the data available to the Board would suggest 11% capacity available within the service area. These numbers are accurate, but the conclusions to be drawn from them are misleading. As simple review of the data could support the conclusion that there is access to services that does not, in fact, exist. This is the reason the Board is afforded the discretion to look beyond the numbers and truly evaluate the needs of a community and the need for services.

As previously noted the proposed facility will be located and serve identified patients from a federally recognized medically underserved area. All of the patients for the proposed facility will come from referrals from identified physicians at Rush University Medical Center and UI Health Medical Center. The proposed facility will not lower utilization of other area providers that are operating below the target utilization standard and this re-located unit will not result in any change to the HSA's comprehensive rehabilitation bed inventory.

Applicants are aware there will be a negative finding regarding adverse impact upon other area providers. However, we state herein that this project has been designed to allow RUMC to modernize and right-size their existing rehabilitation unit. In addition, RUMC and other facilities within the Illinois Medical District will be able to continue supporting other area providers, but also meet the existing need reflected in those referrals that accompany this project. The facilities to which RUMC refers patients will continue to receive referrals based on patient choice. If the goal of this project was to create an adverse impact upon other area providers, this facility would have been presented with significantly more beds that is proposed - a goal which could have been accomplished and supported almost entirely from internal referrals. Competition is not adverse impact. This provision is designed to avoid undermining the viability of other existing providers, a result this application makes evident is neither the intent nor would be the result of approving this project.

The data also reflects that there will be no negative impact on area providers. Of the 1032 historical RUMC rehabilitation patient referrals included with this application, 789 of those patients were treated at RUMC's existing rehabilitation unit. RUMC will be able to meet its obligation to refer patients to the proposed facility and can continue to refer patients to existing providers in the planning area.

Facilities located in HSA 6

Facility Name	# of Approved Beds	# of Staffed Beds	Staffed Bed Utilization Rate	Distance from Proposed Facility
Advocate Illinois Masonic Medical Center	22	22	66.20%	5.5 miles
Louis A. Weiss Memorial Hospital	26	26	18.50%	6.3 miles
Loyola Health System at Gottlieb	20	20	70.20%	9.5 miles
MacNeal Hospital	12	12	66.90%	7 miles
Insight Hospital & Medical Center Chicago	24	16	44.30%	3 miles
Presence Saint Mary of Nazareth Hospital	15	15	76.60%	10.5 miles
Rush University Medical Center	59	40	63.50%	2 miles
Schwab Rehabilitation Center	92	81	52%	2 miles
Shirley Ryan Abilitylab	262	242	87.40%	2.5 miles
Shriners Hospital for Children - Chicago	6	6	50%	7.5 miles
Swedish Covenant Hospital	25	25	44.70%	7 miles
Total	563	505		

1110.230(e) - Staffing

The proposed facility will maintain the necessary clinical and professional staff to meet applicable state of Illinois regulations and certification criteria required by the Centers for Medicare and Medicaid Services (CMS). All patient care staff that are required to be registered with the Illinois Department of Financial and Professional Regulation will maintain their licenses and meet the requisite requirement for continued education.

Rehabilitation Unit Position Description and Projected FTEs

Direct Patient Care Positions		
RN	70	
Nurse Aide	35	
Respiratory Therapist	10	
Occupational Therapist	3	
OT Assistant	1	
Physical Therapist	3	
Physical Therapist Assistant	1	
Wound Care Nurse	1	
Infection Control Nurse	1	
Total Direct Patient Care Positions:	125	
Non-Patient Care Positions (Also to be	e utilized for LTACH Services)	
CEO	0.5	
CNO	0.5	
Nurse Manager	1	
DQM	0.5	
HR Manager	1	
Director of Pharmacy	0.5	
Pharmacist	1	
Pharmacist Tech	1	
Health Info Manager	0.5	
Materials Manager	0.5	
IT Specialist	0.3	
Director of Business Dev	0.5	
Clinical Liaison	6	
Admissions Coord	2	
Materials Tech	2	
HIM Tech	1	
Director of Case Mgmt	0.5	
Case Manager	3	
Total Non-Patient Care Positions	22.3	

ATTACHMENT 19 Comprehensive Physical Rehabilitation

Contractual Staff

RN	8
Nurse Aide	5
Total Staff	160.3

ATTACHMENT 19 Comprehensive Physical Rehabilitation

1110.203(f) - Performance Requirements

The proposed freestanding facility will be for a total 100 beds, and the comprehensive rehabilitation unit will be 56 beds. The proposed facility meets the Board's Performance Requirement for Bed Capacity Minimums.

ATTACHMENT 19 Comprehensive Physical Rehabilitation

1110.203(f) - Assurances

The Applicants attest that by the second year of operation after the project completion, the applicant will achieve and maintain the target occupancy for the category of service as specified in 77 III. Admin. Code 1100. Enclose as evidence is a letter from the Applicant's certifying as such.

ATTACHMENT 19 Comprehensive Physical Rehabilitation



June 28, 2021

Courtney Avery Board Administrator Illinois Health Facilities and Service Review Board 525 West Jefferson Street, 2nd Floor Springfield, Illinois 62761

Re: Assurances

Dear Ms. Avery,

As representative of Rush-Select Holdings, LLC, I, Thomas Mullin, hereby attest to the applicant's full anticipation that, by the end of the second year following the proposed hospital's opening, the proposed facility will operate at or in excess of the utilization standards identified in 77 Illinois Admin. Code Section 1110 Appendix B.

Sincerely,

Thomas Mullin

Executive Vice President, Hospital Operations

Rush-Select Holdings, LLC

ATTACHMENT 29 Long Term Acute Care Hospital

1110.265(b)(1) - Planning Area Need

The proposed project seeks to establish a 44 long-term acute care beds in the Planning Area. This project seeks to add stations to the Planning Area which covers four Health Service Areas (6,7,8, and 9), that cover the entirety of the City of Chicago, Cook County, and surrounding collar counties of Will, Kane, Lake, McHenry, Winnebago, Kendall, and Kane County. The Applicants have included both historical referrals and letters from physicians for prospective referrals to the facility. These letters justify the number of beds sought to meet the healthcare needs of the community.

ATTACHMENT 29 Long Term Acute Care Hospital

1110.265(b)(2) - Planning Area Need - Service to Planning Area Residents

The Applicants attest that the primary purpose of the project is to provide necessary health care to the residents of HSA 6, 7, 8 and 9, which is where the proposed project will be physically located. The Applicants are able to document that over 80% of the proposed patients to be treated at the facility reside within these HSAs. As evidence, the Applicants have included a list of historical patient data for the past 12 months, including the patient zip code for these individuals. The Applicants have also provided several referral letters from physicians associated with both Rush University Medical Center, and the UI Health, another hospital located in the Illinois Medical District. Currently, none of the four hospitals located in the Illinois Medical District offer this category of service.

Listed below is the population totals, listed by zip code, for the projected service area for this Project.

ZIP Code	Population: total (2019 ACS estimate) by ZIP Code
60534	10,452
60638	58,669
60402	62,960
60652	43,447
60620	67,711
60629	110,029
60632	89,857
60636	30,024
60621	28,018
60609	60,939
60619	72,597
60637	47,300
60653	33,154
60615	40,590
60649	46,633
60141	302
60153	23,578
60546	15,405
60130	13,927
60305	10,970
60707	43,093
60171	10,076
60634	75,082
60304	17,782
60301	2,831
60302	31,620
60804	82,383
60623	81,283
60644	46,591

Total	2,726,4	50
60611	33,22	24
60601	15,08	83
60603	1,09	52
60605	29,00	60
60626	50,54	44
60660		
60640	69,30	
60613	50,76	
60657	70,99	
60645	47,2	
60659	42,73	
60625	79,44	
60618	94,90	
60610		
60654	20,02	
60602	1,1	
60606	3,28	
60661	10,3	
60614	71,9	
60604		23
60616	54,19	
60607	29,29	
60622	53,73	
60612	33,73	
60647	87,63 87,63	
60608	80,0	
60712	12,43	
60630	•	
60641	28,56 69,88	
60646	34,89	
60651 60624	63,49	
60639	88,20	
60600	00.00	

ATTACHMENT 29 Long Term Acute Care Hospital

Department of Neurological Sciences Rush University Medical Center Professional Building 1759 W. Harrison St Suite 1106 Chicago, IL 60612

Tel: 312.563.1022 Fax: 312.942.2380 www.rush.edw/neuro James Conners, MD, MS
Chairperson, Department of Neurological Sciences
Co-Director, Neurosciences Service Line
Associate Professor of Neurological Sciences
Medical Director Comprehensive Stroke Program
Rush Medical College, Rush University
Rush University System for Health



July 12, 2021

Courtney Avery
Board Administrator
Health Facilities and Services Review Board
Illinois Department of Public Health
525 West Jefferson Street, Second Floor
Springfield, Illinois 62761

Re: Proposed Referrals for Rush Specialty Hospital

Dear Ms. Avery,

I am Neurologist and the Chairman of the Department. The focus of my group is neurologic conditions. This letter contains the referral documentation required per III. Admin. Code Section 1110.205(b)(3)(A)-(B). Over the past twelve months, my group has cared for 52 patients who required long-term acute care from the geographic service area. Please find enclosed with this letter a list of zip codes for the 52 patients who have received this care.

Based on my historical referrals to licensed Illinois healthcare facilities, I anticipate referring 40 patients each year to the Rush Specialty Hospital as proposed by the applicant. I certify that the patients I propose to refer reside within the applicant's proposed geographic service area.

I further certify that the aforementioned referrals have not been used to support another pending or approved certificate of need permit application. The information provided in this letter is true and accurate to the best of my knowledge.

Physician's Signature _(

Date 7/12/21

Notarization:

Subscribed and sworn to before me this 12 day of July 2021

Seal:

Signature of Notary

"OFFICIAL SEAL"
Velta Zavata
Notary Public, State of Illinois
My Conclusion Explires October 5, 2022

ATTACHMENT 29 Long Term Acute Care Hospital

Neurologic Surgery Department LTACH Historical Patient Data

LTACH Zip Codes		
ZIP	Total	
60616	5	
60644	4	
60406	3	
60628	3	
60651	3	
60624	2	
60632	2	
60609	2	
61603	2	
60623	2	
60620	2	
60649	1	
60461	1	
60804	1	
60585	1	
60466	1	
60188	1	
60653	1	
60610	1	
72301	1	
60305	1	
60642	1	
46310	1	
60647	1	
60621	1	
60471	1	
60402	1	
60657	1	
60099	1	
60486	1	
60418	1	
60544	1	
60629	1	
Grand Total	52	

ATTACHMENT 29 Long Term Acute Care Hospital

Department of Surgery Jelke Building 1750 W. Harrison St. Suite 789 Chicago, H. 60612 Tel: 312.942.5471 Fax: 312.942.2867 Alfonso_Torquati@rush.edu www.rush.edu



Alfonso Torquati, M.D., M.S.C.I., F.A.C.S. Rush University Medical Center Helen Shedd Keith Professor of Surgery Chair, Department of Surgery

ORUSH

July 19, 2021
Courtney Avery
Board Administrator
Health Facilities and Services Review Board
Illinois Department of Public Health
525 West Jefferson Street, Second Floor
Springfield, Illinois 62761

Re: Proposed Referrals for Rush Specialty Hospital

Dear Ms. Avery,

I am surgeon and the Chairman of the Department of Surgery. The focus of my group is General Surgery, Plastic Surgery, Transplant, and Urology. This letter contains the referral documentation required per Ill. Admin. Code Section 1110.205(b)(3)(A)-(B). Over the past twelve months, my group has cared for 28 patients who required long-term acute care from the geographic service area. Please find enclosed with this letter a list of zip codes for the 28 patients who have received this care.

Based on my historical referrals to licensed Illinois healthcare facilities, I anticipate referring 20 patients each year to the Rush Specialty Hospital as proposed by the applicant. I certify that the patients I propose to refer reside within the applicant's proposed geographic service area.

I further certify that the aforementioned referrals have not been used to support another pending or approved certificate of need permit application. The information provided in this letter is true and accurate to the best of my knowledge.

Physician's Signature Date 7/19/202
(Please Print/Type Name) Alfonso Torquati, MD

Notarization:

Subscribed and sworn to before me this Am day of July 2021

"OFFICIAL SEAL"
Maritza Ramses
Notary Public, State of Illinois
My Commission Expires February 27, 1022

Rush is an academic health system comprising Rush University Medical Center, Rush Copley Medical Center and Rush Oak Park Hospital

ATTACHMENT 29 Long Term Acute Care Hospital

General, Plastic, Transplant, and Urology Surgery Department LTACH Historical Patient Data

LTACH Zip Codes		
ZIP	Total	
60901	3	
60629	3	
60619	2	
60463	2	
60617	2	
60540	2	
60418	1	
60438	1	
60644	1	
60503	1	
60302	1	
60950	1	
60632	1	
61420	1	
60655	1	
60615	1	
60069	1	
60193	1	
46320	1	
60609	1	
Grand Total	28	

Michael J. Liptay, MD, FACS The Mary and John Bent Professor of Surgery and Chairman Department of Cardiovascular and Thoracic Surgery Director, Rush Lung Center

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

ATTACHMENT 29 Long Term Acute Care Hospital

Department of Cardiovascular and Thoracic Surgery Rush University Medical Center Professional Building

Professional Building 1725 West Harrison Street Suite 1154 Chicago, IL 60672 Tel: 312.942.5320 Fax: 312.942.1213 rush.edu michael_liptay@rush.edu



July 15, 2021

Courtney Avery Board Administrator Health Facilities and Services Review Board Illinois Department of Public Health 525 West Jefferson Street, Second Floor Springfield, Illinois 62761

Re: Proposed Referrals for Rush Specialty Hospital

Dear Ms. Avery,

I am thoracic surgeon and the Chairman of the Department. The focus of my group is cardiothoracic and vascular surgery. This letter contains the referral documentation required per III. Admin. Code Section 1110.205(b)(3)(A)-(B). Over the past twelve months, my group has cared for 29 patients who required long-term acute care from the geographic service area. Please find enclosed with this letter a list of zip codes for the 29 patients who have received this care.

Based on my historical referrals to licensed Illinois healthcare facilities, I anticipate referring 20 patients each year to the Rush Specialty Hospital as proposed by the applicant. I certify that the patients I propose to refer reside within the applicant's proposed geographic service area.

I further certify that the aforementioned referrals have not been used to support another pending or approved certificate of need permit application. The information provided in this letter is true and accurate to the best of my knowledge.

Physician's Signature _______ Date 7/15/21

(Please Print/Type Name) MICHAEL S. LiPTAY, MD

Notarization: Subscribed and sworn to Defore me

Signature of Notary:

this 15th day of July 202

Seal:

"OFFICIAL SEAL"
Maritza Ramses
Notary Public, Mate of Illinois
My Commission Espires February 27, 2022

ATTACHMENT 29 Long Term Acute Care Hospital

Cardiothoracic and Vascular Surgery Department Historical LTACH Patient Data

LTACH Zip Codes		
ZIP	Total	
60538	3	
60651	2	
60608	2	
60643	1	
60616	1	
60804	1	
60089	1	
60640	1	
60188	1	
46410	1	
60415	1	
60914	1	
60417	1	
60623	1	
60455	1	
60641	1	
46373	1	
60647	1	
60545	1	
60653	1	
60605	1	
60805	1	
46310	1	
60068	1	
60612	1	
Grand Total	29	

ATTACHMENT 29 Long Term Acute Care Hospital

Department of Internal Medicine 1717 West Congress Parkway

1717 West Congress Parkway Suite 1004, Kellogg Bldg. Chicago, IL 60612 Tel: 312.942.6600 Fax: 312.942.5271 www.rush.edu jochen_reiser@rush.edu



Jochen Reiser, MD, PhD The Ralph C. Brown, MD Professor Chairman

July 7, 2021

Courtney Avery Board Administrator Health Facilities and Services Review Board Illinois Department of Public Health 525 West Jefferson Street, Second Floor Springfield, Illinois 62761

Re: Proposed Referrals for Rush Specialty Hospital

Dear Ms. Avery,

I am nephrologist and the Chairman of the Department of Internal Medicine. The focus of my group is medical subspecialties and hospital medicine. This letter contains the referral documentation required per Ill. Admin. Code Section 1110.205(b)(3)(A)-(B). Over the past twelve months, my group has cared for 373 patients who required long-term acute care from the geographic service area. Please find enclosed with this letter a list of zip codes for the 373 patients who have received this care.

Based on my historical referrals to licensed Illinois healthcare facilities, I anticipate referring 340 patients each year to the Rush Specialty Hospital as proposed by the applicant. I certify that the patients I propose to refer reside within the applicant's proposed geographic service area.

I further certify that the aforementioned referrals have not been used to support another pending or approved certificate of need permit application. The information provided in this letter is true and accurate to the best of my knowledge. Physician's

Signature	for the	Date7/7/21	
(Please Print/Type Name)	Jochen Reiser, MD, PhD		

10 1-

Notarization:
Subscribed and sworn to before me
this 7th day of July
Jochen Reiser, MD, PhD
Ralph C. Brown MD Professor
Chairman, Department of Internal Medicine

Signature of Notary:

BERNICE PEREZ OFFICIAL SEAL Notary Public - State of Illinois My Commission Expires Jun 21, 2023

ATTACHMENT 29 Long Term Acute Care Hospital

Internal Medicine Department Historical LTACH Patient Data

LTACH Zip Codes ZIP Total		
60623	16 16	
60608 60624	13	
60609	13	
60804	11	
60612	11	
60629	10	
60617	10	
60644	9	
60632	9	
60651	8	
60628	8	
60649	6	
60619	6	
60634	5	
60643	5	
60130	5	
60616	4	
60477	4	
60639	4	
60107	4	
60534	4	
60614	4	
60411	4	
60083	4	
60193	4	
60605	3	
60620	3	
60642	3	
60607	3	
60426	3	
60631	3	
60640	3	
60471	3	
60827	3	
60139	3	
60647	3	

LTACH Zip Codes		
ZIP	Total	
60636	3	
60302	3	
60638	3	
60618	3	
60561	3	
60641	2	
60428	2	
60409	2	
60438	2	
60014	2	
60621	2	
60025	2	
60459	2	
60056	2	
60462	2	
60108	2	
60626	2	
60016	2	
46307	2	
60018	2	
60101	2	
60304	2	
60504	2	
60050	2	
60505	2	
60653	2	
60527	2	
60436	2	
60010	2	
60517	2	
60466	1	
60430	1	
60013	1	
60486	1	
46304	1	
46308	1	
61420	1	
46324	1	
60633	1	
60515	1	
60446	1	

LTACH Zip Codes		
ZIP	Total	
15005	1	
60654	1	
60120	1	
60950	1	
46374	1	
60657	1	
60538	1	
60417	1	
60540	1	
60062	1	
60542	1	
60076	1	
60544	1	
60453	1	
60546	1	
60463	1	
60554	1	
60661	1	
60020	1	
60901	1	
60563	1	
61270	1	
60564	1	
72301	1	
60586	1	
60543	1	
60141	1	
60630	1	
60142	1	
60423	1	
60148	1	
60061	1	
60153	1	
60637	1	
60610	1	
60069	1	
60611	1	
60440	1	
60178	1	
60448	1	
60613	1	

LTACH Zip Codes		
ZIP	Total	
60646	1	
60181	1	
60085	1	
60189	1	
60465	1	
60191	1	
60657	1	
46383	1	
60707	1	
60030	1	
60098	1	
47978	1	
60927	1	
60401	1	
61111	1	
60622	1	
61350	1	
60402	1	
62034	1	
60404	1	
85051	1	
60625	1	
60608	1	
60406	1	
60506	1	
60053	1	
53168	1	
Grand Total	373	

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

ATTACHMENT 29 Long Term Acute Care Hospital



University of Illinois Hospital & Clinics 1740 W Taylor Street Suite 1400, M/C 693 Chicago, IL 60612-4325 Phone 312,996,3900

July 8, 2021

Courtney Avery Board Administrator Health Facilities and Services Review Board Illinois Department of Public Health 525 West Jefferson Street, Second Floor Springfield, Illinois 62761

Re: Proposed Referrals for Rush Specialty Hospital

Dear Ms. Avery,

I am the Chief Medical Officer at UI Health in the Illinois Medical District. This letter contains the referral documentation required per Ill. Admin. Code Section 1110.205(b) (3)(A)-(B). Over the past twelve months, my hospital has cared for 117 patients who required long-term acute care from the geographic service area. Please find enclosed with this letter a list of zip codes for the 117 patients who have received this care.

Based on the historical referrals to licensed Illinois healthcare facilities, I anticipate my case management team referring 23 patients each year to the Rush Specialty Hospital as proposed by the applicant. I certify that the patients I propose to refer reside within the applicant's proposed geographic service area.

I further certify that the aforementioned referrals have not been used to support another pending or approved certificate of need permit application. The information provided in this letter is true and accurate to the best of my knowledge.

Physician's Signature Vanden Hoek, NO

Notarization:

Subscribed and sworn to before me

Signarure of Notary

"OFFICIAL SEAL"
GUADALUPE ALMANZA Notary Public, State of Illinois Commission Expires 11/16/2021

UI Health Historical LTACH Patient Data

LTACH	I Zip Codes
ZIP	Total
60632	13
60651	9
60608	7
60612	8
60644	5
60623	5
60647	5
60609	5
60620	5
60643	4
60649	3
60804	3
60624	3
60411	3
60638	2
60629	2
60436	2
60108	2
60636	2
60641	2
60640	2
61101	1
60637	1
53511	1
60478	1
60453	1
60639	1
60605	1
60513	1
60607	1
60137	1
46304	1
60432	1
60565	1
60619	1
60431	1
60085	1
60153	1
60621	1

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

LTACH Zip Codes		
ZIP	Total	
60056	1	
61108	1	
60915	1	
60428	1	
60446	1	
60626	1	
60110	1	
Grand Total	117	

1110.265(b)(3) - Planning Area Need - Service Demand -Establishment of LTAC Service

This application involves the establishment of a 44 bed LTAC unit at the proposed facility. Included with this application are multiple referral letters from Rush University Medical Center physicians and the UI Health Chief Medical Officer. The letters provide historical patient information for 599 patients who have been historically referred for LTAC services. Below is a table summarizing the number of historical referrals and proposed referrals described in the enclosed letters.

LTAC Referrals			
Physician Name	Specialty	# of Historical Referrals	# of Proposed Referrals
Connors	Neurology	52	40
Torqauti	General Surgery, Plastic Surgery, Transplant, Urology	28	20
Liptay	Cardiothoracic and Vascular Surgery	29	20
Reiser	Internal Medicine	373	340
UI Health	Chief Medical Officer	117	23
	Total	599	443*

*Please note that this application presents more referrals than those which are necessary to meet the state's utilization standards for this service. This is not an error. The need for these services is overwhelming but it is the intention of RUMC to continue to its pattern of referring patients to other existing providers. This is being done to minimize any adverse impact upon area providers while allowing Applicants to meet an unquestionable need for access to LTAC services.

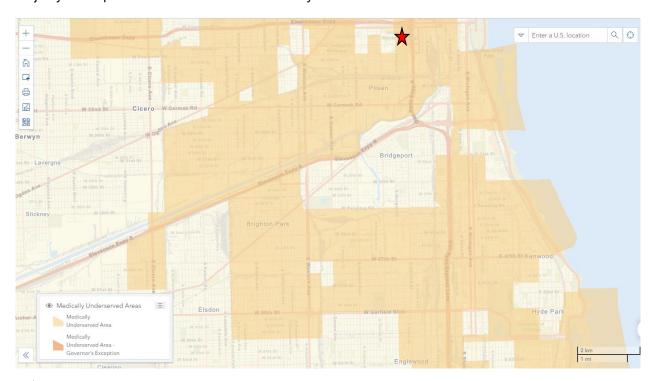
As previously mentioned in the application RUMC data reflects that on an annual basis, there are an average of over 400 patient days where it was unable to find placement in an LTAC setting for patients whose conditions warranted the provision of LTAC services. Consider the following: 400 patient days, presuming an average length of stay of 33 days, would justify 12 fully utilized LTAC beds all on its own. That is 12 fully utilizable beds simply meeting the needs of indigent and underserved individuals that no other healthcare facilities are caring for. These individuals need access to this care and it is a core tenet of this Board to facilitate this type of access to care.

Simply put, there are too many days and too many instances in which patients are forced to obtain care outside of the LTAC category of service because there are no available beds. Applicants cannot speak to why so many beds of the competitors are never set up given the documented need RUMC has experienced. Whether it is because of their inability to staff them or so as to create the illusion of capacity or whether it is simply that they are unwilling to provide the necessary services to the patient population RUMC serves is unknown. What is known is that there is a need for additional services that this project proposes to meet and this project is designed to do so while still supporting the existing facilities that have, thus far, been unable to meet the needs of this patient population.

Furthermore, the various communities where the facility is to be located and where the majority of patients reside is designated a medically underserved population as defined by Health Resources & Services Administration (https://data.hrsa.gov/tools/shortage-area/mua-find). As evidence, a map from the HRSA is enclosed with this attachment. According to the most recent inventory there is an excess of stations, however, the proposed facility will be filled by an existing patient base of facilities in GSA without negatively impacting existing facilities.

1110.265(b)(5) - Planning Area Need - Service Accessibility

The number of beds that are being proposed by this application are necessary to improve access for planning area residents. The proposed facility is located in a medically underserved area ("MUA") and the majority of the patients that benefit from the facility reside in the same MUA.



★ Denotes the location of the proposed facility

1110.265(c)(1)(2)(3) - Unnecessary Duplication of Services, Maldistribution, Impact of Project on Other Area Providers

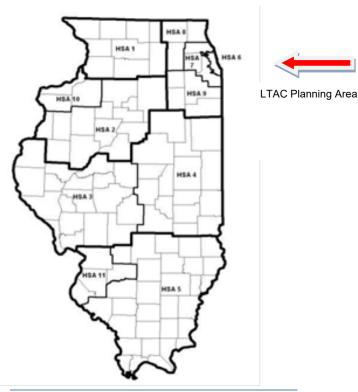
The proposed facility will be located on a lot that currently has the following assigned addresses: 1404-1555 West Congress Parkway, 500-532 South Loomis Avenue, 1400-1554 West Harrison Street, 501-531 South Ashland Avenue. Included with this attachment is a list of zip code areas within 10 miles of the proposed facility site, the total population of the identified zip codes areas, and the name and locations of all existing facilities offering this category of services within 10 miles of the proposed site.

The proposed facility will not result in the maldistribution of services. There are 219 approved beds in the 10 mile GSA surrounding the proposed facility and only 148 were set up and available for patient care according to 2019 HFSRB annual surveys. The failure to staff all approved beds in the geographic service area creates an illusion of availability where none exists because 33% of the LTAC beds were never set up. This is not a new phenomenon. Despite being approved for 86 beds, RML has not reflected staffing more than 69 beds in any of the data it reported to the Health Facilities and Services Review Board since 2015. Kindred Hospital Chicago North has not operated more than 91 since 2015, and lowered the number of staff beds to 80 staff beds in 2018 and 79 staffed beds in 2019.

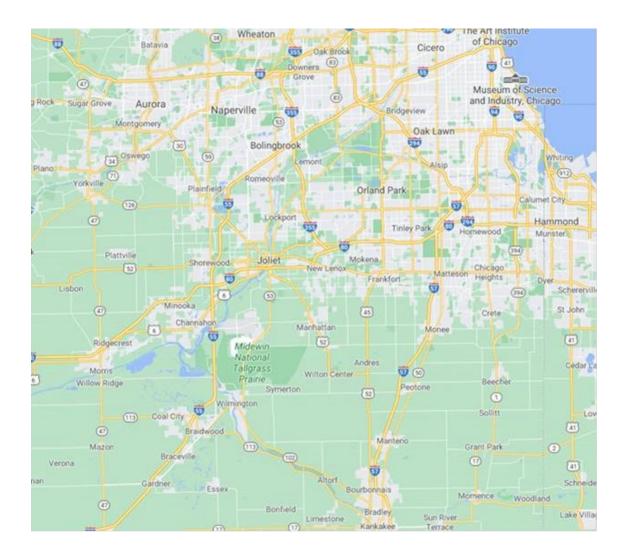
Facilities located within 10 miles of the proposed facility

Facility Name	# of Approved Beds	# of Staffed Beds	Staffed Bed Utilization Rate	Distance from Proposed Facility
Kindred Hospital Chicago North	133	79	55.40%	6.5 miles
RML Specialty Hospital Chicago	86	69	90.30%	2.5 miles
Total	219	148		

The Board's rules designate the planning area for the LTAC service to include the entirety of HSAs 6,7,8, and 9. Put another way, the most populous section of the state is considered as one planning area for the LTAC service line. There are no facilities that offer LTAC services south of the 290 Interstate Highway in the City of Chicago, leaving half of the city's population, and the state's most populous counties (DuPage, Lake, Kane, Will, Winnebago, McHenry, Kendall, Grundy, Kankakee counties) without meaningful access to this care. This is in addition to the fact that there are no facilities within the Illinois Medical District that currently offer LTAC services. The population to be served by this facility is among the most vulnerable populations within the area and those facing the most unnecessary barriers of access to care.



Statewide there are 771 authorized LTAC beds in the state's bed inventory, and 601 beds are located in the west and northern portion of planning area. Below is a map the planning area where there are no facilities that currently offer LTAC services.



As previously noted the proposed facility will be located and serve identified patients from a federally recognized medically underserved area. All of the patients for the proposed facility will come from referrals from identified physicians at RUMC and UI Health Medical Center. The proposed facility will not lower utilization of other area providers that are operating below the target utilization standard. Importantly, the Applicants would note that Kindred Chicago Central Hospital's 95-bed LTACH facility was recently discontinued. As was noted by RUMC, this discontinuation will undoubtedly have an effect on need in the planning area and the proposed facility is well positioned to work with area providers to address the needs of the patient previously served by the discontinued facility. In 2019, Kindred Chicago Central Hospital reported an average daily census of 25.4 patients. The Kindred Hospital Chicago North Hospital reported a 55.4% utilization rate in 2019, or an average daily census of 43.8 patients. With the Chicago Central Hospital closed, those 25.4 patients could now be treated at Kindred's Chicago North Hospital and based on the 79 beds currently staffed at the facility it would immediately exceed the state's target utilization rate by achieving an 88% utilization rate ((43.8 Kindred Chicago North patients + 25.4 Kindred Chicago Central patients)/79 staffed Kindred Chicago Central beds=88% utilization rate). This

would mean that both facilities within 10 miles of the proposed facility would meet the state's target utilization rate for the LTAC category of service.

HFSRB staff and members will note that this application presents more referrals than those which are necessary to meet the state's utilization standards for this category of service. This is not an error. The need for these services is overwhelming but it is the intention of RUMC to continue to its pattern of referring patients to other existing providers. This is being done to minimize any adverse impact upon area providers while allowing Applicants to meet an unquestionable need for access to LTAC services.

Applicants are aware there will be a negative finding regarding adverse impact upon other area providers. However, we state herein that this project has been designed to allow RUMC to be able to continue supporting other area providers with the same approach to referrals as it historically has, but also to meet the existing need reflected in those referrals that accompany this project. The facilities to which RUMC refers patients will continue to receive referrals. If the goal of this project was to create an adverse impact upon other area providers, this facility would have (and could have) been presented with significantly more beds that is proposed - a goal which could have been accomplished and supported almost entirely from internal referrals. Competition is not adverse impact. Moreover, while it is fully expected that competitors will present objections that, while cloaked in concerns of declining utilization and limited Medicaid funding, are truly reflective of a desire to avoid competition. There may be an 'excess' number of beds in the State Board inventory but there is not an excess of availability for these services. This facility will ensure that those truly in need of these services have access - including those who are indigent, and uninsured, and whose immigration status might not be perfected. These people need access to care - and as documented RUMC has experienced over 400 patient days in which no beds were available - in part because its competitors who will likely object to this project left 79 of the 219 approved beds 'offline' - never having even set them up. The 'adverse impact' provision is designed to avoid undermining the viability of other existing providers, a result this application makes evident is neither the intent nor would it be the result of approving this project.

This project is an AND not an OR. It is simply taking the steps necessary to ensure that the access necessary for these services exists and is available, especially given its proximity to the Illinois Medical District which is currently without these categories of service. Moreover, as is the case with the LTAC services, providers have made strategic decisions with regards to the number of beds approved as compared to the number of beds set up at peak levels throughout the year. Facilities near the proposed site have strategically left 2 of every 10 approved beds 'offline' for as long as the HFSRB data is readily available. The *two closest facilities had 33% of approved beds that were never even set up*. If they do not want to provide the care they can return those beds to the inventory for providers who are prepared to step up. If they are unwilling to do that, it seems disingenuous if they should object since the need RUMC's patients have experienced is a result of these providers failing to prioritize access to care and provide the services to the degree they were approved to provide.

The result of these beds that have never been set up is threefold: (1) it creates the appearance of capacity where none exists; (2) it creates circumstances like those described above where area providers are simply unable to find necessary beds even though there "should" be beds available; and (3) it undermines the ability of a project like this to obtain positive findings under the Board rules because 20% of the beds do not, in fact, exist. These are the reasons this Board is given discretionary authority to look beyond the findings and approve a project based upon overall need, despite negative findings.

Facilities located in HSA 6. 7 . 8. and 9

Facility Name	# of Approved Beds	# of Staffed Beds	Staffed Bed Utilization Rate	Distance from Proposed Facility
Kindred Hospital Northlake	94	94	30.70%	12 miles
Kindred Hospital Chicago North	133	79	55.40%	6.5 miles

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RML Specialty Hospital Hinsdale	115	115	71.90%	14 miles
RML Specialty Hospital Chicago	86	69	90.30%	2.5 miles
Presence Holy Family Medical Center	129	129	60.80%	17 miles
Woodlake Specialty Hospital	44	0	0.00%	10.5 miles
Total	601	486		

1110.265(e) - Staffing

The proposed facility will maintain the necessary clinical and professional staff to meet applicable state of Illinois regulations and certification criteria required by the Centers for Medicare and Medicaid Services (CMS). All patient care staff that are required to be registered with the Illinois Department of Financial and Professional Regulation will maintain their licenses and meet the requisite requirement for continued education.

LTACH Unit Position Description and Projected FTEs

Administration		
	CEO	0.50
	PBX\Receptionist	1.00
Rehab Nursing		
	Managers\Supervisors	6.50
	Other Professional	1.00
	RN	39.20
	Certified Nursing Assistant	39.20
	Unit Clerk	2.30
Physical Therapy		
	Managers\Supervisors (DOR)	1.00
	Therapist	11.27
	Therapy Aides	2.94
Occupational Therapy		
	Therapist	10.29
Speech Therapy		
	Therapist	5.39
Pharmacy		
	Director of Pharmacy	0.53
	Pharmacist	0.66
	Technician	0.69
Central Supply		
	Materials Manager	0.53
	Technician	1.00
Admissions		
	Clinical Liaison	8.00
	Admissions Coordinator	0.79
Medical Records		
	Managers\Supervisors	0.53
	Technician	1.00
Quality Management		
	QI Manager (DQM)	0.53

Dietary (FS Only)		
	Dietician	1.00
Plant OPS (FS Only)		
	Director of Plant Ops	1.00
	Patient Service Mechanic	1.00
	Security	2.10
Environmental Services (FS Only)		
	Lead Environmental Services Tech	1.00
	Environmental Services Tech	6.00
Case Management		
	Lead Case Manager/Dir. Case Management	0.53
	Case Manager	3.00
	PPS Manager	1.00
Nursing Administration		
	Admin (CNO)	0.50
Public Relations		
	Admin (DBD)	0.53
Human Resources		
	Managers\Supervisors	1.00
Business Office		
	Technician	0.30
	Total Staff	153.86

1110.265(f) - Performance Requirements

The proposed freestanding facility will be for a total 100 beds, and the long-term acute care unit will be 44 beds. The proposed facility meets the Board's Performance Requirement for Bed Capacity Minimums. The facility also can confirm their intention to obtain Medicare certification as a Long Term Acute Care Hospital within 12 months after the date of project completion.

1110.203(f) - Assurances

The Applicants attest that by the second year of operation after the project completion, the applicant will achieve and maintain the target occupancy for the category of service as specified in 77 III. Admin. Code 1100. Enclose as evidence is a letter from the Applicants certifying as such.



June 28, 2021

Courtney Avery Board Administrator Illinois Health Facilities and Service Review Board 525 West Jefferson Street, 2nd Floor Springfield, Illinois 62761

Re: Assurances

Dear Ms. Avery,

As representative of Rush-Select Holdings, LLC, I, Thomas Mullin, hereby attest to the applicant's full anticipation that, by the end of the second year following the proposed hospital's opening, the proposed facility will operate at or in excess of the utilization standards identified in 77 Illinois Admin. Code Section 1110 Appendix B.

Sincerely,

Thomas Mullin

Executive Vice President, Hospital Operations

Rush-Select Holdings, LLC

The total estimated project cost is \$109,549,205. The Applicant/Licensee will fund the project costs with cash and cash equivalents obtained from Select Medical Corporation. Select Medical Corporation's existing internal resources are sufficient to funds the proposed project as demonstrated in its letter of proof of funding and its publicly available Securities Exchange Commission Form 10-K report.

Rush University System for Health has sufficient internal resources to fund its share of necessary working capital as demonstrated in its letter of proof of funding and its most recent audited financial statements which are enclosed with this attached.

Additionally, enclosed are letters confirming proof of project funding and most recent audited financial statements for Select Medical Corporation and Rush University System for Health.

Rush System for Health

Consolidated Financial Statements as of and for the Years Ended June 30, 2019 and 2018, Single Audit Supplementary Report as of and for the Year Ended June 30, 2019, and Independent Auditors' Report



RUSH UNIVERSITY SYSTEM FOR HEALTH

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INDEPENDENT AUDITORS' REPORT

To the Board of Trustees of Rush System for Health:

We have audited the accompanying consolidated financial statements of Rush System for Health and its subsidiaries (the "System"), which comprise the consolidated balance sheets as of June 30, 2019 and 2018, and the related consolidated statements of operations, changes in net assets, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the System's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the System as of June 30, 2019 and 2018, and the results of their operations and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Changes in Accounting Principle

As discussed in Note 2 to the financial statements, Rush has adopted Accounting Standards Updated No. 2016-14, Notfor-Profit Entities (Topic 958): *Presentation of Financial Statements of Not for Profit Entities* and ASU No. 2014-09, *Revenue from Contracts with Customers*, during the year ended June 30, 2019. Our opinion is not modified with respect to this matter.

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ATTACHMENT 33 Availability of Funds

Other Matters

Other Information

Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The accompanying schedule of expenditures of federal awards as required by Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards is presented for purposes of additional analysis and is not a required part of the consolidated financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated financial statements. The information has been subjected to the auditing procedures applied in the audits of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements, or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the consolidated financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated October 25, 2019, on our consideration of Rush's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Rush's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering Rush's internal control over financial reporting and compliance.

October 25, 2019

Deloitte : Touche LLP

RUSH SYSTEM FOR HEALTH
CONSOLIDATED BALANCE SHEET
(Dollars in thousands)

(Dollars in thousands)			
	As of June 30, 2019 2018		
ASSETS	2013	2010	
CURRENT ASSETS:			
Cash and cash equivalents	\$ 118,939	\$ 157,303	
Accounts receivable for patient services	393,045	314,771	
Other accounts receivable	78,085	59,464	
Self-insurance trust — current portion	30,629	20,346	
Other current assets	84,543	86,237	
Total current assets	705,241	638,121	
ASSETS LIMITED AS TO USE AND INVESTMENTS:			
	1 101 245	1 1 1 1 7 7 7	
Investments — less current portion	1,181,345	1,141,777	
Limited as to use by donor or time restriction or other	609,603	598,020	
Self-insurance trust — less current portion	126,150	114,617	
Total assets limited as to use and investments	1,917,098	1,854,414	
PROPERTY AND EQUIPMENT — net	1,552,941	1,497,632	
OTHER ASSETS	67,252	54,339	
TOTAL ASSETS	\$ 4,242,532	\$ 4,044,506	
LIABILITIES AND NET ASSETS			
CURRENT LIABILITIES:			
Accounts payable and accrued expenses	\$ 73,977	\$ 70,752	
Accrued expenses	328,785	308,317	
Estimated third-party settlements payable	187,276	180,107	
Current portion of accrued liability under self-insurance programs	42,474	30,964	
Current portion of long-term debt	14,270	13,156	
Total current liabilities	646,782	603,296	
LONG-TERM LIABILITIES:			
Accrued liability under self-insurance programs — less current portion	205,771	181,462	
Postretirement and pension benefits	47,724	24,392	
Long-term debt — less current portion	580,252	598,371	
Line of credit	36,500	36,500	
Obligations under capital lease and other financing arrangements	41,770	51,470	
Other long-term liabilities	118,988	118,706	
Total long-term liabilities	1,031,005	1,010,901	
Total liabilities	1,677,787	1,614,197	
NET ASSETS:			
Without donor restrictions	1,727,068	1,652,774	
With donor restrictions	837,677	777,535	
Total net assets	2,564,745	2,430,309	
TOTAL LIABILITIES AND NET ASSETS	\$ 4,242,532	\$ 4,044,506	

See notes to the consolidated financial statements.

RUSH SYSTEM FOR HEALTH CONSOLIDATED STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS (Dollars in thousands)

(Dollars III Chousalius)	For the Years Ended June 30,		
	2019	2018	
NET ASSETS WITHOUT RESTRICTIONS			
REVENUE:			
Patient service revenue	\$ 2,315,770	\$ 2,142,514	
Tuition and educational programs revenue Research revenue and net assets released from restriction	78,129	73,409	
and used for research and other operations	135,302	123,440	
Other revenue	82,063	93,274	
Total revenue	2,611,264	2,432,637	
EXPENSES:			
Salaries, wages and employee benefits	1,349,233	1,249,522	
Supplies, utilities and other	787,850	728,022	
Insurance	56,226	58,075	
Purchased services	209,018	151,257	
Depreciation and amortization	126,899	126,847	
Interest and fees	24,165	24,932	
Pension settlement expense	23,235	-	
Total expenses	2,576,626	2,338,655	
OPERATING INCOME	34,638	93,982	
NON-OPERATING INCOME			
Investment income and other — net	57,413	36,464	
Contributions without donor restriction	2,677	1,835	
Fundraising expenses	(10,938)	(10,105)	
Change in fair value of interest rate swaps	(3,182)	4,402	
Total non-operating income	45,970	32,596	
EXCESS OF REVENUE OVER EXPENSES	\$ 80,608	\$ 126,578	

(Continued)

RUSH SYSTEM FOR HEALTH CONSOLIDATED STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS (Dollars in thousands)

,	For the Years Ended June 30,			
		2019		2018
NET ASSETS WITHOUT DONOR RESTRICTIONS				
Excess of revenue over expenses	\$	80,608	\$	126,578
Net assets released from restrictions used for the purchase of property and equipment		16,804		1,919
Postretirement related changes other than net periodic		(22.270)		40.240
postretirement cost Other		(22,270) (1,382)		18,210 123
Increase in net assets without donor restrictions		73,760		146,830
NET ASSETS WITH DONOR RESTRICTIONS				
Pledges, contributions and grants		95,867		69,015
Net assets released from restrictions		(61,499)		(49,808)
Net realized and unrealized gains on investments		26,308	_	48,529
Increase in net assets with donor restrictions		60,676	_	67,736
INCREASE IN NET ASSETS		134,436		214,566
NET ASSETS — Beginning of period		2,430,309	_	2,215,743
NET ASSETS — End of period	\$	2,564,745	\$	2,430,309
See notes to the consolidated financial statements.			(0	Concluded)

RUSH SYSTEM FOR HEALTH CONSOLIDATED STATEMENTS OF CASH FLOWS (Dollars in thousands)

(Dollars in thousands)			
	 For the Years	nded Ju	
	2019		2018
OPERATING ACTIVITIES:			
Increase in net assets	\$ 134,436	\$	214,566
Adjustments to reconcile change in net assets to net cash provided by			
operating activities:			
Depreciation and amortization	126,899		126,847
Postretirement related changes other than net period postretirement cost	22,270		(18,210)
Change in fair value of interest rate swaps	3,182		(4,402)
Net unrealized and realized gains on investments	(82,403)		(80,884)
Restricted contributions and investment income received	(57,840)		(15,468)
Investment gains on trustee held investments	(64)		(1,812)
Gain on sale of property and equipment	(1,595)		(20,945)
Changes in operating assets and liabilities:			
Accounts receivable for patient services	(78,273)		(23,989)
Accounts payable and accrued expenses	13,281		37,910
Estimated third-party settlements payable	7,169		(2,710)
Pension and postretirement costs	1,062		(25,856)
Accrued liability under self-insurance programs	36,302		(14,413)
Other changes in assets and liabilities	 (36,767)	_	(15,013)
Net cash provided by operating activities	 87,659		155,621
INVESTING ACTIVITIES:			
Additions to property and equipment	(187,500)		(190,087)
Acquisition of physician practices	(632)		-
Proceeds from sale of property and equipment	2,293		78,624
Purchase of investments	(2,937,968)		(2,152,407)
Sale of investments	 2,945,975	_	2,129,306
Net cash used in investing activities	 (177,832)		(134,564)
FINANCING ACTIVITIES:			
Proceeds from restricted contributions and investment income	57,840		15.468
Proceeds from line of credit	-		3,981
Payment of bond issuance cost	_		(476)
Payment of long-term debt	(14,090)		(13,343)
Payment of obligations under capital lease and other financing arrangements	(3,939)		(3,340)
Proceeds from other financing arrangements	 11,998	_	34,715
Net cash provided by financing activities	51,809	_	37,005
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(38,364)		58,062
CASH AND CASH EQUIVALENTS — Beginning of period	157,303		99,241
CASH AND CASH EQUIVALENTS — End of period	\$ 118,939	\$	157,303
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
Cash paid for interest	\$ 26,906	\$	24,659
Noncash additions to property and equipment	\$ 21,228	\$	30,027

See notes to consolidated financial statements.

RUSH SYSTEM FOR HEALTH
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED JUNE 30, 2019 AND 2018
(Dollars in thousands)

1. ORGANIZATION AND BASIS OF CONSOLIDATION

Rush System for Health ("Rush") is a multihospital system with operations that consist of several diverse activities with a shared mission of patient care, education, research, and community service. Rush consists of an academic medical center, Rush University Medical Center ("RUMC"), and two community hospitals, Rush Copley Medical Center ("RCMC") and Rush Oak Park Hospital ("ROPH"), that each serve distinct markets in the Chicago, Illinois, metropolitan area. RUMC, RCMC and ROPH are all Illinois not-for-profit corporations exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code. Effective March 1, 2017, RUMC and RCMC reorganized their operations under a common corporate parent, Rush System for Health, an Illinois not-for-profit corporation, which is exempt from federal income taxes under Section 501(c)(3) of the Code. Previous to this reorganization, RUMC had an affiliation with RCMC that covers governance and other organization relationships, including an Obligated Group. Pursuant to the Amended and Restated Master Trust Indenture dated February 1, 2015, RUMC and RCMC established an Obligated Group (the "Obligated Group") of which both are members along with ROPH. There were no changes to the Obligated Group members as a result of the reorganization under Rush. RUMC, ROPH and RCMC are jointly and severally liable for certain debts issued through the Illinois Finance Authority (IFA) (see Note 9).

Rush University Medical Center

RUMC, the largest member of Rush, is an academic medical center comprising Rush University Hospital (RUH) and Rush University, located in Chicago, Illinois, and ROPH, located in Oak Park, Illinois.

RUH — A 713-licensed bed acute care, rehabilitation and psychiatric hospital in Chicago, Illinois. RUH also includes a faculty practice plan, Rush University Medical Group, which employed 600 physicians as of June 30, 2019.

Rush University — A health sciences university that educates students in health-related fields. This includes Rush Medical College, the College of Nursing, the College of Health Sciences, and the Graduate College. Rush University also includes a research operation with \$171,261 and \$162,399 in annual research expenditures during fiscal years 2019 and 2018, respectively.

ROPH-A 201-licensed bed acute care, rehabilitation, and skilled nursing hospital located in Oak Park, Illinois, eight miles west of RUH. ROPH includes an employed medical group, which employed 51 physicians as of June 30, 2019. RUMC is the sole corporate member of ROPH.

Rush Copley Medical Center

RCMC is the sole corporate member of Copley Memorial Hospital, Inc., a 210-bed licensed acute care hospital located in Aurora, Illinois, which includes an employed medical group of 95 physicians as of June 30, 2019.

Rush Health

Rush Health is a network of providers whose members include RUH, ROPH, and RCMC. Rush Health has approximately 1,908 physicians and 584 allied health providers who are on the medical staff of the member hospitals. The financial results of Rush Health are not consolidated with the financial results of Rush and are accounted for using the equity method of accounting (see Note 17).

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The accompanying consolidated financial statements have been presented in conformity with accounting principles generally accepted in the United States of America (GAAP).

Basis of Consolidation

Included in Rush's consolidated financial statements are all of its wholly owned or controlled subsidiaries. All significant intercompany transactions have been eliminated in consolidation.

The supplemental consolidating balance sheet information and consolidating statement of operations and changes in net asset information as of and for the year ended June 30, 2019, are presented for the purpose of additional analysis of Rush's 2019 consolidated financial statements taken as a whole.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

New Accounting Pronouncements

Effective July 1, 2018, Rush adopted the Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers (Topic 606), which outlined a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry specific guidance. ASU 2014-09 also required expanded disclosures regarding an entity's revenue recognition policies and significant judgments employed in the determination of revenue. The core principle of the revenue model is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The ASU has been applied retrospectively to all periods presented. The adoption of the ASU did not have a material impact on the consolidated financial statements.

Effective July 1, 2018, Rush adopted ASU No. 2018-08, Clarifying the Scope and Accounting Guidance for Contributions Received and Contributions Made (Topic 958). The ASU provides additional guidance on whether a transaction should be accounted for as a contribution or as an exchange transaction under ASU No. 2014-09, as well as additional guidance on conditional contributions. The adoption of the ASU did not have a material impact on the consolidated financial statements.

Effective July 1, 2018, Rush adopted ASU No. 2016-14, Presentation of Financial Statements of Not-for Profit Entities. The ASU required not-for-profit entities to present on the face of the balance sheet and statement of changes in net assets amounts for two classifications of net assets rather than the previous three classifications, and also enhanced several qualitative and quantitative disclosures related to net assets. Rush has elected to apply the practical expedient and not disclose prior year liquidity and availability of resources and functional expenses.

In February 2016, the FASB issued ASU No. 2016-02, *Leases*. The ASU requires lessees to recognize the right-of-use assets and liabilities that arise from all leases with terms greater than twelve months. The ASU also requires repayments of operating and financing leases to be classified as operating or financing activities, respectively, on the statement of cash flows. Rush adopted the ASU effective July 1, 2019 using a modified retrospective approach. On July 1, 2019, the adoption resulted in an increase of \$158 million in right-of-use assets and lease liabilities for operating leases. In addition on July 1, 2019, Rush recognized an increase to net assets without donor restrictions of \$34,531

from a cumulative effect of change in accounting principle, which was related to the remaining deferred gain on sale of property from a previous sale leaseback transactions.

In March 2017, the FASB issued ASU No. 2017-07, Compensation – Retirement Benefits. The ASU amends the disclosure requirements related to the income statement presentation of the components of net periodic benefit cost for sponsored defined benefit pension and other postretirement plans. The ASU requires entities to disaggregate the current service cost component from other components within the net benefit cost and present it with other current compensation costs on the income statement, as well as present the other components outside of income from operations. Rush adopted the ASU effective July 1, 2019. The adoption did not have a material impact on the consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, Classification of Certain Cash Receipts and Cash Payments, which amends guidance on the classification of certain cash receipts and payments within the statement of cash flows that were previously unclear or in which there were no specific guidelines. Rush was required to adopt this standard effective July 1, 2019, which did not have a material impact on the consolidated financial statements.

In January 2016, the FASB issued ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities. The ASU eliminates the requirement for not-for-profit organizations to disclose fair value information for financial instruments measured at amortized cost. Rush elected to early adopt this part of the ASU in fiscal year 2019, and therefore Rush did not disclose the fair value information for financial information measured at amortized cost. The remaining parts of the ASU are effective for fiscal year 2020.

In January 2017, the FASB issued ASU 2017-04, Intangibles — Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment. The ASU eliminates Step 2 from the goodwill impairment test. The annual, or interim, goodwill impairment test is performed by comparing the fair value of a reporting unit with its carrying amount. An impairment charge should be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The ASU also eliminates the requirements for any reporting unit with a zero or negative carrying amount to perform a qualitative assessment and, if it fails that qualitative test, to perform Step 2 of the goodwill impairment test. Rush will still have the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary. Rush is beginning to asses the impact of the standard, which is required to be implemented in fiscal year 2023.

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement. The ASU removes, modifies and adds certain disclosure requirements on fair value required by Topic 820. The ASU is not expected to have a material impact on the consolidated financial statements, which is required to be implemented in fiscal year 2021.

In August 2018, The FASB issued ASU No. 2018-14, Compensation-Retirement Benefits-Defined Benefit Plans. The ASU modifies the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. The ASU allows entities to remove disclosures over accumulated comprehensive income and certain information about plan assets. The ASU also requires entities to add disclosures over reasons for significant gains and losses affecting the benefit obligation and any explanation for other significant changes in the benefit obligation or plan assets. Rush is beginning to assess the impact of the standard, which is required to be implemented in fiscal year 2021.

Cash and Cash Equivalents

Cash and investments having an original maturity of 90 days or less when purchased are considered to be cash and cash equivalents. These securities are so near maturity that they present insignificant risk of changes in value.

Patient Service Revenue and Patient Accounts Receivable

Patient service revenue is reported at the amount that reflects the consideration to which Rush expects to be entitled in exchange for providing patient care. These amounts are due from patients, third-party payors (including health insurers and governmental programs) and others, and includes variable consideration for retroactive revenue adjustments due to settlement of audits, review and other investigations. Revenue is recognized as performance obligations are satisfied. Performance obligations are determined based on the nature of the services provided by Rush. Revenue for performance obligations satisfied over time is recognized based on actual charges incurred in relation to total expected charges. Rush believes that this method provides a faithful depiction of the transfer of services over the term of the performance obligation based on the inputs needed to satisfy the obligation. Generally, performance obligations satisfied over time relate to patients at Rush receiving inpatient acute care services. For outpatient services, the performance obligation is satisfied as the patient simultaneously receives and consumes the benefits provided as the services are performed. In the case of these outpatient services, recognition of the obligation over time yields the same result as recognizing the obligation at a point in time. Rush measures the performance obligation from inpatient admission, or the commencement of an outpatient service, to the point when it is no longer required to provide services to that patient, which is generally at the time of discharge or completion of the outpatient services. For performance obligations satisfied at a point in time, revenue is generally recognized when goods are provided to its patients and customers in a retail setting. In these instances, Rush does not believe it is required to provide additional goods related to that patient. The unsatisfied or partially unsatisfied performance obligations referred to above are primarily related to inpatient acute care services at the end of the reporting period. The performance obligations for these contracts are completed when the patients are discharged, which generally occurs within days or weeks of the end of the reporting period. Amounts related to health care services provided to patients which have not been billed and that do not meet the conditions of an unconditional right to payment at the end of the reporting period are contract assets. Contract asset balances consist primarily of health care services provided to patients who are still receiving inpatient care at Rush at the end of the year. Such amounts totaled \$18.189 and \$18,673 at June 30, 2019 and 2018, respectively, and are included within other current assets.

Rush determines the transaction price based on standard charges for goods and services provided, reduced by explicit price concessions which consist of contractual adjustments provided to third-party payors and discounts provided to uninsured patients in accordance with Rush's policy as well as implicit price concessions provided to patients. Rush determines its estimates of contractual adjustments and discounts based on contractual agreements, published rates, its discount policies and historical experience. Rush determines its estimate of implicit price concessions based on its historical collection experience. Generally, patients who are covered by third-party payors are responsible for related deductibles and coinsurance, which vary in amount. Rush determines its estimate of implicit price concessions for patients with deductibles and coinsurance and from those who are uninsured based on historical experience and current market conditions. The initial estimate of the transaction price is determined by reducing the standard charge by any contractual adjustments, discounts and implicit price concessions.

Rush uses a portfolio approach to account for categories of patient contracts as a collective group rather than recognizing revenue on an individual contract basis. The portfolios consist of major payor classes for inpatient revenue and major payor classes and types of services provided for outpatient revenue. Based on historical collection trends and other analysis, Rush believes that revenue recognized by utilizing the portfolio approach approximates the revenue that would have been recognized if an individual contract approach were used.

Consistent with Rush's mission, care is provided to patients regardless of their ability to pay. Rush provides care without charge or at amounts less than its established rates to patients meeting certain criteria under its charity care policy. Such amounts determined to qualify as charity care are not reported as revenue. Therefore, Rush has determined it has provided implicit price concessions to uninsured patients and patients with other uninsured balances, such as copays and deductibles. The implicit price concessions included in estimating the transaction price represent the difference between amounts billed to patients and the amounts Rush expects to collect based on its collection history with those patients. For the years ended June 30, 2019 and 2018, implicit price concessions totaled approximately \$79,952 and \$81,078, respectively.

Inventory

Medical supplies, pharmaceuticals, and other inventories are stated at the lower of cost or net realizable value and are included in other current assets in the accompanying consolidated balance sheets.

Fair Value of Financial Instruments

Financial instruments consist of cash and cash equivalents, investments, derivative instruments, accounts receivable, accounts payable, accrued expenses, estimated third-party settlements, and debt. The fair value of cash and cash equivalents, accounts receivable, accounts payable, accrued expenses, and estimated third-party settlements approximated their financial statement carrying amount as of June 30, 2019 and 2018, because of their short-term maturity. The fair value of the other instruments is disclosed in Notes 6, 9, and 12.

Assets Limited as to Use and Investments

Assets limited as to use consist primarily of investments limited as to use by donors, unconditional promises to contribute, assets held by trustees under debt or other agreements and for self-insurance, and board designated assets set aside for a specified future use. Investments in equity and debt securities with readily determinable fair values are measured at fair value using quoted market prices or model-driven valuations.

Alternative investments consist of limited partnerships that invest primarily in marketable securities (hedge funds), real estate, and limited partnerships that invest in nonmarketable securities (private equity). Investments in hedge funds and private equity funds are generally not marketable and may be divested only at specified times.

Investments in hedge funds are measured at fair market value based on Rush's interest in the net asset value (NAV) of the respective fund. The estimated valuations of hedge fund investments are subject to uncertainty and could differ had a ready market existed for these investments. Such differences could be material. Real estate investments are carried at amortized cost. Investments in private equity funds entered into on or after July 1, 2012, are measured at fair value based on the estimated fair values of the nonmarketable private equity partnerships in which it invests, which is equivalent to NAV, when Rush's ownership is minor (less than 5%). The estimated valuations of private equity partnerships are subject to uncertainty and could differ had a ready market existed for these investments. Such differences could be material. Investments in private equity funds entered into during fiscal year 2012 or prior years are reported at cost, adjusted for impairment losses, based on information provided by the respective partnership when Rush's ownership percentage is minor (less than 5%). Investments in private equity funds where Rush's ownership percentage is more than minor, but consolidation is not required (5% to 50%), are accounted for on the equity basis. These investments are periodically assessed for impairment. The financial statements of hedge funds and private equity funds are audited annually, generally on December 31. Rush's risk in alternative investments is limited to its capital investment and any future capital commitments (see Note 5).

Investment income or loss (including interest, dividends, realized and unrealized gains and losses, and changes in cost-based valuations) is reported within excess of revenue over expenses within the accompanying consolidated statements of operations and changes in net assets, net of investment related expenses, unless the income or loss is restricted by donor or interpretation of law. Investment gains and losses on Rush's endowment and trustee-held funds are recognized within net assets with donor restrictions. Income earned on tax-exempt borrowings for specific construction projects is offset against interest expense capitalized for such projects.

Derivative Instruments

Derivative instruments, specifically interest rate swaps, are recorded in the consolidated balance sheets as either assets or liabilities at their respective fair values. The change in the fair value of derivative instruments is reflected in non-operating income (expense) in the accompanying consolidated statements of operations and changes in net assets. Net cash settlements and payments, representing the realized changes in the fair value of the interest rate swaps, are

included in interest expense in the accompanying consolidated statements of operations and changes in net assets and as operating cash flows in the accompanying consolidated statements of cash flows (see Note 10).

Property and Equipment

Property and equipment are recorded at cost or, if donated, at fair value at the date of receipt. Expenditures that substantially increase the useful life of existing property and equipment are capitalized. Routine maintenance and repairs are expensed as incurred. Depreciation expense, including amortization of capital leased assets, is recognized over the estimated useful lives of the assets using the straight-line method. Buildings and building service equipment assets have an estimated useful life of 10 to 80 years, moveable equipment assets have an estimated useful life of 5 to 10 years, and computer software and hardware assets have an estimated useful life of 3 to 5 years.

Long-Lived Assets and Impairment

Rush carries tangible and intangible long-lived assets, including goodwill. Rush continually evaluates the recoverability of the carrying value of long-lived assets by reviewing long-lived assets for impairment. No asset impairments were recorded during the years ended June 30, 2019 and 2018.

Asset Retirement Obligations

Rush recognizes the fair value of a liability for legal obligations associated with asset retirements in the period in which it is incurred if a reasonable estimate of the fair value of the obligation can be made. When the liability is initially recorded, Rush capitalizes the cost of the asset retirement obligation by increasing the carrying amount of the related long-lived asset. The liability is accreted to its present value each period, and the capitalized cost associated with the retirement obligation is depreciated over the useful life of the related asset. Upon settlement of the obligation, any difference between the cost to settle an asset retirement obligation and the liability recorded is recognized as a gain or loss in the consolidated statements of operations and changes in net assets. Asset retirement obligations are reported in other liabilities in the accompanying consolidated balance sheets and amounted to \$22,263 and \$21,187 as of June 30, 2019 and 2018, respectively.

Ownership Interests in Other Health-Related Entities

Rush has a majority ownership interest in a number of subsidiaries, which provide outpatient surgical and imaging services. An ownership interest of more than 50% in another health-related entity in which Rush has a controlling interest is consolidated, except for Rush Health as discussed in Note 1, As of June 30, 2019 and 2018, noncontrolling interests in consolidated subsidiaries amounted to \$7,953 and \$11,545, respectively. The amounts related to noncontrolling interests are recorded in net assets without donor restrictions, and as the amounts are not material, they are not separately presented in the accompanying consolidated financial statements. Rush also has affiliations with and interests in other organizations that are not consolidated. These organizations primarily provide outpatient health care and managed care contracting services. An ownership interest in another health-related entity of at least 20%, but not more than 50%, in which Rush has the ability to exercise significant influence over the operating and financial decisions of the investee, is accounted for on the equity basis (see Note 18), and the income (loss) is reflected in other revenue. An ownership interest in a health-related entity of less than 20%, in which Rush does not have the ability to exercise significant influence over the operating and financial decisions of the investee, is carried at cost or estimated net realizable value and reported within other assets, which is not material to the consolidated financial statements. Effective April 1, 2019, Rush's ownership interest in the Rush Oak Brook Surgery Center joint venture was decreased from 50% to 25%. As a result the joint venture is no longer consolidated within the accompanying consolidated balance sheet and is now recorded using the equity method. Total assets of \$13,935, total liabilities of \$15,197 and total net assets of \$(1,262) were removed from the consolidated balance sheet on the date of the ownership change.

Deferred Financing Costs

Debt issuance costs, net of amortization computed on the effective interest basis over the life of the related debt, are reported within long-term debt in the consolidated balance sheets. Unamortized debt issuance costs amounted to \$3,827 and \$4,606 as of June 30, 2019 and 2018, respectively.

Other Assets

Other assets include investments in joint ventures accounted for on the equity basis, goodwill, insurance recoveries and other intangible assets. Rush reviews goodwill for impairment annually; no impairment was recorded for the fiscal years ended June 30, 2019 and 2018.

Other Long-term Liabilities

Other long-term liabilities include asset retirement obligations, employee benefit plan liabilities for certain defined contribution and supplemental retirement plans other than defined benefit pension plans (see Note 12), liabilities for derivative instruments, and other long-term obligations.

Net Assets

Net assets are classified based on the existence or absence of donor or grantor imposed restrictions. Accordingly, net assets and changes therein are classified and reported as follows:

Net Assets Without Donor Restrictions — Net assets without donor restrictions are resources available to support operations. The only limits on the use of these assets are the broad limits resulting from the nature of the organization, the environment in which it operates, the purposes specified in its corporate documents and its application for tax-exempt status, and any limits resulting from contractual agreements with creditors and others that are entered into in the course of business. The net assets without donor restrictions of the Corporation are primarily derived from annual excess of revenue over expenses and net assets released from donor restrictions for operations. Voluntary resolutions by the Board to designate a portion of its net assets without donor restrictions for specific purposes are presented as board-designated. Because these designations are voluntary and may be reversed by the Board at any time, board-designated net assets are included under the caption "without donor restriction".

Net Assets With Donor Restrictions — Net assets with donor restrictions are resources that are restricted by a donor for use for a particular purpose or in a particular future period. Some donor-imposed restrictions are temporary in nature, and the restriction will expire when the resources are used in accordance with the donor's instructions or when the stipulated time has passed. Other donor-imposed restrictions are perpetual in nature, whereby the organization must continue to use the resources in accordance with the donor's instructions.

Contributions

Unconditional contributions and promises to contribute cash and other assets (pledge receivable) are reported at fair value at the date the promise is received. Fair value is estimated as the net present value of the estimated future cash flows of such awards. Estimated future cash flows due after one year are discounted using interest rates commensurate with the time value of money concept. Net unconditional promises to contribute are reported in assets limited as to use by donor or time restriction in the accompanying consolidated balance sheets and amounted to \$26,399 and \$27,891 as of June 30, 2019 and 2018, respectively (see Note 15).

Conditional contributions are similarly reported at fair value when the conditions have been substantially met. Contributions are conditional when there are barriers that Rush must overcome to be entitled to the funds. Rush has received approximately \$105,405 of conditional contributions whose conditions have not been substantially met as of June 30, 2019. Of this amount, approximately \$79,113 relates to federal, state and local grant awards where Rush expects to meet the condition of incurring allowable expenditures under the various grants within the next twelve

months. Another \$26,292 is related to awards from foundations and other not-for-profit organizations where Rush expects to recognize the contribution once the conditions have been met.

Unconditional contributions and conditional contributions whose conditions have been substantially met are reported as net assets with donor restrictions if they are received with donor stipulations that limit the use of the donated assets. When a donor restriction expires, the restricted net assets are released as net assets without restrictions and reported in the consolidated statements of operations as other revenue (if time restricted or restricted for operating purposes) or reported in the consolidated statements of changes in net assets as net assets released from restrictions used for purchase of property and equipment (if restricted for capital acquisitions). Donor-restricted contributions for operating purposes whose restrictions are met within the same year as either received or the same year as the condition is substantially met are reported as other revenue in the accompanying consolidated statements of operations and changes in net assets.

Rush is the beneficiary of several split-interest agreements, primarily perpetual trusts held by others, which are recorded in assets limited as to use within the accompanying consolidated balance sheets. Rush recognizes its interest in these trusts based on either Rush's percentage of the fair value of the trust assets or the present value of expected future cash flows to be received from the trusts, as appropriate, based on each trust arrangement.

Excess of Revenue over Expenses

The consolidated statements of operations and changes in net assets include excess of revenue over expenses as a performance indicator. Excess of revenue over expenses includes all changes in net assets without donor restrictions, net of investment related expenses, except for contributions of (and assets released from donor restrictions related to) long-lived assets, and other items that are required by GAAP to be reported separately (such as extraordinary items, the effect of discontinued operations, postretirement-related changes other than net periodic postretirement costs, and the cumulative effect of changes in accounting principle).

Non-Operating Income (Expense)

Non-operating income (expense) includes items not directly associated with patient care or other core operations of Rush. Non-operating income (expense) consists primarily of investment returns without donor restrictions, endowment investment income appropriated for use, the difference between total investment return and amount allocated to operations for investments designated for self-insurance programs, investment income or loss (including interest, dividends, and realized and unrealized gains and losses), net of investment related expenses, on all other investments unless restricted by donor or interpretation of law, changes in the fair value of interest rate swaps, losses on extinguishment of debt, contributions without donor restrictions, and fundraising expenses.

Consideration of Events Subsequent to the Consolidated Balance Sheet Date

Rush has evaluated events occurring subsequent to the consolidated balance sheet date through October 25, 2019, the date the consolidated financial statements were available to be issued. There were no significant subsequent events through this date, with the exception of the adoption of ASU 2016-02, *Leases* and ASU 2017-07, *Compensation* — *Retirement Benefits*, the issuance of long-term debt and subsequent payoff of the outstanding line of credit (see Note 9), and the corporate restructuring of Rush Health. Effective August 12, 2019, Rush became the sole corporate member of Rush Health.

3. PATIENT SERVICE REVENUE

The mix of patient service revenue, recognized during the years ended June 30, 2019 and 2018, by major payor source and by lines of business, was as follows:

	June 30, 2019												
		RUH		ROPH		RCMC		hysician Groups		nical Joint entures & Other		Total	
Medicare	\$	356,835	\$	35,251	\$	71,149	\$	51,715	\$	13,552	\$	528,502	22.8%
Medicare Managed Care		61,079		7,527		22,928		7,900		-		99,434	4.3
Medicaid		71,238		1,440		34,529		4,582		2,347		114,136	4.9
Medicaid Managed Care		147,254		11,568		21,397		27,610		10,870		218,699	9.4
Managed Care		235,722		28,785		91,757		68,240		20,556		445,060	19.2
Blue Cross		479,360		34,627		82,896		52,566		19,843		669,292	28.9
Commercial, Self-Pay and													
Other	_	158,919	_	21,883	_	14,170	_	33,313	_	12,362	_	240,647	10.4
Revenue	\$	1,510,407	\$	141,081	\$	338,826	\$	245,926	\$	79,530	\$	2,315,770	100.0 %

	_						June .	30, 2018					
	RUH		RUH ROPH						Clinical Joint Ventures & Other		Total		
Medicare	\$	334,316	\$	34,106	\$	66,760	\$	48,240	\$	10,222	\$	493,644	23.0%
Medicare Managed Care		54,468		6,731		16,977		9,416		8		87,600	4.1
Medicaid		78,927		4,765		34,629		3,809		1,511		123,641	5.8
Medicaid Managed Care		132,588		10,736		16,073		21,829		6,998		188,224	8.8
Managed Care		232,876		28,166		82,953		59,965		15,526		419,486	19.6
Blue Cross		435,963		30,069		82,899		45,442		17,242		611,615	28.5
Commercial, Self-Pay and													
Other	_	136,961	_	19,954	_	14,921	_	36,598	_	9,870	_	218,304	10.2
Revenue	\$	1,406,099	\$	134,527	\$	330,133	\$	225,299	\$	61,377	\$	2,142,514	100.0 %

Agreements with third-party payors typically provide for payments at amounts less than established charges. A summary of the payment arrangements with major third-party payors follows:

Medicare and Medicare Managed Care: Certain inpatient acute care services are paid at prospectively determined rates per discharge based on clinical, diagnostic and other factors. Certain services are paid based on cost-reimbursement methodologies subject to certain limits. Physician services are paid based upon established fee schedules. Outpatient services are paid using prospectively determined rates.

Medicaid and Medicaid Managed Care: Medicaid services are generally paid at prospectively determined rates per discharge, per occasion of service.

Blue Cross, Managed Care, Commercial and Other: Payment agreements with certain commercial insurance carriers, health maintenance organizations, and preferred provider organizations provide for payment using prospectively determined rates per discharge, discounts from established charges, and prospectively determined daily rates.

The health care industry is subject to numerous laws and regulations of federal, state, and local governments. Compliance with these laws and regulations, specifically those relating to the Medicare and Medicaid programs, can be subject to review and interpretation, as well as regulatory actions unknown and unasserted at this time. Federal government activity continues with respect to investigations and allegations concerning possible violations of

regulations by health care providers, which could result in the imposition of significant fines and penalties, as well as significant repayment of previously billed and collected revenues from patient services. Management believes that Rush is in substantial compliance with current laws and regulations.

Laws and regulations governing payment programs are complex and subject to interpretation. Settlements with third-party payors for retroactive adjustments due to audits, reviews or investigations are considered variable consideration and are included in the determination of the estimated transaction price for providing patient care using the most likely outcome method. These settlements are estimated based on the terms of the payment agreements with the payor, correspondence from the payor and historical settlement activity, including an assessment to ensure that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the retroactive adjustment is subsequently resolved. Estimated settlements are adjusted in future periods as new information becomes available or as years are settled or are no longer subject to such audits, reviews and investigations. As a result, there is a reasonable possibility that recorded estimated third-party settlements could change by a material amount.

Rush has filed formal appeals relating to the settlement of certain prior-year Medicare cost reports. The outcome of such appeals cannot be determined at this time. Any resulting gains will be recognized in the consolidated statements of operations and changes in net assets when realized.

4. CHARITY CARE

Rush has an established charity care policy and maintains records to identify and monitor the level of charity care it provides. RUMC provides free care to all patients whose family income is 300% of the federal poverty level or less, and an additional discount is available to all patients with family income up to 400% of the federal poverty level. All uninsured patients receive a tiered discount regardless of their ability to pay. These discounts apply to patients with family income ranging from 301% to 1,000% of the federal poverty level, with discounts ranging from 33% to 68%. In addition, any uninsured patient with family income over 1,000% of the federal poverty level would still receive a 33% discount. RCMC provides free care to all patients who apply and support income and asset levels of less than 300% of the current-year poverty level and a 30% discount to all uninsured patients regardless of ability to pay, and discounts balances to patients under 600% of the poverty level. Interest-free payment plans are also provided. Charity care includes the estimated cost of unreimbursed services provided and supplies furnished under its charity care policy and the excess of cost over reimbursement for Medicaid patients. The estimated cost of charity care provided is determined using a ratio of cost to gross charges and multiplying that ratio by the gross unreimbursed charges associated with providing care to charity patients.

In December 2008, the Centers for Medicare and Medicaid Services approved the Illinois Hospital Assessment Program (the "Program") to improve Medicaid reimbursement for Illinois hospitals. This Program increased net patient service revenue in the form of additional Medicaid payments and increased supplies, utilities, and other expense through a tax assessment from the State of Illinois. In fiscal year 2014, the State of Illinois approved a new enhanced assessment program providing additional funding to Rush. The net benefit to Rush from the Program was \$42,267 and \$56,284 during the years ended June 30, 2019 and 2018, respectively. For the years ended June 30, 2019 and 2018, the Medicaid payment of \$105,985 and \$110,409 was included in patient service revenue, representing 5% of the patient service revenue for fiscal years 2019 and 2018, respectively, and the tax assessment of \$63,718 and \$54,125, respectively, was included in supplies, utilities, and other expenses within the consolidated statements of operations and changes in net assets. The State of the Illinois and the Centers for Medicare and Medicaid Services (CMS) has approved a redesign of the Hospital Assessment program effective July 1, 2018. The redesign did not have a material impact on the RSH.

The following table presents the level of charity care and Medicaid provided for the years ended June 30, 2019 and 2018:

	2019	2018
Excess of allocated cost over reimbursement for services provided to hospital Medicaid patients—net of net benefit under the Program Estimated costs and expenses incurred to provide charity care	\$ 141,528	\$ 104,515
in the hospitals	26,968	33,877
Total	\$ 168,496	\$ 138,392

Beyond the cost to provide charity care and unreimbursed services to hospital Medicaid patients, Rush also provides substantial additional benefits to the community, including educating future health care providers, supporting research into new treatments for disease, and providing subsidized medical services in response to community and health care needs, as well as other volunteer services. These community services are provided free of charge or at a fee below the cost of providing them.

5. ASSETS LIMITED AS TO USE AND INVESTMENTS

Assets limited as to use and investments consist primarily of marketable equity and debt securities, which are held in investment pools to satisfy the investment objectives for which the assets are held or to satisfy donor restrictions. Rush also holds certain investments in alternative investments consisting of hedge funds, real estate investments, private equity funds, and private debt (see Note 2). Assets limited as to use by donor or time restriction also include unconditional promises to contribute (see Note 15).

Following is a summary of the composition of assets limited as to use and investments as of June 30, 2019 and 2018:

		2019		2018
Marketable securities and short-term investments Fixed income securities Public equity securities Fund investments (mutual/commingled) Alternative investments Other	\$	15,108 505,350 235,884 943,835 230,777 (39,365)	\$	22,963 485,800 218,261 901,009 210,140 (20,978)
Total assets limited as to use and investments		1,891,589		1,817,195
Beneficial interest in trusts	_	29,739	_	29,675
Total assets limited as to use and investments—excluding pledges receivable		1,921,328		1,846,870
Net pledges receivable	_	26,399	_	27,891
Total assets limited as to use and investments		1,947,727		1,874,761
Less amount reported as current assets	_	(30,629)	_	(20,346)
Assets limited as to use and investments—noncurrent	\$	1,917,098	<u>\$</u>	1,854,415

As of June 30, 2019 and 2018, Rush has commitments for additional alternative investments totaling \$122,481 and \$133,752, respectively.

It is Rush's intent to maintain a long-term investment portfolio to support its self-insurance program. Accordingly, the total return on investments restricted for the self-insurance program is reported in the component statements of operations and changes in net assets in two income statement line items. The investment return allocated to operations, reported in other revenue, is determined by a formula designed to provide a consistent stream of investment earnings to support the self-insurance provision reported in insurance expense in the accompanying component statements of operations and changes in net assets. This allocated return, 4% for the years ended June 30, 2019 and 2018, approximates the real return that Rush expects to earn on its investments over the long term and totaled \$5,731 and \$5,419 for the years ended June 30, 2019 and 2018, respectively. The difference between the total investment return and the amount allocated to operations is reported in non-operating income and totaled \$2,476 and \$428 for the years ended June 30, 2019 and 2018, respectively. There is no guarantee that the investment return expected by management will be realized. For the years ended June 30, 2019 and 2018, the total annual investment return was approximately 5.7% and 4.3%, respectively.

The composition and presentation of investment income and the realized and unrealized gains and losses on all investments, net of investment related expenses, for the years ended June 30, 2019 and 2018, are as follows:

	2019	2018
Interest and dividends Net realized gains on sales of securities Unrealized gains (losses)—without donor restrictions Unrealized (losses) gains—with donor restrictions	\$ 36,759 23,016 30,885 (1,979)	\$ 34,345 52,658 (2,293) 4,514
	\$ 88,681	\$ 89,224
Reported as: Other operating revenue Nonoperating income Net assets with donor restrictions - Net realized/unrealized gains on investments	\$ 6,044 56,329 26,308	\$ 5,550 35,145 48,529
	\$ 88,681	\$ 89,224

6. FAIR VALUE MEASUREMENTS

As of June 30, 2019 and 2018, Rush held certain assets and liabilities that are required to be measured at fair value on a recurring basis, including marketable securities and short-term investments, certain restricted, trusteed and other investments, derivative instruments, and beneficial interests in trusts. Certain alternative investments measured using either the cost or equity method of accounting are excluded from the fair value disclosure provided herein.

Valuation Principles

Under FASB Accounting Standard Codification 820, Fair Value Measurement, fair value is defined as an exit price, representing the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The valuation techniques used to measure fair value are based upon observable and unobservable inputs. Observable inputs generally reflect market data from independent sources and are supported by market activity, while unobservable inputs are generally unsupported by market activity. The three-level valuation hierarchy, which prioritizes the inputs used in measuring fair value of an asset or liability at the measurement date, includes:

Level 1 inputs — Quoted prices (unadjusted) for identical assets or liabilities in active markets. Securities typically priced using Level 1 inputs include listed equities and exchange-traded mutual funds.

Level 2 inputs — Quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets and liabilities in nonactive markets, and model-driven valuations whose inputs are observable for the asset or

liability, either directly or indirectly. Securities typically priced using Level 2 inputs include government bonds (including US treasuries and agencies), corporate and municipal bonds, collateralized obligations, interest rate swaps, commercial paper and currency options.

Level 3 inputs — Unobservable inputs for which there is little or no market data available and are based on the reporting entity's own judgment or estimation of the assumptions that market participants would use in pricing the asset or liability. The fair values for securities typically priced using Level 3 inputs are determined using model-driven techniques, which include option-pricing models, discounted cash flow models, and similar methods. The level 3 classification includes beneficial interests in trusts.

Fair Value Measurements at the Consolidated Balance Sheet Date

The following tables present Rush's fair value hierarchy for its financial assets and liabilities measured at fair value on a recurring basis as of June 30, 2019 and 2018:

Fair Value Measurements as of June 30, 2019	Level 1	Level 2	Level 3	Valued @ NAV	Total Fair Value
Marketable securities and short-term investments	\$ 1,790	\$ 219	\$ -	\$ 13,050	\$ 15,059
Fixed Income Securities:					
U.S. Government and Agency securities	-	251,647	-	-	251,647
Corporate Bonds	-	204,966	-	-	204,966
Asset Backed Securities and Other	-	48,737	-	-	48,737
Public Equity Securities	235,884	-	-	-	235,884
Fund Investments (Mutual/Commingled):					
Fixed Income Funds	243,188	-	-	-	243,188
Public Equity Funds	225,222	-	-	261,265	486,487
Multi Asset Class Funds	163,466	-	-	26,819	190,285
Alternative Investments:					
Hedge Funds	-	-	-	71,226	71,226
Private Equity Partnerships	=	=	=	90,249	90,249
Private Debt	-	-	-	69,302	69,302
Other:					
Derivative Assets	-	416	-	-	416
Trustee-held Investments			29,739		29,739
Pending Transactions		(65,194)			(65,194)
Total investments	\$ 869,550	\$ 440,791	\$ 29,739	\$ 531,911	\$1,871,991
Obligations under interest rate swap agreements	\$ -	\$ (14,782)	\$ -	\$ -	\$ (14,782)
Other derivative liabilities		(867)		<u> </u>	(867)
Total liabilities at fair value	\$ -	\$ (15,649)	\$ -	\$ -	\$ (15,649)

There were no transfers between Level 1, 2, 3 or NAV during fiscal year 2019.

Fair Value Measurements as of June 30, 2018		Level 1		Level 2		Level 3	Val	ued @ NAV	Fá	Total air Value
Marketable securities and short-term investment	\$	1,736	\$	28	\$	-	\$	21,199	\$	22,963
Fixed Income Securities: U.S. Government and Agency securities Corporate Bonds Asset Backed Securities and Other		- - -		226,069 212,127 47,605		-		-		226,069 212,127 47,605
Public Equity Securities		218,261		-		-		-		218,261
Fund Investments (Mutual/Commingled):										
Fixed Income Funds Public Equity Funds Multi Asset Class Funds		237,138 214,974 160,367		- - -		- - -		- 261,265 27,266		237,138 476,239 187,633
Alternative Investments: Hedge Funds Private Equity Partnerships Private Debt		- - -		- - -		- - -		82,609 74,301 53,229		82,609 74,301 53,229
Other: Derivative Assets Trustee-held Investments	_	-	_	780 -	_	- 29,675		-		780 29,675
Pending Transactions	_	-	_	(45,113)	_			-		(45,113)
Total investments	\$	832,476	\$	441,496	\$	29,675	\$	519,869	\$1	,823,516
Obligations under interest rate swap agreements Other derivative liabilities	\$	-	\$	(11,600) (122)	\$	-	\$	-	\$	(11,600) (122)
Total liabilities at fair value	\$	-	\$	(11,722)	\$	-	\$	-	\$	(11,722)

There were no transfers between Level 1, 2, 3 or NAV during fiscal year 2018.

Valuation Techniques and Inputs for Level 2 and Level 3 Instruments

The Level 2 and Level 3 instruments listed in the preceding fair value tables use the following valuation techniques and inputs as of the valuation date:

Fixed Income Securities — Fixed income securities consists primarily of U.S. Government and agency securities, corporate bonds, and asset backed securities, all of which are classified as Level 2. The fair value of investments in U.S. government and agency securities and corporate bonds was primarily determined using techniques consistent with the market approach, including matrix pricing and significant observable inputs of institutional bids, trade data, broker and dealer quotes, discount rates, issues spreads, and benchmark yield curves. The asset backed securities encompasses collateralized bond obligations, collateralized loan and mortgage obligations any other asset backed securities. The fair value of these securities was determined using techniques consistent with the market and income approach, such as discounted cash flows and matrix pricing.

Beneficial Interest in Trusts — The fair value of beneficial interests in perpetual and charitable trusts classified as Level 3 was determined using an income approach based on the present value of expected future cash flows to be received from the trust or based on Rush's beneficial interest in the investments held in the trust measured at fair value. Since Rush is unable to liquidate the funds held and benefits only from the distributions generated off of such investments, the interest in such trusts are all shown in Level 3.

Obligations Under Interest Rate Swap Agreements — The fair value of Rush's obligations under interest rate swap agreements classified as Level 2 is valued using a market approach. The valuation is based on a determination of market expectations relating to the future cash flows associated with the swap contract using sophisticated modeling based on observable market-based inputs, such as interest rate curves. The fair value of the obligation reported in Rush's consolidated balance sheets includes an adjustment for the Obligated Group's credit risk but may not be indicative of the value Rush would be required to pay upon early termination of the swap agreements.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while Rush believes that its methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

Level 3 Rollforward

A rollforward of the amounts in the consolidated balance sheets for financial instruments classified by Rush within Level 3 of the fair value hierarchy is as follows:

	Interest in Trusts
Fair value — June 30, 2017 Actual return on investments — Realized and unrealized losses	\$ 27,863 1,812
Purchases Sales	- - -
Fair value — June 30, 2018 Actual return on investments — Realized and unrealized gains	29,675 64
Purchases Sales	
Fair value — June 30, 2019	<u>\$ 29,739</u>

Investments in Entities that Report Fair Value Using NAV

Included within the fair value table above are investments in certain entities that report fair value using a calculated NAV or its equivalent. These investments consist of hedge fund of funds, private equity partnerships, and private debt within alternative investments. The NAV instruments listed in the fair value measurement tables use the following valuation techniques and inputs as of the valuation date:

Marketable Securities and Short Term Investments — Marketable securities and short term investments classified as NAV are invested in a short-term collective fund that serves as an investment vehicle for cash reserves. Fair value was determined using the calculated NAV as of the valuation date, based on a constant price. These funds are invested in high quality and short term money market instruments with daily liquidity.

Fund Investments — Investments within this category consist of public equity funds and multi-asset funds. The fair value of public equity funds classified at NAV are primarily determined using the calculated NAV at the valuation date under a market approach. This includes investments in commingled funds that invest primarily in domestic and foreign equity securities whose underlying values have a readily determinable market value or based on a net asset value. Multi-asset funds include investments in fund of funds that seek to provide both capital appreciation and income by investing in both traditional and alternative asset funds. The asset allocation is driven by the fund manager's long-range

forecasts of asset-class real returns. Investments in this category classified as NAV are held in a commingled fund that invests primarily in global equity and bond mutual funds. Included in this category is a multistrategy hedge fund, priced on the last business day of each calendar month. The values for underlying investments are estimated based on many factors, including operating performance, balance sheet indicators, growth, and other market and business fundamentals. The underlying investment strategies can include long-short, global macro, fixed-income and currency hedges, and other tactical opportunity-related strategies.

Alternative Investments — Investments within this category consist primarily of hedge fund of funds, private equity partnerships, and private debt. The hedge fund of funds consist of diversified investments including equity long/short, credit long/short, event-drive, relative value, global opportunities, and other multistrategy funds. Hedge fund of funds investments are valued based on Rush's ownership interest in the NAV of the respective fund as estimated by the general partner, which approximates fair value. Effective July 1, 2012, Rush elected to measure all new private equity partnerships entered into on or after July 1, 2012, at fair value (see Note 2). Private equity partnerships are valued based on the estimated fair values of the nonmarketable private equity partnerships in which it invests, which is an equivalent of NAV.

The following table summarizes the attributes relating to the nature and risk of such investments as of June 30, 2019:

Entities that Report Fair Value Using NAV	Unfunded Commitment (In Thousands		Redemption Notice Period
Fund Investments (Mutual/Commingled)	None	Daily/Monthly	1-15 days
Alternative Investments:			
Hedge Funds	None	Quarterly	65-95 days
Private Equity Partnerships	\$ 78,877	Not currently redeemable	N/A
Private Debt	43,605	Not currently redeemable	N/A
Total	\$ 122,482		

7. ENDOWMENT FUNDS

Rush's endowment consists of more than 400 individual funds, which are established for a variety of purposes. As required by GAAP, net assets associated with endowment funds are classified and reported based on the existence or absence of donor-imposed restrictions.

Interpretation of Relevant Law

Rush has interpreted the Uniform Prudent Management of Institutional Funds Act (UPMIFA) as requiring preservation of the original value of the gift as of the gift date absent explicit donor stipulations to the contrary. As a result of this interpretation, Rush classifies as net assets with donor restrictions (a) the original value of gifts donated to the permanent endowment, (b) the original value of any subsequent gifts to the permanent endowment, and (c) accumulations to the permanent endowment made in accordance with the direction of the applicable gift instrument at the time the accumulation is added to the fund. In accordance with UPMIFA, Rush considers the following factors in making a determination to appropriate or accumulate donor-restricted funds:

- a. The duration and preservation of the fund
- b. The purposes of the organization and the donor-restricted endowment fund $% \left(1\right) =\left(1\right) \left(1\right$
- c. General economic conditions
- d. The possible effect of inflation and deflation
- e. The expected total return from income and the appreciation of investments
- f. Other resources of the organization
- g. The investment policies of the organization

Endowment Investment and Spending Policies

Rush has adopted endowment investment and spending policies to preserve purchasing power over the long term and provide stable annual support to the programs supported by the endowment, including professorships, research and education, free care, student financial aid, scholarships, and fellowships. Approximately 17% of Rush's endowment is available for general purposes for the years ended June 30, 2019 and 2018.

The Investment Committee of the Board of Trustees is responsible for defining and reviewing the investment policy to determine an appropriate long-term asset allocation policy. The asset allocation policy reflects the objective with allocations structured for capital growth and inflation protection over the long term. The current asset allocation targets and ranges as well as the asset allocation as of June 30, 2019 and 2018, are as follows:

	Target Allocation and Range	Percentage of Endo	owment Assets
Asset Class		2019	2018
Global equity	55% (+/- 5%)	56 %	56 %
Multi Asset Fund	10% (+/- 5%)	12	13
Private equity	15% (+/- 5%)	18	17
Fixed income	20% (+/- 5%)	14	15

To achieve its long-term rate of return objectives, Rush relies on a total return strategy in which investment returns are achieved through both capital appreciation (realized and unrealized) and current income (interest and dividends). The expected long-term rate of return target of the endowment given its current asset allocation structure is approximately 7.0%. Actual returns in any given year may vary from this amount. Rush has established market-related benchmarks to evaluate the endowment fund's performance on an ongoing basis.

The Finance Committee of the Board of Trustees approves the annual spending policy for program support. In establishing the annual spending policy, Rush's main objectives are to provide for intergenerational equity over the long term, the concept that future beneficiaries will receive the same level of support as current beneficiaries on an inflation-adjusted basis, and to maximize annual support to the programs supported by the endowment. The spending rate was 4.0% for the fiscal years ended June 30, 2019 and 2018 and income from the endowment fund provided \$20,126 and \$19,190 of support for Rush's programs during the fiscal years ended June 30, 2019 and 2018, respectively.

Composition of Endowment Fund and Reconciliation

The endowment net asset composition by type of fund as of June 30, 2019, consisted of the following:

	Without Restrictions	With Restrictions	Total
Donor-restricted endowment funds Board-designated endowment funds	\$ - 13,026	\$ 640,339 -	\$ 640,339 13,026
Total funds	<u>\$ 13,026</u>	\$ 640,339	\$ 653,365

Changes in endowment net assets for the fiscal year ended June 30, 2019, consisted of the following:

	Without Restrictions	With Restrictions	Total
Endowment net assets — June 30, 2018	\$ 7,988	\$ 630,156	\$ 638,144
Contributions Net investment return Transfer of endowment appreciation	5,000 211 (173)	3,567 26,729 (20,113)	8,567 26,940 (20,286)
Endowment net assets — June 30, 2019	\$ 13,026	\$ 640,339	\$ 653,365

The endowment net asset composition by type of fund as of June 30, 2018, consisted of the following:

	Without Restrictions	With Restrictions	Total
Donor-restricted endowment funds Board-designated endowment funds	\$ - 7,988	\$ 630,156	\$ 630,156 7,988
Total funds	\$ 7,988	\$ 630,156	\$ 638,144

Changes in endowment net assets for the fiscal year ended June 30, 2018, consisted of the following:

	Without Restrictions	With Restrictions	Total
Endowment net assets — June 30, 2017	<u>\$ 7,752</u> <u>\$</u>	590,675	\$ 598,427
Contributions Net investment return Transfer of endowment appreciation	420 (184)	7,782 51,017 (19,318)	7,782 51,437 (19,502)
Endowment net assets — June 30, 2018	\$ 7,988 \$	630,156	\$ 638,144

Fund Deficiencies

Rush monitors the accumulated losses on investments within net assets restricted by donors to be maintained in perpetuity to determine whether the endowment corpus has been impaired. The endowment funds are invested in an investment pool, which also includes investments with net assets restricted by donors for a specific time period or purpose and investments within net assets without donor restrictions. No endowments were impaired for fiscal years ending June 30, 2019 and 2018.

8. PROPERTY AND EQUIPMENT

Property and equipment as of June 30, 2019 and 2018 consisted of the following:

	2019	2018
Land and buildings Equipment	\$ 2,110,350 822,928	\$ 2,082,657 763,476
Construction in progress	221,838	163,003
Total	3,155,116	3,009,136
Less accumulated depreciation	(1,602,175)	(1,511,504)
Property and equipment, net	\$ 1,552,941	\$ 1,497,632

Property and equipment, net, includes \$1,656 and \$39,581 in leased property and equipment as of June 30, 2019 and 2018, respectively. Accumulated depreciation on leased property and equipment amounted to \$452 and \$22,977 as of June 30, 2019 and 2018, respectively.

Rush continues to make campus improvements and has a number of construction projects planned with a Master Facility Plan that began in fiscal year 2017. As of June 30, 2019 and 2018, Rush had construction commitments outstanding of \$145,425 and \$70,937, respectively.

9. LONG-TERM DEBT AND CREDIT ARRANGEMENTS

Rush's long-term debt is issued under a Master Trust Indenture, which established the Obligated Group composed of RUMC and RCMC. The Obligated Group is jointly and severally liable for the obligations issued under the Master Trust Indenture. Each Obligated Group member is expected to pay its allocated share of the debt issued on its behalf. As of June 30, 2019 and 2018, such issuances are secured by a pledge of gross receipts, as defined, of the Obligated Group members.

A summary of Rush's long-term debt as of June 30, 2019 and 2018, is as follows:

				utstanding at e 30,
	Interest Rates	Final Maturity Date	2019	2018
Illinois Finance Authority Revenue Bonds:				
Fixed-rate revenue bonds:				
Series 2015 A/B	5.00%	November 15, 2039	\$ 457,475	\$ 466,365
Variable-rate revenue bonds:				
Series 2016	Averrage of 2.89% and			
	1.78% in FY2019 and			
	FY2018, respectively	November 1, 2045	50,000	50,000
Series 2011, Tax-Exempt	Average of 2.73% and			
Private Placement with a	1.67% in FY2019 and			
commercial bank	FY2018, respectively	November 1, 2024	31,405	34,66
Total variable rate debt			81,405	84,665
Total tax-exempt debt			538,880	551,030
Other Debt:				
Mortgage loan, collateralized by fitness ce	4.40%	May 2021	2,006	2,98
Line of Credit	3.20%	August 29, 2019	36,500	36,500
Total par value of debt			577,386	590,516
Less current portion of long-term debt			(14,270)	(13,156
Deferred Financing Costs			(3,827)	(4,606
Less unamortized premium			57,463	62,117
Long-term debt			\$ 616,752	\$ 634,87

Under its various indebtedness agreements, the Obligated Group is subject to certain financial covenants, including maintaining a minimum historical debt service coverage and maximum annual debt service coverage ratios; maintaining minimum levels of days cash on hand; limitations on selling, leasing, or otherwise disposing of Obligated Group property; and certain other nonfinancial covenants. Management believes the Obligated Group was in compliance with its financial covenants as of June 30, 2019 and 2018.

Annual maturities of outstanding long-term debt are as follows:

Years Ending June 30

2020	\$ 14,270
2021	15,121
2022	15,740
2023	16,600
2024	17,975
Thereafter	497,680
Total	\$ 577.386

Lines of Credit Arrangements

The Obligated Group had a \$100 million short-term line of credit with a bank as of June 30, 2018, which would mature on December 31, 2020. In fiscal year 2019, this short-term line of credit was refinanced and reduced to \$75 million with a December 31, 2021 maturity date. Any borrowings on this short-term line of credit are due and payable in 180 days. As of June 30, 2019 and 2018, the Obligated Group had \$36,500 outstanding on this line of credit.

On August 29, 2019, the Obligated Group issued Series 2019 fixed-rate tax exempt revenue bonds for \$36,752, the proceeds of which were used to pay off the outstanding line of credit borrowings of \$36,500 and reimburse RCMC for certain costs. The bonds mature on September 1, 2049.

10. DERIVATIVES

Derivatives Policy

The Obligated Group uses derivative instruments, specifically interest rate swaps, to manage its exposure to changes in interest rates on variable rate borrowings. The use of derivative instruments exposes the Obligated Group to additional risks related to the derivative instrument, including market, credit, and termination, as described below, and the Obligated Group has defined risk management practices to mitigate these risks.

Market risk represents the potential adverse effect on the fair value and cash flow of a derivative instrument due to changes in interest rates or rate spreads. Market risk is managed through ongoing monitoring of interest rate exposure based on set parameters regarding the type and degree of market risk that the Obligated Group will accept. Credit risk is the risk that the counterparty on a derivative instrument may be unable to perform its obligations during the term of the contract. When the fair value of a derivative contract is positive (an asset to the Obligated Group), the counterparty owes the Obligated Group, which creates credit risk. Credit risk is managed by setting stringent requirements for qualified counterparties at the date of execution of a derivative transaction and requiring counterparties to post collateral in the event of a credit rating downgrade or if the fair value of the derivative contract exceeds a negotiated threshold. Termination risk represents the risk that the Obligated Group may be required to make a significant payment to the counterparty if the derivative contract is terminated early. Termination risk is assessed at onset by performing a statistical analysis of the potential for a significant termination payment under various scenarios designed to encompass expected interest rate changes over the life of the proposed contract. The test measures the ability to make a termination payment without a significant impairment to the Obligated Group's ability to meet its debt or liquidity covenants.

Board approval is required to enter or modify any derivatives transaction. Management periodically reviews existing derivative positions as its risk tolerance and cost of capital changes over time.

Interest Rate Swap Agreements

The Obligated Group has two interest rate swap agreements (the "Swap Agreements"), which were designed to synthetically fix the interest payments on its Series 2006A Bonds. Under the Swap Agreements, the Obligated Group makes fixed-rate payments equal to 3.945% to the swap counterparties and receives variable-rate payments equal to 68% of London InterBank Offered Rate (1.613% and 1.421% as of June 30, 2019 and 2018, respectively) from the swap counterparties, each calculated on the notional amount of the Swap Agreements. As of June 30, 2019 and 2018, the Swap Agreements had a notional amount of \$75,400 and \$79,150, respectively (\$37,700 in notional amount with each counterparty). Following the refinancing of the Series 2006A Bonds, the Obligated Group used \$50,000 in notional amount of the Swap Agreements to synthetically fix the interest on the Series 2008A Bonds, which were refinanced into the Series 2016 Bonds. The Swap Agreements each expire on November 1, 2035, and amortize annually commencing in November 2012. The Swap Agreements are secured by obligations issued under the Master Trust Indenture.

The Swap Agreements also require either party to post collateral in the form of cash and certain cash equivalents to secure potential termination payments. The amount of collateral that is required to be posted is based on the relevant party's long-term credit rating. Based on its current rating, the Obligated Group is required to post collateral with the Swap Counterparties in the event that the market value of the Swap Agreements exceeds \$(25,000) or \$(12,500) for each Swap Agreement. As of June 30, 2019 and 2018, the Obligated Group had no collateral posted under Swap Agreements.

The fair value of the Swap Agreements was as follows as of June 30, 2019 and 2018:

		Jun	e 30
	Reported As	2019	2018
Obligations under Swap Agreements Collateral posted under Swap Agreements	Other long-term liabilities Other current assets	\$ (14,782) ———	\$ (11,600)
Obligations under Swap Agreements, net		\$ (14,782)	\$ (11,600)

The fair value of the Swap Agreements reported in Rush's consolidated balance sheets as of June 30, 2019 and 2018, includes an adjustment for the Obligated Group's credit risk and may not be indicative of the termination value that Rush would be required to pay upon early termination of the Swap Agreements.

Management has not designated the Swap Agreements as hedging instruments. Amounts recorded in the accompanying consolidated statements of operations and changes in net assets for the Swap Agreements allocated to Rush for the fiscal years ended June 30, 2019 and 2018, were as follows:

		Fiscal Ye. Jun	ars E e 30	
	Reported As	2019		2018
Change in fair value of interest rate swaps Net cash payments on interest rate swaps	Nonoperating (expense) income Interest expense	\$ (3,182) (1,796)	\$	4,402 (2,323)

11. OBLIGATIONS UNDER CAPITAL LEASE AND OTHER FINANCING ARRANGEMENTS

RUMC is party to certain capital lease and long-term financing arrangements relating to medical and office equipment and buildings. Expiration of leases ranges from 2016 to 2024. Annual interest expense under these lease agreements was \$2,112 and \$1,930 for the years ended June 30, 2019 and 2018, respectively. Assets acquired under capital lease arrangements are included in property and equipment, net, in the accompanying consolidated balance sheets. During fiscal years 2019 and 2018, one of Rush's joint ventures, Rush Oak Brook Orthopaedic, LLC, had draws of \$6,285 and \$34,715, respectively, from a construction line of credit to finance the construction of a new medical office building in Oak Brook, Illinois. The outstanding balance is recorded within other financing arrangements of the accompanying consolidated balance sheet, which totaled \$40,790 as of June 30, 2019. RUMC guarantees 25% of the outstanding balance until certain metrics within the credit agreement are achieved.

Future minimum lease payments under noncancelable capital leases and other financing arrangements are as follows:

Years Ending June 30	
2020	\$ 5,480
2021	3,170
2022	3,216
2023	3,290
2024	3,321
Thereafter	37,850
Total minimum payments	56,327
Less amount representing interest	(12,616)
Net present value of obligations under capital	
lease and other financing arrangements	43,711
Less current portions included in accounts payable	(1,941)
Long-term portion of obligations under	
capital lease and other financing arrangements	\$ 41,770

12. PENSION AND OTHER POSTRETIREMENT BENEFIT PLANS

RUMC maintains a defined benefit pension plan, defined contribution plans, and other postretirement benefit plans that together cover substantially all of RUMC's employees.

Prior to January 1, 2012, RUMC had two defined benefit pension plans, the Retirement Plan and the Pension Plan (collectively, the "Defined Benefit Pension Plans"), covering substantially all of its employees. Benefits are based on the years of service and the employee's final average earnings, as defined. Plan assets and obligations are measured as of June 30 (the "Measurement Date") each year.

Effective as of the close of business on December 31, 2011, the Pension Plan, representing certain union employees, was amended to freeze benefit accruals for all participants. No additional benefits will accrue, and no additional individuals will become plan participants in the Pension Plan as of January 1, 2012. Also, effective December 31, 2011, the Pension Plan was merged into the Retirement Plan with all accrued benefits of the Pension Plan participants preserved as part of the merger. Effective January 1, 2012, the Retirement Plan was amended to include eligible union members previously covered by the Pension Plan.

Effective January 1, 2015 (the "effective date"), a new defined benefit plan was established. This new plan (the "Pre-2015 Separations Plan" or the "Pre-2015 Plan"), is a spinoff of the current Retirement Plan. The Retirement Plan's benefit obligation and assets attributable to participants who terminated employment prior to January 1, 2015, with a vested benefit were transferred to the Pre-2015 Plan as of the effective date. On the effective date, \$648,066 of benefit obligations and \$625,334 of assets were transferred from the Retirement Plan into the Pre-2015 Plan.

Rush offered an enhanced retirement opportunity ("ERO") to certain RUMC and ROPH employees meeting eligibility requirements during fiscal year 2019, resulting in a total settlement of \$69,416. In addition, the ERO triggered a one-time non-cash charge of \$23,235 as a result of the total payments exceeding the plan's interest cost and service cost components in fiscal year 2019, which is recorded as pension settlement expense within the accompanying consolidated statement of operations and changes in net assets.

In addition to the pension programs, RUMC also provides postretirement health care benefits for certain employees (the "Postretirement Healthcare Plans"). Further benefits under the Postretirement Healthcare Plans have been curtailed.

Obligations and Funded Status

The table below sets forth the accumulated benefit obligation, the change in the projected benefit obligation, and the change in the plan assets of the Defined Benefit Pension Plans and Postretirement Healthcare Plans (collectively, the "Plans"). The table also reflects the funded status of the Plans as of the Measurement Date and amounts recognized in RUMC's component balance sheets as of June 30, 2019 and 2018.

Obligations and Funded Status		d Benefit on Plans	Postretirement Healthcare Plans		
obligations and Canada States	2019	2018	2019	2018	
Actuarial present value of benefit obligations — accumulated					
be nefit obligation	\$ 1,050,875	\$ 1,008,810	\$ 6,296	\$ 6,495	
Change in projected benefit obligations:					
Projected benefit obligation — beginning of measurement					
period	\$ 1,032,807	\$ 1,065,233	\$ 6,495	\$ 7,516	
Service costs	21,741	21,743	220	181	
Interest costs	45,040	43,325	290	308	
Employee contributions	-	-	290	413	
Special termination benefits	10,298	-	-	-	
Plan settlements	(69,416)	(406)	-	-	
Actuarial (gain) loss	83,496	(47,893)	(467)	(1,332)	
Benefits paid	(44,473)	(49,195)	. (532)	(591)	
Projected benefit obligation - end of measurement period	\$ 1,079,493	\$ 1,032,807	\$ 6,296	\$ 6,495	
Change in plan assets:					
Fair value of plan assets — beginning of measurement period	\$ 1,014,502	\$ 1,003,729	\$ -	\$ -	
Actual return on plan assets	101,700	25,968	-	-	
Employer contributions	35,341	34,406	242	178	
Plan participant contributions	-	-	290	413	
Plansettlements	(69,416)	(406)	-	-	
Benefits paid	(44,473)	(49,195)	(532)	(591)	
Fair value of plan assets $-$ end of measurement period	\$ 1,037,654	\$ 1,014,502	\$ -	\$ -	
Accrued benefit liability	\$ 41,839	\$ 18,305	\$ 6,296	\$ 6,495	

The actuarial cost method used to compute the Defined Benefit Pension Plans liabilities and expenses is the projected unit credit method.

The components of net periodic pension cost for the Plans were as follows:

Components of Net Periodic Pension Cost		d Benefit on Plans	Postretirement Healthcare Plans		
Year Ended June 30	2019	2018	2019	2018	
Net periodic pension cost comprised of the following:					
Service cost	21,741	21,743	220	181	
Interest cost on projected benefit oblgiation	45,040	43,325	290	308	
Expected return on plan assets	(62,120)	(66,486)	-	-	
Amortization of prior service cost and other acturial amounts	(665)	(662)	=	_	
Recognized actuarial loss (gain)	9,273	10,106	(368)	4	
Special termination benefit recognized	10.298	· -	` -	_	
Recognized settlement loss	12,938	54			
Net periodic pension cost (credit)	\$ 36,505	\$ 8,080	\$ 142	<u>\$ 493</u>	

The table below sets forth the change in the accrued benefit liability of the Plans

Accrued Benefit Liability	Defined Benefit Pension Plans		Postretirement Healthcare Plans					
,	-	2019		2018		2019		2018
Accrued benefit liability — beginning of measurement period Fiscal year activity:	\$	18,305	\$	61,505	\$	6,495	\$	7,516
Net periodic pension cost		23,683		8,080		142		493
Employer contributions		35,341		(34,406)		(242)		(178)
Post retirement-related changes and other net periodic postretirement costs:		,-		(= -, -= -,		,		,,
Actuarial (gain) loss		43,915		(7,376)		(467)		(1,332)
Reclassification adjustment for losses reflected in periodic expense	_	(8,723)	_	(9,498)		368		(4)
Accrued benefit liability — end of measurement period	\$	41,839	\$	18,305	\$	6,296	\$	6,495
Recognized in the consolidated balance sheets as follows:								
Accrued expenses	\$	-	\$	-	\$	-	\$	564
Noncurrent liabilities	_	41,839	_	18,305	· –	6,296	_	7,267
	\$	41,839	\$	18,305	\$	6,296	\$	7,831

In accordance with FASB guidance regarding accounting for defined benefit pension and other postretirement plans, all previously unrecognized actuarial losses and prior service costs are reflected in the consolidated balance sheets. The postretirement-related charges other than net periodic benefit cost related to the Defined Benefit Pension Plans and Postretirement Healthcare Plans are included as a separate (decrease) increase to net assets without restrictions and total \$(22,270) and \$18,210 for fiscal years 2019 and 2018, respectively. For fiscal year 2019, this amount includes actuarial gains arising during fiscal year 2018 of \$(43,448) and a reclassification adjustment for losses reflected in periodic expense in fiscal year 2019 of \$8,356. For fiscal year 2018, this amount includes actuarial gains arising during fiscal year 2017 of \$8,708 and a reclassification adjustment for losses reflected in periodic expense in fiscal year 2018 of \$9,502.

The Defined Benefit Pension Plans and Postretirement Healthcare Plans items not yet recognized as a component of periodic pension and postretirement medical plan expense, but included within net assets without restrictions as of and for the years ended June 30, 2019 and 2018, are as follows:

	Defined	Postretirement			
	Pensio	on Plans	Healthcare Plans		
	2019	2018	2019	2018	
Unrecognized prior service credit Unrecognized net actuarial (loss) gain	\$ 1,930 <u>(277,683</u>)	\$ 2,595 <u>(255,979</u>)	\$ - <u>1,304</u>	\$ - <u>1,205</u>	
Total	<u>\$ (275,753</u>)	<u>\$ (253,384</u>)	\$ 1,304	\$1,205	

An estimated \$665 in prior service credit and (\$10,783) in net actuarial loss will be included as components of periodic pension expense in fiscal year 2020. An estimated \$548 in net actuarial gain will be included as components of periodic postretirement expense in fiscal year 2020.

Assumptions

The actuarial assumptions used to determine benefit obligations at the measurement date and net periodic benefit cost for the Plans are as follows:

Assumptions Used to Determine						
Benefit Obligations and Net Periodic Benefit Cost					Postretii	rement
	Defi	ned Benefi	t Pension Pla	ans	Healthcar	re Plans
			Pre-2	015		
	Retireme	ent Plan	Separatio	ns Plan		
	2019	2018	2019	2018	2019	2018
Discount rate — benefit obligation	3.75 %	4.45 %	3.65 %	4.45 %	3.75 %	4.45 %
Discount rate — pension expense	4.45	4.15	4.45	4.05	4.45	4.15
Rate of increase in compensation levels	5.42	5.42	-	-	-	-
Expected long-term rate of return on plan assets	6.90	7.00	5.75	6.50	-	-
Health care cost trend rate (initial)	-	-	-	-	6.20	6.40
Health care cost trend rate (ultimate)	-	-	-	-	4.50	4.50
Year the rate reaches ultimate trend rate	-	-	-	-	2038	2038

The discount rate used is based on a spot interest rate yield curve based on a broad group of corporate bonds rated AA or better as of the Measurement Date. Rush uses this yield curve and the estimated payouts of the Plans to develop an aggregate discount rate. The estimated payouts are the sum of the payouts under the Defined Benefit Pension Plan(s) and the Postretirement Healthcare Plans. For fiscal years 2019 and 2018, the discount rate was estimated under a bond model approach, which is based on a hypothetical bond portfolio whose cash flow from coupons and maturities match the year-by-year Plans' cash flows using bonds rated AA or better.

 $For the years ended \textit{June 30, 2019} and \textit{ 2018, the actual rate of return on plan assets was 11.4\% and 3.1\%, respectively. \\$

Plan Assets

RUMC's investment objective for its Defined Benefit Pension Plans is to achieve a total return on plan assets that meets or exceeds the return on the plan's liability over a full market cycle with consideration of the plan's current funded status. Investment risk is effectively managed through diversification of assets for a mix of capital growth and capital

protection across various investment styles. The asset allocation policy reflects this objective with allocations to return generating assets (e.g., equity and alternative investments, consisting of hedge funds and limited partnerships) and interest rate hedging assets (e.g., fixed-income securities).

All of the plan's assets are measured at fair value, including alternative investments. Fair value methodologies used to assign plan assets to levels of FASB's valuation hierarchy are consistent with the inputs described in Note 6. Fair value methodologies used to value interests in private equity limited partnerships that hold restricted securities and are not publicly traded are based on RUMC's ownership interest in the NAV of the respective fund as estimated by the general partner, which approximates fair value. RUMC routinely monitors and assesses methodologies and assumptions used in valuing these interests.

The fair value of the Defined Benefit Pension Plan assets as of June 30, 2019 and 2018 is as follows:

Fair Value Measurements as of June 30, 2019	Level 1	Level 2	Level 3	Valued @ NAV	Total Fair Value
Marketable securities and short-term investments	\$ -	\$ -	\$ -	\$ 18,290	\$ 18,290
Fixed Income Securities: U.S. Government and Agency securities Corporate Bonds Asset Backed Securities and Other	- 84,005 -	428,073 403,549 35,940	- - -	- -	428,073 487,554 35,940
Public Equity Securities	65,733	-	-	-	65,733
Fund Investments (Mutual/Commingled):					
Public Equity Funds Multi Asset Class Funds	9,890 46,230	-		115,647 -	125,537 46,230
Alternative Investments: Private Equity Partnerships	-	-	-	18,420	18,420
Other: Derivative Assets	-	6,573			6,573
Pending Transactions	_	(191,523)			(191,523)
Total Plan Assets	\$ 205,858	\$ 682,612	\$ -	\$ 152,357	\$1,040,827
Liablities Derivative Liablities		(9,267)		(1,490)	(10,757)
Total Liabilities at Fair Value	\$ -	\$ (9,267)	\$ -	\$ (1,490)	\$ (10,757)

There were no transfers between Level 1, 2, 3 or NAV during fiscal year 2019.

Fair Value Measurements as of June 30, 2018	Level 1	Level 2	Level 3	Valued @ NAV	Total Fair Value
Marketable securities and short-term investments	\$ -	\$ -	\$ -	\$ 10,548	\$ 10,548
Fixed Income Securities: U.S. Government and Agency securities Corporate Bonds Asset Backed Securities and Other	- 86,443 -	301,548 344,417 35,793	- - -	- - -	301,548 430,860 35,793
Public Equity Securities	86,036	-	-	-	86,036
Fund Investments (Mutual/Commingled):					
Public Equity Funds Multi Asset Class Funds	9,931 75,814	-	-	144,304 -	154,235 75,814
Alternative Investments: Private Equity Partnerships	-	-	-	20,263	20,263
Other: Derivative Assets		8,967			8,967
Pending Transactions		(109,618)			(109,618)
Total Plan Assets	\$ 258,225	\$ 581,108	\$ -	\$ 175,115	\$1,014,447
Liablities Derivative Liablities		(6,487)			(6,487)
Total Liabilities at Fair Value	\$ -	\$ (6,487)	\$ -	\$ -	\$ (6,487)

There were no transfers between Level 1, 2, 3 or NAV during fiscal year 2018.

As of June 30, 2019 and 2018, the defined benefit pension plan's commitments for additional contributions to alternative investments totaled \$3,130 and \$3,169, respectively.

Cash Flows

RUMC expects to make estimated contributions to and benefit payments from its Defined Benefit Pension Plans and Postretirement Healthcare Plans for the years ending June 30 as follows:

	Defined Postretiremen Benefit Healthcare Pension Plans Plans	t
Expected contributions in 2020	<u>\$ 34,562</u> <u>\$ 465</u>	
Estimated Benefit Payments		
2020	\$ 65,033 \$ 465	
2021	63,863 451	
2022	67,405 464	
2023	67,284 483	
2024	69,265 533	
2025 through 2029	347,160 2,803	
Total	\$ 680,010 \$ 5,199	

Other Postretirement Benefit Plans

Both RUMC and RCMC maintain a voluntary tax-deferred retirement savings plan. Under these defined contribution plans, employees may elect to contribute a percentage of their salary, which may be matched in accordance with the provisions of the plans. Other provisions of the plans may provide for employer contributions to the plans based on eligible earnings, regardless of whether the employee elects to contribute to the plan. Maximum annual contributions are limited by federal regulations. Employer contributions to these Plans were \$24,468 and \$19,901 for the years ended June 30, 2019 and 2018, respectively.

RUMC also sponsors a noncontributory defined contribution plan covering selected employees ("457(b) Plan"). Contributions to the 457(b) Plan are based on a percentage of qualifying compensation up to certain limits as defined by the provisions of the 457(b) Plan. The 457(b) Plan assets and liabilities totaled \$24,468 and \$26,483 as of June 30, 2019 and 2018, respectively, and are included in investments — less current portion and other long-term liabilities in the accompanying consolidated balance sheets. The assets of the 457(b) Plan are subject to the claims of the general creditors of RUMC.

Both RUMC and RCMC also sponsor supplemental retirement plans for certain management employees (the "Plans"). The RUMC plans include a Supplement plan, which was frozen as of December 31, 2014, and replaced with the Executive Retirement Plan. The Plans are noncontributory and annual benefits are credited to each participant's account based on a percentage of qualifying compensation, as defined by the provisions of the plan. Assets set aside to fund the Supplemental Plans amounted to \$12,427 and \$10,812 as of June 30, 2019 and 2018, respectively, and are included in investments — less current portion in the accompanying consolidated balance sheets. These supplemental retirement plans are currently funded at 92% of benefits accrued.

RUMC also maintains a frozen nonqualified supplemental defined benefit retirement plan for certain management employees, which is unfunded. Benefits under the supplemental defined benefit plan, which were curtailed as of December 31, 2004, are paid when incurred from operating funds.

It is RUMC's policy to meet the requirement of the Employee Retirement Income Security Act of 1974 and the Pension Protection Act of 2006.

13. CONCENTRATION OF CREDIT RISK

Rush grants credit without collateral to its patients, most of whom are local residents and are insured under third-party payor agreements. The mix of patient accounts receivable from patients and third-party payors as of June 30, 2019 and 2018 was as follows:

	2019	2018
Medicare	19 %	17 %
Medicare Managed Care	6	5
Medicaid	11	9
Medicaid Managed Care	14	15
Blue Cross	22	26
Managed Care	24	24
Commercial	2	2
Self-pay	2	2
Total	100 %	100 %

Products sponsored by Blue Cross Blue Shield of Illinois, the largest health insurer in the market, accounted for 47% and 52% of managed care net patient accounts receivable as of June 30, 2019 and 2018, respectively, and 22% and 26%, respectively, of total patient accounts receivable of Rush.

14. COMMITMENTS AND CONTINGENCIES

Professional Liability

Rush maintains insurance programs, including both self-insured and purchased insurance arrangements, for certain professional liability claims. Self-insured risks are retained in varying amounts according to policy year and entity. For the period December 9, 2017 to December 15, 2018, Rush maintained a general liability self-insurance risk of \$5 million each and every claim, and a professional liability self-insurance risk of \$10 million each and every claim, with a \$10 million annual aggregate buffer, excess the \$10 million. For the period from December 15, 2018 to December 15, 2019, RUMC maintained a general liability self-insurance risk of \$5 million each and every claim, and a professional liability self-insurance risk of \$10 million each and every claim, with a \$15 million annual aggregate buffer, excess the \$10 million. The December 15, 2018 to December 15, 2019 self-insured retentions are now uniform across the Rush System for Health, with Rush Copley paying its own self-insured retention as part of this overall self-insured retention. Rush System for Health also maintains excess liability insurance coverage with combined limits of \$130 million per occurrence and in the aggregate for general liability, professional liability, and other lines of liability coverage for the period from December 15, 2018 to December 15, 2019. The excess liability insurance increased from the 2017-2018 period, where the overall limits were \$120 million. Rush has an established irrevocable trust fund to pay claims and related costs, which is recorded within the self-insurance trust in the accompanying consolidated balance sheets. Starting on January 1, 2010, RCMC implemented a self-insurance program for professional and general liability claims for claims not covered under the Chicago Hospital Risk Pooling Program. Self-insured risks are retained at \$2,000 per claim and \$10,000 annual aggregate with a \$1,000 per claim and \$1,000 aggregate buffer. RCMC also maintains excess liability insurance coverage with combined limits of \$35,000 per claim and in the aggregate. Amounts above specified self-insured limits are insured through purchased insurance policies. Insurance is purchased on a claims-made basis. RCMC has established an account to pay claims and related costs.

Rush has employed an independent actuary to estimate the ultimate costs of claim settlements. Self-insured liabilities are based on the actuarial estimate of losses using Rush's actual payout patterns and various other assumptions. Rush's self-insured liabilities of \$247,930 and \$211,920 as of June 30, 2019 and 2018, respectively, are recorded as noncurrent and current liabilities in the accompanying consolidated balance sheets, as appropriate, and based on the estimated present value of self-insured claims that will be settled in the future. If the present value method was not used, Rush's liability for self-insured claims would be approximately \$21,980 and \$20,971 higher than the amounts recorded in the consolidated balance sheets as of June 30, 2019 and 2018, respectively. The discount rates used in calculating the present value by organization was 4% for fiscal years ended June 30, 2019 and 2018. Insurance recoveries are presented separately within noncurrent and current assets in the accompanying consolidated balance sheets, as appropriate. As of June 30, 2019 and 2018, no insurance recoveries were recorded.

Rush is subject to various other regulatory investigations, legal proceedings, and claims that are incidental to its normal business activities. In the opinion of management, the amount of ultimate liability with respect to professional liability matters and other actions will not have a material adverse effect on the consolidated financial position or results of operations of Rush.

Obligations under Operating Leases

Rush is party to various noncancelable operating leases with third parties. Rental expense was approximately \$37,851 and \$33,257 for the years ended June 30, 2019 and 2018, respectively, and was included in supplies, utilities, and other expenses in the accompanying consolidated statements of operations and changes in net assets. Total minimum payments under noncancelable operating leases as of June 30, 2019, are as follows:

Years Ending June 30	
2020	\$ 31,016
2021	27,331
2022	25,247
2023	21,405
2024	18,149
Thereafter	65,135
Total	\$ 188,283

On December 29, 2017, Rush entered into a sale leaseback transaction over two properties. The sale resulted in cash proceeds of \$76,582, a gain on sale of \$20,927 recorded within other operating revenue of the accompanying consolidated statement of operations and a deferred gain on sale of \$36,708 recorded within other liabilities of the accompanying consolidated balance sheet. RUMC will lease the space for ten years with future lease payments totaling \$42,224 through December 2027.

15. UNCONDITIONAL PROMISES TO CONTRIBUTE

Included in assets limited by donor or time restriction are the following unconditional promises to contribute as of June 30, 2019 and 2018:

	2019	2018
Unconditional promises to contribute before unamortized discount and allowance for uncollectibles	\$ 30,815	\$ 29,201
Less unamortized discount Less allowance for uncollectibles	(816) (3,600)	(741) (569)
Net unconditional promises to contribute	\$ 26,399	\$ 27,891
Amounts due in: Less than one year One to five years More than five years	\$ 11,886 17,329 1,600	\$ 9,754 17,747 1,700
Total unconditional promises to contribute	\$ 30,815	\$ 29,201

16. NET ASSETS

Net assets without donor restrictions consist of the following as of June 20, 2019 and 2018:

Net Assets Without Donor Restrictions	2019	2018	
Non-Board designated Board designated	\$ 1,714,042 13,026	\$ 1,644,786 7,988	
Total net assets without donor restrictions	\$ 1,727,068	\$ 1,652,774	

Net assets with donor restrictions were available for the following purposes as of June 30, 2019 and 2018:

Net Assets With Donor Restrictions®	2019	2018
Restricted for specificed purpose: Construction and purchase of equipment Health education Research, charity and other Unappropriated endowment appreciation available for operations	\$ 28,492 22,772 438,326 64,347	\$ 1,111 16,644 415,555 63,555
Total funds designated for specified purpose	\$ 553,937	\$ 496,865
Endowments, perpetual in nature, the income from which is expendable for the following specified purposes:	A 474.054	Å .=0.4=4
Health education Research, charity and other Operations	\$ 174,361 69,900 <u>39,479</u>	\$ 172,174 36,465 72,031
Total endowment net assets	283,740	280,670
Total net assets with donor restrictions	\$ 837,677	\$ 777,535

During fiscal years 2019 and 2018, net assets were released from donor restrictions for purchasing property and equipment of \$16,804 and \$1,919, respectively, and incurring expenses of \$43,828 and \$46,775, respectively, both of which satisfied the restricted purposes of the donors. Net assets released from restriction used in operations are included in other revenue in the accompanying consolidated statements of operations and changes in net assets.

17. JOINT VENTURES AND OTHER AFFILIATIONS

Investments in unconsolidated joint ventures, accounted for on the equity method, totaled \$5,162 and \$5,911 as of June 30, 2019 and 2018, respectively, and are included in other assets in the accompanying consolidated balance sheets. Income recognized from these joint ventures, reported in other revenue, was \$1,513 and \$1,588 during the years ended June 30, 2019 and 2018, respectively.

Rush has a majority interest in Rush Health and a majority representation on the Board of Trustees as of June 30, 2019. The addition of RCMC to the network resulted in a restructuring of the governance and membership structure of Rush Health. Rush has recorded equity in Rush Health based on membership interest of 56% or \$4,256 and \$3,746 as of June 30, 2019 and 2018, respectively. Rush has elected not to consolidate its interest in Rush Health, as it expects control to be temporary and believes the effects of consolidation to be immaterial.

18. FUNCTIONAL EXPENSES

The consolidated financial statements present certain expenses that are attributed to more than one program or supporting function. Operating expenses directly attributable to a specific functional area are reported as expenses of

those functional areas. Certain expenses are attributable to more than one functional area, and are therefore allocated on a reasonable basis that is consistently applied. Employee benefits are allocated based on factors of either salary expenses or hours worked. General and administrative expenses primarily include legal, finance and human resources activities. Overhead costs that include items such as professional services, office expenses, information technology, interest, insurance, occupancy and other similar expenses are allocated on a variety of factors, including relative costs, square footage, full-time equivalents, direct labor costs among others.

The expenses reported in the consolidated statement of operations for the year ended June 30, 2019, supported the following programs and functions:

	Healthcare Services	Academic & Research Activity	General & Administrative Support	Total
Salaries, Wages & Employee Benefits Supplies, Utilities & Other Insurance	\$ 1,064,464 647,452 53,347	\$ 153,106 94,862 -	\$ 154,898 45,536 2,879	\$ 1,372,468 787,850 56,226
Purchased Services	155,558	7,919	45,541	209,018
Depreciation and Amortization	125,989	-	910	126,899
Interest	22,741		1,424	24,165
Total	\$ 2,069,551	\$ 255,887	\$ 251,188	\$ 2,576,626

19. GOODWILL

The changes in the carrying amount of goodwill for the years ended June 30, 2019 and 2018, were as follows:

	2019	2018
Beginning balance Acquisition of goodwill	\$ 20,383 <u>347</u>	\$ 20,383
Ending balance	\$ 20,730	\$ 20,383

20. LIQUIDITY

Rush's financial assets available within one year of the consolidated balance sheet date for general expenditures are as follows:

		2019
Current Assets:		
Cash and cash equivalents	\$	118,939
Accounts receivable for patient services		393,045
Other accounts receivable		40,451
Other current assets	_	20,327
Total current assets		572,762
Investments	_	1,153,989
Total	<u>\$</u> :	1,726,751

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ATTACHMENT 33 Availability of Funds

Rush has a policy to structure its financial assets to be available as its general expenditures, liability and other obligations come due. Certain other current assets within the accompanying consolidated balance sheet have been excluded from the liquidity table above due to the inability to either liquidate those assets or use them for general expenditures and other obligations, such as prepaid assets, grant related receivables and tuition loan receivables. As described in Note 7, Rush's endowment consists of donor restricted funds established for a variety of purposes, with income from endowments being restricted for specific purposes. The Finance Committee of the Board of Trustees approves an annual endowment spending rate to be used for general purposes. As described in Note 9, Rush also has a \$75 million line of credit available for working capital

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

ATTACHMENT 33 Availability of Funds

SUPPLEMENTAL SCHEDULES



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INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

To the Board of Trustees of Rush System for Health:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Rush System for Health (the "System" or "Rush"), as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise Rush's basic financial statements, and have issued our report thereon dated October 25, 2019.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered Rush's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Rush's internal control. Accordingly, we do not express an opinion on the effectiveness of Rush's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the Rush's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Rush's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

ATTACHMENT 33 Availability of Funds

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Rush's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Rush's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

October 25, 2019

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INDEPENDENT AUDITORS' REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM AND REPORT ON INTERNAL CONTROL OVER COMPLIANCE IN ACCORDANCE WITH OMB UNIFORM GUIDANCE

To the Board of Trustees of Rush System for Health:

Report on Compliance for Each Major Federal Program

We have audited Rush System for Health's (the "System" or "Rush") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on its Rush's major federal program for the year ended June 30, 2019. Rush's major federal program is identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of federal awards applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for Rush's major federal program based on our audit of the types of compliance requirements referred to above.

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of *Title 2* U.S. *Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about Rush's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the major federal program. However, our audit does not provide a legal determination of Rush's compliance.

Opinion on Compliance for Each Major Federal Program

In our opinion, Rush complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended June 30, 2019.

Report on Internal Control over Compliance

Management of Rush is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered Rush's internal control over compliance with the types of requirements that could have a direct and material effect on its major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for its major federal program and to test

and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of Rush's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A material weakness in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

December 18, 2019

Deloitte : Touche LLP

RUSH SYSTEM FOR HEALTH SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS YEAR ENDED JUNE 30, 2019

	Federal	Federal Grantor/		
Federal Grantor/Pass-Through	ĆFDA	Pass-Through	Federal	
Grantor/Program or Cluster Title	Number	Grantor's Number	Expenditures	Subrecipients
RESEARCH AND DEVELOPMENT				
U.S. Department of Health and Human Services:				
National Institute of Health	93.RD		\$ 55,437,414	\$ 10,597,082
Passed through Blood Research of Wisconsin:				
Comparative Effectiveness in the Diagnosis of VWD	93.839	R01HL112614	3,400	
Passed through University of Alabama:				
Identifying therapeutic targets that confer synaptic resilience to Alzheimer's disease	93.866	R01AG061800	68,319	
Passed through University of Arizona:				
Building a Novel Predictive Networks for High-throughput, In-silico Key Driver Prioritization				
to Enhance Drug Target Discovery in Amp-AD and M2OVE-AD	93.866	RF1AG057457	10,910	
Passed through University of Hawaii:				
Profiling genome-wide circulating ncRNAs for the early detection of lung cancer	93.394	R01CA223490	3,299	
Passed through University of Mississippi:				
Jackson Heart Study Coordinating Center	93.RD	HHSN268201800010I	3,787	
Passed through Van Andel Research Institute:				
Promoting survival of dopamine neurons in models of Parkinso disease using a novel transcriptional regulator	93.853	R21NS105436	5,362	
transcriptional regulator Combining synucleinopathy and mitochondrial deficits in a novel mouse model of	93.853	KZINSIU5436	5,362	
Parkinsons disease	93.853	R21NS106078	21,376	
Passed through Ohio State:	55.055	NZINJI00070	21,570	
IFITM-mediated inhibition of HIV infection and viral countermeasures	93.855	R01Al112381	16.032	
Passed through University of Utah:	33.033	NOD WILLESOI	10,032	
Circadian and sleep pathways to cardiometabolic disease risk: role of neurobehavioral				
processes	93,233	R01HL141706	11,367	
Passed through University of Texas:			•	
A Randomized Recruiment Intervention / RECRUIT	93.307	U24MD006941	8,829	
Passed through Loyola University:				
Host Response to Pessaries in teh Postmenopausal Vagina	93.866	R03AG050933	18,137	
Passed through University of Cincinnati:				
AtRial Cardiopathy and Antithrombotic Drugs in prevention After cryptogenicstroke ARCADIA	93.853	U01NS095869	1,491	
Passed through Metropolitan Chicago Healthcare Council:				
MCHC - Chicago Hospital Council Subaward Agreement	93.889	12102602	55,000	
Passed through CDC:				
Candida auris, an emerging fingal pathogen of high concern	93.RD	75D30118C02900	87,554	
Genomic Epidemiology of Community-Onset Invasive USA3 MRSA Infections	93.RD	75D30118C02923	109,421	24,326
Development of reproducible, quantitative methods based on shotgun metagenome				
sequencing for assessment of risk of microbial transmission	93.084	75D30118C02915	11,547	
Passed through Hektoen Institute:				
Chicago Consortium for the Women's Interagency HIV Study	93.855	U01AI034993	113,542	
Chicago WIHS Consortium - WIHS V	93.855	U01AI034993		
Chicago WIHS Consortium WIHS V	93.855	U01AI034993	27,146	
The Contribution of Sleep and Circadian Disruption to Kynurenine Pathway Activation and Cardiometabolic Risk in Women with HIV	02.020	111442446.04	10.002	
and Cardiometabolic Risk in Women with HIV Passed through Columbia University:	93.838	HL142116-01	10,892	
Interdisciplinary Research to Understand the Interplay of Diabetes Cerebrovascular Disease and Alzheimer's D	93.866	RF1 AG051556	11,402	
Pathway Discovery, Validation for Alzheimer's Disease and Compound Identification for	33.000	14 17/6031330	11,402	
Alzheimer's Disease	93.866	U01 AG046152	457,037	
Pathway Discovery, Validation and Compound Identificationfor Alzheimer's Disease	93.866	U01 AG046152	82,750	
NIA Late Onset of Alzheimer's Disease (LOAD)Family Based Study	93.866	U24AG056270	45,939	
Pathway Discovery, Validation for Alzheimer's Disease and Compound Identification or			-,	
Alzheimer's Disease	93.866	U01 AG046152	619	
Influence of Genotype on Monocyte and Microgila Phenotypeand Function in PD	93.866	R56 NS089674	98,464	
Deconstructing and modeling the single cell architecture of the Alzheimer brain	93.866	1RF1AG057473	67,803	
Convergence of myeloid susceptibility protein function in Alzheimer's disease	93.866	R01AG058852	49,329	
A Randomized Multicenter Clinical Trail of Unruptured Brain Arteriovenous Malformations				
(Aruba)	93.853	U01 NS051483	2,181	

RUSH SYSTEM FOR HEALTH SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS YEAR ENDED JUNE 30, 2019

	Federal	Federal Grantor/		
Federal Grantor/Pass-Through	CFDA	Pass-Through	Federal	
Grantor/Program or Cluster Title	Number	Grantor's Number	Expenditures	Subrecipients
Passed through Jaeb Center for Health Research:				
Peripheral DR Lesions on Ultrawide-field Fundus Images and Risk of Diabetic Retinopathy				
Worsening Over time (Protocol AA)	93.867	U10 EY014231	567	
Passed through Northwestern University:	22.227		470 400	
Vitamin D add-on therapy enhances Corticosteroid responsiveness in Asthma	93.837	U10 HL098096	176,109	
Knee OA: Predicators and Outcomes of Physical Inactivity-Activity Transitions	93.846	R01AR054155	4,102	
NIAMS Multidisciplinary Clinical Research Center A Phase 3, Double-Blind, Placebo-Controlled, Parallel Group Study of Isradapine as a	93.846	P60AR064464	1,408	
A Phase 3, Double-Blind, Placebo-Controlled, Parallel Group Study of Isradapine as a Disease Modifying Agent in Patients with Early Parkinson's Disease / STEADY-PD3	93.853	U01 NS080818	110 000	
Chicago Clinical Trials Unit	93.855	UM AI069471	118,500 367,724	
SPORE in Prostate Cancer	93,397	P50CA180995	45,547	
Great Lakes Practive Transformation Network 5345/L1CMS331444	93.638	1L1CMS331444	1,320	
Food Allergy Outcomes Related to White and AfricanAmerican Racial Differences	33.030	111000331	1,320	
(FORWARD)	93.855	R01Al130348	177,656	
A Family Genetic Study of Language in Autism	93.173	R01DC010191	50,529	
Home Sleep and Circadian Phase: Mediators of Racial Disparities in Diabetes Risk	93.847	R01DK095207	(28)	
Multidisciplinary Treatment for Obstructive SLeepApnea and Insomnia	93.233	R01HL114529	203	
Latino vs Non-Latino Disparities in Advance Care Planning& End-of-Life Care	93,307	R01MD007652	1,839	
Synaptic Substrates of Age-Dependent Memory Deficits	93.866	2RF1AG017139	246,557	
Effect of Unilateral and Bilateral STN Stimulation on Eye-Hand Coordination	93.853	R01NS092950	18,700	
Core Center for Clinical Research at NU	93.846	P30AR072579	16,361	
Center for chronic pain and drug abuse	93.279	P50DA044121	4,523	
Molecular mechanisms underlying behavioral and psychological symptoms in				
Alzheimers disease	93.866	R01AG062249	79,641	
Lupus Intervention Fatigue Trial (LIFT)	93.846	R01AR071091	1,467	
Passed through University of Chicago:				
Acceleration PrEP Diffusion through Network Change Agents	93.855	R01 Al120700	3,734	
Chicago Center for Youth Violence Prevention	93.136	U01CE002712	42,697	
Advancing Translational Science in Metropolitian Chicago-KL2 Component	93.350	KL2TR002387	397,363	
ITM 2.0: Advancing Translational Science in Metropolitan Chicago	93.350	UL1TR002389	799,151	
ITM 2.0: Advancing Translational Science in Metropolitan Chicago	93.350	UL1TR002389	60,136	
ITM 2.0: Advancing Translational Science in Metropolitan Chicago	93.350	UL1TR002389	13,397	
Chicago Metropolitan Asthma Consortium for Severe/exacerbation-prone Asthma	93.838	1UG1HL139125	38,000	
CTSA K12 Examining an Adaptive Telehealth Interventionfor Young Children with ASD	93.350	KL2TR002387	(68,833)	
Evaluating a Self-Care Innovation for Older Adults using Agent-based Modeling	93.866	R01AG047869	7,181	
The role of elevated BIN1 in Alzheimer's disease	93.866	R01AG056061	85,536	
Illinois Precision Medicine Consortium	93.310	OT2OD026557	1,194,838	
Passed through University of Illinois:				
Leadership Education in Neurodevelopmental and Related Disorders Training Program	93.110	T73MC11047	5,022	
The Asthma Action at Erie Trial	93.838	R01 HL123797	25,583	
The Effect of Penile Microbiome on BV, GUD and Genital Epithelial Trauma	93.855	R01 Al110369	41,038	
Plasticity Circuits in Alzheimer's Disease	93.866	R01 AG033570	39,808	
The Effect of Alcohol on Retinal Photic Signaling to the Human Circadian System	93.273	R01AA023839	59,200	
Integrated Mechanisms of Cardiac Maladaptation Diet Modulation of Bacterial Sulfur & Bile Acid Metabolism and Colon Cancer Risk	93.837 93.393	P01HL062426 1R01CA204808	105,687	
	93.853	R21NS095723	153,412	
Improving White Matter Integrity with Thyroid Hormone Mediterranean Diet, Weight Loss, and Cognition in Obese Older Adults	93.633	R01HL129153	7,470 16,880	
Leadership Education in Neurodevelopmental and Related Disabilities Training Program	93.110	T73 MC11047-09-00	11,240	
Center for Health Equity Research (CHER)	93.307	U54MD012523	15,778	
AHEC Point of Service Maint & Enhancement	93.107	U77HP26847	33,364	13,489
Passed through Westat Inc:	33.107	07711120047	33,304	15,465
NICHD International and domestic Pediatric and Maternal HIV Studies Coordinating Center	93.RD	HHSN2752018000011	395,982	
NICHD International and Domestic Pediatric and Maternal HIV Studies Coordinating Center	93.RD	HHSN275201800001I	79,554	79,554
Passed through Yale University:	33.110	THISTE, SECTOODS	15,551	75,551
Clinical Pathological Study of Cognitive Impairment in Essential Tremor	93.853	R01 NS086736	15,399	
Molecular Networks Underlying Resilience to Alzheimer's Disease Among APOE E4 Carriers	93.866	R01AG057912	94,447	
Passed through University of Montreal:			- 7111	
Exploring the role of IL-32 as a potential biomarkeran therapeutic target in premature				
cardio-vasculardiseases during HIV-infection	93.866	R01AG054324	74,644	
NIAID (DHHS) Contract:			,	
Virology Quality Assurance Program	93.RD	HHSN272201200023C	1,911,302	

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

ATTACHMENT 33 Availability of Funds

SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS YEAR ENDED JUNE 30, 2019

	Federal	Federal Grantor/		
Federal Grantor/Pass-Through	CFDA	Pass-Through	Federal	0.1
Grantor/Program or Cluster Title	Number	Grantor's Number	Expenditures	Subrecipients
Virology Quality Assurance Program	93.RD	HHSN272201200023C	261,401	261,401
Virology Quality Assurance Program	93.RD	HHSN272201200023C	106,281	106,281
Virology Quality Assurance Program	93.RD	HHSN272201200023C	66,312	66,312
Virology Quality Assurance Program	93.RD	HHSN272201200023C	108,548	108,548
Virology Quality Assurance Program	93.RD	HHSN272201200023C	702,696	
Passed through University of Miami:				
Mechanisms of Early Recurrence in Intracranial Atherosclerotic Disease	93.853	R01 NS084288	1,962	
Passed through University of California: USC, UC Davis, California Institute of Technology, Chil	dren Hosp LA,	UCLA		
A Cognitive Test Battery for Intellectual Disabilties	93.865	R01 HD076189	127,878	
Alzheimer's Disease Neuroimaging Initiative 2 (ADNI2)	93.866	U01AG024904	94,699	
Alzheimer's Disease Cooperative Study - A4 Study	93.866	U19 AG010483	5,714	
AKAP-dependent regulation of Cardiac SR Ca handling	93.837	R01HL133832	85,659	
CD40 Autoantibody and FSGS Recurrence	93.847	R01DK109720	200,792	
Racial Differences in Decision Making among OlderAdults	93.866	R01AG055430	379,425	
Higher Precision Human and Mouse Transcriptomes	93.172	UM1HG009443	26,079	
Nonlinear Models of Cognition Preceding AD and non-AD in a Biracial Population Sample	93.866	R01AG051635	59,212	
Laboratory Center, AIDS Clinical Trails Group (ACTG) LC2/3	93.855	UM1AI106701	59,634	
Alzheimer's Clinical Trial Consortium (ACTC)	93.866	U24AG057437	193,457	
Passed through University of Washington:				
National Alzheimer's Coordinating Center	93.866	U01AG016976	(24,749)	
ADNI Psychometrics	93.866	R01AG029672	32,176	
Mechanisms of Psychosocial Treatments for ChronicLow Back Pain	93.213	R01AT008559	21,203	
Passed through Emory University:				
Clinical Studies of Dystonia and Related Disorders	93.853	U54 NS065701	(2,440)	
Discovery of Novel Proteomic Targets for Treatment of Alzheimer's Disease	93.866	U01 AG046161	90,507	
Testing Tele-Savvy, an Online Psychoeducation Program forinformal Alzheimer's Caregivers	93.866	R01AG054079	35,949	
Understanding the Molecular Mechanisms of Depression andPsychological Well-being in				
Alzheimer's Disease	93.866	R01AG056533	102,803	
Preparation for End-of-Life Decision Making in Mild Alzheimer's Disease	93.866	R01AG057714	19,455	
Building a High-resolution Multi-Omic ADInteractome with the AMO-AD and				
M2OVE-ADProjects	93.866	R01AG057470	55,368	
Brain - Plasma Proteomics Biomarker Discoveryand Validation int eh US and UK	93.866	RF1AG057471	45,593	
Computational Prediction and Functional Validation of Novel Risk Loci in Alzheimer's				
Disease	93.866	R56AG060757	36,600	
Computational Prediction and Functional Validation of Novel Epigenetic Risk Loci in				
Alzheimer's Disease	93.866	R56AG062256	46,122	
Passed through Albert Einstein College of Medicine:	00.007	PO4 1843 55 43	2.002	
Role of Innate Immunity in HIV related vascular disease; biomarkers and mechanisms	93.837	R01 HL126543	2,082	
Integrated Analysis of CVD Risk in HIV: GutMicrobiota, Immune Function and Metabolites Passed through John Hopkins:	93.837	R01HL140976	11,062	
Multi Uveitis Steroid treatment trial	93.867	U10 EY024527	1,575	
Effects of Glucocortiods on Cognitive Functioning inHIV-infected Women	93.867		1,575	
LOC - IMPAACT Leadership Group	93.855	R01MH113512 UM1AI068632	198,828	
·	93.242			
Translational Research in Neuro-AIDS Mental Health HOPE in Action: A clinical trial of HIV-to-HIV deceased donor kidney transplantation	93.242	R25MH080661 U01Al134591	16,806 194	
Passed through Brigham and Women's Hospital:	93.055	001AI134591	194	
LaboratoryCenter, AIDS Clinical Trial Group (ACTG)	93.855	1UM AI106701	115,303	
Aids Clincial Trial Group Network	93.855	AI068636	154,669	
AIDS Clincial Trial Group Network	93.855	AI068636	131,646	
Neurpathology for Disrupted Multiscale Activity Control in Alzheimer's Disease	93.866	R01 AG048108	36,242	
Fractal motor activity regulation and the risk for Alzheimers disease in middle to old age	22.000		30,242	
adults	93.866	R01AG059867	17,512	
AIDS Clinical Trial Group	93.855	5UM1Al068636-12	85,478	
Leadership & Operations Center (LOC) AIDS Clinical Trials Group (ACTG)	93.855	UM1AI068636-12	55,047	
Neuropathy doe disrupted multiscale activity control in Alzheimer's disease	93.866	R01AG048108	23,051	
ACOSOG- A Phase III Prospective, Randomized Trial Comparing Laparoscopic Assisted			25,551	
Resection Versus Open Resection for Rectal Cancer	93.395	U01 CA076001	8,200	
			-,	

RUSH SYSTEM FOR HEALTH
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2019

	Federal	Federal Grantor/		
Federal Grantor/Pass-Through	CFDA	Pass-Through	Federal	
Grantor/Program or Cluster Title	Number	Grantor's Number	Expenditures	Subrecipients
Passed through Massachusetts General Hospital:				
Randomized Trial to Prevent Vascular Events in HIV - REPRIEVE	93.837	U01 HL23336	12,848	
Recurrent Hemorrhagic Stroke in Minority Populations	93.853	R01NS093870	34,795	
A randomized, double-blind, placebo-controlled trial of urate-elevating inosine treatment to				
slow clinical decline in early Parkinson disease.	93.823	U01NS090259	81,762	
Dynamin, actin and microtubules: cystiskeletal crosstalk in podocytes	93.847	R01DK093773	39,790	
Coenzyme Q1 in Huntington's Disease	93.853	5 U01 NS052592	520	
Passed through Great Lakes Hemophilla:				
Regional Program	93.184 93.080	H30 MC24052	33,732	
Public Health Surveillance for Bleeding Disorders	93.080	NU27 DD001155-01-00	30,415	
Passed through University of Florida: Genome-wide Profiling of Brain DNA Hydroxymethylome in Alzheimer's Disease	02.066	RF1AG052476	454.000	
Dignity Therapy RCT led by Nurses of Chaplains for Elderly Cancer Outpatients	93.866 93.395	R01CA200867	151,069	
Neuroimaging Biomarkers in Parkinsonism: Differentiating Subtypes and Tracking Disease	93.395	RUICAZUU887	73,886	
Progression	93.853	U01NS102038	42,982	
Passed through University of Pittsburgh:	35.055	001143102036	42,302	
Signaling Mechanisms of Focal Adhesion Protein Kindlin-2 in Chondrogenesis	93.846	R01 AR068950	210.461	
Cardiovascular and HIV/AIDS Effect on Brain Structure/ Function and Cognition	93.866	R01 AG034852	27,278	
Translational Evaluation of Aging, Inflammation & HIV inLung Dysfunction	93.838	R01 HL120398	86	
SIV Pathogenesis in African Green Monkeys and Pigtailed Macaques	93.837	R01HL117715-13A1	33,568	
Passed through University of Michigan/Michigan State:	33.037	NOTITEET/715 15/11	33,300	
Nortriptyline-mediated attenuation of Alpha-Synuclein Pathology in Parkinson's Disease	93.853	R01 NS094460	295,567	
Systems Biology of Clostridium Difficile Infection	93.855	U01AI124255	219,512	
Genetic Silencing of Striatal CaV1.3 Calcium Channels as a Potent Antidyskinetic Therapy for			,	
PD	93.853	R01NS110398	75,083	
Bright light treatment at home to improve symptom management of fibromyalgia syndrome	93.361	R21NR016930	14,492	
Passed through Vanderbilt University:				
Reduced Opioid Analegsic Requirements via Improved Endogenous Opiod Function	93.279	R01 DA037891	163,295	
Genetic Drivers of Resilience to Alzheimer's Disease	93.866	R01AG059716	21,381	
Neuroprotective Effects of Vascular Endothelial Growth Factor in Alzheimer's Disease	93.866	R01AG061518	7,444	
Passed through Sunnybrook Research Institute:				
Sleep, Cicadian Rhythms, and Mechanisms of Cognitive Declinein the Human Brain	93.866	R01AG052488	369,336	
Passed thru Washington University:				
Washington University & BJC Epicenter for Prevention of Healthcare Associated Infections	93.084	U54CK000482	114,627	
Passed thru University of North Carolina at Chapel Hill:				
Oxidative Stress and the Development of Osteoarthritis	93.866	R01 AG044034	33,056	
The Role of Human Gut Microbiota in HIV-1 Rectal Acquisition, Replication and Pathogenesis	93.855	R01AI123010	18,309	
Passed thru Harvard Pilgrim Health Care:				
Safety and Healthcare Epidemiology Prevention Research Development (SHEPheRD) Program	93.823	2011-N-13526	955,628	65,602
CLUSTER - Cluster Linkage Using Statistics to Trigger and Evaluate Response - Pilot Study				
for Outbreak Detection and Response	93.084	U54CK000484	91,220	
Passed thru University of Indiana:				
National Cell Repository for Alzheimer's Disease (NCRAD)	93.866	U24 AG021886	22,322	
Foundational In Vivo Experiements on Osteocyte Biology in Space	43.007	NNX15AL13G	19,013	
Passed thru Virginia Polytechnic Institute and State University:	00.045	Post 4 Post 2 4 4	0.4.00	
Promoting Healing of Tendinopathies using Metabiologic Stimulation	93.846	R01 AR063144	94,997	
Passesd thru Gynecologic Oncology Group: Gynecologic Oncology Group	93.395	27469-09	1,387	
Passed through Baylor College of Medicine:	93.395	27469-09	1,387	
Functional Validation of the CD1AP Susceptibility Network inAlzheimer's Disease	93.866	R01AG050631	60,745	
Mechanisms of couplon-linked skeletal muscle myopathies	93.846	R01AR072602	82,055	
Passed through Harvard Medical School:	33.040	101/110/2002	32,055	
Targeting a Novel Regulator of Brain Aging and Alzheimer's Disease	93.866	R01 AG046174	51,690	
Genome Engineering an IPSC Model of Alzheimer's Disease	93.866	RF1 AG048056	28,401	
Passed through Boston University/Boston Childrens Hospital:	33.000	17,004000	20,401	
The Brain Transcriptome & Lifetime Obesity Measures: The Framingham Study	93.847	R01 DK099269	68,908	
Passed through Boston Childrens Hospital:	55.547	#11000000	23,300	
Development of Synaptopathies associated with TSC, PTEN and SHANK3	93.853	U54 NS092090	70,976	
. , ,			,574	

RUSH SYSTEM FOR HEALTH SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS YEAR ENDED JUNE 30, 2019

	Federal	Federal Grantor/		
Federal Grantor/Pass-Through	CFDA	Pass-Through	Federal	
Grantor/Program or Cluster Title	Number	Grantor's Number	Expenditures	Subrecipients
Passed through Oregon Health and Science Institute:				
ORCATECH Collaborative Aging (in Place) ResearchUsing Technology (CART)	93.866	1U2CAG054397-01	190,906	
Personality and Health: A Longitudinal Study	93.866	R01AG020048	32,099	
Passed through St. Joseph's Hospital and Medical Center:		P01 AG014449		
Neurobiology and Cognitive Impairment of the Elderly Passed through University of Iowa:	93.866	P01 AG014449	82,032	
Neuroendocrine Tumor Specialized Programs of ResearchExcellence (SPORE) in Human				
Cancer	93.397	P50CA174521	8,752	
Passed through Rutgers University:				
Myocardial Ischemia and Transfusion MINT	93.839	5U01HL133817	1,183	
Asain Resource Centers for Minority Aging Research RCMAR	93.866	P30AG059304	3,915	
Passed through Lurie Childrens Hospital: Employing eSBI in a Community-based HIV Testing Environment for at-risk Youth	93.279	R01 DA041071	80,886	
Passed through University of Rochester:	93.279	ROI DAU41071	80,886	
Cohort of HIV-Associated Seizures and Epilepsy in Zambia)CHASE): Scale Up and Expansion				
Informed by R21 Findings	93.853	R01NS094037	8,733	
Passed through Wake Forest University Health Sciences:				
Developing Research at the Interface of HIV and Aging	93.866	R24AG044325	91,508	
Passed through NeuroNext- Novartis and Massachusetts General Hospital:				
Effects of AFQ056 on Language Learning in Young Childrenwith Fragile X Syndrome (FXS) Effects of AFQ056 on Language Learning in Young Childrenwith Fragile X Syndrome (FXS)	93.853	U01NS096767	76,101	
Passed through NCI-NCTN (ECOG, ALLIANCE, NRG, SWOG)	93.853	U01NS096767	97,786	
Phase III Trial of Enzalutamide versus Enzalutamide, Abriaterone and Prednisone for				
Castration Resistant Metastic Prostate Cancer	93.RD	A031201	212	
A Randomized Double Blind Phase III Study of Ibrutinib Durin and Following autologous				
Stem Cell Transplantation vs Placebo in Patients with Relapsed or Refractory Diffuse Large				
B-cell Lymphoma of the Activated B-cell Subtype	93.RD	A051301	150	
Phase II/III Trial of Adjuvant Radiotherapy and AndrogenDeprivation Following Radical	02.00	NDC CHOOS		
Prostatectomy with orwithout Adjuvant Docetaxel A Phase I and Expansion Cohort Study of Adjuvant Cisplatin, Intensity-Modulated	93.RD	NRG-GU002	60	
Radiotherapy, and MK-3475 in High-RiskHead and Neck Squamous Cell Carcinoma	93.RD	NRG-HN003	138	
DART: Dual Anti-CTLA-4 and ANTI-PD-1 Blockadein Rare Tumors	93.RD	S1609	870	
Randomized phase III trial evaluating the role of weight los in adjuvant treatment of				
overweight and obese women with early breast cancer	93.RD	A011401	294	
A Randomized trial of Regional Radiotherapy in Biomarker Low Risk Node Positive Breast				
Cancer	93.RD	CCTG MA.39	191	
ALCHEMIST: Adjuvant Lung Cancer Enrichment Marker Identification and Sequencing Trial	93.RD	COG ARST1321	350	
Phase III trial assessing the accuracy of tumor bed biopsies in predicting pathologic response in patients with clinical/ radiologic complete response after neoadjuvant chemo				
response in patients with clinicaly radiologic complete response after neoadjuvant chemo in order to explore the feasibility of breast conserving trm	93.RD	NRG-BR005	1.686	
NSABP Found Inc.	93.RD	TFED29-065	87,498	
Phase III Comparison of Thoracic Radiotherapy Regimens in Patients with Limited Small Cell				
Lung Cancer Also Receiving Cisplatin and Etoposide	93.RD	CALBG-30610	159	
Pazopanib Neoadjuvant Trial in Non-Rhabdomyosarcoma Soft Tissue Sarcomas (PAZNTIS):				
A Phase II Trial of Preoperative Chemoradiation or Preoperative Radiation Plus or Minus	02.00	COC ABCTARRA	4.705	
Pazopanib (NSC# 737754, IND# 118613) A Phase I Study with an Expansion Cohort of the Combination of Ipilimumab and	93.RD	COG ARST1321	1,706	
Brentuximab Vedotin in Patients with Relapsed/Refractory Hodgkin	93.RD	E4412	260	
A Randomized Phase II Study Comparing Single-agent Olaparib single agent cediranib and				
the combo of cediranib/olaparib in women with recurrent, persisitent or metastic				
endometrial cancer	93.RD	NRG-GY012	161	
A Phase IB Trial of Neoadjuvant AMG232 Concurrent with Preoperative Radiotherapy in				
Wild-type P53 Soft Tissue Sarcoma (STS)	93.RD	NRG-DT001	1,022	
Androgen Deprivation Therapy and High Dose Radiotherapy with or without whole-pelvic in Unfavorable Intermediate or favorable High Risk Prostate Cancer: A Phase III Randomized				
Trial	93.RD		122	
A Randomized, Phase III trial to Evaluate the Efficacy and Safety of MK-3475 as Adjuvant	330		122	
Therapy for Triple Receptor Negative Breast Cancer with >1 CM Residual Invasive Cancer				
or Positive Lymph Nodes After Neoadjuvant Chemotherapy	93.RD	S1418	558	
Passed through Kaiser Foundation:				
Early Vascular Contributions to Dementia Risk in African-Americans	93.866	R01AG050782	7,552	
Passed through IIT:	02.000	100146053300	05.254	
Comprehensive Probabilistic Atlas of the Brain of Older Adults without Dementia	93.866	1R01AG052200	95,351	

- 5 - (Continued)

RUSH SYSTEM FOR HEALTH SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS YEAR ENDED JUNE 30, 2019

	Federal	Federal Grantor/		
Federal Grantor/Pass-Through	CFDA	Pass-Through	Federal	
Grantor/Program or Cluster ⊤itle	Number	Grantor's Number	Expenditures	Subrecipients
Passed through Tufts University:				
Vitamins D and K Neuropathologically-Defined Alzheimer and Other				
Dementias in Older Persons	93.866	AG051641	171,963	
Passed through Mt. Sinai:				
Peripheral and Brain Levels of Advanced Glycation End Products AGEs and Incident Alzheimers Disease and Neuropathy	93.866	R01AG053446	347,297	
Integrative Network Modeling of Cognitive Resilience to Alzheimer's Disease	93.866	R01AG057907	38,551	
Leveraging Existing Aging Research Networks to Investigate TBI and AD/ADRD risk	33.000	10140037307	30,331	
(LEARN TBI & AD)	93.866	R01AG061028	36,440	
Passed through University of Wisconsin:				
FMR1 Premutation Phenotypes in Population-Based and Clinically-Ascertained Samples	93.865	R01HD082110	26,713	
APOLLO - Upper Midwest	93.847	U01DK116092	31,752	
Passed through Mclean Hospital:				
Human iPSC-based Personalized Cell Therapy of PD	93.853	R01NS070577	197,318	
Passed through RTI:				
Assessing Preferences for use of Clinical Data Among Individuals with IDD and Their Guardians	93.310	R01HD086702	3,352	
Decisional Capacity and Informed Consent in Fragile X Syndrome	93.865	R01 HD071987	3,332 2,872	
Paased through University of Kansas:	33.003	101110071307	2,072	
The Effects of Parenting on the Development and Behavior of FXS Adolescents	93.865	R01HD084563	67,813	
Passed through Thomas Jefferson:				
Optimizing Ultrasound Enhanced Delivery of Therapeutics	93.394	R01CA199646	(4,009)	
Passed through Beth Israel:				
iDEF Trial (Futility Study of Defroxamine Mesylate in Intracerebral Hemmorrhage	93.853	U01 NS074425	(33)	
Passed through Hospital for Special Surg:				
Mechnobiological Risk Factors for Initiation of Post Traumatic Osteoarthritis	93.846	R01 AR066635	183,870	
Passed through Case Western:				
Effects of IL-6 Blockade in treated HIV Infection	93.855	U01 Al105937	35,957	
Passed through Duke University: Metabolic Networks and Pathways in Alzheimer's Disease	93.866	R01AG046171	25,000	
Duke-UNC Prevention Epicenter Program for Prevention of Healthcare-Associated Infections	93.880	U54CK000483	25,000	15.644
Metabolomic signatures for disease sub-classification and target prioritization in AMP-AD	93.866	U01AG061359	16,138	13,044
Passed through Cleveland Clinic:	35.000	0011001333	10,130	
Dementia with Lewy Bodies Consortium	93.853	U01NS100610	36,995	
Passed through Cel-Sci Corporation:				
Preclinical Studies of Pg70 Leaps Peptide Vaccines for Rheumatoid Arthritis	93.846	2R44AR063504	205,718	
Passed through Intl Rett Syndomr FDN:				
Rett Syndrome, MECP2 Duplications, and Rett-related DisorderNatural History	93.865	2U54HD061222-11	39,474	
Passed through the Jackson Laboratory:				
Systems Genetics Analysis of Resilience to Alzheimer's Disease	93.866	R01AG057914	33,915	
Passed through Medical College of South Carolina:				
Genetic Marker of IgG and CytomegalovirusImmnuoevasion in Alzheimer Disease	93.866	R21AG058489	28,133	
Passed through National Fragile X Foundation: Fragile X Clinic and Research Cooperative ConsortiumAgreement	93,315	U01DD001186	978	
Passed through Valitor Inc:	93.313	OOTDOOTTOO	3/6	
Long-acting anti-TNFa conjugates to minimize osteolysisaround joint replacement devices	93.846	R43AR071857	20,971	
Passed through Minneapolis Medical Research Foundation:	33.040	143/1/07 1037	20,571	
Aspirin in Reducing Events in the Elderly (Aspree)	93.866	U01 AG029824	49,456	
Aspirin in reducing events in the elderly	93.866	U01 AG029824	7,092	
			-,	
Total U.S. Department of Health and Human Services		_	73,776,294	11,338,239
U.S. Department of Agriculture:				
Passed through Care Progress:				
SBIR Phase II: Leveraging Health Information Technology to Improve Communication				
between Cancer Patients and Providers	10.212	1534685	3,311	
		_		
Total U.S. Department of Agriculture			3,311	-
U.S. Army Medical Research Acquisition Activity:				
Targeting Prolyl Peptidases in Triple-Negative Breast Cancer Chiecting Rhynotyping in Convict Dystopia	12.420	W81XWH-16-1-0025	201,842	
Objective Phenotyping in Cervical Dystonia Targeting Diet-Microbiome Interactions in thePathogenesis of Parkinson's Disease	12.420	W81XWH-17-1-0394 W81XWH-17-1-0587	222,705 73,148	
	12.420			

RUSH SYSTEM FOR HEALTH
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2019

ederal Grantor/Pass-Through Grantor/Program or Cluster Title	Federal CFDA Number	Federal Grantor/ Pass-Through Grantor's Number	Federal Expenditures	Subrecipients
Passed through University of California:				
Effects of traumatic brain injury and post traumatic stress disorder on Alzheimer's disease in Veterans using A Passed through University of Melbourne:	12.420	W81XWH-12-2-0012	51,514	
The Role of an Aggrecan 32mer Fragment in Post-Traumatic Osteoarthritis	12.420	W81XWH-16-1-0706	4,682	
Total U.S. Army Medical Research Acquisition Activity		_	553,891	-
U.S. Department of Education:				
Web-Based Assesment of Social-Emotional Learning in Grades Four to Six VESIP: Virtual Environment for Social information processing assessment tool for Upper Elementary and Midc	84.305 84.305	R305A160053 R305A150189	323,881 351,504	26,74 28,94
Total Department of Education		_	675,386	55,68
FOTAL RESEARCH AND DEVELOPMENT		_	75,008,882	11,393,92
STUDENT FINANCIAL ASSISTANCE				
U.S. Department of Education:				
Stafford Loan	84.268	P268K5336	39,562,584	
Grad Plus Parent Loans for Undergraduate Students	84.268 84.268	P268K5336 P268K5336	14,675,386 42,489	
Perkins Loan	84.038	P038A031271	42,409	
Perkins Loan-outstanding loan bal. at measurement date	84.038	F 03 dA 03 127 1	4,386,693	
Pell Grant Program	84.063	P063P125336	279,281	
Supplemental Educational Opportunity Grant	84.007	P007A121271	162,625	
Federal Work Study	84.033	P033A121271	382,189	
Total U.S. Dept of Education			59,491,247	-
U.S. Department of Health and Human Services:				
Loans for Disadvantaged Students-outstanding loan bal. at measurement date	93.342		1,206,081	
Nursing Student Loan-Undergraduate-outstanding loan bal. at measurement date	93.364		54,545	
Nursing Student Loan-Graduate-outstanding loan bal. at measurement date	93.364		470,218	
Primary Care Loan/HPSL-outstanding loan bal. at measurement date	93.342		1,641,862	
Nurse Faculty Loan Program-outstanding loan bal. at measurement date-ARRA	93.408 93.264		190,334 900,684	
Nurse Faculty Loan Program-outstanding loan bal. at measurement date Nursing Student Loan	93.264	E4 DHP19180	900,684	
Nurse Faculty Loan Program	93.264	E01 HP28838	131,287	
Total U.S. Department of Health and Human Services		_	4,685,013	
TOTAL STUDENT FINANCIAL ASSISTANCE			64,176,260	-
OTHER FEDERAL ASSISTANCE				
Passed through Washington State Department of Social and Health Services:				
Bridge Model Passed through State of Illinois Department of Human Services:	93.048	9 ONWBC0004-01-00	5,249	
Opioid STR Program	93.788	43CXC03497	443,717	
Passed through City of Chicago-Department of Family and Support Services:	93.043	68760	44.826	
City of Chicago Health Promotion Services Health and Wellness Program	93.043 14.218	68760 43922	44,826 6,289	
Health Promotion-Nutrition Program	93.043	72269	6,030	
Passed through City of Chicago-Chicago Department of Public Health:	33.043	, eed3	0,030	
Expanded HIV Testing for Disproportionately affected populations	93.940	30597	60,000	
ASPR Hospital Preparedness Program Ebola Response Program	93.817	32949	10,022	
Passed through State of Illinois Department of Public Health:			,	
Family Planning Program	93.217	96180065G	79,588	
School Based Health Center	93.994	96380037G	160,320	
Regional Perinatal Network	93.994	86380007F	272,930	
TOTAL OTHER FEDERAL ASSISTANCE		_	1,088,971	

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RUSH SYSTEM FOR HEALTH SCHEDULE OF EXPENDITURES OF STATE AWARDS YEAR ENDED JUNE 30, 2019

State Grantor/Pass-Through Grantor/Program or Cluster Title	State Grantor/ Pass-Through Grantor's Number	State Expenditures
PASSED THROUGH THE ILLINOIS DEPARTMENT OF PUBLIC HEALTH:		
Genetic Counseling/Clinical Services	93788111G	\$71,752
Regional Perinatal Network	86380007F	142,212
School Based Health Center	96380037G	154,960
Family Planning	96180065G	49,472
Sickle Cell Program	93788304G	19,516
ELC and HAI	82680003F	52,520
Total Illinois Department of Public Health		490,432
PASSED THROUGH CITY OF CHICAGO - CHICAGO DEPARTMENT OF PUBLIC HEALTH:		
Community Breast Health Services	PO 57470 _	62,081
Total City of Chicago - Chicago Department of Public Health		62,081
PASSED THROUGH THE ILLINOIS DEPARTMENT OF HUMAN SERVICES:		
Early Intervention Services	FCSXO05147	2,876,299
Early Intervention Services	FCSXO00924	726,208
Total Illinois Department of Human Services		3,602,507
TOTAL EXPENDITURES OF STATE AWARDS	_	4,155,020
TOTAL EXPENDITURES FEDERAL AND STATE AWARDS	-	144,429,133

RUSH SYSTEM FOR HEALTH

NOTES TO THE SCHEDULES OF EXPENDITURES OF FEDERAL AWARDS AND STATE AWARDS FOR THE YEAR ENDED JUNE 30, 2019

1. BASIS OF PRESENTATION

The accompanying Schedules of Expenditures of Federal Awards and State Awards (the "Schedules") include the federal and state grant activity of Rush System for Health (the "System" or "Rush"). The Schedules have been prepared on the accrual basis of accounting. The information in the Schedules is presented in accordance with the requirements of U.S. Office of Management and Budget Uniform Guidance, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Award.*

2. SUMMARY OF SIGNIFICANT ACCOUNTING PRINCIPLES

Expenditures reported on the Schedules are presented on the accrual basis of accounting. Such expenditures are recognized following cost principles contained in OMB Uniform Guidance in 2 CFR Part 200 wherein certain types of expenditures are not allowable or are limited as to reimbursement. Pass-through entity identifying numbers are presented where available. Rush did not elect to utilize the de minimis indirect cost rate as allowed under Uniform Guidance.

3. LOANS WITH CONTINUING REQUIREMENTS

The outstanding balances as of June 30, 2019 for those loan programs for which the Federal Government imposes continuing compliance requirements are as follows:

Perkins Loan	\$ 4,386,693
Loans for Disadvantaged Students	929,371
Nursing Student Loan-Undergraduate	33,015
Nursing Student Loan-Graduate	439,728
Primary Care Loan/HPSL	1,263,216
Nurse Faculty Loan Program- ARRA	149,814
Nurse Faculty Loan Program	892,011

4. NONCASH ASSISTANCE

Rush did not receive any noncash federal awards or in-kind contributions during fiscal year 2019. In addition, Rush did not have any federal insurance in effect during the year ended June 30, 2019, to specifically cover federal expenditures.

RUSH SYSTEM FOR HEALTH								
SCHEDULE OF FINDINGS AND QUESTIONED COSTS FOR THE YEAR ENDED JUNE 30, 2019								
Pai	Part I—Summary of Auditors' Results							
Fin	ancial Statements							
Type of auditors' report issued: unmodified Internal control over financial reporting:								
•	Material weakness(es) identified?		yes	X	no			
•	Significant deficiency(ies) identified that are							
	not considered to be material weaknesses?		yes	X	none reported			
•	Noncompliance material to consolidated financial							
	statements noted?		yes	X	no			
Fed	leral Awards							
Inte	ernal control over major programs:							
•	Material weakness(es) identified?		yes	X	no			
•	Significant deficiency(ies) identified that are							
	not considered to be material weakness(es)?		yes	X	none reported			
Type of auditors' report issued on compliance for major programs: unmodified								
	y audit findings disclosed that are							
	uired to be reported in accordance with FR 200.516 of OMB Uniform Guidance?		V05	Х	no			
20	FR 200.310 Of ONIB Official Guidance:		yes		110			
lde	ntification of major programs:							
	CFDA Numbers	Name of Federal Program or Cluster						
,	V arious		St	udent Fina	ancial Aid			
Do	lar threshold used to distinguish between							
typ	e A and type B programs:	\$3,000,000						
Au	ditee qualified as low-risk auditee?	<u> x</u>	yes		no			

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RUSH SYSTEM FOR HEALTH

SCHEDULE OF FINDINGS AND QUESTIONED COSTS FOR THE YEAR ENDED JUNE 30, 2019

Part II—Financial Statement Findings

None noted.

Part III—Federal Award Findings and Questioned Costs

None noted.

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RUSH SYSTEM FOR HEALTH

SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS FOR THE YEAR ENDED JUNE 30, 2019

Part II—Financial Statement Findings

None noted.

Part III—Federal Award Findings and Questioned Costs

None noted.

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549 Form 10-K

×	ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT O	F 1934

For fiscal year ended December 31, 2020

TRANSITION REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to Commission file numbers: 001-34465

SELECT MEDICAL HOLDINGS CORPORATION

(Exact name of Registrant as specified in its Charter) 20-1764048 Delaware (State or Other Jurisdiction of Incorporation or Organization) (I.R.S. Employer Identification Number) 4714 Gettysburg Road, P.O. Box 2034 Mechanicsburg, PA, 17055 (Address of Principal Executive Offices and Zip Code) (717) 972-1100 (Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class Common Stock, \$0.001 par value per share Trading Symbol(s)

Name of Bach Exchange on Which Registered New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: NONE

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes 🛭 No 🗆

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes 🗆 No 🛭

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding twelve months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes 🗵 No 🗆

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding twelve months (or for such shorter period that the registrant was required to submit such files). Yes \boxtimes No \square

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer × Accelerated filer

Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes \Box No \boxtimes

The aggregate market value of the registrant's voting stock held by non-affiliates at June 30, 2020 (the last business day of the registrant's most recently completed second fiscal quarter) was approximately \$1,574,403,942, based on the closing price per share of common stock on that date of \$14.73 as reported on the New York Stock Exchange. Shares of common stock known by the registrant to be beneficially owned by directors and officers of the registrant subject to the reporting and other requirements of Section 16 of the Securities Exchange Act of 1934 are not included in the computation. The registrant, however, has made no determination that such persons are "affiliates" within the meaning of Rule 12b-2 under the Securities Exchange Act of 1934.

As of February 1, 2021, the number of shares of Holdings' Common Stock, \$0.001 par value, outstanding was 134,836,735.

Unless the context indicates otherwise, any reference in this report to "Holdings" refers to Select Medical Holdings Corporation and any reference to "Select" refers to Select Medical Corporation, the wholly owned operating subsidiary of Holdings, and any of Select's subsidiaries. Any reference to "Concentra" refers to Concentra Group Holdings Parent, LLC ("Concentra Group Holdings Parent," "us," "and "our" refer collectively to Holdings, Select, and Concentra.

Documents Incorporated by Reference

Listed hereunder are the documents, any portions of which are incorporated by reference and the Parts of this Form 10-K into which such portions are incorporated:

1. The registrant's definitive proxy statement for use in connection with the 2021 Annual Meeting of Stockholders to be held on or about April 30, 2021 to be filed within 120 days after the registrant's fiscal year ended December 31, 2020, portions of which are incorporated by reference into Part III of this Form 10-K. Such definitive proxy statement, except for the parts therein which have been specifically incorporated by reference, should not be deemed "filed" for the purposes of this form 10-K.

https://www.sec.gov/Archives/edgar/data/1320414/000162828021003313/sem-20201231.htm

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SELECT MEDICAL HOLDINGS CORPORATION ANNUAL REPORT ON FORM 10-K

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PART I

Forward-Looking Statements

This annual report on Form 10-K contains forward-looking statements within the meaning of the federal securities laws. Statements that are not historical facts, including statements about our beliefs and expectations, are forward-looking statements. Forward-looking statements include statements preceded by, followed by or that include the words "may," "could," "would," "should," "shelieve," "expect," "anticipate," "plan," "target," "estimate," "project," "intend," and similar expressions. These statements include, among others, statements regarding our expected business outlook, anticipated financial and operating results, including the potential impact of the coronavirus disease 2019 ("COVID-19") pandemic on those financial and operating results, our business strategy and means to implement our strategy, our objectives, the amount and timing of capital expenditures, the likelihood of our success in expanding our business, financing plans, budgets, working capital needs, and sources of liquidity.

Forward-looking statements are only predictions and are not guarantees of performance. These statements are based on our management's beliefs and assumptions, which in turn are based on currently available information. Important assumptions relating to the forward-looking statements include, among others, assumptions regarding our services, the expansion of our services, competitive conditions, and general economic conditions. These assumptions could prove inaccurate. Forward-looking statements also involve known and unknown risks and uncertainties, which could cause actual results to differ materially from those contained in any forward-looking statement. Many of these factors are beyond our ability to control or predict. Such factors include, but are not limited to, the following:

- developments related to the COVID-19 pandemic including, but not limited to, the duration and severity of the pandemic, additional
 measures taken by government authorities and the private sector to limit the spread of COVID-19, and further legislative and regulatory
 actions which impact healthcare providers, including actions that may impact the Medicare program;
- changes in government reimbursement for our services and/or new payment policies may result in a reduction in revenue, an increase in
 costs, and a reduction in profitability;
- the failure of our Medicare-certified long term care hospitals or inpatient rehabilitation facilities to maintain their Medicare certifications may cause our revenue and profitability to decline;
- the failure of our Medicare-certified long term care hospitals and inpatient rehabilitation facilities operated as "hospitals within hospitals" to qualify as hospitals separate from their host hospitals may cause our revenue and profitability to decline;
- a government investigation or assertion that we have violated applicable regulations may result in sanctions or reputational harm and increased costs:
- · acquisitions or joint ventures may prove difficult or unsuccessful, use significant resources, or expose us to unforeseen liabilities;
- our plans and expectations related to our acquisitions and our ability to realize anticipated synergies;
- private third-party payors for our services may adopt payment policies that could limit our future revenue and profitability;
- the failure to maintain established relationships with the physicians in the areas we serve could reduce our revenue and profitability;
- shortages in qualified nurses, therapists, physicians, or other licensed providers, or the inability to attract or retain healthcare
 professionals due to the heightened risk of infection related to the COVID-19 pandemic, could increase our operating costs significantly
 or limit our ability to staff our facilities;
- · competition may limit our ability to grow and result in a decrease in our revenue and profitability;
- the loss of key members of our management team could significantly disrupt our operations;
- the effect of claims asserted against us could subject us to substantial uninsured liabilities;
- a security breach of our or our third-party vendors' information technology systems may subject us to potential legal and reputational
 harm and may result in a violation of the Health Insurance Portability and Accountability Act of 1996 or the Health Information
 Technology for Economic and Clinical Health Act; and
- other factors discussed from time to time in our filings with the Securities and Exchange Commission (the "SEC"), including factors
 discussed under the heading "Risk Factors" of this annual report on Form 10-K.

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Except as required by applicable law, including the securities laws of the United States and the rules and regulations of the SEC, we are under no obligation to publicly update or revise any forward-looking statements, whether as a result of any new information, future events, or otherwise. You should not place undue reliance on our forward-looking statements. Although we believe that the expectations reflected in forward-looking statements are reasonable, we cannot guarantee future results or performance.

Investors should also be aware that while we do, from time to time, communicate with securities analysts, it is against our policy to disclose to securities analysts any material non-public information or other confidential commercial information. Accordingly, stockholders should not assume that we agree with any statement or report issued by any securities analyst irrespective of the content of the statement or report. Thus, to the extent that reports issued by securities analysts contain any projections, forecasts or opinions, such reports are not the responsibility of the Company.

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Item 1. Business.

Overview

We began operations in 1997 and, based on the number of facilities, are one of the largest operators of critical illness recovery hospitals, rehabilitation hospitals, outpatient rehabilitation clinics, and occupational health centers in the United States. As of December 31, 2020, we had operations in 46 states and the District of Columbia. As of December 31, 2020, we operated 99 critical illness recovery hospitals in 28 states, 30 rehabilitation hospitals in 12 states, and 1,788 outpatient rehabilitation clinics in 37 states and the District of Columbia. As of December 31, 2020, Concentra, a joint venture subsidiary, operated 517 occupational health centers in 41 states. Concentra also provides contract services at employer worksites.

We manage our Company through four business segments: our critical illness recovery hospital segment, our rehabilitation hospital segment, our outpatient rehabilitation segment, and our Concentra segment. We had revenue of \$5,531.7 million for the year ended December 31, 2020. Of this total, we earned approximately 38% of our revenue from our critical illness recovery hospital segment, approximately 13% from our rehabilitation hospital segment, approximately 17% from our outpatient rehabilitation segment, and approximately 27% from our Concentra segment. We also recognized revenue associated with employee leasing services provided to the Company's non-consolidating subsidiaries; these revenues are included as part of our other activities. The Company previously referred to its revenue as "net operating revenues."

Our critical illness recovery hospital segment consists of hospitals designed to serve the needs of patients recovering from critical illnesses, often with complex medical needs, and our rehabilitation hospital segment consists of hospitals designed to serve patients that require intensive physical rehabilitation care. Patients are typically admitted to our critical illness recovery hospitals and rehabilitation hospitals from general acute care hospitals. Our outpatient rehabilitation segment consists of clinics that provide physical, occupational, and speech rehabilitation services. Our Concentra segment consists of occupational health centers and contract services provided at employer worksites that deliver occupational medicine, physical therapy, and consumer health services. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations" and "Notes to Consolidated Financial Statements—Note 15. Segment Information" beginning on F-29 for financial information for each of our segments for the past three fiscal years.

Critical Illness Recovery Hospitals

We are a leading operator of critical illness recovery hospitals in the United States, which are certified by Medicare as long term care hospitals ("LTCHs"). As of December 31, 2020, we operated 99 critical illness recovery hospitals in 28 states. For the years ended December 31, 2018, 2019, and 2020, approximately 51%, 49% and 43%, respectively, of the revenue of our critical illness recovery hospital segment came from Medicare reimbursement. As of December 31, 2020, we employed approximately 14,700 people in our critical illness recovery hospital segment, consisting primarily of registered nurses, respiratory therapists, physical therapists, occupational therapists, and speech therapists.

We operate the majority of our critical illness recovery hospitals as a hospital within a hospital (an "HIH"). A critical illness recovery hospital that operates as an HIH typically leases space from a general acute care hospital, or "host hospital," and operates as a separately licensed hospital within the host hospital, or on the same campus as the host hospital. In contrast, a free-standing critical illness recovery hospital does not operate on a host hospital campus. We operated 99 critical illness recovery hospitals at December 31, 2020, of which 70 were operated as HIHs and 29 were operated as free-standing hospitals.

Patients are typically admitted to our critical illness recovery hospitals from general acute care hospitals, likely following an intensive care unit stay, suffering from chronic critical illness. These patients have highly specialized needs, with serious and complex medical conditions involving multiple organ systems. These conditions are often a result of complications related to heart failure, complex infectious disease, respiratory failure and pulmonary disease, complex surgery requiring prolonged recovery, renal disease, neurological events, and trauma. Given their complex medical needs, these patients require a longer length of stay than patients in a general acute care hospital and benefit from being treated in a critical illness recovery hospital that is designed to meet their unique medical needs. For the year ended December 31, 2020, the average length of stay for patients in our critical illness recovery hospitals was 30 days.

Additionally, we continually seek to increase our admissions by demonstrating our quality outcomes and, by doing so, expanding and improving our relationships with the physicians and general acute care hospitals in the markets where we operate. We maintain a strong focus on the provision of high-quality medical care within our facilities. The Joint Commission ("TJC") and DNV GL Healthcare USA, Inc. ("DNV") are independent, not-for-profit organizations that establish standards related to the operation and management of healthcare facilities. As of December 31, 2020, we operated 99 critical illness recovery hospitals, 98 of which were accredited by TJC. One of our critical illness recovery hospitals was accredited by DNV. Also as of December 31, 2020, all of our critical illness recovery hospitals were certified as LTCHs. Each of our critical illness recovery hospitals must regularly demonstrate to a survey team conformance to the applicable standards established by TJC, DNV or the Medicare program, as applicable.

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When a patient is referred to one of our critical illness recovery hospitals by a physician, case manager, discharge planner, or payor, a clinical assessment is performed to determine patient eligibility for admission. Based on the determinations reached in this clinical assessment an admission decision is made.

Upon admission, an interdisciplinary team meets to perform a comprehensive review of the patient's condition. The interdisciplinary team is composed of a number of clinicians and may include any or all of the following: an attending physician; a registered nurse; a physical, occupational, and speech therapist; a respiratory therapist; a dietitian; a pharmacist; and a case manager. Upon completion of an initial evaluation by each member of the treatment team, an individualized treatment plan is established and initiated. Case management coordinates all aspects of the patient's hospital stay and serves as a liaison to the insurance carrier's case management staff as appropriate. The case manager specifically communicates clinical progress, resource utilization, and treatment goals to the patient, the treatment team, and the payor.

Each of our critical illness recovery hospitals has a distinct medical staff that is composed of physicians from multiple specialties that have successfully completed the required privileging and credentialing process. In general, physicians on the medical staff are not directly employed but are more commonly independent, practicing at multiple hospitals in the community. Attending physicians conduct daily rounds on their patients while consulting physicians provide consulting services based on the specific medical needs of our patients. Each critical illness recovery hospital develops on-call arrangements with individual physicians to help ensure that a physician is available to care for our patients. When determining the appropriate composition of the medical staff of a critical illness recovery hospital, we consider the size of the critical illness recovery hospital, services provided by the critical illness recovery hospital, if applicable, the size and capabilities of the medical staff of the general acute care hospital that hosts that HIH and, if applicable, the proximity of an acute care hospital to the free-standing critical illness recovery hospital. The medical staff of each of our critical illness recovery hospitals meets the applicable requirements set forth by Medicare, the hospital's applicable accrediting organizations, and the state in which that critical illness recovery hospital is located.

Our critical illness recovery hospital segment is led by a president & chief operating officer, chief medical officer, and chief quality officer. Each of our critical illness recovery hospitals has an onsite management team consisting of a chief executive officer, a medical director, a chief nursing officer, and a director of business development. These teams manage local strategy and day-to-day operations, including oversight of clinical care and treatment. They also assume primary responsibility for developing relationships with the general acute care providers and clinicians in the local areas we serve that refer patients to our critical illness recovery hospitals. We provide our critical illness recovery hospitals with centralized accounting, treasury, payroll, legal, operational support, human resources, compliance, management information systems, and billing and collection services. The centralization of these services improves efficiency and permits staff at our critical illness recovery hospitals to focus their time on patient care.

For a description of government regulations and Medicare payments made to our critical illness recovery hospitals, see "—
Government Regulations" and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Regulatory Changes."

Critical Illness Recovery Hospital Strategy

The key elements of our critical illness recovery hospital strategy are to:

Focus on Specialized Inpatient Services. We serve highly acute patients and patients with debilitating injuries and rehabilitation needs that cannot be adequately cared for in a less medically intensive environment, such as a skilled nursing facility. Patients admitted to our critical illness recovery hospitals require long stays, benefiting from a more specialized and targeted clinical approach. Our care model is distinct from what patients experience in general acute care hospitals.

Provide High-Quality Care and Service. Our critical illness recovery hospitals serve a critical role in comprehensive healthcare delivery. Through our specialized treatment programs and staffing models, we treat patients with acute, highly complex, and specialized medical needs. Our treatment programs focus on specific patient needs and medical conditions, such as ventilator weaning protocols, comprehensive wound care assessments and treatment protocols, medication review and antibiotic stewardship, infection control prevention, and customized mobility, speech, and swallow programs. Our staffing models seek to ensure that patients have the appropriate clinical resources over the course of their stay. We maintain quality assurance programs to support and monitor quality of care standards and to meet regulatory requirements and maintain Medicare certifications. We believe that we are recognized for providing quality care and service, which helps develop brand loyalty in the local areas we serve.

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Our treatment programs are continuously reassessed and updated based on peer-reviewed literature. This approach provides our clinicians access to the best practices and protocols that we have found to be effective in treating various conditions in this population such as respiratory failure, non-healing wounds, brain injury, renal dysfunction, and complex infectious diseases. In addition, we customize these programs to provide a treatment plan tailored to meet our patients' unique needs. The collaborative team-based approach coupled with the intense focus on patient safety and quality affords these highly complex patients the best opportunity to recover from catastrophic illness. This comprehensive care model is ultimately measured by the functional recovery of each of our patients.

Our critical illness recovery hospitals demonstrated a critical role in caring for patients during the COVID-19 pandemic. Our critical illness recovery hospitals were and continue to be in a position to enhance and promote recovery of patients with COVID-19, as many patients with severe manifestations of COVID-19 require prolonged mechanical ventilation. We have developed specialized strategies for liberation from prolonged mechanical ventilation, promoting physical recovery through innovative therapies and nutrition programs while reducing risk of adverse ventilator-associated events including pneumonia and infection. Our critical illness recovery hospitals demonstrated rapid preparation and implementation of modifications that supported the treatment of active COVID-19 patients and patients recovering from moderate-to-severe response to COVID-19 infection. Successful treatment resulted in a significant increase in the proportion of COVID-19 patients who were discharged to home and lower level of care compared to non-COVID-19 patients. We have demonstrated that our critical illness recovery hospitals can substitute for ICU beds in regions with high COVID-19 surge levels and as a post-ICU provider for patients who require longer-term care while recovering from severe complications from COVID-19.

The quality of the patient care we provide is continually monitored using several measures, including clinical outcomes data and analyses and patient satisfaction surveys. Quality metrics from our critical illness recovery hospitals are used to create monthly, quarterly, and annual reporting for our leadership team. In order to benchmark ourselves against other hospitals, we collect our clinical and patient satisfaction information and compare it to national standards and the results of other healthcare organizations. We are required to report quality measures to individual states based on unique requirements and laws. We also submit required quality data elements to the Center for Medicare & Medicaid Services ("CMS"). See "—Government Regulations—Other Medicare Regulations—Medicare Quality Reporting."

Control Operating Costs. We continually seek to improve operating efficiency and control costs at our critical illness recovery hospitals by standardizing operations and centralizing key administrative functions. These initiatives include:

- centralizing administrative functions such as accounting, finance, treasury, payroll, legal, operational support, human resources, compliance, and billing and collection;
- standardizing management information systems to assist in capturing the medical record, accounting, billing, collections, and data capture and analysis: and
- centralizing sourcing and contracting to receive discounted prices for pharmaceuticals, medical supplies, and other commodities
 used in our operations.

Increase Commercial Volume. We have focused on continued expansion of our relationships with commercial insurers to increase our volume of patients with commercial insurance in our critical illness recovery hospitals. We believe that commercial payors seek to contract with our hospitals because we offer our patients high-quality, cost-effective care at more attractive rates than general acute care hospitals. We also offer commercial enrollees customized treatment programs not typically offered in general acute care hospitals.

Pursue Opportunistic Acquisitions. We may grow our network of critical illness recovery hospitals through opportunistic acquisitions. When we acquire a critical illness recovery hospital or a group of related facilities, a team of our professionals is responsible for formulating and executing an integration plan. We seek to improve financial performance at such facilities by adding clinical programs that attract commercial payors, centralizing administrative functions, and implementing our standardized resource management programs.

Rehabilitation Hospitals

Our rehabilitation hospitals provide comprehensive physical medicine, as well as rehabilitation programs and services, which serve to optimize patient health, function, and quality of life. As of December 31, 2020, we operated 30 rehabilitation hospitals in 12 states. For the years ended December 31, 2018, 2019, and 2020, approximately 50%, 50% and 47% respectively, of the revenue of our rehabilitation hospital segment came from Medicare reimbursement. As of December 31, 2020, we employed approximately 11,500 people in our rehabilitation hospital segment, consisting primarily of registered nurses, respiratory therapists, physical therapists, occupational therapists, speech therapists, neuropsychologists, and other psychologists.

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Patients at our rehabilitation hospitals have specialized needs, with serious and often complex medical conditions requiring rehabilitative healthcare services in an inpatient setting. These conditions require targeted therapy and rehabilitation treatment, including comprehensive rehabilitative services for brain and spinal cord injuries, strokes, amputations, neurological disorders, orthopedic conditions, pediatric congenital or acquired disabilities, and cancer. Given their complex medical needs and gradual and prolonged recovery, these patients generally require a longer length of stay than patients in a general acute care hospital. For the year ended December 31, 2020, the average length of stay for patients in our rehabilitation hospitals was 15 days.

Additionally, we continually seek to increase our admissions by demonstrating our quality outcomes and, by doing so, expanding and improving our relationships with the physicians and general acute care hospitals in the markets where we operate. We maintain a strong focus on the provision of high-quality medical care within our facilities. As of December 31, 2020, we operated 30 rehabilitation hospitals, all of which were accredited by TJC. Also as of December 31, 2020, all of our rehabilitation hospitals were certified as Medicare providers as impatient rehabilitation facilities ("IRFs"). 12 of our rehabilitation hospitals also received accreditation from the Commission on Accreditation of Rehabilitation Facilities ("CARF"), an independent, not-for-profit organization that establishes standards related to the operation of medical rehabilitation facilities. Each of our rehabilitation hospitals must regularly demonstrate to a survey team conformance to the applicable standards established by TJC, the Medicare program, or CARF, as applicable.

When a patient is referred to one of our rehabilitation hospitals by a physician, case manager, discharge planner, health maintenance organization, or insurance company, we perform a clinical assessment of the patient to determine if the patient meets criteria for admission. Based on the determinations reached in this clinical assessment, an admission decision is made.

Upon admission, an interdisciplinary team reviews a patient's condition. The interdisciplinary team is composed of a number of clinicians and may include any or all of the following: an attending physician; a registered nurse; a physical, occupational, and speech therapist; a respiratory therapist; a dietitian; a pharmacist; and a case manager. Upon completion of an initial evaluation by each member of the treatment team, an individualized treatment plan is established and implemented. The case manager coordinates all aspects of the patient's hospital stay and serves as a liaison with the insurance carrier's case management staff when appropriate. The case manager communicates progress, resource utilization, and treatment goals between the patient, the treatment team, and the payor.

Each of our rehabilitation hospitals has a multi-specialty medical staff that is composed of physicians who have completed the privileging and credentialing process required by that rehabilitation hospital and have been approved by the governing board of that rehabilitation hospital. Physicians on the medical staff of our rehabilitation hospitals are generally not directly employed by our rehabilitation hospitals, but instead have staff privileges at one or more hospitals. At each of our rehabilitation hospitals, attending physicians conduct rounds on their patients on a regular basis and consulting physicians provide consulting services based on the medical needs of our patients. Our rehabilitation hospitals also have on-call arrangements with physicians to help ensure that a physician is available to care for our patients. We staff our rehabilitation hospitals with the number of physicians, therapists, and other medical practitioners that we believe is appropriate to address the varying needs of our patients. When determining the appropriate composition of the medical staff of a rehabilitation hospital, we consider the size of the rehabilitation hospital, services provided by the rehabilitation hospital, and, if applicable, the proximity of an acute care hospital to the free-standing rehabilitation hospital. The medical staff of each of our rehabilitation hospitals meets the applicable requirements set forth by Medicare, the facility's applicable accrediting organizations, and the state in which that rehabilitation hospital is located.

Our rehabilitation hospital segment is led by a president, chief operating officer, national medical director, chief academic officer, and chief quality officer. Each of our rehabilitation hospitals has an onsite management team consisting of a chief executive officer, a medical director, a chief nursing officer, a director of therapy services, and a director of business development. These teams manage local strategy and day-to-day operations, including oversight of clinical care and treatment. They also assume primary responsibility for developing relationships with the general acute care providers and clinicians in the local areas we serve that refer patients to our rehabilitation hospitals. We provide our facilities within our rehabilitation hospital segment with centralized accounting, treasury, payroll, legal, operational support, human resources, compliance, management information systems, and billing and collection services. The centralization of these services improves efficiency and permits the staff at our rehabilitation hospitals to focus their time on patient care.

For a description of government regulations and Medicare payments made to our rehabilitation hospitals, see "—Government Regulations" and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Regulatory Changes."

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Rehabilitation Hospital Strategy

The key elements of our rehabilitation hospital strategy are to:

Focus on Specialized Inpatient Services. We serve patients with debilitating injuries and rehabilitation needs that cannot be adequately cared for in a less medically intensive environment, such as a skilled nursing facility. Generally, patients in our rehabilitation hospitals require longer stays and can benefit from more specialized and intensive clinical care than patients treated in general acute care hospitals and require more intensive therapy than that provided in outpatient rehabilitation clinics.

Provide High-Quality Care and Service. Our rehabilitation hospitals serve a critical role in comprehensive healthcare delivery. Through our specialized treatment programs and staffing models, we treat patients with complex and specialized medical needs. Our specialized treatment programs focus on specific patient needs and medical conditions, such as rehabilitation programs for brain trauma and spinal cord injuries. We also focus on specific programs of care designed to restore strength, improve physical and cognitive function, and promote independence in activities of daily living for patients who have suffered complications from strokes, amputations, cancer, and neurological and orthopedic conditions. Our staffing models seek to ensure that patients have the appropriate clinical resources over the course of their stay. We maintain quality assurance programs to support and monitor quality of care standards and to meet regulatory requirements and maintain Medicare certifications. We believe that we are recognized for providing quality care and service, which helps develop brand loyalty in the local areas we serve.

Our treatment programs, which are continuously reassessed and updated, benefit patients because they give our clinicians access to the best practices and protocols that we have found to be most effective in treating various conditions such as brain and spinal cord injuries, strokes, and neuromuscular disorders. In addition, we combine or modify these programs to provide a treatment plan tailored to meet our patients' unique needs. We measure the outcomes and successes of our patients' recovery in order to provide the best possible patient care and service.

Our rehabilitation hospitals demonstrated a critical role in caring for patients during the COVID-19 pandemic. Our rehabilitation hospitals were and continue to be in a position to enhance and promote recovery of patients with COVID-19, as many patients with severe manifestations of COVID-19 suffer from complex medical conditions and severe deconditioning. Our rehabilitation hospitals demonstrated rapid preparation and implementation of modifications that supported the treatment of active COVID-19 patients and patients recovering from moderate-to-severe response to COVID-19 infection. We have demonstrated that our rehabilitation hospitals can support short term acute care hospitals in regions as a post-ICU provider for patients who require specialized therapies while recovering from severe complications from COVID-19.

The quality of the patient care we provide is continually monitored using several measures, including clinical outcomes data and analyses and patient satisfaction surveys. Quality metrics from our rehabilitation hospitals are used to create monthly, quarterly, and annual reporting for our leadership team. In order to benchmark ourselves against other hospitals, we collect our clinical and patient satisfaction information and compare it to national standards and the results of other healthcare organizations. We are required to report quality measures to individual states based on unique requirements and laws. We also submit required quality data elements to CMS. See "— Government Regulations—Other Medicare Regulations—Medicare Quality Reporting."

Control Operating Costs. We continually seek to improve operating efficiency and control costs at our rehabilitation hospitals by standardizing operations and centralizing key administrative functions. These initiatives include:

- centralizing administrative functions such as accounting, finance, treasury, payroll, legal, operational support, human resources, compliance, and billing and collection;
- standardizing management information systems to assist in capturing the medical record, accounting, billing, collections, and data capture and analysis; and
- centralizing sourcing and contracting to receive discounted prices for pharmaceuticals, medical supplies, and other commodities
 used in our operations.

Increase Commercial Volume. We have focused on continued expansion of our relationships with commercial insurers to increase our volume of patients with commercial insurance in our rehabilitation hospitals. We believe that commercial payors seek to contract with our rehabilitation hospitals because we offer our patients high-quality, cost-effective care at more attractive rates than general acute care hospitals. We also offer commercial enrollees customized and comprehensive rehabilitation treatment programs not typically offered in general acute care hospitals.

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Develop Rehabilitation Hospitals through Pursuing Joint Ventures with Large Healthcare Systems. By leveraging the experience of our senior management and development team, we believe that we are well positioned to expand our portfolio of joint ventured operations. When we identify joint venture opportunities, our development team conducts an extensive review of the area's referral patterns and commercial insurance rates to determine the general reimbursement trends and payor mix. Once discussions commence with a healthcare system, we refine the specific needs of a joint venture, which could include working capital, the construction of new space, or the leasing and renovation of existing space. A joint venture typically consists of us and the healthcare system contributing certain post-acute care businesses into a newly formed entity. We typically function as the manager and hold either a majority or minority ownership interest. We bring clinical expertise and clinical programs that attract commercial payors and implement our standardized resource management programs, which may improve the clinical outcome and enhance the financial performance of the joint venture.

Pursue Opportunistic Acquisitions. We may grow our network of rehabilitation hospitals through opportunistic acquisitions. When we acquire a rehabilitation hospital or a group of related facilities, a team of our professionals is responsible for formulating and executing an integration plan. We seek to improve financial performance at such facilities by adding clinical programs that attract commercial payors, centralizing administrative functions, and implementing our standardized resource management programs.

Outpatient Rehabilitation

We are the largest operator of outpatient rehabilitation clinics in the United States based on number of facilities, with 1,788 facilities throughout 37 states and the District of Columbia as of December 31, 2020. Our outpatient rehabilitation clinics are typically located in a medical complex or retail location. Our outpatient rehabilitation segment employed approximately 10,400 people as of December 31, 2020.

In our outpatient rehabilitation clinics, we provide physical, occupational, and speech rehabilitation programs and services. We also provide certain specialized programs such as functional programs for work related injuries, hand therapy, post-concussion rehabilitation, pediatric rehabilitation, cancer rehabilitation, and athletic training services. In 2020, we developed and launched our national Recovery and Reconditioning program design to rehabilitate those patients suffering side effects from COVID-19. The typical patient in one of our outpatient rehabilitation clinics suffers from musculoskeletal impairments that restrict his or her ability to perform normal activities of daily living. These impairments are often associated with accidents, sports injuries, work related injuries, or post-operative orthopedic and other medical conditions. Our rehabilitation programs and services are designed to help these patients minimize physical and cognitive impairments and maximize functional ability. We also provide services designed to prevent short term disabilities from becoming chronic conditions. Our rehabilitation services are provided by our professionals including licensed physical therapists, occupational therapists, and speech-language pathologists.

Outpatient rehabilitation patients are generally referred or directed to our clinics by a physician, employer, or health insurer who believes that a patient, employee, or member can benefit from the level of therapy we provide in an outpatient setting. Although individuals in all states may have some form of direct access to physical therapy services, the level of direct access varies based on provisions and limitations in each jurisdiction. In recent years, all states have enacted laws that allow individuals to seek outpatient physical rehabilitation services without a physician order. In our outpatient rehabilitation segment, for the year ended December 31, 2020, approximately 83% of our revenue come from commercial payors, including healthcare insurers, managed care organizations, workers' compensation programs, contract management services, and private pay sources. We believe that our services are attractive to healthcare payors who are seeking to provide high-quality and cost-effective care to their enrollees. The balance of our reimbursement is derived from Medicare and other government sponsored programs.

For a description of government regulations and Medicare payments made to our outpatient rehabilitation services, see "—
Government Regulations" and "Management's Discussion and Analysis of Financial Condition and Results of Operations—Regulatory Changes."

Outpatient Rehabilitation Strategy

The key elements of our outpatient rehabilitation strategy are to:

Provide High-Quality Care and Service. We are focused on providing a high level of service to our patients throughout their entire course of treatment. To measure satisfaction with our service we have developed surveys for both patients and physicians. Our clinics utilize the feedback from these surveys to continuously refine and improve service levels. We believe that by focusing on quality care and offering a high level of customer service we develop brand loyalty which allows us to strengthen our relationships with referring physicians, employers, and health insurers to drive additional patient volume.

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Increase Market Share. We strive to establish a leading presence within the local areas we serve. To increase our presence, we seek to open new clinics in our existing markets. We have also entered into joint ventures with hospital systems that have resulted in an increase in the number of facilities that we operate. This allows us to realize economies of scale, heightened brand loyalty, and workforce continuity. We also focus on increasing our workers' compensation and commercial/managed care payor mix.

Expand Rehabilitation Programs and Services. Through our local clinical directors of operations and clinic managers within their service areas, we assess the healthcare needs of the areas we serve. Based on these assessments, we implement additional programs and services (such as telehealth) specifically targeted to meet demand in the local community. In designing these programs we benefit from the knowledge we gain through our national network of clinics. This knowledge is used to design programs that optimize treatment methods and measure changes in health status, clinical outcomes, and patient satisfaction.

Optimize Payor Contract Reimbursements. We review payor contracts scheduled for renewal and potential new payor contracts to assure reasonable reimbursements for the services we provide. Before we enter into a new contract with a commercial payor, we assess the reasonableness of the reimbursements by analyzing past and projected patient volume and clinic capacity. We create a retention strategy for the top performing contracts and a renegotiation strategy for contracts that do not meet our defined criteria. We believe that our national footprint and our strong reputation enable us to negotiate favorable reimbursement rates with commercial insurers.

Maintain Strong Community and Employee Relations. We believe that the relationships between our employees and the referral sources in their communities are critical to our success. Our referral sources, such as physicians and healthcare case managers, send their patients to our clinics based on three factors: the quality of our care, the customer service we provide, and their familiarity with our therapists. We seek to retain and motivate our therapists by implementing a performance-based bonus program, a defined career path with the ability to be promoted from within, timely communication on company developments, and internal training programs. We also focus on empowering our employees by giving them a high degree of autonomy in determining local area strategy. We seek to identify therapists who are potential business leaders. This management approach reflects the unique nature of each local area in which we operate and the importance of encouraging our employees to assume responsibility for their clinic's financial and operational performance.

Pursue Opportunistic Acquisitions. We may grow our network of outpatient rehabilitation facilities through opportunistic acquisitions. We believe our size and centralized infrastructure allow us to take advantage of operational efficiencies and improve financial performance at acquired facilities.

Concentra

We are the largest provider of occupational health services in the United States based on the number of facilities. As of December 31, 2020, we operated 517 occupational health centers and 134 onsite clinics at employer worksites throughout 42 states. In some of our occupational health centers we also provide urgent care services. On September 1, 2020, Concentra sold its Department of Veterans Affairs community-based outpatient clinic ("CBOC") business. We deliver occupational medicine, consumer health, physical therapy, and wellness services in our occupational health centers and our onsite clinics located at the workplaces of our employer customers. Our Concentra segment employed approximately 10,800 people as of December 31, 2020.

We offer a range of occupational and consumer health services through our occupational health centers and onsite clinics. Occupational health services include workers' compensation injury care as well as employer services, clinical testing, wellness programs, and preventative care. Consumer health consists of non-employer, patient-directed treatment of injuries and illnesses. Our consumer health service offerings include urgent care, wellness programs, and preventative care.

Occupational medicine refers to the diagnosis and treatment of work-related injuries (workers' compensation), compliance services, such as preventive services, including pre-employment, fitness-for-duty, and post-accident physical examinations and substance abuse screening. Utilization is driven by the needs of labor-intensive industries such as transportation, distribution/warehousing, manufacturing, construction, healthcare, police/fire, and other occupations that have historically posed a higher than average risk of workplace injury or that require a workplace physical. Workers' compensation is the form of insurance that provides medical coverage to employees with work-related illnesses or injuries.

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Workers' compensation is administered on a state-by-state basis and each state is responsible for implementing and regulating its own workers' compensation program. Because workers' compensation benefits are mandated by law and subject to extensive regulation, insurers, third-party administrators, and employers do not have the same flexibility to alter benefits as they have with other health benefit programs. In addition, because programs vary by state, it is difficult for insurance companies and multi-state employers to adopt uniform policies to administer, manage, and control the costs of benefits across states. As a result, managing the cost of workers' compensation requires approaches that are tailored to the specific regulatory environments in which the employer operates. For the year ended December 31, 2020, approximately 56% of our Concentra segment revenue came from workers' compensation payments.

Acquisition of Additional Membership Interests in Concentra Group Holdings Parent

On January 1, 2020, February 1, 2020 and December 31, 2020, Select acquired an aggregate amount of approximately 30% of outstanding membership interests of Concentra Group Holdings Parent, a joint venture subsidiary of Select, on a fully diluted basis from Welsh, Carson, Anderson & Stowe XII, L.P. ("WCAS"), Dignity Health Holding Corporation ("DHHC") and certain other sellers, in exchange for an aggregate purchase price of approximately \$576.4 million (collectively, the "Concentra Interest Purchases"). Upon consummation of the Concentra Interest Purchases, Select owns in the aggregate approximately 78.0% of the outstanding membership interests of Concentra Group Holdings Parent on a fully diluted basis and approximately 79.8% of the outstanding voting membership interests of Concentra Group Holdings Parent.

Concentra Strategy

The key elements of our Concentra strategy are to:

Provide High-Quality Care and Service. We strive to provide a high level of service to our patients and our employer customers. We measure and monitor patient and employer satisfaction and focus on treatment programs to provide the best clinical outcomes in a consistent manner. Our programs and services have proven that aggressive treatment and management of workers injuries can more rapidly restore employees to better health which reduces workers' compensation indemnity claim costs for our employer customers.

Focus on Occupational Medicine. Our history as an industry leader in the provision of occupational medicine services provides the platform for Concentra to grow this service offering. Complementary service offerings help drive additional growth in this business line.

Pursue Direct Employer Relationships. We believe we provide occupational health services in a cost-effective manner to our employer customers. By establishing direct relationships with these customers, we seek to reduce overall costs of their workers' compensation claims, while improving employee health, and getting their employees back to work faster.

Increase Presence in the Areas We Serve. We strive to establish a strong presence within the local areas we serve. To increase our presence, we seek to expand our services and programs and to open new occupational health centers and employer onsite locations. This allows us to realize economies of scale, heightened brand loyalty, and workforce continuity.

Pursue Opportunistic Acquisitions. We may grow our network and expand our geographic reach through opportunistic acquisitions. We believe our size and centralized infrastructure allow us to take advantage of operational efficiencies and improve financial performance at acquired facilities.

Other

Other activities include our corporate administration and shared services, as well as employee leasing services with our non-consolidating subsidiaries. We also hold minority investments in other healthcare related businesses. These include investments in companies that provide specialized technology and services to healthcare entities, as well as providers of complementary services.

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Our Competitive Strengths

We believe that the success of our business model is based on a number of competitive strengths, including our position as a leading operator in each of our business segments, our proven financial performance, our strong cash flow, our significant scale, our experience in completing and integrating acquisitions, our partnerships with large healthcare systems, our ability to capitalize on consolidation opportunities, and our experienced management team.

Leading Operator in Distinct but Complementary Lines of Business. We believe that we are a leading operator in our business segments based on number of facilities in the United States. Our leadership position and reputation as a high-quality, cost-effective healthcare provider in each of our business segments allows us to attract patients and employees, aids us in our marketing efforts to referral sources, and helps us negotiate payor contracts. In our critical illness recovery hospitals segment, we operated 99 critical illness recovery hospitals in 28 states as of December 31, 2020. In our rehabilitation hospital segment, we operated 30 rehabilitation hospitals in 12 states as of December 31, 2020. In our outpatient rehabilitation segment, we operated 1,788 outpatient rehabilitation clinics in 37 states and the District of Columbia as of December 31, 2020. In our Concentra segment, we operated 517 occupational health centers in 41 states as of December 31, 2020. With these leading positions in the areas we serve, we believe that we are well-positioned to benefit from the rising demand for medical services due to an aging population in the United States, which will drive growth across our business segments.

Proven Financial Performance and Strong Cash Flow. We have established a track record of improving the financial performance of our facilities due to our disciplined approach to revenue growth, expense management, and focus on free cash flow generation. This includes regular review of specific financial metrics of our business to determine trends in our revenue generation, expenses, billing, and cash collection. Based on the ongoing analysis of such trends, we make adjustments to our operations to optimize our financial performance and cash flow.

Significant Scale. By building significant scale in each of our business segments, we have been able to leverage our operating costs by centralizing administrative functions at our corporate office.

Experience in Successfully Completing and Integrating Acquisitions. Since our inception in 1997 through 2020, we completed ten significant acquisitions, including the acquisitions of Physiotherapy, Concentra, and U.S. HealthWorks. We believe that we have improved the operating performance of these businesses over time by applying our standard operating practices and by realizing efficiencies from our centralized operations and management.

Experience in Partnering with Large Healthcare Systems. Over the past several years we have partnered with large healthcare systems to provide post-acute care services. We believe that we provide operating expertise to these ventures through our experience in operating critical illness recovery hospitals, rehabilitation hospitals, and outpatient rehabilitation facilities and have improved and expanded the level of post-acute care services provided in these communities, as well as the financial performance of these operations.

Well-Positioned to Capitalize on Consolidation Opportunities. We believe that we are well-positioned to capitalize on consolidation opportunities within each of our business segments and selectively augment our internal growth. We believe that each of our business segments is largely fragmented, with many of the nation's critical illness recovery hospitals, rehabilitation hospitals, outpatient rehabilitation facilities, and occupational health centers operated by independent operators lacking national or broad regional scope. With our geographically diversified portfolio of facilities in the United States, we believe that our footprint provides us with a wide-ranging perspective on multiple potential acquisition opportunities.

Experienced and Proven Management Team. Prior to co-founding our company with our current Executive Chairman and Co-Founder, our Vice Chairman and Co-Founder founded and operated three other healthcare companies focused on inpatient and outpatient rehabilitation services. The other members of our senior management team also have extensive experience in the healthcare industry, with an average of almost 25 years in the business. In recent years, we have reorganized our operations to expand executive talent and promote management continuity.

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Sources of Revenue

The following table presents the approximate percentages by source of revenue received for healthcare services we provided for the periods indicated:

	Year	Ended December 31,	
Revenue by Payor Source	2018	2019	2020
Medicare	26.6 %	25.9 %	25.0 %
Commercial insurance ⁽¹⁾	31.8 %	32.3 %	34.8 %
Workers' Compensation	22.1 %	21.4 %	19.2 %
Private and other(2)	16.8 %	17.5 %	19.4 %
Medicaid	2.7 %	2.9 %	1.6 %
Total	100.0 %	100.0 %	100.0 %

- (1) Primarily includes commercial healthcare insurance carriers, health maintenance organizations, preferred provider organizations, and managed care programs.
- (2) Primarily includes management services, employer services, self-payors, and non-patient related payments. Self-pay revenues represent less than 1% of total revenue for all periods.

Government Sources

Medicare is a federal program that provides medical insurance benefits to persons age 65 and over, some disabled persons, and persons with end-stage renal disease. Medicaid is a federal-state funded program, administered by the states, which provides medical benefits to individuals who are unable to afford healthcare. As of December 31, 2020, we operated 99 critical illness recovery hospitals, all of which were certified by Medicare as LTCHs. Also as of December 31, 2020, we operated 30 rehabilitation hospitals, all of which were certified by Medicare as IRFs. Our outpatient rehabilitation clinics regularly receive Medicare payments for their services. Additionally, many of our critical illness recovery hospitals and rehabilitation hospitals participate in state Medicaid programs. Amounts received under the Medicare and Medicaid programs are generally less than the customary charges for the services provided. In recent years, there have been significant changes made to the Medicare and Medicaid programs. Since a significant portion of our revenues come from patients covered under the Medicare program, our ability to operate our business successfully in the future will depend in large measure on our ability to adapt to changes in the Medicare program. See "—Government Regulations—Overview of U.S. and State Government Reimbursements."

Non-Government Sources

Our non-government sources of revenue include insurance companies, workers' compensation programs, health maintenance organizations, preferred provider organizations, other managed care companies, and employers, as well as patients directly.

Employees

As of December 31, 2020, we employed approximately 49,600 people throughout the United States. Approximately 35,100 of our employees are full-time and the remaining approximately 14,500 are part-time employees. Our critical illness recovery hospital segment employees totaled approximately 14,700, rehabilitation hospital segment employees totaled approximately 11,500, outpatient rehabilitation segment employees totaled approximately 10,400, and Concentra segment employees totaled approximately 10,800. Approximately 2,200 of the remaining employees performed corporate management, administration, and other support services primarily at our Mechanicsburg, Pennsylvania headquarters.

Human Capital Management

Select Medical developed a cultural framework we call "The Select Medical Way." One of the key tenants of this framework is to deliver a superior employee experience. We devote considerable time and resources to attract, engage and retain talented employees to successfully operate our business and achieve our goals. Each of the key areas on which we focus to achieve our human capital objectives is described below.

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Talent Acquisition and Retention

We have several key strategies to attract and hire top talent across the markets that we serve. These strategies include robust referral programs, recruitment marketing through social media and our internal campaign technology, promotion of virtual hiring events and partnering with local nursing schools for clinical rotations and new graduate nursing and therapy programs. Our recruitment and selection processes seek to ensure that we hire employees who have the level of education, experience and professional licensure that align with the organization's strategic objectives. We have developed several programs to advance technical and clinical skills, enable career growth and improve retention for clinical and operational employees. Using our online platform, Select University, we have developed an extensive catalog of online learning classes for both instructor-led and asynchronous learning covering technical, professional and management-related topics. In addition, to promote business continuity, we create specific succession plans for our key operational and support management and executive positions.

Diversity and Inclusion

We strive to foster a culture of inclusion and equality. Our employees and patients are a valued and integral part of our organization, and we stand in solidarity with those who respect and share our values, care for others and condemn racism. We are committed to providing regular employee education and training on respect, equality, empathy and compassion, and we evaluate and update these resources on an ongoing basis. Additionally, any agency or contracted individual working within our facilities receives orientation and training on our expectations and standards for care. We take pride in our recruitment efforts that seek to attract the best and brightest talent from around the country. We are committed to having a workforce that reflects diversity at all levels, and we partner with several organizations to help attract diverse talent. In order to help us achieve these goals, we have established a diversity task force that oversees affirmative action planning and provides strategic recommendations to help ensure our goals for a diverse and inclusive workplace remain robust and actionable.

Employee Engagement and Wellness

We demonstrate our care for our employees through our safety, benefit and employee resource programs. We strive to create and sustain a culture of employee safety in each of our facilities. We have a implemented a communications tool, the "10-Foot Circle of Employee Safety," to help leaders and staff focus on areas of our work which cause workplace injuries. This program has resulted in significant reductions of employee injuries at work. We have also implemented an Employee Assistance Program ("EAP") which has become a valuable resource for employees needing no cost or low cost counseling/mental health services, legal support, or family assistance. Our EAP provides access to resources for individuals dealing with grief, anxiety, and other concerns relevant to and at the forefront of our communities. We offer robust benefit programming with health coaching on diverse topics like weight management, smoking cessation, and maintaining and improving health goals, and we offer training to our employees to help them develop their skills. We also provide surveys to our employees that are focused on areas such as employee engagement, operational reliability and suggestions for improvement. Additionally, we offer extensive supportive programs to individuals facing serious health concerns, including but not limited to, high blood pressure/heart conditions, diabetes and cancer.

Workforce Compensation and Pay Equity

We provide competitive compensation and benefits, including a retirement savings plan with matching opportunities, comprehensive healthcare and insurance benefits, health savings and flexible spending accounts, paid time off and family leave. We have key processes that seek to ensure our pay and benefits remain competitive across all of our disciplines. Using an electronic platform for both performance reviews and compensation review, each employee's performance assessment and compensation go through multiple layers of review annually to promote equitable, market competitive and performance-based compensation. For external benchmarking, we use third party commercially available compensation surveys, as well as the Department of Labor wage data.

Impact of the COVID-19 Pandemic

Our industry has been on the front line in the battle against COVID-19. This has resulted in a high demand for registered nurses and respiratory therapists, which in turn has placed increased pressure on the importance of recruiting and retaining high quality employees. We have taken several steps in response to these demands to achieve our human capital objectives, including increased incentives for staff in markets that have been particularly impacted by the COVID-19 pandemic, employee re-assignments and furloughs in segments of our business that have seen a significant drop in patient volume as the result of the COVID-19 pandemic and providing a meaningful amount of paid time off for employees who cannot work for COVID-19 related reasons.

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Competition

Critical Illness Recovery Hospitals and Rehabilitation Hospitals

Our critical illness recovery hospitals and our rehabilitation hospitals both compete on the basis of the quality of the patient services we provide, the outcomes we achieve for our patients, and the prices we charge for our services. The primary competitive factors in both of our critical illness recovery hospital and rehabilitation hospital segments include quality of services, charges for services, and responsiveness to the needs of patients, families, payors, and physicians. Other companies operate critical illness recovery hospitals and rehabilitation hospitals that compete with our own hospitals, including large operators of similar facilities, such as Kindred Healthcare, LLC and Encompass Health Corporation, and rehabilitation units and step-down units operated by acute care hospitals in the markets we serve. The competitive position of a critical illness recovery hospital or a rehabilitation hospital is also affected by the ability of its management to negotiate contracts with purchasers of group healthcare services, including private employers, managed care companies, preferred provider organizations, and health maintenance organizations. Such organizations attempt to obtain discounts from established critical illness recovery hospital or rehabilitation hospital charges. The importance of obtaining contracts with preferred provider organizations, health maintenance organizations, and other organizations which finance healthcare, and its effect on a critical illness recovery hospital's or rehabilitation hospital's competitive position, vary from area to area depending on the number and strength of such organizations.

Outpatient Rehabilitation Clinics

Our outpatient rehabilitation clinics face a highly fragmented and competitive environment. The primary competitors that provide outpatient rehabilitation services include physician-owned physical therapy clinics, dedicated locally owned and managed outpatient rehabilitation clinics, and hospital or university owned or affiliated ventures, as well as national and regional providers in select areas, including Athletico Physical Therapy, ATI Physical Therapy, U.S. Physical Therapy, and Upstream Rehabilitation. Some of these competing clinics have longer operating histories and greater name recognition in these communities than our clinics, and they may have stronger relations with physicians in these communities on whom we rely for patient referrals. Because the barriers to entry are not substantial and current customers have the flexibility to move easily to new healthcare service providers, we believe that new outpatient physical therapy competitors can emerge relatively quickly.

Concentra

Our Concentra segment's occupational health services and consumer health businesses face a highly fragmented and competitive environment. The primary competitors that provide occupational health services have typically been independent physicians, hospital emergency departments, and hospital-owned or hospital-affiliated medical facilities. Because the barriers to entry are not substantial and Concentra's current customers have the flexibility to move easily to new healthcare service providers, we believe that new competitors to Concentra can emerge relatively quickly. Furthermore, urgent care clinics in the local communities Concentra serves provide services similar to those Concentra offers, and, in some cases, competing facilities are more established or newer than Concentra's, may offer a broader array of services to patients than Concentra's, and may have larger or more specialized medical staffs to treat and serve patients.

Government Regulations

General

The healthcare industry is required to comply with many complex laws and regulations at the federal, state, and local government levels. These laws and regulations require that hospitals and facilities furnishing outpatient services (including outpatient rehabilitation clinics, Concentra occupational health centers and onsite clinics) comply with various requirements and standards. These laws and regulations include those relating to the adequacy of medical care, facilities and equipment, personnel, operating policies and procedures, and recordkeeping, as well as standards for reimbursement, fraud and abuse prevention, and health information privacy and security. These laws and regulations are extremely complex, often overlap and, in many instances, the industry does not have the benefit of significant regulatory or judicial interpretation. If we fail to comply with applicable laws and regulations, we could suffer civil or criminal penalties, including the loss of our licenses to operate and our ability to participate in the Medicare, Medicaid, and other federal and state healthcare programs.

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Facility Licensure

Our healthcare facilities are subject to state and local licensing statutes and regulations ranging from the adequacy of medical care to compliance with building codes and environmental protection laws. In order to assure continued compliance with these various regulations, governmental and other authorities periodically inspect our facilities, both at scheduled intervals and in response to complaints from patients and others. While our facilities intend to comply with existing licensing standards, there can be no assurance that regulatory authorities will determine that all applicable requirements are fully met at any given time. In addition, the state and local licensing laws are subject to changes or new interpretations that could impose additional burdens on our facilities. A determination by an applicable regulatory authority that a facility is not in compliance with these requirements could lead to the imposition of corrective action, assessment of fines and penalties, or loss of licensure, Medicare enrollment, certification or accreditation. These consequences could have an adverse effect on our company.

Some states require us to get approval under certificate of need regulations when we create, acquire, or expand our facilities or services, or alter the ownership of such facilities, whether directly or indirectly. The certificate of need regulations vary from state to state, and are subject to change and new interpretation. If we fail to show public need and obtain approval in these states for our new facilities or changes to the ownership structure of existing facilities, we may be subject to civil or even criminal penalties, lose our facility license, or become ineligible for reimbursement.

Professional Licensure, Corporate Practice and Fee-Splitting Laws

Healthcare professionals at our critical illness recovery hospitals, our rehabilitation hospitals, and our facilities furnishing outpatient services are required to be individually licensed or certified under applicable state law. We take steps to help ensure our employees and agents possess all necessary licenses and certifications.

Some states prohibit the "corporate practice of medicine," which restricts business corporations from practicing medicine through the direct employment of physicians or from exercising control over medical decisions by physicians. Some states similarly prohibit the "corporate practice of therapy." The laws relating to corporate practice vary from state to state and are not fully developed in each state in which we have facilities. Typically, however, professional corporations owned and controlled by licensed professionals are exempt from corporate practice restrictions and may employ physicians or therapists to furnish professional services. Also, in some states, hospitals are permitted to employ physicians.

Some states also prohibit entities from engaging in certain financial arrangements, such as fee-splitting, with physicians or therapists. The laws relating to fee-splitting also vary from state to state and are not fully developed. Generally, these laws restrict business arrangements that involve a physician or therapist sharing medical fees with a referral source, but in some states these laws have been interpreted to extend to management agreements between physicians or therapists and business entities under some circumstances.

We believe that each of our facilities, licensed physicians, and therapists comply with any current corporate practice and fee-splitting laws of the state in which they are located. In states where we are prohibited by the corporate practice of medicine from directly employing licensed physicians, we typically enter into management agreements with professional corporations that are owned by licensed physicians, which, in turn, employ or contract with physicians who provide professional medical services in our facilities. Under those management agreements, we perform only non-medical administrative services, do not exercise control over the practice of medicine by the physicians, and structure compensation to avoid fee-splitting. In those states that apply the corporate practice of therapy prohibition, we either contract to obtain therapy services from an entity permitted to employ therapists or we manage the physical therapy practice owned by licensed therapists through which the therapy services are provided.

Although we believe that our facilities comply with corporate practice and fee-splitting laws, if new regulations or judicial or administrative interpretations establish that our facilities do not comply with these laws, we could be subject to civil and perhaps criminal penalties. In addition, if any of our facilities is determined not to comply with corporate practice and fee-splitting laws, certain of our agreements relating to the facility may be determined to be unenforceable, including our management agreements with the professional corporations furnishing physician services or our payment arrangements with insurers or employers. Future interpretations of corporate practice and fee-splitting laws, the enactment of new legislation, or the adoption of new regulations relating to these laws could cause us to have to restructure our business operations or close our facilities in a particular state. Any such penalties, determinations of unenforceability, or interpretations could have a material adverse effect on our business.

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Medicare Enrollment and Certification

In order to participate in the Medicare program and receive Medicare reimbursement, each facility must comply with the applicable regulations of the United States Department of Health and Human Services relating to, among other things, the type of facility, its equipment, its personnel, and its standards of medical care, as well as compliance with all applicable state and local laws and regulations. As of December 31, 2020, all of the critical illness recovery hospitals we operated were certified by Medicare as LTCHs. As of December 31, 2020, all of the rehabilitation hospitals we operated were certified by Medicare as IRFs. In addition, we provide the majority of our outpatient rehabilitation services through outpatient rehabilitation clinics certified by Medicare as rehabilitation agencies or "rehab agencies," which operate as outpatient rehabilitation providers for the purposes of the Medicare program. Our Concentra occupational health centers furnishing outpatient services are generally enrolled in Medicare as suppliers.

Accreditation

Our critical illness recovery hospitals and our rehabilitation hospitals receive accreditation from TJC, DNV and/or CARF. As of December 31, 2020, all of the 99 critical illness recovery hospitals and all of the 30 rehabilitation hospitals we operated were accredited by TJC or DNV. In addition, 12 of our rehabilitation hospitals have also received accreditation from CARF.

Workers' Compensation

Workers' compensation is a state mandated, comprehensive insurance program that requires employers to fund or insure medical expenses, lost wages, and other costs resulting from work related injuries and illnesses. Workers' compensation benefits and arrangements vary from state to state, and are often highly complex. In some states, payment for services covered by workers' compensation programs are subject to cost containment features, such as requirements that all workers' compensation injuries be treated through a managed care program, or the imposition of fee schedules or payment caps for services furnished to injured employees. Some state workers' compensation laws limit the ability of an employer to select the providers furnishing care to injured employees. Several states require that physicians furnishing non-emergency services to workers' compensation patients must register with the applicable state agency and undergo special continuing education and training. Workers' compensation programs may also impose other requirements that affect the operations of our facilities furnishing outpatient services. Revenue generated directly from workers' compensation programs represented approximately 19% of our revenue from our outpatient rehabilitation segment, 1% of our revenue from our Concentra segment for the year ended December 31, 2020.

Our facilities furnishing outpatient services are reimbursed for services furnished to injured workers by payors pursuant to the applicable state workers' compensation statutes. Most of the states in which we maintain operations reimburse providers for services payable under workers' compensation laws pursuant to a treatment-specific fee schedule with established maximum reimbursement levels. In states without such fee schedules, healthcare providers are often reimbursed based on "usual and customary" fees benchmarked by market data and negotiated by providers with payors and networks.

Inadequate increases to the applicable fee schedule amounts for our services, and changes in state workers' compensation laws, including cost containment initiatives, could have a negative impact on the operations and financial performance of those facilities.

Overview of U.S. and State Government Reimbursements

Medicare Program in General

The Medicare program reimburses healthcare providers for services furnished to Medicare beneficiaries, which are generally persons age 65 and older, those who are chronically disabled, and those suffering from end stage renal disease. The program is governed by the Social Security Act of 1965 and is administered primarily by the Department of Health and Human Services and CMS. The table below shows the percentage of revenue generated directly from the Medicare program for each of our segments and our company as a whole for the fiscal years ended December 31, 2018, 2019 and 2020.

	Year	Ended December 31,	
Medicare Revenue by Segment	2018	2019	2020
Critical illness recovery hospital	50.9 %	49.4 %	43.3
Rehabilitation hospital	50.3 %	49.6 %	47.0
Outpatient rehabilitation	16.2 %	16.4 %	14.9
Concentra	0.1 %	0.1 %	0.1
Total Company	26.6 %	25.9 %	25.0

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The Medicare program reimburses various types of providers, including LTCHs, IRFs, and outpatient rehabilitation providers, using different payment methodologies. The Medicare reimbursement systems specific to LTCHs, IRFs, and outpatient rehabilitation providers, as described herein, are different than the system applicable to general acute care hospitals. If any of our hospitals fail to comply with requirements for payment under Medicare reimbursement systems for LTCHs or IRFs, as applicable, that hospital will be paid under the system applicable to general acute care hospitals. For general acute care hospitals, Medicare payments for inpatient care are made under the inpatient prospective payment system ("IPPS") under which a hospital receives a fixed payment amount per discharge (adjusted for area wage differences) using Medicare severity diagnosis-related groups ("MS-DRGs"). The general acute care hospital MS-DRG payment rate is based upon the national average cost of treating a Medicare patient's condition, based on severity levels of illness, in that type of facility. Although the average length of stay varies for each MS-DRG, the average stay of all Medicare patients in a general acute care hospital is substantially less than the average length of stay in LTCHs and IRFs. Thus, the prospective payment system for general acute care hospitals creates an economic incentive for those hospitals to discharge medically complex Medicare patients to a post-acute care setting as soon as clinically possible. Effective October 1, 2005, CMS expanded its post-acute care transfer policy under which general acute care hospitals are paid on a per diem basis rather than the full MS-DRG rate if a patient is discharged early to certain postacute care settings, including LTCHs and IRFs. When a patient is discharged from selected MS-DRGs to, among other providers, an LTCH or IRF, the general acute care hospital may be reimbursed below the full MS-DRG payment if the patient's length of stay is at least one day less than the geometric mean length of stay for the MS-DRG.

Medicare Reimbursement of LTCH Services

The Medicare payment system for LTCHs is based on a prospective payment system specifically applicable to LTCHs ("LTCH-PPS"). The policies and payment rates under LTCH-PPS are subject to annual updates and revisions. Under LTCH-PPS, each patient discharged from an LTCH is assigned to a distinct "MS-LTC-DRG," which is a Medicare severity long-term care diagnosis-related group for LTCHs, and an LTCH is generally paid a pre-determined fixed amount applicable to the assigned MS-LTC-DRG (adjusted for area wage differences), subject to exceptions for short stay and high cost outlier patients (described below). CMS assigns relative weights to each MS-LTC-DRG to reflect their relative use of medical care resources. The payment amount for each MS-LTC-DRG is intended to reflect the average cost of treating a Medicare patient assigned to that MS-LTC-DRG in an LTCH.

Standard Federal Rate

Payment under the LTCH-PPS is dependent on determining the patient classification, that is, the assignment of the case to a particular MS-LTC-DRG, the weight of the MS-LTC-DRG, and the standard federal payment rate. There is a single standard federal rate that encompasses both the inpatient operating costs, which includes a labor and non-labor component, and capital-related costs that CMS updates on an annual basis. LTCH-PPS also includes special payment policies that adjust the payments for some patients based on the patient's length of stay, the facility's costs, whether the patient was discharged and readmitted, and other factors.

Patient Criteria

The Bipartisan Budget Act of 2013, enacted December 26, 2013, established a dual-rate LTCH-PPS for Medicare patients discharged from an LTCH. Specifically, for Medicare patients discharged in cost reporting periods beginning on or after October 1, 2015, LTCHs are reimbursed at the LTCH-PPS standard federal payment rate only if, immediately preceding the patient's LTCH admission, the patient was discharged from a "subsection (d) hospital" (generally, a short-term acute care hospital paid under IPPS) and either the patient's stay included at least three days in an intensive care unit or coronary care unit at the subsection (d) hospital, or the patient was assigned to an MS-LTC-DRG for cases receiving at least 96 hours of ventilator services in the LTCH. In addition, to be paid at the LTCH-PPS standard federal payment rate, the patient's discharge from the LTCH may not include a principal diagnosis relating to psychiatric or rehabilitation services. For any Medicare patient who does not meet these criteria, the LTCH will be paid a "site-neutral" payment rate, which will be the lower of: (i) the IPPS comparable per-diem payment rate capped at the MS-DRG payment rate plus any outlier payments; or (ii) 100 percent of the estimated costs for services.

The site neutral payment rate for those patients not paid at the LTCH-PPS standard federal payment rate is subject to a transition period. During the transition period (applicable to hospital cost reporting periods beginning on or after October 1, 2015 through September 30, 2019), a blended rate will be paid for Medicare patients not meeting the new criteria that is equal to 50% of the site neutral payment rate amount and 50% of the standard federal payment rate amount. For discharges in cost reporting periods beginning on or after October 1, 2019, only the site neutral payment rate will apply for Medicare patients not meeting the new criteria. For hospital discharges beginning on or after October 1, 2017 through September 30, 2026, the IPPS comparable per diem payment amount (including any applicable outlier payment) used to determine the site neutral payment rate is reduced by 4.6% after any annual payment rate update.

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In addition, for cost reporting periods beginning on or after October 1, 2019, LTCHs must maintain an "LTCH discharge payment percentage" of at least 50% to continue to be reimbursed for Medicare fee-for-service patients at the dual rates of the LTCH-PPS. The "LTCH discharge payment percentage" is a ratio, expressed as a percentage, of Medicare fee-for-service (FFS) discharges not paid the site neutral payment rate (i.e., those meeting LTCH patient criteria) to the total number of Medicare FFS discharges occurring during the cost reporting period. If this percentage is lower than 50%, the LTCH is notified that all of its Medicare FFS discharges will be subject to payment adjustment beginning in the cost reporting period after it was notified. The payment adjustment will result in reimbursement at an IPPS equivalent payment rate. However, the LTCH will not be subject to this payment adjustment if it maintains an LTCH discharge payment percentage of at least 50% during a 6-month "probationary-cure period" immediately before the cost reporting period when the rayment adjustment would apply, and during that cost reporting period. An LTCH that has been subject to this payment adjustment will be reinstated at the regular dual rates of the LTCH-PPS in the cost reporting period that begins after the LTCH is notified that its LTCH discharge payment percentage is at least 50%.

Payment adjustments, including the interrupted stay policy (discussed herein), apply to LTCH discharges regardless of whether the case is paid at the standard federal payment rate or the site-neutral payment rate. However, short stay outlier payment adjustments do not apply to cases paid at the site-neutral payment rate. CMS calculates the annual recalibration of the MS-LTC-DRG relative payment weighting factors using only data from LTCH discharges that meet the criteria for exclusion from the site-neutral payment rate. In addition, CMS applies the IPPS fixed-loss amount for high cost outliers to site-neutral cases, rather than the LTCH-PPS fixed-loss amount. CMS calculates the LTCH-PPS fixed-loss amount using only data from cases paid at the LTCH-PPS payment rate, excluding cases paid at the site-neutral rate.

Short Stay Outlier Policy

CMS established a different payment methodology for Medicare patients with a length of stay less than or equal to five-sixths of the geometric average length of stay for that particular MS-LTC-DRG, referred to as a short stay outlier ("SSO"). SSO cases are paid based on a per diem rate derived from blending 120% of the MS-LTC-DRG specific per diem amount with a per diem rate based on the general acute care hospital IPPS. Under this policy, as the length of stay of a SSO case increases, the percentage of the per diem payment amounts based on the full MS-LTCH-DRG standard federal payment rate increases and the percentage of the payment based on the IPPS comparable amount decreases.

High Cost Outliers

Some cases are extraordinarily costly, producing losses that may be too large for hospitals to offset. Cases with unusually high costs, referred to as "high cost outliers," receive a payment adjustment to reflect the additional resources utilized. CMS provides an additional payment if the estimated costs for the patient exceed the adjusted MS-LTC-DRG payment plus a fixed-loss amount that is established in the annual payment rate update.

Interrupted Stays

An interrupted stay is defined as a case in which an LTCH patient, upon discharge, is admitted to a general acute care hospital, IRF or skilled nursing facility/swing-bed and then returns to the same LTCH within a specified period of time. If the length of stay at the receiving provider is equal to or less than the applicable fixed period of time, it is considered to be an interrupted stay case and the case is treated as a single discharge for the purposes of payment to the LTCH. For interrupted stays of three days or less, Medicare payments for any test, procedure, or care provided to an LTCH patient on an outpatient basis or for any inpatient treatment during the "interruption" would be the responsibility of the LTCH.

Freestanding, HIH, and Satellite LTCHs

LTCHs may be organized and operated as freestanding facilities or as HIHs. As its name suggests, a freestanding LTCH is not located on the campus of another hospital. For such purpose, "campus" means the physical area immediately adjacent to a hospital's main buildings, other areas, and structures that are not strictly contiguous to a hospital's main buildings but are located within 250 yards of its main buildings, and any other areas determined, on an individual case basis by the applicable CMS regional office, to be part of a hospital's campus. Conversely, an HIH is an LTCH that is located on the campus of another hospital. An LTCH, whether freestanding or an HIH, that uses the same Medicare provider number of an affiliated "primary site" LTCH is known as a "satellite." Under Medicare policy, a satellite LTCH must be located within 35 miles of its primary site LTCH and be administered by such primary site LTCH. A primary site LTCH may have more than one satellite LTCH. CMS sometimes refers to a satellite LTCH that is freestanding as a "remote location." LTCH HIHs and satellites must comply with certain requirements to show that they operate as part of the main LTCH, and not the colocated hospital. Most or all of these requirements no longer apply to LTCHs that are located on the same campus as an IRF, an inpatient psychiatric facility, or any other hospital excluded from the IPPS, provided that an IPPS hospital is not also located on that campus.

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Facility Certification Criteria

individualized treatment plan for each patient.

The LTCH-PPS regulations define the criteria that must be met in order for a hospital to be certified as an LTCH. To be eligible for payment under the LTCH-PPS, a hospital must be primarily engaged in providing inpatient services to Medicare beneficiaries with medically complex conditions that require a long hospital stay. In addition, by definition, LTCHs must meet certain facility criteria, including: (i) instituting a review process that screens patients for appropriateness of an admission and validates the patient criteria within 48 hours of each patient's admission, evaluates regularly their patients for continuation of care, and assesses the available discharge options; (ii) having active physician involvement with patient care that includes a physician available on-site daily and additional consulting physicians on call; and (iii) having an interdisciplinary team of healthcare professionals to prepare and carry out an

An LTCH must have an average inpatient length of stay for Medicare patients (including both Medicare covered and non-covered days) of greater than 25 days. LTCH cases paid at the site-neutral rate and Medicare Advantage cases are excluded from the LTCH average length of stay calculation. LTCHs that fail to exceed an average length of stay of 25 days during any cost reporting period may be paid under the general acute care hospital IPPS if not corrected within established time frames. CMS, through its contractors, determines whether an LTCH has maintained an average length of stay of greater than 25 days during each annual cost reporting period.

Prior to qualifying under the payment system applicable to LTCHs, a new LTCH initially receives payments under the general acute care hospital IPPS. The LTCH must continue to be paid under this system for a minimum of six months while meeting certain Medicare LTCH requirements, the most significant requirement being an average length of stay for Medicare patients (including both Medicare covered and non-covered days) greater than 25 days.

25 Percent Rule

The "25 Percent Rule" was a downward payment adjustment that applied if the percentage of Medicare patients discharged from LTCHs who were admitted from a referring hospital (regardless of whether the LTCH or LTCH satellite is co-located with the referring hospital) exceeded the applicable percentage admissions threshold during a particular cost reporting period.

CMS was precluded from applying the 25 Percent Rule for freestanding LTCHs to cost reporting years beginning before July 1, 2016 and for discharges occurring on or after October 1, 2016 and before October 1, 2017. In addition, the law applied higher percentage admissions thresholds for most LTCHs operating as HIHs and satellites for cost reporting years beginning before July 1, 2016 and effective for discharges occurring on or after October 1, 2016 and before October 1, 2017.

For fiscal year 2018, CMS adopted a regulatory moratorium on the implementation of the 25 Percent Rule.

For fiscal year 2019 and thereafter, CMS eliminated the 25 Percent Rule entirely. The elimination of the 25 Percent Rule is being implemented in a budget-neutral manner by adjusting the standard federal payment rates down such that the projection of aggregate LTCH payments would equal the projection of aggregate LTCH payments that would have been paid if the moratorium ended and the 25 Percent Rule went into effect on October 1, 2018. As a result, the elimination of the 25 Percent Rule includes a temporary, one-time adjustment to the fiscal year 2019 LTCH-PPS standard federal payment rate, a temporary, one-time adjustment to the fiscal year 2020 LTCH-PPS standard federal payment rate, and a permanent, one-time adjustment to the LTCH-PPS standard federal payment rate in fiscal years 2021 and subsequent years.

Annual Payment Rate Update

Fiscal Year 2019. On August 17, 2018, CMS published the final rule updating policies and payment rates for the LTCH-PPS for fiscal year 2019 (affecting discharges and cost reporting periods beginning on or after October 1, 2018 through September 30, 2019). Certain errors in the final rule were corrected in a document published October 3, 2018. The standard federal rate was set at \$41,559, an increase from the standard federal rate applicable during fiscal year 2018 of \$41,415. The update to the standard federal rate for fiscal year 2019 included a market basket increase of 2.9%, less a productivity adjustment of 0.8%, and less a reduction of 0.75% mandated by the Affordable Care Act ("ACA"). The standard federal rate also included an area wage budget neutrality factor of 0.999215 and a temporary, one-time budget neutrality adjustment of 0.990878 in connection with the elimination of the 25 Percent Rule (discussed herein). The fixed-loss amount for high cost outlier cases paid under LTCH-PPS was set at \$27,121, a decrease from the fixed-loss amount in the 2018 fiscal year of \$27,381. The fixed-loss amount for high cost outlier cases paid under the site-neutral payment rate was set at \$25,743, a decrease from the fixed-loss amount in the 2018 fiscal year of \$26,537.

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Fiscal Year 2020. On August 16, 2019, CMS published the final rule updating policies and payment rates for the LTCH-PPS for fiscal year 2020 (affecting discharges and cost reporting periods beginning on or after October 1, 2019 through September 30, 2020). Certain errors in the final rule were corrected in a document published October 8, 2019. The standard federal rate was set at \$42,678, an increase from the standard federal rate applicable during fiscal year 2019 of \$41,559. The update to the standard federal rate for fiscal year 2020 included a market basket increase of 2.9%, less a productivity adjustment of 0.4%. The standard federal rate also included an area wage budget neutrality factor of 1.0020203 and a temporary, one-time budget neutrality adjustment of 0.999858 in connection with the elimination of the 25 Percent Rule (discussed herein). The fixed-loss amount for high cost outlier cases paid under LTCH-PPS was set at \$26,778, a decrease from the fixed-loss amount in the 2019 fiscal year of \$27,121. The fixed-loss amount for high cost outlier cases paid under LTCH-PPS was set at \$26,552, an increase from the fixed-loss amount in the 2019 fiscal year of \$25,743. For LTCH discharges occurring in cost reporting periods beginning in fiscal year 2020, site neutral payment rate cases will begin to be paid fully on the site neutral payment rate, rather than the transitional blended rate. However, the CARES Act waives the site neutral payment rate for patients admitted during the COVID-19 emergency period and in response to the public health emergency, as discussed below.

Fiscal Year 2021. On September 18, 2020, CMS published the final rule updating policies and payment rates for the LTCH-PPS for fiscal year 2021 (affecting discharges and cost reporting periods beginning on or after October 1, 2020 through September 30, 2021). Certain errors in the final rule were corrected in a document published December 7, 2020. The standard federal rate was set at \$43,755, an increase from the standard federal rate applicable during fiscal year 2020 of \$42,678. The update to the standard federal rate for fiscal year 2021 included a market basket increase of 2.3% with no productivity adjustment. The standard federal rate also included an area wage budget neutrality factor of 1.0016837 and a permanent, one-time budget neutrality adjustment of 1.000517 in connection with the elimination of the 25 Percent Rule (discussed herein). As a result of the CARES Act, all LTCH cases are paid at the standard federal rate during the public health emergency. If the public health emergency ends during fiscal year 2021, then CMS will return to using the site-neutral payment rate for reimbursement of cases that do not meet the LTCH patient criteria. The fixed-loss amount for high cost outlier cases paid under LTCH-PPS was set at \$27,195, an increase from the fixed-loss amount in the 2020 fiscal year of \$26,778. The fixed-loss amount in the 2020 fiscal year of \$26,552.

Medicare Reimbursement of IRF Services

IRFs are paid under a prospective payment system specifically applicable to this provider type, which is referred to as "IRF-PPS." Under the IRF-PPS, each patient discharged from an IRF is assigned to a case mix group ("IRF-CMG") containing patients with similar clinical conditions that are expected to require similar amounts of resources. An IRF is generally paid a pre-determined fixed amount applicable to the assigned IRF-CMG (subject to applicable case adjustments related to length of stay and facility level adjustments for location and low income patients). The payment amount for each IRF-CMG is intended to reflect the average cost of treating a Medicare patient's condition in an IRF relative to patients with conditions described by other IRF-CMGs. The IRF-PPS also includes special payment policies that adjust the payments for some patients based on the patient's length of stay, the facility's costs, whether the patient was discharged and readmitted and other factors.

Facility Certification Criteria

Our rehabilitation hospitals must meet certain facility criteria to be classified as an IRF by the Medicare program, including: (i) a provider agreement to participate as a hospital in Medicare; (ii) a pre-admission screening procedure; (iii) ensuring that patients receive close medical supervision and furnish, through the use of qualified personnel, rehabilitation nursing, physical therapy, and occupational therapy, plus, as needed, speech therapy, social or psychological services, and orthotic and prosthetic services; (iv) a full-time, qualified director of rehabilitation; (v) a plan of treatment for each inpatient that is established, reviewed, and revised as needed by a physician in consultation with other professional personnel who provide services to the patient; and (vi) a coordinated multidisciplinary team approach in the rehabilitation of each inpatient, as documented by periodic clinical entries made in the patient's medical record to note the patient's status in relationship to goal attainment, and that team conferences are held at least every two weeks to determine the appropriateness of treatment. Failure to comply with any of the classification criteria may result in the denial of claims for payment or cause a hospital to lose its status as an IRF and be paid under the prospective payment system that applies to general acute care hospitals.

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Patient Classification Criteria

In order to qualify as an IRF, a hospital must demonstrate that during its most recent 12-month cost reporting period, it served an inpatient population of whom at least 60% required intensive rehabilitation services for one or more of 13 conditions specified by regulation. Compliance with the 60% Rule is demonstrated through either medical review or the "presumptive" method, in which a patient's diagnosis codes are compared to a "presumptive compliance" list. Beginning October 1, 2017, the 60% Rule's presumptive methodology was revised to (i) include certain International Classification of Diseases, Tenth Revision, Clinical Modification ("ICD-10-CM") diagnosis codes for patients with traumatic brain injury and hip fracture conditions and (ii) count IRF cases that contain two or more of the ICD-10-CM codes from three major multiple trauma lists in the specified combinations.

Annual Payment Rate Update

Fiscal Year 2019. On August 6, 2018, CMS published the final rule updating policies and payment rates for the IRF-PPS for fiscal year 2019 (affecting discharges and cost reporting periods beginning on or after October 1, 2018 through September 30, 2019). The standard payment conversion factor for discharges for fiscal year 2019 was set at \$16,021, an increase from the standard payment conversion factor applicable during fiscal year 2018 of \$15,838. The update to the standard payment conversion factor for fiscal year 2019 included a market basket increase of 2.9%, less a productivity adjustment of 0.8%, and less a reduction of 0.75% mandated by the ACA. CMS increased the outlier threshold amount for fiscal year 2019 to \$9,402 from \$8,679 established in the final rule for fiscal year 2018.

Fiscal Year 2020. On August 8, 2019, CMS published the final rule updating policies and payment rates for the IRF-PPS for fiscal year 2020 (affecting discharges and cost reporting periods beginning on or after October 1, 2019 through September 30, 2020). The standard payment conversion factor for discharges for fiscal year 2020 was set at \$16,489, an increase from the standard payment conversion factor applicable during fiscal year 2019 of \$16,021. The update to the standard payment conversion factor for fiscal year 2020 included a market basket increase of 2.9%, less a productivity adjustment of 0.4%. CMS decreased the outlier threshold amount for fiscal year 2020 to \$9,300 from \$9,402 established in the final rule for fiscal year 2019.

Fiscal Year 2021. On August 10, 2020, CMS published the final rule updating policies and payment rates for the IRF-PPS for fiscal year 2021 (affecting discharges and cost reporting periods beginning on or after October 1, 2020 through September 30, 2021). The standard payment conversion factor for discharges for fiscal year 2021 was set at \$16,856, an increase from the standard payment conversion factor applicable during fiscal year 2020 of \$16,489. The update to the standard payment conversion factor for fiscal year 2021 included a market basket increase of 2.4% with no productivity adjustment. CMS decreased the outlier threshold amount for fiscal year 2021 to \$7,906 from \$9,300 established in the final rule for fiscal year 2020.

Medicare Reimbursement of Outpatient Rehabilitation Clinic Services

Outpatient rehabilitation providers enroll in Medicare as a rehabilitation agency, a clinic, or a public health agency. The Medicare program reimburses outpatient rehabilitation providers based on the Medicare physician fee schedule. For services provided in 2017 through 2019, a 0.5% update was applied each year to the fee schedule payment rates, subject to an adjustment beginning in 2019 under the Merit-Based Incentive Payment System ("MIPS"). In 2019, CMS added physical and occupational therapists to the list of MIPS eligible clinicians. For these therapists in private practice, payments under the fee schedule are subject to adjustment in a later year based on their performance in MIPS according to established performance standards. Calendar year 2021 is the first year that payments are adjusted, based upon the therapist's performance under MIPS in 2019. Providers in facility-based outpatient therapy settings are excluded from MIPS eligibility and therefore not subject to this payment adjustment.

For services provided in 2020 through 2025, a 0.0% percent update will be applied each year to the fee schedule payment rates, subject to adjustments under MIPS and the alternative payment models ("APMs"). In 2026 and subsequent years, eligible professionals participating in APMs who meet certain criteria would receive annual updates of 0.75%, while all other professionals would receive annual updates of 0.25%. Each year from 2019 through 2024 eligible clinicians who receive a significant share of their revenues through an advanced APM (such as accountable care organizations or bundled payment arrangements) that involves risk of financial losses and a quality measurement component will receive a 5% bonus. The bonus payment for APM participation is intended to encourage participation and testing of new APMs and to promote the alignment of incentives across payors.

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In the 2020 Medicare physician fee schedule final rule, CMS revised coding, documentation guidelines, and increased the valuation for the evaluation and management ("E/M") office visit codes, beginning in 2021. Because the Medicare physician fee schedule is budget-neutral, any revaluation of E/M services that will increase spending by more than \$20 million will require a budget neutrality adjustment. To increase values for the E/M codes while maintaining budget neutrality under the fee schedule, CMS cut the values of other codes to make up the difference, beginning in 2021.

In the 2021 Medicare physician fee schedule final rule, CMS increased the values for the E/M office visit codes and cuts to other specialty codes to maintain budget neutrality. As a result, therapy services provided in our outpatient rehabilitation clinics will receive an estimated 3.6% decrease in payment from Medicare in calendar year 2021. Legislation was introduced in Congress that, if enacted, would waive the budget neutrality requirement with respect to the E/M codes for 2021 in order to avoid or minimize cuts to physical and occupational therapy services and other code values. Separately, the Consolidated Appropriations Act, 2021, provides a one-time 3.75% increase in payments in calendar year 2021 for therapy services and other services paid under the physician fee schedule.

Therapy Caps

Outpatient therapy providers reimbursed under the Medicare physician fee schedule have been subject to annual limits for therapy expenses. For example, for the calendar year beginning January 1, 2017, the annual limit on outpatient therapy services was \$1,980 for combined physical and speech language pathology services and \$1,980 for occupational therapy services. The Bipartisan Budget Act of 2018 repealed the annual limits on outpatient therapy.

The annual limits for therapy expenses historically did not apply to services furnished and billed by outpatient hospital departments. However, the Medicare Access and CHIP Reauthorization Act of 2015 and prior legislation extended the annual limits on therapy expenses in hospital outpatient department settings through December 31, 2017. The application of annual limits to hospital outpatient department settings sunset on December 31, 2017.

For calendar year 2018 through calendar year 2028, all therapy claims exceeding \$3,000 are subject to a manual medical review process authorized by the Middle Class Tax Relief and Job Creation Act of 2012 and amended by the Bipartisan Budget Act of 2018. The \$3,000 threshold is applied to physical therapy and speech therapy services combined and separately applied to occupational therapy. CMS will continue to require that an appropriate modifier be included on claims over the current exception threshold indicating that the therapy services are medically necessary. Beginning in 2028 and in each calendar year thereafter, the threshold amount for claims requiring manual medical review will increase by the percentage increase in the Medicare Economic Index.

Modifiers to Identify Services of Physical Therapy Assistants or Occupational Therapy Assistants

In the Medicare Physician Fee Schedule final rule for calendar year 2019, CMS established two new modifiers (CQ and CO) to identify services furnished in whole or in part by physical therapy assistants ("PTAs") or occupational therapy assistants ("OTAs"). These modifiers were mandated by the Bipartisan Budget Act of 2018, which requires that claims for outpatient therapy services furnished in whole or part by therapy assistants on or after January 1, 2020 include the appropriate modifier. CMS intends to use these modifiers to implement a payment differential that would reimburse services provided by PTAs and OTAs at 85% of the fee schedule rate beginning on January 1, 2022. In the final 2020 Medicare physician fee schedule rule, CMS clarified that when the physical therapist is involved for the entire duration of the service and the PTA provides skilled therapy alongside the physical therapist, the CQ modifier is not required. Also, when the same service (code) is furnished separately by the physical therapist and PTA, CMS will apply the *de minimis* standard to each 15-minute unit of codes, not on the total physical therapist and PTA time of the service, allowing the separate reporting, on two different claim lines, of the number of units to which the new modifiers apply and the number of units to which the modifiers do not apply.

Other Requirements for Payment

Historically, outpatient rehabilitation services have been subject to scrutiny by the Medicare program for, among other things, medical necessity for services, appropriate documentation for services, supervision of therapy aides and students, and billing for single rather than group therapy when services are furnished to more than one patient. CMS has issued guidance to clarify that services performed by a student are not reimbursed even if provided under "line of sight" supervision of the therapist. Likewise, CMS has reiterated that Medicare does not pay for services provided by aides regardless of the level of supervision. CMS also has issued instructions that outpatient physical and occupational therapy services provided simultaneously to two or more individuals by a practitioner should be billed as group therapy services.

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Medicaid Reimbursement of LTCH and IRF Services

The Medicaid program is designed to provide medical assistance to individuals unable to afford care. The program is governed by the Social Security Act of 1965, funded jointly by each individual state and the federal government and administered by state agencies. Medicaid payments are made under a number of different systems, which include cost based reimbursement, prospective payment systems, or programs that negotiate payment levels with individual hospitals. In addition, Medicaid programs are subject to statutory and regulatory changes, administrative rulings, interpretations of policy by the state agencies, and certain government funding limitations, all of which may increase or decrease the level of program payments to our hospitals. Revenue generated directly from the Medicaid program represented approximately 3% of our critical illness recovery hospital segment revenue and 3% of our rehabilitation hospital segment revenue for the year ended December 31, 2020.

Other Healthcare Regulations

Federal Healthcare Program Changes in Response to the COVID-19 Pandemic

The Secretary of Health and Human Services ("HHS") has authorized a number of waivers or modifications of certain requirements under Medicare, Medicaid and the Children's Health Insurance Program ("CHIP") pursuant to section 1135 of the Social Security Act in response to the COVID-19 outbreak in the United States. For a description of such waivers and modifications, see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Regulatory Changes."

Medicare Quality Reporting

LTCHs and IRFs are subject to mandatory quality reporting requirements. LTCHs and IRFs that do not submit the required quality data will be subject to a 2% reduction in their annual payment update. The reduction can result in payment rates less than the prior year. However, the reduction will not carry over into the subsequent fiscal years.

Our LTCHs and IRFs are required to collect and report patient assessment data and clinical measures on each Medicare beneficiary who receives inpatient services in our facilities. We began reporting this data on October 1, 2012. CMS began making this data available to the public on the CMS website in December 2016. CMS is now adding cross-setting quality measures to compare quality and resource data across post-acute settings pursuant to the Improving Medicare Post-Acute Care Transformation Act of 2014 (the "IMPACT Act").

Medicare Hospital Wage Index Adjustment

As part of the methodology for determining prospective payments to LTCHs and IRFs, CMS adjusts the standard payment amounts for area differences in hospital wage levels by a factor reflecting the relative hospital wage level in the geographic area of the hospital compared to the national average hospital wage level. This adjustment factor is the hospital wage index. CMS currently defines hospital geographic areas (labor market areas) based on the definitions of Core-Based Statistical Areas established by the Office of Management and Budget.

Physician-Owned Hospital Limitations

CMS regulations include a number of hospital ownership and physician referral provisions, including certain obligations requiring physician-owned hospitals to disclose ownership or investment interests held by the referring physician or his or her immediate family members. In particular, physician-owned hospitals must furnish to patients, on request, a list of physicians or immediate family members who own or invest in the hospital. Moreover, a physician-owned hospital must require all physician owners or investors who are also active members of the hospital's medical staff to disclose in writing their ownership or investment interests in the hospital to all patients they refer to the hospital. CMS can terminate the Medicare provider agreement of a physician-owned hospital if it fails to comply with these disclosure provisions or with the requirement that a hospital disclose in writing to all patients whether there is a physician on-site at the hospital, 24 hours per day, seven days per week.

Under the transparency and program integrity provisions of the ACA, the exception to the federal self-referral law (the "Stark Law") that permits physicians to refer patients to hospitals in which they have an ownership or investment interest has been dramatically curtailed. Only hospitals with physician ownership and a provider agreement in place on December 31, 2010 are exempt from the general ban on self-referral. Existing physician-owned hospitals are prohibited from increasing the percentage of physician ownership or investment interests held in the hospital after March 23, 2010. In addition, physician-owned hospitals are prohibited from increasing the number of licensed beds after March 23, 2010, unless meeting specific exceptions related to the hospital's location and patient population. In order to retain their exemption from the general ban on self-referrals, our physician-owned hospitals are required to adopt specific measures relating to conflicts of interest, bona fide investments and patient safety. As of December 31, 2020, we operated four hospitals that are owned in-part by physicians.

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Medicare Recovery Audit Contractors

CMS contracts with third-party organizations, known as Recovery Audit Contractors ("RACs") to identify Medicare underpayments and overpayments, and to authorize RACs to recoup any overpayments. RACs are paid on a contingency fee basis. The contingency fee is a percentage of improper overpayment recoveries or underpayments identified by the RAC. The RAC must return the contingency fee if an improper payment determination is reversed on appeal. RACs conduct audit activities nationwide in four regions of the country that cover all 50 states on a combined basis. RAC audits of our Medicare reimbursement may lead to assertions that we have been overpaid, require to incur additional costs to respond to requests for records and pursue the reversal of payment denials through appeals, and ultimately require us to refund any amounts determined to have been overpaid. We cannot predict the impact of future RAC reviews on our results of operations or cash flows.

Fraud and Abuse Enforcement

Various federal and state laws prohibit the submission of false or fraudulent claims, including claims to obtain payment under Medicare, Medicaid, and other government healthcare programs. Penalties for violation of these laws include civil and criminal fines, imprisonment, and exclusion from participation in federal and state healthcare programs. In recent years, federal and state government agencies have increased the level of enforcement resources and activities targeted at the healthcare industry. In addition, the federal False Claims Act and similar state statutes allow individuals to bring lawsuits on behalf of the government, in what are known as qui tam or "whistleblower" actions, alleging false or fraudulent Medicare or Medicaid claims or other violations of the statute. The use of these private enforcement actions against healthcare providers has increased dramatically in recent years, in part because the individual filing the initial complaint is entitled to share in a portion of any settlement or judgment. Revisions to the False Claims Act enacted in 2009 expanded significantly the scope of liability, provided for new investigative tools, and made it easier for whistleblowers to bring and maintain False Claims Act suits on behalf of the government. See "—Legal Proceedings."

From time to time, various federal and state agencies, such as the Office of Inspector General of the Department of Health and Human Services ("OIG") issue a variety of pronouncements, including fraud alerts, the OIG's Annual Work Plan, and other reports, identifying practices that may be subject to heightened scrutiny. These pronouncements can identify issues relating to LTCHs, IRFs, or outpatient rehabilitation services or providers. For example, the OIG recently announced that it will (1) determine whether Medicare appropriately paid hospitals' inpatient claims subject to the post-acute care transfer policy, (2) determine whether Medicare paid hospitals more for Medicare outlier payments than the hospitals would have been paid if their outlier payments had been reconciled, and (3) examine up-coding of inpatient hospital billing by comparing how billing has changed over time and how billing varied among hospitals. We monitor government publications applicable to us to supplement and enhance our compliance efforts.

We endeavor to conduct our operations in compliance with applicable laws, including healthcare fraud and abuse laws. If we identify any practices as being potentially contrary to applicable law, we will take appropriate action to address the matter, including, where appropriate, disclosure to the proper authorities, which may result in a voluntary refund of monies to Medicare, Medicaid, or other governmental healthcare programs.

Remuneration and Fraud Measures

The federal anti-kickback statute prohibits some business practices and relationships under Medicare, Medicaid, and other federal healthcare programs. These practices include the payment, receipt, offer, or solicitation of remuneration in connection with, to induce, or to arrange for, the referral of patients covered by a federal or state healthcare program. Violations of the anti-kickback law may be punished by: a criminal fine of up to \$100,000 or up to ten years imprisonment for each violation, or both; civil monetary penalties of \$20,000, \$30,000 or \$100,000 per violation, depending on the type of violation; damages of up to three times the total amount of remuneration; and exclusion from participation in federal or state healthcare programs.

The Stark Law prohibits referrals for designated health services by physicians under the Medicare and Medicaid programs to other healthcare providers in which the physicians have an ownership or compensation arrangement unless an exception applies. Sanctions for violating the Stark Law include returning program reimbursements, civil monetary penalties of up to \$15,000 per prohibited service provided, assessments equal to three times the dollar value of each such service provided, and exclusion from the Medicare and Medicaid programs and other federal and state healthcare programs. The statute also provides a penalty of up to \$100,000 for a circumvention scheme. In addition, many states have adopted or may adopt similar anti-kickback or anti-self-referral statutes. Some of these prohibit the payment or receipt of remuneration for the referral of patients, regardless of the source of the payment for the care. While we do not believe our arrangements are in violation of these prohibitions, we cannot assure you that governmental officials charged with the responsibility for enforcing the provisions of these prohibitions will not assert that one or more of our arrangements are in violation of the provisions of such laws and regulations.

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Provider-Based Status

The designation "provider-based" refers to circumstances in which a subordinate facility (such as a separately certified Medicare provider, a department of a provider, or a satellite facility) is treated as part of a provider for Medicare payment purposes. In these cases, the services of the subordinate facility are included on the "main" provider's cost report and overhead costs of the main provider can be allocated to the subordinate facility, to the extent that they are shared. As of December 31, 2020, we operated 18 critical illness recovery hospitals and seven rehabilitation hospitals that were treated as provider-based satellites of certain of our other facilities, 253 of the outpatient rehabilitation clinics we operated were provider-based and are operated as departments of the rehabilitation hospitals we operated, and we provide rehabilitation management and staffing services to hospital rehabilitation departments that may be treated as provider-based. These facilities are required to satisfy certain operational standards in order to retain their provider-based status.

Health Information Practices

The Health Insurance Portability and Accountability Act of 1996 ("HIPAA") mandates the adoption of standards for the exchange of electronic health information in an effort to encourage overall administrative simplification and enhance the effectiveness and efficiency of the healthcare industry, while maintaining the privacy and security of health information. Among the standards that the Department of Health and Human Services has adopted or will adopt pursuant to HIPAA are standards for electronic transactions and code sets, unique identifiers for providers (referred to as National Provider Identifier), employers, health plans and individuals, security and electronic signatures, privacy, and enforcement. If we fail to comply with the HIPAA requirements, we could be subject to criminal penalties and civil sanctions. The privacy, security and enforcement provisions of HIPAA were enhanced by the Health Information Technology for Economic and Clinical Health Act ("HITECH"), which was included in the ARRA. Among other things, HITECH establishes security breach notification requirements, allows enforcement of HIPAA by state attorneys general, and increases penalties for HIPAA violations.

The Department of Health and Human Services has adopted standards in three areas in which we are required to comply that affect our operations.

Standards relating to the privacy of individually identifiable health information govern our use and disclosure of protected health information and require us to impose those rules, by contract, on any business associate to whom such information is disclosed.

Standards relating to electronic transactions and code sets require the use of uniform standards for common healthcare transactions, including healthcare claims information, plan eligibility, referral certification and authorization, claims status, plan enrollment and disenrollment, payment and remittance advice, plan premium payments, and coordination of benefits.

Standards for the security of electronic health information require us to implement various administrative, physical, and technical safeguards to preserve the integrity and confidentiality of electronic protected health information.

We maintain a Privacy and Security Committee that is charged with evaluating and monitoring our compliance with HIPAA. The Privacy and Security Committee monitors regulations promulgated under HIPAA as they have been adopted to date and as additional standards and modifications are adopted. Although health information standards have had a significant effect on the manner in which we handle health data and communicate with payors, the cost of our compliance has not had a material adverse effect on our business, financial condition, or results of operations. We cannot estimate the cost of compliance with standards that have not been issued or finalized by the Department of Health and Human Services.

In addition to HIPAA, there are numerous federal and state laws and regulations addressing patient and consumer privacy concerns, including unauthorized access or theft of personal information. State statutes and regulations vary from state to state. Lawsuits, including class actions and action by state attorneys general, directed at companies that have experienced a privacy or security breach also can occur. Although our policies and procedures are aimed at complying with privacy and security requirements and minimizing the risks of any breach of privacy or security, there can be no assurance that a breach of privacy or security will not occur. If there is a breach, we may be subject to various penalties and damages and may be required to incur costs to mitigate the impact of the breach on affected individuals.

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Compliance Program

Our Compliance Program

We maintain a written code of conduct (the "Code of Conduct") that provides guidelines for principles and regulatory rules that are applicable to our patient care and business activities. The Code of Conduct is reviewed and amended as necessary and is the basis for our company-wide compliance program. These guidelines are implemented by our compliance officer, our compliance and audit committee, and are communicated to our employees through education and training. We also have established a reporting system, auditing and monitoring programs, and a disciplinary system as a means for enforcing the Code of Conduct's policies.

Compliance and Audit Committee

Our compliance and audit committee is made up of members of our senior management and in-house counsel. The compliance and audit committee meets, at a minimum, on a quarterly basis and reviews the activities, reports, and operation of our compliance program. In addition, our Privacy and Security Committee provides reports to the compliance and audit committee. Our vice president of compliance and audit services meets with the compliance and audit committee, at a minimum, on a quarterly basis to provide an overview of the activities and operation of our compliance program.

Operating Our Compliance Program

We focus on integrating compliance responsibilities with operational functions. We recognize that our compliance with applicable laws and regulations depends upon individual employee actions as well as company operations. As a result, we have adopted an operations team approach to compliance. Our corporate executives, with the assistance of corporate experts, designed the programs of the compliance and audit committee. We utilize facility leaders for employee-level implementation of our Code of Conduct. This approach is intended to reinforce our company-wide commitment to operate in accordance with the laws and regulations that govern our business.

Compliance Issue Reporting

In order to facilitate our employees' ability to report known, suspected, or potential violations of our Code of Conduct, we have developed a system of reporting. This reporting, anonymous or attributable, may be accomplished through our toll-free compliance hotline, compliance e-mail address, or our compliance post office box. Our compliance officer and the compliance and audit committee are responsible for reviewing and investigating each compliance incident in accordance with the compliance and audit services department's investigation policy.

Compliance Monitoring and Auditing / Comprehensive Training and Education

Monitoring reports and the results of compliance for each of our business segments are reported to the compliance and audit committee, at a minimum, on a quarterly basis. We train and educate our employees regarding the Code of Conduct, as well as the legal and regulatory requirements relevant to each employee's work environment. New and current employees are required to acknowledge and certify that the employee has read, understood, and has agreed to abide by the Code of Conduct. Additionally, all employees are required to re-certify compliance with the Code of Conduct on an annual basis.

Policies and Procedures Reflecting Compliance Focus Areas

We review our policies and procedures for our compliance program from time to time in order to improve operations and to promote compliance with requirements of standards, laws, and regulations and to reflect the ongoing compliance focus areas which have been identified by the compliance and audit committee.

Internal Audit

We have a compliance and audit department, which has an internal audit function. Our vice president of compliance and audit services manages the combined compliance and audit department and meets with the audit and compliance committee of our board of directors, at a minimum, on a quarterly basis to discuss audit results and provide an overview of the activities and operation of our compliance program.

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Available Information

We are subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934 and, in accordance therewith, file periodic reports, proxy statements, and other information, including our Code of Conduct, with the SEC. Such periodic reports, proxy statements, and other information are available on the SEC's website at www.sec.gov.

Our website address is www.selectmedicalholdings.com and can be used to access free of charge, through the investor relations section, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, as soon as reasonably practicable after we electronically file such material with or furnish it to the SEC. The information on our website is not incorporated as a part of this annual report.

Executive Officers of the Registrant

The following table sets forth the names, ages and titles, as well as a brief account of the business experience, of each person who was an executive officer of the Company as of February 25, 2021:

Name	Age	Position
Robert A. Ortenzio	63	Executive Chairman and Co-Founder
Rocco A. Ortenzio	88	Vice Chairman and Co-Founder
David S. Chernow	63	President and Chief Executive Officer
Martin F. Jackson	66	Executive Vice President and Chief Financial Officer
John A. Saich	52	Executive Vice President and Chief Administrative Officer
Michael E. Tarvin	60	Executive Vice President, General Counsel and Secretary
Scott A. Romberger	60	Senior Vice President and Chief Accounting Officer
Robert G. Breighner, Jr.	51	Vice President, Compliance and Audit Services and Corporate Compliance Officer
Thomas P. Mullin	37	Executive Vice President, Hospital Operations

Robert A. Ortenzio has served as our Executive Chairman and Co-Founder since January 1, 2014. Mr. Ortenzio co-founded Select and has served as a director of Select since February 1997, and became a director of the Company in February 2005. Mr. Ortenzio served as the Company's Chief Executive Officer from January 1, 2005 to December 31, 2013 and as Select's President and Chief Executive Officer from September 2001 to January 1, 2005. Mr. Ortenzio also served as Select's President and Chief Operating Officer from February 1997 to September 2001. Mr. Ortenzio also currently serves on the board of directors of Concentra Group Holdings Parent. He was an Executive Vice President and a director of Horizon/CMS Healthcare Corporation from July 1995 until July 1996. In 1986, Mr. Ortenzio co-founded Continental Medical Systems, Inc., and served in a number of different capacities, including as a Senior Vice President from February 1986 until April 1988, as Chief Operating Officer from April 1988 until July 1995, as President from May 1989 until August 1996 and as Chief Executive Officer from July 1995 until August 1996. Before co-founding Continental Medical Systems, Inc., he was a Vice President of Rehab Hospital Services Corporation. Mr. Ortenzio is the son of Rocco A. Ortenzio, our Vice Chairman and Co-Founder.

Rocco A. Ortenzio has served as our Vice Chairman and Co-Founder since January 1, 2014. Mr. Ortenzio co-founded Select and served as Select's Chairman and Chief Executive Officer from February 1997 until September 2001. Mr. Ortenzio served as Select's Executive Chairman from September 2001 until December 2013, and Executive Chairman of the Company from February 2005 until December 2013. In 1986, he co-founded Continental Medical Systems, Inc., and served as its Chairman and Chief Executive Officer until July 1995. In 1979, Mr. Ortenzio founded Rehab Hospital Services Corporation, and served as its Chairman and Chief Executive Officer until June 1986. In 1969, Mr. Ortenzio founded Rehab Corporation and served as its Chairman and Chief Executive Officer until 1974. Mr. Ortenzio is the father of Robert A. Ortenzio, the Company's Executive Chairman and Co-Founder.

David S. Chernow has served as our President and Chief Executive Officer since January 1, 2014. Mr. Chernow has served as our President and previously held various executive officer titles since September 2010. Mr. Chernow served as a director of the Company from January 2002 until February 2005 and from August 2005 until September 2010. Mr. Chernow also serves on the board of directors of Concentra Group Holdings Parent. From May 2007 to February 2010, Mr. Chernow served as the President and Chief Executive Officer of Oncure Medical Corp., one of the largest providers of free-standing radiation oncology care in the United States. From July 2001 to June 2007, Mr. Chernow served as the President and Chief Executive Officer of JA Worldwide, a nonprofit organization dedicated to the education of young people about business (formerly, Junior Achievement, Inc.). From 1999 to 2001, he was the President of the Physician Services Group at US Oncology, Inc. Mr. Chernow co-founded American Oncology Resources in 1992 and served as its Chief Development Officer until the time of the merger with Physician Reliance Network, Inc., which created US Oncology, Inc. in 1999.

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Martin F. Jackson has served as our Executive Vice President and Chief Financial Officer since February 2007. He served as our Senior Vice President and Chief Financial Officer from May 1999 to February 2007. Mr. Jackson also serves on the board of directors of Concentra Group Holdings Parent. Mr. Jackson previously served as a Managing Director in the Health Care Investment Banking Group for CIBC Oppenheimer from January 1997 to May 1999. Prior to that time, he served as Senior Vice President, Health Care Finance with McDonald & Company Securities, Inc. from January 1994 to January 1997. Prior to 1994, Mr. Jackson held senior financial positions with Van Kampen Merritt, Touche Ross, Honeywell and L'Nard Associates.

John A. Saich has served as our Executive Vice President and Chief Administrative Officer since October 1, 2018. He served as our Executive Vice President and Chief Human Resources Officer from December 2010 to September 2018. He served as our Senior Vice President, Human Resources from February 2007 to December 2010. He served as our Vice President, Human Resources from November 1999 to January 2007. He joined the Company as Director, Human Resources and HRIS in February 1998. Previously, Mr. Saich served as Director of Benefits and Human Resources for Integrated Health Services in 1997 and as Director of Human Resources for Continental Medical Systems, Inc. from August 1993 to January 1997.

Michael E. Tarvin has served as our Executive Vice President, General Counsel and Secretary since February 2007. He served as our Senior Vice President, General Counsel and Secretary from November 1999 to February 2007. He served as our Vice President, General Counsel and Secretary from February 1997 to November 1999. He was Vice President—Senior Counsel of Continental Medical Systems from February 1993 until February 1997. Prior to that time, he was Associate Counsel of Continental Medical Systems from March 1992. Mr. Tarvin was an associate at the Philadelphia law firm of Drinker Biddle & Reath LLP from September 1985 until March 1992.

Scott A. Romberger has served as our Senior Vice President and Chief Accounting Officer since January 2021. He served as our Senior Vice President, Controller and Chief Accounting Officer from February 2007 to January 2021. He served as our Vice President and Chief Accounting Officer from December 2000 to February 2007. In addition, he served as our Vice President and Controller from February 1997 to December 2000. Prior to February 1997, he was Vice President—Controller of Continental Medical Systems from January 1991 until January 1997. Prior to that time, he served as Acting Corporate Controller and Assistant Controller of Continental Medical Systems from June 1990 and December 1988, respectively. Mr. Romberger is a certified public accountant and was employed by a national accounting firm from April 1985 until December 1988.

Robert G. Breighner, Jr. has served as our Vice President, Compliance and Audit Services since August 2003. He served as our Director of Internal Audit from November 2001 to August 2003. Previously, Mr. Breighner was Director of Internal Audit for Susquehanna Pfaltzgraff Co. from June 1997 until November 2001. Mr. Breighner held other positions with Susquehanna Pfaltzgraff Co. from May 1991 until June 1997.

Thomas P. Mullin has served as our Executive Vice President, Hospital Operations since August 2020. He served as the President of our Specialty Hospital Divisions from November 2018 to August 2020. He served as Chief Operating Officer of our Specialty Hospital Divisions from January 2018 to November 2018. He served as Chief Operating Officer of our CIRH Division from October 2016 to January 2018. Mr. Mullin served as Senior Vice President, Business and Market Development in our CIRH Division from July 2015 to September 2016. He served as Regional Vice President in our CIRH Division from September 2014 to July 2015. He held other positions in our CIRH Division from June 2008 to September 2014.

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Item 1A. Risk Factors

In addition to the factors discussed elsewhere in this Form 10-K, the following are important factors which could cause actual results or events to differ materially from those contained in any forward-looking statements made by or on behalf of us.

Risks Related to Our Business

The unpredictable effects of the COVID-19 pandemic, including the duration and extent of disruption on our operations, creates uncertainties about our future operating results and financial condition.

The extent to which the COVID-19 pandemic continues to disrupt our business and results of operations, financial position, and cash flows will depend on a number of evolving factors and future developments that we are not able to predict, including, but not limited to, the duration of the outbreak; further actions by governmental authorities and the private sector to limit the spread of COVID-19; continued encouragement to social distance; and the economic impact on our patients and the communities we serve as a result of containment efforts.

Our critical illness recovery hospitals and rehabilitation hospitals may experience constrained staffing levels and increased operating costs resulting from increased usage of contract clinical labor due to the overwhelming need for healthcare professionals, particularly in areas that are heavily impacted by the COVID-19 pandemic. Our hospitals may experience increased operating costs resulting from shortages of medical supplies, including personal protective equipment, and supply chain disruptions. The payments we have received under the Public Health and Social Services Emergency Fund, also referred to as the Provider Relief Fund, for health care related expenses and lost revenues attributable to the COVID-19 pandemic have mitigated these issues, but to the extent such relief funding stops, our hospitals may experience increased operating costs.

In our outpatient rehabilitation clinics and Concentra centers, we may experience declines in demand for our services if governmental authorities continue to mandate or resume mandates requiring the temporary closure of non-essential and non-life sustaining businesses. Our outpatient rehabilitation clinics may experience reductions in patient volume if governmental authorities and health departments continue to suspend or resume suspension of elective surgeries which would typically result in a patient seeking outpatient services and if the operations of our referral sources experience disruption as a result of the COVID-19 pandemic. Our clinics may continue to experience a reduction in workers' compensation injury visits as a result of business closures and our Concentra centers may continue to experience a reduction in workers' compensation and employer services visits as a result of businesses furloughing their workforce and temporarily ceasing and reducing operations.

Adverse economic conditions in the U.S. or globally could adversely affect us.

We are subject to the risks arising from adverse conditions in the general economy. A U.S. or global recession or prolonged economic downturn could negatively impact our current and prospective patients, adversely affect the financial ability of health insurers to pay claims, adversely impact our ability to pay our expenses, and limit our ability to obtain financing for our operations. Healthcare spending in the U.S. could be negatively affected in the event of a downturn in economic conditions. For example, U.S. patients who have lost their jobs or healthcare coverage may no longer be covered by an employer-sponsored health insurance plan, and patients reducing their overall spending may elect to decrease the frequency of visits to our facilities or forgo elective treatments or procedures, thereby reducing demand for our services.

We could experience significant increases to our operating costs due to shortages of healthcare professionals or union activity.

Our critical illness recovery hospitals and our rehabilitation hospitals are highly dependent on nurses, our outpatient rehabilitation division is highly dependent on therapists for patient care, and Concentra is highly dependent upon the ability of its affiliated professional groups to recruit and retain qualified physicians and other licensed providers. The market for qualified healthcare professionals is highly competitive. We have sometimes experienced difficulties in attracting and retaining qualified healthcare personnel. We cannot assure you we will be able to attract and retain qualified healthcare professionals in the future. Additionally, the cost of attracting and retaining qualified healthcare personnel may be higher than we anticipate, and as a result, our profitability could decline.

In addition, United States healthcare providers are continuing to see an increase in the amount of union activity. Though we cannot predict the degree to which we will be affected by future union activity, there may be continuing legislative proposals that could result in increased union activity. We could experience an increase in labor and other costs from such union activity.

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If the frequency of workplace injuries and illnesses continues to decline, Concentra's results may be negatively affected.

Approximately 56% of Concentra's revenue in 2020 was generated from the treatment of workers' compensation claims. In the past decade, the number of workers' compensation claims has decreased, which Concentra primarily attributes to improvements in workplace safety, improved risk management by employers, and changes in the type and composition of jobs. During the economic downturn between the years of 2007-2009, the number of employees with workers' compensation insurance substantially decreased. A recession or prolonged economic contraction as a result of the COVID-19 pandemic could similarly cause the number of covered employees to decline, which may cause further declines in workers' compensation claims. In addition, because of the greater access to health insurance and the fact that the United States economy has continued to shift from a manufacturing-based to a service-based economy along with general improvements in workplace safety, workers are generally healthier and less prone to work injuries. Increases in employer-sponsored wellness and health promotion programs, spurred in part by the ACA, have led to fitter and healthier employees who may be less likely to injure themselves on the job. Concentra's business model is based, in part, on its ability to expand its relative share of the market for the treatment of claims for workplace injuries and illnesses. The COVID-19 pandemic has also resulted in a significant increase in unemployment in the United States, which may continue even after the pandemic. If workplace injuries and illnesses decline at a greater rate than the increase in total employment, or if total employment declines at a greater rate than the increase in incident rates, the number of claims in the workers' compensation market will decrease and may adversely affect Concentra's business.

If Concentra loses several significant employer customers or payor contracts, its results may be adversely affected.

Concentra's results may decline if it loses several significant employer customers or payor contracts. One or more of Concentra's significant employer customers could be acquired. Additionally, Concentra could lose significant employer customers or payor contracts due to competitive pricing pressures or other reasons. Our Concentra centers have also experienced a reduction in employer services visits due to furloughed workforces and temporarily ceased and reduced operations during the COVID-19 pandemic. The loss of several significant employer customers or payor contracts could cause a material decline in Concentra's profitability and operating performance.

If there are changes in the rates or methods of Medicare reimbursements for our services, our revenue and profitability could decline.

Approximately 27% of our revenue for the year ended December 31, 2018, 26% of our revenue for the year ended December 31, 2019, and 25% of our revenue for the year ended December 31, 2020, came from the highly regulated federal Medicare program.

In recent years, through legislative and regulatory actions, the federal government has made substantial changes to various payment systems under the Medicare program. President Obama signed into law comprehensive reforms to the healthcare system, including changes to the methods for, and amounts of, Medicare reimbursement. Additional reforms or other changes to these payment systems, including modifications to the conditions on qualification for payment, bundling payments to cover both acute and post-acute care, or the imposition of enrollment limitations on new providers, may be proposed or could be adopted, either by Congress or CMS.

If revised regulations are adopted, the availability, methods, and rates of Medicare reimbursements for services of the type furnished at our facilities could change. Reductions in Medicare reimbursements could also adversely affect payments under some of our commercial payor contracts that follow Medicare payment methodologies. For example, the rules and regulations related to patient criteria for our critical illness recovery hospitals could become more stringent and reduce the number of patients we admit. Some of these changes and proposed changes could adversely affect our business strategy, operations, and financial results. In addition, there can be no assurance that any increases in Medicare reimbursement rates established by CMS will fully reflect increases in our operating costs.

We conduct business in a heavily regulated industry, and changes in regulations, new interpretations of existing regulations, or violations of regulations may result in increased costs or sanctions that reduce our revenue and profitability.

The healthcare industry is subject to extensive federal, state, and local laws and regulations relating to: (i) facility and professional licensure, including certificates of need; (ii) conduct of operations, including financial relationships among healthcare providers, Medicare fraud and abuse, and physician self-referral; (iii) addition of facilities and services and enrollment of newly developed facilities in the Medicare program; (iv) payment for services; and (v) safeguarding protected health information.

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Both federal and state regulatory agencies inspect, survey, and audit our facilities to review our compliance with these laws and regulations. While our facilities intend to comply with existing licensing, Medicare certification requirements, and accreditation standards, there can be no assurance that these regulatory authorities will determine that all applicable requirements are fully met at any given time. A determination by any of these regulatory authorities that a facility is not in compliance with these requirements could lead to the imposition of requirements that the facility takes corrective action, assessment of fines and penalties, or loss of licensure, Medicare certification, or accreditation. These consequences could have an adverse effect on our company.

In addition, there have been heightened coordinated civil and criminal enforcement efforts by both federal and state government agencies relating to the healthcare industry. The ongoing investigations relate to, among other things, various referral practices, billing practices, and physician ownership. In the future, different interpretations or enforcement of these laws and regulations could subject us to allegations of impropriety or illegality or could require us to make changes in our facilities, equipment, personnel, services, and capital expenditure programs. These changes may increase our operating expenses and reduce our operating revenues. If we fail to comply with these extensive laws and government regulations, we could become ineligible to receive government program reimbursement, suffer civil or criminal penalties, or be required to make significant changes to our operations. In addition, we could be forced to expend considerable resources responding to any related investigation or other enforcement action.

If our critical illness recovery hospitals fail to maintain their certifications as LTCHs or if our facilities operated as HIHs fail to qualify as hospitals separate from their host hospitals, our revenue and profitability may decline.

As of December 31, 2020, we operated 99 critical illness recovery hospitals, all of which are currently certified by Medicare as LTCHs. LTCHs must meet certain conditions of participation to enroll in, and seek payment from, the Medicare program as an LTCH, including, among other things, maintaining an average length of stay for Medicare patients in excess of 25 days. An LTCH that fails to maintain this average length of stay for Medicare patients in excess of 25 days during a single cost reporting period is generally allowed an opportunity to show that it meets the length of stay criteria during a subsequent cure period. If the LTCH can show that it meets the length of stay criteria during this cure period, it will continue to be paid under the LTCH-PPS. If the LTCH again fails to meet the average length of stay criteria during the cure period, it will be paid under the general acute care IPPS at rates generally lower than the rates under the LTCH-PPS.

While CMS has issued temporary waivers that exempt LTCHs from the 25 day average length of stay requirement for all cost reporting periods that include the COVID-19 pandemic health emergency, to the extent such waivers are lifted, LTCHs will again be required to comply with this rule. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Regulatory Changes."

Similarly, our HIHs must meet conditions of participation in the Medicare program, which include additional criteria establishing separateness from the hospital with which the HIH shares space. If our critical illness recovery hospitals fail to meet or maintain the standards for certification as LTCHs, they will receive payment under the general acute care hospitals IPPS which is generally lower than payment under the system applicable to LTCHs. Payments at rates applicable to general acute care hospitals would result in our hospitals receiving significantly less Medicare reimbursement than they currently receive for their patient services.

Decreases in Medicare reimbursement rates received by our outpatient rehabilitation clinics may reduce our future revenue and profitability.

Our outpatient rehabilitation clinics receive payments from the Medicare program under the Medicare physician fee schedule. In the 2021 Medicare physician fee schedule final rule, CMS increased the values for the E/M office visit codes and cuts to other specialty codes to maintain budget neutrality. As a result, therapy services provided in our outpatient rehabilitation clinics will receive an estimated 3.6% decrease in payment from Medicare in calendar year 2021. The budget-neutrality requirements under the Medicare physician fee schedule may result in future physical and occupational therapy services receiving code reductions, and a concurrent decrease in payments. Separately, the Consolidated Appropriations Act, 2021, provides a one-time 3.75% increase in payments in calendar year 2021 for therapy services and other services paid under the physician fee schedule.

In addition, the Medicare Access and CHIP Reauthorization Act of 2015 requires that payments under the fee schedule be adjusted starting in 2019 based on performance in a MIPS and, beginning in 2020, incentives for participation in alternative payment models. The specifics of the MIPS and incentives for participation in alternative payment models will be subject to future notice and comment rule-making. It is unclear what impact, if any, the MIPS and incentives for participation in alternative payment models will have on our business and operating results, but any resulting decrease in payment may reduce our future revenue and profitability.

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The nature of the markets that Concentra serves may constrain its ability to raise prices at rates sufficient to keep pace with the inflation of its costs.

Rates of reimbursement for work-related injury or illness visits in Concentra's occupational health services business are established through a legislative or regulatory process within each state that Concentra serves. Currently, 36 states in which Concentra has operations have fee schedules pursuant to which all healthcare providers are uniformly reimbursed. The fee schedules are determined by each state and generally prescribe the maximum amounts that may be reimbursed for a designated procedure. In the states without fee schedules, healthcare providers are generally reimbursed based on usual, customary and reasonable rates charged in the particular state in which the services are provided. Given that Concentra does not control these processes, it may be subject to financial risks if individual jurisdictions reduce rates or do not routinely raise rates of reimbursement in a manner that keeps pace with the inflation of Concentra's costs of service.

If our rehabilitation hospitals fail to comply with the 60% Rule or admissions to IRFs are limited due to changes to the diagnosis codes on the presumptive compliance list, our revenue and profitability may decline.

As of December 31, 2020, we operated 30 rehabilitation hospitals, all of which were certified as Medicare providers and operating as IRFs. Our rehabilitation hospitals must meet certain conditions of participation to enroll in, and seek payment from, the Medicare program as an IRF. Among other things, at least 60% of the IRF's total inpatient population must require treatment for one or more of 13 conditions specified by regulation. This requirement is now commonly referred to as the "60% Rule." Compliance with the 60% Rule is demonstrated through a two-step process. The first step is the "presumptive" method, in which patient diagnosis codes are compared to a "presumptive compliance" list. IRFs that fail to demonstrate compliance with the 60% Rule using this presumptive test may demonstrate compliance through a second step involving an audit of the facility's medical records to assess compliance.

If an IRF does not demonstrate compliance with the 60% Rule by either the presumptive method or through a review of medical records, then the facility's classification as an IRF may be terminated at the start of its next cost reporting period causing the facility to be paid as a general acute care hospital under IPPS. If our rehabilitation hospitals fail to demonstrate compliance with the 60% Rule through either method and are classified as general acute care hospitals, our revenue and profitability may be adversely affected.

While CMS has issued temporary waivers in response to the COVID-19 pandemic that allow IRFs, IRF units and hospitals and units applying to be classified as IRFs to exclude patients admitted solely to respond to the public health emergency from the 60% Rule, to the extent such waivers are lifted, IRFs will again be required to comply with this rule. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Regulatory Changes."

As a result of post-payment reviews of claims we submit to Medicare for our services, we may incur additional costs and may be required to repay amounts already paid to us.

We are subject to regular post-payment inquiries, investigations, and audits of the claims we submit to Medicare for payment for our services. These post-payment reviews include medical necessity reviews for Medicare patients admitted to LTCHs and IRFs, and audits of Medicare claims under the Recovery Audit Contractor program. These post-payment reviews may require us to incur additional costs to respond to requests for records and to pursue the reversal of payment denials, and ultimately may require us to refund amounts paid to us by Medicare that are determined to have been overpaid.

Most of our critical illness recovery hospitals are subject to short-term leases, and the loss of multiple leases close in time could materially and adversely affect our business, financial condition, and results of operations.

We lease most of our critical illness recovery hospitals under short-term leases with terms of less than ten years. These leases often do not have favorable renewal options and generally cannot be renewed or extended without the written consent of the landlords thereunder. If we cannot renew or extend a significant number of our existing leases, or if the terms for lease renewal or extension offered by landlords on a significant number of leases are unacceptable to us, then the loss of multiple leases close in time could materially and adversely affect our business, financial condition, and results of operations.

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Our facilities are subject to extensive federal and state laws and regulations relating to the privacy of individually identifiable information.

HIPAA required the United States Department of Health and Human Services to adopt standards to protect the privacy and security of individually identifiable health information. The department released final regulations containing privacy standards in December 2000 and published revisions to the final regulations in August 2002. The privacy regulations extensively regulate the use and disclosure of individually identifiable health information. The regulations also provide patients with significant new rights related to understanding and controlling how their health information is used or disclosed. The security regulations require healthcare providers to implement administrative, physical and technical practices to protect the security of individually identifiable health information that is maintained or transmitted electronically. HITECH, which was signed into law in February 2009, enhanced the privacy, security, and enforcement provisions of HIPAA by, among other things, establishing security breach notification requirements, allowing enforcement of HIPAA by state attorneys general, and increasing penalties for HIPAA violations. Violations of HIPAA or HITECH could result in civil or criminal penalties. For example, HITECH permits HHS to conduct audits of HIPAA compliance and impose penalties even if we did not know or reasonably could not have known about the violation and increases civil monetary penalty amounts up to \$50,000 per violation with a maximum of \$1.5 million in a calendar year for violations of the same requirement.

In addition to HIPAA, there are numerous federal and state laws and regulations addressing patient and consumer privacy concerns, including unauthorized access, or theft of patient's identifiable health information. State statutes and regulations vary from state to state. Lawsuits, including class actions and action by state attorneys general, directed at companies that have experienced a privacy or security breach also can occur.

In the conduct of our business, we process, maintain, and transmit sensitive data, including our patient's individually identifiable health information. We have developed a comprehensive set of policies and procedures in our efforts to comply with HIPAA and other privacy laws. Our compliance officer, privacy officer, and information security officer are responsible for implementing and monitoring compliance with our privacy and security policies and procedures at our facilities. We believe that the cost of our compliance with HIPAA and other federal and state privacy laws will not have a material adverse effect on our business, financial condition, results of operations, or cash flows. However, there can be no assurance that a breach of privacy or security will not occur. If there is a breach, we may be subject to various lawsuits, penalties and damages and may be required to incur costs to mitigate the impact of the breach on affected individuals.

We may be adversely affected by a security breach of our, or our third-party vendors', information technology systems, such as a cyber attack, which may cause a violation of HIPAA or HITECH and subject us to potential legal and reputational harm.

In the normal course of business, our information technology systems hold sensitive patient information including patient demographic data, eligibility for various medical plans including Medicare and Medicaid, and protected health information, which is subject to HIPAA and HITECH. Additionally, we utilize those same systems to perform our day-to-day activities, such as receiving referrals, assigning medical teams to patients, documenting medical information, maintaining an accurate record of all transactions, processing payments, and maintaining our employee's personal information. We also contract with third-party vendors to maintain and store our patient's individually identifiable health information. Numerous state and federal laws and regulations address privacy and information security concerns resulting from our access to our patient's and employee's personal information.

Our information technology systems and those of our vendors that process, maintain, and transmit such data are subject to computer viruses, cyber attacks, or breaches. We adhere to policies and procedures designed to promote compliance with HIPAA and other privacy and information security laws and require our third-party vendors to do so as well. Failure to maintain the security and functionality of our information systems and related software, or to defend a cybersecurity attack or other attempt to gain unauthorized access to our or third-party's systems, facilities, or patient health information could expose us to a number of adverse consequences, including but not limited to disruptions in our operations, regulatory and other civil and criminal penalties, reputational harm, investigations and enforcement actions (including, but not limited to, those arising from the SEC, Federal Trade Commission, the OIG or state attorneys general), fines, litigation with those affected by the data breach, loss of customers, disputes with payors, and increased operating expense, which either individually or in the aggregate could have a material adverse effect on our business, financial position, results of operations, and liquidity. Although we maintain cyber liability insurance to protect us from losses related to cyber attacks and breaches, not every risk or liabilities insured, and for risks that are insurable, our policy limits and terms of coverage may not be sufficient to cover all actual losses or liabilities incurred.

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Furthermore, while our information technology systems, and those of our third-party vendors, are maintained with safeguards protecting against cyber attacks, including passive intrusion protection, firewalls, and virus detection software, these safeguards do not ensure that a significant cyber attack could not occur. A cyber attack that bypasses our information technology security systems, or those of our third-party vendors, could cause the loss of protected health information, or other data subject to privacy laws, the loss of proprietary business information, or a material disruption to our or a third-party vendor's information technology business systems resulting in a material adverse effect on our business, financial condition, results of operations, or cash flows. In addition, our future results could be adversely affected due to the theft, destruction, loss, misappropriation, or release of protected health information, other confidential data or proprietary business information, operational or business delays resulting from the disruption of information technology systems and subsequent clean-up and mitigation activities, negative publicity resulting in reputation or brand damage with clients, members, or industry peers, or regulatory action taken as a result of such incident. We provide our employees annual training and regular reminders on important measures they can take to prevent breaches and other cyber threats. We routinely identify attempts to gain unauthorized access to our systems. However, given the rapidly evolving nature and proliferation of cyber threats, there can be no assurance our training and network security measures or other controls will detect, prevent, or remediate security or data breaches in a timely manner or otherwise prevent unauthorized access to, damage to, or interruption of our systems and operations. For example, it has been widely reported that many well-organized international interests, in certain cases with the backing of sovereign governments, are targeting the theft of patient information through the use of advance persistent threats. Similarly, in recent years, several hospitals have reported being the victim of ransomware attacks in which they lost access to their systems, including clinical systems, during the course of the attacks. While we are not aware of having experienced a material cyber breach or attack to date, we are likely to face attempted attacks in the future. Accordingly, we may be vulnerable to losses associated with the improper functioning, security breach, or unavailability of our information systems as well as any systems used in acquired operations.

Our acquisitions require transitions and integration of various information technology systems, and we regularly upgrade and expand our information technology systems' capabilities. If we experience difficulties with the transition and integration of these systems or are unable to implement, maintain, or expand our systems properly, we could suffer from, among other things, operational disruptions, regulatory problems, working capital disruptions, and increases in administrative expenses. While we make significant efforts to address any information security issues and vulnerabilities with respect to the companies we acquire, we may still inherit risks of security breaches or other compromises when we integrate these companies within our business.

Quality reporting requirements may negatively impact Medicare reimbursement.

The IMPACT Act requires the submission of standardized data by certain healthcare providers. Specifically, the IMPACT Act requires, among other significant activities, the reporting of standardized patient assessment data with regard to quality measures, resource use, and other measures. Failure to report data as required will subject providers to a 2% reduction in market basket prices then in effect. Additionally, reporting activities associated with the IMPACT Act are anticipated to be quite burdensome. CMS proposes to require hospitals to have a discharge planning process that focuses on patients' goals and preferences and on preparing them and, as appropriate, their caregivers, to be active partners in their post-discharge care. The adoption of these and additional quality reporting measures for our hospitals to track and report will require additional time and expense and could affect reimbursement in the future. In healthcare generally, the burdens associated with collecting, recording, and reporting quality data are increasing.

There can be no assurance that all of our hospitals will continue to meet quality reporting requirements in the future which may result in one or more of our hospitals seeing a reduction in its Medicare reimbursements. Regardless, we, like other healthcare providers, are likely to incur additional expenses in an effort to comply with additional and changing quality reporting requirements.

We may be adversely affected by negative publicity which can result in increased governmental and regulatory scrutiny and possibly adverse regulatory changes.

Negative press coverage, including about the industries in which we currently operate, can result in increased governmental and regulatory scrutiny and possibly adverse regulatory changes. Adverse publicity and increased governmental scrutiny can have a negative impact on our reputation with referral sources and patients and on the morale and performance of our employees, both of which could adversely affect our businesses and results of operations.

Current and future acquisitions may use significant resources, may be unsuccessful, and could expose us to unforeseen liabilities.

As part of our growth strategy, we may pursue acquisitions of critical illness recovery hospitals, rehabilitation hospitals, outpatient rehabilitation clinics, and other related healthcare facilities and services. These acquisitions, may involve significant cash expenditures, debt incurrence, additional operating losses and expenses, and compliance risks that could have a material adverse effect on our financial condition and results of operations.

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We may not be able to successfully integrate our acquired businesses into ours, and therefore, we may not be able to realize the intended benefits from an acquisition. If we fail to successfully integrate acquisitions, our financial condition and results of operations may be materially adversely affected. These acquisitions could result in difficulties integrating acquired operations, technologies, and personnel into our business. Such difficulties may divert significant financial, operational, and managerial resources from our existing operations and make it more difficult to achieve our operating and strategic objectives. We may fail to retain employees or patients acquired through these acquisitions, which may negatively impact the integration efforts. These acquisitions could also have a negative impact on our results of operations if it is subsequently determined that goodwill or other acquired intangible assets are impaired, thus resulting in an impairment charge in a future period.

In addition, these acquisitions involve risks that the acquired businesses will not perform in accordance with expectations; that we may become liable for unforeseen financial or business liabilities of the acquired businesses, including liabilities for failure to comply with healthcare regulations; that the expected synergies associated with acquisitions will not be achieved; and that business judgments concerning the value, strengths, and weaknesses of businesses acquired will prove incorrect, which could have a material adverse effect on our financial condition and results of operations.

Future joint ventures may use significant resources, may be unsuccessful, and could expose us to unforeseen liabilities.

As part of our growth strategy, we have partnered and may partner with large healthcare systems to provide post-acute care services. These joint ventures have included and may involve significant cash expenditures, debt incurrence, additional operating losses and expenses, and compliance risks that could have a material adverse effect on our financial condition and results of operations.

A joint venture involves the combining of corporate cultures and mission. As a result, we may not be able to successfully operate a joint venture, and therefore, we may not be able to realize the intended benefits. If we fail to successfully execute a joint venture relationship, our financial condition and results of operations may be materially adversely affected. A new joint venture could result in difficulties in combining operations, technologies, and personnel. Such difficulties may divert significant financial, operational, and managerial resources from our existing operations and make it more difficult to achieve our operating and strategic objectives. We may fail to retain employees or patients as a result of the integration efforts.

A joint venture is operated through a board of directors that contains representatives of Select and other parties to the joint venture. We may not control the board of certain joint ventures and, as a result, such joint ventures may take certain actions that could have adverse effects on our financial condition and results of operations.

If we fail to compete effectively with other hospitals, clinics, occupational health centers, and healthcare providers in the local areas we serve, our revenue and profitability may decline.

The healthcare business is highly competitive, and we compete with other hospitals, rehabilitation clinics, occupational health centers, and other healthcare providers for patients. If we are unable to compete effectively in the critical illness recovery, rehabilitation hospital, outpatient rehabilitation, and occupational health services businesses, our ability to retain customers and physicians, or maintain or increase our revenue growth, price flexibility, control over medical cost trends, and marketing expenses may be compromised and our revenue and profitability may decline.

Many of our critical illness recovery hospitals and our rehabilitation hospitals operate in geographic areas where we compete with at least one other facility that provides similar services.

Our outpatient rehabilitation clinics face competition from a variety of local and national outpatient rehabilitation providers, including physician-owned physical therapy clinics, dedicated locally owned and managed outpatient rehabilitation clinics, and hospital or university owned or affiliated ventures, as well as national and regional providers in select areas. Other competing outpatient rehabilitation clinics in local areas we serve may have greater name recognition and longer operating histories than our clinics. The managers of these competing clinics may also have stronger relationships with physicians in their communities, which could give them a competitive advantage for patient referrals. Because the barriers to entry are not substantial and current customers have the flexibility to move easily to new healthcare service providers, we believe that new outpatient physical therapy competitors can emerge relatively quickly.

Concentra's primary competitors have typically been independent physicians, hospital emergency departments, and hospital-owned or hospital-affiliated medical facilities. Because the barriers to entry in Concentra's geographic markets are not substantial and its current customers have the flexibility to move easily to new healthcare service providers, new competitors to Concentra can emerge relatively quickly. The markets for Concentra's consumer health business are also fragmented and competitive. If Concentra's competitors are better able to attract patients or expand services at their facilities than Concentra is, Concentra may experience an overall decline in revenue.

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Future cost containment initiatives undertaken by private third-party payors may limit our future revenue and profitability.

Initiatives undertaken by major insurers and managed care companies to contain healthcare costs affect our profitability. These payors attempt to control healthcare costs by contracting with hospitals and other healthcare providers to obtain services on a discounted basis. We believe that this trend may continue and may limit reimbursements for healthcare services. If insurers or managed care companies from whom we receive substantial payments reduce the amounts they pay for services, our profit margins may decline, or we may lose patients if we choose not to renew our contracts with these insurers at lower rates.

If we fail to maintain established relationships with the physicians in the areas we serve, our revenue may decrease.

Our success is partially dependent upon the admissions and referral practices of the physicians in the communities our critical illness recovery hospitals, rehabilitation hospitals, and outpatient rehabilitation clinics serve, and our ability to maintain good relations with these physicians. Physicians referring patients to our hospitals and clinics are generally not our employees and, in many of the local areas that we serve, most physicians have admitting privileges at other hospitals and are free to refer their patients to other providers. If we are unable to successfully cultivate and maintain strong relationships with these physicians, our hospitals' admissions and our facilities' and clinics' businesses may decrease, and our revenue may decline.

Our business operations could be significantly disrupted if we lose key members of our management team.

Our success depends to a significant degree upon the continued contributions of our senior officers and other key employees, and our ability to retain and motivate these individuals. We currently have employment agreements in place with three executive officers and change in control agreements and/or non-competition agreements with several other officers. Many of these individuals also have significant equity ownership in our company. We do not maintain any key life insurance policies for any of our employees. The loss of the services of certain of these individuals could disrupt significant aspects of our business, could prevent us from successfully executing our business strategy, and could have a material adverse effect on our results of operations.

In conducting our business, we are required to comply with applicable laws regarding fee-splitting and the corporate practice of medicine.

Some states prohibit the "corporate practice of medicine" that restricts business corporations from practicing medicine through the direct employment of physicians or from exercising control over medical decisions by physicians. Some states similarly prohibit the "corporate practice of therapy." The laws relating to corporate practice vary from state to state and are not fully developed in each state in which we have facilities. Typically, however, professional corporations owned and controlled by licensed professionals are exempt from corporate practice restrictions and may employ physicians or therapists to furnish professional services. Also, in some states, hospitals are permitted to employ physicians.

Some states also prohibit entities from engaging in certain financial arrangements, such as fee-splitting, with physicians or therapists. The laws relating to fee-splitting also vary from state to state and are not fully developed. Generally, these laws restrict business arrangements that involve a physician or therapist sharing medical fees with a referral source, but in some states, these laws have been interpreted to extend to management agreements between physicians or therapists and business entities under some circumstances.

We believe that the Company's current and planned activities do not constitute fee-splitting or the unlawful corporate practice of medicine as contemplated by these state laws. However, there can be no assurance that future interpretations of such laws will not require structural and organizational modification of our existing relationships with the practices. If a court or regulatory body determines that we have violated these laws or if new laws are introduced that would render our arrangements illegal, we could be subject to civil or criminal penalties, our contracts could be found legally invalid and unenforceable (in whole or in part), or we could be required to restructure our contractual arrangements with our affiliated physicians and other licensed providers.

Significant legal actions could subject us to substantial uninsured liabilities.

Physicians, hospitals, and other healthcare providers have become subject to an increasing number of legal actions alleging malpractice, product liability, or related legal theories. Many of these actions involve large claims and significant defense costs. We are also subject to lawsuits under federal and state whistleblower statutes designed to combat fraud and abuse in the healthcare industry. These whistleblower lawsuits are not covered by insurance and can involve significant monetary damages and award bounties to private plaintiffs who successfully bring the suits. See "Legal Proceedings" and Note 21 – Commitments and Contingencies in our audited consolidated financial statements.

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We currently maintain professional malpractice liability insurance and general liability insurance coverages through a number of different programs that are dependent upon such factors as the state where we are operating and whether the operations are wholly owned or are operated through a joint venture. For our wholly owned operations, we currently maintain insurance coverages under a combination of policies with a total annual aggregate limit of up to \$37.0 million for professional malpractice liability insurance and \$40.0 million for general liability insurance. Our insurance for the professional liability coverage is written on a "claims-made" basis, and our commercial general liability coverage is maintained on an "occurrence" basis. These coverages apply after a self-insured retention limit is exceeded. For our joint venture operations, we have designed a separate insurance program that responds to the risks of specific joint ventures. Most of our joint ventures are insured under a master program with an annual aggregate limit of up to \$80.0 million, subject to a sublimit aggregate ranging from \$23.0 million to \$33.0 million for most joint ventures. The policies are generally written on a "claims-made" basis. Each of these programs has either a deductible or self-insured retention limit. We review our insurance program annually and may make adjustments to the amount of insurance coverage and self-insured retentions in future years. In addition, our insurance coverage does not generally cover punitive damages and may not cover all claims against us. See "Business—Government Regulations—Other Healthcare Regulations."

Concentration of ownership among our existing executives and directors may prevent new investors from influencing significant corporate decisions.

Our executives and directors, beneficially own, in the aggregate, approximately 18.8% of Holdings' outstanding common stock as of February 1, 2021. As a result, these stockholders have significant control over our management and policies and are able to exercise influence over all matters requiring stockholder approval, including the election of directors, amendment of our certificate of incorporation, and approval of significant corporate transactions. The directors elected by these stockholders are able to make decisions affecting our capital structure, including decisions to issue additional capital stock, implement stock repurchase programs, and incur indebtedness. This influence may have the effect of deterring hostile takeovers, delaying or preventing changes in control or changes in management, or limiting the ability of our other stockholders to approve transactions that they may deem to be in their best interest.

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Risks Related to Our Capital Structure

If WCAS and the other members of Concentra Group Holdings Parent or DHHC exercise their Put Right, it may have an adverse effect on our liquidity. Additionally, we may not have adequate funds to pay amounts due in connection with the Put Right, if exercised, in which case we would be required to issue Holdings' common stock to purchase interests of Concentra Group Holdings Parent and our stockholders' ownership interest will be diluted.

Pursuant to the Amended and Restated Limited Liability Company Agreement of Concentra Group Holdings Parent, WCAS and the other members of Concentra Group Holdings Parent and DHHC have separate put rights (each, a "Put Right") with respect to their equity interests in Concentra Group Holdings Parent. If a Put Right is exercised by WCAS or DHHC, Select will be obligated to purchase up to 33 1/3% of the equity interests of Concentra Group Holdings Parent that WCAS or DHHC, respectively, owned as of February 1, 2018, at a purchase price based on a valuation of Concentra Group Holdings Parent performed by an investment bank to be agreed between Select and one of WCAS or DHHC, which valuation will be based on certain precedent transactions using multiples of EBITDA (as defined in the Amended and Restated Limited Liability Company Agreement of Concentra Group Holdings Parent) and capped at an agreed upon multiple of EBITDA. Select has the right to elect to pay the purchase price in cash or in shares of Holdings' common stock.

On January 1, 2020, February 1, 2020 and December 31, 2020, Select, WCAS and DHHC consummated the Concentra Interest Purchases, which were in lieu of, and collectively deemed to constitute, the exercises of WCAS' and DHHC's first and second Put Rights, pursuant to which Select acquired an aggregate amount of approximately 30% of the outstanding membership interests, on a fully diluted basis, of Concentra Group Holdings Parent from WCAS, DHHC and the other equity holders of Concentra Group Holdings Parent, in exchange for an aggregate payment of approximately \$576.4 million. Upon consummation of the Concentra Interest Purchases, Select owns in the aggregate approximately 78.0% of the outstanding membership interests of Concentra Group Holdings Parent on a fully diluted basis and approximately 79.8% of the outstanding voting membership interests of Concentra Group Holdings Parent.

WCAS and DHHC may exercise their remaining respective Put Rights to sell up to an additional 33 1/3% of the equity interests in Concentra Group Holdings Parent that each, respectively, owned as of February 1, 2018, on an annual basis during the sixty-day period following the delivery of the audited financial statements for the immediately preceding fiscal year. If WCAS exercises future Put Rights, the other members of Concentra Group Holdings Parent, other than DHHC, may elect to sell to Select, on the same terms as WCAS, a percentage of their equity interests of Concentra Group Holdings Parent that such member owned as of February 1, 2018, up to but not exceeding the percentage of equity interests owned by WCAS as of such date that WCAS has determined to sell to Select in the exercise of its Put Right.

Furthermore, WCAS, DHHC, and the other members of Concentra Group Holdings Parent have a put right with respect to their equity interest in Concentra Group Holdings Parent that may only be exercised in the event Holdings or Select experiences a change of control that has not been previously approved by WCAS and DHHC, and which results in change in the senior management of Select (an "SEM COC Put Right"). If an SEM COC Put Right is exercised by WCAS, Select will be obligated to purchase all (but not less than all) of the equity interests of WCAS and the other members of Concentra Group Holdings Parent (other than DHHC) offered by such members at a purchase price based on a valuation of Concentra Group Holdings Parent performed by an investment bank to be agreed between Select and one of WCAS or DHHC, which valuation will be based on certain precedent transactions using multiples of EBITDA and capped at an agreed upon multiple of EBITDA. Similarly, if an SEM COC Put Right is exercised by DHHC, Select will be obligated to purchase all (but not less than all) of the equity interests of DHHC at a purchase price based on a valuation of Concentra Group Holdings Parent performed by an investment bank to be agreed between Select and one of WCAS or DHHC, which valuation will be based on certain precedent transactions using multiples of EBITDA and capped at an agreed upon multiple of EBITDA.

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We may not have sufficient funds, borrowing capacity, or other capital resources available to pay for the interests of Concentra Group Holdings Parent in cash if WCAS, DHHC, and the other members of Concentra Group Holdings Parent exercise the Put Right or the SEM COC Put Right, or may be prohibited from doing so under the terms of our debt agreements. Such lack of available funds upon the exercising of the Put Right or the SEM COC Put Right would force us to issue stock at a time we might not otherwise desire to do so in order to purchase the interests of Concentra Group Holdings Parent. To the extent that the interests of Concentra Group Holdings Parent are purchased by issuing shares of our common stock, the increase in the number of shares of our common stock issued and outstanding may depress the price of our common stock and our stockholders will experience dilution in their respective percentage ownership in us. In addition, shares issued to purchase the interests in Concentra Group Holdings Parent will be valued at the twenty-one trading day volume-weighted average sales price of such shares for the period beginning ten trading days immediately preceding the first public announcement of the Put Right or the SEM COC Put Right being exercised and ending ten trading days immediately following such announcement. Because the value of the common stock issued to purchase the interests in Concentra Group Holdings Parent is, in part, determined by the sales price of our common stock following the announcement that the Put Right or the SEM COC Put Right is being exercised, which may cause the sales price of our common stock to decline, the amount of common stock we may have to issue to purchase the interests in Concentra Group Holdings Parent may increase, resulting in further dilution to our existing stockholders.

Our substantial indebtedness may limit the amount of cash flow available to invest in the ongoing needs of our business.

We have a substantial amount of indebtedness. As of December 31, 2020, Select had approximately \$3,391.7 million of total indebtedness, and Concentra had approximately \$1,143.4 million of total indebtedness, \$1,133.1 million of which was intercompany debt owed to Select. As of December 31, 2020, our total indebtedness to third parties was \$3,402.0 million. Our indebtedness could have important consequences to you. For example, it:

- requires us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, reducing the
 availability of our cash flow to fund working capital, capital expenditures, development activity, acquisitions, and other general
 corporate purposes;
- · increases our vulnerability to adverse general economic or industry conditions;
- · limits our flexibility in planning for, or reacting to, changes in our business or the industries in which we operate;
- makes us more vulnerable to increases in interest rates, as borrowings under our senior secured credit facilities are at variable rates;
- limits our ability to obtain additional financing in the future for working capital or other purposes; and
- places us at a competitive disadvantage compared to our competitors that have less indebtedness.

Any of these consequences could have a material adverse effect on our business, financial condition, results of operations, prospects, and ability to satisfy our obligations under our indebtedness. In addition, there would be a material adverse effect on our business, financial condition, results of operations, and cash flows if we were unable to service our indebtedness or obtain additional financing, as needed. Furthermore, Concentra's failure to repay its intercompany debt to Select could result in Select's inability to service its indebtedness, leading to the consequences described above.

See "Management's Discussion and Analysis of Financial Condition and Results of Operations-Liquidity and Capital Resources."

The Select credit facilities and the indenture governing Select's 6.250% senior notes require Select to comply with certain financial covenants and obligations, the default of which may result in the acceleration of certain of Select's indebtedness.

In the case of an event of default under the agreements governing the Select credit facilities (as defined below), the lenders under such agreements could elect to declare all amounts borrowed, together with accrued and unpaid interest and other fees, to be due and payable. If Select is unable to obtain a waiver from the requisite lenders under such circumstances, these lenders could exercise their rights, then Select's financial condition and results of operations could be adversely affected, and Select could become bankrupt or insolvent

The Select credit facilities require Select to maintain a leverage ratio (based upon the ratio of indebtedness to consolidated EBITDA as defined in the agreements governing the Select credit facilities), which is tested quarterly. Failure to comply with these covenants would result in an event of default under the Select credit facilities and, absent a waiver or an amendment from the lenders, preclude Select from making further borrowings under its revolving facility and permit the lenders to accelerate all outstanding borrowings under the Select credit facilities.

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As of December 31, 2020, Select was required to maintain its leverage ratio (its ratio of total indebtedness to consolidated EBITDA for the prior four consecutive fiscal quarters) at less than 7.00 to 1.00. At December 31, 2020, Select's leverage ratio was 3.48 to 1.00.

While Select has never defaulted on compliance with any of its financial covenants, Select's ability to comply with this ratio in the future may be affected by events beyond its control. Inability to comply with the required financial covenants could result in a default under the Select credit facilities. In the event of any default under Select's credit facilities, the revolving lenders could elect to terminate borrowing commitments and declare all borrowings outstanding, together with accrued and unpaid interest and other fees, to be immediately due and payable. In the event of any default under Select's indenture, dated August 1, 2019, by and among Select, the guarantors named therein and U.S. Bank National Association, as trustee (the "Indenture"), the trustee or holders of 25% of the notes could declare all outstanding 6.250% senior notes immediately due and payable.

The Concentra credit facilities require Concentra to comply with certain financial covenants and obligations, the default of which may result in the acceleration of certain of Concentra's indebtedness.

In the case of an event of default under the agreement (the "Concentra-JPM first lien credit agreement") governing Concentra's revolving facility (the "Concentra-JPM revolving facility" and, together with the Concentra-JPM first lien credit agreement, the "Concentra-JPM credit facilities"), which is nonrecourse to Select, the lenders under such agreement could elect to declare all amounts borrowed, if any, together with accrued and unpaid interest and other fees, to be due and payable. If Concentra is unable to obtain a waiver from these lenders under such circumstances, the lenders could exercise their rights, then Concentra's financial condition and results of operations could be adversely affected, and Concentra could become bankrupt or insolvent. As of December 31, 2020, there is no indebtedness outstanding under the Concentra-JPM revolving facility.

The Concentra-JPM first lien credit agreement requires Concentra to maintain a leverage ratio (based upon the ratio of indebtedness for money borrowed to consolidated EBITDA) of 5.75 to 1.00, which is tested quarterly, but only if Revolving Exposure (as defined in the Concentra-JPM first lien credit agreement) exceeds 30% of Revolving Commitments (as defined in the Concentra-JPM first lien credit agreement) on such day. Failure to comply with this covenant would result in an event of default under the Concentra-JPM first lien credit agreement only and, absent a waiver or an amendment from the revolving lenders, preclude Concentra from making further borrowings under the Concentra-JPM revolving facility and permit the revolving lenders to accelerate all outstanding borrowings under the Concentra-JPM revolving facility. Upon such acceleration, Concentra's failure to comply with the financial covenant would result in an event of default with respect to the Concentra intercompany loan agreement (as defined below).

The Concentra-JPM first lien credit agreement also contains a number of affirmative and restrictive covenants, including limitations on mergers, consolidations, and dissolutions; sales of assets; investments and acquisitions; indebtedness; liens; affiliate transactions; and dividends and restricted payments. The Concentra-JPM first lien credit agreement contains events of default for non-payment of principal and interest when due (subject to a grace period for interest), cross-default and cross-acceleration provisions and an event of default that would be triggered by a change of control.

While Concentra has never defaulted on compliance with its financial covenants, Concentra's ability to comply with this ratio in the future may be affected by events beyond our control. Inability to comply with the required financial covenants could result in a default under the Concentra-JPM first lien credit agreement. In the event of any default under the Concentra-JPM first lien credit agreement, the revolving lenders could elect to terminate borrowing commitments and declare all borrowings outstanding, together with accrued and unpaid interest and other fees, to be immediately due and payable.

Payment of interest on, and repayment of principal of, our indebtedness is dependent in part on cash flow generated by our subsidiaries

Payment of interest on, and repayment of, principal of our indebtedness will be dependent in part upon cash flow generated by our subsidiaries and their ability to make such cash available to us, by dividend, debt repayment, or otherwise. In particular, Concentra's inability to make interest and principal payments when due to Select, pursuant to the terms of the Concentra intercompany loan agreement, may result in Select's inability to service its debt to third parties. Our subsidiaries may not be able to, or be permitted to, make distributions to enable us to make payments in respect of our indebtedness. Each of our subsidiaries is a distinct legal entity and, under certain circumstances, legal and contractual restrictions may limit our ability to obtain cash from our subsidiaries. In the event that we do not receive distributions from our subsidiaries, we may be unable to make required principal and interest payments on our indebtedness. In addition, any payment of interest, dividends, distributions, loans, or advances by our subsidiaries to us could be subject to restrictions on dividends or repatriation of distributions under applicable local law, monetary transfer restrictions, and foreign currency exchange regulations in the jurisdictions in which the subsidiaries operate or under arrangements with local partners. Furthermore, the ability of our subsidiaries to make such payments of interest, dividends, distributions, loans, or advances may be contested by taxing authorities in the relevant jurisdictions.

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Despite our substantial level of indebtedness, we and our subsidiaries may be able to incur additional indebtedness. This could further exacerbate the risks described above.

We and our subsidiaries may be able to incur additional indebtedness in the future. Although the Select credit facilities, the Indenture and the Concentra-JPM first lien credit agreement contain restrictions on the incurrence of additional indebtedness, these restrictions are subject to a number of qualifications and exceptions, and the indebtedness incurred in compliance with these restrictions could be substantial. Also, these restrictions do not prevent us or our subsidiaries from incurring obligations that do not constitute indebtedness. As of December 31, 2020, Select had \$410.7 million of availability under the Select revolving facility (as defined below) (after giving effect to \$39.3 million of outstanding letters of credit) and Concentra had \$83.6 million of availability under the Concentra-JPM revolving facility (after giving effect to \$16.4 million of outstanding letters of credit). In addition, to the extent new debt is added to us and our subsidiaries' current debt levels, the substantial leverage risks described above would increase.

Concentra's inability to meet the conditions and payments under the Concentra-JPM revolving facility could jeopardize Select's equity investment in Concentra.

Select is not a party to the Concentra-JPM first lien credit agreement and is not an obligor with respect to Concentra's debt under the Concentra-JPM revolving facility; however, if Concentra fails to meet its obligations and defaults on the Concentra-JPM revolving facility, a portion of or all of Select's equity investment in Concentra could be at risk of loss.

Changes in the method of determining London Interbank Offered Rate ("LIBOR"), or the replacement of LIBOR with an alternative reference rate, may adversely affect interest expense related to our debt.

Amounts drawn under the Select credit facilities bear interest rates at the election of the borrower, in relation to LIBOR or an alternate base rate. On July 27, 2017, the Financial Conduct Authority in the U.K. announced that it would phase out LIBOR as a benchmark by the end of 2021. It is unclear whether new methods of calculating LIBOR will be established such that it continues to exist after 2021. The U.S. Federal Reserve is considering replacing U.S. dollar LIBOR with a newly created index called the Secured Overnight Financing Rate, calculated with a broad set of short-term repurchase agreements backed by treasury securities. The Select credit facilities contain certain provisions concerning the possibility that LIBOR may cease to exist, and that an alternative reference rate may be chosen. However, if LIBOR in fact ceases to exist, and no alternative rate is acceptable to Select or JPMorgan Chase Bank, N.A., as agent to the Select credit agreement, amounts drawn under the Select credit facilities would be subject to the alternate base rate, which may be a higher interest rate than LIBOR which would increase our interest expense. As a result, we may need to renegotiate the Select credit facilities and may not be able to do so with terms that are favorable to us. The overall financial market may be disrupted as a result of the phase-out or replacement of LIBOR. Disruption in the financial market or the inability to renegotiate the credit facility with favorable terms could have a material adverse effect on our business, financial position, and operating results.

We may be unable to refinance our debt on terms favorable to us or at all, which would negatively impact our business and financial condition.

We are subject to risks normally associated with debt financing, including the risk that our cash flow will be insufficient to meet required payments of principal and interest. While we intend to refinance all of our indebtedness before it matures, there can be no assurance that we will be able to refinance any maturing indebtedness, that such refinancing will be on terms as favorable to us as the terms of the maturing indebtedness or, if the indebtedness cannot be refinanced, that we will be able to otherwise obtain funds by selling assets or raising equity to make required payments on our maturing indebtedness. Furthermore, if prevailing interest rates or other factors at the time of refinancing result in higher interest rates upon refinancing, then the interest expense relating to that refinanced indebtedness would increase. If we are unable to refinance our indebtedness at or before maturity or otherwise meet our payment obligations, our business and financial condition will be negatively impacted, and we may be in default under our indebtedness. Any default under the Select credit facilities would permit lenders to foreclose on our assets and would also be deemed a default under the Indenture governing Select's 6.250% senior notes, which may also result in the acceleration of that indebtedness, and, although Select is not an obligor with respect to Concentra's debt under such agreements, if Concentra fails to meet its obligations and defaults on the Concentra-JPM first lien credit agreement, a portion of or all of Select's equity investment in Concentra Group Holdings Parent, the indirect parent company of Concentra, could be at risk of loss.

See "Management's Discussion and Analysis of Financial Condition and Results of Operations-Liquidity and Capital Resources."

Item 1B. Unresolved Staff Comments.

None.

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https://www.sec.gov/Archives/edgar/data/1320414/000162828021003313/sem-20201231.htm

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Item 2. Properties.

We currently lease most of our consolidated facilities, including critical illness recovery hospitals, rehabilitation hospitals, outpatient rehabilitation clinics, occupational health centers, and our corporate headquarters. We own 22 of our critical illness recovery hospitals, nine of our rehabilitation hospitals, one of our outpatient rehabilitation clinics, and eight of our Concentra occupational health centers throughout the United States. As of December 31, 2020, we leased 77 of our critical illness recovery hospitals, ten of our rehabilitation hospitals, 1,502 of our outpatient rehabilitation clinics, and 509 of our Concentra occupational health centers.

We lease our corporate headquarters from companies owned by a related party affiliated with us through common ownership or management. As of December 31, 2020, our corporate headquarters is approximately 294,724 square feet and is located in Mechanicsburg, Pennsylvania.

The following is a list by state of the number of facilities we operated as of December 31, 2020.

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	Critical Illness Recovery Hospitals ⁽¹⁾	Rehabilitation Hospitals ⁽¹⁾	Outpatient Rehabilitation Clinics ⁽¹⁾	Concentra Occupational Health Centers ⁽²⁾	Total Facilities
Alabama	1		25		26
Alaska	_	_	9	5	14
Arizona	2	3	45	16	66
Arkansas	2	_	1	2	5
California	1	1	83	100	185
Colorado		_	47	24	71
Connecticut	_	_	58	10	68
Delaware	1	_	14	1	16
District of Columbia	_	_	5	_	5
Florida	12	2	125	31	170
Georgia	5	1	7 1	15	92
Hawaii	_	_	_	1	1
Illinois	_	_	72	17	89
Indiana	3	_	32	12	47
Iowa	2	_	23	3	28
Kansas	2	_	15	4	21
Kentucky	2	_	62	9	73
Louisiana	_	2	3	3	8
Maine	_	_	26	7	33
Maryland	_	_	66	12	78
Massachusetts	_		22	2	24
Michigan	10		36	18	64
Minnesota	1	_	32	6	39
Mississippi	4	_	1	_	5
Missouri	3	3	96	15	117
Nebraska	2	_	1	3	6
Nevada	_	1	13	7	21
New Hampshire	_	_	_	3	3
New Jersey	1	4	167	20	192
New Mexico	_	_	1	4	5
North Carolina	2	_	38	8	48
Ohio	15	5	102	17	139
Oklahoma	2	_	26	7	35
Oregon	_	_	_	4	4
Pennsylvania	10	2	231	17	260
Rhode Island	_	_	_	2	2
South Carolina	2	_	25	5	32
South Dakota	1	_	_	_	1
Tennessee	5	_	20	9	34
Texas	3	5	138	54	200
Utah	_	_	_	6	6
Vermont	_	_	_	2	2
Virginia	1	1	40	6	48
Washington	_	_	9	17	26
West Virginia	1	_	_		1
Wisconsin	3	_	8	13	24
Total Company	99	30	1,788	517	2,434
opa,	,,	50	2,700		_, .5 .

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(1) Includes managed critical illness recovery hospitals, rehabilitation hospitals, and outpatient rehabilitation clinics, respectively.

(2) Our Concentra segment also had operations in New York.

Item 3. Legal Proceedings.

Refer to the "Litigation" section contained within Note 21 - Commitments and Contingencies of the notes to our consolidated financial statements included herein.

Item 4. Mine Safety Disclosures.

None.

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PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information

Select Medical Holdings Corporation common stock is quoted on the New York Stock Exchange under the symbol "SEM."

Holders

At the close of business on February 1, 2021, Holdings had 134,836,735 shares of common stock issued and outstanding. As of that date, there were 129 registered holders of record. This does not reflect beneficial stockholders who hold their stock in nominee or "street" name through brokerage firms.

Dividend Policy

Holdings has not paid or declared any dividends on its common stock at any point during the last three fiscal years. We do not anticipate paying any further dividends on Holdings' common stock in the foreseeable future. We intend to retain future earnings to finance the ongoing operations and growth of our business. Any future determination relating to our dividend policy will be made at the discretion of Holdings' board of directors and will depend on conditions at that time, including our financial condition, results of operations, contractual restrictions, capital requirements, business prospects, and other factors the board of directors may deem relevant. Additionally, certain contractual agreements we are party to, including the Select credit facilities and the Indenture governing Select's 6.250% senior notes, restrict our capacity to pay dividends.

Securities Authorized For Issuance Under Equity Compensation Plans

For information regarding securities authorized for issuance under equity compensation plans, see Part III "Item 12—Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters."

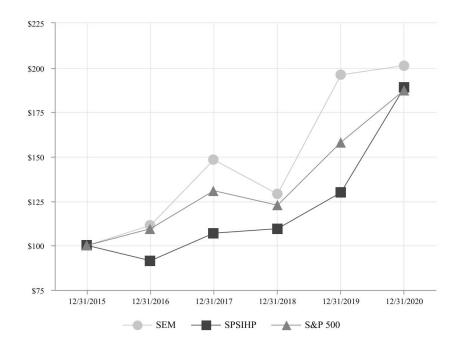
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Stock Performance Graph

The graph below compares the cumulative total stockholder return on \$100 invested at the close of the market on December 31, 2015, with dividends being reinvested on the date paid through and including the market close on December 31, 2020 with the cumulative total return of the same time period on the same amount invested in the Standard & Poor's 500 Index (S&P 500) and the S&P Health Care Services Select Industry Index (SPSIHP). The chart below the graph sets forth the actual numbers depicted on the graph.



Select Medical Holdings Corporation (SEM) S&P Health Care Services Select Industry Index (SPSIHP) S&P 500

12	2/31/2015	015 12/31/2016		12	2/31/2017	12	2/31/2018	12	2/31/2019	12/31/2020			
\$	100.00	\$	111.25	\$	148.19	\$	128.88	\$	195.97	\$	232.24		
\$	100.00	\$	91.55	\$	107.01	\$	109.53	\$	129.69	\$	172.49		
\$	100.00	\$	109.56	\$	130.84	\$	122.67	\$	158.10	\$	183.81		

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Purchases of Equity Securities by the Issuer

Holdings' board of directors has authorized a common stock repurchase program to repurchase up to \$500.0 million worth of shares of its common stock. The program, which has been extended until December 31, 2021, and will remain in effect until then, unless further extended or earlier terminated by the board of directors. Stock repurchases under this program may be made in the open market or through privately negotiated transactions, and at times and in such amounts as Holdings deems appropriate. Holdings did not repurchase shares during the three months ended December 31, 2020 under the authorized common stock repurchase program.

The following table provides information regarding repurchases of our common stock during the three months ended December 31, 2020. As set forth below, the shares repurchased during the three months ended December 31, 2020 relate entirely to shares of common stock surrendered to us to satisfy tax withholding obligations associated with the vesting of restricted shares issued to employees, pursuant to the provisions of our equity incentive plans.

	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	pproximate Dollar Value of Shares that May Yet Be Purchased inder Plans or Programs
October 1 - October 31, 2020		\$ 		\$ 143,394,863
November 1 - November 30, 2020	79,567	22.53	_	143,394,863
December 1 - December 31, 2020	_	_	_	143,394,863
Total	79,567	\$ 22.53		\$ 143,394,863

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Item 6. Selected Financial Data.

You should read the following selected historical consolidated financial data in conjunction with our consolidated financial statements and the accompanying notes. The financial results of Physiotherapy and U.S. HealthWorks are included in our consolidated financial statements beginning on their acquisition dates of March 4, 2016 and February 1, 2018, respectively.

You should also read "Management's Discussion and Analysis of Financial Condition and Results of Operations" which is contained elsewhere herein. The selected historical financial data has been derived from consolidated financial statements audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm. The selected historical consolidated financial data as of December 31, 2019 and 2020, and for the years ended December 31, 2018, 2019, and 2020, have been derived from our consolidated financial information included elsewhere herein. The selected historical consolidated financial data as of December 31, 2016, 2017, and 2018, and for the years ended December 31, 2016 and 2017, have been derived from our audited consolidated financial information not included elsewhere herein.

For the Veer Fuded December 21

		For th	e Yea	r Ended Decem	ber 3	l,	
	2016	2017		2018		2019	2020
		(In the	ısands	, except per sh	are da	ta)	
Statement of Operations Data:							
Revenue	\$ 4,217,460	\$ 4,365,245	\$	5,081,258	\$	5,453,922	\$ 5,531,713
Costs and expenses:							
Operating expenses ⁽¹⁾	3,772,302	3,849,356		4,462,324		4,769,465	4,848,409
Depreciation and amortization	 145,311	 160,011		201,655		212,576	 205,659
Total costs and expenses	3,917,613	4,009,367		4,663,979		4,982,041	5,054,068
Other operating income	_	_				_	90,012
Income from operations	299,847	355,878		417,279		471,881	567,657
Loss on early retirement of debt ⁽²⁾	(11,626)	(19,719)		(14,155)		(38,083)	_
Equity in earnings of unconsolidated subsidiaries	19,943	21,054		21,905		24,989	29,440
Gain (loss) on sale of businesses	42,651	(49)		9,016		6,532	12,387
Interest expense	(170,081)	(154,703)		(198,493)		(200,570)	(153,011)
Income before income taxes	180,734	202,461		235,552		264,749	456,473
Income tax expense (benefit)	55,464	(18,184)		58,610		63,718	111,867
Net income	125,270	220,645		176,942		201,031	344,606
Less: Net income attributable to non-controlling interests ⁽³⁾	9,859	43,461		39,102		52,582	85,611
Net income attributable to Select Medical Holdings Corporation	\$ 115,411	\$ 177,184	\$	137,840	\$	148,449	\$ 258,995
Earnings per common share:							
Basic	\$ 0.88	\$ 1.33	\$	1.02	\$	1.10	\$ 1.93
Diluted	\$ 0.87	\$ 1.33	\$	1.02	\$	1.10	\$ 1.93
Weighted average common shares outstanding:							
Basic	127,813	128,955		130,172		130,248	129,780
Diluted	127,968	129,126		130,256		130,276	129,780
Balance Sheet Data (at end of period):							
Cash and cash equivalents	\$ 99,029	\$ 122,549	\$	175,178	\$	335,882	\$ 577,061
Working capital ⁽⁴⁾	191,268	315,423		287,338		298,712	155,634
Total assets ⁽⁴⁾	4,920,626	5,127,166		5,964,265		7,340,288	7,655,399
Total debt	2,698,989	2,699,902		3,293,381		3,445,110	3,402,019
Redeemable non-controlling interests	422,159	640,818		780,488		974,541	398,171
Total stockholders' equity	815,725	823,368		803,042		770,972	1,060,480

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- (1) Operating expenses include cost of services, general and administrative expenses, credit loss expense, and stock compensation expense.
- (2) During the year ended December 31, 2016, the Company recognized a loss on early retirement debt of \$0.8 million relating to the repayment of series D tranche B term loans under Select's 2011 senior secured credit facility. Additionally, on September 26, 2016, Concentra Inc. prepaid the term loans outstanding under its second lien credit agreement. The premium plus the expensing of unamortized debt issuance costs and original issuance discount resulted in losses on early retirement of debt of \$10.9 million.

During the year ended December 31, 2017, the Company refinanced Select's 2011 senior secured credit facility. The expensing of unamortized debt issuance costs and original issue discount, as well as certain fees incurred in connection with the refinancing, resulted in a loss on early retirement of debt of \$19.7 million.

During the year ended December 31, 2018, the Company refinanced the Select credit facilities and the Concentra-JPM first lien credit agreement. The expensing of unamortized debt issuance costs and original issue discount, as well as certain fees incurred in connection with these refinancing events, resulted in losses on early retirement of debt of \$14.2 million.

During the year ended December 31, 2019, the Company refinanced the Select credit facilities and the Concentra-JPM first lien credit agreement. The Company also prepaid the term loans outstanding under both the Concentra-JPM first and second lien credit agreements and redeemed its 6.375% senior notes. The expensing of unamortized debt issuance costs and original issue discounts and premiums, as well as certain fees incurred in connection with these refinancing events, resulted in losses on early retirement of debt of \$38.1 million.

- (3) Reflects interests held by other parties in subsidiaries, limited liability companies and limited partnerships owned and controlled by us.
- (4) As of December 31, 2019 and 2020, the balance sheet data reflects the adoption of Accounting Standards Codification Topic 842, Leases, which required the recognition of operating lease right-of-use assets and operating lease liabilities on the balance sheet. Prior periods were not adjusted and continue to be reported in accordance with Accounting Standards Codification Topic 840, Leases.

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Non-GAAP Measure Reconciliation

The following table reconciles net income and income from operations to Adjusted EBITDA and should be referenced when we discuss Adjusted EBITDA. Refer to "Management's Discussion and Analysis of Financial Condition and Results of Operations" for further information on Adjusted EBITDA as a non-GAAP measure.

	For the Year Ended December 31,									
		2016		2017	2018		2019		2020	
					(In thousands)					
Net income	\$	125,270	\$	220,645	\$ 176,942	\$	201,031	\$	344,606	
Income tax expense (benefit)		55,464		(18,184)	58,610		63,718		111,867	
Interest expense		170,081		154,703	198,493		200,570		153,011	
Loss (gain) on sale of businesses		(42,651)		49	(9,016))	(6,532)		(12,387)	
Equity in earnings of unconsolidated subsidiaries		(19,943)		(21,054)	(21,905))	(24,989)		(29,440)	
Loss on early retirement of debt		11,626		19,719	14,155		38,083		_	
Income from operations		299,847		355,878	417,279		471,881		567,657	
Stock compensation expense:										
Included in general and administrative		14,607		15,706	17,604		20,334		22,053	
Included in cost of services		2,806		3,578	5,722		6,117		5,197	
Depreciation and amortization		145,311		160,011	201,655		212,576		205,659	
Physiotherapy acquisition costs		3,236		_	_		_		_	
U.S. HealthWorks acquisition costs		_		2,819	2,895		_		_	
Adjusted EBITDA	\$	465,807	\$	537,992	\$ 645,155	\$	710,908	\$	800,566	

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Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read this discussion together with the "Selected Financial Data" and consolidated financial statements and accompanying notes included elsewhere herein.

Overview

We began operations in 1997 and, based on number of facilities, are one of the largest operators of critical illness recovery hospitals, rehabilitation hospitals, outpatient rehabilitation clinics, and occupational health centers in the United States. As of December 31, 2020, we had operations in 46 states and the District of Columbia. We operated 99 critical illness recovery hospitals in 28 states, 30 rehabilitation hospitals in 12 states, and 1,788 outpatient rehabilitation clinics in 37 states and the District of Columbia. Concentra, a joint venture subsidiary, operated 517 occupational health centers in 41 states as of December 31, 2020. Concentra also provides contract services at employer worksites.

Our reportable segments include the critical illness recovery hospital segment, the rehabilitation hospital segment, the outpatient rehabilitation segment, and the Concentra segment. We had revenue of \$5,531.7 million for the year ended December 31, 2020. Of this total, we earned approximately 38% of our revenue from our critical illness recovery hospital segment, approximately 13% from our rehabilitation hospital segment, approximately 17% from our outpatient rehabilitation segment, and approximately 27% from our Concentra segment. Our critical illness recovery hospital segment consists of hospitals designed to serve the needs of patients recovering from critical illnesses, often with complex medical needs, and our rehabilitation hospital segment consists of hospitals designed to serve patients that require intensive physical rehabilitation care. Patients are typically admitted to our critical illness recovery hospitals and rehabilitation hospitals from general acute care hospitals. Our outpatient rehabilitation segment consists of clinics that provide physical, occupational, and speech rehabilitation services. Our Concentra segment consists of occupational health centers that provide workers' compensation injury care, physical therapy, and consumer health services as well as onsite clinics located at employer worksites that deliver occupational medicine services.

Non-GAAP Measure

We believe that the presentation of Adjusted EBITDA, as defined below, is important to investors because Adjusted EBITDA is commonly used as an analytical indicator of performance by investors within the healthcare industry. Adjusted EBITDA is used by management to evaluate financial performance and determine resource allocation for each of our operating segments. Adjusted EBITDA is not a measure of financial performance under accounting principles generally accepted in the United States of America ("GAAP"). Items excluded from Adjusted EBITDA are significant components in understanding and assessing financial performance. Adjusted EBITDA should not be considered in isolation or as an alternative to, or substitute for, net income, income from operations, cash flows generated by operations, investing or financial activities, or other financial statement data presented in the consolidated financial statements as indicators of financial performance or liquidity. Because Adjusted EBITDA is not a measurement determined in accordance with GAAP and is thus susceptible to varying definitions, Adjusted EBITDA as presented may not be comparable to other similarly titled measures of other companies.

We define Adjusted EBITDA as earnings excluding interest, income taxes, depreciation and amortization, gain (loss) on early retirement of debt, stock compensation expense, acquisition costs associated with Physiotherapy and U.S. HealthWorks, gain (loss) on sale of businesses, and equity in earnings (losses) of unconsolidated subsidiaries. We will refer to Adjusted EBITDA throughout the remainder of Management's Discussion and Analysis of Financial Condition and Results of Operations.

The table contained within "Selected Financial Data" reconciles net income and income from operations to Adjusted EBITDA and should be referenced when we discuss Adjusted EBITDA.

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https://www.sec.gov/Archives/edgar/data/1320414/000162828021003313/sem-20201231.htm

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Effects of the COVID-19 Pandemic on our Results of Operations

The continuing implications of the COVID-19 pandemic on our business, results of operations and overall financial performance remain uncertain. We provided monthly revenue and certain operating statistics for each of our segments for the years ended December 31, 2020 and 2019. See Item 1A. "Risk Factors" for further discussion of the possible impact of the COVID-19 pandemic on our business.

Critical Illness Recovery Hospital Segment. Our critical illness recovery hospitals are a key component of the inpatient hospital continuum of care. Beginning in March 2020, a number of waivers and modifications of certain requirements under the Medicare, Medicaid and CHIP programs were authorized, including certain regulations concerning patient length of stay requirements under the Medicare program which apply to our critical illness recovery hospitals. The length of stay requirements were suspended in order to facilitate the transfer of patients from general acute care hospitals and expand hospital bed capacity to care for COVID-19 patients (see "Regulatory Changes" for further discussion of the temporary suspension of regulations). During the year ended December 31, 2020, we played a critical role in caring for patients during the COVID-19 patients.

The following table shows revenue, patient days, and occupancy rates for each of the periods presented, as well as the number of critical illness recovery hospitals we owned at the end of each period.

	Revenue				Patient Days		Occupa	ncy Rate	Number of Hospitals Owned ⁽¹⁾		
	2019		2020	% Change	2019	2020	% Change	2019	2020	2019	2020
	(in thous	ands	, except perce	ntages)							
January	\$ 149,799	\$	163,238	9.0%	86,238	90,783	5.3%	69%	69%	96	100
February	145,586		165,375	13.6%	80,806	87,844	8.7%	71%	72%	96	100
March	162,149		171,908	6.0%	91,085	91,831	0.8%	73%	70%	96	100
Three Months Ended March 31	\$ 457,534	\$	500,521	9.4%	258,129	270,458	4.8%	71%	70%	96	100
April	\$ 156,231	\$	171,445	9.7%	88,357	90,710	2.7%	70%	71%	99	100
May	156,422		178,223	13.9%	89,350	95,191	6.5%	69%	72%	99	100
June	148,490		169,958	14.5%	85,153	90,988	6.9%	68%	71%	99	100
Three Months Ended June 30	\$ 461,143	\$	519,626	12.7%	262,860	276,889	5.3%	69%	72%	99	100
Six Months Ended June 30	\$ 918,677	\$	1,020,147	11.0%	520,989	547,347	5.1%	70%	71%	99	100
July	\$ 151,416	\$	175,253	15.7%	87,143	94,144	8.0%	67%	71%	99	99
August	155,485		173,967	11.9%	86,553	93,964	8.6%	66%	71%	99	99
September	155,991		170,234	9.1%	84,393	90,955	7.8%	67%	71%	99	99
Three Months Ended September 30	\$ 462,892	\$	519,454	12.2%	258,089	279,063	8.1%	67%	71%	99	99
Nine Months Ended September 30	\$ 1,381,569	\$	1,539,601	11.4%	779,078	826,410	6.1%	69%	71%	99	99
October	\$ 152,791	\$	181,251	18.6%	87,188	95,616	9.7%	66%	71%	100	100
November	150,399		174,133	15.8%	84,540	92,651	9.6%	67%	71%	100	99
December	151,759		182,514	20.3%	87,555	97,079	10.9%	67%	72%	100	99
Three Months Ended December 31	\$ 454,949	\$	537,898	18.2%	259,283	285,346	10.1%	67%	71%	100	99
Twelve Months Ended December 31	\$ 1,836,518	\$	2,077,499	13.1%	1,038,361	1,111,756	7.1%	68%	71%	100	99

⁽¹⁾ Represents the number of hospitals owned at the end of each period presented.

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Rehabilitation Hospital Segment. Our rehabilitation hospitals receive most of their admissions from general acute care hospitals. Beginning in March 2020, a number of waivers and modifications of certain requirements under the Medicare, Medicaid and CHIP programs were authorized, including certain regulations governing admissions into rehabilitation hospitals. This was done in order to facilitate the transfer of patients from general acute care hospitals and critical illness recovery hospitals and to expand hospital bed capacity to care for COVID-19 patients (see "Regulatory Changes" for further discussion of the temporary suspension of regulations). Our rehabilitation hospitals were affected by the suspension of elective surgeries at hospitals and other facilities at the beginning of the pandemic, which resulted in reduced need for inpatient rehabilitation services. Beginning in May 2020, state governments and health departments began to ease restrictions and hospitals began to perform elective surgeries again, which has increased the need for the services provided by our rehabilitation hospitals.

The following table shows revenue, patient days, and occupancy rates for each of the periods presented, as well as the number of rehabilitation hospitals we owned at the end of each period.

			Revenue			Patient Days		Occupa	ncy Rate	Number of Own	
	2019		2020	% Change	2019	2020	% Change	2019	2020	2019	2020
	(in thou	sand	s, except perce	entages)							
January	\$ 50,615	\$	61,673	21.8%	27,434	32,111	17.0%	74%	79%	17	19
February	48,080		60,690	26.2%	25,442	31,813	25.0%	76%	84%	17	19
March	55,863		59,656	6.8%	29,940	30,644	2.4%	78%	76%	18	19
Three Months Ended March 31	\$ 154,558	\$	182,019	17.8%	82,816	94,568	14.2%	76%	79%	18	19
Aprīl	\$ 51,991	\$	45,878	(11.8)%	28,266	23,553	(16.7)%	76%	61%	18	19
May	56,019		57,815	3.2%	29,730	29,787	0.2%	75%	73%	19	19
June	52,364		64,974	24.1%	28,529	30,741	7.8%	73%	78%	19	19
Three Months Ended June 30	\$ 160,374	\$	168,667	5.2%	86,525	84,081	(2.8)%	75%	71%	19	19
Six Months Ended June 30	\$ 314,932	\$	350,686	11,4%	169,341	178,649	5.5%	76%	75%	19	19
July	\$ 57,077	\$	62,312	9.2%	30,054	31,986	6.4%	75%	81%	19	18
August	58,072		63,673	9.6%	30,228	32,518	7.6%	75%	83%	19	18
September	58,220		62,090	6.6%	29,172	31,176	6.9%	75%	82%	19	18
Three Months Ended September 30	\$ 173,369	- \$	188,075	8.5%	89,454	95,680	7.0%	75%	82%	19	18
Nine Months Ended September 30	\$ 488,301	\$	538,761	10.3%	258,795	274,329	6.0%	75%	77%	19	18
October	\$ 61,975	\$	66,591	7.4%	31,767	33,378	5.1%	78%	82%	19	19
November	60,353		64,610	7.1%	31,022	31,581	1.8%	79%	80%	19	19
December	60,342		64,711	7.2%	31,447	31,545	0.3%	78%	78%	19	19
Three Months Ended December 31	\$ 182,670	\$	195,912	7.2%	94,236	96,504	2.4%	78%	80%	19	19
Twelve Months Ended December 31	\$ 670,971	\$	734,673	9.5%	353,031	370,833	5.0%	76%	78%	19	19

⁽¹⁾ Represents the number of hospitals owned at the end of each period presented.

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Outpatient Rehabilitation Segment. Beginning in mid-March 2020, state governments began implementing mandatory closures of non-essential or non-life sustaining businesses, restricting travel and individual activities outside of the home, closing schools, and mandating other social distancing measures. Additionally, hospitals and other facilities began to suspend elective surgeries. As a result, our outpatient rehabilitation clinics experienced significantly less patient visit volume due to a decline in patient referrals from physicians, a reduction in workers' compensation injury visits resulting from the temporary closure of businesses, and the suspension of elective surgeries which would have required outpatient rehabilitation services. Beginning in May 2020, state governments began to ease restrictions imposed on businesses and individuals, physician offices began reopening for routine office visits, and hospitals and other facilities began performing elective surgeries again, which resulted in an increased need for the services provided by our outpatient rehabilitation clinics.

The following table shows revenue and patient visits for each of the periods presented, as well as the number of working days for each period.

		1	Revenue			Visits		Working Days ⁽¹⁾			
	2019		2020	% Change	2019	2020	% Change	2019	2020		
	(in thou	sands	, except perce	ntages)							
January	\$ 83,185	\$	90,924	9.3%	687,007	757,171	10.2%	22	22		
February	78,573		88,239	12.3%	658,610	739,061	12.2%	20	20		
March	85,147		76,086	(10.6)%	708,866	626,433	(11.6)%	21	22		
Three Months Ended March 31	\$ 246,905	\$	255,249	3.4%	2,054,483	2,122,665	3.3%	63	64		
April	\$ 90,230	\$	49,084	(45.6)%	762,914	386,108	(49.4)%	22	22		
May	90,272		51,186	(43.3)%	759,829	409,703	(46.1)%	22	20		
June	81,389		66,868	(17.8)%	680,762	546,456	(19.7)%	20	22		
Three Months Ended June 30	\$ 261,891	\$	167,138	(36.2)%	2,203,505	1,342,267	(39.1)%	64	64		
Six Months Ended June 30	\$ 508,796	\$	422,387	(17.0)%	4,257,988	3,464,932	(18.6)%	127	128		
July	\$ 89,267	\$	77,793	(12.9)%	754,102	636,826	(15.6)%	22	22		
August	90,687		79,034	(12.8)%	743,813	651,738	(12.4)%	22	21		
September	85,376		83,215	(2.5)%	706,413	694,808	(1.6)%	20	21		
Three Months Ended September 30	\$ 265,330	\$	240,042	(9.5)%	2,204,328	1,983,372	(10.0)%	64	64		
Nine Months Ended September 30	\$ 774,126	\$	662,429	(14.4)%	6,462,316	5,448,304	(15.7)%	191	192		
October	\$ 96,868	\$	88,274	(8.9)%	808,649	745,562	(7.8)%	23	22		
November	87,072		82,102	(5.7)%	722,607	685,885	(5.1)%	20	20		
December	87,945		87,108	(1.0)%	725,710	713,593	(1.7)%	21	22		
Three Months Ended December 31	\$ 271,885	\$	257,484	(5.3)%	2,256,966	2,145,040	(5.0)%	64	64		
Twelve Months Ended December 31	\$ 1,046,011	\$	919,913	(12,1)%	8,719,282	7,593,344	(12.9)%	255	256		

⁽¹⁾ Represents the number of days in which normal business operations were conducted during the periods presented.

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Concentra Segment. Beginning in mid-March 2020, state governments began placing significant restrictions on businesses and mandating closures of non-essential or non-life sustaining businesses, causing many employers to furlough their workforce and temporarily cease or significantly reduce their operations. These actions had significant effects on our patient visit volumes. Beginning in May 2020, state governments began to ease restrictions imposed on businesses and employers began to increase their workforce, which resulted in an increased need for our occupational health services. During the year ended December 31, 2020, Concentra expanded its services to provide COVID-19 screening and testing at its centers and various onsite clinics located at employer worksites.

The following table shows revenue and patient visits for each of the periods presented, as well as the number of working days for each period.

	Revenue						Visits		Working Days ⁽¹⁾		
		2019		2020	% Change	2019	2020	% Change	2019	2020	
		(in tho	ısand	s, except perce	ntages)						
January	\$	133,507	\$	141,236	5.8%	985,598	1,032,069	4.7%	22	22	
February		126,309		133,690	5.8%	919,065	965,741	5.1%	20	20	
March		136,505		123,609	(9.4)%	1,006,944	879,585	(12.6)%	21	22	
Three Months Ended March 31	\$	396,321	\$	398,535	0.6%	2,911,607	2,877,395	(1.2)%	63	64	
April	\$	140,050	\$	91,178	(34.9)%	1,040,543	610,555	(41.3)%	22	22	
May		143,183		99,228	(30.7)%	1,073,763	674,629	(37.2)%	22	20	
June		130,218		121,932	(6.4)%	988,783	865,896	(12.4)%	20	22	
Three Months Ended June 30	\$	413,451	\$	312,338	(24.5)%	3,103,089	2,151,080	(30.7)%	64	64	
Six Months Ended June 30	\$	809,772	\$	710,873	(12.2)%	6,014,696	5,028,475	(16.4)%	127	128	
July	\$	142,385	\$	132,465	(7.0)%	1,057,809	930,427	(12.0)%	22	22	
August		144,452		130,291	(9.8)%	1,087,165	933,555	(14.1)%	22	21	
September		135,063		129,103	(4.4)%	1,005,929	963,065	(4.3)%	20	21	
Three Months Ended September 30	\$	421,900	\$	391,859	(7.1)%	3,150,903	2,827,047	(10.3)%	64	64	
Nine Months Ended September 30	\$	1,231,672	\$	1,102,732	(10.5)%	9,165,599	7,855,522	(14.3)%	191	192	
October	\$	149,260	\$	139,365	(6.6)%	1,113,408	1,011,816	(9.1)%	23	22	
November		123,152		126,431	2.7%	908,159	867,918	(4.4)%	19	19	
December		124,733		132,906	6.6%	881,699	892,648	1.2%	21	22	
Three Months Ended December 31	\$	397,145	\$	398,702	0.4%	2,903,266	2,772,382	(4.5)%	63	63	
Twelve Months Ended December 31	\$	1,628,817	\$	1,501,434	(7.8)%	12,068,865	10,627,904	(11.9)%	254	255	

⁽¹⁾ Represents the number of days in which normal business operations were conducted during the periods presented.

Please refer to "Summary Financial Results" and "Results of Operations" for further discussion of our segment performance measures. Please refer to "Operating Statistics" for further discussion regarding the uses and calculations of the metrics provided above.

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Summary Financial Results

Year Ended December 31, 2020

For the year ended December 31, 2020, our revenue increased 1.4% to \$5,531.7 million, compared to \$5,453.9 million for the year ended December 31, 2019. Income from operations increased 20.3% to \$567.7 million for the year ended December 31, 2020, compared to \$471.9 million for the year ended December 31, 2019. For the year ended December 31, 2020, income from operations included other operating income of \$90.0 million related to the recognition of payments received under the Public Health and Social Services Emergency Fund, also referred to as the Provider Relief Fund, for health care related expenses and loss of revenue attributable to the COVID-19 pandemic. Refer to Note 22 - CARES Act of the notes to our consolidated financial statements included herein for further information.

Net income increased 71.4% to \$344.6 million for the year ended December 31, 2020, compared to \$201.0 million for the year ended December 31, 2019. For the year ended December 31, 2020, net income included pre-tax gains on sales of businesses of \$12.4 million. For the year ended December 31, 2019, net income included pre-tax losses on early retirement of debt of \$38.1 million and a pre-tax gain on sale of businesses of \$6.5 million.

Adjusted EBITDA increased 12.6% to \$800.6 million for the year ended December 31, 2020, compared to \$710.9 million for the year ended December 31, 2019. Our Adjusted EBITDA margin increased to 14.5% for the year ended December 31, 2020, compared to 13.0% for the year ended December 31, 2019.

The following tables reconcile our segment performance measures to our consolidated operating results:

	For the Year Ended December 31, 2020											
		ritical Illness covery Hospital	ı	Rehabilitation Hospital		Outpatient lehabilitation		Concentra		Other		Total
						(in thou	SAI	ids)				
Revenue	\$	2,077,499	\$	734,673	\$	919,913	5	1,501,434	\$	298,194	\$	5,531,713
Operating expenses		(1,735,072)		(581,470)		(840,749)		(1,252,200)		(438,918)		(4,848,409)
Depreciation and amortization		(51,531)		(27,727)		(29,009)		(87,865)		(9,527)		(205,659)
Other operating income		_		_		_		1,146		88,866		90,012
Income from operations		290,896		125,476		50,155	_	162,515		(61,385)		567,657
Depreciation and amortization		51,531		27,727		29,009		87,865		9,527		205,659
Stock compensation expense		_		_		_		2,512		24,738		27,250
Adjusted EBITDA	\$	342,427	\$	153,203	\$	79,164	3	252,892	\$	(27,120)	\$	800,566
Adjusted EBITDA margin		16.5 %		20.9 %		8.6 %	-	16.8 %		N/M		14.5 %

	For the Year Ended December 31, 2019												
		ritical Illness covery Hospital		Rehabilitation Hospital		Outpatient ehabilitation		Concentra		Other		Total	
						(in thou	san	ls)					
Revenue	\$	1,836,518	\$	670,971	\$	1,046,011	\$	1,628,817	\$	271,605	\$	5,453,922	
Operating expenses		(1,581,650)		(535,114)		(894,180)		(1,355,404)		(403,117)		(4,769,465)	
Depreciation and amortization		(50,763)		(27,322)		(28,301)		(96,807)		(9,383)		(212,576)	
Income from operations		204,105		108,535		123,530	_	176,606		(140,895)		471,881	
Depreciation and amortization		50,763		27,322		28,301		96,807		9,383		212,576	
Stock compensation expense		_		_		_		3,069		23,382		26,451	
Adjusted EBITDA	\$	254,868	\$	135,857	\$	151,831	\$	276,482	\$	(108,130)	\$	710,908	
Adjusted EBITDA margin		13.9 %		20.2 %		14.5 %	_	17.0 %		N/M		13.0 %	

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The following table summarizes the changes in segment performance measures for the year ended December 31, 2020, compared to the year ended December 31, 2019:

	Critical Illness Recovery Hospital	Rehabilitation Hospital	Outpatient Rehabilitation	Concentra	Other	Total
Change in revenue	13.1 %	9.5 %	(12.1)%	(7.8)%	9.8 %	1.4 %
Change in income from operations	42.5 %	15.6 %	(59.4)%	(8.0)%	N/M	20.3 %
Change in Adjusted EBITDA	34.4 %	12.8 %	(47.9)%	(8.5)%	N/M	12.6 %

N/M — Not meaningful.

Year Ended December 31, 2019

For the year ended December 31, 2019, our revenue increased 7.3% to \$5,453.9 million, compared to \$5,081.3 million for the year ended December 31, 2018. Income from operations increased 13.1% to \$471.9 million for the year ended December 31, 2019, compared to \$417.3 million for the year ended December 31, 2018.

Net income increased 13.6% to \$201.0 million for the year ended December 31, 2019, compared to \$176.9 million for the year ended December 31, 2018. For the year ended December 31, 2019, net income included pre-tax losses on early retirement of debt of \$38.1 million and a pre-tax gain on sale of businesses of \$6.5 million. For the year ended December 31, 2018, net income included pre-tax losses on early retirement of debt of \$14.2 million, pre-tax gains on sales of businesses of \$9.0 million, and pre-tax U.S. HealthWorks acquisition costs of \$2.9 million.

Our Adjusted EBITDA increased 10.2% to \$710.9 million for the year ended December 31, 2019, compared to \$645.2 million for the year ended December 31, 2018. Our Adjusted EBITDA margin increased to 13.0% for the year ended December 31, 2019, compared to 12.7% for the year ended December 31, 2018.

The following tables reconcile our segment performance measures to our consolidated operating results:

	For the Year Ended December 31, 2019										
		Critical Illness covery Hospital	1	Rehabilitation Hospital		Outpatient ehabilitation		Concentra		Other	Total
	-					(in thou	sands	1)			
Revenue	\$	1,836,518	\$	670,971	\$	1,046,011	\$	1,628,817	\$	271,605	\$ 5,453,922
Operating expenses		(1,581,650)		(535,114)		(894,180)		(1,355,404)		(403,117)	(4,769,465)
Depreciation and amortization		(50,763)		(27,322)		(28,301)		(96,807)		(9,383)	(212,576)
Income from operations		204,105		108,535		123,530		176,606		(140,895)	471,881
Depreciation and amortization		50,763		27,322		28,301		96,807		9,383	212,576
Stock compensation expense		_		_		_		3,069		23,382	26,451
Adjusted EBITDA	\$	254,868	\$	135,857	\$	151,831	\$	276,482	\$	(108,130)	\$ 710,908
Adjusted ERITDA margin		13.9 %	_	20.2 %		14.5 %		17.0 %		N/M	13.0 %

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					For	the Year Ended	Decer	nber 31, 2018		
		Critical Illness covery Hospital	1	Rehabilitation Hospital		Outpatient ehabilitation		Concentra	Other	Total
	_					(in thou	sands)		
Revenue	\$	1,753,584	\$	583,745	\$	995,794	\$	1,557,673	\$ 190,462	\$ 5,081,258
Operating expenses		(1,510,569)		(474,818)		(853,789)		(1,311,474)	(311,674)	(4,462,324)
Depreciation and amortization		(45,797)		(24,101)		(27,195)		(95,521)	(9,041)	(201,655)
Income from operations		197,218		84,826		114,810	_	150,678	(130,253)	417,279
Depreciation and amortization		45,797		24,101		27,195		95,521	9,041	201,655
Stock compensation expense		_		_		_		2,883	20,443	23,326
U.S. HealthWorks acquisition costs		_		_		_		2,895	_	2,895
Adjusted EBITDA	\$	243,015	\$	108,927	\$	142,005	\$	251,977	\$ (100,769)	\$ 645,155
Adjusted EBITDA margin		13.9 %		18.7 %		14.3 %	_	16.2 %	 N/M	12.7 %

The following table summarizes the changes in segment performance measures for the year ended December 31, 2019, compared to the year ended December 31, 2018:

	Critical Illness Recovery Hospital	Rehabilitation Hospital	Outpatient Rehabilitation	Concentra	Other	Total
Change in revenue	4.7 %	14.9 %	5.0 %	4.6 %	42.6 %	7.3 %
Change in income from operations	3.5 %	28.0 %	7.6 %	17.2 %	N/M	13.1 %
Change in Adjusted EBITDA	4.9 %	24.7 %	6.9 %	9.7 %	N/M	10.2 %

N/M — Not meaningful.

Significant Events

Purchases of Concentra Interest

On January 1, 2020, February 1, 2020 and December 31, 2020, Select, WCAS and DHHC consummated the Concentra Interest Purchases, which were in lieu of, and collectively deemed to constitute, the exercises of WCAS' and DHHC's first and second Put Rights, pursuant to which Select acquired an aggregate amount of approximately 30% of the outstanding membership interests, on a fully diluted basis, of Concentra Group Holdings Parent from WCAS, DHHC and the other equity holders of Concentra Group Holdings Parent, in exchange for an aggregate payment of approximately \$576.4 million. Upon consummation of the Concentra Interest Purchases, Select owns in the aggregate approximately 78.0% of the outstanding membership interests of Concentra Group Holdings Parent on a fully diluted basis and approximately 79.8% of the outstanding woting membership interests of Concentra Group Holdings Parent.

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Regulatory Changes

The Medicare program reimburses healthcare providers for services furnished to Medicare beneficiaries, which are generally persons age 65 and older, those who are chronically disabled, and those suffering from end stage renal disease. The program is governed by the Social Security Act of 1965 and is administered primarily by the Department of Health and Human Services and CMS. Revenue generated directly from the Medicare program represented approximately 27%, 26%, and 25% of the Company's revenue for the years ended December 31, 2018, 2019, and 2020, respectively.

The Medicare program reimburses various types of providers using different payment methodologies. Those payment methodologies are complex and are described elsewhere in this report under "Business—Government Regulations." The following is a discussion of some of the more significant healthcare regulatory changes that have affected our financial performance in the periods covered by this report or are likely to affect our financial performance and financial condition in the future.

Federal Health Care Program Changes in Response to the COVID-19 Pandemic

On January 31, 2020, HHS declared a public health emergency under section 319 of the Public Health Service Act, 42 U.S.C. § 247d, in response to the COVID-19 outbreak in the United States. The HHS Secretary renewed the public health emergency determination for 90-day periods effective on April 26, 2020, July 25, 2020, and October 23, 2020. On March 13, 2020, President Trump declared a national emergency due to the COVID-19 pandemic and the HHS Secretary authorized the waiver or modification of certain requirements under the Medicare, Medicaid and CHIP pursuant to section 1135 of the Social Security Act. Under this authority, CMS issued a number of blanket waivers that excuse health care providers or suppliers from specific program requirements. The following blanket waivers, while in effect, may impact our results of operations:

- IRFs, IRF units, and hospitals and units applying to be classified as IRFs, can exclude patients admitted solely to respond to the emergency from the calculation of the "60 percent rule" thresholds to receive payment as an IRF.
- ii. LTCHs are exempt from the greater-than-25-day average length of stay requirement for all cost reporting periods that include the COVID-19 public health emergency period. Hospitals seeking LTCH classification can exclude patient stays from the greater-than-25-day average length of stay requirement where the patient was admitted or discharged to meet the demands of the COVID-19 public health emergency.
- iii. Medicare expanded the types of health care professionals who can furnish telehealth services to include all those who are eligible to bill Medicare for their professional services. This allows health care professionals who were previously ineligible to furnish and bill for Medicare telehealth services, including physical therapists, occupational therapists, speech language pathologists, and others, to receive payment for Medicare telehealth services.
- iv. Medicare will not require out-of-state physician and non-physician practitioners to be licensed in the state where they are providing services when they are licensed in another state, subject to certain conditions and state or local licensure requirements.
- Many requirements under the hospital conditions of participation ("CoPs") are waived during the emergency period to give hospitals more flexibility in treating COVID-19 patients.
- vi. Hospitals can operate temporary expansion locations without meeting the provider-based entity requirements or certain requirements in the physical environment CoP for hospitals during the emergency. This waiver also allows hospitals to change the status of their current provider-based department locations to meet patient needs as part of the state or local pandemic plan.
- vii. IRFs, LTCHs and certain other providers did not need to submit quality data to Medicare for October 1, 2019 through June 30, 2020 to comply with the quality reporting programs.
- viii. The HHS Secretary waived sanctions under the physician self-referral law (i.e., Stark law) for certain types of remuneration and referral arrangements that are related to a COVID-19 purpose. The OIG will also exercise enforcement discretion to not impose administrative sanctions under the federal anti-kickback statute for many payments covered by the Stark law waivers.

CMS also approved section 1135 waivers for 54 state Medicaid programs (including the District of Columbia, Puerto Rico, and other territories), 51 temporary changes to Medicaid or CHIP state plan amendments, 3 traditional changes to Medicaid state plan amendments, and section 1115 waivers for 10 state Medicaid demonstration projects addressing the COVID-19 public health emergency. CMS will consider specific waiver requests from providers and suppliers. We have submitted one or more specific waiver requests to make it easier for our operators or referral partners to treat COVID-19 patients, and we may submit others in the future.

https://www.sec.gov/Archives/edgar/data/1320414/000162828021003313/sem-20201231.htm

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Pursuant to the Coronavirus Preparedness and Response Supplemental Appropriations Act, Public Law 116-123, CMS has waived Medicare telehealth payment requirements during the emergency so that beneficiaries in all areas of the country (not just rural areas) can receive telehealth services, including in their homes, beginning on March 6, 2020. CMS issued additional waivers to permit more than 130 additional services to be furnished by telehealth, allow physicians to monitor patient services remotely, and fulfill face-to-face requirements in IRFs.

In addition to these agency actions, the CARES Act was enacted on March 27, 2020. It provides additional waivers, reimbursement, grants and other funds to assist health care providers during the COVID-19 public health emergency. Some of the CARES Act provisions that may impact our operations include:

- i. \$100 billion in appropriations for the Public Health and Social Services Emergency Fund to be used for preventing, preparing, and responding to COVID-19, and for reimbursing "eligible health care providers for health care related expenses or lost revenues that are attributable to coronavirus." The Paycheck Protection Program and Health Care Enhancement Act, Public Law 116-139, added \$75 billion to this fund. The Consolidated Appropriations Act, 2021, added another \$3 billion to this fund. HHS has allocated three general distributions from the fund for payments to Medicare providers. The Phase 1 General Distribution included \$30 billion for health care providers that received Medicare fee-for-service payments in 2019. Another \$20 billion was distributed to Medicare providers in a manner that makes the entire \$50 billion Phase 1 General Distribution proportional to each provider's share of 2018 net patient revenue. The Phase 2 General Distribution allocated \$18 billion for providers in state Medicaid/CHIP programs, Medicaid managed care plans, dentists, and certain Medicare providers who did not receive a Phase 1 General Distribution payment. The Phase 3 General Distribution includes \$20 billion for providers to apply for if they suffered financial losses caused by COVID-19 or if they were previously ineligible for a general distribution. The remainder of the COVID-19 related appropriations to the Public Health and Social Services Emergency Fund is for targeted allocations to providers in high impact COVID-19 areas (\$22 billion), rural providers (approximately \$11.3 billion), skilled nursing facilities (approximately \$7.4 billion), safety net hospitals (approximately \$14.7 billion), Indian Health Service (\$500 million), and unspecified allocations for providers treating uninsured COVID-19 patients. HHS also established a \$2 billion incentive payment structure for skilled nursing facilities and nursing homes for keeping new COVID-19 infection and mortality rates among residents lower than the communities they serve.
- ii. Expansion of the Accelerated and Advance Payment Program to advance three months of payments to Medicare providers. CMS has the ability to recoup the advanced payments through future Medicare claims. Section 2501 of the Continuing Appropriations Act, 2021 and Other Extensions Act, Public Law 116-159, modified the terms of repayment so that a provider can request no recoupment for one year after the advanced payment was issued, followed by a 25% offset the next 11 months, and a 50% offset the last 6 months. Any amounts that remain unpaid after 29 months will be subject to a 4% interest rate (instead of 10.25%).
- iii. Temporary suspension of the 2% cut to Medicare payments due to sequestration so that, for the period of May 1, 2020 to December 31, 2020, the Medicare program will be exempt from any sequestration order. The Consolidated Appropriations Act, 2021, extended this temporary suspension of the 2% sequestration cut through March 31, 2021.
- iv. Two waivers of Medicare statutory requirements regarding site neutral payment to LTCHs. The first waives the LTCH discharge payment percentage requirement (i.e., 50% rule) for the cost reporting period(s) that include the emergency period. The second waives application of the site neutral payment rate so that all LTCH cases admitted during the emergency period will be paid the LTCH-PPS standard federal rate.
- v. Waiver of the IRF 3-hour rule so that IRF services provided during the public health emergency period do not need to meet the coverage requirement that patients receive at least 3 hours of therapy a day or 15 hours of therapy per week.
- vi. Broader waiver authority for HHS under section 1135 of the Social Security Act to issue additional telehealth waivers.

The CARES Act also provides for a 20% increase in the payment weight for Medicare payments to hospitals paid under the IPPS for treating COVID-19 patients. We are monitoring developments related to this provision, in case CMS provides a similar payment add-on for LTCHs and IRFs.

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Medicare Reimbursement of LTCH Services

The following is a summary of significant regulatory changes to the Medicare prospective payment system for our critical illness recovery hospitals, which are certified by Medicare as LTCHs, which have affected our results of operations, as well as the policies and payment rates that may affect our future results of operations. Medicare payments to our critical illness recovery hospitals are made in accordance with LTCH-PPS.

Fiscal Year 2019. On August 17, 2018, CMS published the final rule updating policies and payment rates for the LTCH-PPS for fiscal year 2019 (affecting discharges and cost reporting periods beginning on or after October 1, 2018 through September 30, 2019). Certain errors in the final rule were corrected in a document published October 3, 2018. The standard federal rate was set at \$41,559, an increase from the standard federal rate applicable during fiscal year 2018 of \$41,415. The update to the standard federal rate for fiscal year 2019 included a market basket increase of 2.9%, less a productivity adjustment of 0.8%, and less a reduction of 0.75% mandated by the ACA. The standard federal rate also included an area wage budget-neutrality factor of 0.999215 and a temporary, one-time budget-neutrality adjustment of 0.990878 in connection with the elimination of the 25 Percent Rule. The fixed-loss amount for high cost outlier cases paid under LTCH-PPS was set at \$27,121, a decrease from the fixed-loss amount in the 2018 fiscal year of \$27,381. The fixed-loss amount in the 2018 fiscal year of \$26.537.

Fiscal Year 2020. On August 16, 2019, CMS published the final rule updating policies and payment rates for the LTCH-PPS for fiscal year 2020 (affecting discharges and cost reporting periods beginning on or after October 1, 2019 through September 30, 2020). Certain errors in the final rule were corrected in a document published October 8, 2019. The standard federal rate was set at \$42,678, an increase from the standard federal rate applicable during fiscal year 2019 of \$41,559. The update to the standard federal rate for fiscal year 2020 included a market basket increase of 2.9%, less a productivity adjustment of 0.4%. The standard federal rate also included an area wage budget neutrality factor of 1.0020203 and a temporary, one-time budget neutrality adjustment of 0.999858 in connection with the elimination of the 25 Percent Rule. The fixed-loss amount for high cost outlier cases paid under LTCH-PPS was set at \$26,778, a decrease from the fixed-loss amount in the 2019 fiscal year of \$27,121. The fixed-loss amount for high cost outlier cases paid under the site-neutral payment rate was set at \$26,552, an increase from the fixed-loss amount in the 2019 fiscal year of \$25,743. For LTCH discharges occurring in cost reporting periods beginning in fiscal year 2020, site neutral payment rate cases will begin to be paid fully on the site neutral payment rate, rather than the transitional blended rate. However, the CARES Act waives the site neutral payment rate for patients admitted during the COVID-19 emergency period and in response to the public health emergency, as discussed above.

Fiscal Year 2021. On September 18, 2020, CMS published the final rule updating policies and payment rates for the LTCH-PPS for fiscal year 2021 (affecting discharges and cost reporting periods beginning on or after October 1, 2020 through September 30, 2021). Certain errors in the final rule were corrected in a document published December 7, 2020. The standard federal rate was set at \$43,755, an increase from the standard federal rate applicable during fiscal year 2020 of \$42,678. The update to the standard federal rate for fiscal year 2021 included a market basket increase of 2.3% with no productivity adjustment. The standard federal rate also included an area wage budget neutrality factor of 1.0016837 and a permanent, one-time budget neutrality adjustment of 1.000517 in connection with the elimination of the 25 Percent Rule. As a result of the CARES Act, all LTCH cases are paid at the standard federal rate during the public health emergency. If the public health emergency ends during fiscal year 2021, then CMS will return to using the site-neutral payment rate for reimbursement of cases that do not meet the LTCH patient criteria. The fixed-loss amount for high cost outlier cases paid under LTCH-PPS was set at \$27,195, an increase from the fixed-loss amount in the 2020 fiscal year of \$26,778. The fixed-loss amount in the 2020 fiscal year of \$26,552.

Medicare Reimbursement of IRF Services

The following is a summary of significant regulatory changes to the Medicare prospective payment system for our rehabilitation hospitals, which are certified by Medicare as IRFs, which have affected our results of operations, as well as the policies and payment rates that may affect our future results of operations. Medicare payments to our rehabilitation hospitals are made in accordance with IRF-PPS.

Fiscal Year 2019. On August 6, 2018, CMS published the final rule updating policies and payment rates for the IRF-PPS for fiscal year 2019 (affecting discharges and cost reporting periods beginning on or after October 1, 2018 through September 30, 2019). The standard payment conversion factor for discharges for fiscal year 2019 was set at \$16,021, an increase from the standard payment conversion factor applicable during fiscal year 2018 of \$15,838. The update to the standard payment conversion factor for fiscal year 2019 included a market basket increase of 2.9%, less a productivity adjustment of 0.8%, and less a reduction of 0.75% mandated by the ACA. CMS increased the outlier threshold amount for fiscal year 2019 to \$9,402 from \$8,679 established in the final rule for fiscal year 2018.

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Fiscal Year 2020. On August 8, 2019, CMS published the final rule updating policies and payment rates for the IRF-PPS for fiscal year 2020 (affecting discharges and cost reporting periods beginning on or after October 1, 2019 through September 30, 2020). The standard payment conversion factor for discharges for fiscal year 2020 was set at \$16,489, an increase from the standard payment conversion factor applicable during fiscal year 2019 of \$16,021. The update to the standard payment conversion factor for fiscal year 2020 included a market basket increase of 2.9%, less a productivity adjustment of 0.4%. CMS decreased the outlier threshold amount for fiscal year 2020 to \$9,300 from \$9,402 established in the final rule for fiscal year 2019.

Fiscal Year 2021. On August 10, 2020, CMS published the final rule updating policies and payment rates for the IRF-PPS for fiscal year 2021 (affecting discharges and cost reporting periods beginning on or after October 1, 2020 through September 30, 2021). The standard payment conversion factor for discharges for fiscal year 2021 was set at \$16,856, an increase from the standard payment conversion factor applicable during fiscal year 2020 of \$16,489. The update to the standard payment conversion factor for fiscal year 2021 included a market basket increase of 2.4% with no productivity adjustment. CMS decreased the outlier threshold amount for fiscal year 2021 to \$7,906 from \$9,300 established in the final rule for fiscal year 2020.

Medicare Reimbursement of Outpatient Rehabilitation Clinic Services

Outpatient rehabilitation providers enroll in Medicare as a rehabilitation agency, a clinic, or a public health agency. The Medicare program reimburses outpatient rehabilitation providers based on the Medicare physician fee schedule. For services provided in 2017 through 2019, a 0.5% update was applied each year to the fee schedule payment rates, subject to an adjustment beginning in 2019 under the MIPS. In 2019, CMS added physical and occupational therapists to the list of MIPS eligible clinicians. For these therapists in private practice, payments under the fee schedule are subject to adjustment in a later year based on their performance in MIPS according to established performance standards. Calendar year 2021 is the first year that payments are adjusted, based upon the therapist's performance under MIPS in 2019. Providers in facility-based outpatient therapy settings are excluded from MIPS eligibility and therefore not subject to this payment adjustment. For services provided in 2020 through 2025, a 0.0% percent update will be applied each year to the fee schedule payment rates, subject to adjustments under MIPS and the APMs. In 2026 and subsequent years, eligible professionals participating in APMs who meet certain criteria would receive annual updates of 0.75%, while all other professionals would receive annual updates of 0.25%.

Each year from 2019 through 2024 eligible clinicians who receive a significant share of their revenues through an advanced APM (such as accountable care organizations or bundled payment arrangements) that involves risk of financial losses and a quality measurement component will receive a 5% bonus. The bonus payment for APM participation is intended to encourage participation and testing of new APMs and to promote the alignment of incentives across payors.

In the 2020 Medicare physician fee schedule final rule, CMS revised coding, documentation guidelines, and increased the valuation for E/M office visit codes, beginning in 2021. Because the Medicare physician fee schedule is budget-neutral, any revaluation of E/M services that will increase spending by more than \$20 million will require a budget neutrality adjustment. To increase values for the E/M codes while maintaining budget neutrality under the fee schedule, CMS cut the values of other codes to make up the difference, beginning in 2021

In the 2021 Medicare physician fee schedule final rule, CMS increased the values for the E/M office visit codes and cuts to other specialty codes to maintain budget neutrality. As a result, therapy services provided in our outpatient rehabilitation clinics will receive an estimated 3.6% decrease in payment from Medicare in calendar year 2021. Legislation was introduced in Congress that, if enacted, would waive the budget neutrality requirement with respect to the E/M codes for 2021 in order to avoid or minimize cuts to physical and occupational therapy services and other code values. Separately, the Consolidated Appropriations Act, 2021, provides a one-time 3.75% increase in payments in calendar year 2021 for therapy services and other services paid under the physician fee schedule.

https://www.sec.gov/Archives/edgar/data/1320414/000162828021003313/sem-20201231.htm

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Modifiers to Identify Services of Physical Therapy Assistants or Occupational Therapy Assistants

In the Medicare Physician Fee Schedule final rule for calendar year 2019, CMS established two new modifiers (CQ and CO) to identify services furnished in whole or in part by PTAs or OTAs. These modifiers were mandated by the Bipartisan Budget Act of 2018, which requires that claims for outpatient therapy services furnished in whole or part by therapy assistants on or after January 1, 2020 include the appropriate modifier. CMS intends to use these modifiers to implement a payment differential that would reimburse services provided by PTAs and OTAs at 85% of the fee schedule rate beginning on January 1, 2022. In the final 2020 Medicare physician fee schedule rule, CMS clarified that when the physical therapist is involved for the entire duration of the service and the PTA provides skilled therapy alongside the physical therapist, the CQ modifier is not required. Also, when the same service (code) is furnished separately by the physical therapist and PTA, CMS will apply the de minimis standard to each 15-minute unit of codes, not on the total physical therapist and PTA time of the service, allowing the separate reporting, on two different claim lines, of the number of units to which the new modifiers apply and the number of units to which the modifiers do not apply.

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Critical Accounting Matters

Revenue Recognition and Accounts Receivable

Our principal revenue source comes from providing healthcare services to patients. Patient service revenues are recognized at an amount equal to the consideration we expect to be entitled to in exchange for providing healthcare services to our patients. Revenue earned from these services is variable in nature, as we are required to make judgments that impact the transaction price.

We determine the transaction price for services provided to patients who are Medicare beneficiaries using Medicare's prospective payment systems and other payment methods. The expected payment is determined by the level of clinical services provided and is sensitive to the patient's length of stay. Additionally, we are paid by various other non-Medicare payor sources including, but not limited to, insurance companies (including Medicare Advantage plans), state Medicaid programs, workers' compensation programs, health maintenance organizations, preferred provider organizations, other managed care companies and employers, as well as patients themselves. The transaction price for services provided to non-Medicare patients include amounts prescribed by state and federal fee schedules, negotiated contracted amounts, or usual and customary amounts associated with the specific payor or based on the service provided. We apply a portfolio approach in determining revenues for certain homogeneous non-Medicare patient populations.

The transaction price for services provided to our patients is also impacted by factors, such as the patient's condition and length of stay, which in turn impact the payment we expect to receive for providing such services. Variable consideration included in the transaction price is inclusive of our estimates of implicit discounts and other adjustments related to timely filing and documentation denials, out of network adjustments, and medical necessity denials, which are estimated using our historical experience. We are also subject to regular post-payment inquiries, investigations, and audits of the claims we submit for services provided. Some claims can take several years for resolution and may result in adjustments to the transaction price. Management includes in its estimates of the transaction price its expectations for these types of adjustments such that the amount of cumulative revenue recognized will not be subject to significant reversal in future periods. Historically, adjustments arising from a change in the transaction price have not been significant.

Our accounts receivable is reported at an amount equal to the amount we expect to collect for providing healthcare services to our patients. Because our accounts receivable is typically paid for by highly-solvent, creditworthy payors, such as Medicare, other governmental programs, and highly-regulated commercial insurers on behalf of the patient, our credit losses are infrequent and insignificant in nature; as such, we generally do not recognize allowances for expected credit losses.

Insurance Risk Programs

Under a number of our insurance programs, which include our employee health insurance, workers' compensation, and professional malpractice liability insurance programs, we are liable for a portion of our losses before we can attempt to recover from the applicable insurance carrier. We accrue for losses under an occurrence-based approach, whereby we estimate the losses that will be incurred in a respective accounting period and accrue that estimated liability using actuarial methods. We monitor these programs quarterly and revise our estimates as necessary to take into account additional information. We recorded a liability of \$157.1 million and \$173.6 million for our estimated losses under these insurance programs at December 31, 2019 and 2020, respectively. We also recorded insurance proceeds receivable of \$15.5 million and \$13.0 million at December 31, 2019 and 2020, respectively, for liabilities which exceed our deductibles and self-insured retention limits and are recoverable through our insurance policies.

Intangible Assets

Goodwill and other indefinite-lived intangible assets are not amortized, but instead are subject to periodic impairment evaluations. Impairment tests are required to be conducted at least annually or when events or conditions occur that might suggest a possible impairment. These events or conditions include, but are not limited to: a significant adverse change in the business environment, regulatory environment, or legal factors; a current period operating or cash flow loss combined with a history of such losses or a projection of continuing losses; or a sale or disposition of a significant portion of a reporting unit. The occurrence of one of these events or conditions could significantly impact an impairment assessment, necessitating an impairment charge.

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We performed our annual goodwill impairment assessment for each of our reporting units as of October 1, 2020. Our assessment was qualitative in nature and considered whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. We considered relevant events or circumstances, such as the COVID-19 pandemic, which could affect the fair value of a reporting unit, including (i) industry and market conditions, (ii) financial performance, such as negative or declining cash flows, or a decline in revenue or earnings compared with actual and forecasted results, (iii) the regulatory environment affecting each of our reporting units, including reimbursement and compliance requirements under the Medicare program, and (iv) other factors specific to each reporting unit, such as a change in strategy, management, or acquisitions or divestitures affecting the composition of the reporting unit. Our assessment did not indicate goodwill impairment for any of our reporting units as of October 1, 2020.

At December 31, 2020, our other indefinite-lived intangible assets consist of trademarks, certificates of need, and accreditations. To determine the fair value of our trademarks, we use a relief from royalty income approach. For our certificates of need and accreditations, we perform qualitative assessments. As part of these assessments, we evaluate the current business environment, regulatory environment, legal and other company-specific factors. If it is more likely than not that the fair values are less than the carrying values, we perform quantitative impairment tests. Our most recent impairment assessments for indefinite-lived intangible assets were completed during the fourth quarter of 2020. We did not identify any instances of impairment with respect to indefinite-lived intangible assets.

We have recorded total goodwill and other identifiable intangible assets of \$3.8 billion at December 31, 2020, of which \$1.1 billion related to our critical illness recovery hospital reporting unit, \$458.4 million related to our rehabilitation hospital reporting unit, \$701.2 million related to our outpatient rehabilitation reporting unit, and \$1.5 billion relates to the Concentra reporting unit.

Realization of Deferred Tax Assets

We recognize deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in our financial statements. Deferred tax assets and liabilities are determined on the basis of the differences between the book and tax bases of assets and liabilities by using enacted tax rates in effect for the year in which the differences are expected to reverse. We also recognize the future tax benefits from net operating loss carryforwards as deferred tax assets. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

We evaluate the realizability of deferred tax assets and reduce those assets using a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset will not be realized. Among the factors used to assess the likelihood of realization are projections of future taxable income streams, the expected timing of the reversals of existing temporary differences, and the impact of tax planning strategies that could be implemented to avoid the potential loss of future tax benefits. However, changes in tax codes, statutory tax rates or future taxable income levels could materially impact our valuation of tax accruals and assets and could cause our provision for income taxes to vary significantly from period to period.

At December 31, 2020, we had deferred tax liabilities in excess of deferred tax assets of approximately \$111.7 million principally due to depreciation deductions that have been accelerated for tax purposes and amortization of intangibles and goodwill. This amount includes approximately \$17.3 million of valuation reserves related primarily to state net operating losses.

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Operating Statistics

The following table sets forth operating statistics for each of our segments for the periods presented. The operating statistics reflect data for the period of time we managed these operations. Our operating statistics include metrics we believe provide relevant insight about the number of facilities we operate, volume of services we provide to our patients, and average payment rates for services we provide. These metrics are utilized by management to monitor trends and performance in our businesses and therefore may be important to investors because management may assess our performance based in part on such metrics. Other healthcare providers may present similar statistics, and these statistics are susceptible to varying definitions. Our statistics as presented may not be comparable to other similarly titled statistics of other companies.

	For the Year Ended December 31,						
		2018		2019	-	2020	
Critical illness recovery hospital data:							
Number of hospitals owned—start of period		99		96		100	
Number of hospitals acquired		_		4		1	
Number of hospital start-ups		1		_		_	
Number of hospitals closed/sold		(4)				(2)	
Number of hospitals owned—end of period		96		100		99	
Number of hospitals managed—end of period				11			
Total number of hospitals (all)—end of period		96		101		99	
Available licensed beds ⁽¹⁾		4,071		4,265		4,362	
Admissions ⁽¹⁾⁽²⁾		36,474		36,774		37,456	
Patient days(1)(3)		1,012,368		1,038,361		1,111,756	
Average length of stay (days)(1)(4)		28		28		30	
Revenue per patient day(1)(5)	\$	1,716	\$	1,753	\$	1,858	
Occupancy rate ⁽¹⁾⁽⁶⁾		67 %		68 %		71 %	
Percent patient days—Medicare(1)(7)		53 %		51 %		45 %	
Rehabilitation hospital data:							
Number of hospitals owned—start of period		16		17		19	
Number of hospitals acquired		_		_		1	
Number of hospital start-ups		1		2		_	
Number of hospitals closed/sold						(1)	
Number of hospitals owned—end of period		17		19		19	
Number of hospitals managed—end of period		9		10		11	
Total number of hospitals (all)—end of period		26		29		30	
Available licensed beds ⁽¹⁾		1,189		1,309		1,311	
Admissions ⁽¹⁾⁽²⁾		21,813		24,889		25,081	
Patient days(1)(3)		315,468		353,031		370,833	
Average length of stay (days)(1)(4)		14		14		15	
Revenue per patient day(1)(5)	\$	1,606	\$	1,685	\$	1,793	
Occupancy rate ⁽¹⁾⁽⁶⁾		74 %		76 %		78 %	
Percent patient days—Medicare(1)(7)		54 %		52 %		48 %	
Outpatient rehabilitation data:							
Number of clinics owned—start of period		1,447		1,423		1,461	
Number of clinics acquired		20		31		17	
Number of clinic start-ups		34		57		55	
Number of clinics closed/sold		(78)		(50)		(30)	
Number of clinics owned—end of period		1,423		1,461		1,503	
Number of clinics managed—end of period		239		279		285	
Total number of clinics (all)—end of period		1,662		1,740		1,788	
Number of visits ⁽¹⁾⁽⁸⁾		8,356,018		8,719,282		7,593,344	
Revenue per visit ⁽¹⁾⁽⁹⁾	\$	103	\$	103	\$	104	

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		For the Year Ended December 31,					
	2	018		2019		2020	
Concentra data:							
Number of centers owned—start of period		312		524		521	
Number of centers acquired		221		6		6	
Number of center start-ups		_		_		1	
Number of centers closed/sold		(9)		(9)		(11)	
Number of centers owned-end of period		524		521		517	
Number of onsite clinics operated—end of period		124		131		134	
Number of CBOCs owned—end of period		31		32		_	
Number of visits ⁽¹⁾⁽⁸⁾		11,426,940		12,068,865		10,627,904	
Revenue per visit ⁽¹⁾⁽⁹⁾	\$	124	\$	122	\$	123	

- (1) Data excludes locations managed by the Company. For purposes of our Concentra segment, onsite clinics and community-based outpatient clinics are excluded.
- (2) Represents the number of patients admitted to our hospitals during the periods presented.
- (3) Each patient day represents one patient occupying one bed for one day during the periods presented.
- (4) Represents the average number of days in which patients were admitted to our hospitals. Average length of stay is calculated by dividing the number of patient days, as presented above, by the number of patients discharged from our hospitals during the periods presented.
- (5) Represents the average amount of revenue recognized for each patient day. Revenue per patient day is calculated by dividing patient service revenues, excluding revenues from certain other ancillary and outpatient services provided at our hospitals, by the total number of patient days.
- (6) Represents the portion of our hospitals being utilized for patient care during the periods presented. Occupancy rate is calculated using the number of patient days, as presented above, divided by the total number of bed days available during the period. Bed days available is derived by adding the daily number of available licensed beds for each of the periods presented.
- (7) Represents the portion of our patient days which are paid by Medicare. The Medicare patient day percentage is calculated by dividing the total number of patient days which are paid by Medicare by the total number of patient days, as presented above.
- (8) Represents the number of visits in which patients were treated at our outpatient rehabilitation clinics and Concentra centers during the periods presented.
- (9) Represents the average amount of revenue recognized for each patient visit. Revenue per visit is calculated by dividing patient service revenue, excluding revenues from certain other ancillary services, by the total number of visits. For purposes of this computation for our Concentra segment, patient service revenue does not include onsite clinics and community-based outpatient clinics.

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Results of Operations

The following table outlines selected operating data as a percentage of revenue for the periods indicated:

	For the Year Ended December 31,						
	2018	2019	2020				
Revenue	100.0 %	100.0 %	100.0 %				
Costs and expenses:							
Cost of services, exclusive of depreciation and amortization ⁽¹⁾	85.4	85.1	85.2				
General and administrative	2.4	2.4	2.5				
Depreciation and amortization	4.0	3.8	3.6				
Total costs and expenses	91.8	91.3	91.3				
Other operating income			1.6				
Income from operations	8.2	8.7	10.3				
Loss on early retirement of debt	(0.3)	(0.7)	_				
Equity in earnings of unconsolidated subsidiaries	0.4	0.5	0.5				
Gain on sale of businesses	0.2	0.1	0.2				
Interest expense	(3.9)	(3.7)	(2.7)				
Income before income taxes	4.6	4.9	8.3				
Income tax expense	1.1	1.2	2.1				
Net income	3.5	3.7	6.2				
Net income attributable to non-controlling interests	0.8	1.0	1.5				
Net income attributable to Select Medical Holdings Corporation	2.7 %	2.7 %	4.7 %				

⁽¹⁾ Cost of services includes salaries, wages and benefits, operating supplies, lease and rent expense, and other operating costs.

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The following table summarizes selected financial data by segment for the periods indicated (in thousands, except percentages):

		Year Ended December 31,						
	2018 ⁽¹⁾ 2019 2020		2020	% Change 2018 - 2019	% Change 2019 - 2020			
Revenue:								
Critical illness recovery hospital	\$	1,753,584	\$	1,836,518	\$	2,077,499	4.7 %	13.1 %
Rehabilitation hospital		583,745		670,971		734,673	14.9	9.5
Outpatient rehabilitation		995,794		1,046,011		919,913	5.0	(12.1)
Concentra		1,557,673		1,628,817		1,501,434	4.6	(7.8)
Other ⁽²⁾		190,462		271,605		298,194	42.6	9.8
Total Company	\$	5,081,258	\$	5,453,922	\$	5,531,713	7.3 %	1.4 %
Income (loss) from operations:								
Critical illness recovery hospital	\$	197,218	\$	204,105	\$	290,896	3.5 %	42.5 %
Rehabilitation hospital		84,826		108,535		125,476	28.0	15.6
Outpatient rehabilitation		114,810		123,530		50,155	7.6	(59.4)
Concentra(3)		150,678		176,606		162,515	17.2	(8.0)
Other ⁽²⁾⁽³⁾		(130,253)		(140,895)		(61,385)	N/M	N/M
Total Company	\$	417,279	\$	471,881	\$	567,657	13.1 %	20.3 %
Adjusted EBITDA:	_							
Critical illness recovery hospital	\$	243,015	\$	254,868	\$	342,427	4.9 %	34.4 %
Rehabilitation hospital		108,927		135,857		153,203	24.7	12.8
Outpatient rehabilitation		142,005		151,831		79,164	6.9	(47.9)
Concentra(3)		251,977		276,482		252,892	9.7	(8.5)
Other(2)(3)		(100,769)		(108,130)		(27,120)	N/M	N/M
Total Company	\$	645,155	\$	710,908	\$	800,566	10.2 %	12.6 %
Adjusted EBITDA margins:							, ,	
Critical illness recovery hospital		13.9 %		13.9 %		16.5 %		
Rehabilitation hospital		18.7		20.2		20.9		
Outpatient rehabilitation		14.3		14,5		8.6		
Concentra(3)		16.2		17.0		16.8		
Other(2)(3)		N/M		N/M		N/M		
Total Company		12.7 %		13.0 %		14.5 %		
Total assets:								
Critical illness recovery hospital	\$	1,771,605	\$	2,099,833	\$	2,213,892		
Rehabilitation hospital		894,192		1,127,028		1,148,617		
Outpatient rehabilitation		1,002,819		1,289,190		1,302,110		
Concentra		2,178,868		2,372,187		2,400,646		
Other ⁽²⁾		116,781		452,050		590,134		
Total Company	\$	5,964,265	\$	7,340,288	\$	7,655,399		
Purchases of property and equipment:								
Critical illness recovery hospital	\$	40,855	\$	45,573	\$	49,726		
Rehabilitation hospital		42,389		27,216		7,571		
Outpatient rehabilitation		30,553		33,628		28,876		
Concentra		42,205		44,101		50,114		
Other ⁽²⁾		11,279		6,608		10,153		
Total Company	\$	167,281	\$	157,126	\$	146,440		

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- (1) The Concentra segment includes the operating results of U.S. HealthWorks beginning February 1, 2018.
- (2) Other includes our corporate administration and shared services, as well as employee leasing services with our non-consolidating subsidiaries. Total assets include certain non-consolidating joint ventures and minority investments in other healthcare related businesses.
- (3) For the year ended December 31, 2020, we recognized payments received under the Provider Relief Fund for health care related expenses and loss of revenue attributable to the COVID-19 pandemic as other operating income. Other operating income of \$1.1 million and \$88.9 million is included within the operating results of our Concentra segment and other activities, respectively.

N/M — Not meaningful.

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Year Ended December 31, 2020 Compared to Year Ended December 31, 2019

In the following, we discuss our results of operations related to revenue, operating expenses, other operating income, Adjusted EBITDA, depreciation and amortization, income from operations, loss on early retirement of debt, equity in earnings of unconsolidated subsidiaries, gain on sale of businesses, interest expense, income taxes, and net income attributable to non-controlling interests.

Please refer to "Effects of the COVID-19 Pandemic on our Results of Operations" above for further discussion.

Revenue

Our revenue increased 1.4% to \$5,531.7 million for the year ended December 31, 2020, compared to \$5,453.9 million for the year ended December 31, 2019.

Critical Illness Recovery Hospital Segment. Revenue increased 13.1% to \$2,077.5 million for the year ended December 31, 2020, compared to \$1,836.5 million for the year ended December 31, 2019. The increase in revenue was due to increases in both patient volume and revenue per patient day during the year ended December 31, 2020 compared to the year ended December 31, 2019. Our patient days increased 7.1% to 1,111,756 days for the year ended December 31, 2020, compared to 1,038,361 days for the year ended December 31, 2019. We experienced a 4.8% increase in patient days in our existing critical illness recovery hospitals. The remaining increase principally occurred in the four critical illness recovery hospitals we acquired in 2019. The relaxation of certain admission restrictions during the year ended December 31, 2020 also contributed to the increase in volume. These measures were implemented to increase hospital capacity in response to the COVID-19 pandemic. Occupancy in our critical illness recovery hospitals increased to 71% during the year ended December 31, 2020, compared to 68% for the year ended December 31, 2019. Revenue per patient day increased 6.0% to \$1,858 for the year ended December 31, 2020, compared to \$1,753 for the year ended December 31, 2019. We experienced increases in both our Medicare nevenue per patient day. Our critical illness recovery hospitals experienced an increase in patient acuity during the year ended December 31, 2020, which contributed to the increase in Medicare revenue per patient day as a result of the temporary suspension of the 2.0% cut to Medicare payments due to sequestration, which is described further under "Regulatory Changes."

Rehabilitation Hospital Segment. Revenue increased 9.5% to \$734.7 million for the year ended December 31, 2020, compared to \$671.0 million for the year ended December 31, 2019. The increase in revenue resulted from increases in both patient volume and revenue per patient day during the year ended December 31, 2020 compared to the year ended December 31, 2019. Our patient days increased 5.0% to 370,833 days for the year ended December 31, 2020, compared to 353,031 days for the year ended December 31, 2019. The increase in patient days was principally driven by our rehabilitation hospitals which commenced operations during 2019. We also experienced a 2.0% increase in patient days in our existing rehabilitation hospitals. This increase occurred despite declines in volume experienced within our rehabilitation hospitals in New Jersey and South Florida which temporarily restricted admissions as a result of the COVID-19 pandemic. Certain of our rehabilitation hospitals also experienced lower patient volume due to the suspension of elective surgeries at hospitals and other facilities, which consequently reduced the demand for inpatient rehabilitation services, during the year ended December 31, 2020 compared to the year ended December 31, 2020 compared to the year ended December 31, 2020, compared to 76% for the year ended December 31, 2019. Our revenue per patient day increased 6.4% to \$1,793 for the year ended December 31, 2020, compared to \$1,685 for the year ended December 31, 2019. We experienced increases in both our Medicare and non-Medicare revenue per patient day. The temporary suspension of the 2.0% cut to Medicare payments due to sequestration, which is described further under "Regulatory Changes," contributed to the increase in revenue per patient day.

Outpatient Rehabilitation Segment. Revenue was \$919.9 million for the year ended December 31, 2020, compared to \$1,046.0 million for the year ended December 31, 2019. The decrease in revenue was attributable to a decline in visits, which were 7,593,344 for the year ended December 31, 2020, compared to 8,719,282 visits for the year ended December 31, 2019, a decrease of 12.9%. During the months of March through December 2020, our outpatient rehabilitation clinics experienced a 17.3% decrease in visits, as compared to the same period in 2019, due to the effects of the COVID-19 pandemic. The declines in volume principally occurred in April and May 2020 and were the result of a decline in patient referrals from physicians, a reduction in workers' compensation injury visits resulting from the temporary closure of businesses, the suspension of elective surgeries which would have required outpatient rehabilitation services, as well as recommendations to practice social distancing. Patient volume in our outpatient rehabilitation clinics has improved since April and May 2020 as restrictions imposed on individuals and businesses ease. Refer to the "Effects of the COVID-19 Pandemic on our Results of Operations" for a table which outlines the monthly trend in our patient visits for both the years ended December 31, 2020 and 2019. Our revenue per visit was \$104 for the year ended December 31, 2020, compared to \$103 for the year ended December 31, 2019.

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Concentra Segment. Revenue was \$1,501.4 million for the year ended December 31, 2020, compared to \$1,628.8 million for the year ended December 31, 2019. The decrease in revenue was attributable to a decline in visits, which were 10,627,904 for the year ended December 31, 2020, compared to 12,068,865 visits for the year ended December 31, 2019, a decrease of 11.9%. During the months of March through December 2020, our centers experienced a 15.1% decrease in visits, as compared to the same period in 2019, due to the effects of the COVID-19 pandemic. The declines in volume principally occurred in April and May 2020 and were primarily due to employers furloughing their workforce and temporarily ceasing or significantly reducing their operations. Patient volume in our centers has improved since April and May 2020 as restrictions imposed on businesses ease. Refer to the "Effects of the COVID-19 Pandemic on our Results of Operations" for a table which outlines the monthly trend in our patient visits for both the years ended December 31, 2020 and 2019. The sale of Concentra's Department of Veterans Affairs community-based outpatient clinic business on September 1, 2020 also contributed to the decline in revenue. This business contributed \$28.5 million of revenue to the Concentra segment during the months of September through December 2019. The declines in revenue during the year ended December 31, 2020 were offset, in part, by the revenue earned from providing COVID-19 screening and testing at our centers and various onsite clinics located at employer worksites. These services contributed \$62.0 million of revenue during the year ended December 31, 2020. Revenue per visit was \$123 for the year ended December 31, 2020, compared to \$122 for the year ended December 31, 2020.

Operating Expenses

Our operating expenses consist principally of cost of services and general and administrative expenses. Our operating expenses were \$4,848.4 million, or 87.7% of revenue, for the year ended December 31, 2020, compared to \$4,769.5 million, or 87.5% of revenue, for the year ended December 31, 2019. Our cost of services, a major component of which is labor expense, was \$4,710.4 million, or 85.2% of revenue, for the year ended December 31, 2020, compared to \$4,641.0 million, or 85.1% of revenue, for the year ended December 31, 2019. The increase in our operating expenses relative to our revenue was principally due to the reduced patient volume in our outpatient rehabilitation and Concentra segments, as discussed above. General and administrative expenses were \$138.0 million, or 2.5% of revenue, for the year ended December 31, 2020, compared to \$128.5 million, or 2.4% of revenue, for the year ended December 31, 2019.

Other Operating Income

For the year ended December 31, 2020, we had other operating income of \$90.0 million. We recognize payments received under the Provider Relief Fund as other operating income for health care related expenses and loss of revenue attributable to the COVID-19 pandemic. Refer to Note 22 – CARES Act of the notes to our consolidated financial statements included herein for further information. For the year ended December 31, 2020, \$88.9 million of other operating income is included within the operating results of our other activities, and \$1.1 million of other operating income is included in the operating results of our Concentra segment.

Adjusted EBITDA

Critical Illness Recovery Hospital Segment. Adjusted EBITDA increased 34.4% to \$342.4 million for the year ended December 31, 2020, compared to \$254.9 million for the year ended December 31, 2019. Our Adjusted EBITDA margin for the critical illness recovery hospital segment was 16.5% for the year ended December 31, 2020, compared to 13.9% for the year ended December 31, 2019. The increases in Adjusted EBITDA and Adjusted EBITDA margin for our critical illness recovery hospital segment were driven by increases in both patient volume and revenue per patient day, as discussed above under "Revenue." The increases in Adjusted EBITDA and Adjusted EBITDA margin occurred despite the incurrence of additional operating expenses as a result of the COVID-19 pandemic. Our critical illness recovery hospitals have modified certain of their protocols in order to follow the guidelines and recommendations for patient treatment and for the protection of both our patients and staff members. This has resulted in increased labor costs, including increased contracted labor usage, as well as additional costs resulting from the purchase of personal protective equipment.

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Rehabilitation Hospital Segment. Adjusted EBITDA increased 12.8% to \$153.2 million for the year ended December 31, 2020, compared to \$135.9 million for the year ended December 31, 2019. Our Adjusted EBITDA margin for the rehabilitation hospital segment was 20.9% for the year ended December 31, 2020, compared to 20.2% for the year ended December 31, 2019. These increases were primarily attributable to our hospitals which commenced operations in 2019. We also experienced increases in Adjusted EBITDA and Adjusted EBITDA margin at many of our existing hospitals as a result of increased patient volume and increases in revenue per patient day. The increases in Adjusted EBITDA and Adjusted EBITDA margin in our rehabilitation hospital segment occurred despite our hospitals in New Jersey and South Florida experiencing declines in Adjusted EBITDA and Adjusted EBITDA margin. These hospitals temporarily restricted admissions as a result of the COVID-19 pandemic during the second quarter of 2020. Our Adjusted EBITDA and Adjusted EBITDA margin were also adversely impacted by the incurrence of additional operating expenses as a result of the COVID-19 pandemic. Our rehabilitation hospitals have modified certain of their protocols in order to follow the guidelines and recommendations for patient treatment and for the protection of both our patients and staff members. This has resulted in increased labor costs as well as

Outpatient Rehabilitation Segment. Adjusted EBITDA was \$79.2 million for the year ended December 31, 2020, compared to \$151.8 million for the year ended December 31, 2019. Our Adjusted EBITDA margin for the outpatient rehabilitation segment was 8.6% for the year ended December 31, 2020, compared to 14.5% for the year ended December 31, 2019. The decrease in Adjusted EBITDA and Adjusted EBITDA margin were caused by a decline in visits, beginning in mid-March 2020, as a result of the effects of the COVID-19 pandemic, as described above. During the months of March through December 2020, our outpatient rehabilitation clinics experienced a 17.3% decrease in visits, as compared to the same period in 2019. In response to the decline in patient volume and in an effort to reduce operating expenses, we temporarily consolidated, where possible, the operations of clinics which operate within close proximity to one another and took other measures to reduce labor costs.

additional costs resulting from the purchase of personal protective equipment. For the year ended December 31, 2019, the Adjusted

EBITDA results of the rehabilitation hospital segment include start-up losses of approximately \$8.8 million.

Concentra Segment. Adjusted EBITDA was \$252.9 million for the year ended December 31, 2020, compared to \$276.5 million for the year ended December 31, 2019. Our Adjusted EBITDA margin for the Concentra segment was 16.8% for the year ended December 31, 2020, compared to 17.0% for the year ended December 31, 2019. The decreases in Adjusted EBITDA and Adjusted EBITDA margin were caused by a decline in visits, beginning in mid-March 2020, as a result of the effects of the COVID-19 pandemic, as described above. During the months of March through December 2020, our centers experienced a 15.1% decrease in visits, as compared to the same period in 2019. In response to the decline in patient volume and in an effort to reduce operating expenses, we temporarily consolidated, where possible, the operations of centers which operate within close proximity to one another, reduced the operating hours of certain centers, and took other measures to reduce labor and other discretionary costs. Many of these initiatives have been and will continue to be curtailed as we see improvement in patient volumes.

Depreciation and Amortization

Depreciation and amortization expense was \$205.7 million for the year ended December 31, 2020, compared to \$212.6 million for the year ended December 31, 2019. The decrease in depreciation and amortization expense occurred in our Concentra segment. The decrease in depreciation and amortization expense is primarily due to certain assets acquired as part of the acquisitions of U.S. HealthWorks, Inc. and Concentra Inc. becoming fully depreciated.

Income from Operations

For the year ended December 31, 2020, we had income from operations of \$567.7 million, compared to \$471.9 million for the year ended December 31, 2019. The increase in income from operations was primarily attributable to the recognition of \$90.0 million of other operating income, as discussed above. We also experienced increases in income from operations within our critical illness recovery hospital and rehabilitation hospital segments, which were offset in part by declines in income from operations experienced within our outpatient rehabilitation and Concentra segments.

Loss on Early Retirement of Debt

During the year ended December 31, 2019, we amended both the Select credit agreement and the Concentra-JPM first lien credit agreement. We also repaid the term loans outstanding under both the Concentra-JPM first and second lien credit agreements and redeemed our 6.375% senior notes. These financing events resulted in losses on early retirement of debt of \$38.1 million.

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Equity in Earnings of Unconsolidated Subsidiaries

Our equity in earnings of unconsolidated subsidiaries relates to rehabilitation businesses and other healthcare-related businesses in which we are a minority owner. For the year ended December 31, 2020, we had equity in earnings of unconsolidated subsidiaries of \$29.4 million, compared to \$25.0 million for the year ended December 31, 2019. During the year ended December 31, 2020, certain of our non-consolidating subsidiaries received Provider Relief Funds for health care related expenses and loss of revenue attributable to the COVID-19 pandemic. We experienced an increase in our equity in earnings for our share of the income recognized from these funds.

Gain on Sale of Businesses

We recognized gains of \$12.4 million during the year ended December 31, 2020. During the year ended December 31, 2020, we sold an outpatient rehabilitation business, a rehabilitation hospital business, and Concentra's Department of Veterans Affairs community-based outpatient clinic business. These sales resulted in gains of approximately \$21.4 million. We also incurred a loss of \$9.0 million related to the indemnity provision associated with a previously sold business.

We recognized a gain of \$6.5 million during the year ended December 31, 2019. The gain was attributable to the sale of outpatient rehabilitation clinics to a non-consolidating subsidiary.

Interest Expense

Interest expense was \$153.0 million for the year ended December 31, 2020, compared to \$200.6 million for the year ended December 31, 2019. The decrease in interest expense was principally due to a decline in variable interest rates, as well as the refinancing of our Select credit facilities, Concentra-JPM first and second lien credit agreements, and senior notes during the third and fourth quarters of 2019.

Income Taxes

We recorded income tax expense of \$111.9 million for the year ended December 31, 2020, which represented an effective tax rate of 24.5%. We recorded income tax expense of \$63.7 million for the year ended December 31, 2019, which represented an effective tax rate of 24.1%. For the year ended December 31, 2020, the increase in the effective tax rate resulted primarily from a higher estimate of state and local income taxes. Refer to Note 19 – Income Taxes of the notes to our consolidated financial statements included herein for the reconciliations of the statutory federal income tax rate to our effective income rate for the years ended December 31, 2020 and 2019.

Net Income Attributable to Non-Controlling Interests

Net income attributable to non-controlling interests was \$85.6 million for the year ended December 31, 2020, compared to \$52.6 million for the year ended December 31, 2019. In addition to general improvements made in the operating performance of the Company's less than wholly owned critical illness recovery and rehabilitation hospitals, particularly in our hospitals which commenced operations during 2019, net income attributable to non-controlling interests increased as a result of the operating income recognized for payments received under the Provider Relief Fund. Additionally, the net income of our Concentra segment increased during the year ended December 31, 2020, which was principally due to a decline in interest expense. The Concentra segment also recognized a loss on early retirement of debt during the year ended December 31, 2019.

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Year Ended December 31, 2019 Compared to Year Ended December 31, 2018

In the following, we discuss our results of operations related to revenue, operating expenses, Adjusted EBITDA, depreciation and amortization, income from operations, loss on early retirement of debt, equity in earnings of unconsolidated subsidiaries, gain on sale of businesses, interest expense, income taxes, and net income attributable to non-controlling interests.

Revenue

Our revenue increased 7.3% to \$5,453.9 million for the year ended December 31, 2019, compared to \$5,081.3 million for the year ended December 31, 2018.

Critical Illness Recovery Hospital Segment. Revenue increased 4.7% to \$1,836.5 million for the year ended December 31, 2019, compared to \$1,753.6 million for the year ended December 31, 2018. The increase in revenue was due to increases in both patient volume and revenue per patient day. Our patient days increased 2.6% to 1,038,361 days for the year ended December 31, 2019, compared to 1,012,368 days for the year ended December 31, 2018. The acquisition of four hospitals during 2019 contributed to the increase in patient days. We also experienced an increase in patient days in our existing hospitals, which was offset by a decrease in patient days from hospital closures which occurred during 2018, including the temporary closure of our hospital located in Panama City, Florida as a result of damage sustained from Hurricane Michael in October 2018. Revenue per patient day increased 2.2% to \$1,753 for the year ended December 31, 2019, compared to \$1,716 for the year ended December 31, 2018. We experienced increases in both our Medicare and non-Medicare revenue per patient day.

Rehabilitation Hospital Segment. Revenue increased 14.9% to \$671.0 million for the year ended December 31, 2019, compared to \$583.7 million for the year ended December 31, 2018. The increase in revenue resulted from increases in both patient volume and revenue per patient day during the year ended December 31, 2019. Our patient days increased 11.9% to 353,031 days for the year ended December 31, 2019, compared to 315,468 days for the year ended December 31, 2018. The increase in patient days was principally driven by our rehabilitation hospitals which recently commenced operations. We also experienced a 3.7% increase in patient days in our existing hospitals. Our revenue per patient day increased 4.9% to \$1,685 for the year ended December 31, 2019, compared to \$1,606 for the year ended December 31, 2018. We experienced increases in both our Medicare and non-Medicare revenue per patient day.

Outpatient Rehabilitation Segment. Revenue increased 5.0% to \$1,046.0 million for the year ended December 31, 2019, compared to \$995.8 million for the year ended December 31, 2018. The increase in revenue was attributable to an increase in visits, which increased 4.3% to 8,719,282 for the year ended December 31, 2019, compared to 8,356,018 visits for the year ended December 31, 2018. The increase in visits was due to new outpatient rehabilitation clinics and a 5.1% increase in visits within our existing clinics. This growth was offset in part by the sale of outpatient rehabilitation clinics to non-consolidating subsidiaries. These clinics contributed 218,381 visits during the year ended December 31, 2018. During the year ended December 31, 2019, we also experienced an increase in management fee revenues related to services provided to our non-consolidating subsidiaries. These services have expanded as a result of our sales of clinics to these non-consolidating subsidiaries. Our revenue per visit was \$103 for both the years ended December 31, 2019 and 2018.

Concentra Segment. Revenue increased 4.6% to \$1,628.8 million for the year ended December 31, 2019, compared to \$1,557.7 million for the year ended December 31, 2018. Visits in our centers increased 5.6% to 12,068,865 for the year ended December 31, 2019, compared to 11,426,940 visits for the year ended December 31, 2018. The increases in revenue and visits were principally due to U.S. HealthWorks, which we acquired on February 1, 2018, and other new centers. Revenue per visit was \$122 for the year ended December 31, 2019, compared to \$124 for the year ended December 31, 2018. The decrease in revenue per visit was principally due to a relative increase in employer services visits, which yield lower per visit rates.

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Operating Expenses

Our operating expenses consist principally of cost of services and general and administrative expenses. Our operating expenses were \$4,769.5 million, or 87.5% of revenue, for the year ended December 31, 2019, compared to \$4,462.3 million, or 87.8% of revenue, for the year ended December 31, 2018. Our cost of services, a major component of which is labor expense, was \$4,641.0 million, or 85.1% of revenue, for the year ended December 31, 2019, compared to \$4,341.1 million, or 85.4% of revenue, for the year ended December 31, 2018. The decrease in our operating expenses relative to our revenue was principally due to the operating performance of our Concentra and rehabilitation hospital segments. General and administrative expenses were \$128.5 million, or 2.4% of revenue, for the year ended December 31, 2019, compared to \$121.3 million, or 2.4% of revenue, for the year ended December 31, 2018. General and administrative expenses included \$2.9 million of U.S. HealthWorks acquisition costs for the year ended December 31, 2018.

Adjusted EBITDA

Critical Illness Recovery Hospital Segment. Adjusted EBITDA increased 4.9% to \$254.9 million for the year ended December 31, 2019, compared to \$243.0 million for the year ended December 31, 2018. Our Adjusted EBITDA margin for the critical illness recovery hospital segment was 13.9% for both the years ended December 31, 2019 and 2018. The increase in Adjusted EBITDA for our critical illness recovery hospital segment was primarily driven by increases in patient volumes and revenue per patient day, as discussed above under "Revenue." Our Adjusted EBITDA margins were impacted by our newly acquired hospitals, which operated at lower margins than our other critical illness recovery hospitals.

Rehabilitation Hospital Segment. Adjusted EBITDA increased 24.7% to \$135.9 million for the year ended December 31, 2019, compared to \$108.9 million for the year ended December 31, 2018. Our Adjusted EBITDA margin for the rehabilitation hospital segment was 20.2% for the year ended December 31, 2019, compared to 18.7% for the year ended December 31, 2018. The increases in Adjusted EBITDA and Adjusted EBITDA margin are primarily attributable to increases in patient volume and revenue per patient day at many of our existing hospitals. Adjusted EBITDA losses in our start-up hospitals were \$8.8 million for the year ended December 31, 2019, compared to \$4.7 million for the year ended December 31, 2018.

Outpatient Rehabilitation Segment. Adjusted EBITDA increased 6.9% to \$151.8 million for the year ended December 31, 2019, compared to \$142.0 million for the year ended December 31, 2018. Our Adjusted EBITDA margin for the outpatient rehabilitation segment was 14.5% for the year ended December 31, 2019, compared to 14.3% for the year ended December 31, 2018. For the year ended December 31, 2019, the increase in Adjusted EBITDA resulted principally from increases in patient visits in our existing clinics, as discussed above under "Revenue." We also experienced increases in Adjusted EBITDA from our start-up and newly developed outpatient rehabilitation clinics.

Concentra Segment. Adjusted EBITDA increased 9.7% to \$276.5 million for the year ended December 31, 2019, compared to \$252.0 million for the year ended December 31, 2018, which included the operating results of U.S. HealthWorks beginning February 1, 2018. Our Adjusted EBITDA margin for the Concentra segment was 17.0% for the year ended December 31, 2019, compared to 16.2% for the year ended December 31, 2018. The increases in Adjusted EBITDA and Adjusted EBITDA margin resulted from achieving lower relative operating costs across our combined Concentra and U.S. HealthWorks businesses.

Depreciation and Amortization

Depreciation and amortization expense was \$212.6 million for the year ended December 31, 2019, compared to \$201.7 million for the year ended December 31, 2018. The increase principally occurred within our critical illness recovery hospital and rehabilitation hospital segments. The increase resulted in part from new hospitals operating within both of these segments. Additionally, effective July 1, 2019, the state of Florida repealed its certificate of need regulations; accordingly, the certificate of need intangible assets previously recognized by our Florida critical illness recovery hospitals were fully amortized during the year ended December 31, 2019.

Income from Operations

For the year ended December 31, 2019, we had income from operations of \$471.9 million, compared to \$417.3 million for the year ended December 31, 2018. The increase in income from operations resulted principally from our Concentra and rehabilitation hospital segments.

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Loss on Early Retirement of Debt

During the year ended December 31, 2019, we amended both the Select credit agreement and the Concentra-JPM first lien credit agreement. We also repaid the term loans outstanding under both the Concentra-JPM first and second lien credit agreements and redeemed our 6.375% senior notes. These financing events resulted in losses on early retirement of debt of \$38.1 million.

During the year ended December 31, 2018, we amended both the Select credit agreement and the Concentra-JPM first lien credit agreement which resulted in losses on early retirement of debt of \$14.2 million.

Equity in Earnings of Unconsolidated Subsidiaries

Our equity in earnings of unconsolidated subsidiaries principally relates to rehabilitation businesses in which we are a minority owner. For the year ended December 31, 2019, we had equity in earnings of unconsolidated subsidiaries of \$25.0 million, compared to \$21.9 million for the year ended December 31, 2018. The increase in equity in earnings was principally attributable to the growth of certain non-consolidating subsidiaries as a result of our sales of outpatient rehabilitation clinics to these subsidiaries.

Gain on Sale of Businesses

We recognized gains of \$6.5 million and \$9.0 million during the years ended December 31, 2019 and 2018, respectively. The gains were principally attributable to the sales of outpatient rehabilitation clinics to non-consolidating subsidiaries.

Interest Expense

Interest expense was \$200.6 million for the year ended December 31, 2019, compared to \$198.5 million for the year ended December 31, 2018. The increase in interest expense was principally due to the recognition of interest expense on both the 6.250% senior notes and the 6.375% senior notes during August 2019, as the redemption of the \$710.0 million 6.375% senior notes occurred on August 30, 2019, while the issuance of the \$550.0 million 6.250% senior notes occurred on August 1, 2019.

Income Taxes

We recorded income tax expense of \$63.7 million for the year ended December 31, 2019, which represented an effective tax rate of 24.1%. We recorded income tax expense of \$58.6 million for the year ended December 31, 2018, which represented an effective tax rate of 24.9%.

The reduction in our effective tax rate resulted from an increase in our income before income taxes generated from our consolidated subsidiaries taxed as partnerships. For these subsidiaries, we only incur income tax expense on our share of the earnings. The effect of the income allocated to non-controlling interests on the effective tax rate was 2.9% for the year ended December 31, 2019, compared to 2.1% for the year ended December 31, 2018. Refer to Note 19 – Income Taxes of the notes to our consolidated financial statements included herein for the reconciliations of the statutory federal income tax rate to our effective income rate for the years ended December 31, 2019 and 2018.

Net Income Attributable to Non-Controlling Interests

Net income attributable to non-controlling interests was \$52.6 million for the year ended December 31, 2019, compared to \$39.1 million for the year ended December 31, 2018. The increase was principally due to the improved operating performance of several of our joint venture rehabilitation hospitals and our Concentra segment.

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Liquidity and Capital Resources

Cash Flows for the Years Ended December 31, 2018, 2019, and 2020

In the following, we discuss cash flows from operating activities, investing activities, and financing activities.

	For the Year Ended December 31,						
		2018		2019		2020	
Cash flows provided by operating activities	\$	494,194	\$	445,182	\$	1,028,073	
Cash flows used in investing activities		(697,137)		(316,729)		(115,353)	
Cash flows provided by (used in) financing activities		255,572		32,251		(671,541)	
Net increase in cash and cash equivalents		52,629		160,704		241,179	
Cash and cash equivalents at beginning of period		122,549		175,178		335,882	
Cash and cash equivalents at end of period	\$	175,178	\$	335,882	\$	577,061	

Operating activities provided \$1,028.1 million of cash flows for the year ended December 31, 2020, compared to \$445.2 million of cash flows for the year ended December 31, 2019. The increase in cash flows provided by operating activities is primarily attributable to \$318.1 million of advanced payments received under the Accelerated and Advance Payment Program, as well as \$172.6 million of payments received under the Provider Relief Fund. Refer to Note 22 – CARES Act of the notes to our consolidated financial statements included herein for further information.

Our days sales outstanding was 56 days at December 31, 2020, while our days sales outstanding was 51 days at both December 31, 2019 and 2018. Our days sales outstanding will fluctuate based upon variability in our collection cycles and patient volumes. For the year ended December 31, 2020, our days sales outstanding was primarily impacted by an increase in our Medicare receivables at our hospitals.

Operating activities provided \$445.2 million of cash flows for the year ended December 31, 2019, compared to \$494.2 million of cash flows for the year ended December 31, 2018. The lower operating cash flows were principally driven by the change in our accounts receivable. Our days sales outstanding was 51 days at both December 31, 2019 and 2018, while our days sales outstanding was 58 days at December 31, 2017. During the year ended December 31, 2018, we experienced an increase in operating cash flows related to accounts receivable, primarily as a result of underpayments we received through the Medicare periodic interim payment program in our critical illness recovery hospitals during the year ended December 31, 2017.

Investing activities used \$115.4 million, \$316.7 million and \$697.1 million of cash flows for the years ended December 31, 2020, 2019 and 2018, respectively. For the year ended December 31, 2020, the principal uses of cash were \$146.4 million for purchases of property and equipment and \$52.2 million for investments in and acquisitions of businesses. We also received proceeds from the sale of assets and businesses of \$83.3 million. For the year ended December 31, 2019, the principal uses of cash were \$157.1 million for purchases of property and equipment and \$159.8 million for investments in and acquisitions of businesses. For the year ended December 31, 2018, the principal uses of cash were \$157.3 million for purchases of property and equipment.

Financing activities used \$671.5 million of cash flows for the year ended December 31, 2020. The principal use of cash was \$576.4 million for the purchase of additional membership interests of Concentra Group Holdings Parent during the year ended December 31, 2020, as discussed above under "Other Significant Events." We also used \$39.8 million of cash for the mandatory prepayment of term loans under the Select credit facilities.

Financing activities provided \$32.3 million of cash flows for the year ended December 31, 2019. The principal sources of cash were from the issuance of \$1,225.0 million aggregate principal amount of 6.250% senior notes, \$1,115.0 million of incremental term loan borrowings under the Select credit facilities, and \$100.0 million of incremental term loan borrowings under the Concentra-JPM first lien credit agreement. These borrowings provided net financing cash inflows of \$2,453.1 million. A portion of the net proceeds of the 6.250% senior notes, together with a portion of the proceeds from the incremental term loan borrowings under the Select credit facilities, were used by Select to redeem in full its \$710.0 million 6.375% senior notes and to make a term loan in an aggregate principal amount of approximately \$1,240.3 million to Concentra Inc., pursuant to the Concentra increompany loan agreement. Concentra Inc. then repaid its \$1,240.3 million term loan outstanding under the Concentra-JPM first lien credit agreement were used, in part, to repay the \$240.0 million of term loans outstanding under the Concentra-JPM second lien credit agreement. We also used \$98.8 million and \$33.9 million of cash for mandatory prepayments of term loans under the Select credit facilities and Concentra-JPM first and second lien credit agreements, respectively. During the year ended December 31, 2019, we had net repayments of \$20.0 million under the Select and Concentra-JPM revolving facilities.

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Financing activities provided \$255.6 million of cash flows for the year ended December 31, 2018. The principal source of cash was from the issuance of term loans under the Concentra-JPM first and second lien credit agreements which resulted in net proceeds of \$779.8 million. This was offset in part by \$311.5 million of distributions to and purchases of non-controlling interests, of which \$294.9 million related to the redemption and reorganization transactions executed in connection with the acquisition of U.S. HealthWorks, and \$210.0 million of net repayments under the Select revolving facility.

Capital Resources

Working capital. We had net working capital of \$155.6 million at December 31, 2020, compared to net working capital of \$298.7 million at December 31, 2019. Our net working capital as of December 31, 2020 was impacted by the purchases of additional membership interests of Concentra Group Holdings Parent, including the most recent purchase which occurred on December 31, 2020, as discussed above under "Other Significant Events."

A significant component of our working capital is our accounts receivable. Collection of these accounts receivable is our primary source of cash and is critical to our liquidity and capital resources. Most of our patients are subject to healthcare coverage through third party payor arrangements, including Medicare and Medicaid. It is our general policy to verify healthcare coverage prior to providing services. We have credit risk associated with our accounts receivable; however, we believe there is a remote possibility of default with these payors.

Select credit facilities.

In February 2020, Select made a principal prepayment of approximately \$39.8 million associated with its term loans in accordance with the provision in the Select credit facilities that requires mandatory prepayments of term loans as a result of annual excess cash flow, as defined in the Select credit facilities.

At December 31, 2020, Select had outstanding borrowings under the Select credit facilities consisting of a \$2,103.4 million Select term loan (excluding unamortized original issue discounts and debt issuance costs of \$17.5 million). Select did not have any borrowings outstanding under the Select revolving facility. At December 31, 2020, Select had \$410.7 million of availability under the Select revolving facility after giving effect to \$39.3 million of outstanding letters of credit. On the last day of each calendar quarter, Select is required to pay each lender a commitment fee in respect of any unused commitments under the Select revolving facility, which is currently 0.375% per annum and subject to adjustment based on Select's leverage ratio, as specified in the Select credit agreement.

As of December 31, 2020, Select's leverage ratio (its ratio of total indebtedness to consolidated EBITDA for the prior four consecutive fiscal quarters), which is required to be maintained at less than 7.00 to 1.00 under the terms of the Select revolving facility, was 3.48 to 1.00.

The Select credit facilities also contain a number of other affirmative and restrictive covenants, including limitations on mergers, consolidations and dissolutions; sales of assets; investments and acquisitions; indebtedness; liens; affiliate transactions; and dividends and restricted payments. The Select credit facilities contain events of default for non-payment of principal and interest when due (subject, as to interest, to a grace period), cross-default and cross-acceleration provisions and an event of default that would be triggered by a change of control.

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Select 6.250% senior notes.

At December 31, 2020, Select had \$1,225.0 million of 6.250% senior notes outstanding (excluding the unamortized premium and debt issuance costs of \$16.8 million).

The terms of the senior notes contains covenants that, among other things, limit Select's ability and the ability of certain of Select's subsidiaries to (i) grant liens on its assets, (ii) make dividend payments, other distributions or other restricted payments, (iii) incur restrictions on the ability of Select's restricted subsidiaries to pay dividends or make other payments, (iv) enter into sale and leaseback transactions, (v) merge, consolidate, transfer or dispose of substantially all of their assets, (vi) incur additional indebtedness, (vii) make investments, (viii) sell assets, including capital stock of subsidiaries, (ix) use the proceeds from sales of assets, including capital stock of restricted subsidiaries, and (x) enter into transactions with affiliates. These covenants are subject to a number of exceptions, limitations and qualifications.

Concentra credit facilities.

At December 31, 2020, Concentra Inc. did not have any borrowings outstanding under the Concentra-JPM revolving facility. At December 31, 2020, Concentra Inc. had \$83.6 million of availability under the Concentra-JPM revolving facility after giving effect to \$16.4 million of outstanding letters of credit. Concentra Inc. is required to pay each lender a commitment fee in respect of any unused commitments under the Concentra-JPM revolving facility, which is currently 0.50% per annum and subject to adjustment based on the first lien net leverage ratio, as specified in the Concentra-JPM first lien credit agreement. Select and Holdings are not obligors with respect to Concentra Inc.'s debt under the Concentra-JPM first lien credit agreement. At December 31, 2020, Concentra Inc. had outstanding borrowings under the Concentra intercompany loan agreement with Select of \$1,133.1 million.

The Concentra-JPM first lien credit agreement contains a number of obligations concerning Concentra Inc. In particular, such obligations require Concentra Inc. to maintain a leverage ratio of 5.75 to 1.00 which is tested quarterly, but only if Revolving Exposure (as defined in the Concentra-JPM first lien credit agreement) exceeds 30% of Revolving Commitments (as defined in the Concentra-JPM first lien credit agreement) on such day. Failure to comply with this covenant would result in an event of default under the Concentra-JPM first lien credit agreement only and, absent a waiver or an amendment from the revolving lenders, preclude Concentra Inc. from making further borrowings under the Concentra-JPM revolving facility and permit the revolving lenders to accelerate all outstanding borrowings under the Concentra-JPM revolving facility. Upon such acceleration, Concentra Inc.'s failure to comply with the financial covenant would result in an event of default with respect to the Concentra intercompany loan agreement.

The Concentra-JPM first lien credit agreement also contains a number of affirmative and restrictive covenants, including limitations on mergers, consolidations and dissolutions; sales of assets; investments and acquisitions; indebtedness; liens; affiliate transactions; and dividends and restricted payments. The Concentra-JPM first lien credit agreement contains events of default for non-payment of principal and interest when due (subject to a grace period for interest), cross-default and cross acceleration provisions and an event of default that would be triggered by a change of control.

The Concentra intercompany loan agreement contains substantially similar obligations, and affirmative and negative covenants.

Liquidity. The COVID-19 pandemic adversely affected certain segments of our operations during the year ended December 31, 2020. The duration and extent of the impact from the COVID-19 pandemic on our operations and liquidity depends on future developments that cannot be accurately predicted at this time; however, we believe our internally generated cash flows, borrowing capacity under the Select and Concentra-JPM revolving facilities, and other measures taken to enhance our liquidity position have allowed and will continue to allow us to finance our operations in both the short and long term. As of December 31, 2020, we had cash and cash equivalents of \$577.1 million, availability of \$410.7 million under the Select revolving facility after giving effect to \$39.3 million of outstanding letters of credit, and availability of \$83.6 million under the Concentra-JPM revolving facility after giving effect to \$16.4 million of outstanding letters of credit.

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On March 27, 2020, the CARES Act, which is explained further within "Regulatory Changes," was enacted. The CARES Act provided additional waivers, reimbursement, grants and other funds to assist health care providers during the COVID-19 pandemic, including \$100.0 billion in appropriations for the Provider Relief Fund, to be used for preventing, preparing, and responding to COVID-19, and for reimbursing "eligible health care providers for health care related expenses or lost revenues that are attributable to coronavirus." We received approximately \$172.6 million of payments under the Provider Relief Fund during the year ended December 31, 2020. We evaluated our compliance with the terms and conditions of the funds and recognized \$90.0 million as other operating income for the year ended December 31, 2020. The remaining Provider Relief Fund payments of approximately \$82.6 million at December 31, 2020 may need to be repaid to the government to the extent they cannot be utilized in accordance with the regulations promulgated by HHS. In 2021, we have received an additional \$34.6 million of payments under the Provider Relief Fund.

In accordance with the CARES Act, CMS expanded its current Accelerated and Advance Payment Program for Medicare providers. Under this program, qualified healthcare providers could receive advanced or accelerated payments from CMS. We received approximately \$321.8 million of advanced payments under this program. The majority of these payments were received in April 2020. On October 1, 2020, a short-term government funding bill was signed into law. This bill, among other things, extended the repayment terms for providers who received advanced payments under the Medicare Accelerated and Advance Payment Program. The bill modified the terms of repayment so that a provider can request no recoupment for one year after the advanced payment was issued, followed by a 25.0% recoupment of Medicare payments during the next 11 months, and 50.0% recoupment of Medicare payments during the last six months. Any amounts that remain unpaid after 29 months would be subject to a 4.0% interest rate. Due to the mechanism in which the advanced payments are repaid, there is uncertainty surrounding when we will repay the advances we received under this program; however, we anticipate that most of the advances will be repaid within the next 12 months.

Additionally, we implemented other temporary measures to reduce operating costs and expenses. Many of these initiatives have been and will continue to be curtailed as we see improvement in patient volumes. These initiatives included reducing labor costs through employee furloughs, salary and wage reductions for certain employees, reducing the hours worked by part time employees, as well as limiting discretionary spending on capital expenditures. We also deferred payment on our share of payroll taxes owed, as allowed by the CARES Act through December 31, 2020. As of December 31, 2020, the Company deferred \$106.2 million of payroll taxes, half of which is due December 31, 2021, with the remaining half due on December 31, 2022.

At December 31, 2020, we were in compliance with each of our financial covenants. As of December 31, 2020, we do not anticipate events or circumstances which would preclude us from complying with our financial covenants in the future or prevent us from making interest and principal payments when due. Our ability to comply with our financial covenants and obligations outlined within our debt agreements can be affected by various risks and uncertainties. Please refer to our risk factors discussed in Item 1A. "Risk Factors" for further discussion.

We may from time to time seek to retire or purchase our outstanding debt through cash purchases and/or exchanges for equity securities, in open market purchases, privately negotiated transactions, tender offers or otherwise. Such repurchases or exchanges, if any, may be funded from operating cash flows or other sources and will depend on prevailing market conditions, our liquidity requirements, contractual restrictions and other factors. The amounts involved may be material.

Stock Repurchase Program. Holdings' board of directors has authorized a common stock repurchase program to repurchase up to \$500.0 million worth of shares of its common stock. The program has been extended until December 31, 2021, and will remain in effect until then, unless further extended or earlier terminated by the board of directors. Stock repurchases under this program may be made in the open market or through privately negotiated transactions, and at times and in such amounts as Holdings deems appropriate. Holdings funds this program with cash on hand and borrowings under the Select revolving facility. During the year ended December 31, 2020, Holdings repurchased 491,559 shares at a cost of approximately \$8.7 million, or \$17.68 per share, which includes transaction costs. Since the inception of the program through December 31, 2020, Holdings has repurchased 38,580,908 shares at a cost of approximately \$356.6 million, or \$9.24 per share, which includes transaction costs.

Use of Capital Resources. We may from time to time pursue opportunities to develop new joint venture relationships with large, regional health systems and other healthcare providers. We also intend to open new outpatient rehabilitation clinics and occupational health centers in local areas that we currently serve where we can benefit from existing referral relationships and brand awareness to produce incremental growth. In addition to our development activities, we may grow through opportunistic acquisitions.

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Commitments and Contingencies

The following contractual obligation table summarizes our contractual obligations and the effect such obligations are expected to have on liquidity and cash flow in future periods.

	Total		2021 2022 - 20		2022 - 2024	924 2025 - 2026		After 2026
				-	(in thousands)			
Debt ⁽¹⁾	\$	3,403,043	\$ 12,621	\$	65,993	\$	3,313,241	\$ 11,188
Interest ⁽²⁾		737,952	146,459		437,330		137,549	16,614
Letters of credit outstanding(1)		55,743	_		55,743		_	_
Purchase obligations ⁽³⁾		125,446	56,221		63,358		5,451	416
Construction contracts ⁽⁴⁾		13,164	13,164		_		_	_
Operating leases ⁽⁵⁾		1,428,903	273,293		569,955		211,424	374,231
Total contractual cash obligations ⁽⁶⁾	\$	5,764,251	\$ 501,758	\$	1,192,379	\$	3,667,665	\$ 402,449

- (1) See Note 11 Long-Term Debt and Notes Payable of the notes to our consolidated financial statements included herein.
 - These figures do not reflect the indebtedness owed by Concentra Inc. to Select pursuant to the Concentra intercompany loan agreement in the amount of \$1,133.1 million as of December 31, 2020, because such indebtedness is eliminated in consolidation.
- (2) The interest obligation for the Select credit facilities was calculated using the average interest rate of 3.2% for the Select term loan at December 31, 2020. The interest obligation for the 6.250% senior notes was calculated using the stated interest rate. The weighted average interest rate of our other debt obligations was 3.9% at December 31, 2020.
- (3) Amounts represent purchase commitments that are not presented as construction contract commitments. Our purchase obligations primarily relate to software licensing and support.
- (4) See Note 21 Commitments and Contingencies of the notes to our consolidated financial statements included herein.
- (5) See Note 6 Leases of the notes to our consolidated financial statements included herein.
- (6) Workers' compensation and professional malpractice liability insurance liabilities of \$112.2 million, which are included as components of other non-current liabilities on the consolidated balance sheet at December 31, 2020, have been excluded from the table above as we cannot reasonably estimate the amounts or periods in which these liabilities will be paid.

Concentra Put Right

Pursuant to the Amended and Restated Limited Liability Company Agreement of Concentra Group Holdings Parent, WCAS and the other members of Concentra Group Holdings Parent and DHHC have Put Rights with respect to their equity interests in Concentra Group Holdings Parent. On January 1, 2020, February 1, 2020 and December 31, 2020, Select, WCAS and DHHC consummated the Concentra Interest Purchases, which were in lieu of, and collectively deemed to constitute, the exercises of WCAS' and DHHC's first and second Put Rights, pursuant to which Select acquired an aggregate amount of approximately 30% of the outstanding membership interests, on a fully diluted basis, of Concentra Group Holdings Parent from WCAS, DHHC and the other equity holders of Concentra Group Holdings Parent, in exchange for an aggregate payment of approximately \$576.4 million. Upon consummation of the Concentra Interest Purchases, Select owns in the aggregate approximately 78.0% of the outstanding membership interests of Concentra Group Holdings Parent on a fully diluted basis and approximately 79.8% of the outstanding voting membership interests of Concentra Group Holdings Parent.

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WCAS and DHHC may exercise their remaining respective Put Rights to sell up to an additional 33 1/3% of the equity interests in Concentra Group Holdings Parent that each, respectively, owned as of February 1, 2018, on an annual basis during the sixty-day period following the delivery of the audited financial statements for the immediately preceding fiscal year. The purchase price of the equity interests is to be based upon a valuation of Concentra Group Holdings Parent performed by an investment bank to be agreed between Select and one of WCAS or DHHC, which valuation will be based on certain precedent transactions using multiples of EBITDA (as defined in the Amended and Restated Limited Liability Company Agreement of Concentra Group Holdings Parent) and capped at an agreed upon multiple of EBITDA. Select has the right to elect to pay the purchase price in cash or in shares of Holdings' common stock. If

Select and one of WCAS or DHHC, which valuation will be based on certain precedent transactions using multiples of EBITDA (as defined in the Amended and Restated Limited Liability Company Agreement of Concentra Group Holdings Parent) and capped at an agreed upon multiple of EBITDA. Select has the right to elect to pay the purchase price in cash or in shares of Holdings' common stock. If WCAS exercises its future Put Right, the other members of Concentra Group Holdings Parent, other than DHHC, may elect to sell to Select, on the same terms as WCAS, a percentage of their equity interests of Concentra Group Holdings Parent that such member owned as of February 1, 2018, up to but not exceeding the percentage of equity interests owned by WCAS as of such date that WCAS has determined to sell to Select in the exercise of its Put Right.

Furthermore, WCAS, DHHC, and the other members of Concentra Group Holdings Parent have a put right with respect to their

Furthermore, WCAS, DHHC, and the other members of Concentra Group Holdings Parent have a put right with respect to their equity interest in Concentra Group Holdings Parent that may only be exercised in the event Holdings or Select experiences a change of control that has not been previously approved by WCAS and DHHC, and which results in change in the senior management of Select (an "SEM COC Put Right"). If an SEM COC Put Right is exercised by WCAS, Select will be obligated to purchase all (but not less than all) of the equity interests of WCAS and the other members of Concentra Group Holdings Parent (other than DHHC) offered by such members at a purchase price based on a valuation of Concentra Group Holdings Parent performed by an investment bank to be agreed between Select and one of WCAS or DHHC, which valuation will be based on certain precedent transactions using multiples of EBITDA and capped at an agreed upon multiple of EBITDA. Similarly, if an SEM COC Put Right is exercised by DHHC, Select will be obligated to purchase all (but not less than all) of the equity interests of DHHC at a purchase price based on a valuation of Concentra Group Holdings Parent performed by an investment bank to be agreed between Select and one of WCAS or DHHC, which valuation will be based on certain precedent transactions using multiples of EBITDA and capped at an agreed upon multiple of EBITDA.

Furthermore, Select has a call right (the "Call Right"), whereby each other member of Concentra Group Holdings Parent will be obligated to sell all or a portion of their equity interests in Concentra Group Holdings Parent to Select at a purchase price based on a valuation of Concentra Group Holdings Parent performed by an investment bank to be mutually agreed upon by Select and either WCAS or DHHC. The valuation will be based on certain precedent transactions using multiples of EBITDA and capped at an agreed upon multiple of EBITDA. Select may first exercise the Call Right after February 1, 2022.

We exclude the approximate amount that we may be required to pay to purchase these equity interests in Concentra Group Holdings Parent from the contractual obligations table above because of the uncertainty as to: (i) whether or not the Put Right, if exercisable, or the Call Right will actually be exercised; (ii) the dollar amounts that would be paid if the Put Right or Call Right is exercised; and (iii) the timing and form of consideration of any such payments.

Effects of Inflation and Changing Prices

We derive a substantial portion of our revenues from the Medicare program. We have been, and could be in the future, affected by the continuing efforts of governmental and private third-party payors to contain healthcare costs by limiting or reducing reimbursement payments.

Additionally, reimbursement payments under governmental and private third-party payor programs may not increase to sufficiently cover increasing costs. Medicare reimbursement in our critical illness recovery hospitals and rehabilitation hospitals is subject to fixed payments under the Medicare prospective payment systems. In accordance with Medicare laws, CMS makes annual adjustments to Medicare payments under what is commonly known as a "market basket update." Generally, these rates are adjusted for inflation. However, these adjustments may not reflect the actual increase in the costs of providing healthcare services and may be reduced by CMS for other adjustments.

The healthcare industry is labor intensive and the Company's largest expenses are labor related costs. Wage and other expenses increase during periods of inflation and when labor shortages occur in the marketplace. There can be no guarantee we will not experience increases in the cost of labor, as the need for clinical healthcare professionals is expected to grow. In addition, suppliers pass along rising costs to us in the form of higher prices. We have little or no ability to pass on these increased costs associated with providing services due to federal laws that establish fixed reimbursement rates.

Recent Accounting Pronouncements

Refer to Note 1 – Organization and Significant Accounting Policies of the notes to our consolidated financial statements included herein for information regarding recent accounting pronouncements.

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Item 7A. Quantitative and Qualitative Disclosures about Market Risk.

We are subject to interest rate risk in connection with our variable rate long-term indebtedness. Our principal interest rate exposure relates to the loans outstanding under the Select credit facilities and Concentra-JPM revolving facility, which generally bear interest at a rate that is indexed against LIBOR.

As of December 31, 2020, Select had outstanding borrowings under the Select credit facilities consisting of a \$2,103.4 million Select term loan (excluding unamortized original issue discount and debt issuance costs of \$17.5 million). Select did not have any borrowings outstanding under the Select revolving facility. As of December 31, 2020, Concentra Inc. did not have any borrowings outstanding under the Concentra-JPM revolving facility.

In order to mitigate our exposure to rising interest rates, we entered into an interest rate cap transaction in October 2020 to limit the 1-month LIBOR rate to 1.0% on \$2.0 billion of principal outstanding under the Select term loan. The agreement is effective on March 31, 2021 after our current interest rate commitment period. The interest rate cap will apply to interest payments from and including April 30, 2021 through September 30, 2024.

As of December 31, 2020, the 1-month LIBOR rate was 0.14%. Currently, a 0.25% change in market interest rates would impact the interest expense on our variable rate debt by \$5.3 million per annum. Beginning March 31, 2021, each 0.25% change in market interest rates would impact the interest expense on our variable rate debt by \$5.3 million until 1-month LIBOR exceeds 1.0%, at which time the impact of increases in 1-month LIBOR on our interest expense will be mitigated in part by the interest rate cap, as described above.

Item 8. Financial Statements and Supplementary Data.

See Consolidated Financial Statements and Notes thereto commencing at Page F-1.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure,

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We carried out an evaluation, under the supervision and with the participation of our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934) as of the end of the period covered in this report. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures, including the accumulation and communication of disclosure to our principal executive officer and principal financial officer as appropriate to allow timely decisions regarding disclosure, are effective as of December 31, 2020 to provide reasonable assurance that material information required to be included in our periodic SEC reports is recorded, processed, summarized, and reported within the time periods specified in the relevant SEC rules and forms.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rule 13a-15(f) of the Securities Exchange Act of 1934) identified in connection with the evaluation required by Rule 13a-15(d) of the Securities Exchange Act of 1934 that occurred during the fourth quarter of the year ended December 31, 2020 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

It should be noted that any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system will be met. In addition, the design of any control system is based in part upon certain assumptions about the likelihood of future events. Because of these and other inherent limitations of control systems, there is only reasonable assurance that our controls will succeed in achieving their goals under all potential future conditions.

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Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining an adequate system of internal control over our financial reporting. In order to evaluate the effectiveness of internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act, management has conducted an assessment, including testing, using the criteria of "Internal Control—Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission, or "COSO," as of December 31, 2020. Our system of internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation and fair presentation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness of internal control over financial reporting to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2020. This assessment was based on criteria for effective internal control over financial reporting described in "Internal Control—Integrated Framework (2013)" issued by COSO. Based on this assessment, management concludes that, as of December 31, 2020, internal control over financial reporting was effective to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with U.S. generally accepted accounting principles. The effectiveness of the Company's internal control over financial reporting as of December 31, 2020 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm as stated in their report which appears herein.

Item 9B. Other Information.

None.

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PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information regarding directors and nominees for directors of the Company, including identification of the audit committee and audit committee financial expert, and Compliance with Section 16(a) of the Exchange Act is presented under the headings "Corporate Governance—Committees of the Board of Directors" and "Election of Directors—Directors and Nominees" in the Company's definitive proxy statement for use in connection with the 2021 Annual Meeting of Stockholders (the "Proxy Statement") to be filed within 120 days after the end of the Company's fiscal year ended December 31, 2020. The information contained under these headings is incorporated herein by reference. Information regarding the executive officers of the Company is included in this annual report on Form 10-K under Item 1 of Part I as permitted by the Instruction to Item 401 of Regulation S-K.

We have adopted a written code of business conduct and ethics, known as our Code of Conduct, which applies to all of our directors, officers, and employees, as well as a Code of Ethics applicable to our senior financial officers, including our Chief Executive Officer, our Chief Financial Officer and our Chief Accounting Officer. Our Code of Conduct and Code of Ethics for senior financial officers are available on our website, www.selectmedicalholdings.com. Our Code of Conduct and Code of Ethics for senior financial officers may also be obtained by contacting investor relations at (717) 972-1100. Any amendments to our Code of Conduct or Code of Ethics for senior financial officers or waivers from the provisions of the codes for our Chief Executive Officer, our Chief Financial Officer and our Chief Accounting Officer will be disclosed on our website promptly following the date of such amendment or waiver.

Item 11. Executive Compensation.

Information concerning executive compensation is presented under the headings "Executive Compensation Discussion and Analysis" and "Compensation Committee Report" in the Proxy Statement. The information contained under these headings is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Information with respect to security ownership of certain beneficial owners and management is set forth under the heading "Security Ownership of Certain Beneficial Owners and Directors and Officers" in the Proxy Statement. The information contained under this heading is incorporated herein by reference.

Equity Compensation Plan Information

Set forth in the table below is a list of all of our equity compensation plans and the number of securities to be issued on exercise of equity rights, average exercise price, and number of securities that would remain available under each plan if outstanding equity rights were exercised as of December 31, 2020.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))(c)
Equity compensation plans approved by security holders:			
Select Medical Holdings Corporation 2016 Equity Incentive Plan	_	_	— (1)
Select Medical Holdings Corporation 2020 Equity Incentive Plan	_	_	6,005,786
Equity compensation plans not approved by security holders	_	_	_

⁽¹⁾ In connection with the approval of the Select Medical Holdings Corporation 2020 Equity Incentive Plan, we no longer issue awards under the Select Medical Holdings Corporation 2016 Equity Incentive Plan.

Item 13. Certain Relationships, Related Transactions and Director Independence.

Information concerning related transactions is presented under the heading "Certain Relationships, Related Transactions and Director Independence" in the Proxy Statement. The information contained under this heading is incorporated herein by reference.

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Number of securities

ATTACHMENT 33 Availability of Funds

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Item 14. Principal Accountant Fees and Services.

Information concerning principal accountant fees and services is presented under the heading "Ratification of Appointment of Independent Registered Public Accounting Firm" in the Proxy Statement. The information contained under this heading is incorporated herein by reference.

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PART IV

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Item 15. Exhibits and Financial Statement Schedules.

- a. The following documents are filed as part of this report:
 - i. Financial Statements: See Index to Financial Statements appearing on page F-1 of this report.
 - Financial Statement Schedule: See Schedule II—Valuation and Qualifying Accounts appearing on page F-43 of this
 report.
 - iii. The following exhibits are filed as part of, or incorporated by reference into, this report:

Number Description

- 2.1 Equity Purchase and Contribution Agreement, by and among Dignity Health Holding Corporation, U.S. HealthWorks, Inc., Concentra Group Holdings, LLC, Concentra Inc. and Concentra Group Holdings Parent, LLC, dated October 22, 2017, incorporated herein by reference to Exhibit 2.1 of the Current Report on Form 8-K of Select Medical Holdings Corporation and Select Medical Corporation filed on October 23, 2017 (Reg. Nos. 001-34465 and 001-31441).
- 3.1 Amended and Restated Certificate of Incorporation of Select Medical Corporation, incorporated by reference to Exhibit 3.1 of Select Medical Corporation's Form S-4 filed June 15, 2005 (Reg. No. 001-31441).
- 3.2 Form of Restated Certificate of Incorporation of Select Medical Holdings Corporation, incorporated by reference to Exhibit 3.3 of Select Medical Holdings Corporation's Form S-1/A filed September 21, 2009 (Reg No. 333-152514).
- 3.3 Amended and Restated Bylaws of Select Medical Corporation, incorporated herein by reference to Exhibit 3.2 of the Quarterly Report on Form 10-Q of Select Medical Holdings Corporation and Select Medical Corporation filed on October 30, 2014 (Reg. Nos. 001-34465 and 001-31441).
- 3.4 Amended and Restated Bylaws of Select Medical Holdings Corporation, as amended, incorporated herein by reference to Exhibit 3.4 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed on February 26, 2016 (Reg. Nos. 001-34465 and 001-31441).
- 4.1 Indenture, dated as of August 1, 2019, by and among Select Medical Corporation, the guarantors named therein and U.S. Bank National Association, as trustee, incorporated herein by reference to Exhibit 4.1 of the Current Report on Form 8-K of Select Medical Holdings Corporation on August 1, 2019 (Reg. No. 001-34465).
- 4.2 Forms of 6.250% Senior Notes due 2026, incorporated herein by reference to Exhibit 4.1 of the Current Report on Form 8-K of Select Medical Holdings Corporation on August 1, 2019 (Reg. No. 001-34465).
- Description of Registrant's Securities, incorporated herein by reference to Exhibit 4.3 of Select Medical Holdings Corporation's Annual Report on Form 10-K for the fiscal year December 31, 2019, filed on February 20, 2020 (Reg. No. 001-34465).
- 10.1 Employment Agreement, dated as of March 1, 2000, between Select Medical Corporation and Rocco A. Ortenzio, incorporated by reference to Exhibit 10.16 of Select Medical Corporation's Registration Statement on Form S-1 filed October 27, 2000 (Reg. No. 333-48856).
- 10.2 Amendment No. 1 to Employment Agreement, dated as of August 8, 2000, between Select Medical Corporation and Rocco A. Ortenzio, incorporated by reference to Exhibit 10.17 of Select Medical Corporation's Registration Statement on Form S-1 filed October 27, 2000 (Reg. No. 333-48856).
- 10.3 Amendment No. 2 to Employment Agreement, dated as of February 23, 2001, between Select Medical Corporation and Rocco A. Ortenzio, incorporated by reference to Exhibit 10.47 of Select Medical Corporation's Registration Statement on Form S-1 March 30, 2001 (Reg. No. 333-48856).
- 10.4 Amendment No. 3 to Employment Agreement, dated as of April 24, 2001, between Select Medical Corporation and Rocco A. Ortenzio, incorporated by reference to Exhibit 10.50 of Select Medical Corporation's Registration Statement on Form S-4 filed June 26, 2001 (Reg. No. 333-63828).
- 10.5 Amendment No. 4 to Employment Agreement, dated as of September 17, 2001, between Select Medical Corporation and Rocco A, Ortenzio, incorporated by reference to Exhibit 10,52 of Select Medical Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2001 (Reg. No. 000-32499).
- 10.6 Amendment No. 5 to Employment Agreement, dated as of February 24, 2005, between Select Medical Corporation and Rocco A. Ortenzio, incorporated by reference to Exhibit 10.10 of Select Medical Corporation's Form S-4 filed June 16, 2005 (Reg. No. 333-125846).
- 10.7 Employment Agreement, dated as of March 1, 2000, between Select Medical Corporation and Robert A. Ortenzio, incorporated by reference to Exhibit 10.14 of Select Medical Corporation's Registration Statement on Form S-1 filed October 27, 2000 (Reg. No. 333-48856).

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Number	Description
10.8	Amendment No. 1 to Employment Agreement, dated as of August 8, 2000, between Select Medical Corporation and Robert A. Ortenzio, incorporated by reference to Exhibit 10.15 of Select Medical Corporation's Registration Statement on Form S-1
	filed October 27, 2000 (Reg. No. 333-48856).
10.9	Amendment No. 2 to Employment Agreement, dated as of February 23, 2001, between Select Medical Corporation and Robert A, Ortenzio, incorporated by reference to Exhibit 10.48 of Select Medical Corporation's Registration Statement on Form S-1 filed March 30, 2001 (Reg. No. 333-48856).
10.10	Amendment No. 3 to Employment Agreement, dated as of September 17, 2001, between Select Medical Corporation and Robert A. Ortenzio, incorporated by reference to Exhibit 10.53 of Select Medical Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2001 (Reg. No. 000-32499).
10.11	Amendment No. 4 to Employment Agreement, dated as of December 10, 2004, between Select Medical Corporation and Robert A. Ortenzio, incorporated by reference to Exhibit 99.3 of Select Medical Corporation's Current Report on Form 8-K filed December 16, 2004 (Reg., No. 001-31441).
10.12	Amendment No. 5 to Employment Agreement, dated as of February 24, 2005, between Select Medical Corporation and Robert A. Ortenzio, incorporated by reference to Exhibit 10.16 of Select Medical Corporation's Form S-4 filed June 16, 2005 (Reg. No. 333-125846).
10.13	Change of Control Agreement, dated as of March 1, 2000, between Select Medical Corporation and Martin F. Jackson, incorporated by reference to Exhibit 10.11 of Select Medical Corporation's Registration Statement on Form S-1 filed October 27, 2000 (Reg. No. 333-48856).
10.14	Amendment to Change of Control Agreement, dated as of February 23, 2001, between Select Medical Corporation and Martin F. Jackson, incorporated by reference to Exhibit 10.52 of Select Medical Corporation's Registration Statement on Form S-1 filed March 30, 2001 (Reg. No. 333-48856).
10.15	Second Amendment to Change of Control Agreement, dated as of February 24, 2005, between Select Medical Corporation and Martin F. Jackson, incorporated by reference to Exhibit 10.24 of Select Medical Corporation's Form S-4 filed June 16, 2005 (Reg. No. 333-125846).
10.16	Change of Control Agreement, dated as of March 1, 2000, between Select Medical Corporation and Michael E. Tarvin, incorporated by reference to Exhibit 10.22 of Select Medical Corporation's Registration Statement on Form S-1 filed October 27, 2000 (Reg. No. 333-48856).
10.17	Amendment to Change of Control Agreement, dated as of February 23, 2001, between Select Medical Corporation and Michael E. Tarvin, incorporated by reference to Exhibit 10.54 of Select Medical Corporation's Registration Statement on Form S-1 filed March 30, 2001 (Reg. No. 333-48856).
10.18	Second Amendment to Change of Control Agreement, dated as of February 24, 2005, between Select Medical Corporation and Michael E. Tarvin, incorporated by reference to Exhibit 10.39 of Select Medical Corporation's Form S-4 filed June 16, 2005 (Reg. No. 333-125846).
10.19	Change of Control Agreement, dated as of March 1, 2000, between Select Medical Corporation and Scott A. Romberger, incorporated by reference to Exhibit 10.56 of Select Medical Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2001 (Reg. No. 000-32499).
10.20	Amendment to Change of Control Agreement, dated as of February 23, 2001, between Select Medical Corporation and Scott A. Romberger, incorporated by reference to Exhibit 10.57 of Select Medical Corporation's Annual Report on Form 10-K for the fiscal year ended December 31, 2001 (Reg. No. 000-32499).
10.21	Second Amendment to Change of Control Agreement, dated as of February 24, 2005, between Select Medical Corporation and Scott A. Romberger, incorporated by reference to Exhibit 10.42 of Select Medical Corporation's Form S-4 filed June 16, 2005 (Reg. No. 333-125846).
10.22	Office Lease Agreement, dated as of June 17, 1999, between Select Medical Corporation and Old Gettysburg Associates III, incorporated by reference to Exhibit 10.27 of Select Medical Corporation's Registration Statement on Form S-1 filed October 27, 2000 (Reg. No. 333-48856).
10.23	First Addendum to Lease Agreement, dated as of April 25, 2008, between Old Gettysburg Associates III and Select Medical Corporation, incorporated by reference to Exhibit 10.65 of Select Medical Holdings Corporation's Form S-1 filed July 24, 2008 (Reg. No. 333-152514).
10.24	Second Addendum to Lease Agreement, dated as of November 1, 2012, between Old Gettysburg Associates III LP and Select Medical Corporation, incorporated by reference to Exhibit 10.37 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed on February 26, 2013 (Reg. Nos. 001-34465 and 001-31441).
10.25	Office Lease Agreement, dated August 25, 2006, between Old Gettysburg Associates IV, L.P. and Select Medical Corporation, incorporated by reference to Exhibit 10.1 of Select Medical Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2006 (Reg. No. 001-31441).

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Number	Description
10.26	First Addendum to Lease Agreement, dated as of November 1, 2012, between Old Gettysburg Associates IV LP and Select Medical Corporation, incorporated by reference to Exhibit 10.39 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed on February 26, 2013 (Reg. Nos. 001-34465 and 001-31441).
10.27	Office Lease Agreement, dated November 1, 2012, by and between Select Medical Corporation and Old Gettysburg Associates, incorporated by reference to Exhibit 10.40 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed on February 26, 2013 (Reg. Nos. 001-34465 and 001-31441).
10.28	Office Lease Agreement, dated November 1, 2012, by and between Select Medical Corporation and Old Gettysburg Associates II, LP, incorporated by reference to Exhibit 10.41 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed on February 26, 2013 (Reg. Nos. 001-34465 and 001-31441).
10.29	Amendment No. 6 to Employment Agreement between Select Medical Corporation and Rocco A. Ortenzio, incorporated by reference to Exhibit 10.95 of Select Medical Holdings Corporation's Form S-1/A filed June 18, 2009 (Reg. No. 333-152514).
10.30	Amendment No. 6 to Employment Agreement between Select Medical Corporation and Robert A. Ortenzio, incorporated by reference to Exhibit 10.96 of Select Medical Holdings Corporation's Form S-1/A filed June 18, 2009 (Reg. No. 333-152514).
10.31	Third Amendment to Change of Control Agreement between Select Medical Corporation and Michael E. Tarvin, incorporated by reference to Exhibit 10.100 of Select Medical Holdings Corporation's Form S-1/A filed June 18, 2009 (Reg. No. 333-152514).
10.32	Third Amendment to Change of Control Agreement between Select Medical Corporation and Scott A. Romberger, incorporated by reference to Exhibit 10.102 of Select Medical Holdings Corporation's Form S-1/A filed June 18, 2009 (Reg. No. 333-152514).
10.33	Third Amendment to Change of Control Agreement between Select Medical Corporation and Martin F. Jackson, incorporated by reference to Exhibit 10.103 of Select Medical Holdings Corporation's Form S-1/A filed June 18, 2009 (Reg. No. 333-152514).
10.34	Employment Agreement, dated September 13, 2010, by and between Select Medical Corporation and David S. Chernow, incorporated herein by reference to Exhibit 10.1 of the Current Report on Form 8-K of Select Medical Holdings Corporation and Select Medical Corporation filed on September 15, 2010, (Reg. Nos. 001-34465 and 001-31441).
10.35	Amendment No. 1 to Employment Agreement, dated March 21, 2011, between Select Medical Corporation and David S. Chernow, incorporated herein by reference to Exhibit 10.8 of the Quarterly Report on Form 10-O of Select Medical Holdings Corporation and Select Medical Corporation filed on May 5, 2011. (Reg. Nos. 001-34465 and 001-31441).
10.36	Amendment No. 7 to Employment Agreement, dated November 10, 2010, by and between Select Medical Corporation and Rocco A. Ortenzio, incorporated herein by reference to Exhibit 10.1 of the Current Report on Form 8-K of Select Medical Holdings Corporation and Select filed on November 15, 2010. (Reg. Nos. 001-34465 and 001-31441).

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Number	Description
10.37	Amendment No. 7 to Employment Agreement, dated November 10, 2010, by and between Select Medical Corporation and Robert A. Ortenzio, incorporated herein by reference to Exhibit 10.2 of the Current Report on Form 8-K of Select Medical Holdings Corporation and Select filed on November 15, 2010. (Reg. Nos. 001-34465 and 001-31441).
10.38	Fourth Amendment to Change of Control Agreement, dated March 8, 2011, between Select Medical Corporation and Martin F. Jackson, incorporated herein by reference to Exhibit 10.111 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed on March 9, 2011 (Reg. Nos. 001-34465 and 001-31441).
10.39	Amendment No. 8 to Employment Agreement, dated March 8, 2011, between Select Medical Corporation and Robert A. Ortenzio, incorporated herein by reference to Exhibit 10.112 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed on March 9, 2011 (Reg. Nos. 001-34465 and 001-31441).
10.40	Amendment No. 8 to Employment Agreement, dated March 8, 2011, between Select Medical Corporation and Rocco A. Ortenzio, incorporated herein by reference to Exhibit 10.113 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed on March 9, 2011 (Reg. Nos. 001-34465 and 001-31441).
10.41	Fourth Amendment to Change of Control Agreement, dated March 8, 2011, between Select Medical Corporation and Scott A. Romberger, incorporated herein by reference to Exhibit 10.115 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed on March 9, 2011 (Reg. Nos. 001-34465 and 001-31441).
10.42	Fourth Amendment to Change of Control Agreement, dated March 8, 2011, between Select Medical Corporation and Michael E. Tarvin, incorporated herein by reference to Exhibit 10.117 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed on March 9, 2011 (Reg. Nos. 001-34465 and 001-31441).
10.43	Office Lease Agreement, dated October 30, 2014, between Century Park Investments, L.P. and Select Medical Corporation, incorporated herein by reference to Exhibit 10.80 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed on February 25, 2015 (Reg. Nos. 001-34465 and 001-31441).
10.44	First Lien Credit Agreement, dated June 1, 2015, by and among, Concentra Holdings, Inc., Concentra, Inc., JPMorgan Chase Bank, N.A. as administrative agent, collateral agent and lender and the additional lenders names therein, incorporated herein by reference to Exhibit 10.3 of the Quarterly Report on Form 10-Q of Select Medical Holdings Corporation and Select Medical Corporation filed on August 6, 2015 (Reg. Nos. 001-34465 and 001-31441).
10.45	First Amendment to Lease Agreement, dated February 24, 2016, between Old Gettysburg II, LP and Select Medical Corporation, incorporated herein by reference to Exhibit 10.82 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed February 26, 2016 (Reg. Nos. 001-34465 and 001-31441).
10.46	Second Amendment to the Lease Agreement, dated June 1, 2016, between Old Gettysburg II, LP and Select Medical Corporation, incorporated herein by reference to Exhibit 10.1 of the Quarterly Report on Form 10-Q of Select Medical Holdings Corporation and Select Medical Corporation filed August 4, 2016 (Reg. Nos. 001-34465 and 001-31441).
10.47	Third Amendment to the Lease Agreement, dated September 19, 2016, between Old Gettysburg II, LP and Select Medical Corporation, incorporated herein by reference to Exhibit 10.1 of the Quarterly Report on Form 10-Q of Select Medical Holdings Corporation and Select Medical Corporation filed November 3, 2016 (Reg. Nos. 001-34465 and 001-31441).
10.48	Amendment No. 1, dated September 26, 2016, among Concentra Inc., Concentra Holdings, Inc., JP Morgan Chase Bank, N.A, as the administrative agent, collateral agent and lender, and the additional lenders named therein, incorporated herein by reference to Exhibit 10.1 of the Current Report on Form 8-K of Select Medical Holdings Corporation and Select Medical Corporation filed on September 28, 2016 (Reg. Nos. 001-34465 and 001-31441).
10.49	Office Lease Agreement, dated October 28, 2016, between Select Medical Corporation and Old Gettysburg Associates V. L.P., incorporated herein by reference to Exhibit 10.3 of the Quarterly Report on Form 10-Q of Select Medical Holdings Corporation and Select Medical Corporation filed November 3, 2016 (Reg. Nos. 001-34465 and 001-31441).
10.50	First Amendment to the Lease Agreement, dated November 15, 2016, between Old Gettysburg Associates and Select Medical Corporation, incorporated herein by reference to Exhibit 10.75 of the Annual Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed February 23, 2017 (Reg. Nos. 001-34465 and 001-31441).

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ımber	Description
10.51	Select Medical Holdings Corporation 2016 Equity Incentive Plan, incorporated herein by reference to Appendix A of to Definitive Proxy Statement on Schedule 14A of Select Medical Holdings Corporation filed March 3, 2016 (Reg. No. 00 34465).
10.52	Form of Restricted Stock Award Agreement under the Select Medical Holdings Corporation 2016 Equity Incentive Plancorporated herein by reference to Exhibit 10.77 of the Annual Report on Form 10-K of Select Medical Holding Corporation and Select Medical Corporation filed February 23, 2017 (Reg Nos. 001-34465 and 001-31441).
10.53	Credit Agreement, dated as of March 6, 2017, among Select Medical Holdings Corporation, Select Medical Corporation JPMorgan Chase Bank, N.A., as Administrative and Collateral Agent, Wells Fargo Securities, LLC and Deutsche Ba Securities Inc., as CoSyndication Agents and RBC Capital Markets, Merrill Lynch, Pierce, Fenner & Smith Incorporate Goldman Sachs Bank USA, PNC Bank, National Association and Morgan Stanley Senior Funding, Inc., as C Documentation Agents and the other lenders and issuing banks party thereto, incorporated herein by reference to Exhi 10.1 of the Current Report on Form 8-K of Select Medical Holdings Corporation and Select Medical Corporation filed March 7, 2017 (Reg Nos. 001- 34465 and 001-31441).
10.54	Change of Control Agreement, dated February 16, 2017, between Select Medical Corporation and John A. Sai incorporated herein by reference to Exhibit 10.2 of the Quarterly Report on Form 10-Q of Select Medical Holdin Corporation and Select Medical Corporation filed May 4, 2017 (Reg Nos. 001-34465 and 001-31441).
10.55	Second Amendment to Lease Agreement, dated as of May 30, 2017, between Old Gettysburg Associates and Select Medi Corporation, incorporated by reference to Exhibit 10.1 of the Quarterly Report on Form 10-Q of Select Medical Holdin Corporation and Select Medical Corporation filed August 3, 2017 (Reg. Nos. 001-34465 and 001-31441).
10.56	Amended and Restated Limited Liability Company Agreement of Concentra Group Holdings Parent, LLC, da February 1, 2018, by and among Concentra Group Holdings Parent, LLC, Select Medical Corporation, Welsh, Cars Anderson & Stowe XII, L.P., Dignity Health Holding Corporation, Cressey & Company IV LP, and the other memb named therein, incorporated herein by reference to Exhibit 10.1 of the Current Report on Form 8-K of Select Medical Holdings Corporation and Select Medical Corporation filed February 2, 2018 (Reg. Nos. 001-34465 and 001-31441).
10.57	Amendment No. 3, dated February 1, 2018, to the First Lien Credit Agreement, dated as of June 1, 2015, among Concerned, MJ Acquisition Corporation, Concentra Holdings, Inc., the Lenders party thereto and JPMorgan Chase Bank, N.A., amended by Amendment No. 1, dated as of September 26, 2016, Amendment No. 2, dated as of March 20, 20 incorporated herein by reference to Exhibit 10.2 of the Current Report on Form 8-K of Select Medical Holdings Corporation filed February 2, 2018 (Reg. Nos. 001-34465 and 001-31441).
10.58	Amendment No. 1, dated March 22, 2018, to the Credit Agreement, dated March 6, 2017, by and among Select Medi- Holdings Corporation, Select Medical Corporation, JPMorgan Chase Bank, N.A., as Administrative Agent and Collate Agent, and the other lenders and issuing banks party thereto, incorporated herein by reference to Exhibit 10.1 of the Curr Report on Form 8-K of Select Medical Holdings Corporation and Select Medical Corporation filed March 23, 2018 (R Nos. 001-34465 and 001-31441).
10.59	Amendment No. 1, dated June 28, 2018, to the Amended and Restated Limited Liability Company Agreement of Concer Group Holdings Parent, LLC, dated February 1, 2018, by and among Concentra Group Holdings Parent, LLC, Sel Medical Corporation, Welsh, Carson, Anderson & Stowe XII, L.P., Dignity Health Holding Corporation, Cressey Company IV LP, and the other members named therein, incorporated herein by reference to Exhibit 10.68 of the Ann Report on Form 10-K of Select Medical Holdings Corporation and Select Medical Corporation filed on February 21, 20 (Reg. Nos. 001-34465 and 001-31441).
10.60	Amendment No. 2, dated October 26, 2018, to the Credit Agreement, dated March 6, 2017, by and among Select Median Holdings Corporation, Select Medical Corporation, JPMorgan Chase Bank, N.A., as Administrative Agent and Collate Agent, and the other lenders and issuing banks party thereto, as amended by Amendment No. 1, dated as of March 22, 20 incorporated herein by reference to Exhibit 10.1 of Current Report on Form 8-K of Select Medical Holdings Corporation Select Medical Corporation filed October 31, 2018 (Reg. Nos. 001-34465 and 001-31441).
10.61	Amendment No. 4, dated October 26, 2018, to the First Lien Credit Agreement, dated as of June 1, 2015, among Concer Holdings Inc., MJ Acquisition Corporation, Concentra Inc., the lenders party thereto and JPMorgan Chase Bank, N.A. Administrative and Collateral Agent, as amended by Amendment No. 1, dated as of September 26, 2016, Amendment No dated as of March 20, 2017 and Amendment No. 3, dated February 1, 2018, incorporated herein by reference to Exhibit 1 of the Current Report on Form 8-K of Select Medical Holdings Corporation and Select Medical Corporation filed Octo 31, 2018 (Reg., Nos. 001-34465 and 001-31441).
10.62	Office Lease Agreement, dated as of October 24, 2018, between 207 Associates and Independence Avenue Investme LLC and Select Medical Corporation, incorporated herein by reference to Exhibit 10.71 of the Annual Report on Form 10 of Select Medical Holdings Corporation and Select Medical Corporation filed on February 21, 2019 (Reg. Nos. 001-34 and 001-31441).

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umber	Description
10.63	Amendment No. 5, dated April 8, 2019, to the First Lien Credit Agreement, dated as of June 1, 2015, among Concentra Holdings Inc., MJ Acquisition Corporation, Concentra Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative and Collateral Agent, as amended by Amendment No. 1, dated as of September 26, 2016, Amendment No. 2, dated as of March 20, 2017, Amendment No. 3, dated as of February 1, 2018, and Amendment No. 4, dated as of October 26, 2018, incorporated herein by reference to Exhibit 10.1 of the Current Report on Form 8-K of Select Medical Holdings
	Corporation and Select Medical Corporation filed April 11, 2019 (Reg. Nos. 001-34465 and 001-31441).
10.64	Amendment No. 3, dated August 1, 2019, to the Credit Agreement, dated March 6, 2017, by and among Select Medical Holdings Corporation, Select Medical Corporation, JPMorgan Chase Bank, N.A., as Administrative Agent and Collateral Agent, and the other lenders and issuing banks party thereto, as amended by Amendment No. 1, dated as of March 22, 2018, and Amendment No. 2, dated as of October 26, 2018, incorporated herein by reference to Exhibit 10.1 of the Current Report on Form 8-K of Select Medical Holdings Corporation filed August 1, 2019 (Reg. No. 001-34465).
10.65	Amendment No. 6, dated September 20, 2019, to the First Lien Credit Agreement, dated as of June 1, 2015, among Concentra Holdings Inc., MJ Acquisition Corporation, Concentra Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent and Collateral Agent, as amended by Amendment No. 1, dated as of September 26, 2016, Amendment No. 2, dated as of March 20, 2017, Amendment No. 3, dated as of February 1, 2018, Amendment No. 4, dated as of October 26, 2018, and Amendment No. 5, dated as of April 8, 2019, incorporated herein by reference to Exhibit 10.1 of the Current Report on Form 8-K of Select Medical Holdings Corporation filed September 24, 2019 (Reg. No. 001-34465).
10.66	Amendment No. 4, dated December 10, 2019, to the Credit Agreement, dated March 6, 2017, by and among Select Medical Holdings Corporation, Select Medical Corporation, JPMorgan Chase Bank, N.A., as Administrative Agent and Collateral Agent, and the other lenders and issuing banks party thereto, as amended by Amendment No. 1, dated as of March 22, 2018, Amendment No. 2, dated as of October 26, 2018 and Amendment No. 3, dated as of August 1, 2019, incorporated herein by reference to Exhibit 10.1 of the Current Report on Form 8-K of Select Medical Holdings Corporation filed December 11, 2019 (Reg. No. 001-34465).
10.67	First Lien Term Loan Credit Agreement, dated December 10, 2019, by and among Select Medical Corporation, Concentra Inc. and Concentra Holdings, Inc., incorporated herein by reference to Exhibit 10.2 of the Current Report on Form 8-K of Select Medical Holdings Corporation filed December 11, 2019 (Reg. No. 001-34465).
10.68	Interest Purchase Agreement, dated January 1, 2020, by and among Concentra Group Holdings Parent, LLC, Select Medical Corporation, Welsh, Carson, Anderson & Stowe XII, L.P., Dignity Health Holding Corporation and the other signatories thereto, incorporated herein by reference to Exhibit 10.1 of the Current Report on Form 8-K, filed on January 2, 2020 (Reg. No. 001-34465).
10.69	Interest Purchase Agreement, dated February 1, 2020, by and among Concentra Group Holdings Parent, LLC, Select Medical Corporation, Welsh, Carson, Anderson & Stowe XII, L.P., Dignity Health Holding Corporation and the other signatories thereto, incorporated herein by reference to Exhibit 10.1 of the Current Report on Form 8-K, filed on February 3, 2020 (Reg. No. 001-34465).
10.70	Select Medical Holdings Corporation 2020 Equity Incentive Plan, incorporated herein by reference to Appendix A of the Definitive Proxy Statement on Schedule 14A of Select Medical Holdings Corporation filed March 4, 2020 (Reg. No. 001-34465).
10.71	Form of Restricted Stock Award Agreement under the Select Medical Holdings Corporation 2020 Equity Incentive Plan.
10.72	First Amendment to Lease Agreement, dated as of April 24, 2020, between 225 Grandview Investors, LLC and Select Medical Corporation, incorporated herein by reference to Exhibit 10.1 of the Quarterly Report on Form 10-Q of Select Medical Holdings Corporation filed on July 30, 2020 (Reg. No. 001-34465).
10.73	Third Addendum to Lease Agreement, dated as of May 5, 2020, between Old Gettysburg Associates III, LP and Select Medical Corporation, incorporated herein by reference to Exhibit 10.2 of the Quarterly Report on Form 10-Q of Select Medical Holdings Corporation filed on July 30, 2020 (Reg. No. 001-34465).
10.74	Interest Purchase Agreement, dated December 31, 2020, by and among Concentra Group Holdings Parent, LLC, Select Medical Corporation, Welsh, Carson, Anderson & Stowe XII, L.P., Dignity Health Holding Corporation and the other signatories thereto, incorporated herein by reference to Exhibit 10.1 of the Current Report on Form 8-K, filed on January 4, 2021 (Reg. No. 001-34465).
10.75	Change of Control Agreement, dated February 18, 2021, between Select Medical Corporation and Thomas P. Mullin.
21.1	Subsidiaries of Select Medical Holdings Corporation.
23	Consent of PricewaterhouseCoopers LLP.
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Executive Vice President and Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Chief Executive Officer, and Executive Vice President and Chief Financial Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

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101.INS XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
 101.SCH Inline XBRL Taxonomy Extension Schema Document.
 101.CAL Inline XBRL Taxonomy Extension Calculation Linkbase Document.
 101.DEF Inline XBRL Taxonomy Extension Definition Linkbase Document.
 101.LAB Inline XBRL Taxonomy Extension Label Linkbase Document.
 101.PRE Inline XBRL Taxonomy Extension Presentation Linkbase Document.

The representations, warranties, and covenants contained in the agreements set forth in this Exhibit Index were made only as of specified dates for the purposes of the applicable agreement, were made solely for the benefit of the parties to such agreement, and may be subject to qualifications and limitations agreed upon by the parties. In particular, the representations, warranties, and covenants contained in such agreement were negotiated with the principal purpose of allocating risk between the parties, rather than establishing matters as facts, and may have been qualified by confidential disclosures. Such representations, warranties, and covenants may also be subject to a contractual standard of materiality different from those generally applicable to stockholders and to reports and documents filed with the SEC. Accordingly, investors should not rely on such representations, warranties, and covenants as characterizations of the actual state of facts or circumstances described therein. Information concerning the subject matter of such representations, warranties, and covenants may change after the date of such agreement, which subsequent information may or may not be fully reflected in the parties' public disclosures.

Item 16. Form 10-K Summary.

None.

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Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SELECT MEDICAL HOLDINGS CORPORATION

Bv:

/s/ MICHAEL E. TARVIN
Michael E. Tarvin

(Executive Vice President, General Counsel and Secretary)

Date: February 25, 2021

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated as of February 25, 2021.

/s/ ROCCO A. ORTENZIO
Rocco A. Ortenzio
Director, Vice Chairman and Co-Founder

/s/ DAVID S. CHERNOW
David S. Chernow
President and Chief Executive Officer (principal executive officer)
/s/ SCOTT A. ROMBERGER
Scott A. Romberger
Senior Vice President and Chief Accounting Officer (principal accounting officer)
/s/ BRYAN C. CRESSEY
Bryan C. Cressey

Director

/s/ JAMES S. ELY III
 James S. Ely III
 Director

/s/ THOMAS A. SCULLY
 Thomas A. Scully
 Director

/s/ MARILYN B. TAVENNER

Marilyn B. Tavenner Director Robert A. Ortenzio
Director, Executive Chairman and Co-Founder
/s/ MARTIN F. JACKSON
Martin F. Jackson
Executive Vice President and Chief Financial Officer (principal
financial officer)

/s/ ROBERT A. ORTENZIO

/s/ RUSSELL L. CARSON Russell L. Carson Director /s/ WILLIAM H. FRIST, M.D. William H. Frist, M.D. Director /s/ DANIEL J. THOMAS Daniel J. Thomas Director

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SELECT MEDICAL HOLDINGS CORPORATION

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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Select Medical Holdings Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Select Medical Holdings Corporation and its subsidiaries (the "Company") as of December 31, 2020 and 2019, and the related consolidated statements of operations, comprehensive income, changes in equity and income and cash flows for each of the three years in the period ended December 31, 2020, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2020 listed in the index appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020 in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for leases as of January 1, 2019.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation of patient accounts receivable

As described in Note 1 to the consolidated financial statements, substantially all of the Company's accounts receivable is related to providing healthcare services to patients. These services are paid for primarily by federal and state governmental authorities, managed care health plans, commercial insurance companies, and workers' compensation and employer-directed programs. As of December 31, 2020, accounts receivable of the Company totaled approximately \$896.8 million. As disclosed by management, accounts receivable is reported at an amount equal to the amount it expects to collect for providing healthcare services to its patients. This amount is inclusive of management's estimate of factors such as implicit discounts and other adjustments, which are estimated using historical experience.

The principal considerations for our determination that performing procedures relating to the valuation of patient accounts receivable is a critical audit matter are the significant judgment by management in estimating accounts receivable at an amount equal to the amount management expects to receive, which in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating the audit evidence obtained in relation to the valuation of patient accounts receivable.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included, among others: (i) testing the operating effectiveness of controls relating to management's valuation of patient accounts receivable, (ii) evaluating management's process for developing its estimate patient accounts receivable, (iii) testing the completeness, accuracy, and relevance of the underlying data used to estimate patient accounts receivable, including historical billing and reimbursement data, and (iv) evaluating the historical accuracy of management's process for developing the estimate of the amount which management expects to collect by comparing actual cash receipts related to patient accounts receivable balances which existed as of the prior period balance sheet date.

/s/ PricewaterhouseCoopers LLP

Harrisburg, Pennsylvania February 25, 2021

We have served as the Company's auditor since 2005.

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PART I FINANCIAL INFORMATION

ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS

Select Medical Holdings Corporation Consolidated Balance Sheets

(in thousands, except share and per share amounts)

	Dece	mber 31, 2019		December 31, 2020
ASSETS			_	December 51, 2020
Current Assets:				
Cash and cash equivalents	\$	335,882	\$	577,061
Accounts receivable	•	762,677	•	896,763
Prepaid income taxes		18,585		5,686
Other current assets		95,848		114,490
Total Current Assets		1,212,992		1,594,000
Operating lease right-of-use assets		1,003,986		1,032,217
Property and equipment, net		998,406		943,420
Goodwill		3,391,955		3,379,014
Identifiable intangible assets, net		409,068		387,541
Other assets		323,881		319,207
Total Assets	\$	7,340,288	\$	7,655,399
LIABILITIES AND EQUITY	<u> </u>	1,2 11,2 11	Ě	· · · · ·
Current Liabilities:				
Current operating lease liabilities	\$	207,950	\$	220,413
Current portion of long-term debt and notes payable	•	25,167	Ψ.	12,621
Accounts payable		145,731		177,087
Accrued payroll		183,754		224,876
Accrued vacation		124,111		132,811
Accrued interest		33,853		29,240
Accrued other		191,076		228,948
Government advances (Note 22)				321,807
Uncarned government assistance (Note 22)		_		82,607
Income taxes payable		2,638		7,956
Total Current Liabilities		914,280	_	1,438,366
Non-current operating lease liabilities		852,897		875,367
Long-term debt, net of current portion		3,419,943		3,389,398
Non-current deferred tax liability		148,258		132,421
Other non-current liabilities		101,334		168,703
Total Liabilities		5,436,712	_	6,004,255
Commitments and contingencies (Note 21)		7,		*,***
Redeemable non-controlling interests		974,541		398,171
Stockholders' Equity:				,
Common stock, \$0.001 par value, 700,000,000 shares authorized, 134,328,112 and 134,850,735 shares issued and outstanding at 2019 and 2020, respectively		134		135
Capital in excess of par		491,038		509,128
Retained carnings		279,800		553,244
Accumulated other comprehensive loss		· —		(2,027)
Total Stockholders' Equity		770,972	_	1,060,480
Non-controlling interests		158,063		192,493
Total Equity		929,035	_	1,252,973
Total Liabilities and Equity	\$	7,340,288	\$	7.655,399
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The accompanying notes are an integral part of these consolidated financial statements.

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Select Medical Holdings Corporation Consolidated Statements of Operations (in thousands, except per share amounts)

	For the Year Ended December 31,								
		2018		2019	2020				
Revenue	\$	5,081,258	\$	5,453,922	\$	5,531,713			
Costs and expenses:									
Cost of services, exclusive of depreciation and amortization		4,341,056		4,641,002		4,710,372			
General and administrative		121,268		128,463		138,037			
Depreciation and amortization		201,655		212,576		205,659			
Total costs and expenses		4,663,979		4,982,041		5,054,068			
Other operating income (Note 22)				_		90,012			
Income from operations		417,279		471,881		567,657			
Other income and expense:									
Loss on early retirement of debt		(14,155)		(38,083)		_			
Equity in earnings of unconsolidated subsidiaries		21,905		24,989		29,440			
Gain on sale of businesses		9,016		6,532		12,387			
Interest expense		(198,493)		(200,570)		(153,011)			
Income before income taxes		235,552		264,749		456,473			
Income tax expense		58,610		63,718		111,867			
Net income		176,942		201,031		344,606			
Less: Net income attributable to non-controlling interests		39,102		52,582		85,611			
Net income attributable to Select Medical Holdings Corporation	\$	137,840	\$	148,449	\$	258,995			
Earnings per common share (Note 20):									
Basic	\$	1.02	\$	1.10	\$	1.93			
Diluted	\$	1.02	\$	1.10	\$	1.93			

The accompanying notes are an integral part of these consolidated financial statements.

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Select Medical Holdings Corporation Consolidated Statements of Comprehensive Income (in thousands)

	For the Year Ended December 31,								
	 2018		2019		2020				
Net income	 176,942		201,031		344,606				
Other comprehensive loss:									
Loss on interest rate cap cash flow hedge, net of tax effect of \$705 thousand			_		(2,027)				
Comprehensive income	 176,942		201,031		342,579				
Less: Comprehensive income attributable to non-controlling interests	39,102		52,582		85,611				
Comprehensive income attributable to Select Medical Holdings Corporation	\$ 137,840	\$	148,449	\$	256,968				

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The accompanying notes are an integral part of these consolidated financial statements.
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Select Medical Holdings Corporation Consolidated Statements of Changes in Equity and Income (in thousands)

		Total Stockholders' Equity														
	Common Stock Issued		Common Stock Par Value		Capital in Excess of Par			Retained Earnings		Accumulated Other omprehensive Loss	s	Total tockholders' Equity	No	1-controlling Interests		Total Equity
Balance at December 31, 2017	134,115	\$	134	\$	463,49	99	\$	359,735	s		s	823,368	\$	109,236	\$	932,604
Net income attributable to Select Medical Holdings Corporation								137,840				137,840				137,840
Net income attributable to non-controlling interests												_		11,327		11,327
Issuance of restricted stock	1,491		1		((1)						_				_
Forfeitures of unvested restricted stock	(168)		0			0						_				_
Vesting of restricted stock					20,44	43						20,443				20,443
Repurchase of common shares	(357)		0		(3,72	28)		(3,109)				(6,837)				(6,837)
Exercise of stock options	185		0		1,72	22						1,722				1,722
Issuance and exchange of non-controlling interests					1,55	53		74,341				75,894		1,921		77,815
Distributions to and purchases of non- controlling interests					(93	32)		(83,617)				(84,549)		(10,839)		(95,388)
Redemption adjustment on non-controlling interests								(164,476)				(164,476)				(164,476)
Other								(363)				(363)		1,553		1,190
Balance at December 31, 2018	135,266	\$	135	\$	482,55	56	\$	320,351	s	_	S	803,042	\$	113,198	\$	916,240
Net income attributable to Select Medical Holdings Corporation								148,449				148,449				148,449
Net income attributable to non-controlling interests												_		26,626		26,626
Issuance of restricted stock	1,500		2			(2)						_				· -
Forfeitures of unvested restricted stock	(43)		0			0						_				_
Vesting of restricted stock					23,38	82						23,382				23,382
Repurchase of common shares	(2,500)		(3)		(22,56	55)		(15,963)				(38,531)				(38,531)
Exercise of stock options	105		0		96	64						964				964
Issuance of non-controlling interests					6,49	99						6,499		31,622		38,121
Distributions to and purchases of non- controlling interests					20	04						204		(15,065)		(14,861)
Redemption adjustment on non-controlling interests								(172,915)				(172,915)				(172,915)
Other								(122)				(122)		1,682		1,560
Balance at December 31, 2019	134,328	\$	134	\$	491,03	38	\$	279,800	5		s	770,972	\$	158,063	\$	929,035
Net income attributable to Select Medical Holdings Corporation								258,995				258,995				258,995
Net income attributable to non-controlling interests												_		47,850		47,850
Issuance of restricted stock	1,478		1			(1)						_				_
Forfeitures of unvested restricted stock	(84)		0			0						_				_
Vesting of restricted stock					24,73	38						24,738				24,738
Repurchase of common shares	(872)		0		(8,99	96)		(7,038)				(16,034)				(16,034)
Issuance of non-controlling interests					3,04	42						3,042		5,020		8,062
Distributions to and purchases of non- controlling interests					10	02		(5,935)				(5,833)		(20,787)		(26,620)
Redemption adjustment on non-controlling interests								27,470				27,470				27,470
Loss on interest rate cap cash flow hedge,										(0.000)		/a nem				(0 per)
net of tax effect Other					/80			(40)		(2,027)		(2,027)		2247		(2,027)
	124 050	_	105	-	(79	<u> </u>	_	(48)	_	(3.00%)	_	(843)	_	2,347	-	1,504
Balance at December 31, 2020	134,850	\$	135	\$	509,12	48	\$	553,244	S	(2,027)	S	1,060,480	\$	192,493	\$	1,252,973

The accompanying notes are an integral part of these consolidated financial statements.

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Select Medical Holdings Corporation Consolidated Statements of Cash Flows (in thousands)

•	ŕ				
		2018	2019		2020
Operating activities		_	_		_
Net income	\$	176,942	\$ 201,031	\$	344,606
Adjustments to reconcile net income to net cash provided by operating activities:					
Distributions from unconsolidated subsidiaries		15,721	20,222		35,390
Depreciation and amortization		201,655	212,576		205,659
Provision for expected credit losses		(103)	3,038		604
Equity in earnings of unconsolidated subsidiaries		(21,905)	(24,989)		(29,440)
Loss on extinguishment of debt		2,999	22,130		
Gain on sale of assets and businesses		(9,168)	(6,321)		(22,563)
Stock compensation expense		23,326	26,451		27,250
Amortization of debt discount, premium and issuance costs		13,112	11,566		2,184
Deferred income taxes		7,217	(7,435)		(14,715)
Changes in operating assets and liabilities, net of effects of business combinations:					
Accounts receivable		54,575	(57,991)		(116,601)
Other current assets		(4,152)	(4,259)		(18,775)
Other assets		7,857	6,122		17,587
Accounts payable		(1,778)	5,743		27,325
Accrued expenses		27,896	37,298		168,839
Government advances		_	_		318,116
Unearned government assistance		_	_		82,607
Net cash provided by operating activities		494,194	445,182		1,028,073
Investing activities					
Business combinations, net of cash acquired		(523,134)	(93,705)		(20,808)
Purchases of property and equipment		(167,281)	(157,126)		(146,440)
Investment in businesses		(13,482)	(66,090)		(31,425)
Proceeds from sale of assets and businesses		6,760	192		83,320
Net cash used in investing activities		(697,137)	 (316,729)		(115,353)
Financing activities		(111,117	 (==-,-=-,		(
Borrowings on revolving facilities		595,000	700,000		470,000
Payments on revolving facilities		(805,000)	(720,000)		(470,000)
Proceeds from term loans		779,823	1,208,106		(470,000)
Payments on term loans		(11,500)	(1,618,170)		(39,843)
Proceeds from 6.250% senior notes		(11,000)	1,244,987		(57,0.5)
Payment on 6.375% senior notes			(710,000)		
Revolving facility debt issuance costs		(1,639)	(310)		_
Borrowings of other debt		42,218	24,225		40,108
Principal payments on other debt		(25,242)	(30,604)		(48,381)
Repurchase of common stock		(6,837)	(38,531)		(16,034)
Proceeds from exercise of stock options		1,722	964		(10,034)
Decrease in overdrafts		(4,380)	(25,083)		_
Proceeds from issuance of non-controlling interests		2,926	18,447		7,564
Distributions to and purchases of non-controlling interests			(21,780)		(38,589)
		(311,519)	(21,/60)		
Purchase of membership interests of Concentra Group Holdings Parent (Note 2)			 		(576,366)
Net cash provided by (used in) financing activities		255,572	32,251		(671,541)
Net increase in cash and cash equivalents		52,629	160,704		241,179
Cash and cash equivalents at beginning of period		122,549	 175,178		335,882
Cash and cash equivalents at end of period	\$	175,178	\$ 335,882	\$	577,061
Supplemental information:					
Cash paid for interest	\$	193,406	\$ 182,992	\$	155,236
Cash paid for taxes		48,153	70,592		108,890
Non-cash investing and financing activities:					
Liabilities for purchases of property and equipment	\$	29,134	\$ 28,760	\$	24,480
Non-cash equity exchange for acquisition of U.S. HealthWorks		238,000	_		_

The accompanying notes are an integral part of these consolidated financial statements.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Significant Accounting Policies

Business Description

The consolidated financial statements of Select Medical Holdings Corporation ("Holdings") include the accounts of its wholly owned subsidiary, Select Medical Corporation ("Select"). Holdings conducts substantially all of its business through Select and its subsidiaries. Holdings and Select and its subsidiaries are collectively referred to as the "Company."

The Company is, based on number of facilities, one of the largest operators of critical illness recovery hospitals, rehabilitation hospitals, outpatient rehabilitation clinics, and occupational health centers in the United States. As of December 31, 2020, the Company had operations in 46 states and the District of Columbia. As of December 31, 2020, the Company operated 99 critical illness recovery hospitals, 30 rehabilitation hospitals, and 1,788 outpatient rehabilitation clinics. As of December 31, 2020, Concentra, a joint venture subsidiary, operated 517 occupational health centers. Concentra also operated 134 onsite clinics at employer worksites.

The Company operates through four business segments: the critical illness recovery hospital segment, the rehabilitation segment, and the Concentra segment. The Company's critical illness recovery hospital segment consists of hospitals designed to serve the needs of patients recovering from critical illnesses, often with complex medical needs, and the rehabilitation hospital segment consists of hospitals designed to serve patients that require intensive physical rehabilitation care. Patients are typically admitted to the Company's critical illness recovery hospitals and rehabilitation hospitals from general acute care hospitals. The Company's outpatient rehabilitation segment consists of clinics that provide physical, occupational, and speech rehabilitation services. The Company's Concentra segment consists of occupational health centers that provide workers' compensation injury care, physical therapy, and consumer health services and onsite clinics located at employer worksites that deliver occupational medicine services.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses. Estimates and assumptions are used for, but not limited to: revenue recognition, allowances for expected credit losses, estimated useful lives of assets, the fair value of goodwill and intangible assets, amounts payable for self-insured losses, and the computation of income taxes. Future events and their effects cannot be predicted with certainty; accordingly, the Company's accounting estimates require the exercise of judgment. The accounting estimates used in the preparation of the financial statements will change as new events occur, as more experience is acquired, as additional information is obtained, and as the Company's operating environment changes. The Company's management evaluates and updates assumptions and estimates on an ongoing basis. Actual results could differ from those estimates.

Principles of Consolidation

The consolidated financial statements include the accounts of Holdings, Select, and the subsidiaries, limited liability companies, limited partnerships, and variable interest entities in which the Company has a controlling financial interest. All intercompany balances and transactions are eliminated in consolidation.

Non-Controlling Interests

The ownership interests held by outside parties in subsidiaries, which include limited liability companies and limited partnerships, controlled by the Company are classified as non-controlling interests. Net income or loss is attributed to the Company's non-controlling interests. Some of the Company's non-controlling ownership interests consist of outside parties that have certain redemption rights that, if exercised, require the Company to purchase the parties' ownership interests. These interests are classified and reported as redeemable non-controlling interests and have been adjusted to their approximate redemption values, after the attribution of net income or loss.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Organization and Significant Accounting Policies (Continued)

Earnings per Share

The Company's capital structure includes common stock and unvested restricted stock awards. To compute earnings per share ("EPS"), the Company applies the two-class method because the Company's unvested restricted stock awards are participating securities which are entitled to participate equally with the Company's common stock in undistributed earnings. Application of the Company's two-class method is as follows:

- (i) Net income attributable to the Company is reduced by the amount of dividends declared and by the contractual amount of dividends that must be paid for the current period for each class of stock, if any.
- (ii) The remaining undistributed net income of the Company is then equally allocated to its common stock and unvested restricted stock awards, as if all of the earnings for the period had been distributed. The total net income allocated to each security is determined by adding both distributed and undistributed net income for the period.
- (iii) The net income allocated to each security is then divided by the weighted average number of outstanding shares for the period to determine the EPS for each security considered in the two-class method.

Cash and Cash Equivalents

The Company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. Cash equivalents are stated at cost which approximates fair value.

Accounts Receivable

Substantially all of the Company's accounts receivable is related to providing healthcare services to patients. These services are paid for primarily by federal and state governmental authorities, managed care health plans, commercial insurance companies, workers' compensation programs, and employer-directed programs. The Company's general policy is to verify insurance coverage prior to the date of admission for patients admitted to its critical illness recovery hospitals and rehabilitation hospitals. Within the Company's outpatient rehabilitation clinics, insurance coverage is verified prior to the patient's visit. Within the Company's Concentra centers, insurance coverage is verified or an authorization is received from the patient's employer prior to the patient's visit.

The Company performs periodic assessments to determine if an allowance for expected credit losses is necessary. The Company considers its incurred loss experience and adjusts for known and expected events and other circumstances. In estimating its expected credit losses, the Company may consider changes in the length of time its receivables have been outstanding, changes in credit ratings for its payors, requests from payors to alter payment terms due to financial difficulty, and notices of payor bankruptcies or payors entering receivership. Because the Company's accounts receivable is typically paid for by highly-solvent, creditworthy payors, such as Medicare, other governmental programs, and highly-regulated commercial insurers on behalf of the patient, the Company's credit losses have been infrequent and insignificant in nature. Amounts recognized for allowances for expected credit losses are immaterial to the consolidated financial statements.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Organization and Significant Accounting Policies (Continued)

Leases

The Company adopted Accounting Standards Codification ("ASC") Topic 842, *Leases* as of January 1, 2019. The Company used the modified retrospective approach for leases which existed on that date. Prior comparative periods were not adjusted and continue to be reported in accordance with ASC Topic 840, *Leases*.

Under ASC 842, the Company evaluates whether a contract is or contains a lease at the inception of the contract. Upon lease commencement, the date on which a lessor makes the underlying asset available to the Company for use, the Company classifies the lease as either an operating or finance lease. Most of the Company's facility leases are classified as operating leases.

A right-of-use asset represents the Company's right to use an underlying asset for the lease term while the lease liability represents an obligation to make lease payments arising from a lease. Right-of-use assets and lease liabilities are measured at the present value of the remaining, fixed lease payments at lease commencement. As most of the Company's leases do not specify an implicit rate, the Company uses its incremental borrowing rate, which coincides with the lease term at the commencement of a lease, in determining the present value of its remaining lease payments. The Company's leases may also specify extension or termination clauses; these options are factored into the measurement of the lease liability when it is reasonably certain that the Company will exercise the option. Right-of-use assets also include any prepaid lease payments and initial direct costs, less any lease incentive received, at the lease commencement date.

The Company has elected to account for lease and non-lease components, such as common area maintenance, as a single lease component for its facility leases. As a result, the fixed payments that would otherwise be allocated to the non-lease components are accounted for as lease payments and are included in the measurement of the Company's right-of-use asset and lease liability.

For the Company's operating leases, lease expense, a component of cost of services and general and administrative expense on the consolidated statements of operations, is recognized on a straight-line basis over the lease term. For the Company's finance leases, interest expense on the lease liability is recognized using the effective interest method and amortization expense related to the right-of-use asset is recognized on a straight-line basis over the shorter of the estimated useful life of the asset or the lease term. The Company also makes variable lease payments which are expensed as incurred. These payments relate to changes in indexes or rates after the lease commencement date, as well as property taxes, insurance, and common area maintenance which were not fixed at lease commencement. This expense is a component of cost of services and general and administrative expense on the consolidated statements of operations.

The Company may enter into arrangements to sublease portions of its facilities and the Company typically retains the obligation to the lessor under these arrangements. The Company's subleases are classified as operating leases; accordingly, the Company continues to account for the original leases as it did prior to commencement of the subleases. Sublease income, a component of cost of services on the consolidated statements of operations, is recognized on a straight-line basis, as a reduction to lease expense, over the term of the sublease.

The Company elected the short-term lease exemption for equipment leases; accordingly, equipment leases with terms of 12 months or less are not recorded on the consolidated balance sheets. For these leases, the Company recognizes lease payments on a straight-line basis over the lease term and variable lease payments are expensed as incurred. These expenses are included as components of cost of services on the consolidated statements of operations.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Organization and Significant Accounting Policies (Continued)

Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation. Maintenance and repairs of property and equipment are expensed as incurred. Improvements that increase the estimated useful life of an asset are capitalized. Direct internal and external costs of developing software for internal use, including programming and enhancements, are capitalized and depreciated over the estimated useful lives once the software is placed in service. Capitalized software costs are included within furniture and equipment. Software training costs, maintenance, and repairs are expensed as incurred. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets or the term of the lease, as appropriate. The general range of useful lives is as follows:

Land improvements5 - 25 yearsLeasehold improvements1 - 20 yearsBuildings40 yearsBuilding improvements5 - 40 yearsFurniture and equipment1 - 20 years

The Company's long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of those assets or asset groups may not be recoverable. If the expected undiscounted future cash flows are less than the carrying amount of such assets or asset groups, the Company recognizes an impairment loss to the extent the carrying amount exceeds its estimated fair value.

Intangible Assets

Goodwill and indefinite-lived identifiable intangible assets

Goodwill and other indefinite-lived intangible assets are recognized primarily as the result of business combinations. Goodwill is assigned to reporting units based upon the specific nature of the business acquired. When a business combination contains business components related to more than one reporting unit, goodwill is assigned to each reporting unit based upon an allocation determined by the relative fair values of the business acquired. When the Company disposes of a business, the Company allocates a portion of the reporting unit's goodwill to that business using the relative fair value methodology.

Goodwill and other indefinite-lived intangible assets are not amortized, but instead are subject to periodic impairment evaluations. Impairment tests are required to be conducted at least annually or when events or conditions occur that might suggest a possible impairment. These events or conditions include, but are not limited to: a significant adverse change in the business environment, regulatory environment, or legal factors; a current period operating or cash flow loss combined with a history of such losses or a projection of continuing losses; or a sale or disposition of a significant portion of a reporting unit. The occurrence of one of these events or conditions could significantly impact an impairment assessment, necessitating an impairment charge.

The Company may first assess qualitatively whether goodwill is more likely than not impaired by considering relevant events or circumstances that affect the fair value or carrying amount of a reporting unit. If goodwill is more likely than not impaired, the Company is then required to complete a quantitative analysis. The Company considers both the income and market approach in determining the fair values of its reporting units when performing a quantitative analysis. If the carrying value of a reporting unit exceeds its fair value, an impairment charge is recognized equal to the difference between the carrying amount of the reporting unit and its fair value, not to exceed the carrying value of goodwill of the reporting unit.

At December 31, 2020, the Company's other indefinite-lived intangible assets consist of trademarks, certificates of need, and accreditations. To determine the fair values of its trademarks, the Company uses a relief from royalty income approach. For the Company's certificates of need and accreditations, the Company performs qualitative assessments. As part of these assessments, the Company evaluates the current business environment, regulatory environment, legal and other company-specific factors. If it is more likely than not that the fair values are less than the carrying values, the Company performs a quantitative impairment test.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Organization and Significant Accounting Policies (Continued)

The Company's most recent impairment assessments were completed during the fourth quarter of 2020 utilizing information as of October 1, 2020. The Company did not identify any instances of impairment with respect to goodwill or other indefinite-lived intangible assets as of October 1, 2020.

Finite-lived identifiable intangible assets

At December 31, 2020, the Company's finite-lived intangible assets consist of customer relationships and non-compete agreements. Finite-lived intangible assets are amortized based on the pattern in which the economic benefits are consumed or otherwise depleted. If such a pattern cannot be reliably determined, finite-lived intangible assets are amortized on a straight-line basis over their estimated lives. Management believes that the below estimated useful lives are reasonable based on the economic factors applicable to each class of finite-lived intangible asset.

Customer relationships 5-15 years Non-compete agreements 1-15 years 1-15 years

The Company's finite-lived intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of those assets or asset groups may not be recoverable. If the expected undiscounted future cash flows are less than the carrying amount of such assets or asset groups, the Company recognizes an impairment loss to the extent the carrying amount exceeds its estimated fair value.

Equity Method Investments

The Company applies the equity method of accounting for investments in which the Company has the ability to exercise significant influence over the operating and financial policies of the investee, but does not possess a controlling financial interest in the investee. Investments of this nature are recorded at their original cost and adjusted periodically to recognize the Company's proportionate share of its investees' net income or losses after the date of investment. When net losses from an investment accounted for under the equity method exceed the carrying amount, the investment balance is reduced to zero. The Company resumes accounting for the investment under the equity method if the investee subsequently reports net income and the Company's share of that net income exceeds the share of the net losses not recognized during the period the equity method was suspended. Investments are written down only when there is clear evidence that a decline in value that is other than temporary has occurred. The Company evaluates its equity method investments for impairment when there is evidence or indicators that a loss in value may be other than temporary.

Income Taxes

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company's financial statements. Deferred tax assets and liabilities are determined on the basis of the differences between the book and tax bases of assets and liabilities by using enacted tax rates in effect for the year in which the differences are expected to reverse. The Company also recognizes the future tax benefits from net operating loss carryforwards as deferred tax assets. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company evaluates the realizability of deferred tax assets and reduces those assets using a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset will not be realized. Among the factors used to assess the likelihood of realization are projections of future taxable income streams, the expected timing of the reversals of existing temporary differences, and the impact of tax planning strategies that could be implemented to avoid the potential loss of future tax benefits.

Reserves for uncertain tax positions are established for exposure items related to various federal and state tax matters. Income tax reserves are recorded when an exposure is identified and when, in the opinion of management, it is more likely than not that a tax position will not be sustained and the amount of the liability can be estimated.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Organization and Significant Accounting Policies (Continued)

Insurance Risk Programs

Under a number of the Company's insurance programs, which include the Company's employee health insurance, workers' compensation, and professional malpractice liability insurance programs, the Company is liable for a portion of its losses before it can attempt to recover from the applicable insurance carrier. The Company accrues for losses under an occurrence-based approach whereby the Company estimates the losses that will be incurred in a respective accounting period and accrues that estimated liability using actuarial methods. These programs are monitored quarterly and estimates are revised as necessary to take into account additional information. The Company also records insurance proceeds receivable for liabilities which exceed the Company's deductibles and self-insured retention limits and are recoverable through its insurance policies.

Revenue Recognition

Patient Services Revenue

Patient service revenues are recognized at an amount equal to the consideration the Company expects to be entitled to in exchange for providing healthcare services to its patients. Amounts owed for services provided are the obligations of the Company's patients and can be paid for by third-party payors, including health insurers, government programs, and other payors on the patient's behalf. Most all of the Company's patients are subject to healthcare coverage through a third party payor arrangement. Given the nature and extent of third party payor arrangements, the Company disaggregates its revenue by the following payor categories:

Medicare: Medicare is a federal program that provides medical insurance benefits to persons age 65 and over, some disabled persons, and persons with end stage renal disease. The Company determines the transaction price for services provided to patients who are Medicare beneficiaries using Medicare's prospective payment systems and other payment methods. The expected payment is determined by the level of clinical services provided and is sensitive to the patient's length of stay.

Non-Medicare: Non-Medicare payor sources include, but are not limited to, insurance companies (including Medicare Advantage plans), state Medicaid programs, workers' compensation programs, health maintenance organizations, preferred provider organizations, other managed care companies and employers, as well as patients themselves. The transaction price for services provided to non-Medicare patients include amounts prescribed by state and federal fee schedules, negotiated contract amounts, or usual and customary amounts associated with the specific payor or based on the service provided. The Company applies the portfolio approach in determining revenues for certain homogeneous non-Medicare patient populations.

The Company's principal revenue source comes from providing healthcare services to patients. For patients treated within the Company's outpatient rehabilitation clinics and Concentra centers, performance obligations are generally satisfied upon completion of the patient's visit. For patients treated within the Company's critical illness recovery and rehabilitation hospitals, the Company's performance obligation is satisfied over the duration of the patient's stay. As such, the Company recognizes revenue over the patient's stay in amounts which are commensurate with the level of services provided to the patient. Any differences between the Company's estimates of the transaction price, which may be impacted by various factors as described further below, and the payment received upon a patient's discharge would be recognized as revenue in the period in which this change becomes known; such adjustments are not significant. The Company has an obligation to continue delivering treatment to patients admitted in the Company's critical illness recovery and rehabilitation hospitals at the end of each reporting period. These performance obligations are typically satisfied in the subsequent month following the reporting period. The Company has elected the optional exemption which allows for the exclusion of disclosures regarding the transaction price allocated to unsatisfied performance obligations of contracts with a duration of less than one year.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Organization and Significant Accounting Policies (Continued)

Revenue earned from providing services to patients is variable in nature, as the Company is required to make judgments which impact the transaction price, such as a patient's condition and length of stay. These factors, among others, impact the payment the Company expects to receive for providing services. Variable consideration included in the transaction price is inclusive of the Company's estimates of implicit discounts and other adjustments related to timely filing and documentation denials, out of network adjustments, and medical necessity denials, which are estimated using the Company's historical experience. The Company is also subject to regular post-payment inquiries, investigations, and audits of the claims it submits for services provided. Some claims can take several years for resolution and may result in adjustments to the transaction price. Management includes in its estimates of the transaction price its expectations for these types of adjustments such that the amount of cumulative revenue recognized will not be subject to significant reversal in future periods. Historically, adjustments arising from a change in the transaction price have not been significant.

Other Revenues

The Company recognizes revenue for other services which principally consist of management and employee leasing services under contractual arrangements with both related parties affiliated with the Company and non-affiliated healthcare institutions. The Company accounts for management and employee leasing services as single performance obligations satisfied over time. The transaction price is variable in nature and the Company recognizes revenue in amounts which are commensurate with the level of services provided during the period. The Company's transaction price is determined such that the amount of cumulative revenue recognized will not be subject to significant reversal in future periods.

Recent Accounting Pronouncements

Reference Rate Reform

In March 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-04, Reference Rate Reform (Topic 848), Facilitation of the Effects of Reference Rate Reform on Financial Reporting and in January 2021, the FASB issued 2021-01, Reference Rate Reform (Topic 848), Scope, which further clarified the scope of the reference rate reform optional practical expedients and exceptions outlined in Topic 848. Topic 848 provides temporary relief from some of the existing rules governing contract modifications when the modification is related to the replacement of the London Interbank Offered Rate ("LIBOR") or other reference rates discontinued as a result of reference rate reform. For eligible contract modifications, the update generally allows an entity to account for and present modifications as an event that does not require contract remeasurement at the modification date or reassessment of a previous accounting determination. That is, the modified contract is accounted for as a continuation of the existing contract. For cash flow hedging relationships affected by reference rate reform, Topic 848 provides expedients that allow an entity to (i) change the reference rate of either the forecasted transaction or hedging instrument due to reference rate reform without requiring dedesignation of the hedging relationship; (ii) assert that changes to the hedged forecasted transaction due to reference rate reform will not impact whether it remains probable of occurring; and (iii) for the purposes of assessment of hedge effectiveness assume that the reference rate will not be replaced for the remainder of the hedging relationship if both the hedged forecasted transaction and hedging instrument are expected to be impacted by reference rate reform. The standard was effective upon issuance on March 12, 2020, and the optional practical expedients can generally be applied to contract modifications made and hedging relationships entered into on or before December 31, 2022.

Borrowings under the Select credit agreement bear interest, at the election of Select, based on LIBOR or an alternate base rate. Provisions within the Select credit agreement currently provide the Company with the ability to agree with JPMorgan Chase Bank, N.A., as administrative agent to the lenders, to replace LIBOR with a different reference rate in the event that LIBOR ceases to exist. For the Company's cash flow hedge, described further in Note 12 — Interest Rate Cap, the Company has elected to assert that the hedged forecasted transaction remains probable of occurring and for the purposes of assessment of hedge effectiveness assume that the reference rate will not be replaced for the remainder of the hedging relationship, as outlined by Topic 848. The Company is currently evaluating the other optional practical expedients provided under the standard and the effects they could have on the Company's consolidated financial statements, if elected.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Organization and Significant Accounting Policies (Continued)

Convertible Instruments and Contracts on an Entity's Own Equity

In August 2020, the FASB issued ASU 2020-06, Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity. The ASU simplifies the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments and contracts on an entity's own equity. As part of this update, convertible instruments are to be included in diluted earnings per share using the if-converted method, rather than the treasury stock method. Further, contracts which can be settled in cash or shares, excluding liability-classified share-based payment awards, are to be included in diluted earnings per share on an if-converted basis if the effect is dilutive, regardless of whether the entity or the counterparty can choose between cash and share settlement. The share-settlement presumption may not be rebutted based on past experience or a stated policy.

This pronouncement is effective for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2021. The Company plans to adopt this pronouncement as of January 1, 2022. The use of either the modified retrospective or fully retrospective method of transition is permitted. The Company is currently evaluating the impact ASU 2020-06 will have on the Company's consolidated financial statements upon adoption.

Recently Adopted Accounting Pronouncements

Financial Instruments

On January 1, 2020, the Company adopted ASU 2016-13, Financial Instruments — Credit Losses: Measurement of Credit Losses on Financial Instruments (Topic 326), which replaced the incurred loss approach for recognizing credit losses on financial instruments with an expected loss approach. The expected loss approach is subject to management judgments using assessments of incurred credit losses, assessments of current conditions, and forecasts using reasonable and supportable assumptions. The standard was required to be applied using the modified retrospective approach with a cumulative-effect adjustment to retained earnings, if any, upon adoption.

The Company's primary financial instrument subject to the standard is its accounts receivable derived from contracts with its patients. Historically, the Company has experienced infrequent, immaterial credit losses related to its accounts receivable and, based on its experience, believes the risk of material defaults is low. The Company experienced credit losses of \$1.1 million for the year ended December 31, 2017, credit loss recoveries of \$0.1 million for the year ended December 31, 2018, and credit losses of \$3.0 million for the year ended December 31, 2019. The Company's historical credit losses have been infrequent and immaterial largely because the Company's accounts receivable are typically paid for by highly-solvent, creditworthy payors, such as Medicare, other governmental programs, and highly-regulated commercial insurers, on behalf of the patient.

In estimating the Company's expected credit losses under Topic 326, the Company considers its incurred loss experience and adjusts for known and expected events and other circumstances, identified using periodic assessments implemented by the Company, which management believes are relevant in assessing the collectability of its accounts receivable. Because of the infrequent and insignificant nature of the Company's historical credit losses, forecasts of expected credit losses are generally unnecessary. Expected credit losses are recognized by the Company through an allowance for credit losses and related credit loss expense.

As of January 1, 2020, the Company completed its expected credit loss assessment for its financial instruments subject to Topic 326. The Company's estimate of expected credit losses as of January 1, 2020, resulted in no adjustments to the allowance for credit losses and no cumulative-effect adjustment to retained earnings on the adoption date of the standard.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. Organization and Significant Accounting Policies (Continued)

Goodwill

On January 1, 2020, the Company adopted ASU 2017-04, Intangibles—Goodwill and Other: Simplifying the Test for Goodwill Impairment. This amendment eliminates the requirement to calculate the implied fair value of goodwill, the second step of the quantitative goodwill impairment test, to measure a goodwill impairment charge. Instead, an impairment charge will be based on the excess of a reporting unit's carrying amount over its fair value. ASU 2017-04 did not impact the Company's consolidated financial statements upon adoption.

2. Redeemable Non-Controlling Interests

The Company's redeemable non-controlling interests are comprised primarily of the voting membership interests owned by outside members of Concentra Group Holdings Parent, LLC ("Concentra Group Holdings Parent"), each which have put rights with respect to their interests in Concentra Group Holdings Parent. The redemption value of these membership interests is approximately \$939.9 million and \$368.9 million as of December 31, 2019 and 2020, respectively.

During the year ended December 31, 2020, Select, Welsh, Carson, Anderson & Stowe XII, L.P. ("WCAS"), Dignity Health Holding Corporation ("DHHC"), and other members of Concentra Group Holdings Parent entered into agreements pursuant to which Select acquired additional outstanding membership interests of Concentra Group Holdings Parent. The aggregate purchase price for these interests was \$576.4 million. Following these purchases, Select owns approximately 78.0% of the outstanding membership interests of Concentra Group Holdings Parent on a fully diluted basis and approximately 79.8% of the outstanding voting membership interests of Concentra Group Holdings Parent.

For the Year Ended December 31.

The changes in redeemable non-controlling interests were as follows:

	2018	2019	2020
		(in thousands)	
Balance as of January 1	\$ 640,818	\$ 780,488	\$ 974,541
Net income attributable to redeemable non-controlling interests	27,775	25,956	37,761
Issuance of redeemable non-controlling interests	163,659	_	_
Distributions to and purchases of redeemable non-controlling interests	(217,570)	(6,205)	(11,255)
Purchase of membership interests of Concentra Group Holdings Parent	_	_	(576,366)
Redemption adjustment on redeemable non-controlling interests	164,476	172,915	(27,470)
Other	 1,330	1,387	 960
Balance as of December 31	\$ 780,488	\$ 974,541	\$ 398,171

3. Credit Risk and Pavor Concentrations

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash balances and accounts receivable. The Company's excess cash is held with large financial institutions. The Company grants unsecured credit to its patients, most of whom reside in the service area of the Company's facilities and are insured under third-party payor agreements.

Because of the diversity in the Company's non-governmental third-party payor base, as well as their geographic dispersion, accounts receivable due from the Medicare program represent the Company's only significant concentration of credit risk. Approximately 15% and 18% of the Company's accounts receivable is due from Medicare at December 31, 2019 and 2020, respectively.

Revenues from providing services to patients covered under the Medicare program represented approximately 27%, 26%, and 25% of the Company's total revenue for the years ended December 31, 2018, 2019, and 2020, respectively. As a provider of services under the Medicare program, the Company is subject to extensive regulations. The inability of any of the Company's critical illness recovery hospitals, rehabilitation hospitals, or outpatient rehabilitation clinics to comply with Medicare regulations can result in the Company receiving significantly less Medicare payments than the Company currently receives for the services it provides to its patients.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

4. Acquisitions

U.S. HealthWorks Acquisition

On February 1, 2018, Concentra acquired all of the issued and outstanding shares of stock of U.S. HealthWorks, Inc. ("U.S. HealthWorks"), an occupational medicine and urgent care provider, from DHHC. Concentra acquired U.S. HealthWorks for \$753.6 million. DHHC, a subsidiary of Dignity Health, was issued a 20.0% equity interest in Concentra Group Holdings Parent, which was valued at \$238.0 million. The remainder of the purchase price was paid in cash. Select retained a majority voting interest in Concentra Group Holdings Parent following the closing of the transaction.

U.S. HealthWorks contributed revenue of \$488.8 million for the year ended December 31, 2018, which is reflected in the Company's consolidated statement of operations. Due to the integrated nature of the Company's operations, the Company believes it is not practicable to separately identify earnings of U.S. HealthWorks on a stand-alone basis.

Pro Forma Results

The following pro forma unaudited results of operations have been prepared assuming the acquisition of U.S. HealthWorks occurred on January 1, 2017. Acquisition costs of \$2.9 million were excluded from the pro forma results. These results are not necessarily indicative of the results of future operations nor of the results that would have occurred had the acquisition been consummated on the aforementioned date.

	F	or the Year Ended December 31, 2018
		(in thousands)
Revenue	\$	5,128,838
Net income attributable to the Company		140,488

Other Acquisitions

During the year ended December 31, 2019, the Company made acquisitions consisting of a critical illness recovery hospital, rehabilitation hospital, outpatient rehabilitation, and Concentra businesses. The consideration given for these acquired businesses consisted principally of \$93.7 million of cash and the issuance of \$15.1 million of non-controlling interests. The Company allocated the purchase price of these acquired businesses to assets acquired, principally property and equipment, and liabilities assumed based on their estimated fair values The Company recognized goodwill of \$33.6 million, \$14.3 million, \$13.0 million, and \$16.1 million in our critical illness recovery hospital, rehabilitation hospital, outpatient rehabilitation, and Concentra reporting units, respectively. These acquired businesses are not material individually or collectively to the Company's consolidated financial statements.

During the year ended December 31, 2020, the Company made acquisitions consisting of critical illness recovery hospital, rehabilitation hospital, outpatient rehabilitation, and Concentra businesses. The consideration given for these acquired businesses consisted principally of \$20.8 million of cash. The Company allocated the purchase price of these acquired businesses to assets acquired, principally accounts receivable and property and equipment, and liabilities assumed based on their estimated fair values. The Company recognized goodwill of \$6.0 million, \$2.5 million, \$2.7 million, and \$12.3 million in our critical illness recovery hospital, rehabilitation hospital, outpatient rehabilitation, and Concentra reporting units, respectively. These acquired businesses are not material individually or collectively to the Company's consolidated financial statements.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

5. Variable Interest Entities

Certain states prohibit the "corporate practice of medicine," which restricts the Company from owning medical practices which directly employ physicians and from exercising control over medical decisions by physicians. In these states, the Company enters into long-term management agreements with medical practices that are owned by licensed physicians, which, in turn, employ or contract with physicians who provide professional medical services in its occupational health centers. The agreements provide for the Company to direct the transfer of ownership of the medical practices to new licensed physicians at any time. Based on the provisions of the management agreements, the medical practices are variable interest entities for which the Company is the primary beneficiary.

As of December 31, 2019 and 2020, the total assets of the Company's variable interest entities were \$178.4 million and \$208.4 million, respectively, and are principally comprised of accounts receivable. As of December 31, 2019 and 2020, the total liabilities of these variable interest entities were \$52.7 million and \$55.1 million, respectively, and are principally comprised of accounts payable and accrued expenses. The Company's variable interest entities have obligations payable for services received under the aforementioned management agreements of \$124.1 million and \$151.8 million as of December 31, 2019 and 2020, respectively; these intercompany balances are eliminated in consolidation.

6. Leases

The Company has operating and finance leases for its facilities. The Company leases its corporate office space from related parties. The Company's critical illness recovery hospitals and rehabilitation hospitals generally have lease terms of 10 years with two, five year renewal options. These renewal options vary for hospitals which operate as a hospital within a hospital, or "HIH." The Company's outpatient rehabilitation clinics generally have lease terms of five years with two, three to five year renewal options. The Company's Concentra centers generally have lease terms of 10 years with two, five year renewal options.

The Company's total lease cost was as follows:

					F	or the Year End	led]	December 31,			
				2019						2020	
	Unre	lated Parties	Relat	ted Parties		Total	U	nrelated Parties	Rel	lated Parties	Total
						(in tho	usar	ds)			
Operating lease cost	\$	271,799	\$	5,498	\$	277,297	\$	278,945	\$	7,118	\$ 286,063
Finance lease cost:											
Amortization of right-of-use assets		258		_		258		452		_	452
Interest on lease liabilities		812		_		812		1,011		_	1,011
Short-term lease cost		2,171		_		2,171		_		_	_
Variable lease cost		43,096		553		43,649		49,409		580	49,989
Sublease income		(9,822)		_		(9,822)		(9,814)		_	(9,814)
Total lease cost	\$	308,314	\$	6,051	\$	314,365	\$	320,003	\$	7,698	\$ 327,701

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

6. Leases (Continued)

Supplemental cash flow information related to leases was as follows:

	For the	Year En	ded Decem	ber 31,		
	2019			2020		
		(in thousands)				
Cash paid for amounts included in the measurement of lease liabilities:						
Operating cash flows for operating leases	\$ 2	274,095	\$	280,263		
Operating cash flows for finance leases		777		1,011		
Financing cash flows for finance leases		225		140		
Right-of-use assets obtained in exchange for lease liabilities:						
Operating leases ⁽¹⁾	1,2	275,575		256,697		
Finance leases		9,102		1,220		

⁽¹⁾ Includes the right-of-use assets obtained in exchange for lease liabilities of \$1,057.0 million which were recognized upon adoption of ASC Topic 842 during the year ended December 31, 2019.

Supplemental balance sheet information related to leases was as follows:

					Decem	ber:	31,			
				2019					2020	
		Unrelated Parties	Rela	ted Parties	Total		Unrelated Parties	Rela	ited Parties	Total
Operating Leases	_				(in tho	ısan	ds)			
Operating lease right-of-use assets	<u>s</u>	971,382	\$	32,604	\$ 1,003,986	<u>\$</u>	1,002,151	\$	30,066	\$ 1,032,217
Current operating lease liabilities	\$	202,506	\$	5,444	\$ 207,950	\$	214,377	\$	6,036	\$ 220,413
Non-current operating lease liabilities		826,049		26,848	852,897		848,215		27,152	875,367
Total operating lease liabilities	\$	1,028,555	\$	32,292	\$ 1,060,847	\$	1,062,592	\$	33,188	\$ 1,095,780
					Decem	ber :	31,			
				2019					2020	

				2019					:	2020	
	τ	Unrelated Unrelated Parties Related Parties Total Parties Related Parties							Total		
Finance Leases						(in thou	sand	s)			
Property and equipment, net	\$	4,965	\$		\$	4,965	\$	5,644	\$		\$ 5,644
Current portion of long-term debt and notes payable	\$	195	\$	_	\$	195	\$	663	\$	_	\$ 663
Long-term debt, net of current portion		13,088		_		13,088		13,491		_	13,491
Total finance lease liabilities	\$	13,283	\$		\$	13,283	\$	14,154	\$	_	\$ 14,154

The weighted average remaining lease terms and discount rates were as follows:

	December 3	1,
	2019	2020
Weighted average remaining lease term (in years):		
Operating leases	8.0	7.8
Finance leases	34.4	31.2
Weighted average discount rate:		
Operating leases	5.9 %	5.6 %
Finance leases	7.3 %	7.2 %

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

6. Leases (Continued)

As of December 31, 2020, maturities of lease liabilities were approximately as follows:

	Operating Leases		Finance Leases
	(in the	usands	<u>)</u>
2021	\$ 273,293	\$	1,678
2022	232,876		1,663
2023	187,739		1,530
2024	149,340		1,195
2025	117,525		1,205
Thereafter	468,130		29,018
Total undiscounted cash flows	1,428,903		36,289
Less: Imputed interest	333,123		22,135
Total discounted lease liabilities	\$ 1,095,780	\$	14,154

For the year ended December 31, 2018, the Company's rent expense for facility and equipment operating leases, including cancellable leases, was \$307.8 million. The Company made payments to related parties for office rent, leasehold improvements, and miscellaneous expenses of \$6.3 million for the year ended December 31, 2018.

7. Property and Equipment

The Company's property and equipment consists of the following:

		Decem	ber 31,	
	2019			2020
		(in tho	usands)	
Land	\$	95,549	\$	93,756
Leasehold improvements		543,934		562,734
Buildings		553,701		552,796
Furniture and equipment		670,050		704,430
Construction-in-progress		52,467		62,748
Total property and equipment	1	,915,701		1,976,464
Accumulated depreciation		(917,295)		(1,033,044)
Property and equipment, net	\$	998,406	\$	943,420

Depreciation expense was \$171.7 million, \$182.9 million, and \$178.0 million for the years ended December 31, 2018, 2019, and 2020, respectively.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Intangible Assets

Goodwill

The following table shows changes in the carrying amounts of goodwill by reporting unit for the years ended December 31, 2019 and 2020:

	ritical Illness covery Hospital				Outpatient Rehabilitation	Concentra	Total
					(in thousands)		
Balance as of January 1, 2019	\$ 1,045,220	\$	416,646	\$	642,422	\$ 1,216,438	\$ 3,320,726
Acquisition of businesses	33,149		14,254		12,970	18,299	78,672
Measurement period adjustment	435		_		_	(2,249)	(1,814)
Sale of businesses	_		_		(5,629)	_	(5,629)
Balance as of December 31, 2019	1,078,804		430,900		649,763	1,232,488	3,391,955
Acquisition of businesses	5,957		2,481		2,704	12,287	23,429
Measurement period adjustment	_		_		_	(20)	(20)
Sale of businesses	_		(628)		(6,034)	(29,688)	(36,350)
Balance as of December 31, 2020	\$ 1,084,761	\$	432,753	\$	646,433	\$ 1,215,067	\$ 3,379,014

Identifiable Intangible Assets

The following table provides the gross carrying amounts, accumulated amortization, and net carrying amounts for the Company's identifiable intangible assets:

					Decen	abe	r 31,						
			2019			2020							
	Gross Carrying Amount	Accumulated Amortization		Net Carrying Amount			Gross Carrying Amount		Accumulated Amortization		Net Carrying Amount		
					(in the	uss	ınds)						
Indefinite-lived intangible assets:													
Trademarks	\$ 166,698	\$	_	\$	166,698	\$	166,698	\$	_	\$	166,698		
Certificates of need	17,157		_		17,157		18,392		_		18,392		
Accreditations	1,874		_		1,874		1,874		_		1,874		
Finite-lived intangible assets:													
Trademarks	5,000		(5,000)		_		5,000		(5,000)		_		
Customer relationships	287,373		(87,346)		200,027		291,923		(113,346)		178,577		
Non-compete agreements	32,114		(8,802)		23,312		33,771		(11,771)		22,000		
Total identifiable intangible assets	\$ 510,216	\$	(101,148)	\$	409,068	\$	517,658	\$	(130,117)	\$	387,541		

The Company's accreditations and trademarks have renewal terms and the costs to renew these intangible assets are expensed as incurred. At December 31, 2020, the accreditations and trademarks have a weighted average time until next renewal of 1.5 years and 6.8 years, respectively.

The Company's finite-lived intangible assets amortize over their estimated useful lives. Amortization expense was \$29.9 million, \$29.6 million, and \$27.6 million for the years ended December 31, 2018, 2019, and 2020, respectively.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Intangible Assets (Continued)

Estimated amortization expense of the Company's finite-lived intangible assets for each of the five succeeding years is as follows:

	 2021	202	2		2023	2024	2025
				(in	thousands)		<u> </u>
Amortization expense	\$ 27,789	\$	27,279	\$	26,789	\$ 18,603	\$ 12,638

9. Equity Method Investments

The Company's equity method investments consist principally of minority ownership interests in rehabilitation businesses. Equity method investments of \$230.7 million and \$251.1 million are presented as part of other assets on the consolidated balance sheets as of December 31, 2019 and 2020, respectively. At December 31, 2020, these businesses primarily consist of the following ownership interests:

BIR JV, LLP	49.0 %
OHRH, LLC	49.0 %
GlobalRehab—Scottsdale, LLC	49.0 %
ES Rehabilitation, LLC	49.0 %
Coastal Virginia Rehabilitation, LLC	49.0 %
BHSM Rehabilitation, LLC	49.0 %

The Company provides contracted services, principally employee leasing services, and charges management fees to related parties affiliated through its equity method investments. Revenue generated from contracted services provided and management fees charged to related parties affiliated through the Company's equity method investments was \$216.9 million, \$308.2 million, and \$337.6 million for the years ended December 31, 2018, 2019, and 2020, respectively.

The Company had receivables from related parties affiliated through its equity method investments of \$5.7 million and \$28.7 million, which are included as part of other current assets and other assets on the consolidated balance sheet, respectively, as of December 31, 2019. The Company has receivables from related parties of \$13.7 million and \$2.5 million, which are included as part of other current assets and other assets on the consolidated balance sheet, respectively, as of December 31, 2020.

The Company had liabilities for the operating cash it holds on behalf of certain rehabilitation businesses in which it has an equity method investment. These liabilities were \$31.2 million and \$30.6 million as of December 31, 2019 and 2020, respectively, and are included as part of accrued other on the consolidated balance sheets.

Summarized combined financial information of the rehabilitation businesses in which the Company has a minority ownership interest is as follows:

		Decem	iber 31,	
	2019)		2020
		(in tho	usands)	
Current assets	\$	178,674	\$	189,571
Non-current assets		317,332		334,372
Total assets	\$	496,006	\$	523,943
Current liabilities	\$	107,400	\$	96,980
Non-current liabilities		127,976		118,312
Equity		260,630		308,651
Total liabilities and equity	\$	496,006	\$	523,943

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. Equity Method Investments (Continued)

	 F	or the Y	Year Ended December 3	11,	
	 2018		2019		2020
			(in thousands)		
Revenues	\$ 393,034	\$	536,464	\$	562,031
Cost of services and other operating expenses	342,603		476,182		496,739
Net income	48,535		58,519		72,172

10. Insurance Risk Programs

Under a number of the Company's insurance programs, which include the Company's employee health insurance, workers' compensation, and professional malpractice liability insurance programs, the Company is liable for a portion of its losses before it can attempt to recover from the applicable insurance carrier. The Company accrues for losses under an occurrence-based approach whereby the Company estimates the losses that will be incurred in a respective accounting period and accrues that estimated liability using actuarial methods. At December 31, 2019 and 2020, provisions for losses for professional liability risks retained by the Company have been discounted at 3%. The Company recorded a liability of \$157.1 million and \$173.6 million related to these programs at December 31, 2019 and 2020, respectively. If the Company did not discount the provisions for losses for professional liability risks, the aggregate liability for all of the insurance risk programs would be approximately \$162.0 million and \$178.4 million at December 31, 2019 and 2020, respectively. At December 31, 2019 and 2020, the Company recorded insurance proceeds receivable of \$15.5 million and \$13.0 million, respectively, for liabilities which exceeded its deductibles and self-insured retention limits and are recoverable through its insurance policies.

11. Long-Term Debt and Notes Payable

For purposes of this indebtedness footnote, references to Select exclude Concentra Inc. because the Concentra-JPM revolving facility is non-recourse to Holdings and Select.

As of December 31, 2020, the Company's long-term debt and notes payable were as follows:

	Principal Outstanding	Unamortized Premium (Discount)	Unamortized Issuance Costs	Carrying Value	Fair Value
			(in thousands)		
Select 6.250% senior notes	\$ 1,225,000	\$ 33,773	\$ (16,953)	\$ 1,241,820	\$ 1,316,875
Select credit facilities:					
Select term loan	2,103,437	(8,393)	(9,149)	2,085,895	2,082,403
Other debt, including finance leases	74,606	_	(302)	74,304	74,304
Total debt	\$ 3,403,043	\$ 25,380	\$ (26,404)	\$ 3,402,019	\$ 3,473,582

Principal maturities of the Company's long-term debt and notes payable are approximately as follows:

 2021	2022		2023		2024		2025		Thereafter		Total
				(in	thousands)						
\$ _	\$ _	\$	_	\$	_	\$	_	\$	1,225,000	\$	1,225,000
_	_		4,757		11,150		2,087,530		_		2,103,437
12,621	3,662		22,891		23,533		334		11,565		74,606
\$ 12,621	\$ 3,662	\$	27,648	\$	34,683	\$	2,087,864	\$	1,236,565	\$	3,403,043
\$	\$ \$ \$ 	\$ — \$ — — — — — 12,621 — 3,662	s — s — s — — — — — — — — — — — — — — —	\$ — \$ — \$ — — — 4,757 12,621 3,662 22,891	\$ — \$ — \$ — \$ (in \$) — — — 4,757 12,621 3,662 22,891	\$ - \$ - \$ \\ \begin{array}{c c c c c c c c c c c c c c c c c c c	s — s — s — s — — \$ — \$ — — 4,757 11,150 12,621 3,662 22,891 23,533	\$ - \$ - \$ \\ \tag{\text{(in thousands)}}{\text{5}} \\ \tag{-11,150} \\ \tag{2,087,530} \\ \tag{12,621} \\ \tag{3,662} \\ \tag{22,891} \\ \tag{23,533} \\ \tag{334}	s — \$ — \$ — \$ — — 4,757 11,150 2,087,530 12,621 3,662 22,891 23,533 334	\$ - \$ (in thousands) - \$ - \$ 1,225,000 - - - \$ - \$ 1,225,000 - - - 4,757 11,150 2,087,530 - 12,621 3,662 22,891 23,533 334 11,565	\$ - \$ - \$ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

11. Long-Term Debt and Notes Payable (Continued)

As of December 31, 2019, the Company's long-term debt and notes payable were as follows:

	Principal outstanding	Unamortized Premium (Discount)		Unamortized Issuance Costs	c	arrying Value	Fair Value
				(in thousands)			
Select 6.250% senior notes	\$ 1,225,000	\$ 39,988	\$	(19,944)	\$	1,245,044	\$ 1,322,020
Select credit facilities:							
Select term loan	2,143,280	(10,411)		(11,348)		2,121,521	2,145,959
Other debt, including finance leases	78,941	_		(396)		78,545	78,545
Total debt	\$ 3,447,221	\$ 29,577	\$	(31,688)	\$	3,445,110	\$ 3,546,524
			=				

Select Credit Facilities

On March 6, 2017, Select entered into a senior secured credit agreement (the "Select credit agreement"). The Select credit agreement provides for \$2,265.0 million in term loan borrowings (the "Select term loan") and a \$450.0 million revolving credit facility (the "Select revolving facility" and, together with the Select term loan, the "Select credit facilities"), including a \$75.0 million sublimit for the issuance of standby letters of credit. At December 31, 2020, Select had \$410.7 million of availability under the Select revolving facility after giving effect to \$39.3 million of outstanding letters of credit. The Select term loan and the Select revolving facility are due March 6, 2025 and March 6, 2024, respectively.

The interest rate on the Select term loan is equal to the Adjusted LIBO Rate (as defined in the Select credit agreement) plus a percentage ranging from 2.25% to 2.50%, or the Alternate Base Rate (as defined in the Select credit agreement) plus a percentage ranging from 1.25% to 1.50%, in each case subject to a specified leverage ratio. The interest rate on the loans outstanding under the Select revolving facility is equal to the Adjusted LIBO Rate plus a percentage ranging from 2.25% to 2.50%, or the Alternate Base Rate plus a percentage ranging from 1.25% to 1.50%, in each case subject to a specified leverage ratio.

As of December 31, 2020, the applicable interest rate for the Select term loan was the Adjusted LIBO Rate plus 2.25% or the Alternate Base Rate plus 1.25%. The applicable interest rate for the Select revolving facility was the Adjusted LIBO Rate plus 2.25% or the Alternate Base Rate plus 1.25%.

The Select revolving facility requires Select to maintain a leverage ratio, as specified in the Select credit agreement, not to exceed 7.00 to 1.00. As of December 31, 2020, Select's leverage ratio was 3.48 to 1.00.

Borrowings under the Select credit facilities are guaranteed by Holdings and substantially all of Select's current domestic subsidiaries, other than certain non-guarantor subsidiaries including Concentra and its subsidiaries, and will be guaranteed by substantially all of Select's future domestic subsidiaries. Borrowings under the Select credit facilities are secured by substantially all of Select's existing and future property and assets and by a pledge of Select's capital stock, the capital stock of Select's domestic subsidiaries, other than certain non-guarantor subsidiaries including Concentra and its subsidiaries, and up to 65% of the capital stock of Select's foreign subsidiaries held directly by Select or a domestic subsidiary.

Prepayment of Borrowings

Select will be required to prepay borrowings under the Select credit facilities with (i) the net cash proceeds received from non-ordinary course asset sales or other dispositions, or as a result of a casualty or condemnation, subject to reinvestment provisions and other customary carveouts and, to the extent required, the payment of certain indebtedness secured by liens having priority over the debt under the Select credit facilities or subject to a first lien intercreditor agreement, (ii) the net cash proceeds received from the issuance of debt obligations other than certain permitted debt obligations, and (iii) a percentage of excess cash flow (as defined in the Select credit agreement) based on Select's leverage ratio, as specified in the Select credit agreement. The Company will not be required to make a prepayment of borrowings as a result of excess cash flow for the year ended December 31, 2020.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

11. Long-Term Debt and Notes Payable (Continued)

Select 6.250% Senior Notes

On August 1, 2019, Select issued and sold \$550.0 million aggregate principal amount of 6.250% senior notes due August 15, 2026. On December 10, 2019, Select issued and sold \$675.0 million aggregate principal amount of 6.250% senior notes, due August 15, 2026, as additional notes under the indenture pursuant to which it previously issued \$550.0 million aggregate principal amount of senior notes. The additional senior notes were issued at 106.00% of the aggregate principal amount. Interest on the senior notes accrues at the rate of 6.250% per annum and is payable semi-annually in arrears on February 15 and August 15 of each year, commencing on February 15, 2020.

The senior notes are Select's senior unsecured obligations which are subordinated to all of Select's existing and future secured indebtedness, including the Select credit facilities. The senior notes rank equally in right of payment with all of Select's other existing and future senior unsecured indebtedness and senior in right of payment to all of Select's existing and future subordinated indebtedness. The senior notes are unconditionally guaranteed on a joint and several basis by each of Select's direct or indirect existing and future domestic restricted subsidiaries, other than certain non-guarantor subsidiaries, including Concentra and its subsidiaries.

Prior to August 15, 2022, Select may redeem some or all of the senior notes by paying a "make-whole" premium. On or after August 15, 2022, Select may redeem some or all of the senior notes at specified redemption prices. In addition, prior to August 15, 2022, Select may redeem up to 40% of the principal amount of the senior notes with the net proceeds of certain equity offerings at a price of 106.250% plus accrued and unpaid interest, if any. Select is obligated to offer to repurchase the senior notes at a price of 101% of their principal amount plus accrued and unpaid interest, if any, as a result of certain change of control events. These restrictions and prohibitions are subject to certain qualifications and exceptions.

Concentra-JPM Revolving Facility

On June 1, 2015, Concentra Inc. entered into a first lien credit agreement (the "Concentra-JPM first lien credit agreement"). The Concentra-JPM first lien credit agreement currently provides for availability of up to \$100.0 million under a revolving credit facility (the "Concentra-JPM revolving facility"), which matures March 1, 2022. At December 31, 2020, Concentra Inc. had \$83.6 million of availability under the Concentra-JPM revolving facility after giving effect to \$16.4 million of outstanding letters of credit.

The interest rate on amounts borrowed under the Concentra-JPM revolving facility is equal to the Adjusted LIBO Rate (as defined in the Concentra-JPM first lien credit agreement) plus a percentage ranging from 2.25% to 2.50%, or the Alternate Base Rate (as defined in the Concentra-JPM first lien credit agreement) plus a percentage ranging from 1.25% to 1.50%, in each case subject to a first lien net leverage ratio, as specified in the Concentra-JPM first lien credit agreement.

At December 31, 2020, the applicable interest rate for the Concentra-JPM revolving facility was the Adjusted LIBO Rate plus 2.50% or the Alternate Base Rate plus 1.50%.

The Concentra-JPM first lien credit agreement requires Concentra Inc. to maintain a leverage ratio, as specified in the Concentra-JPM first lien credit agreement, of 5.75 to 1.00 which is tested quarterly, but only if Revolving Exposure (as defined in the Concentra-JPM first lien credit agreement) exceeds 30% of Revolving Commitments (as defined in the Concentra-JPM first lien credit agreement) on such day.

The borrowings under the Concentra-JPM first lien credit agreement are guaranteed, on a first lien basis by Concentra Holdings, Inc., Concentra Inc., and certain domestic subsidiaries of Concentra Inc. (subject, in each case, to permitted liens). These borrowings will also be guaranteed by certain of Concentra Inc.'s future domestic subsidiaries. The borrowings are secured by substantially all of Concentra Inc.'s and its domestic subsidiaries' existing and future property and assets and by a pledge of Concentra Inc.'s capital stock, the capital stock of certain of Concentra Inc.'s domestic subsidiaries and up to 65% of the voting capital stock and 100% of the non-voting capital stock of Concentra Inc.'s foreign subsidiaries, if any.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

11. Long-Term Debt and Notes Payable (Continued)

Loss on Early Retirement of Debt

During the year ended December 31, 2018, the Company refinanced its Select credit facilities and the Concentra-JPM first lien credit agreement which resulted in losses on early retirement of debt of \$14.2 million. The loss on early retirement of debt consisted of \$3.0 million of debt extinguishment losses and \$11.2 million of debt modification losses.

During the year ended December 31, 2019, the Company refinanced its senior notes, Select credit facilities, the Concentra-JPM first and second lien credit agreements which resulted in losses on early retirement of debt of \$38.1 million. The losses on early retirement of debt consisted of \$22.1 million of debt extinguishment losses and \$16.0 million of debt modification losses.

12. Interest Rate Cap

The Company is subject to market risk exposure arising from changes in interest rates on the Select term loan, which bears interest at a variable interest rate, as discussed further in Note 11 – Long-Term Debt and Notes Payable. The Company's objective in using an interest rate derivative was to mitigate its exposure to increases in interest rates. To accomplish this objective, the Company entered into an interest rate cap agreement in October 2020. The interest rate cap will limit the Company's exposure to increases in the reference rate to 1.0% on \$2.0 billion of principal outstanding under the Select term loan, as the interest rate cap provides for payments from the counterparty when interest rates rise above 1.0%. The interest rate cap has a \$2.0 billion notional amount and is effective March 31, 2021 for the monthly periods from and including April 30, 2021 through September 30, 2024. The interest rate cap has a deferred premium; accordingly, the Company will pay a monthly premium for the interest rate cap over the term of the agreement. The annual premium is equal to 0.0916% on the notional amount.

As of December 31, 2020, the interest rate cap has been designated as a cash flow hedge and is highly effective at offsetting the changes in cash outflows when the reference rate exceeds 1.0%. Changes in the fair value of the interest rate cap, net of tax, are recognized in other comprehensive income and are reclassified out of accumulated other comprehensive income and into interest expense when the hedged interest obligations affect earnings. During the year ended December 31, 2020, the Company recognized losses, net of tax, of \$2.0 million related to changes in the fair value of the interest rate cap contract in other comprehensive income. The Company did not reclassify any amounts out of accumulated other comprehensive income into interest expense during the year ended December 31, 2020. Refer to Note 13 – Fair Value of Financial Instruments for information on the fair value of the Company's interest rate cap contract and its balance sheet classification.

Based on the fair value of the interest rate cap contract December 31, 2020, the estimated pre-tax losses expected to be reclassified from accumulated other comprehensive income into interest expense within the next twelve months is approximately \$1.3 million.

13. Fair Value of Financial Instruments

Financial instruments which are measured at fair value, or for which a fair value is disclosed, are classified in the fair value hierarchy, as outlined below, on the basis of the observability of the inputs used in the fair value measurement:

- Level 1 inputs are based upon quoted prices for identical instruments in active markets.
- Level 2 inputs are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant inputs are observable in the market or can be corroborated by observable market data.
- Level 3 inputs are generally unobservable and typically reflect management's estimates of assumptions that market participants
 would use in pricing the instrument.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

13. Fair Value of Financial Instruments (Continued)

The Company's interest rate cap contract is recorded at its fair value in the consolidated balance sheets on a recurring basis. The fair value of the interest rate cap contract is based upon a model-derived valuation using observable market inputs, such as interest rates and interest rate volatility, and the strike price.

			December 31,	
Financial Instrument	Balance Sheet Classification	Level	2019	2020
			(in thousands)	
Interest rate cap contract, current portion	Accrued other	Level 2	\$ — \$	1,339
Interest rate cap contract, non-current portion	Other non-current liabilities	Level 2	_	1,392

The Company does not measure its indebtedness at fair value in its consolidated balance sheets. The fair value of the Select credit facilities is based on quoted market prices for this debt in the syndicated loan market. The fair value of the senior notes is based on quoted market prices. The carrying value of the Company's other debt, as disclosed in Note 11 – Long-Term Debt and Notes Payable, approximates fair value.

			Decembe	r 31, 2	2019		December	r 31,	2020
Financial Instrument	Level	Ca	rrying Value		Fair Value	Cı	rrying Value		Fair Value
					(in tho	usand	s)		
Select 6.250% senior notes	Level 2	\$	1,245,044	\$	1,322,020	\$	1,241,820	\$	1,316,875
Select credit facilities:									
Select term loan	Level 2		2,121,521		2,145,959		2,085,895		2,082,403

The Company's other financial instruments, which primarily consist of cash and cash equivalents, accounts receivable, and accounts payable approximate fair value because of the short-term maturities of these instruments.

14. Stock Repurchase Program

Holdings' board of directors has authorized a common stock repurchase program to repurchase up to \$500.0 million worth of shares of its common stock. The program has been extended until December 31, 2021, and will remain in effect until then, unless further extended or earlier terminated by the board of directors. Stock repurchases under this program may be made in the open market or through privately negotiated transactions, and at times and in such amounts as Holdings deems appropriate. Holdings is funding this program with cash on hand and borrowings under the Select revolving facility.

Holdings did not repurchase shares under the common stock repurchase program during the years ended December 31, 2018. During the year ended December 31, 2019, Holdings repurchased 2,165,221 shares at a cost of approximately \$33.2 million. During the year ended December 31, 2020, Holdings repurchased 491,559 shares at a cost of approximately \$8.7 million. The common stock repurchase program has available capacity of \$143.4 million as of December 31, 2020.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

15. Segment Information

The Company identifies its segments according to how the chief operating decision maker evaluates financial performance and allocates resources. The Company's reportable segments consist of the critical illness recovery hospital segment, rehabilitation hospital segment, outpatient rehabilitation segment, and Concentra segment. Other activities include the Company's corporate shared services, certain investments, and employee leasing services provided to related parties affiliated through the Company's equity method investments. The accounting policies of the segments are the same as those described in the summary of significant accounting policies. For the year ended December 31, 2020, the Company's other activities also include other operating income related to the recognition of payments received under the Provider Relief Fund for health care related expenses and loss of revenue attributable to the coronavirus disease 2019 ("COVID-19"). Refer to Note 22 – CARES Act for further information.

The Company evaluates the performance of its segments based on Adjusted EBITDA. For the years ended December 31, 2018, 2019, and 2020, Adjusted EBITDA is defined as earnings excluding interest, income taxes, depreciation and amortization, gain (loss) on early retirement of debt, stock compensation expense, acquisition costs associated with U.S. HealthWorks, gain (loss) on sale of businesses, and equity in earnings (losses) of unconsolidated subsidiaries. The Company has provided additional information regarding its reportable segments, such as total assets, which contributes to the understanding of the Company and provides useful information to the users of the consolidated financial statements.

The following tables summarize selected financial data for the Company's reportable segments.

			:	For the Year Ende	l De	cember 31, 2018		
	itical Illness very Hospital	Rehabilitation Hospital		Outpatient Rehabilitation		Concentra ⁽¹⁾	Other	Total
				(in the	usar	ids)		<u>.</u>
Revenue	\$ 1,753,584	\$ 583,745	\$	995,794	\$	1,557,673	\$ 190,462	\$ 5,081,258
Adjusted EBITDA	243,015	108,927		142,005		251,977	(100,769)	645,155
Total assets	1,771,605	894,192		1,002,819		2,178,868	116,781	5,964,265
Capital expenditures	40,855	42,389		30,553		42,205	11,279	167,281
				For the Year Ende	l De	cember 31, 2019		
	itical Illness very Hospital	Rehabilitation Hospital		Outpatient Rehabilitation		Concentra	Other	Total
				(in the	usar	nds)		
Revenue	\$ 1,836,518	\$ 670,971	\$	1,046,011	\$	1,628,817	\$ 271,605	\$ 5,453,922
Adjusted EBITDA	254,868	135,857		151,831		276,482	(108,130)	710,908
Total assets	2,099,833	1,127,028		1,289,190		2,372,187	452,050	7,340,288
Capital expenditures	45,573	27,216		33,628		44,101	6,608	157,126
				For the Year Ende	l De	cember 31, 2020		
	itical Illness very Hospitals	Rehabilitation Hospitals		Outpatient Rehabilitation		Concentra	Other	Total
				(in the	usar	nds)		
Revenue	\$ 2,077,499	\$ 734,673	\$	919,913	\$	1,501,434	\$ 298,194	\$ 5,531,713
Adjusted EBITDA	342,427	153,203		79,164		252,892	(27,120)	800,566
Total assets	2,213,892	1,148,617		1,302,110		2,400,646	590,134	7,655,399
Capital expenditures	49,726	7,571		28,876		50,114	10,153	146,440

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

15. Segment Information (Continued)

A reconciliation of Adjusted EBITDA to income before income taxes is as follows:

				1	or	the Year Ended D	ecem	ber 31, 2018			
		itical Illness Recovery Hospital	R	ehabilitation Hospital		Outpatient Rehabilitation	c	oncentra ⁽²⁾	Other		Total
	-					(in thousa	ınds)				
Adjusted EBITDA	\$	243,015	\$	108,927	\$	142,005	\$	251,977	\$ (100,769)		
Depreciation and amortization		(45,797)		(24,101)		(27,195)		(95,521)	(9,041)		
Stock compensation expense		_		_		_		(2,883)	(20,443)		
U.S. HealthWorks acquisition costs		_		_		_		(2,895)	_		
Income (loss) from operations	\$	197,218	\$	84,826	\$	114,810	\$	150,678	\$ (130,253)	\$	417,279
Loss on early retirement of debt											(14,155)
Equity in earnings of unconsolidated subsidiaries											21,905
Gain on sale of businesses											9,016
Interest expense											(198,493)
Income before income taxes										\$	235,552
*										<u>\$</u>	

			F	or th	he Year Ended	Dec	ember 31, 2019)		
	 tical Illness Recovery Hospital	R	ehabilitation Hospital		Outpatient ehabilitation		Concentra		Other	Total
					(in thou	san	ds)			
Adjusted EBITDA	\$ 254,868	\$	135,857	\$	151,831	\$	276,482	\$	(108,130)	
Depreciation and amortization	(50,763)		(27,322)		(28,301)		(96,807)		(9,383)	
Stock compensation expense	_						(3,069)		(23,382)	
Income (loss) from operations	\$ 204,105	\$	108,535	\$	123,530	\$	176,606	\$	(140,895)	\$ 471,881
Loss on early retirement of debt										(38,083)
Equity in earnings of unconsolidated subsidiaries										24,989
Gain on sale of businesses										6,532
Interest expense										(200,570)
Income before income taxes										\$ 264,749

				F	or th	e Year Ended	Dece	mber 31, 2020)		
	- 1	tical Illness Recovery Hospital	R	habilitation Hospital		Outpatient ehabilitation		Concentra		Other	Total
						(in thou	sand	s)			
Adjusted EBITDA	\$	342,427	\$	153,203	\$	79,164	\$	252,892	\$	(27,120)	
Depreciation and amortization		(51,531)		(27,727)		(29,009)		(87,865)		(9,527)	
Stock compensation expense								(2,512)		(24,738)	
Income (loss) from operations	\$	290,896	\$	125,476	\$	50,155	\$	162,515	\$	(61,385)	\$ 567,657
Equity in earnings of unconsolidated subsidiaries											29,440
Gain on sale of businesses											12,387
Interest expense											(153,011)
Income before income taxes											\$ 456,473

⁽¹⁾ The Concentra segment includes the operating results of U.S. HealthWorks beginning February 1, 2018.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

16. Revenue from Contracts with Customers

The following tables disaggregate the Company's revenue:

					For	the Year Ended	l Dece	mber 31, 2018									
		ritical Illness overy Hospital		habilitation Hospital	Re	Outpatient habilitation		Concentra		Other		Total					
						(in the	usand	ls)									
Patient service revenue:																	
Medicare	\$	893,429	\$	293,913	\$	161,054	\$	2,168	\$	_	\$	1,350,564					
Non-Medicare		847,447		254,215		762,247		1,545,852				3,409,761					
Total patient services revenue		1,740,876		548,128		923,301		1,548,020				4,760,325					
Other revenue	_	12,708		35,617		72,493	_	9,653	_	190,462	_	320,933					
Total revenue	<u>s</u>	1,753,584	<u>\$</u>	583,745	<u>\$</u>	995,794	\$	1,557,673	<u>\$</u>	190,462	\$	5,081,258					
					For	the Year Ended	l Dece	mber 31, 2019									
	Critical I Recovery H			habilitation Hospital		Outpatient habilitation		Concentra		Other		Total					
	- Itte	overy mospital		Hospital		(in the				Outr		10041					
Patient service revenue:						(,									
Medicare	\$	907,963	\$	332,514	\$	171,690	\$	1,965	\$	_	\$	1,414,132					
Non-Medicare		916,650		300,113		794,288		1,615,529		_		3,626,580					
Total patient services revenue	_	1,824,613		632,627		965,978		1,617,494		_		5,040,712					
Other revenue		11,905		38,344		80,033		11,323		271,605		413,210					
Total revenue	\$	1,836,518	\$	670,971	\$	1,046,011	\$	1,628,817	\$	271,605	\$	5,453,922					
					_												
	_	itical Illness	т.	habilitation			1 Dece	mber 31, 2020									
		overy Hospital		nabilitation Hospital		Outpatient habilitation		Concentra		Other		Total					
						(in the	usand	ls)									
Patient service revenue:																	
Medicare	\$	900,593	\$	345,642	\$	137,447	\$	1,284	\$	_	\$	1,384,966					
Non-Medicare		1,164,410		349,530		719,600		1,488,976	_			3,722,516					
Total patient services revenue		2,065,003		695,172		857,047		1,490,260				5,107,482					
Other revenue		12,496		39,501		62,866	_	11,174	_	298,194	_	424,231					
Total revenue	\$	2,077,499	\$	734,673	\$	919,913	\$	1,501,434	\$	298,194	\$	5,531,713					

17. Sale of Businesses

The Company recognized gains of \$9.0 million and \$6.5 million during the years ended December 31, 2018 and 2019, respectively. These gains resulted principally from the sale of outpatient rehabilitation businesses to equity method investees.

During the year ended December 31, 2020, the Company sold three businesses, including Concentra's Department of Veterans Affairs community-based outpatient clinic business, for a total selling price of approximately \$87.0 million, which excludes transaction expenses and certain other adjustments set forth in each respective purchase agreement. These sales resulted in gains of approximately \$21.4 million. During the year ended December 31, 2020, the Company also accrued a liability and incurred a loss of \$9.0 million related to the indemnity provision associated with a previously sold business.

Weighted Average

ATTACHMENT 33 Availability of Funds

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

18. Stock-based Compensation

Holdings' equity incentive plan provides for the issuance of various stock-based awards. Under its current plan, which was approved during the year ended December 31, 2020, Holdings has issued restricted stock awards. The equity plan currently allows for the issuance of 7,484,000 awards, as adjusted for cancelled or forfeited awards through December 31, 2020. As of December 31, 2020, Holdings has capacity to issue 6,005,786 stock-based awards under its equity plan. The equity plan allows for authorized but previously unissued shares or shares previously issued and outstanding and reacquired by Holdings to satisfy these awards.

The Company measures the compensation costs of stock-based compensation arrangements based on the grant-date fair value and recognizes the costs over the period during which employees are required to provide services. Restricted stock awards are valued using the closing market price of Holdings' stock on the date of grant. These restricted stock awards generally vest over three to four years. Forfeitures are recognized as they occur.

Transactions related to restricted stock awards are as follows:

Grant Date Fair Value						
(share amounts in thousands)						
17.03						
17.17						
14.99						
17.03						
17.74						
th						

For the years ended December 31, 2018, 2019, and 2020, the weighted average grant date fair values of restricted stock awards granted were \$19.72, \$16.60, and \$17.17, respectively. For the years ended December 31, 2018, 2019, and 2020, the fair values of restricted stock awards vested were \$19.1 million, \$15.6 million, and \$22.2 million, respectively.

For the years ended December 31, 2018 and 2019, the intrinsic values of stock options exercised were \$1.8 million and \$0.7 million, respectively. Holdings did not have any stock options outstanding or exercisable during the year ended December 31, 2020.

Stock compensation expense recognized by the Company was as follows:

		For the Year Ended December 31,										
	2018		2019		2020							
	(in thousands)											
Stock compensation expense:												
Included in general and administrative	\$	17,604	\$ 20,334	\$	22,053							
Included in cost of services		5,722	6,117		5,197							
Total	\$	23,326	\$ 26,451	\$	27,250							

Future stock compensation expense based on current stock-based awards is estimated to be as follows:

	20	21	20	022	2023	2024		
				(in thousand	ls)			
Stock compensation expense	\$	23,589	\$	15,143 \$	6,229	\$ 1,312		

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

19. Income Taxes

The components of the Company's income tax expense for the years ended December 31, 2018, 2019, and 2020 were as follows:

	For the Year Ended December 31,									
	20	18		2019		2020				
			(in tl	nousands)						
Current income tax expense:										
Federal	\$	36,072	\$	55,822	\$	95,633				
State and local		15,321		15,331		30,949				
Total current income tax expense		51,393		71,153		126,582				
Deferred income tax expense (benefit)		7,217		(7,435)		(14,715)				
Total income tax expense	\$	58,610	\$	63,718	\$	111,867				

Reconciliations of the statutory federal income tax rate to the effective income tax rate are as follows:

	For the Year Ended December 31,								
	2018	2019	2020						
Federal income tax at statutory rate	21.0 %	21.0 %	21.0 %						
State and local income taxes, less federal income tax benefit	5.0	4.2	5.8						
Permanent differences	1.0	0.4	0.5						
Deferred income taxes - state income tax rate adjustment	0.4	0.8	0.0						
Uncertain tax positions	(0.8)	(0.1)	(0.1)						
Valuation allowance	0.5	0.5	0.0						
Limitation on Officers' compensation	1,1	1.3	1.1						
Stock-based compensation	(2.2)	(0.7)	(1.4)						
Non-controlling interest	(2.1)	(2.9)	(3.3)						
Other	1.0	(0.4)	0.9						
Effective income tax rate	24.9 %	24.1 %	24.5 %						

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

19. Income Taxes (Continued)

The Company's deferred tax assets and liabilities are as follows:

		December 31,					
		2019		2020			
	·	(in tho	usands))			
Deferred tax assets							
Implicit discounts and adjustments	\$	13,097	\$	13,825			
Compensation and benefit-related accruals		55,300		54,464			
Professional malpractice liability insurance		13,753		17,330			
Deferred revenue		274		163			
Federal and state net operating loss and state tax credit carryforwards		38,933		34,417			
Interest limitation carryforward		4,943		686			
Stock awards		6,251		3,638			
Equity investments		2,914		4,627			
Operating lease liabilities		267,513		223,875			
CARES Act employer payroll tax deferral		_		23,001			
Derivatives		_		705			
Other		2,344		2,489			
Deferred tax assets	\$	405,322	\$	379,220			
Valuation allowance		(18,461)		(17,339)			
Deferred tax assets, net of valuation allowance	\$	386,861	\$	361,881			
Deferred tax liabilities							
Deferred income	\$	(9,190)	\$	(4,595)			
Investment in unconsolidated affiliates		(7,498)		(10,401)			
Depreciation and amortization		(225,079)		(238,655)			
Deferred financing costs		(6,250)		(5,003)			
Operating lease right-of-use assets		(263,818)		(210,045)			
Other		(3,546)		(4,844)			
Deferred tax liabilities	\$	(515,381)	\$	(473,543)			
Deferred tax liabilities, net of deferred tax assets	\$	(128,520)	\$	(111,662)			

The Company's deferred tax assets and liabilities are included in the consolidated balance sheet captions as follows:

		Decem	ber 31,	
		2019		2020
Other assets	\$	19,738	\$	20,759
Non-current deferred tax liability		(148,258)		(132,421)
	\$	(128,520)	\$	(111,662)

The CARES Act, which was enacted on March 27, 2020, includes changes to certain tax law related to net operating losses and the deductibility of interest expense and depreciation. ASC 740, *Income Taxes*, requires the effects of changes in tax rates and laws on deferred tax balances to be recognized in the period in which the legislation is enacted. This legislation had the effect of increasing the Company's deferred income taxes and decreasing its current income taxes payable by approximately \$15.5 million and resulted from bonus depreciation on certain types of qualified property for tax years beginning January 1, 2018, and the provision for an increase in the amounts allowed for interest expense deductions for tax years beginning January 1, 2019. The legislation related to net operating losses did not impact the Company's deferred tax balances. The CARES Act also allowed eligible employers to defer payment on their share of payroll taxes otherwise required to be deposited between March 27, 2020 and December 31, 2020, as described further in Note 22 — CARES Act. This legislation had the effect of decreasing the Company's deferred income taxes and increasing its current income taxes payable by approximately \$23.0 million as of December 31, 2020.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

19. Income Taxes (Continued)

As of December 31, 2019 and 2020, the Company's valuation allowance is primarily attributable to the uncertainty regarding the realization of state net operating losses and other net deferred tax assets of loss entities. The state net deferred tax assets have a full valuation allowance recorded for entities that have a cumulative history of pre-tax losses (current year in addition to the two prior years). For the year ended December 31, 2019, the Company recorded a net valuation allowance increase of \$0.6 million. For the year ended December 31, 2020, the Company recorded a net valuation allowance decrease of \$1.1 million. These changes resulted from net changes in state net operating losses, as well as the sale of a business. The changes in the Company's valuation allowance were recognized as a result of management's reassessment of the amount of its deferred tax assets that are more likely than not to be realized.

At December 31, 2019 and 2020, the Company's net deferred tax liabilities of approximately \$128.5 million and \$111.7 million, respectively, consist of items which have been recognized for tax reporting purposes, but which will increase tax on returns to be filed in the future. The Company has performed an assessment of positive and negative evidence regarding the realization of the net deferred tax assets. This assessment included a review of legal entities with three years of cumulative losses, estimates of projected future taxable income, the effects on future taxable income resulting from the reversal of existing deferred tax liabilities in future periods, and the impact of tax planning strategies that management would and could implement in order to keep deferred tax assets from expiring unused. Although realization is not assured, based on the Company's assessment, it has concluded that it is more likely than not that such assets, net of the determined valuation allowance, will be realized.

The total state net operating losses are approximately \$642.6 million. State net operating loss carryforwards expire and are subject to valuation allowances as follows:

State Net O	perating Losses	Gross Valu	Valuation Allowance	
	(in the	usands)		
\$	12,285	\$	9,571	
	38,517		32,973	
	23,036		17,659	
	28,861		24,124	
	539,896		369,107	

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

20. Earnings per Share

The following table sets forth the net income attributable to the Company, its common shares outstanding, and its participating securities outstanding. There were no dividends declared or contractual dividends paid for the years ended December 31, 2018, 2019, and 2020.

			E	Basic EPS			Diluted EPS						
		For the	Year	Ended Dece	mbe	r 31,		For the Year Ended December 31,					
	2018		2019 2020		2018		2019			2020			
						(in tho	usan	ds)					
Net income	\$	176,942	\$	201,031	\$	344,606	\$	176,942	\$	201,031	\$	344,606	
Less: net income attributable to non-controlling interests		39,102		52,582		85,611		39,102		52,582		85,611	
Net income attributable to the Company		137,840		148,449		258,995		137,840		148,449		258,995	
Less: net income attributable to participating securities		4,551		4,995		8,896		4,548		4,994		8,896	
Net income attributable to common shares	\$	133,289	\$	143,454	\$	250,099	\$	133,292	\$	143,455	\$	250,099	

The following tables set forth the computation of EPS under the two-class method:

			For	the Year Ended	Dece	mber 31, 2018			
	et Income Allocation	Shares ⁽¹⁾		Basic EPS		et Income Allocation	Shares ⁽¹⁾	Dilu	ed EPS
		(ir	tho	usands, except	for per	share amounts))		
Common shares	\$ 133,289	130,172	\$	1.02	S	133,292	130,256	\$	1.02
Participating securities	4,551	4,444		1.02		4,548	4,444		1.02
Total Company	\$ 137,840				\$	137,840			
			For	the Year Ended	Dece	mber 31, 2019			
	et Income Illocation	Shares ⁽¹⁾		Basic EPS		et Income Ilocation	Shares ⁽¹⁾	Dilu	ed EPS
		(in	tho	usands, except	for per	share amounts))		
Common shares	\$ 143,454	130,248	\$	1.10	\$	143,455	130,276	\$	1.10
Participating securities	4,995	4,535		1.10		4,994	4,535		1.10
Total Company	\$ 148,449				\$	148,449			
			For	the Year Ended	Dece	mber 31, 2020			
	et Income Allocation	Shares ⁽¹⁾		Basic EPS		et Income Ilocation	Shares ⁽¹⁾	Dilu	ed EPS
		(ir	tho	usands, except	for per	share amounts))		
Common shares	\$ 250,099	129,780	\$	1.93	\$	250,099	129,780	\$	1.93
Participating securities	8,896	4,616	\$	1.93		8,896	4,616	\$	1.93
Total Company	\$ 258,995				\$	258,995			

(1) Represents the weighted average share count outstanding during the period.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

21. Commitments and Contingencies

Construction Commitments

At December 31, 2020, the Company had outstanding commitments under construction contracts related to new construction, improvements, and renovations totaling approximately \$13.2 million.

Litigation

The Company is a party to various legal actions, proceedings, and claims (some of which are not insured), and regulatory and other governmental audits and investigations in the ordinary course of its business. The Company cannot predict the ultimate outcome of pending litigation, proceedings, and regulatory and other governmental audits and investigations. These matters could potentially subject the Company to sanctions, damages, recoupments, fines, and other penalties. The Department of Justice, Centers for Medicare & Medicaid Services ("CMS"), or other federal and state enforcement and regulatory agencies may conduct additional investigations related to the Company's businesses in the future that may, either individually or in the aggregate, have a material adverse effect on the Company's business, financial position, results of operations, and liquidity.

To address claims arising out of the Company's operations, the Company maintains professional malpractice liability insurance and general liability insurance coverages through a number of different programs that are dependent upon such factors as the state where the Company is operating and whether the operations are wholly owned or are operated through a joint venture. For the Company's wholly owned operations, the Company currently maintains insurance coverages under a combination of policies with a total annual aggregate limit of up to \$37.0 million for professional malpractice liability insurance and \$40.0 million for general liability insurance. The Company's insurance for the professional liability coverage is written on a "claims-made" basis, and its commercial general liability coverage is maintained on an "occurrence" basis. These coverages apply after a self-insured retention limit is exceeded. For the Company's joint venture operations, the Company has designed a separate insurance program that responds to the risks of specific joint ventures. Most of the Company's joint ventures are insured under a master program with an annual aggregate limit of up to \$80.0 million, subject to a sublimit aggregate ranging from \$23.0 million to \$33.0 million for most joint ventures. The policies are generally written on a "claims-made" basis. Each of these programs has either a deductible or self-insured retention limit. The Company reviews its insurance program annually and may make adjustments to the amount of insurance coverage and self-insured retentions in future years. The Company also maintains umbrella liability insurance covering claims which, due to their nature or amount, are not covered by or not fully covered by the Company's other insurance policies. These insurance policies also do not generally cover punitive damages and are subject to various deductibles and policy limits. Significant legal actions, as well as the cost and possible lack of available insurance, could subject the Company to substantial uninsured liabilities. In the Company's opinion, the outcome of these actions, individually or in the aggregate, will not have a material adverse effect on its financial position, results of operations, or cash flows.

Healthcare providers are subject to lawsuits under the qui tam provisions of the federal False Claims Act. Qui tam lawsuits typically remain under seal (hence, usually unknown to the defendant) for some time while the government decides whether or not to intervene on behalf of a private qui tam plaintiff (known as a relator) and take the lead in the litigation. These lawsuits can involve significant monetary damages and penalties and award bounties to private plaintiffs who successfully bring the suits. The Company is and has been a defendant in these cases in the past, and may be named as a defendant in similar cases from time to time in the future.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

21. Commitments and Contingencies (Continued)

On January 19, 2017, the United States District Court for the District of Delaware unsealed a qui tam Wilmington Litigation. complaint in United States of America and State of Delaware ex rel. Theresa Kelly v. Select Specialty Hospital-Wilmington, Inc. ("SSH-Wilmington"), Select Specialty Hospitals, Inc., Select Employment Services, Inc., Select Medical Corporation, and Crystal Cheek, No. 16-347-LPS. The complaint was initially filed under seal in May 2016 by a former chief nursing officer at SSH-Wilmington and was unsealed after the United States filed a Notice of Election to Decline Intervention in January 2017. The corporate defendants were served in March 2017. In the complaint, the plaintiff-relator alleges that the Select defendants and an individual defendant, who is a former health information manager at SSH-Wilmington, violated the False Claims Act and the Delaware False Claims and Reporting Act based on allegedly falsifying medical practitioner signatures on medical records and failing to properly examine the credentials of medical practitioners at SSH-Wilmington. In response to the Select defendants' motion to dismiss the complaint, in May 2017 the plaintiff-relator filed an amended complaint asserting the same causes of action. The Select defendants filed a motion to dismiss the amended complaint based on numerous grounds, including that the amended complaint did not plead any alleged fraud with sufficient particularity, failed to plead that the alleged fraud was material to the government's payment decision, failed to plead sufficient facts to establish that the Select defendants knowingly submitted false claims or records, and failed to allege any reverse false claim. In March 2018, the District Court dismissed the plaintiff-relator's claims related to the alleged failure to properly examine medical practitioners' credentials, her reverse false claims allegations, and her claim that the defendants violated the Delaware False Claims and Reporting Act. It denied the defendants' motion to dismiss claims that the allegedly falsified medical practitioner signatures violated the False Claims Act. Separately, the District Court dismissed the individual defendant due to the plaintiff-relator's failure to timely serve the amended complaint upon her.

In March 2017, the plaintiff-relator initiated a second action by filing a complaint in the Superior Court of the State of Delaware in Theresa Kelly v. Select Medical Corporation, Select Employment Services, Inc., and SSH-Wilmington, C.A. No. N17C-03-293 CLS. The Delaware complaint alleges that the defendants retaliated against her in violation of the Delaware Whistleblowers' Protection Act for reporting the same alleged violations that are the subject of the federal amended complaint. The defendants filed a motion to dismiss, or alternatively to stay, the Delaware complaint based on the pending federal amended complaint and the failure to allege facts to support a violation of the Delaware Whistleblowers' Protection Act. In January 2018, the Court stayed the Delaware complaint pending the outcome of the federal case.

In January 2021, the Company entered into a settlement agreement with the plaintiff-relator. Under the terms of the settlement, the Company agreed to make payments to the government, the plaintiff-relator and her counsel. Such payments, in the aggregate, are immaterial to the Company's financial statements. In the settlement agreement, the plaintiff-relator released all defendants from liability for all conduct alleged in the federal and state court complaints, and the Company admitted no liability or wrongdoing. In connection with the settlement, the Office of the United States Attorney for the District of Delaware issued a letter to the Company stating that it does not have any present intention, based on facts now known, to pursue an investigation and/or to file suit under the False Claims Act against the Company with respect to any of the allegations made in the federal litigation.

Contract Therapy Subpoena. On May 18, 2017, the Company received a subpoena from the U.S. Attorney's Office for the District of New Jersey seeking various documents principally relating to the Company's contract therapy division, which contracted to furnish rehabilitation therapy services to residents of skilled nursing facilities ("SNFs") and other providers. The Company operated its contract therapy division through a subsidiary until March 31, 2016, when the Company sold the stock of the subsidiary. The subpoena seeks documents that appear to be aimed at assessing whether therapy services were furnished and billed in compliance with Medicare SNF billing requirements, including whether therapy services were coded at inappropriate levels and whether excessive or unnecessary therapy was furnished to justify coding at higher paying levels. The U.S. Attorney's Office has indicated that the subpoena was issued in connection with a qui tam lawsuit. The Company has produced documents in response to the subpoena and intends to fully cooperate with this investigation. At this time, the Company is unable to predict the timing and outcome of this matter.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

21. Commitments and Contingencies (Continued)

Ann Arbor Complaint. On May 12, 2020, the United States District Court for the Eastern District of Michigan unsealed qui tam complaints in United States of America and State of Michigan ex rel. Neal Elkin v. Select Medical Holdings Corp., Select Medical, and Select Specialty Hospital – Ann Arbor, Inc. ("SSH-Ann Arbor"), No. 12-cv-13984. An initial complaint was filed under seal in September 2012 and a first amended complaint was filed under seal in September 2019. Both complaints were unsealed after the United States and State of Michigan filed a Notice of Election to Decline Intervention in May 2020. In the first amended complaint, the plaintiff-relator, a physician formerly practicing at SSH-Ann Arbor, alleges that the defendants had a policy to keep respiratory patients on ventilators longer than medically necessary in order to increase reimbursement, and that, after he complained of this practice, SSH-Ann Arbor retaliated by refusing to assign new patients to him. The first amended complaint was never served on the defendants. On January 15, 2021, the District Court, at the request of the plaintiff-relator and with the consent of the United States and the State of Michigan, dismissed the action without prejudice.

Oklahoma City Subpoena. On August 24, 2020, the Company and Select Specialty Hospital – Oklahoma City, Inc. ("SSH-Oklahoma City") received Civil Investigative Demands from the U.S. Attorney's Office for the Western District of Oklahoma seeking responses to interrogatories and the production of various documents principally relating to the documentation, billing and reviews of medical services furnished to patients at SSH-Oklahoma City. The Company does not know whether the subpoena has been issued in connection with a qui tam lawsuit or in connection with possible civil, criminal or administrative proceedings by the government. The Company is producing documents in response to the subpoena and intends to fully cooperate with this investigation. At this time, the Company is unable to predict the timing and outcome of this matter.

Medicare Dual-Eligible Litigation

The Company's critical illness recovery hospitals have pursued claims against CMS involving denied Medicare bad debt reimbursement for copayments and deductibles of dual-eligible Medicaid beneficiaries. One group of claims affects 75 hospitals in 26 states for cost reporting periods ending in 2005 through 2010. After appeals taken by the Company, a U.S. District Court, in August 2019, ruled in favor of the Company and ordered CMS to determine and pay the Medicare bad debt reimbursement plus interest. The Company and CMS agreed on the amounts of bad debts incurred, but CMS took the position that these amounts need to be reduced by what the state Medicaid programs would have paid. In December 2020, the Company filed a motion with the U.S. District Court to enforce the judgment and order CMS to pay the bad debt amounts without a Medicaid reduction. In January 2021, the Company received correspondence from CMS indicating that it was proceeding to effectuate the judgment based on its own computation of the Medicare bad debt reimbursement. In February 2021, the Company received reimbursement proceeds of \$17.9 million plus accrued interest of \$4.7 million. These amounts will be recognized as income during 2021. The Company believes that CMS owes it an additional \$2.3 million; the Company's motion with the U.S. District Court is still pending with regards to this disputed amount.

22. CARES Act

Provider Relief Funds

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") was enacted. The CARES Act provided additional waivers, reimbursement, grants and other funds to assist health care providers during the COVID-19 pandemic, including \$100.0 billion in appropriations for the Public Health and Social Services Emergency Fund, also referred to as the Provider Relief Fund, to be used for preventing, preparing, and responding to COVID-19, and for reimbursing "eligible health care providers for health care related expenses or lost revenues that are attributable to coronavirus." These health care related expenses could include costs associated with constructing temporary structures or emergency operation centers, retrofitting facilities, purchasing medical supplies and equipment including personal protective equipment and testing supplies, and increasing workforce and trainings. The Company is able to use payments received under the Provider Relief Fund through June 30, 2021.

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

22. CARES Act (Continued)

On December 27, 2020, the Coronavirus Response and Relief Supplemental Appropriations Act of 2021 ("CRRSA Act") was signed into law. The CRRSA Act legislated certain provisions and reporting requirements associated with the payments received under the Provider Relief Fund, including provisions surrounding how an entity should calculate lost revenues and a provision specifying that a parent organization may allocate all or a portion of the General and Targeted Distributions it has received among its other subsidiaries. As discussed above, the payments received under the Provider Relief Fund are to be used for health care related expenses and lost revenues attributable to the COVID-19 pandemic. These amounts, which are to be calculated in accordance with the terms and conditions set forth by the Department of Health and Human Services ("HHS"), must be determined for each of the Company's subsidiaries by taxpayer identification number. Further, the payments are to be applied first against health care related expenses and then applied to lost revenue attributable to the COVID-19 pandemic.

On January 15, 2021, HHS released an updated post-payment notice of reporting requirements which incorporates the provisions of the CRRSA Act. HHS continues to release updated guidance and new or modified responses to Frequently Asked Questions regarding the Provider Relief Fund payments. The Company believes that any changes made to the terms and conditions from those contained in the CRRSA Act are a change to, rather than clarification of, the terms and conditions which existed as of December 31, 2020. Further, the Company believes that the terms and conditions surrounding the Provider Relief Fund payments are subject to additional changes given the series of post-payment notices of reporting requirements and other guidance issued by HHS during the year ended December 31, 2020, which, in some instances, significantly altered the terms and conditions surrounding the Provider Relief Fund payments.

The Company's consolidated subsidiaries received approximately \$172.6 million of payments under the Provider Relief Fund as of December 31, 2020. Since December 31, 2020, the Company has received an additional \$34.6 million of General Distributions. Under the Company's accounting policy, payments are recognized on the books and records of the Company's subsidiaries as other operating income when it is probable that it has complied with the terms and conditions of the funds. The Company evaluated its compliance with the terms and conditions set forth within the CRRSA Act and by HHS as of December 31, 2020, and recognized approximately \$90.0 million as other operating income on the accompanying consolidated statement of operations.

The remaining Provider Relief Fund payments of approximately \$82.6 million at December 31, 2020 are reported as "unearned government assistance" on the accompanying consolidated balance sheet. Of this amount, approximately \$54.5 million relates to payments received where uncertainties exist related to the Company's ability to recognize the payments as other operating income. Such funds may need to be repaid to the government to the extent that they cannot be utilized in accordance with the regulations promulgated by HHS. The remaining amounts are anticipated to be recognized through June 30, 2021 as healthcare expenses attributable to the COVID-19 pandemic are incurred.

Medicare Accelerated and Advance Payments Program

In accordance with the CARES Act, CMS temporarily expanded its current Accelerated and Advance Payment Program for Medicare providers. Under this program, qualified healthcare providers could receive advanced or accelerated payments from CMS. The Company's consolidated subsidiaries received approximately \$321.8 million of advanced payments under this program. The majority of these payments were received in April 2020.

On October 1, 2020, a short-term government funding bill was signed into law. This bill, among other things, extended the repayment terms for providers who received advanced payments under the Medicare Accelerated and Advance Payment Program. The bill modified the terms of repayment so that a provider can request no recoupment for one year after the advanced payment was issued, followed by a 25.0% recoupment of Medicare payments during the next 11 months, and 50.0% recoupment of Medicare payments during the last six months. Any amounts that remain unpaid after 29 months would be subject to a 4.0% interest rate.

Due to the mechanism in which the advanced payments are repaid, there is uncertainty surrounding when the Company will repay the advances it received under this program. Accordingly, amounts received under the Accelerated and Advance Payment Program are reflected as a current liability under "government advances" on the accompanying consolidated balance sheet.

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

ATTACHMENT 33 Availability of Funds

8/20/2021 sem-20201231

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

22. CARES Act (Continued)

Employer Payroll Tax Deferral

In April 2020, the Company began deferring payment on its share of payroll taxes owed, as allowed by the CARES Act through December 31, 2020. The Company is able to defer half of its share of payroll taxes owed until December 31, 2021, with the remaining half due on December 31, 2022. As of December 31, 2020, the Company deferred approximately \$106.2 million of payroll taxes. These amounts are reflected in "accrued payroll" and "other non-current liabilities" on the accompanying consolidated balance sheet.

F-41

https://www.sec.gov/Archives/edgar/data/1320414/000162828021003313/sem-20201231.htm

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SELECT MEDICAL HOLDINGS CORPORATION NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

23. Selected Quarterly Financial Data (Unaudited)

The tables below sets forth selected unaudited financial data for each quarter of the last two years.

		First Quarter		Second Quarter		Third Quarter		Fourth Quarter				
			(in t	housands, excep	t per	share amounts)					
For the year ended December 31, 2019												
Revenue	\$	1,324,631	\$	1,361,364	\$	1,393,343	\$	1,374,584				
Cost of services, exclusive of depreciation and amortization		1,132,092		1,150,150		1,183,111		1,175,649				
Depreciation and amortization		52,138		54,993		52,941		52,504				
Income from operations		111,724		124,882		122,906		112,369				
Net income		53,344		59,986		44,030		43,671				
Net income attributable to Select Medical Holdings Corporation		40,834		44,816		30,732		32,067				
Earnings per common share:(1)												
Basic	\$	0.30	\$	0.33	\$	0.23	\$	0.24				
Diluted	\$	0.30	\$	0.33	\$	0.23	\$	0.24				
		First Quarter		Second Quarter		Third Quarter		Fourth Quarter				
	(in thousands, except per share amounts)											
For the year ended December 31, 2020												
Revenue	\$	1,414,632	\$	1,232,718	\$	1,423,869	\$	1,460,494				
Cost of services, exclusive of depreciation and amortization		1,200,371		1,082,456		1,180,951		1,246,594				
Depreciation and amortization		51,752		52,271		50,110		51,526				
Income from operations ⁽²⁾		128,678		119,518		156,132		163,329				
Net income		70,448		67,486		104,457		102,215				
Net income attributable to Select Medical Holdings Corporation		53,125		51,650		76,946		77,274				
Earnings per common share:(1)												
Basic	\$	0.40	\$	0.39	\$	0.57	\$	0.57				
Diluted	\$	0.40	S	0.39	\$	0.57	\$	0.57				

⁽¹⁾ Due to rounding, the summation of quarterly earnings per common share balances may not equal year to date equivalents.

For the year ended December 31, 2020, the Company recognized payments received under the Provider Relief Fund for health care related expenses and loss of revenue attributable to COVID-19 as other operating income. Income from operations included \$55.0 million and \$36.2 million of other operating income for the second and fourth quarters ended December 31, 2020. Income from operations included a reduction to other operating income of \$1.2 million for the third quarter ended December 31, 2020. Refer to Note 22 - CARES Act for further information.

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The following Financial Statement Schedule along with the report thereon of PricewaterhouseCoopers LLP dated February 25, 2021, should be read in conjunction with the consolidated financial statements. Financial Statement Schedules not included in this filing have been omitted because they are not applicable or the required information is shown in the consolidated financial statements or notes thereto.

Schedule II—Valuation and Qualifying Accounts

	Balance at Beginning of Year		Charged to Cost and Expenses Ac		Acquisitions(1)		Deductions ⁽²⁾		Balance at End of Year	
	(in thousands)									
Income Tax Valuation Allowance										
Year ended December 31, 2020	\$ 18,461	\$	(484)	\$	_	\$	(638)	\$	17,339	
Year ended December 31, 2019	\$ 17,893	\$	568	\$	_	\$	_	\$	18,461	
Year ended December 31, 2018	\$ 12,986	\$	1,032	\$	3,875	\$	_	\$	17,893	

⁽¹⁾ Includes valuation allowance reserves resulting from business combinations.

⁽²⁾ Valuation allowance deductions relate to the disposition of certain subsidiaries.

ATTACHMENT 34 Financial Viability

Enclosed with this attachment are evidence that Rush University System for Health meets the financial viability waiver criteria by maintaining an "A" Bond rating or better. Select Medical Corporation is one of the largest operators of critical illness recovery hospitals, rehabilitation hospitals, outpatient rehabilitation clinics, and occupational health centers in the United States and is publicly traded company on the New York Stock Exchange under ticker SEM (NYSE:SEM). The company had revenues in excess of \$5 billion dollars in 2020 and has the financial wherewithal to meet its financial obligations associated with this project. Enclosed with Attachment 35 are financial viability ratios for which audited financials are available. Additionally, enclosed with Attachment 35 are projected financial viability ratios for the licensee Rush Specialty Hospital, LLC.

ATTACHMENT 34 Financial Viability



Regulatory Disclosures

Regulatory Disclosures

1. The Symbol, Number, or Score in the Rating Scale and the Identity of the Obligor or the Identity and a Description of the Security or Money Market Instrument as required by Paragraph (a)(1)(ii)(A) of SEC Rule 17g-7

Obligor Name: RUSH UNIVERSITY MEDICAL CENTER OBLIGATED GROUP, IL;

Rating: A1

Identifier: CUS: 78200JAA0
Identifier: MDY: 906585669

Description: Rating Class: Underlying; Currency: USD

Credit Rating Action Date: 02 Mar 2020

2. The Version of the Procedure or Methodology Used to Determine the Credit Rating as required by Paragraph (a)(1)(ii)(B) of SEC Rule 17g-7

Principal Methodology

The principal methodology used in this rating was Not-For-Profit Healthcare published on 24-Dec-2018.

Procedure

Not Applicable

Additional Information

The list of the cross sector methodologies identified for this sector are used, when applicable, in the analytical process in conjunction with the primary methodology identified for this rating action, and should be considered an integral part of the analytic approach to determining the credit rating. In cases where the topic of the cross sector methodology is also addressed in the primary methodology, the primary methodology takes precedence.

Adjustments to Pension and OPEB Data Reported by GASB Issuers, Including US States and Local Governments Methodology published on 7-Oct-2019.

Assessing the Impact of Sovereign Credit Quality on Other Ratings published on 20-Jun-2019.

<u>Financial Statement Adjustments in the Analysis of Non-Financial Corporations</u> <u>published on 9-Aug-2018</u>.

General Principles for Assessing Environmental, Social and Governance Risks published on 9-Jan-2019.

Hybrid Equity Credit published on 10-Sep-2018.

<u>Local and Foreign Currency Country Ceilings for Bonds and Other Obligations Methodology</u> <u>published</u> on 25-Nov-2019.

Loss Given Default for Speculative-Grade Companies published on 4-Dec-2015.

Mapping National Scale Ratings from Global Scale Ratings published on 9-May-2016.

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT – July 2018 Edition

ATTACHMENT 34 Financial Viability

S&P Global Find A Rating **About Ratings** Research & Insights Regulatory Products & Benefits Events Q Ratings Illinois Finance Authority **US Regulatory** Issue: US\$410.47 mil rev rdfg bnds (RUSH Obligated Grp) ser 2015A dtd 02/05/2015 due 06/30/2040 **Disclosure** Regulatory Disclosure S&P Global Ratings' regulatory disclosures (PCRs) are published as of a point-in-time, which is current as of the date a Credit Rating Action was last published. S&P Global Ratings updates the PCR for a given Credit Rating to include any changes to PCR disclosures only when a subsequent Credit Rating Action is published. Thus, disclosure information in this PCR may not reflect changes to data within PCR disclosures that can occur over time subsequent to the publication of a PCR but that are not otherwise associated with a Credit Rating Action. CLASS/MATURITY DATE RATING TYPE PUBLICATION DATE Symbol, Number, or Score 03-Mar-2020 16:53 EST 2015A/15-Nov-2021 Local Currency LT in the Rating Scale Used to Denote Credit Rating **Categories and Notches** Rule 17g-7 (a)(1)(ii)(A) Symbol, Number, or Score in the Rating Scale Used to Denote Credit Rating Categories Procedure or Methodology and Notches as Required by Paragraph (a)(1)(ii)(A)of Rule 17g-7 Used to Determine the **Credit Rating** Rule 17g-7 (a)(1)(ii)(B) Main Assumptions and Rating Information Principles Used to Construct the Rating Methodology Used to CREDITWATCH / OUTLOOK CREDITWATCH/ OUTLOOK DATE Determine the Credit Rating Rule 17g-7 (a)(1)(ii)(C)

09-Jan-2015

Stable

03-Mar-2020

A+

The Potential Limitations of the Credit Rating,

ATTACHMENT 35 Financial Viability

Rush Specialty Hospital LLC Ratios

Rush Speciality Hospital, LLC Financial Viability Ratios		· · · ·	D1:-	
			rent Ratio	
	Year 1			Meets Criteria
Current Ratio= Current Assests/Current Liabilites	3.60	4.11	2.0 or more	YES
YR1= 13,027,410/3,619,355				
YR2=17,327,771/4,219,655		Net Margin Percentage		
	Year 1	Year 2	Criteria Y2	
Net Margin %= (Net Income/Net Operating Revenue) x 100	-21%	11%	3% or more	YES
YR1=(7,005,067)/33,250,515 x 100				
YR2= 6,341,145/56,209,799 x 100	Long	-Term D	ebt to Capita	lization
	Year 1	Year 2	Criteria Y2	
Long- Term Debt to Capitalization = (Long-Term/Long-Term				
Debt plus Net Assests) x 100	39%	15%	50% or less	YES
YR1=6,983,149/(6,983,149+10,994,993)				
YR2=2,983,149/(2,983,149+17,336,078)	Proje	Projected Debt Service Coverage		
	Year 1	Year 2	Criteria Y2	
Projected Debt Sevice Coverage= Net Income plus				
(Depreciation plus Interest plus Amorization)/Principal				
Payments plus Interest Expense for the Year of Maximum				
Debt Service after Project Completion	(4.17)	6.98	2.5 or more	YES
YR1=-(7,005,067+1,508,055+500000)/(698315+500000)				
YR2=(6,341,145+1,518,912+500000)/(698315+500000)		Days-0	Cash-on-Han	d
	Year 1	Year 2	Criteria Y2	
Days Cash on Hand= (Cash plus Investments plus Board				
Designated Funds)/(Operating Expense less Depreciation				
Expense)/365 days	83.56	77.77	75 or more	YES
YR1=(8,870,954/(40,256,709-1,508,055))/365				
YR2=(10,301,405/(49,869,781-1,518,912))/365		Cus	hion Ratio	
	Year 1	Year 2	Criteria Y2	
Cushion Ratio= (Cash plus Investments plus Board				
Designated Funds)/(Principal Payments plus Interest				
Expense) for the year of maximum debt service after project				
completion	7.40	8.60	7 or more	YES
YR1=8,870,954/(698315+500000)				
YR2=10,138,082/(698315+500000)				

ATTACHMENT 35 Financial Viability

Select Medical Corporation Financial Viability Ratios

Select Medical Corporation is one of the largest operators of critical illness recovery hospitals, rehabilitation hospitals, outpatient rehabilitation clinics, and occupational health centers in the United States and is publicly traded company on the New York Stock Exchange under ticker SEM (NYSE:SEM). The company had revenues in excess of \$5 billion dollars in 2020 and has the financial wherewithal to meet its financial obligations associated with this project. While the company does not meet the Board's financial viability criteria, the joint venture entity does meet the criteria. As a publicly traded company, the entity files an annual 10-K report with the United States Securities and Exchange Commission which is available online at https://www.selectmedical.com/investor-relations/.

				Board Criteria
Financial Ratio Formula	2018	2019	2020	Requirement
Current Ratio= Current Assets/ Current Liabilities	1.3	1.3	1.3	2.0 or More
Net Margin Percentage = (Net Income/Net Operating Revenues) X 100	3.48%	3.69%	6.23%	3.0% or more
Long-Term Debt to Capitalization = (Long-Term Debt/Long-Term Debt plus Net Assets) X 100	76.60%	73.82%	68.01%	50% or less
Projected Debt Service Coverage = Net Income plus (Depreciation plus Interest plus Amortization)/Principal Payments plus Interest Expense for the Year of Maximum Debt Service after Project Completion	2.88	3.08	2.73	2.5 or more
Days-Cash-on-Hand = (Cash plus Investments plus Board Designated Funds)/(Operating Expense less Depreciation Expense)/365 days	46.43	57.21	45.78	75 or more days
Cushion Ratio = (Cash plus Investments plus Board Designated Funds)/(Principal Payments plus Interest Expense) for the year of maximum debt service after project completion	2.54	3.23	2.9	7.0 or more

ATTACHMENT 35 Financial Viability

	CON Year 1	CON Year 2
<u>Revenue</u>		
Gross Patient Revenue	158,828,518	169,621,806
Contractual Adjustments	101,753,725	87,968,736
Other Deductions from Revenue	23,824,278	25,443,271
Deductions from Revenue	125,578,003	113,412,007
Net Patient Revenue	33,250,515	56,209,799
Other Revenue	1,127	1,127
Total Revenue	33,251,642	56,210,926
Operating Expenses		
Salaries and Benefits	19,414,563	25,365,024
Supplies	3,169,365	3,986,867
Adminstrative Services	2,098,247	3,521,357
Depreciation and Amortization	1,508,055	1,518,912
Other Operating Expenses	14,066,479	15,477,621
Total Operating Expenses	40,256,709	49,869,781
Income from Project Operations	(7,005,067)	6,341,145
Taxes	-	-
Net Income from Project Operations	(7,005,067)	6,341,145
	CON Year 1	CON Year 2
Cash	8,870,954	10,301,405
Accounts Receivable	4,156,455	7,026,366
Other Current Assets	-	-
Other Current Assets Total Current Assets	13,027,410	17,327,771
_		
Total Current Assets PP&E	9,978,082	10,138,082
Total Current Assets		
Total Current Assets PP&E Accumulated Depreciation	9,978,082 (1,508,055)	10,138,082 (3,026,967)
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets	9,978,082 (1,508,055) 8,470,027	10,138,082 (3,026,967) 7,111,115
PP&E Accumulated Depreciation PP&E, net	9,978,082 (1,508,055) 8,470,027	10,138,082 (3,026,967) 7,111,115
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets TOTAL ASSETS	9,978,082 (1,508,055) 8,470,027	10,138,082 (3,026,967) 7,111,115
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets TOTAL ASSETS CURRENT LIABILIITES	9,978,082 (1,508,055) 8,470,027 100,000 21,597,437	10,138,082 (3,026,967) 7,111,115 100,000 24,538,886
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets TOTAL ASSETS CURRENT LIABILITES Accounts Payable	9,978,082 (1,508,055) 8,470,027 100,000 21,597,437	10,138,082 (3,026,967) 7,111,115 100,000 24,538,886 3,244,081
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets TOTAL ASSETS CURRENT LIABILITES Accounts Payable Accrued Salaries	9,978,082 (1,508,055) 8,470,027 100,000 21,597,437	10,138,082 (3,026,967) 7,111,115 100,000 24,538,886
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets TOTAL ASSETS CURRENT LIABILIITES Accounts Payable Accrued Salaries Other Current Liabilities	9,978,082 (1,508,055) 8,470,027 100,000 21,597,437 2,872,641 746,714	10,138,082 (3,026,967) 7,111,115 100,000 24,538,886 3,244,081 975,578
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets TOTAL ASSETS CURRENT LIABILITES Accounts Payable Accrued Salaries	9,978,082 (1,508,055) 8,470,027 100,000 21,597,437	10,138,082 (3,026,967) 7,111,115 100,000 24,538,886 3,244,081
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets TOTAL ASSETS CURRENT LIABILIITES Accounts Payable Accrued Salaries Other Current Liabilities	9,978,082 (1,508,055) 8,470,027 100,000 21,597,437 2,872,641 746,714	10,138,082 (3,026,967) 7,111,115 100,000 24,538,886 3,244,081 975,578
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets TOTAL ASSETS CURRENT LIABILIITES Accounts Payable Accrued Salaries Other Current Liabilities TOTAL CURRENT LIABILIITES	9,978,082 (1,508,055) 8,470,027 100,000 21,597,437 2,872,641 746,714 - 3,619,355	10,138,082 (3,026,967) 7,111,115 100,000 24,538,886 3,244,081 975,578 - 4,219,659
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets TOTAL ASSETS CURRENT LIABILIITES Accounts Payable Accrued Salaries Other Current Liabilities TOTAL CURRENT LIABILIITES	9,978,082 (1,508,055) 8,470,027 100,000 21,597,437 2,872,641 746,714 - 3,619,355	10,138,082 (3,026,967) 7,111,115 100,000 24,538,886 3,244,081 975,578 - 4,219,659
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets TOTAL ASSETS CURRENT LIABILIITES Accounts Payable Accrued Salaries Other Current Liabilities TOTAL CURRENT LIABILIITES LONG-TERM DEBT EQUITY	9,978,082 (1,508,055) 8,470,027 100,000 21,597,437 2,872,641 746,714 - 3,619,355 6,983,149	10,138,082 (3,026,967) 7,111,115 100,000 24,538,886 3,244,081 975,578 - 4,219,659 2,983,149
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets TOTAL ASSETS CURRENT LIABILIITES Accounts Payable Accrued Salaries Other Current Liabilities TOTAL CURRENT LIABILIITES LONG-TERM DEBT EQUITY Partners Equity	9,978,082 (1,508,055) 8,470,027 100,000 21,597,437 2,872,641 746,714 - 3,619,355 6,983,149	10,138,082 (3,026,967) 7,111,115 100,000 24,538,886 3,244,081 975,578 - 4,219,659 2,983,149 18,000,000
Total Current Assets PP&E Accumulated Depreciation PP&E, net Other Assets TOTAL ASSETS CURRENT LIABILIITES Accounts Payable Accrued Salaries Other Current Liabilities TOTAL CURRENT LIABILIITES LONG-TERM DEBT EQUITY Partners Equity Retained Earnings	9,978,082 (1,508,055) 8,470,027 100,000 21,597,437 2,872,641 746,714 - 3,619,355 6,983,149 18,000,000 (7,005,067)	10,138,082 (3,026,967) 7,111,115 100,000 24,538,886 3,244,081 975,578 - 4,219,659 2,983,149 18,000,000 (663,922)

Finance Department 1725 W. Harrison Street Suite 364 Chicago, IL 60612 Tel: 312-942-5647 Fax: 312-942-5729 www.rush.edu patricia_s_oneil@rush.edu

Patricia S. O'Nell Senior Vice President and System Chief Financial Officer



August 20, 2021

Courtney Avery Board Administrator Illinois Health Facilities and Services Review Board 525 W. Jefferson Street, 2nd Floor Springfield, IL 62761

RE: Rush Specialty Hospital
III. Admin. Code Section 1120.120(a) Available Funds Certification
III. Admin. Code Section 1120.140(a) Reasonableness of Financing Arrangements

Dear Ms. Avery:

As a representative of Rush University System for Health ("RUSH"), an Applicant, I hereby attest that the Rush Specialty Hospital project costs will be \$109,549,205. Select Medical Corporation, an Applicant will fund the entire amount of construction of the project from internal cash resources including cash and equivalents.

Applicants are evaluating an alternative construction financing structure involving a ground lease of the property to a third-party developer and lease of the facility to the joint venture entity. If an appropriate alternative arises during the developmental stage, Applicants hereby acknowledge both that any such alternative transaction would require financial commitment of this project and the appropriate filing of a Certificate of Exemption application. As of the filing of this project, no agreement exists or is being evaluated, but the possibility is being included herein in the interests of transparency. In all potential scenarios, the licensee will remain unchanged, as will control of the facility, as that term is defined by this Board.

In the event the Applicants do not proceed with a transaction as described above, RUSH will fund a portion of the project's necessary operating capital until it achieves the target utilization of 85% of average annual occupancy as outlined in the application. RUSH has sufficient and readily accessible internal resources to fund obligations required by the Project, and to fully fund their other ongoing obligations.

Ultimately, RUSH will maintain an ownership interest in the Licensee of up to 26.5% through its ownership interest in Rush-Select Holdings, LLC. The Licensee, Rush Specialty Hospital, LLC is a newly formed entity, without liquid assets that could be used to fund the project. Thus, the project will be funded through Select Medical Corporation's cash resources.

I certify that our analysis of the funding options for this project reflected that the funding strategy outlined herein is the lowest net cost option available.

Sincerely,

Patricia S. O'Neil

Senior Vice President & System Chief Financial Officer

Rush University System for Health

Notarization:

Subscribed and sworn to before me this 20 day of Augus 7, 2021.

icia of O'Nuil

Notary signature: Many F. Porosile

OFFICIAL SEAL MARY F PANOSH NOTARY PUBLIC, STATE OF ILLINOIS My Commission Expires 1/15/25



August 19, 2021

Courtney Avery Board Administrator Illinois Health Facilities and Services Review Board 525 W. Jefferson Street, 2nd Floor Springfield, IL 62761

> RE: Rush Specialty Hospital Ill. Admin. Code Section 1120.120(a) Available Funds Certification Ill. Admin. Code Section 1120.140(a) Reasonableness of Financing Arrangements

Dear Ms. Avery:

As a representative of Select Medical Corporation, an Applicant, I hereby attest that the Rush Specialty Hospital project costs will be \$109,549,205. Select Medical Corporation, an Applicant will fund the entire amount of construction of the project from cash resources including cash and equivalents, as more fully set forth herein. Select Medical Corporation will fund necessary working capital and operating deficits through the second full fiscal year by which time the Project is expected to achieve the target utilization of 85% of average annual occupancy.

Applicants are evaluating an alternative construction financing structure involving a ground lease of the property to a third party developer and lease of the facility to the joint venture entity. If an appropriate alternative arises during the developmental stage, Applicants hereby acknowledge both that any such alternative transaction would require financial commitment of this project and the appropriate filing of a Certificate of Exemption application. As of the filing of this project, no agreement exists or is being evaluated, but the possibility is being included herein in the interests of transparency. In all potential scenarios, the licensee will remain unchanged, as will control of the facility, as that term is defined by this Board.

In the event the Applicants do not proceed with an alternative funding structure as described above, Select Medical Corporation has sufficient and readily accessible internal resources to fund the obligations required by the project. In 2020, Select Medical Corporation's operating activities generated \$5.5 billion in revenue. Select Medical Corporation has at its discretion a \$450 million Revolving Credit Facility, of which \$410 million was available as of December 31, 2020. Existing cash, cash flow from operations, and funds available under the credit facility offer more than adequate funds for the proposed project. We have sufficient resources to fully fund these expenditures in addition to our other ongoing obligations.

Ultimately, Select Medical Corporation will maintain an ownership interest in the Licensee of up to 73.5% through its ownership interest in Rush-Select Holdings, LLC. The Licensee, Rush Specialty Hospital, LLC is a newly formed entity, without liquid assets that could be used to fund the project. Accordingly, the project will be funded as outlined herein.

Select Medical | 4714 Gettysburg Road, Mechanicsburg, PA 17055 | selectmedical.com

Courtney Avery Board Administrator Illinois Health Facilities and Services Review Board

I certify that our analysis of the funding options for this project reflected that the funding strategy outlined herein is the lowest not cost option available.

Sincerely,

Martin F. Jackson

Executive Vice President & Chief Financial Officer
Select Medical Corporation

Notarization:
Subscribed and sworn to before me this 4th day of August, 2021.

INDIVIDUAL ACKNOWLEDGMENT	
State/Commonwealth of PA County of WMDNIan	} ss.
On this the 19th day of Avgus	the undersigned Notary Public,
Name of Notary Public personally appeared	NAM Tacksm Name(s) of Signer(s)
	personally known to me – OR – proved to me on the basis of satisfactory evidence
	to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he/she/they executed the same for the purposes therein stated.
Commonwealth of Pennsylvania - Notary Seal MELANIE BETH NOTARIO - Notary Public Cumberland County My Commission Expires Mar 5, 2024 Commission Number 1240226	WITNESS my hand and official seal.
	Signature of Notary Public
Place Notary Seal/Stamp Above	Any Other Required Information (Printed Name of Notary, Expiration Date, etc.)
OF	PTIONAL
This section is required for notarizations performed information can deter alteration of the document or frau	in Arizona but is optional in other states. Completing this idulent reattachment of this form to an unintended document.
Description of Attached Document	
Title or Type of Document:	
Document Date:	Number of Pages:
Signer(s) Other Than Named Above:	
	tary.org • 1-800-US NOTARY (1-800-876-6827) Item #25936

COST AND GROSS SQUARE FEET BY DEPARTMENT OR SERVICE									
D	Α	В	С	D	Е	F	G	Н	T
Department (list below)	Cost/Squ New	are Foot Mod.	Gross S Ne Circ	ėw .	Gross S Mod.	Sq. Ft. Circ.*	Const. \$ (A x C)	Mod. \$ (B x E)	Total Cost (G + H)
Comprehensive Physical Rehabilitation	\$278.35		65,671				\$18,279,796		\$18,279,796
LTACH	\$246.84		65,671				\$16,210,386		\$16,210,386
Contingency	\$52.36		65,671				\$3,438,838		\$3,438,838
TOTALS	\$577.55		65,671	•			\$37,929,020		\$37,929,020
* Include the perd	* Include the percentage (%) of space for circulation								

Projected Operating Costs

The projected operating costs for the Rush Specialty Hospital in the second fiscal year when the Project achieves target utilization are as follows:

Factor	YR2
Salaries and Benefits	25,365,024
Supplies	3,986,867
Other Operating	
Costs	15,477,621
Total Operating	
Costs	40,842,645
Patient Days	41037
Cost Per Day	\$995

Total Effect of the Project on Capital Costs

Factor	YR2
Depreciation	\$1,518,912
Total Capital Costs	\$1,518,912
Patient Days	41,037
Cost Per Day	\$37

RUSH UNIVERSITY MEDICAL CENTER

Safety Net Information per PA 96-0031					
CHARITY CARE					
Charity (# of patients)	2017	2018	2019		
Inpatient	480	476	349		
Outpatient	11,655	12,224	11,035		
Total	12,135	12,700	11,384		
Charity (cost in dollars)					
Inpatient	\$10,686,523	\$7,388,724	\$8,667,696		
Outpatient	\$10,917,270	\$10,645,902	\$11,728,611		
Total	\$21,603,793	\$18,034,626	\$20,396,307		
	MEDICAID				
Medicaid (# of patients)	2017	2018	2019		
Inpatient	6,981	8,134	7,665		
Outpatient	107,016	114,735	120,775		
Total	113,997	122,869	128,440		
Medicaid (revenue)					
Inpatient	\$100,059,000	\$112,923,000	\$125,248,000		
Outpatient	\$31,698,000	\$30,265,000	\$40,102,000		
Total	\$131,757,000	\$143,188,000	\$165,350,000		

RUSH OAK PARK HOSPITAL

Safety Net Information per PA 96-0031				
CHARITY CARE				
Charity (# of patients)	2017	2018	2019	
Inpatient	N/A	59	35	
Outpatient	N/A	2,549	3,655	
Total	N/A	2,608	3,690	
Charity (cost in dollars)	N/A			
Inpatient	N/A	\$611,142	\$268,090	
Outpatient	N/A	\$2,214,229	\$2,251,356	
Total	N/A	\$2,825,371	\$2,519,446	
	MEDICAID			
Medicaid (# of patients)	2017	2018	2019	
Inpatient	N/A	615	345	
Outpatient	N/A	22,922	24,880	
Total	N/A	23,537	25,225	
Medicaid (revenue)				
Inpatient	N/A	\$6,870,809	\$8,293,384	
Outpatient	N/A	\$10,675,377	\$7,629,535	
Total	N/A	\$17,546,186	\$15,922,919	

RUSH COPLEY MEDICAL CENTER

Safety Net Information per PA 96-0031					
CHARITY CARE					
Charity (# of patients)	2017	2018	2019		
Inpatient	157	138	102		
Outpatient	590	492	327		
Total	747	630	429		
Charity (cost in dollars)					
Inpatient	\$2,672,294	\$2,129,038	\$2,882,758		
Outpatient	\$2,293,079	\$1,832,746	\$1,227,014		
Total	\$4,965,373	\$3,961,784	\$4,109,772		
	MEDICAID				
Medicaid (# of patients)	2017	2018	2019		
Inpatient	2,294	2,183	2,078		
Outpatient	49,504	48,381	45,265		
Total	51,798	50,564	47,343		
Medicaid (revenue)					
Inpatient	\$28,109,323	\$27,963,450	\$21,765,064		
Outpatient	\$244,639,933	\$24,927,322	\$34,153,515		
Total	\$272,749,256	\$52,890,772	\$55,918,579		

RUSH SURGICENTER AT THE PROFESSIONAL BLDG., LTD.

Safety Net Information per PA 96-0031					
CHARITY CARE					
Charity (# of patients)	2017	2018	2019		
Inpatient	0	0	0		
Outpatient	0	1	0		
Total	0	1	0		
Charity (cost in dollars)					
Inpatient	\$0	\$0	\$0		
Outpatient	\$0	\$0	\$0		
Total	\$0	\$0	\$0		
	MEDICAID		T		
Medicaid (# of patients)	2017	2018	2019		
Inpatient	0	0	0		
Outpatient	0	0	0		
Total	0	0	0		
Medicaid (revenue)					
Inpatient	\$0	\$0	\$0		
Outpatient	\$0	\$0	\$0		
Total	\$0	\$0	\$0		

RUSH OAK BROOK SURGERY CENTER, LLC

Safety Net Information per PA 96-0031						
CHARITY CARE						
Charity (# of patients)	2017	2018	2019			
Inpatient	N/A	N/A	0			
Outpatient	N/A	N/A	0			
Total	N/A	N/A	0			
Charity (cost in dollars)						
Inpatient	N/A	N/A	\$0			
Outpatient	N/A	N/A	\$0			
Total	N/A	N/A	\$0			
	·					
	MEDICAID	1				
Medicaid (# of patients)	2017	2018	2019			
Inpatient	N/A	N/A	0			
Outpatient	N/A	N/A	1			
Total	N/A	N/A	1			
Medicaid (revenue)						
Inpatient	N/A	N/A	\$0			
Outpatient	N/A	N/A	\$0			
Total	N/A	N/A	\$0			

RUSH-COPLEY SURGICENTER, LLC

Safety Net	Information pe	er PA 96-0031		
CHARITY CARE				
Charity (# of patients)	2017	2018	2019	
Inpatient	N/A	N/A	0	
Outpatient	N/A	N/A	0	
Total	N/A	N/A	0	
Charity (cost in dollars)				
Inpatient	N/A	N/A	0	
Outpatient	N/A	N/A	0	
Total	N/A	N/A	0	
	MEDICAID			
Medicaid (# of patients)	2017	2018	2019	
Inpatient	N/A	N/A	0	
Outpatient	N/A	N/A	1	
Total	N/A	N/A	1	
Medicaid (revenue)				
Inpatient	N/A	N/A	\$0	
Outpatient	N/A	N/A	\$15,268	
Total	N/A	N/A	\$15,268	

Rush Specialty Hospital, LLC is a new entity and has no applicable historical data for this section of the application. The project patient mix by payer source and projected ratio of charity care through the first five years of operation are included below:

	Payer Mix				
	Year 1	Year 2	Year 3	Year 4	Year 5
Medicare	44.9%	52.0%	52.6%	52.1%	51.8%
Medicare HMO	10.4%	10.1%	10.2%	10.1%	10.0%
Medicaid	16.8%	13.5%	13.3%	13.1%	13.6%
Medicaid HMO	5.7%	4.5%	4.2%	4.4%	4.2%
Commercial	21.9%	19.5%	19.3%	19.4%	19.4%
Charity Care	0.2%	0.2%	0.4%	0.8%	1.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Please find below the historical charitable care organizations owned by the Applicant, Rush University System for Health.

Rush University Medical Center

CHA	CHARITY CARE		
Charity (# of patients)	2017	2018	2019
Inpatient	480	476	349
Outpatient	11,655	12,224	11,035
Total	12,135	12,700	11,384
Charity (cost in dollars)			
Inpatient	\$10,686,523	\$7,388,724	\$8,667,696
Outpatient	\$10,917,270	\$10,645,902	\$11,728,611
Total	\$21,603,793	\$18,034,626	\$20,396,307
Net Patient Revenue	\$21,603,793	\$18,034,626	\$20,396,307
Charity Care as % of Net Revenue	1.8%	1.4%	1.5%

Rush Oak Park Hospital

CHA	RITY CARE		
Charity (# of patients)	2017	2018	2019
Inpatient	61	59	35
Outpatient	3495	2,549	3,655
Total	3,556	2,608	3,690
Charity (cost in dollars)	2017		
Inpatient	\$493,013	\$611,142	\$268,090
Outpatient	\$2,303,877	\$2,214,229	\$2,251,356
Total	\$2,796,890	\$2,825,371	\$2,519,446
Net Patient Revenue	\$2,796,890	\$2,825,371	\$2,519,446
Charity Care as % of Net Revenue	2.0%	2.0%	1.7%

Rush Copley Medical Center

CHA	RITY CARE		
Charity (# of patients)	2017	2018	2019
Inpatient	157	138	102
Outpatient	590	492	327
Total	747	630	429
Charity (cost in dollars)			
Inpatient	\$2,672,294	\$2,129,038	\$2,882,758
Outpatient	\$2,293,079	\$1,832,746	\$1,227,014
Total	\$4,965,373	\$3,961,784	\$4,109,772
Net Patient Revenue	\$4,965,373	\$3,961,784	\$4,109,772
Charity Care as % of Net Revenue	1.4%	1.2%	1.2%

Rush Surgicenter at the Professional Bldg., LTD.

CHA	RITY CARE		
Charity (# of patients)	2017	2018	2019
Inpatient	0	0	0
Outpatient	0	1	0
Total	0	1	0
Charity (cost in dollars)			
Inpatient	\$0	\$0	\$0
Outpatient	\$0	\$0	\$0
Total	\$0	\$0	\$0
Net Patient Revenue	0	0	0
Charity Care as % of Net Revenue	0%	0%	0%

Rush Oak Brook Surgery Center, LLC

CHA	RITY CARE		
Charity (# of patients)	2017	2018	2019
Inpatient	N/A	N/A	0
Outpatient	N/A	N/A	0
Total	N/A	N/A	0
Charity (cost in dollars)			
Inpatient	N/A	N/A	\$0
Outpatient	N/A	N/A	\$0
Total	N/A	N/A	\$0
Net Patient Revenue	0	0	0
Charity Care as % of Net Revenue	0%	0%	0%

Rush Copley Surgicenter, LLC

CHA	RITY CARE		
Charity (# of patients)	2017	2018	2019
Inpatient	N/A	N/A	0
Outpatient	N/A	N/A	0
Total	N/A	N/A	0
Charity (cost in dollars)			
Inpatient	N/A	N/A	0
Outpatient	N/A	N/A	0
Total	N/A	N/A	0
Net Patient Revenue	0	0	0
Charity Care as % of Net Revenue	0%	0%	0%

Select Medical Corporation owns no licensed Illinois healthcare facilities and thus has no applicable historical data for this section of the application. However, from their earliest days of operation, Select Medical has been committed to giving back to the communities they served. More than 20 years later, this spirit of giving is deeply woven into the fabric of the company. Thousands of their employees volunteer their time, efforts and expertise to support important causes and help others in communities across 47 states and the District of Columbia. At the national level, Select Medical is a long-time partner of The American Cancer Society, American Heart Association, Special Olympics and Junior Achievement, among others.

They are also proud to have supported hundreds of regional and community-based organizations and causes such as:

Adopt-A-Highway	Channels Food Rescue	Good Shepherd Foundation
Alex's Lemonade Stand Foundation	Children's Miracle Network	Goodwill Industries
ALS Association	Christopher and Dana Reeve	Greater Cincinnati Foundation
Alzheimer's Association	Foundation Coder Kids – Central PA	Habitat for Humanity
American Cancer Society	Cystic Fibrosis Foundation	Harrisburg Academy
American Heart Association	Daughters of Israel	Harrisburg Area Community College
American Lung Association	Doctors Without Borders	Harrisburg Public School
American Red Cross	Domestic Violence Services	Foundation
America's Second Harvest	of Cumberland and Perry Counties	Harrisburg Symphony Orchestra
Amputee Coalition of America	Dress for Success	Harrisburg University
Angels Among Us	Easter Seals Society	Harvesters – The Community Food Network
Arthritis Foundation	FAIR Fund	Haven of Rest
Autism Speaks	Fairmont Park Conservancy	Humane Society
Bethesda Mission	Fort Smith Children's Emergency Shelter	Illinois State Soccer
Big Brothers Big Sisters		Association
Boys & Girls Club	Four Diamonds Fund	Indo-American Charity
Camp Curtin	Freedom Isn't Free, Inc.	Foundation
Camp Koala	Gamut Theatre Group	International Brain Research Foundation, Inc.
Central Pennsylvania Blood	Girls in the Game	Jesus House
Bank	Girls on the Run	Jewish Home Foundation
Central Pennsylvania Food Bank	Golden Harvest Food Bank	Junior Achievement, Inc.

Juvenile Diabetes Research Foundation

Kallan's Klan

Kessler Foundation

Kidney Association

La Salle University

Latrobe Area Hospital Charitable Foundation

Learning Lamp

Leukemia & Lymphoma Society

Make-A-Wish Foundation

March of Dimes Foundation

MDA – Muscular Dystrophy Association

Meals on Wheels

Memorial Hospital Foundation

Mid-Ohio Food Bank

Mid-Michigan Food Bank

M.S. Hershey Foundation

National Multiple Sclerosis Society

Ned Smith Center for Nature

and Art

Neumann Scholarship Foundation

Norton Healthcare Foundation

Oklahoma Food Bank

Omanoma i ood Bank

Old Newsboys of Flint, Inc.

Pennsylvania Regional Ballet

Pensacola Junior College

Foundation

PinnacleHealth Foundation

Recycle Bicycle

Ronald McDonald House

Charities

Saint Barnabas Medical Center Foundation

Saint Joseph's University

Salvation Army

Seashore Gardens

Foundation

Select Medical Charitable

Foundation

Silence of Mary Home

Special Olympics

Spina Bifida Resource

Network

St. Baldrick's Foundation

St. Francis House -

Gainesville

St. Francis Soup Kitchen

St. Jude Children's Research

Hospital

Star of Hope Mission

Summa Hospitals Foundation

Susan G. Komen for the Cure

Tennessee Hospital Hospitality Houses

Marine Toys for Tots

Foundation

Foundation

Turning Point Elderly Homeless Center

United Cerebral Palsy

United Way

Uplifting Athletes

Vinnie's Kids, Inc.

Vista School

Walter Reed Army Medical

Center

Western Kentucky University

Westmoreland County Food

Bank

Westmoreland Hospital

Foundation

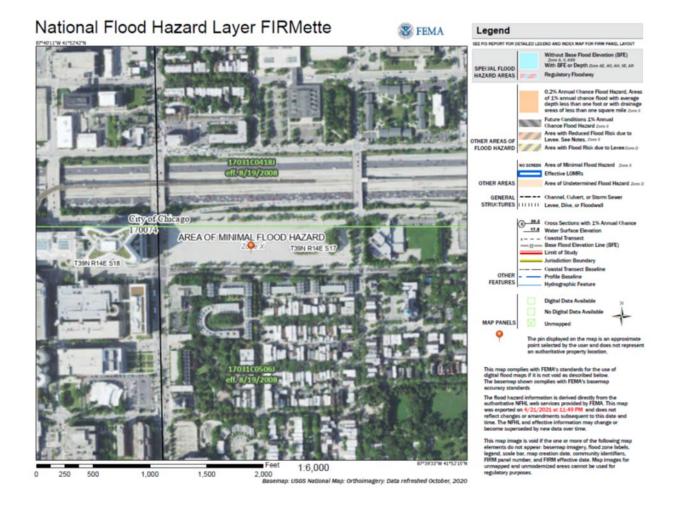
Whitaker Center for Science

and the Arts

Wounded Warriors Project

YMCA / YWCA

ATTACHMENT 39 Flood Plain Information



After paginating the entire completed application indicate, in the chart below, the page numbers for the included attachments:

ACHMENT NO.		PAGES
1	Applicant Identification including Certificate of Good Standing	38 – 45
2	Site Ownership	46 – 49
3	Persons with 5 percent or greater interest in the licensee must be identified with the % of ownership.	50 - 51
4	Organizational Relationships (Organizational Chart) Certificate of Good Standing Etc.	52
5	Flood Plain Requirements	53 – 54
6	Historic Preservation Act Requirements	55 – 56
7	Project and Sources of Funds Itemization	57 – 60
8	Financial Commitment Document if required	61
9	Cost Space Requirements	62 – 64
10	Discontinuation	n/a
11	Background of the Applicant	65 – 90
12	Purpose of the Project	91 – 155
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14	Size of the Project	159
15	Project Service Utilization	160 – 16
16	Unfinished or Shell Space	162
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19 20	Comprehensive Physical Rehabilitation Acute Mental Illness	164 – 202 n/a
20	Acute Mental Illness	n/a
21	Open Heart Surgery	n/a
22	Cardiac Catheterization	n/a
23	In-Center Hemodialysis	n/a
24	Non-Hospital Based Ambulatory Surgery	n/a
25	Selected Organ Transplantation	n/a
26	Kidney Transplantation	n/a
27	Subacute Care Hospital Model	n/a
28	Community-Based Residential Rehabilitation Center	n/a
29	Long Term Acute Care Hospital	203-230
30	Clinical Service Areas Other than Categories of Service	n/a
31	Freestanding Emergency Center Medical Services	n/a
32	Birth Center	n/a
Financial a	and Economic Feasibility:	
33	Availability of Funds	231 – 43
34	Financial Waiver	432 – 434
35	Financial Viability	435 – 437
36	Economic Feasibility	438 – 442
37	Safety Net Impact Statement	443 – 448
38	Charity Care Information	449 – 454
	Flood Plain Information	455