ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT

SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION

This Section must be completed for all projects.

Facility/Project Identification

Facility Name: **Advocate Condell Medical Center - ICU & Med-Surg Construction & Modernization Project**
Street Address: 801 S. Milwaukee Avenue
City and Zip Code: Libertyville, IL 60048
County: Lake Health Service Area: 8 Health Planning Area: A-09

RECEIVED
JAN 8 2020
HEALTH FACILITIES & SERVICES REVIEW BOARD

Applicant(s) [Provide for each applicant (refer to Part 1130.220)]

Exact Legal Name: Advocate Condell Medical Center
Street Address: 801 S. Milwaukee Avenue
City and Zip Code: Libertyville, IL 60048
Name of Registered Agent: Michael Kerns
Registered Agent Street Address: 3075 Highland Parkway, Suite 600
Registered Agent City and Zip Code: Downers Grove, IL 60515
Name of President: Matthew Primack
President Street Address: 801 S. Milwaukee Avenue
President City and Zip Code: Libertyville, IL 60048
President Telephone Number: (847) 990-5201

Type of Ownership of Applicants

- ☒ Non-profit Corporation
- ☐ For-profit Corporation
- ☐ Limited Liability Company
- ☐ Partnership
- ☐ Governmental
- ☐ 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 ATTACHMENT 1 IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

Primary Contact [Person to receive ALL correspondence or inquiries]

Name: Matthew Primack
Title: President
Company Name: Advocate Condell Medical Center
Address: 801 S. Milwaukee Avenue, Libertyville, IL 60048
Telephone Number: (847) 990-5201
E-mail Address: Matthew.Primack@advocatehealth.com
Fax Number: (847) 362-1721

Additional Contact [Person who is also authorized to discuss the application for permit]

Name: Myndee Balkan
Title: Manager, Business Development Planning
Company Name: Advocate Aurora Health Care
Address: 801 S. Milwaukee Avenue, Libertyville, IL 60048
Telephone Number: (847) 990-5521
E-mail Address: Myndee.Balkan@advocatehealth.com
Fax Number: (847) 573-4315

ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD
APPLICATION FOR PERMIT

SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION

This Section must be completed for all projects.

Facility/Project Identification

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City and Zip Code: Libertyville, IL 60048
County: Lake Health Service Area: 8 Health Planning Area: A-09

Applicant(s) [Provide for each applicant (refer to Part 1130.220)]

Exact Legal Name: Advocate Health & Hospitals Corporation
Street Address: 3075 Highland Parkway, Suite 600
City and Zip Code: Downers Grove, IL 60515
Name of Registered Agent: Michael Kerns
Registered Agent Street Address: 3075 Highland Parkway, Suite 600
Registered Agent City and Zip Code: Downers Grove, IL 60515
Name of Chief Executive Officer: James H. Skogsbergh
Chief Executive Officer Street Address: 3075 Highland Parkway, Suite 600
Chief Executive Officer City and Zip Code: Downers Grove, IL 60515
Chief Executive Officer Telephone Number: (630) 572-9393

Type of Ownership of Applicants

☒ Non-profit Corporation ☐ Partnership
☐ For-profit Corporation ☐ Governmental
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ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD
APPLICATION FOR PERMIT

SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION

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Facility/Project Identification

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Street Address: 801 S. Milwaukee Avenue
City and Zip Code: Libertyville, IL 60048
County: Lake Health Service Area: 8 Health Planning Area: A-09

Applicant(s) [Provide for each applicant (refer to Part 1130.220)]

Exact Legal Name: **Advocate Health Care Network**
Street Address: 3075 Highland Parkway, Suite 600
City and Zip Code: Downers Grove, IL 60515
Name of Registered Agent: Michael Kerns
Registered Agent Street Address: 3075 Highland Parkway
Registered Agent City and Zip Code: Downers Grove, IL 60515
Name of Chief Executive Officer: James H. Skogsbergh
Chief Executive Officer Street Address: 3075 Highland Parkway, Suite 600
Chief Executive Officer City and Zip Code: Downers Grove, IL 60515
Chief Executive Officer Telephone Number: (630) 572-9393

Type of Ownership of Applicants

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LLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD
APPLICATION FOR PERMIT

SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION

Facility/Project Identification

Facility Name: **Advocate Condell Medical Center - ICU & Med-Surg Construction & Modernization Project**
Street Address: 801 S. Milwaukee Avenue
City and Zip Code: Libertyville, IL 60048
County: Lake Health Service Area: 8 Health Planning Area: A-09

Applicant(s) [Provide for each applicant (refer to Part 1130.220)]

Exact Legal Name: **Advocate Aurora Health, Inc.**	
Street Address: 750 W. Virginia	
City and Zip Code: Milwaukee, WI 53204	
Name of Registered Agent: The Corporation Trust Company	
Registered Agent Street Address: Wilmington, DE 19801	
Name of Chief Executive Officer:	James H. Skogsbergh
Chief Executive Officer Street Address:	3075 Highland Parkway, Suite 600
Chief Executive Officer City and Zip Code:	Downers Grove, IL 60515
Chief Executive Officer Telephone Number:	(630) 572-9393

Type of Ownership of Applicants

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Telephone Number: (847) 990-5521
E-mail Address: Myndee.Balkan@advocatehealth.com
Fax Number: (847) 573-4315

Post Exemption Contact

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

Name:	Scott Nelson
Title	Vice President, Planning, Design & Construction
Company Name:	Advocate Aurora Health, Inc.
Address:	3075 Highland Parkway, Suite 400, Downers Grove, IL 60515
Telephone Number:	(630) 929-5575
E-mail Address:	scott.nelson@advocatehealth.com
Fax Number:	(630) 990-4798

Site Ownership

[Provide this information for each applicable site]

Exact Legal Name of Site Owner: **Advocate Condell Medical Center**

Address of Site Owner: **801 S. Milwaukee Avenue, Libertyville, IL 60048**

Street Address or Legal Description of the Site: **801 S. Milwaukee Avenue, Libertyville, IL 60048**

Proof of ownership or control of the site is to be provided as Attachment 2. Examples of proof of ownership are property tax statements, tax assessor's documentation, deed, notarized statement of the corporation attesting to ownership, an option to lease, a letter of intent to lease, or a lease.

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

Operating Identity/Licensee

[Provide this information for each applicable facility and insert after this page.]

Exact Legal Name of Site Owner: **Advocate Condell Medical Center**

Address of Site Owner: **801 S. Milwaukee Avenue, Libertyville, IL 60048**

- ☒ Non-profit Corporation
- ☐ For-profit Corporation
- ☐ Limited Liability Company
- ☐ Partnership
- ☐ Governmental
- ☐ 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 organized and the name and address of each partner specifying whether each is a general or limited partner.
- **Persons with 5 percent or greater interest in the licensee must be identified with the % of ownership.**

APPEND DOCUMENTATION AS ATTACHMENT 3, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

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 ATTACHMENT 4, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

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)**.

APPEND DOCUMENTATION AS ATTACHMENT 5, 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 ATTACHMENT 6, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

DESCRIPTION OF PROJECT

1. Project Classification

[Check those applicable - refer to Part 1110.20 and Part 1120.20(b)]

Part 1110 Classification:

☒ 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.

Advocate Condell Medical Center, Advocate Health & Hospitals Corporation, Advocate Heath Care Network and Advocate Aurora Health, Inc. the applicants, propose construction and modernization of the Intensive Care Unit and Medical-Surgical Units at Advocate Condell Medical Center, with the address 801 S. Milwaukee Avenue, Libertyville, IL 60048.

The project will include expansion and modernization of the current Intensive Care Unit (ICU) to increase capacity from 17 to 32 beds. The fifth floor of the attached West Tower building is being designed for relocation of 34 of the total medical-surgical beds from the original hospital building increasing the medical-surgical bed capacity from 214 to 217 beds. The West Tower construction will include relocation of the acute care dialysis stations increasing from 4 to 6 stations.

The Project will be completed in phases. The West Tower medical-surgical modernization will be completed in Phase 1 to accommodate the ICU expansion in Phase 2.

The project is expected to cost $63,538,825 with 24,855 square feet of new construction (15,388 of clinical and 9,467 of non clinical) and 39,589 square feet of modernization (30,595 of clinical and 8,994 of non-clinical space).

The West Tower Fifth floor will be designed for high efficiency patient care as well as energy efficienct LEED Certification. The modernized ICU floor will have Healthy Roadmap Space Certification (similar to LEED). The anticipated completion date is December 31, 2023.

The project is classified as a substantive project, as there is a change in bed capacity.

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 and Sources of Funds			
USE OF FUNDS	**CLINICAL**	**NONCLINICAL**	**TOTAL**
Preplanning Costs			
Site Survey and Soil Investigation			
Site Preparation			
Off Site Work			
New Construction Contracts			
Modernization Contracts			
Contingencies			
Architectural/Engineering Fees			
Consulting and Other Fees			
Movable or Other Equipment (not in construction contracts)			
Bond Issuance Expense (project related)			
Net Interest Expense During Construction (project related)			
Fair Market Value of Leased Space or Equipment			
Other Costs To Be Capitalized			
Acquisition of Building or Other Property (excluding land)			
TOTAL USES OF FUNDS			
SOURCE OF FUNDS	**CLINICAL**	**NONCLINICAL**	**TOTAL**
Cash and Securities			
Pledges			
Gifts and Bequests			
Bond Issues (project related)			
Mortgages			
Leases (fair market value)			
Governmental Appropriations			
Grants			
Other Funds and Sources			
TOTAL SOURCES OF FUNDS			
NOTE: ITEMIZATION OF EACH LINE ITEM MUST BE PROVIDED AT ATTACHMENT 7, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.			

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: $_____
Fair Market Value: $_____

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 $ _____.

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 ☐ Final Working

Anticipated project completion date (refer to Part 1130.140): 12/31/2023

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 ATTACHMENT 8, 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.

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							
Medical Surgical							
Intensive Care							
Diagnostic Radiology							
MRI							
Total Clinical							
NON-REVIEWABLE							
Administrative							
Parking							
Gift Shop							
Total Non-clinical							
TOTAL							

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

Facility Bed Capacity and Utilization

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: Advocate Condell Medical Center		**CITY: Libertyville**			
REPORTING PERIOD DATES:		**From: 1/1/2018**		**to: 12/31/18**	
Category of Service	**Authorized Beds**	**Admissions**	**Patient Days**	**Bed Changes**	**Proposed Beds**
Medical/Surgical	214	12,702	66,136	3	217
Obstetrics	26	1,184	3,032	0	26
Pediatrics	16	171	876	0	16
Intensive Care	17	11,383	5,254	15	32
Comprehensive Physical Rehabilitation	0	0	0	0	0
Acute/Chronic Mental Illness	0	0	0	0	0
Neonatal Intensive Care	0	0	0	0	0
General Long-Term Care	0	0	0	0	0
Specialized Long-Term Care	0	0	0	0	0
Long Term Acute Care	0	0	0	0	0
Other – Dedicated Obs.	*6*	*0*	*311*	*0*	*0*
TOTALS:	273	15,440	75,609	18	291

Source: Hospital Profile

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CERTIFICATION

The application must be signed by the authorized representative(s) of the applicant entity. The authorized representative(s) are:

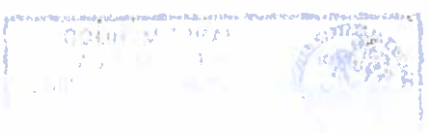
- in the case of a corporation, any two of its officers or members of its Board of Directors;
- in the case of a limited liability company, any two of its managers or members (or the sole manger or member when two or more managers or members do not exist);
- in the case of a partnership, two of its general 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 for Permit is filed on the behalf of Advocate Condell 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 for permit 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 permit application fee required for this application is sent herewith or will be paid upon request.

SIGNATURE	SIGNATURE
Matthew Primack PRINTED NAME	William Santulli PRINTED NAME
President Advocate Condell Medical Center PRINTED TITLE	Chief Operating Officer PRINTED TITLE
Notarization: Subscribed and sworn to before me this _____ day of _____	Notarization: Subscribed and sworn to before me this 16th day of December 2019
Signature of Notary	Signature of Notary
Seal	Seal

JANET M. HOOD
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
September 10, 2022

*Insert EXACT legal name of the applicant



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SIGNATURE

Matthew Primack
PRINTED NAME

President
Advocate Condell Medical Center
PRINTED TITLE

Notarization:
Subscribed and sworn to before me
this 10 day of December 2019

Signature of Notary

Seal

OFFICIAL SEAL
TIFFANY L NICHOLS
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:01/26/21

SIGNATURE

William Santulli
PRINTED NAME

Chief Operating Officer
PRINTED TITLE

Notarization:
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this _____ day of _____

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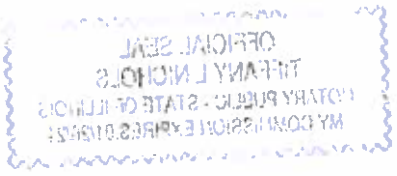
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MY COMMISSION EXPIRES 8.01.2021

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SIGNATURE

James H. Skogsbergh
PRINTED NAME

President and CEO
PRINTED TITLE

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this 16th day of December, 2019

Signature of Notary

Seal

JANET M. HOOD
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Notary Public, State of Illinois
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SIGNATURE

William Santulli
PRINTED NAME

Chief Operating Officer
PRINTED TITLE

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Notary Public, State of Illinois
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SIGNATURE

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PRINTED NAME

Chief Operating Officer
PRINTED TITLE

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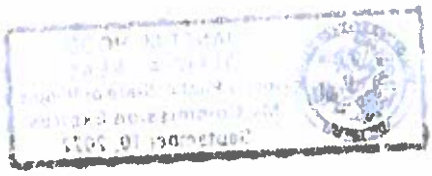
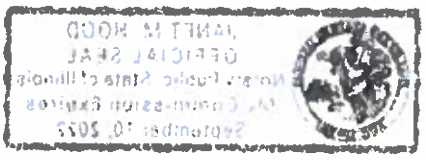
*Indicate the legal name of the applicant





CERTIFICATION

The application must be signed by the authorized representative(s) of the applicant entity. The authorized representative(s) 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 manger 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 for Permit is filed on the behalf of Advocate Aurora Health, Inc. 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 for permit 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 permit application fee required for this application is sent herewith or will be paid upon request.

JH Skogsbergh
SIGNATURE

James H. Skogsbergh
PRINTED NAME

President and CEO
PRINTED TITLE

Notarization:
Subscribed and sworn to before me
this 16th day of December 2019

Janet M. Hood
Signature of Notary

Seal

JANET M. HOOD
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
September 10, 2022

William Santulli
SIGNATURE

William Santulli
PRINTED NAME

Chief Operating Officer
PRINTED TITLE

Notarization:
Subscribed and sworn to before me
this 16th day of December 2019

Janet M. Hood
Signature of Notary

Seal

JANET M. HOOD
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
September 10, 2022

*Insert EXACT legal name of the applicant

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.

3. 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 is able to submit amendments to previously submitted information, as needed, to update and/or clarify data.

APPEND DOCUMENTATION AS ATTACHMENT 11, 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 ATTACHMENT 12, 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** of 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 ATTACHMENT 13, 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				
DEPARTMENT/SERVICE	PROPOSED BGSF/DGSF	STATE STANDARD	DIFFERENCE	MET STANDARD?

APPEND DOCUMENTATION AS ATTACHMENT 14, 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 has established utilization standards or occupancy targets in 77 Ill. 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					
	DEPT./ SERVICE	HISTORICAL UTILIZATION (PATIENT DAYS) (TREATMENTS) ETC.	PROJECTED UTILIZATION	STATE STANDARD	MEET STANDARD?
YEAR 1					
YEAR 2					

APPEND DOCUMENTATION AS ATTACHMENT 15, 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:
   a. 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 ATTACHMENT 16, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

There is no shell space in the proposed project.

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 ATTACHMENT 17, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

N/A

SECTION V. SERVICE SPECIFIC REVIEW CRITERIA

This Section is applicable to all projects proposing the establishment, expansion or modernization of categories of service that are subject to CON review, as provided in the Illinois Health Facilities Planning Act [20 ILCS 3960]. It is comprised of information requirements for each category of service, as well as charts for each service, indicating the review criteria that must be addressed for each action (establishment, expansion, and modernization). After identifying the applicable review criteria for each category of service involved, read the criteria and provide the required information APPLICABLE TO THE CRITERIA THAT MUST BE ADDRESSED:

A. Criterion 1110.200 - Medical/Surgical, Obstetric, Pediatric and Intensive Care

1. Applicants proposing to establish, expand and/or modernize the Medical/Surgical, Obstetric, Pediatric and/or Intensive Care categories 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
☐ **Medical/Surgical**		
☐ **Obstetric**		
☐ **Pediatric**		
☐ **Intensive Care**		

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

APPLICABLE REVIEW CRITERIA	Establish	Expand	Modernize
1110.200(b)(1) - Planning Area Need - 77 Ill. Adm. Code 1100 (formula calculation)	X		
1110.200(b)(2) - Planning Area Need - Service to Planning Area Residents	X	X	
1110.200(b)(3) - Planning Area Need - Service Demand - Establishment of Category of Service	X		
1110.200(b)(4) - Planning Area Need - Service Demand - Expansion of Existing Category of Service		X	
1110.200(b)(5) - Planning Area Need - Service Accessibility	X		
1110.200(c)(1) - Unnecessary Duplication of Services	X		
1110.200(c)(2) - Maldistribution	X	X	
1110.200(c)(3) - Impact of Project on Other Area Providers	X		
1110. 200(d)(1), (2), and (3) - Deteriorated Facilities			X
1110.200(d)(4) - Occupancy			X
1110.200(e) - Staffing Availability	X	X	
1110.200(f) - Performance Requirements	X	X	X
1110.200(g) - Assurances	X	X	

APPEND DOCUMENTATION AS ATTACHMENT 18, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

M. Criterion 1110.270 - Clinical Service Areas Other than Categories of Service

1. Applicants proposing to establish, expand and/or modernize Clinical Service Areas Other than categories of service must submit the following information:

2. Indicate changes by Service: Indicate # of key room changes by action(s):

Service	# Existing Key Rooms	# Proposed Key Rooms
☐		
☐		
☐		

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

Project Type	Required Review Criteria
New Services or Facility or Equipment	(b) – Need Determination – Establishment
Service Modernization	(c)(1) – Deteriorated Facilities
	AND/OR
	(c)(2) – Necessary Expansion
	PLUS
	(c)(3)(A) – Utilization – Major Medical Equipment
	OR
	(c)(3)(B) – Utilization – Service or Facility
APPEND DOCUMENTATION AS ATTACHMENT 30, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.	

The following Sections DO NOT 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)**

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]:**

_____	a) Cash and Securities – statements (e.g., audited financial statements, letters from financial institutions, board resolutions) as to: 1) the amount of cash and securities available for the project, including the identification of any security, its value and availability of such funds; and 2) 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 time table of gross receipts and related fundraising expenses, and a discussion of past fundraising experience.
_____	c) Gifts and Bequests – verification of the dollar amount, identification of any conditions of use, and the estimated time table 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: 1) 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; 2) 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.; 4) 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; 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 ATTACHMENT 33, 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 of 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 ATTACHMENT 34, 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.

	Historical 3 Years			Projected
Enter Historical and/or Projected Years:				
Current Ratio				
Net Margin Percentage				
Percent Debt to Total Capitalization				
Projected Debt Service Coverage				
Days Cash on Hand				
Cushion Ratio				

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 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 of 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;

3) 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									
Department (list below)	A	B	C	D	E	F	G	H	Total Cost (G + H)
	Cost/Square Foot New	Cost/Square Foot Mod.	Gross Sq. Ft. New	Gross Sq. Ft. Circ.*	Gross Sq. Ft. Mod.	Gross Sq. Ft. Circ.*	Const. $ (A x C)	Mod. $ (B x E)	
Contingency									
TOTALS									
* 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 ATTACHMENT 36, 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 ALL SUBSTANTIVE 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)	**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 ATTACHMENT 37, 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 **audited** 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 must be provided at cost.

A table in the following format must be provided for all facilities as part of Attachment 38.

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

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

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

INDEX OF ATTACHMENTS

Type of Ownership of Applicants

☒	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 ATTACHMENT 1 IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

See Attachment #1, Exhibits 1, 2, 3, and 4.

File Number 6610-658-6

STATE OF ILLINOIS

OFFICE OF THE SECRETARY OF STATE

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

ADVOCATE CONDELL MEDICAL CENTER, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON APRIL 29, 2008, 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.

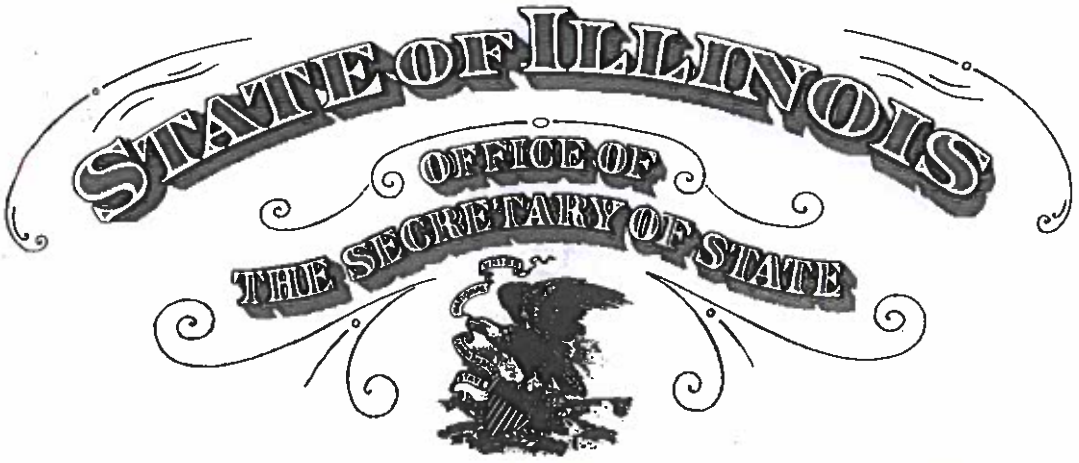
In Testimony Whereof, *I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this* 10TH *day of* DECEMBER *A.D.* 2019 .

Authentication #: 1934401148 verifiable until 12/10/2020
Authenticate at: http://www.cyberdriveillinois.com

Jesse White

SECRETARY OF STATE

File Number 1004-695-5



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

ADVOCATE HEALTH AND HOSPITALS CORPORATION, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON SEPTEMBER 12, 1906, 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* 26TH *day of* MARCH *A.D.* 2019 .

Authentication #: 1908501888 verifiable until 03/26/2020
Authenticate at: http://www.cyberdriveillinois.com

Jesse White

SECRETARY OF STATE

File Number 1707-692-2

STATE OF ILLINOIS

OFFICE OF THE SECRETARY OF STATE

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

ADVOCATE HEALTH CARE NETWORK, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON JUNE 14, 1923, 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* 26TH *day of* MARCH *A.D.* 2019 .

Authentication #: 1908501864 verifiable until 03/26/2020
Authenticate at: http://www.cyberdrivelllinois.com

Jesse White

SECRETARY OF STATE

State Of Delaware

Entity Details

7/31/2018 6:24:28PM

File Number: 6645600 Incorporation Date / Formation Date: 12/4/2017

Entity Name: ADVOCATE AURORA HEALTH, INC.

Entity Kind: Corporation Entity Type: Exempt

Residency: Domestic State: DELAWARE

Status: Good Standing Status Date: 12/4/2017

Registered Agent Information

Name: THE CORPORATION TRUST COMPANY

Address: CORPORATION TRUST CENTER 1209 ORANGE ST

City: WILMINGTON Country:

State: DE Postal Code: 19801

Phone: 302-658-7581

OFFICE OF THE SECRETARY OF STATE

JESSE WHITE • Secretary of State

APRIL 3, 2018 **7155-851-7**

CT CORPORATION SYSTEM
118 W EDWARDS #200
SPRINGFIELD IL 62704

RE ADVOCATE AURORA HEALTH, INC.

DEAR SIR OR MADAM:

ENCLOSED YOU WILL FIND THE AUTHORITY OF THE ABOVE NAMED CORPORATION TO CONDUCT AFFAIRS IN THIS STATE.

PAYMENT OF THE FILING FEE IS HEREBY ACKNOWLEDGED.

CERTAIN NOT FOR PROFIT CORPORATIONS ORGANIZED AS A CHARITABLE CORPORATION ARE REQUIRED TO REGISTER WITH THE OFFICE OF THE ATTORNEY GENERAL. UPON RECEIPT OF THE ENCLOSED AUTHORITY, YOU MUST CONTACT THE CHARITABLE TRUST DIVISION, OFFICE OF THE ATTORNEY GENERAL, 100 W. RANDOLPH, 3RD FLOOR, CHICAGO, ILLINOIS 60601, TELEPHONE (312) 814-2595.

SINCERELY,

JESSE WHITE
SECRETARY OF STATE
DEPARTMENT OF BUSINESS SERVICES
CORPORATION DIVISION
TELEPHONE (217) 782-6961

FORM NFP 113.15 (rev. Dec. 2003)
APPLICATION FOR AUTHORITY
TO CONDUCT AFFAIRS IN
ILLINOIS (Foreign Corporations)
General Not For Profit Corporation Act

Secretary of State
Department of Business Services
501 S. Second St., Rm. 350
Springfield, IL 62756
217-782-1834
www.cyberdriveillinois.com

Remit payment in the form of a cashier's check, certified check, money order or an Illinois attorney's or CPA's check payable to Secretary of State.

FILED

APR 0 3 2018

JESSE WHITE
SECRETARY OF STATE

File # 7155-8517 Filing Fee: $50 Approved: BC

----- Submit in duplicate ----- Type or Print clearly in black ink ----- Do not write above this line -----

1. a. Corporate Name: Advocate Aurora Health, Inc.

   b. Assumed Corporate Name (Complete only if the new corporate name is not available in this state.):

   By electing this assumed name, the Corporation hereby agrees NOT to use its corporate name in the transaction of business in Illinois. Form NFP 104.15 is attached.

2. a. State or Country of Incorporation: Delaware

   b. Date of Incorporation: December 4, 2017

   c. Period of Duration: Permanent

3. a. Address of Principal Office, wherever located: 3075 Highland Pkwy.,
   Downers Grove, IL 60515-1206

   b. Address of Principal Office in Illinois: 3075 Highland Pkwy.,
   Downers Grove, IL 60515-1206

4. Name and Address of Registered Agent and Registered Office in Illinois:

   Registered Agent: Earl J. Barnes II
   (First Name / Middle Name / Last Name)

   Registered Office: 3075 Highland Pkwy Suite 600
   (Number / Street / Suite # (P.O. Box alone is unacceptable))

   Downers Grove 60515 DuPage County
   (City / ZIP Code / County)

5. States and Countries in which Corporation is admitted or qualified to conduct affairs: Wisconsin (application pending)

6. Names and respective addresses of Corporation's officers and directors:

	Street Address	City	State	ZIP
President See attached				
Secretary				
Director				
Director				
Director				

If there are additional officers or more than three directors, please attach list.

Printed by authority of the State of Illinois. January 2015 - 1 - C 150.15

7155 8517

Directors:

Name	Address
Michele Baker Richardson	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
John F. Timmer	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Lynn Y. Crump-Caine	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
K. Richard Jakle	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Mark M. Harris	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
David B. Anderson	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
James H. Skogsbergh	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Joanne Disch	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
John W. Daniels, Jr.	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Joanne B. Bauer	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Charles Harvey	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Rick Weiss	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Thomas Bolger	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Nick W. Turkal	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515

7155-8517

Section 7: PURPOSE(S) FOR WHICH THE CORPORATION IS ORGANIZED AND PROPOSES TO PURSUE IN THE CONDUCT OF AFFAIRS IN THIS STATE:

The Corporation is organized and shall be operated exclusively for charitable, scientific, religious and educational purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (or the corresponding provisions of any future United States Internal Revenue Law) (hereinafter the "Code"); and limited as further provided in its Certificate of Incorporation. Specifically, the Corporation is organized and shall be operated exclusively for the benefit of, to perform the functions of, or to carry out the purposes of its supported organizations, as listed below (the "Supported Organizations"). The Corporation is organized and operated as a Type III functionally integrated supporting organization as defined in section 509(a)(3) of the Code and Treas. Reg. Section 1.509(a)-4(i). The Corporation is organized for the purpose of serving as the parent organization of the Supported Organizations and shall exercise direction over the policies, programs and activities of the Supported Organizations. The Corporation shall engage in activities relating to the purposes described above, and invest in, receive, hold, use, and dispose of all property, real or personal, as may be necessary or desirable to carry into effect such purposes. The Corporation is formed as a result of the affiliation of Advocate Health Care Network, an Illinois nonprofit corporation ("Advocate") and Aurora Health Care, Inc., a Wisconsin nonstock corporation ("Aurora"), in accordance with the terms and conditions of that certain Affiliation Agreement between Advocate and Aurora dated December 4, 2017 (the "Affiliation Agreement").

The Corporation's Supported Organizations, which are described in Section 509(a)(1) or Section 509(a)(2) of the Code, are as follows:

- Advocate Health and Hospitals Corporation
- EHS Home Health Care Services, Inc.
- Advocate Charitable Foundation
- Advocate North Side Health Network
- Meridian Hospice
- Advocate Condell Medical Center
- Advocate Sherman Hospital
- Sherman West Court
- Visiting Nurse Association of Wisconsin, Inc.
- Aurora UW Academic Medical Group
- Aurora Health Care Central, Inc.
- Aurora Psychiatric Hospital, Inc.
- Aurora Medical Center of Washington County, Inc.
- Aurora Health Care North, Inc.
- West Allis Memorial Hospital, Inc.
- Aurora Family Service, Inc.
- Aurora Medical Center of Oshkosh, Inc.
- Aurora Medical Group, Inc.
- Kradwell School, Inc.
- Aurora Advanced Healthcare, Inc.

7155-8517

- Aurora Health Care Metro, Inc.
- Aurora Health Care Southern Lakes, Inc.
- AMG Illinois, Ltd.
- Aurora Medical Center Grafton

Site Ownership

[Provide this information for each applicable site]

Exact Legal Name of Site Owner: **Advocate Condell Medical Center**
Address of Site Owner: **801 S. Milwaukee Avenue, Libertyville, IL 60048**
Street Address or Legal Description of the Site: **801 S. Milwaukee Avenue, Libertyville, IL 60048** **Proof of ownership or control of the site is to be provided as Attachment 2. Examples of proof of ownership are property tax statements, tax assessor's documentation, deed, notarized statement of the corporation attesting to ownership, an option to lease, a letter of intent to lease, or a lease.**
APPEND DOCUMENTATION AS ATTACHMENT 2, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

The proposed site is at 801 S. Milwaukee Avenue, Libertyville, IL.
See Attachment #2, Exhibit 1.

#20-004

Advocate Health Care
3075 Highland Parkway, Suite 600 || Downers Grove, Illinois 60515 || T 630.572.9393|| advocatehealth.com

December 23, 2019

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

RE: Advocate Condell Medical Center
– Construction & Modernization Project

Dear Ms. Avery:

This attestation letter is submitted to indicate that Advocate Condell Medical Center owns the site.

We trust this attestation complies with the State Agency Proof of Ownership requirement indicated in the Permit application – September 2018 edition.

Respectfully,

William Santulli
Chief Operating Officer
Advocate Aurora Health

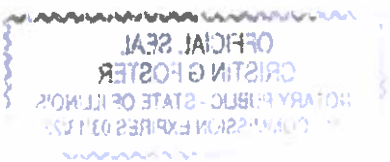
Notarization:

Subscribed and sworn to before me
This 23 day of December 2019.

(Seal of Notary)

OFFICIAL SEAL
CRISTIN G FOSTER
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:03/13/23

Cristin G. Foster
Signature of Notary


OFFICIAL SEAL
CRISTIN G FOSTER
NOTARY PUBLIC - STATE OF ILLINOIS
COMMISSION EXPIRES 03/1/25

Operating Identity/Licensee

[Provide this information for each applicable facility and insert after this page.]

Exact Legal Name of Site Owner: **Advocate Condell Medical Center**
Address: **801 S. Milwaukee Avenue, Libertyville, IL 60048**

☒	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 organized and the name and address of each partner specifying whether each is a general or limited partner.
- **Persons with 5 percent or greater interest in the licensee must be identified with the % of ownership.**

APPEND DOCUMENTATION AS ATTACHMENT 3, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

Certificates of Good Standing for Advocate Condell Medical Center, Advocate Health and Hospital Corporation, Advocate Health Care Network, and Advocate Aurora Health, Inc. are included as Attachment #3, Exhibits 1, 2, 3, and 4.

File Number 6610-658-6

STATE OF ILLINOIS

OFFICE OF THE SECRETARY OF STATE

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

ADVOCATE CONDELL MEDICAL CENTER, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON APRIL 29, 2008, 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* 10TH *day of* DECEMBER *A.D.* 2019 .

Authentication #: 1934401148 verifiable until 12/10/2020
Authenticate at: http://www.cyberdrivеillinois.com

Jesse White

SECRETARY OF STATE

File Number 1004-695-5

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

ADVOCATE HEALTH AND HOSPITALS CORPORATION, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON SEPTEMBER 12, 1906, 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* 26TH *day of* MARCH *A.D.* 2019 .

Authentication #: 1908501888 verifiable until 03/26/2020
Authenticate at: http://www.cyberdriveillinois.com

Jesse White

SECRETARY OF STATE

File Number 1707-692-2

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

ADVOCATE HEALTH CARE NETWORK, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON JUNE 14, 1923, 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.

Authentication #: 1908501864 verifiable until 03/26/2020
Authenticate at: http://www.cyberdriveillinois.com

In Testimony Whereof, *I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this* 26TH *day of* MARCH *A.D.* 2019 .

Jesse White

SECRETARY OF STATE

State Of Delaware

Entity Details

7/31/2018 6:24:28PM

File Number: 6645600 Incorporation Date / Formation Date: 12/4/2017

Entity Name: ADVOCATE AURORA HEALTH, INC.

Entity Kind: Corporation Entity Type: Exempt

Residency: Domestic State: DELAWARE

Status: Good Standing Status Date: 12/4/2017

Registered Agent Information

Name: THE CORPORATION TRUST COMPANY

Address: CORPORATION TRUST CENTER 1209 ORANGE ST

City: WILMINGTON Country:

State: DE Postal Code: 19801

Phone: 302-658-7581

OFFICE OF THE SECRETARY OF STATE

JESSE WHITE • Secretary of State

APRIL 3, 2018 **7155-851-7**

CT CORPORATION SYSTEM
118 W EDWARDS #200
SPRINGFIELD IL 62704

RE ADVOCATE AURORA HEALTH, INC.

DEAR SIR OR MADAM:

ENCLOSED YOU WILL FIND THE AUTHORITY OF THE ABOVE NAMED CORPORATION TO CONDUCT AFFAIRS IN THIS STATE.

PAYMENT OF THE FILING FEE IS HEREBY ACKNOWLEDGED.

CERTAIN NOT FOR PROFIT CORPORATIONS ORGANIZED AS A CHARITABLE CORPORATION ARE REQUIRED TO REGISTER WITH THE OFFICE OF THE ATTORNEY GENERAL. UPON RECEIPT OF THE ENCLOSED AUTHORITY, YOU MUST CONTACT THE CHARITABLE TRUST DIVISION, OFFICE OF THE ATTORNEY GENERAL, 100 W. RANDOLPH, 3RD FLOOR, CHICAGO, ILLINOIS 60601, TELEPHONE (312) 814-2595.

SINCERELY,

JESSE WHITE
SECRETARY OF STATE
DEPARTMENT OF BUSINESS SERVICES
CORPORATION DIVISION
TELEPHONE (217) 782-6961

FORM NFP 113.15 (rev. Dec. 2003)
APPLICATION FOR AUTHORITY
TO CONDUCT AFFAIRS IN
ILLINOIS (Foreign Corporations)
General Not For Profit Corporation Act

Secretary of State
Department of Business Services
501 S. Second St., Rm. 350
Springfield, IL 62756
217-782-1834
www.cyberdriveillinois.com

Remit payment in the form of a cashier's check, certified check, money order or an Illinois attorney's or CPA's check payable to Secretary of State.

FILED

APR 0 3 2018

JESSE WHITE
SECRETARY OF STATE

File # 7155-8517 Filing Fee: $50 Approved: BC

----- Submit in duplicate ------ Type or Print clearly in black ink ----- Do not write above this line -----

1. a. Corporate Name: Advocate Aurora Health, Inc.

   b. Assumed Corporate Name (Complete only if the new corporate name is not available in this state.):

   By electing this assumed name, the Corporation hereby agrees NOT to use its corporate name in the transaction of business in Illinois. Form NFP 104.15 is attached.

2. a. State or Country of Incorporation: Delaware

   b. Date of Incorporation: December 4, 2017

   c. Period of Duration: Permanent

3. a. Address of Principal Office, wherever located: 3075 Highland Pkwy.,
   Downers Grove, IL 60515-1206

   b. Address of Principal Office in Illinois: 3075 Highland Pkwy.,
   Downers Grove, IL 60515-1206

4. Name and Address of Registered Agent and Registered Office in Illinois:

   Registered Agent: Earl J. Barnes II
   (First Name / Middle Name / Last Name)

   Registered Office: 3075 Highland Pkwy Suite 600
   (Number / Street / Suite # (P.O. Box alone is unacceptable))

   Downers Grove 60515 DuPage County
   (City / ZIP Code / County)

5. States and Countries in which Corporation is admitted or qualified to conduct affairs: Wisconsin (application pending)

6. Names and respective addresses of Corporation's officers and directors:

	Street Address	City State ZIP
President See attached		
Secretary		
Director		
Director		
Director		

If there are additional officers or more than three directors, please attach list.

Printed by authority of the State of Illinois. January 2015 - 1 - C 190.15

7155 8517

Directors:

Name	Address
Michele Baker Richardson	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
John F. Timmer	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Lynn Y. Crump-Caine	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
K. Richard Jakle	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Mark M. Harris	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
David B. Anderson	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
James H. Skogsbergh	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Joanne Disch	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
John W. Daniels, Jr.	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Joanne B. Bauer	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Charles Harvey	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Rick Weiss	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Thomas Bolger	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Nick W. Turkal	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515

7155-8517

Section 7: PURPOSE(S) FOR WHICH THE CORPORATION IS ORGANIZED AND PROPOSES TO PURSUE IN THE CONDUCT OF AFFAIRS IN THIS STATE:

The Corporation is organized and shall be operated exclusively for charitable, scientific, religious and educational purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (or the corresponding provisions of any future United States Internal Revenue Law) (hereinafter the "Code"); and limited as further provided in its Certificate of Incorporation. Specifically, the Corporation is organized and shall be operated exclusively for the benefit of, to perform the functions of, or to carry out the purposes of its supported organizations, as listed below (the "Supported Organizations"). The Corporation is organized and operated as a Type III functionally integrated supporting organization as defined in section 509(a)(3) of the Code and Treas. Reg. Section 1.509(a)-4(i). The Corporation is organized for the purpose of serving as the parent organization of the Supported Organizations and shall exercise direction over the policies, programs and activities of the Supported Organizations. The Corporation shall engage in activities relating to the purposes described above, and invest in, receive, hold, use, and dispose of all property, real or personal, as may be necessary or desirable to carry into effect such purposes. The Corporation is formed as a result of the affiliation of Advocate Health Care Network, an Illinois nonprofit corporation ("Advocate") and Aurora Health Care, Inc., a Wisconsin nonstock corporation ("Aurora"), in accordance with the terms and conditions of that certain Affiliation Agreement between Advocate and Aurora dated December 4, 2017 (the "Affiliation Agreement").

The Corporation's Supported Organizations, which are described in Section 509(a)(1) or Section 509(a)(2) of the Code, are as follows:

- Advocate Health and Hospitals Corporation
- EHS Home Health Care Services, Inc.
- Advocate Charitable Foundation
- Advocate North Side Health Network
- Meridian Hospice
- Advocate Condell Medical Center
- Advocate Sherman Hospital
- Sherman West Court
- Visiting Nurse Association of Wisconsin, Inc.
- Aurora UW Academic Medical Group
- Aurora Health Care Central, Inc.
- Aurora Psychiatric Hospital, Inc.
- Aurora Medical Center of Washington County, Inc.
- Aurora Health Care North, Inc.
- West Allis Memorial Hospital, Inc.
- Aurora Family Service, Inc.
- Aurora Medical Center of Oshkosh, Inc.
- Aurora Medical Group, Inc.
- Kradwell School, Inc.
- Aurora Advanced Healthcare, Inc.

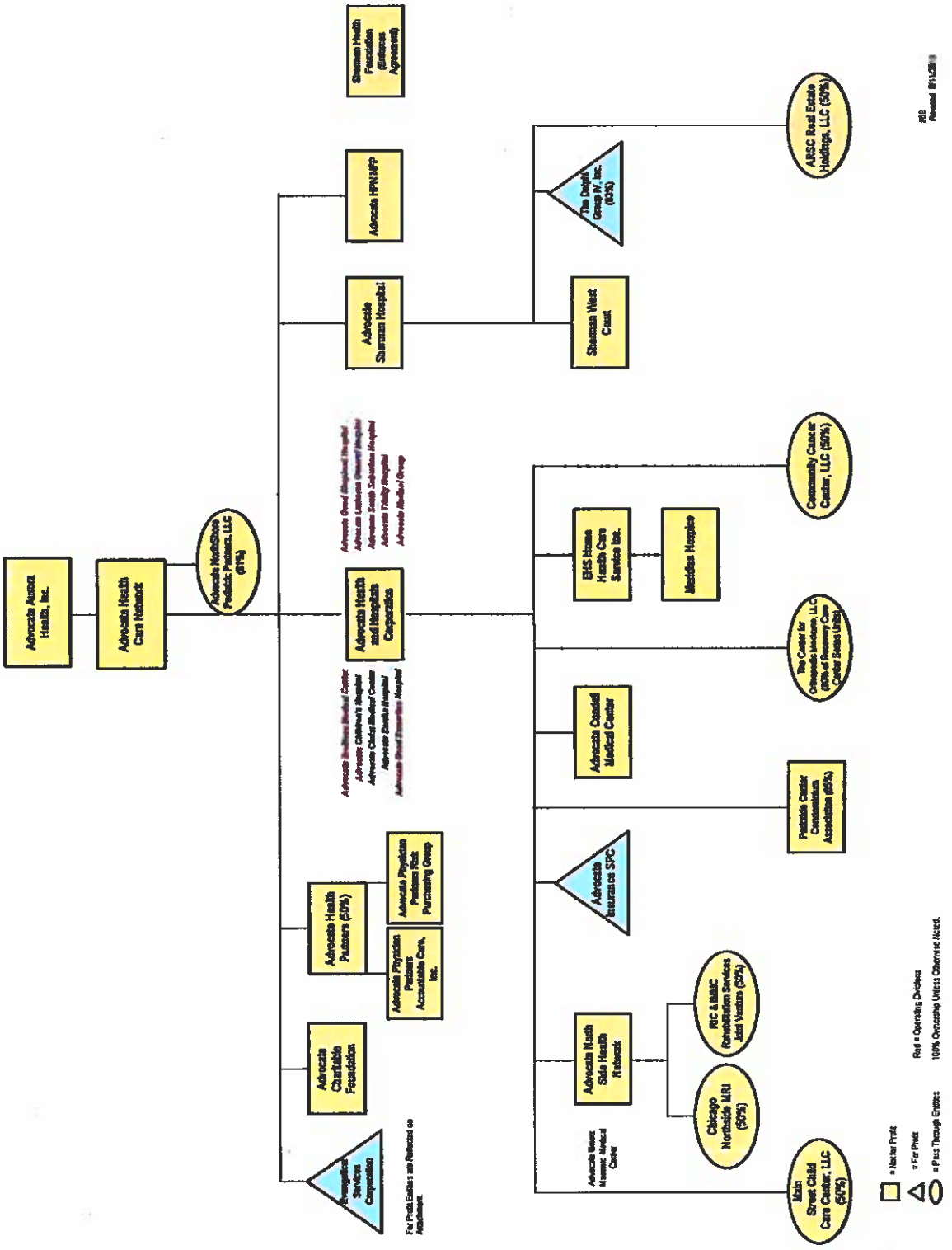
7155-8517

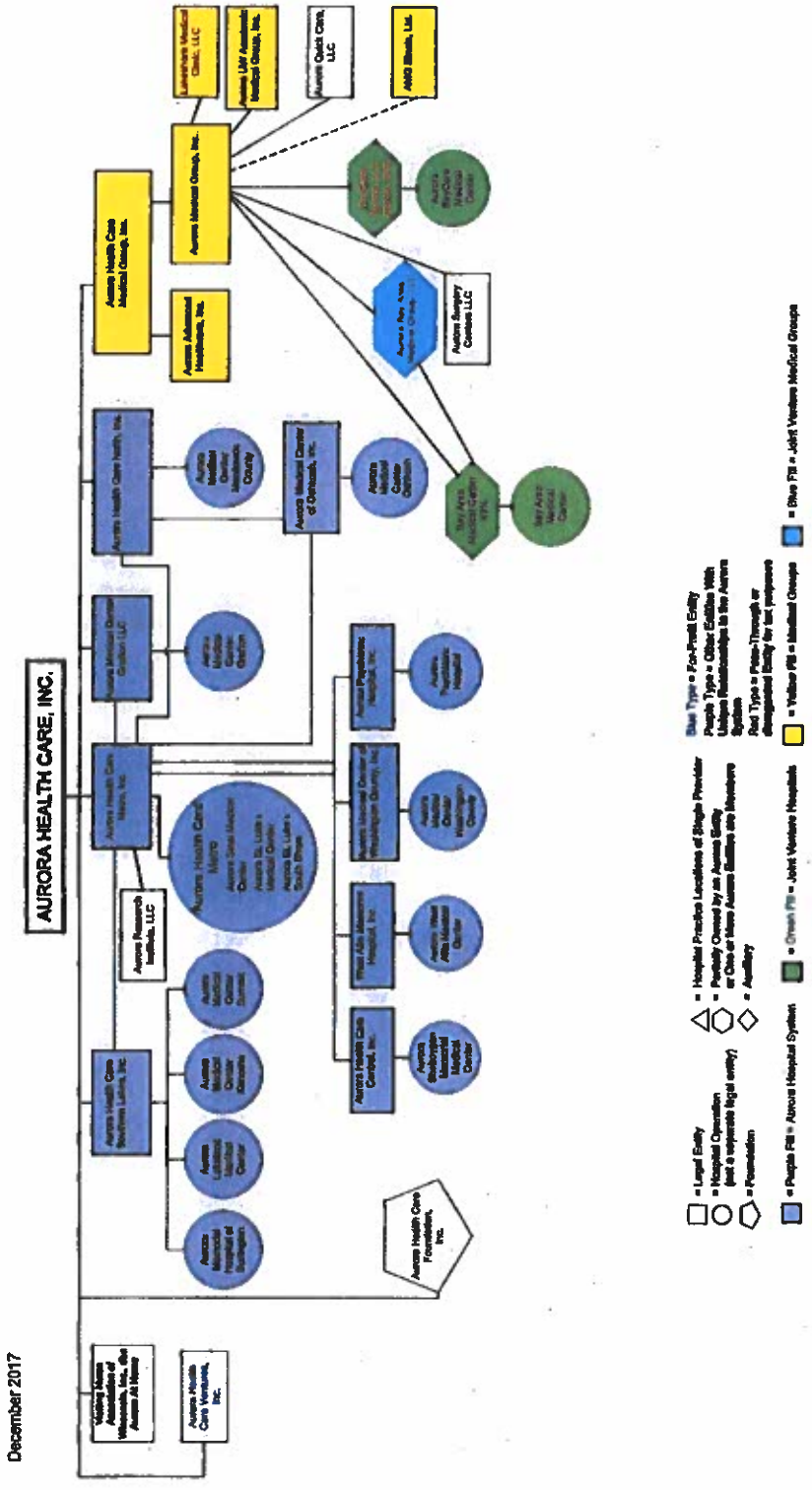
- Aurora Health Care Metro, Inc.
- Aurora Health Care Southern Lakes, Inc.
- AMG Illinois, Ltd.
- Aurora Medical Center Grafton

Organizational Relationships

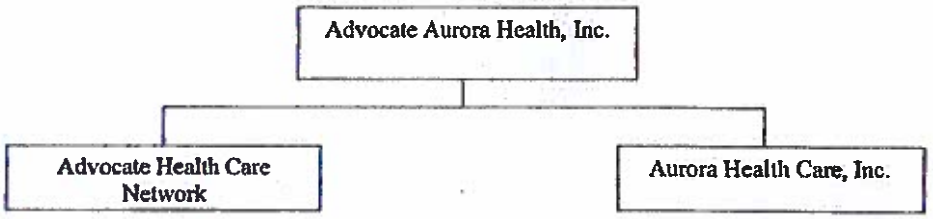
Provide (for each applicant) an organizational chart containing the name and relationship of any person or entity who is related (as defined in Part 1130.140). If the related person or entity is participating in the development or funding of the project, describe the interest and the amount and type of any financial contribution.
APPEND DOCUMENTATION AS ATTACHMENT 4, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

Attachment #4, Exhibits 1, 2, and 3 show the legacy organizations Advocate Health Care Network and Aurora Health Care, Inc. that came together as Advocate Aurora Health, Inc.


Advocate Aurora Health, Inc.
Advocate Health Care Network
Advocate NorthShore Pediatric Partners, LLC (51%)
Advocate Health and Hospitals Corporation
Advocate Sherman Hospital
Advocate HPN IPP
Sherman Health Foundation (Enforces Agreement)
The Depot Group IV, Inc. (51%)
Sherman West Court
ARSC Real Estate Holdings, LLC (50%)
BHS Home Health Care Service Inc.
Meridian Hospice
Community Cancer Center, LLC (50%)
The Center for Orthopedic Medicine, LLC (50% of Recovery Care Center Series Units)
Advocate Condell Medical Center
Parkside Center Corporation Association (50%)
Advocate Insurance SPC
Advocate Health Partners (50%)
Advocate Physician Partner Risk Purchasing Group
Advocate Physician Partners Accountable Care, Inc.
Advocate Charitable Foundation
Evangelical Services Corporation
For Profit Entities are Reflected on Attachment
Advocate Health Side Health Network
RIC & MAIC Rehabilitation Services Joint Venture (50%)
Chicago Northside MRI (50%)
Advocate Illinois Masonic Medical Center
Main Street Child Care Center, LLC (50%)
= Not for Profit
= For Profit
= Pass Through Entities
Red = Operating Division
100% Ownership Unless Otherwise Noted.
40


AURORA HEALTH CARE, INC.
December 2017

POST-CLOSING ORGANIZATIONAL CHART



All of the Advocate Health Care Network ("Advocate") entities will remain under the Advocate corporate structure and all of the Aurora Health Care, Inc. ("Aurora") entities will remain under the Aurora corporate structure, shown on the previously included organizational charts for each of Advocate and Aurora.

Flood Plain Requirements

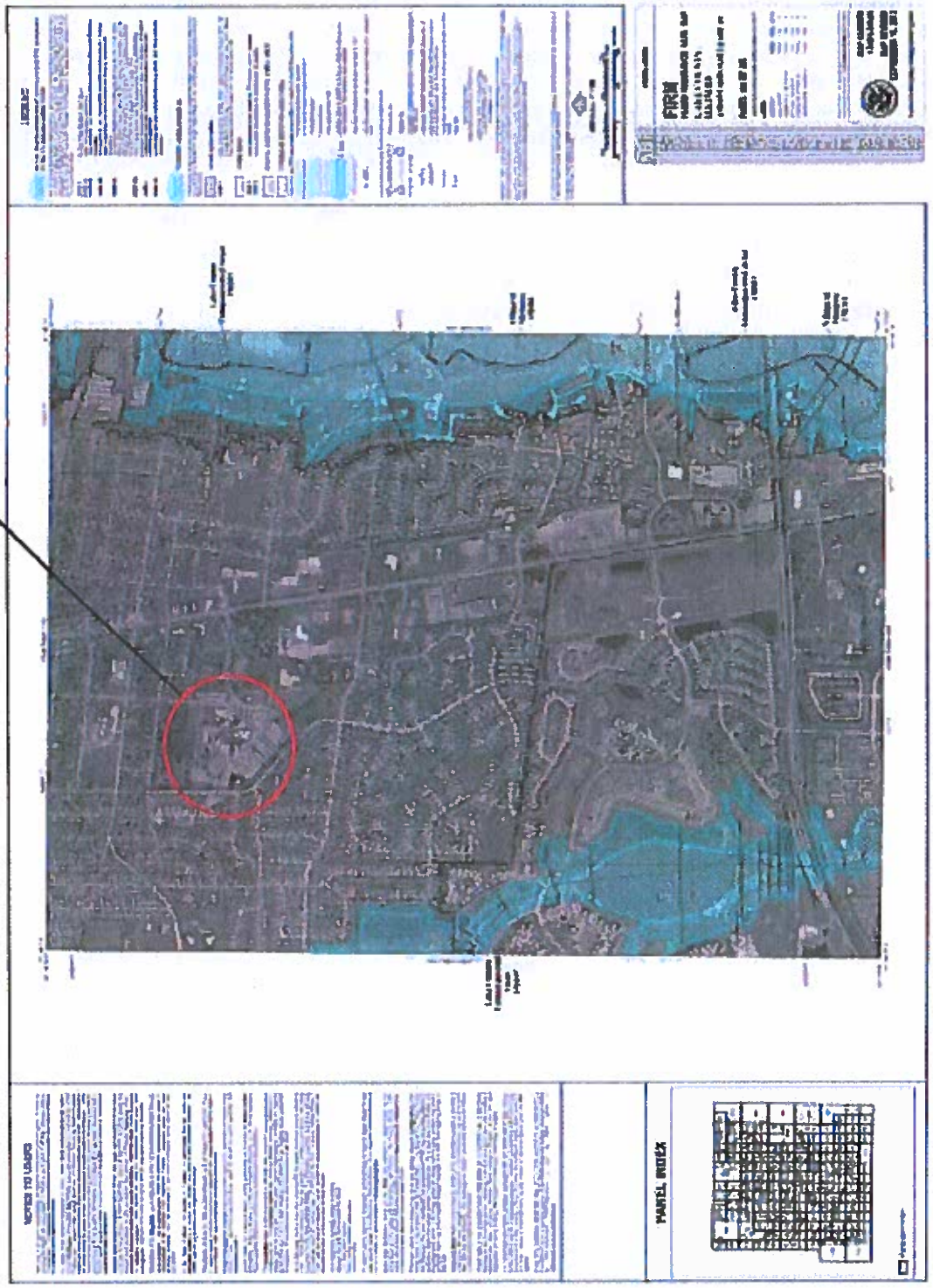
[Refer to application instructions.]

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)**.

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

By their signatures on the Certification, the applicants certify that the site for the proposed Project is not in a flood plain, as identified by the most recent FEMA Flood Insurance Rate Map for this location. The project is not located in a Special Flood Hazard Area. Therefore, it complies with Illinois Executive Order #2006-5. Attachment 5, Exhibit 1.

Advocate Condell Medical Center
801 S. Milwaukee Avenue
Libertyville, IL 60048



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 ATTACHMENT 6, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

See Attachment #6. The Historic Resources Preservation letter is provided as Exhibit 1.

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov Mailing Address: 1 Old State Capitol Plaza, Springfield, IL 62701

JB Pritzker, Governor
Colleen Callahan, Director

FAX (217) 524-7525

Lake County
Libertyville
CON - New Floor Addition for an ICU Expansion and Med-Surg Unit, Advocate Condell Medical Center
801 S. Milwaukee Ave.
SHPO Log #018091219

December 6, 2019

Janet M. Hood
Advocate Health Care
3075 Highland Parkway, Suite 600
Downers Grove, IL 60515

Dear Ms. Hood:

This letter is to inform you that we have reviewed the information provided concerning the referenced project.

Our review of the records indicates that no historic, architectural or archaeological sites exist within the project area.

Please retain this letter in your files as evidence of compliance with Section 4 of the Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420/1 et. seq.). This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please call 217/782-4836.

Sincerely,

Robert F. Appleman
Deputy State Historic
Preservation Officer

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 AND SOURCES OF FUNDS			
USE OF FUNDS	**CLINICAL**	**NON-CLINICAL**	**TOTAL**
Preplanning Costs	$ 282,785	$ 197,459	$ 480,244
Site Survey and Soil Investigation	$ 0	$ 75,000	$ 75,000
Site Preparation	$ 389,012	$ 1,331,870	$ 1,720,882
Off Site Work	$ 0	$ 0	$ 0
New Construction Contracts	$ 8,694,220	$ 9,462,554	$ 18,156,774
Modernization Contracts	$ 12,184,786	$ 6,822,183	$ 19,006,969
Contingencies	$ 921,027	$ 2,782,216	$ 3,703,243
Architectural/Engineering Fees	$ 1,587,750	$ 1,257,437	$ 2,845,187
Consulting and Other Fees	$ 752,500	$ 584,472	$ 1,336,972
Movable or Other Equipment (not in construction contracts)	$ 8,151,216	$ 1,171,750	$ 9,322,966
Bond Issuance Expense (project related)	$ 220,394	$ 355,984	$ 576,378
Net Interest Expense During Construction (project related)	$ 1,539,401	$ 2,486,471	$ 4,025,872
Fair Market Value of Leased Space or Equipment	$ 0	$ 0	$ 0
Other Costs To Be Capitalized	$ 357,800	$ 1,930,538	$ 2,288,338
Acquisition of Building or Other Property (excluding land)	$ 0	$ 0	$ 0
TOTAL USES OF FUNDS	$ 35,080,891	$ 28,457,934	$ 63,538,825
SOURCE OF FUNDS	**CLINICAL**	**NONCLINICAL**	**TOTAL**
Cash and Securities	$ 9,622,621	$ 7,805,956	$ 17,428,577
Pledges	0	0	0
Gifts and Bequests	0	0	0
Bond Issues (project related)	$ 25,458,270	$ 20,651,978	$ 46,110,248
Mortgages	0	0	0
Leases (fair market value)	0	0	0
Governmental Appropriations	0	0	0
Grants	0	0	0
Other Funds and Sources	0	0	$ 0
TOTAL SOURCES OF FUNDS	$ 35,080,891	$ 28,457,934	$ 63,538,825

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

Itemization of Costs

Items	Cost
Pre-Planning	**$ 480,244**
Site and Facility Planning	100,044
Programming thru Conceptual & Pre-Construction Planning	380,200
Site survey (zoning, site survey)	**$ 75,000**
Site Preparation	**$ 1,720,882**
Prep Work (Demo, and Staging)	389,842
Fuel Tank Storage	87,595
Site Staging for Construction	659,043
Earthwork, drainage, stone, foundation prep	584,402
New Construction Contracts	**$ 18,156,774**
Modernization Contracts	**$ 19,006,969**
Contingencies	**$ 3,703,243**
Architect/Eng. Fees	**$ 2,845,187**
Consulting and Other Fees	**$ 1,336,972**
Const. Admin & Misc. Consultants	150,000
A/E RFI + Operational Consultants / Misc. Analysis	224,600
Reimbursables/ Renderings / Misc. support	125,800
MEP /Envelope, LEED Commissioning	275,000
Miscellaneous	561,572
Movable / Equipment	**$ 9,322,966**
Modular Headwalls	391,216
ICU Patient Room Equipment	4,320,000
Med/Surg Patient Room Equipment	3,840,000
Misc. Equipment	234,330
PACS Hardware / Server / Station Equipment	310,000
General Equip.	227,420
Bond Issuance / Finance Expense	**$ 576,378**
Net Interest	**$ 4,025,872**
Other Costs to be Capitalized	**$ 2,288,338**
FF&E	1,084,550
Utilities / Taps	223,560
Data Infrastructure, wireless, telecom	606,800
Miscellaneous other costs	373,428
TOTAL	**$ 63,538,825**

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.**

Cost Space							
		Department Gross Square Feet		Proposed Total Department Gross Square Feet			
Dept. / Area	Cost	Existing	Proposed	New Const.	Modernized	As Is	Vacated Space
Reviewable							
ICU	$ 18,895,686	9,093	21,914	15,388	6,526	0	0
Medical/Surgical Nursing Unit (5 Tower)	$ 15,142,543	19,792	21,831	0	21,831	0	0
Medical/Surgical Nursing Unit (2 East)	$ 115,049	11,183	20,330	0	538	19,792	0
Dialysis	$ 927,613	538	1,700	0	1,700	0	538
Total Clinical	$ 35,080,891	40,606	65,775	15,388	30,595	19,792	538
Non-Reviewable							
Administrative offices / support`	$ 1,876,537	0	2,217	1,651	566	0	0
Staff Support	$ 1,895,261	0	2,437	912	1,525	0	0
Education Spaces	$ 744,196	0	645	0	645	0	0
Building System/Support	$ 4,623,110	0	6,609	3,266	2,317	596	0
Security	$ 321,899	0	0	0	0	0	0
Public Corridors / Waiting	$ 2,300,764	0	3,095	811	2,284	0	0
Reception/Waiting	$ -	0	0	0	0	0	0
Material Management	$ 984,615	0	1,054	597	457	0	0
Admin Offices (vacated space 3W)	$ -	0	4,135	0	0	4,135	0
Education (vacated space 3W)	$ -	0	1,353	0	0	1,353	0
On-call (vacated space 3W)	$ -	0	4,162	0	0	4,162	0
Building Storage (vacated space 3W)	$ -	0	1,533	0	0	1,533	0
Air-Handling Units (roof)	$ 6,225,373	0	1,800	1,800	0	0	0
Boiler Installation	$ 5,556,012	0	1,200	0	1,200	0	0
Elevator	$ 3,930,168	0	0	430	0	0	0
Total Non-Clinical	$ 28,457,934	0	30,240	9,467	8,994	11,779	0
Total	$ 63,538,825	40,606	96,015	24,855	39,589	31,571	538

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

The 3W Unit vacated space will include:

- Classroom/Conference Room space - Formal classroom space is needed as Advocate Condell is a Level 1 Trauma Center and the EMS Resource Hospital with an EMT-Paramedic Training Program. Currently, there is insufficient space to meet the needs of increasing EMT-Paramedic class size and trauma related education for nursing, EMS and physicians (Advance Trauma Life Support).
- Nursing education -There is an increasing need of increased classroom/conference space for:
  - Post clinical conferences for the nursing students from the collaborating colleges and universities present at Advocate Condell Medical Center. The various nursing programs represent all levels (associate, baccalaureate, and master's degrees) of nursing education.
  - General nursing orientation, annual skill competency validation, and ongoing education required for ongoing nursing education of staff at all levels.
- Administrative Offices – Offices for nursing management, stroke coordinators and clinical staff. They currently use family conference space and other public spaces.
- On-call rooms – There are currently 3 physician on-call rooms. Four additional rooms will be utilized to provide on-call space for Trauma surgeons, Intensivist physicians, Anesthesiology and on-call surgeons who must remain on site.
- Building storage – This will include bed storage including beds that are stored on the fifth floor of the West Tower and throughout the hospital.

The Dialysis vacated space will include:

- Clinician offices for the medical surgical unit staff

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

6. A listing of all health care facilities owned or operated by the applicant, including licensing, and certification if applicable.

7. 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.

8. 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.

9. 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.**

10. 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 is able to submit amendments to previously submitted information, as needed, to update and/or clarify data.

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

See Attachment #11, Exhibits 1-7.

1. **The listing of all health care facilities owned or operated by the applicant, including licensing, and certification if applicable.**

   Attachment 11, Exhibit 1 is the listing of all the facilities owned by Advocate Health and Hospital Corporation. Exhibit 2 is the current state hospital license for Advocate Condell Medical Center. The most recent DNV accreditation certificate for the Hospital is included as Attachment 11, Exhibit 3.

2. **Certified Listing of Any Adverse Action Against Any Facility Owned or Operated by the Applicant**

   By the signatures on the Certification pages, the applicants attest there have been no adverse actions against any facility owned and/or operated by Advocate Health and Hospitals Corporation or Advocate Health Care Network, as demonstrated by compliance with the CMS Conditions of Participation with Medicare and Medicaid, during the three years prior to the filing of this application.

3. **Authorization Permitting IHFPB and DPH to Access Necessary Documentation**

   By the signatures on the Certification pages, the applicants hereby authorize the Illinois Health Facilities and Services Review Board and the Illinois Department of Public Health to access information in order to verify any documentation or information submitted in response to the requirements of this subsection, or to obtain any documentation or information which the State Board or Department of Public Health find pertinent to this subsection.

4. **Exception for Filing Multiple Certificates of Need in One Year**

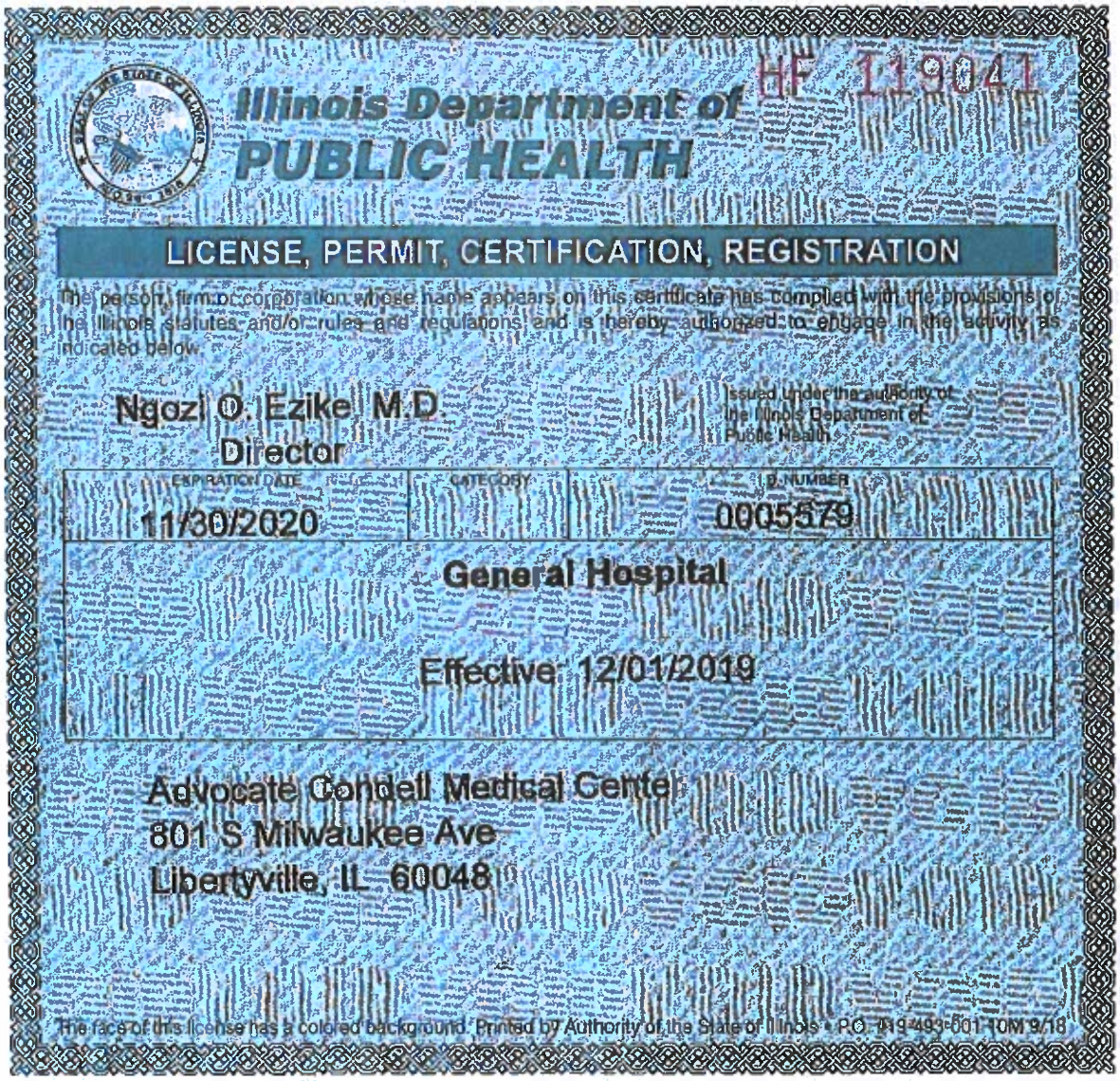
   Not applicable. This is the first certificate of need application filed by Advocate Condell Medical Center in 2020.

5. The licensing, certification, and accreditation numbers of each organization owned or operated by Advocate Health and Hospitals Corporation, along with relevant identification numbers, are listed below.

Facility	Location	License No.	DNV Accreditation No.
Advocate Condell Medical Center	801 S. Milwaukee Ave., Libertyville, IL	0005579	211487-2019-AHC-USA-NIAHO

Additional hospitals owned and operated as a part of Advocate Health Care Network:

Facility	Location	License No.	DNV Accreditation No.
Advocate BroMenn Medical Center	1304 Franklin Ave. Normal, IL	0005645	189504-2018-AHC-USA-NIAHO
Advocate Christ Medical Center	4440 W. 95th St. Oak Lawn, IL	0000315	197946-2019-AHC-USA-NIAHO
Advocate Eureka Hospital	101 S. Major Eureka, IL	0005652	189647-2018-AHC-USA-NIAHO
Advocate Good Samaritan Hospital	3815 Highland Ave. Downers Grove, IL	0003384	176404-2018-AHC-USA-NIAHO
Advocate Good Shepherd Hospital	450 W. Highway, #22 Barrington, IL	0003475	261250-2018--AHC-USA-NIAHO
Advocate Lutheran General Hospital	1775 Dempster Park Ridge, IL	0004796	178979-2018-AHC-USA-NIAHO
Advocate Illinois Masonic Medical Center	836 W. Wellington Chicago, IL	0005165	192082-2018-AHC-USA-NIAHO
Advocate Sherman Hospital	1425 N. Randall Rd Elgin, IL	0005884	246588-2017-AHC-USA-NIAHO
Advocate South Suburban Hospital	17800 S. Kedzie Ave Hazel Crest, IL	0004697	190161-2018-AHC-USA-NIAHO
Advocate Trinity Hospital	2320 E. 93rd St. Chicago, IL	0004176	193041-2018-AHC-USA-NIAHO



Illinois Department of PUBLIC HEALTH

HF 119041

LICENSE, PERMIT, CERTIFICATION, REGISTRATION

The person, firm or corporation whose name appears on this certificate has complied with the provisions of the Illinois statutes and/or rules and regulations and is hereby authorized to engage in the activity as indicated below.

Ngozi O. Ezike, M.D.
Director

Issued Under the Authority of the Illinois Department of Public Health

EXPIRATION DATE	CATEGORY	I.D. NUMBER
11/30/2020		0005579

General Hospital

Effective: 12/01/2019

Advocate Condell Medical Center
801 S Milwaukee Ave
Libertyville, IL 60048

The face of this license has a colored background. Printed by Authority of the State of Illinois • P.O. 019-499-001-10M 9/18

CERTIFICATE OF ACCREDITATION

Certificate No.:	Initial date:	Valid until:
211487-2019-AHC-USA-NIAHO	12/12/2019	12/12/2022

This is to certify that:

Advocate Condell Medical Center

801 S. Milwaukee Ave, Libertyville, IL 60048

has been found to comply with the requirements of the:

NIAHO® Hospital Accreditation Program

Pursuant to the authority granted to DNV GL Healthcare USA, Inc. by the U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, this organization is deemed in compliance with the Medicare Conditions of Participation for Hospitals (42 C.F.R. §482).

This certificate is valid for a period of three (3) years from the Effective Date of Accreditation.

For the Accreditation Body:
DNV GL - Healthcare
Katy, TX

Patrick Horine
Chief Executive Officer

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

Lack of continual fulfillment of the conditions set out in the Certification/Accreditation Agreement may render this Certificate invalid.

DNV GL - Healthcare, 400 Techne Center Drive, Suite 100, Milford OH, 45150. Tel: 513-947-8343 www.dnvglhealthcare.com

File Number 6610-658-6

STATE OF ILLINOIS
OFFICE OF THE SECRETARY OF STATE

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

ADVOCATE CONDELL MEDICAL CENTER, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON APRIL 29, 2008, 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* 10TH *day of* DECEMBER *A.D.* 2019 .

Authentication #: 1934401148 verifiable until 12/10/2020
Authenticate at: http://www.cyberdriveillinois.com

Jesse White
SECRETARY OF STATE

File Number 1004-695-5

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

ADVOCATE HEALTH AND HOSPITALS CORPORATION, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON SEPTEMBER 12, 1906, 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* 26TH *day of* MARCH *A.D.* 2019 .

Authentication #: 1908501688 verifiable until 03/26/2020
Authenticate at: http://www.cyberdriveillinois.com

Jesse White
SECRETARY OF STATE

File Number 1707-692-2

STATE OF ILLINOIS
OFFICE OF
THE SECRETARY OF STATE

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

ADVOCATE HEALTH CARE NETWORK, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON JUNE 14, 1923, 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* 26TH *day of* MARCH *A.D.* 2019 .

Authentication #: 1908501864 verifiable until 03/26/2020
Authenticate at: http://www.cyberdriveillinois.com

Jesse White
SECRETARY OF STATE

State Of Delaware

Entity Details

7/31/2018 6:24:28PM

File Number: 6645600 Incorporation Date / Formation Date: 12/4/2017

Entity Name: ADVOCATE AURORA HEALTH, INC.

Entity Kind: Corporation Entity Type: Exempt

Residency: Domestic State: DELAWARE

Status: Good Standing Status Date: 12/4/2017

Registered Agent Information

Name: THE CORPORATION TRUST COMPANY

Address: CORPORATION TRUST CENTER 1209 ORANGE ST

City: WILMINGTON Country:

State: DE Postal Code: 19801

Phone: 302-658-7581

OFFICE OF THE SECRETARY OF STATE

JESSE WHITE • Secretary of State

APRIL 3, 2018 **7155-851-7**

CT CORPORATION SYSTEM
118 W EDWARDS #200
SPRINGFIELD IL 62704

RE ADVOCATE AURORA HEALTH, INC.

DEAR SIR OR MADAM:

ENCLOSED YOU WILL FIND THE AUTHORITY OF THE ABOVE NAMED CORPORATION TO CONDUCT AFFAIRS IN THIS STATE.

PAYMENT OF THE FILING FEE IS HEREBY ACKNOWLEDGED.

CERTAIN NOT FOR PROFIT CORPORATIONS ORGANIZED AS A CHARITABLE CORPORATION ARE REQUIRED TO REGISTER WITH THE OFFICE OF THE ATTORNEY GENERAL. UPON RECEIPT OF THE ENCLOSED AUTHORITY, YOU MUST CONTACT THE CHARITABLE TRUST DIVISION, OFFICE OF THE ATTORNEY GENERAL, 100 W. RANDOLPH, 3RD FLOOR, CHICAGO, ILLINOIS 60601, TELEPHONE (312) 814-2595.

SINCERELY,

JESSE WHITE
SECRETARY OF STATE
DEPARTMENT OF BUSINESS SERVICES
CORPORATION DIVISION
TELEPHONE (217) 782-6961

FORM NFP 113.15 (rev. Dec. 2003)
APPLICATION FOR AUTHORITY
TO CONDUCT AFFAIRS IN
ILLINOIS (Foreign Corporations)
General Not For Profit Corporation Act

Secretary of State
Department of Business Services
501 S. Second St., Rm. 350
Springfield, IL 62756
217-782-1834
www.cyberdrivelllinois.com

Remit payment in the form of a cashier's check, certified check, money order or an Illinois attorney's or CPA's check payable to Secretary of State.

FILED

APR 0 3 2018

JESSE WHITE
SECRETARY OF STATE

File # 7155-8517 Filing Fee: $50 Approved: BC

----- Submit in duplicate ----- Type or Print clearly in black ink ------ Do not write above this line -----

1. a. Corporate Name: Advocate Aurora Health, Inc.

   b. Assumed Corporate Name (Complete only if the new corporate name is not available in this state.):

   By electing this assumed name, the Corporation hereby agrees NOT to use its corporate name in the transaction of business in Illinois. Form NFP 104.15 is attached.

2. a. State or Country of Incorporation: Delaware

   b. Date of Incorporation: December 4, 2017

   c. Period of Duration: Permanent

3. a. Address of Principal Office, wherever located: 3075 Highland Pkwy.,
   Downers Grove, IL 60515-1206

   b. Address of Principal Office in Illinois: 3075 Highland Pkwy.,
   Downers Grove, IL 60515-1206

4. Name and Address of Registered Agent and Registered Office in Illinois:

   Registered Agent: Earl J. Barnes II
   (First Name / Middle Name / Last Name)

   Registered Office: 3075 Highland Pkwy Suite 600
   (Number / Street / Suite # (P.O. Box alone is unacceptable))

   Downers Grove 60515 DuPage County
   (City / ZIP Code / County)

5. States and Countries in which Corporation is admitted or qualified to conduct affairs: Wisconsin (application pending)

6. Names and respective addresses of Corporation's officers and directors:

	Street Address	City State ZIP
President See attached		
Secretary		
Director		
Director		
Director		

If there are additional officers or more than three directors, please attach list.

Printed by authority of the State of Illinois. January 2015 - 1 - C 160.15

7155 8517

Directors:

Name	Address
Michele Baker Richardson	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
John F. Timmer	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Lynn Y. Crump-Caine	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
K. Richard Jakle	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Mark M. Harris	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
David B. Anderson	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
James H. Skogsbergh	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Joanne Disch	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
John W. Daniels, Jr.	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Joanne B. Bauer	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Charles Harvey	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Rick Weiss	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Thomas Bolger	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515
Nick W. Turkal	c/o Aurora Advocate Health, Inc. 3075 Highland Pkwy Suite 600, Downers Grove, IL 60515

7155-8517

Section 7: PURPOSE(S) FOR WHICH THE CORPORATION IS ORGANIZED AND PROPOSES TO PURSUE IN THE CONDUCT OF AFFAIRS IN THIS STATE:

The Corporation is organized and shall be operated exclusively for charitable, scientific, religious and educational purposes within the meaning of Section 501(c)(3) of the Internal Revenue Code of 1986, as amended (or the corresponding provisions of any future United States Internal Revenue Law) (hereinafter the "Code"); and limited as further provided in its Certificate of Incorporation. Specifically, the Corporation is organized and shall be operated exclusively for the benefit of, to perform the functions of, or to carry out the purposes of its supported organizations, as listed below (the "Supported Organizations"). The Corporation is organized and operated as a Type III functionally integrated supporting organization as defined in section 509(a)(3) of the Code and Treas. Reg. Section 1.509(a)-4(i). The Corporation is organized for the purpose of serving as the parent organization of the Supported Organizations and shall exercise direction over the policies, programs and activities of the Supported Organizations. The Corporation shall engage in activities relating to the purposes described above, and invest in, receive, hold, use, and dispose of all property, real or personal, as may be necessary or desirable to carry into effect such purposes. The Corporation is formed as a result of the affiliation of Advocate Health Care Network, an Illinois nonprofit corporation ("Advocate") and Aurora Health Care, Inc., a Wisconsin nonstock corporation ("Aurora"), in accordance with the terms and conditions of that certain Affiliation Agreement between Advocate and Aurora dated December 4, 2017 (the "Affiliation Agreement").

The Corporation's Supported Organizations, which are described in Section 509(a)(1) or Section 509(a)(2) of the Code, are as follows:

- Advocate Health and Hospitals Corporation
- EHS Home Health Care Services, Inc.
- Advocate Charitable Foundation
- Advocate North Side Health Network
- Meridian Hospice
- Advocate Condell Medical Center
- Advocate Sherman Hospital
- Sherman West Court
- Visiting Nurse Association of Wisconsin, Inc.
- Aurora UW Academic Medical Group
- Aurora Health Care Central, Inc.
- Aurora Psychiatric Hospital, Inc.
- Aurora Medical Center of Washington County, Inc.
- Aurora Health Care North, Inc.
- West Allis Memorial Hospital, Inc.
- Aurora Family Service, Inc.
- Aurora Medical Center of Oshkosh, Inc.
- Aurora Medical Group, Inc.
- Kradwell School, Inc.
- Aurora Advanced Healthcare, Inc.

7155-8517

- Aurora Health Care Metro, Inc.
- Aurora Health Care Southern Lakes, Inc.
- AMG Illinois, Ltd.
- Aurora Medical Center Grafton

Criterion 1110.110(b) & (d)

PURPOSE OF PROJECT

7. Document that the project will provide health services that improve the health care or well-being of the market area population to be served.
8. Define the planning area or market area, or other relevant area, per the applicant's definition.
9. Identify the existing problems or issues that need to be addressed as applicable and appropriate for the project.
10. Cite the sources of the documentation.
11. Detail how the project will address or improve the previously referenced issues, as well as the population's health status and well-being.
12. 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 ATTACHMENT 12, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM. EACH ITEM (1-6) MUST BE IDENTIFIED IN ATTACHMENT 12.

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.

The purpose of the proposed Project is to continue to provide access to high quality, inpatient care at Advocate Condell Medical Center (Condell) to support the health care needs of the residents of Lake County, Illinois. The project proposes to expand the ICU capacity from 17 to 32 beds and build out the fifth floor of the West Tower building to create a new medical-surgical unit adding three additional medical-surgical beds to replace an outdated medical-surgical unit in the main hospital building.

In 2014, a Master Facility Plan and needs assessment was prepared by the consulting firm of Kurt Salmon and Associates (KSA). It was a comprehensive plan encompassing a review of all services and buildings on the campus. The plan identified significant needs to be addressed specifically the ICU bed capacity and the space, capacity and congestion of the intermediate medical-surgical care unit. It was determined that the medical-surgical and ICU capacity needed to be right-sized for the current services and long-term needs of the communities that Condell serves.

As the only Level 1 Trauma hospital in Lake County, ICU beds are often at maximum occupancy. Condell has seen an increasing number of the most critically-ill patients. As the volumes in neurosurgery, cardiac and critical care services grow, patients flow into the ICU. Many advanced procedures require patients to be monitored and receive care for extended periods of time. The need for critical care capacity will continue to be compounded with key service line expansion such Condell's transition to becoming a Comprehensive Stroke Center and the physician additions in the Advocate Aurora Health System.

Concurrent to expanding Condell's critical care capacity, the 2014 KSA assessment also identified the hospital's need to add new medical-surgical capacity while restructuring and

modernizing its current inpatient bed capacity to enhance the quality of care. KSA recommends that 20-30% of all acute beds be classified as critical care beds. In the current configuration, less than 8% of adult beds are classified as critical care.

This project is designed to provide capacity for the patient growth seen over the last five years and expected to continue with the older population growth projected in Lake County and the increased destination services developed as Advocate Aurora Health.

The current medical-surgical unit is located in the hospital section built over 57 years ago. The rooms in this original unit are undersized in functional space compared with current standards and the unit location serves as a hospital connector to many units and services and functions as a corridor within the hospital.

The current medical-surgical units are often at capacity and based on the growth of inpatient days, additional medical-surgical beds are included in the project. The modernized medical-surgical rooms will include updated technology that is difficult to provide in a facility designed more than 50 years ago. The proposed units will be designed with workstations and supply storage needed in each patient room.

The new medical-surgical unit in the West Tower will be designed as universal care patient rooms to allow patients to receive the appropriate care in the right unit of the hospital. This enhanced unit will enable greater flexibility to care for the increasing acuity of all inpatients. The dialysis service for inpatients that require dialysis during their admission for other medical care will be expanded and modernized and located in one suite on West Tower 5th Floor. The new dialysis suite will include 6 stations: 4 stations in one dialysis room and 2 additional private rooms.

2. Define the planning area or market area, or other, per the applicant's definition.
Advocate Condell Medical Center is a major provider of health care to the residents of Lake County, serving the residents of Libertyville and Lake County since 1928. It is located in the IHFSRB Planning Area A-09 as shown in Attachment 12, Exhibit 1.

The Hospital's service area includes 19 zip codes that comprise 88% of the hospital's inpatient admissions and 85% of the ICU admissions. See Attachment 12, Exhibit 2 for a map of the hospital's service area.

Population projections for the Advocate Condell Medical Center Service Area are provided in the table below. Although the total population in the service area is expected to have modest growth, the 65+ age population is projected to grow by 20%, expecting an increase of over 15,000 additional older residents.

Advocate Condell Total Service Area Demographics				
Age Group	**2019 Population**	**2024 Population**	**2019 % of Total**	**Population Change**
0-17	136,999	128,478	24.5%	(6.2%)
18-44	190,413	189,655	34.0%	(0.4%)
45-64	155,575	150,885	27.8%	(3.0%)
65+	76,980	92,220	13.8%	19.8%
TOTAL	559,967	561,238	100.0%	0.3%

Source: Claritis 2019

The population for the entire Planning Area A-09, illustrated a projected 8% growth in total population. Similar to the Advocate Condell Medical Center service area, the 65+ age population is projected to grow by 31%, expecting an increase of over 30,000 additional older residents.

The hospital has continued to adapt to the changing health care needs and provide the continuum of health care services to families that live in the hospital's defined service area.

3. Identify the existing problems or issues that need to be addressed, as applicable and appropriate for the project. [See 1110.230(b) for examples of documentation.] add deficiencies of the existing unit

As the regions' only tertiary care facility, Condell requires the proposed infrastructure to appropriately support the higher level of specialty care needed with the trauma cases and significant volume growth in cardiac and neurosurgery inpatients. Expanded services such as Watchman, ECMO (extracorporeal membrane oxygenation) and CRRT (continuous renal replacement therapy) increase the number of high acuity conditions treated. These advanced services are now available to patients in Lake County, no longer requiring residents to leave the service area for this type of care.

The following services represent Condell's ability to provide specialty therapies for the severely critically ill. These therapies are increasing in volume and will increase the average ICU length of stay due to the nature of the critical illness and duration of therapy. An increase in volume of these patients and the long length of stay will result in an increase of ICU bed utilization.

a. Impella is utilized in complex cardiac procedures and in acute severe heart failure to "provide a steady supply of oxygen to all tissues and organs in the body" (ABIOMED, 2019).
b. The WATCHMAN device (procedure) is used to permanently close off the atrial appendage and keep those blood clots from escaping in the patients with atrial fibrillation. Patients with atrial fibrillation are at great risk for strokes. This is a high acuity procedure with significant risk associated with it. This is becoming a standard of care thus increasing acuity and volume that will increase the use of critical care beds.
c. Extracorporeal Membrane Oxygenation (ECMO) provides prolonged support for those unable to support organ perfusion to sustain life. This therapy can have a duration from days to weeks; extending the overall length of stay to encompass the duration of therapy and the extended recovery due to severity of illness. This service will be expanded to encompass the ability to provide this therapy during a cardiac arrest known as eCPR in order to improve the chance of survival from sudden cardiac arrest for identified patients.
d. Continuous Renal Replacement Therapy (CRRT) is a method of providing dialysis support in the critically ill who cannot tolerate intermittent dialysis. Duration of therapy is two days at a minimum, but typically ranges up to two weeks. The severity of illness, acute recovery and the duration of therapy increases the patient ICU length of stay. (Baxter, 2019)

The increasing patient acuity and volume requiring critical care beds is also impacted by Advocate Condell's designation as a Certified Stroke Center and a Certified Chest Pain Center. These designations serve the community as the primary recipient of patients from the Emergency Medical Services teams throughout the communities in our service area.

a. As a Stroke Center, services have been expanding as evidenced most recently by the implementation of TeleStroke capability for immediate access to a neurologist for all patients presenting with stroke symptoms and potentially requiring antithrombotic medications to treat the stroke.
b. As a Certified Chest Pain Center, Advocate Condell provides comprehensive cardiovascular services including PCI (percutaneous coronary intervention, i.e. stents), invasive cardiac support utilizing the Impella and the Intraortic Balloon Pump (IABP) as well cardiothoracic and vascular surgery.

As the only Level 1 Trauma Center in Lake County, Advocate Condell has received an increasing number of Emergency Room patients with many types of trauma including gunshot wounds. These patients impact the need for additional ICU beds. The number of these patients has more than doubled over the last 4 years.

Advocate Condell Emergency Department	
Year	**Gunshot Wounds**
2015	13
2016	19
2017	29
2018	48

Source: Hospital records

Additional needs addressed in the project focus on specific population groups. The current ICU facilities are limited in meeting the needs of the bariatric population. As outlined in the attachment, there is a significant growth in the bariatric population. The new facility will have four rooms designed and equipped to meet the needs of the bariatric population. These changes include increased space to accommodate the size of the patient care furniture (bed and chair), a 1000-pound ceiling lift for patient mobility as well as patient and staff safety. All toilet facilities will be upgraded to full bathrooms with floor mounted toilets allowing adaptation to the bariatric patient in all rooms.

Infection prevention is a priority in the ICU as these patients are immune compromised. Currently, the ICU has one negative pressure room to protect the remaining patients and staff from airborne transmission and all other supplies for infection prevention are maintained in mobile carts kept in the areas of egress. Currently, the mobile carts limit space for patient movement throughout the unit. The new ICU will have three negative air flow rooms; two will have all the accommodations for the bariatric population. The mobile carts will be eliminated as each room will have in-wall cabinets outside of each room as well as disposal systems for isolation supplies allowing retrieval of the waste without entering the patient room.

Advocate Condell has consistently operated the ICU at over 90% occupancy; exceeding the state standard of 60%. ICU bed utilization is increasingly at 100% of the current capacity and critically ill patients are then cared for outside of the current ICU unit. This "overflow" ICU population is cared for in the current step-down unit. Appropriately trained ICU staff from the ICU provide the critical care required. This physical expansion outside of the ICU results in a reduction and/or relocation of step-down beds onto other medical-surgical nursing units. The staff are increasingly challenged to manage bed placement and the ability to move patients from the ED and surgery to the appropriate nursing unit to optimize their care. The lack of ICU

available beds adversely effects patients needing optimal care and created an unnecessary bottleneck for surgical services, the ED and other holding areas waiting for an available ICU bed.

The newly designed medical-surgical unit will include 3 additional beds as outlined by the projected growth for inpatient days. The project will consist of improving the design of the patient care room, including modernization, addressing deficiencies in the size and functionality of the current units, and be located in an area that improves patient transport and hospital traffic.

Upgrades to the building systems and design will include LEED certification and Healthy Spaces Roadmap Certification and improve efficiency in patient care, energy efficiency and sustainability.

The increased need for additional ICU beds has been well documented at Condell and will be magnified with significant growth in the number of patients requiring ICU services in the area. This will be due to advanced technology and growth in the older population in Lake County and the HSA. This parallels the state's inventory and bed determination showing a current need for 10 additional ICU beds and this will be further pressured with the projected growth of over 30,000 additional 65 years and older residents. (ESRI census data).

4. Cite the sources of the information provided as documentation.

- Advocate Condell Medical Center Master Facility Plan
- Illinois Department of Public Health Hospital Licensing Code
- Illinois Health Facilities and Services Review Board (HFSRB) Administrative Rules
- IHA COMPdata
- AIA/FGI Guidelines for Design and Construction of Health Care Facilities
- Advocate Condell Medical Center Admission Data
- Claritas and the US Census Bureau
- HFSRB Hospital Profiles
- HFSRB Inventories and Data
- Health care literature regarding current trends
- Advocate Condell Medical Center Public Relations archives
- Lake County and Libertyville building codes
- Master Facility Plan, Kurt Salmon
- DaVita Dialysis corporation
- Sg2 Impact of Change Forecast: Rising Acuity, Impact Growth Trends 2019
- Reference pages listed are provided in Appendix 2, pages 218-219.

5. Detail how the project will address or improve the previously referenced issues, as well as the population's health status and well-being.

The primary purpose of the project is to provide health services that improve healthcare or wellbeing of the market are served. The proposed project will provide enhanced patient, physician and team member satisfaction.

The improvements in the physical space will include:

a. Meeting the physical, psychosocial and emotional needs of the patients, families and staff is the primary focus of this project following an evidence-based approach to support optimum performance.

   The new facility design will improve access to supplies and equipment, especially when time is of the essence. Strategically located storage areas will disperse supplies, medications and equipment among three Interdisciplinary Team Centers (ITC). (Hamilton & McCuskey Shepley, 2010, p. 133)

   Each ITC will support the functions of the multidisciplinary team including physicians, nurses, pharmacists, respiratory therapists, etc. thus the "nurses' station" is replaced with centralized multifunctional spaces to support the entire healthcare team. (Hamilton & McCuskey Shepley, 2010, pp. 90 - 91; 127)

b. Each room is larger to accommodate the increasing technology and equipment required to care for the complex critically ill patient while standardization of all rooms ensures continual familiarity and intuitive functions for the healthcare team. Reduction in variability in room configuration and supply placement supports optimum function and performance (Hamilton & McCuskey Shepley, 2010, p. XV).

   The concept and trend of increasing the size of the critical care room is supported by the American Institute of Architects (AIA), Society of Critical Care Medicine (SCCM) and the American Association of Critical Care Nurses (AACN). The design of each patient room provides four zones of care (1) the patient, (2) the family, (3) the healthcare providers and (4) a hygiene zone to support infection prevention and hygiene needs of the patient.

c. The addition of a family zone in each room supports the evidence-based practice of family centered care. Increasing family access to the patient promotes the family's ability to participate in multidisciplinary rounds, provide input into the development of the patient plan of care, be present during resuscitation/procedures (if desired), and decrease the sense of abandonment/separation. Increasing family presence decreases psychologic impact of critical illness causing post ICU syndrome for both the patient and the family. (American Association of Critical Care Nurses (AACN), 2015)

   Family-centered care is further supported with family support areas for private consultation and/or bereavement, storage of belongings in each room, a mother's room to accommodate hygiene care of small children and nursing mothers. Facilities will "encourage the kind of strong support for the critical care patient" while affording the opportunity for self-care by the visitor (Hamilton & McCuskey Shepley, 2010, p. 125).

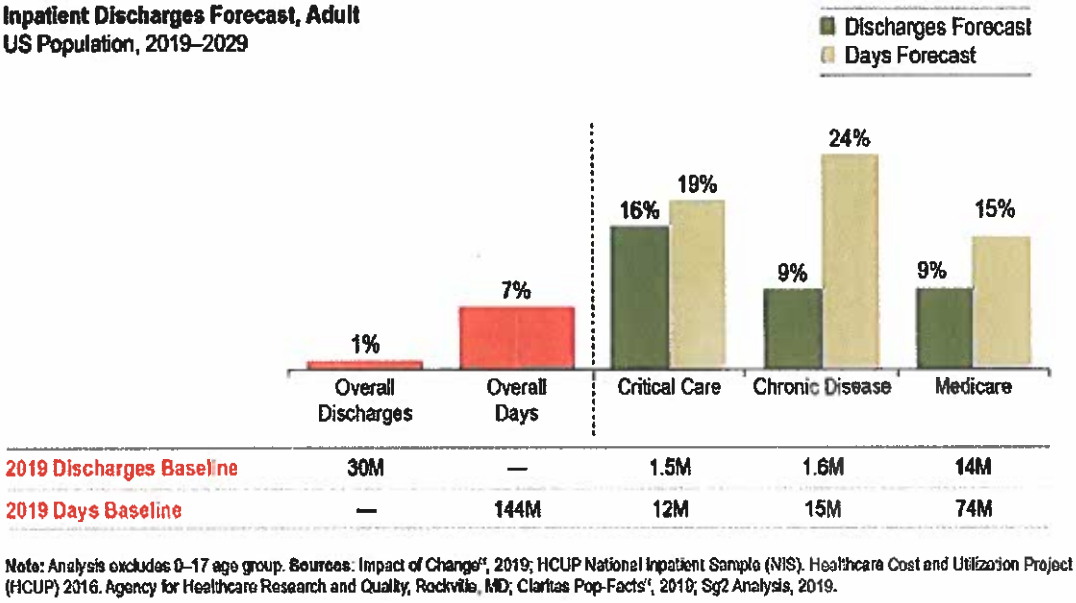
d. The new ICU environment will improve the working environment of the staff caring for these patients. There will spaces for a library and conference room to promote education, locker rooms, breakroom and serenity space to meet the privacy, psychosocial and emotional needs of the healthcare team in a highly charged healthcare environment. Staff specific spaces will allow innovative solutions to the stress of caring in the critical care environment such as Code Lavender for private personal support in difficult situations.

   This demonstrates the ethical and moral commitment not only to the patients served but also the teams providing care. This is consistent with the healthy work environment standards

promoted by the American Association Critical Care Nurses (AACN). (American Association of Critical Care Nurses (AACN), 2005)

"Experts recommend using a statistically-based service-volume projection method to determine the number of beds needed" (Hamilton & McCuskey Shepley, 2010, pp. 66 - 67). This was applied in Advocate Condell calculation of the number of beds needed.

Sg2, a national Consulting Firm, forecasts that "inpatient growth is poised to change. While IP volume growth is expected to be flat, case mix acuity will rise and result in an increase in average length of stay (5%) and total patient days (7%) over the 10-year horizon. Demographic changes, improved survivorship, increase prevalence of chronic conditions will fuel the acuity rise in the inpatient setting. The Medicare population is expected to balloon to a 35% increase over the next 10 years. This will include more Medicare inpatient volumes, critical care volumes and chronic disease admissions. These case mix changes will require careful resource and facility planning to adequately meet future demand."



Note: Analysis excludes 0–17 age group. Sources: Impact of Change©, 2019; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP) 2016. Agency for Healthcare Research and Quality, Rockville, MD; Claritas Pop-Facts©, 2019; Sg2 Analysis, 2019.

Source: Sg2 forecast data

At the completion of the project, the Hospital will have the 32 Intensive Care beds to meet the needs of Lake County's critically ill patients that come to Advocate Condell. The rooms will be sized and configured to meet the Advocate and current industry standards; providing the necessary space for staff to care for patients. The necessary controls will be integrated into the rooms to provide the needs for this patient population. Having the appropriate number of medical-surgical and intensive care beds will improve access and allow the for the timely and appropriate placement of all patients needing critical care.

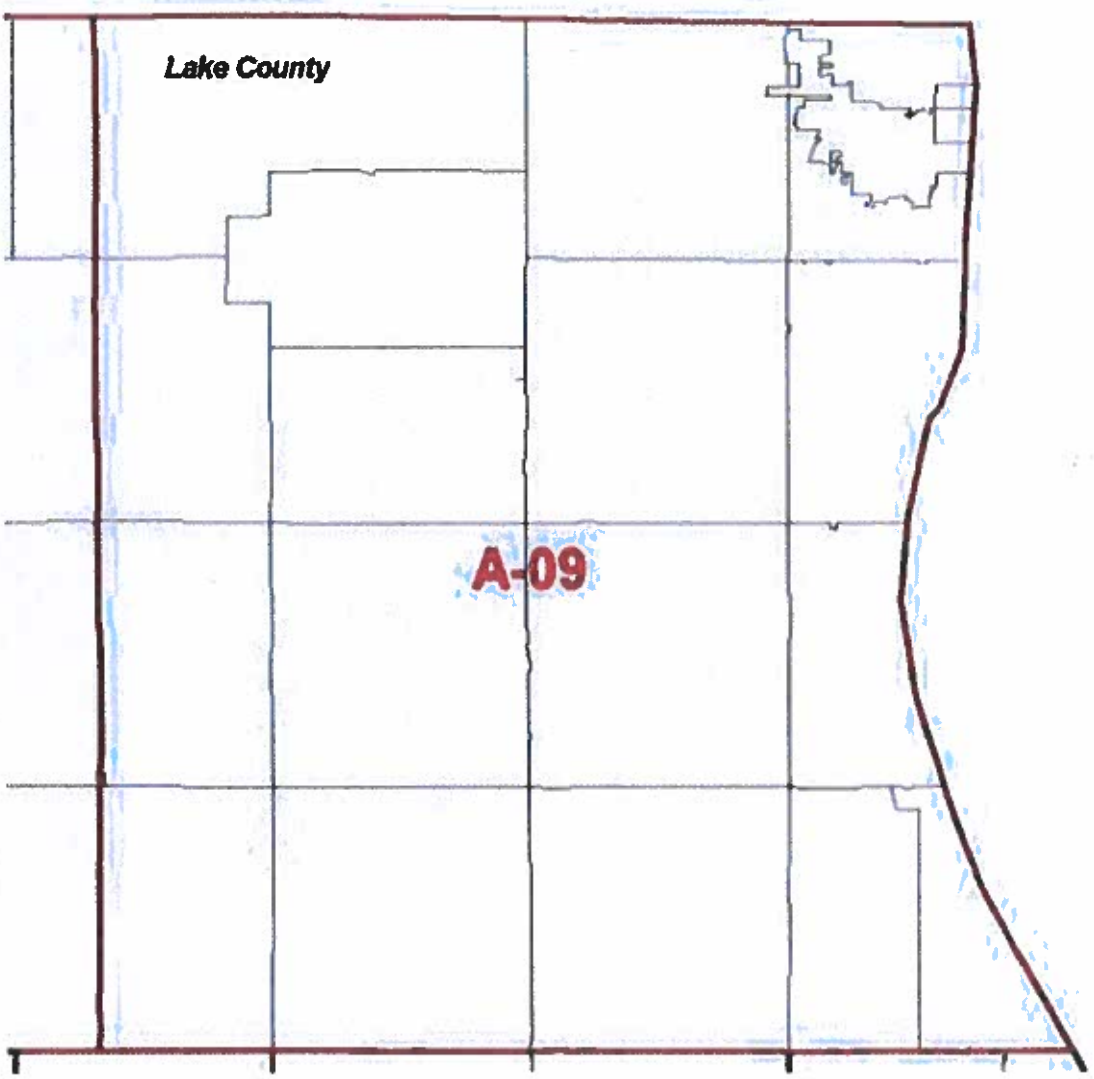
6. Provide goals with quantified and measurable objectives, with specific timeframes that relate to achieving the stated goals as appropriate.

The phasing of this project was well thought out to provide the safest, high quality care and minimized disruption to patients and clinicians. The first phase of the project includes modernization of Tower 5 to include 34 medical-surgical beds and the relocation and expansion of dialysis services.

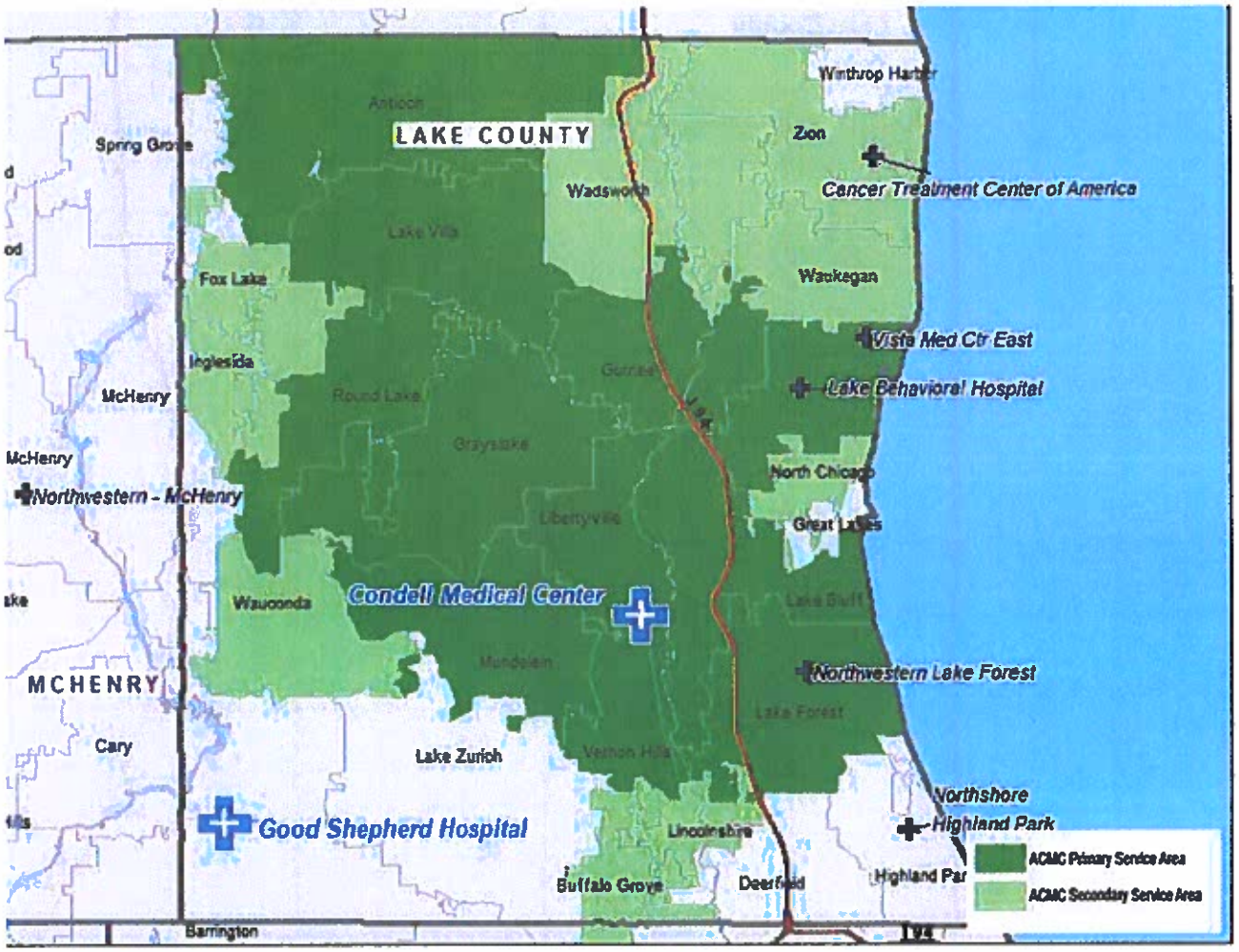
The next phase will be to vacate 34 beds on East 2 (current medical-surgical unit/located below ICU construction) and move these patients to Tower 5. With the completion of the expanded ICU floor to 32 beds, medical-surgical patients will be moved back to East 2, allowing the closure of the West 3 medical-surgical unit.

The entire project is expected to be completed and operational by December 31, 2023.

PLANNING AREA A-9: Lake County



ADVOCATE CONDELL MEDICAL CENTER SERVICE AREA MAP



ALTERNATIVES

1) Identify **ALL** of 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 ATTACHMENT 13, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

As part of the overall Advocate Condell Medical Center Master Facility Planning process it was determined that it was critical to address the need for expansion and modernization of the medical-surgical and intensive care unit (ICU) floors in the next phase. The conclusion of this assessment identified the need for additional capacity while restructuring and modernizing the current inpatient bed capacity to enhance quality of care.

There is an immediate need to increase the number of ICU beds to accommodate current patients and growth projected in the service area. This project will implement the right-sizing of Condell's inpatient critical care capacity to provide the safest, most flexible environment for treating the most critically-ill patients. The construction of a new medical-surgical floor is needed to address additional medical-surgical beds and the outdated space in the original building to meet the needs of current inpatients.

Alternative One – Modernize and expand the ICU unit without modernizing the West tower medical surgical floor

This option increases access for ICU patients, however not address the significant facility needs for the outdated medical-surgical unit. The medical-surgical unit, West3, is almost 60 years old and is significantly undersized in functional space compared with current standards. The location of West 3, creates challenges as the unit location connects to many units and services and functions as a corridor within the hospital. The dialysis bays are undersized and are insufficient for current dialysis patient volume. In addition, the inclusion of the 5th floor build-out in the planned scope allows for the floor below the vertical expansion to be unoccupied during construction. In this option, however, the vertical expansion would have to be completed in three phases, driving higher cost.

Cost: $41,750,000 - Rejected

Alternative Two —Modernize the West Tower space to create a medical surgical unit without including the ICU unit expansion

The current ICU unit does not provide an adequate number of beds; therefore, the appropriate level of care for ICU level patients. Critical care patients are either being cared for in marginally appropriate settings (intermediate unit for ICU level patients and medical-surgical units for intermediate level patients). Patients may be downgraded to lower levels of intensity care faster that desired to maximize available beds in current units. Patients would continue to wait in the Emergency Department for an ICU bed or others would be prematurely stepped down to other units. The shortage will only intensify with the older population growth expected in this service area and the acuity projected for these patients. As the only Level 1 Trauma Center in Lake County, access to ICU capacity is essential.

Cost: $23,100,000 - Rejected

Alternative Three — Utilize and refer to other Hospital locations

The services addressed in the project do not fit within the "joint venture" concept. Relying on the option for the patients to be referred or transferred to other hospitals when Advocate Condell is at capacity may seem like a solution in a crisis. Many of these patients present to the Emergency Department with immediate and critical health care needs. For patients who present needing immediate critical care, the Emergency Medical Treatment and Labor Act (EMTALA) requires hospitals to provide stabilizing treatment within its capacity. Current industry standards indicate that transferring patients in the course of admission to intensive care jeopardized continuity of care. This alternative does not address the long-range need for service at this site. The physicians admitting these patients are on the staff at Advocate Condell Medical Center and this would not allow the continuity of care for these patients. This would be disruptive for patients to have their care provided at multiple locations.

Cost: No Additional Cost -Rejected

Alternative Four — Build two additional floors on the West Tower to accommodate all medical surgical patients from the main building including expansion of the ICU unit

The construction of multiple floors to include all medical-surgical units and the intensive care unit would address the capacity and appropriate design space for these patients. Since the West Tower was not built with the structural capacity for vertical expansion, however, extensive structural reinforcement would be necessary in order to prepare the building structure for vertical expansion. In addition, extensive costs would be required for the relocation of existing rooftop mechanical equipment.

As good financial stewards of Advocate Aurora Health, this plan was ruled infeasible due to the exorbitant cost and extensive negative impact to ongoing hospital operations.

Cost: $76,950,000 - Rejected

Alternative Five – Construct new space and modernize the existing ICU unit to include 32 ICU beds in the main hospital and build out space in the West Tower to accommodate 34 medical surgical beds in modern private rooms.

This option was selected as it would improve patient access for current patients with the appropriate bed capacity in the ICU and medical-surgical units and right-size the space to support Condell's inpatient critical care capacity.

This project will enhance safety, quality of care, and provide the necessary facility improvements to support the future of the hospital providing the safest, most flexible environment for treating critically-ill patients.

Cost: $63,538,825 - Accepted

Alternative	Description	Patient Access	Quality	Cost	Financial Benefit, Short Range	Financial Benefit, Long Range	Conclusion
1	Modernize and expand the ICU unit without building the additional med surg floor on the West Tower building	This would increase access for ICU patients, while not addressing the significant facility needs for the outdated medical surgical unit.	The quality of care would not be improved for the majority of medical surgical patients. The medical surgical unit would continue to be undersized and located in a challenging location.	While the total project cost at this time would be less, the deficiencies in the medical surgical unit would need to be addressed adding incremental cost.	This option would be more costly as the vertical integration would have to be done in three phas driving higher cost and requiring additional expenditures.	It would be more costly in total to make incremental modifications to the medical surgical unit, ultimately replacing the unit.	Rejected
2	Build the additional med surg floor on the West Tower without including the ICU unit expansion	The current space for the ICU unit would not increase patient access. Patients would continue to wait in the ED for an ICU bed or others would be prematurely stepped down to other units.	The quality of care would not be improved as patients would be cared for in marginally appropriate settings or downgraded prematurely. As the only Level 1 Trauma Center in the planning area, this would add pressure to clinicians to find alternative locations to care for patients.	While the total project cost at this time would be less, the need is projected to continue to grow and ultimately would require financial resources to add ICU capacity.	This option would be less costly for this phase, but would require additional expenditures.	As service area patients needs increase the long range challenge will intensify. The current constraints have led to bypass situations. The need for ICU beds will continue to grow in the service area due to the increased acuity and services offered at Advocate Condell and will continue to increase	Rejected
3	Utilize and refer to other Hospital locations	Problems with access to would continue. Many of these patients present to the Emergency Room with immediate and critical health care needs. The physicians admitting these patients are on the staff at Advocate Condell Medical Center and	The quality of care would not be improved for the majority of medical surgical and ICU patients. The ICU and medical surgical units would continue to be undersized and This would be disruptive for patients to have their care provided at multiple locations	There would be no additional cost.	There would be a lower cost short term, although needed capacity would not be available for existing patients.	The need for additional capacity will continue to grow in the service area and the issues of access with continue long term.	Rejected
4	Build several additional floors in the West Tower - relocating all Medical Surgical patients from the main building; include expansion of ICU unit	This would improve patient access by creating the appropriate space and design for the ICU unit and Med-Surg units.	Quality of care would be improved due to right sizing both the ICU and medical surgical units. Patients would have availability to be located on the most appropriate unit and to be able to step down in place or moved as clinically determined.	The cost will be increase exponentially with increased construction. The total project cost needs to be measured against the true needs of the organization and the patients it serves.	As good financial stewards of Advocate Aurora Health Care, the plan to build beyond the scope of this project at this time was determined to be a significant financial investment and create extensive negative impact to ongoing hospital operations.	Advocate Aurora Health Care will continue to look at the long term needs of each facility and develop investments based on the needs of the community.	Rejected
5	Expand and modernize the ICU to include 32 ICU beds; Build an additional floor in the West Tower to relocate 34 Med-Surg beds	This would improve patient access by creating the appropriate space and design for the ICU unit and Med-Surg unit.	Quality of care would be improved due to right sizing both the ICU and medical surgical units. Patients would have availability to be located on the most appropriate unit and to be able to step down in place or moved as clinically determined.	The cost of this project was designed to provide the necessary facility design to provide the safest quality of care for current and future patients.	The space designed specifically for these two patient care units will provide the number of beds needed in the area to support current patient needs and into the future.	The medical surgical and intensive care units will be properly designed and built for immediate and long term needs. This will provide more efficient operations, and address the space needed to provide the determined number of beds.	✓ Accepted

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:

3. 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.**

4. 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				
DEPARTMENT/SERVICE	**PROPOSED BGSF/DGSF**	**STATE STANDARD**	**DIFFERENCE**	**MET STANDARD?**
ICU BEDS MED/SURG BEDS DIALYSIS STATIONS				

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

See Attachment #14, Exhibit 1.

SIZE OF PROJECT				
DEPARTMENT/SERVICE	PROPOSED BGSF/DGSF	STATE STANDARD	DIFFERENCE	MET STANDARD?
ICU BEDS	21,914	21,920 (32 beds x 685 dgsf /bed)*	-6	YES
MED/SURG BEDS (5 TOWER)	21,831	22,440 (34 beds x 685 dgsf /bed)*	-609	YES
MED/SURG BEDS (2 EAST)	20,330	29,040 (44 beds x 685 dgsf /bed)*	-8,710	YES

Source: Hospital Records/ *State Standard- Sec. 77 IL Adm Code 1100

The ICU Unit was created utilizing Advocate room standards outlined within the existing footprint of the floors below. The area was calculated using the state standard determination to calculate square footage of the unit.

The unit will be divided into 3 team stations for better patient acuity separations, providing the best patient/staff ratios. All required support spaces are included.

The medical-surgical inpatient beds will be built out utilizing the West Tower existing footprint with all of its existing utilities already in place. The square footage of the medical-surgical inpatient beds on 2 East will remain in the current configuration.

There are no standards for an Inpatient Dialysis Unit. The proposed 1,700 dgsf for the unit meets the state standards for freestanding dialysis units.

- The state standard of 470 dgsf/station x 6 stations = the state standard of 2,820 dgsf for 6 stations. The proposed unit is -1,120 less than the state standard.

The Inpatient Dialysis Unit will be expanded to allow for the best care for inpatients requiring dialysis, outside their patient room. A centralized location allows maximum patient care in a central location.

Non-clinical additions will include a new elevator with a direct connection to the existing Emergency Room, allowing for quicker patient access. A new boiler infrastructure will be included to support these functions.

PROJECT SERVICES UTILIZATION:

This criterion is applicable only to projects or portions of projects that involve services, functions or equipment for which HFSRB has established utilization standards or occupancy targets in 77 Ill. 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				
	DEPT./ SERVICE	HISTORICAL UTILIZATION (PATIENT DAYS) (TREATMENTS) ETC.	PROJECTED UTILIZATION	STATE STANDARD	MEET STANDARD?
YEAR 1					
YEAR 2					

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

See Attachment #15, Exhibit 1.

Projected Services Utilization

Size of Project					
	Historical Utilization	Projected Utilization	State Standard	Number Requested	Met Standard?
Department	2018	2025*			
Medical Surgical Patient Days	66,136	78,370	328.5 days per room = 239	217 rooms	Yes
ICU Patient Days	5,254	6,521	219 days per room = 30	32 rooms	No
*2 years post completion					

Note: The IP dialysis clinical service is currently operational and included in the Project but does not have utilization standards. Utilization is found in Attachments 20 in the application.
Source: Hospital records

The projected utilization, as outlined in Attachment 18, was developed using the formula for the Need Determination Assessment in Part 1100 Narrative and Planning Policies Section 1100.520.

Medical-Surgical Projected Bed Need

The projections for demand are driven by the pattern of growth of patients currently admitted to the medical-surgical units.

	2014	2015	2016	2017	2018	% Change 2014-2018	Compound Annual Growth Rate
Med Surg Days	60,023	63,450	61,499	63,474	66,136	10.2%	2.5%

Source: Hospital Profiles

To project demand for the medical-surgical units, the Compound Annual Growth Rate (CAGR) was applied to develop the trend line to 2025 (2 years post completion of the project).

Compound Annual Growth Rate	2019	2020	2021	2022	2023	2024	2025
2.5%	67,759	69,422	71,126	72,872	74,660	76,492	78,370

Source: Calculated based on past Hospital Profiles

By the second year after the proposed project is completed, the patient days are projected to be 78,370.

The state target of occupancy is 90%. With this occupancy, the 239 medical-surgical beds are needed.

365 days per year x 90% = 328.5 days per bed
78,370 patient days divided by 328.5 days per bed = 239 beds

With 217 beds proposed, **the standard was met.**

It was determined that conservatively, the medical-surgical services can be supported by the 217 beds included in the proposed project. Additional capacity will be shifting from the medical-surgical service to intensive care and additional beds will be needed on the ICU floor.

Intensive Care Projected Bed Need

The projections for demand are driven by the pattern of growth of patients currently admitted to the Intensive Care Unit.

	2014	2015	2016	2017	2018	% Change 2014-2018	Compound Annual Growth Rate
ICU Days	4,644	4,783	4,977	5,129	5,254	13.1%	3.1%

Source: Hospital Profile

To project demand for the medical-surgical units, the Compound Annual Growth Rate (CAGR) was applied to develop the trend line to 2025 (2 years post completion of the project).

Compound Annual Growth Rate	2019	2020	2021	2022	2023	2024	2025
3.1%	5,419	5,588	5,764	5,944	6,130	6,322	6,521

Source: Calculated based on past Hospital Profiles

By the second year after the proposed project is completed, the patient days are projected to be 6,521.

The state target of occupancy is 60%. With this occupancy, the 30 ICU beds are needed.

365 days per year x 60% =219 days per bed
6,521 patient days divided by 219 days per bed = 30 beds

Based on the 31% growth in the 65 and older population anticipated in the next years, and the acuity increases demonstrated, it was determined that 2 additional ICU beds will be needed within the next 5 years.

These will replace some of the need demonstrated for medical-surgical beds knowing that many of the medical-surgical patients would appropriately stay in the ICU unit for a longer duration that will be made available with the increased capacity. The 15 additional ICU beds will help address the well-documented need for more ICU beds in the A-09 Health Planning Area (See Attachment #15, Exhibit 1). Further, it will alleviate the pressure at Advocate Condell for ICU beds and better serve the needs of the patients in the service area.

Ratio of Medical-Surgical Beds to Intensive Care Beds

The State of Illinois ratio in 2018 of medical-surgical beds to intensive care is as follows:

- 20,580 state medical-surgical beds ÷ 3,535 ICU beds = **5.8** medical-surgical beds per ICU bed

The current ratio at Condell is:

- 214 medical-surgical beds ÷ 17 ICU beds = **12.6** medical-surgical beds per ICU bed

In the proposed project, the ratio is as follows:

- 217 medical-surgical beds ÷ 32 ICU beds = **6.8** medical surgical beds per ICU bed

This would bring the current ratio of 12.6 to an appropriate level to meet the needs of patients progressing from intensive care. This is supported in the needs assessment, prepared by the consulting firm of Kurt Salmon and Associates (KSA), that recommends that 20-30% of all acute beds should be classified as critical care.

Increased Need for Intensive Care Beds

Patient days are projected to continue to increase and shift from the medical-surgical service to the intensive care service. As the only Level 1 Trauma Center in Lake County, the increase in trauma patients and the increased acuity of inpatients demonstrates the need for a greater number of Intensive care beds. The projected increased number of 65 and older population in the HSA, will likewise increase the number of inpatients with co-morbidities that will require intensive care services. The number of 32 intensive care rooms requested reflects the care shift anticipated to support the needs of patients living in the Advocate Condell service area.

Inventory of Health Care Facilities and Services
and Need Determinations

Illinois Health Facilities and Services Review Board
Illinois Department of Public Health

9/1/2019
Page C-4

INTENSIVE CARE CATEGORY OF SERVICE
Existing Beds, Calculated Beds Needed, and Additional Beds Needed or Existing Excess Beds By Planning Region and Area

Planning Regions and Areas	Existing Beds	Total Beds Needed	Additional Beds Needed	Existing Excess Beds
REGION A	**2,616**	**2,559**	**129**	**186**
Planning Area A-01	449	416	0	33
Planning Area A-02	384	458	74	0
Planning Area A-03	262	251	0	11
Planning Area A-04	366	300	0	66
Planning Area A-05	244	260	16	0
Planning Area A-06	209	189	0	20
Planning Area A-07	192	165	0	27
Planning Area A-08	94	81	0	13
Planning Area A-09	108	118	10	0
Planning Area A-10	33	38	5	0
Planning Area A-11	45	41	0	4
Planning Area A-12	58	66	8	0
Planning Area A-13	115	131	16	0
Planning Area A-14	57	45	0	12
REGION B	**140**	**126**	**1**	**15**
Planning Area B-01	98	99	1	0
Planning Area B-02	8	5	0	3
Planning Area B-03	14	14	0	0
Planning Area B-04	20	8	0	12
REGION C	**235**	**197**	**0**	**38**
Planning Area C-01	146	136	0	10
Planning Area C-02	22	15	0	7
Planning Area C-03	21	12	0	9
Planning Area C-04	12	7	0	5
Planning Area C-05	34	27	0	7

SECTION V. SERVICE SPECIFIC REVIEW CRITERIA

This Section is applicable to all projects proposing the establishment, expansion or modernization of categories of service that are subject to CON review, as provided in the Illinois Health Facilities Planning Act [20 ILCS 3960]. It is comprised of information requirements for each category of service, as well as charts for each service, indicating the review criteria that must be addressed for each action (establishment, expansion, and modernization). After identifying the applicable review criteria for each category of service involved, read the criteria and provide the required information APPLICABLE TO THE CRITERIA THAT MUST BE ADDRESSED:

A. Criterion 1110.200 - Medical/Surgical, Obstetric, Pediatric and Intensive Care

3. Applicants proposing to establish, expand and/or modernize the Medical/Surgical, Obstetric, Pediatric and/or Intensive Care categories of service must submit the following information:

4. Indicate bed capacity changes by Service: Indicate # of beds changed by action(s):

Category of Service	# Existing Beds	# Proposed Beds
☐ **Medical/Surgical**	**214**	**217**
☐ **Obstetric**		
☐ **Pediatric**		
☐ **Intensive Care**	**17**	**32**

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

APPLICABLE REVIEW CRITERIA	Establish	Expand	Modernize
1110.200(b)(1) - Planning Area Need - 77 Ill. Adm. Code 1100 (formula calculation)	X		
1110.200(b)(2) - Planning Area Need - Service to Planning Area Residents	X	X	
1110.200(b)(3) - Planning Area Need - Service Demand - Establishment of Category of Service	X		
1110.200(b)(4) - Planning Area Need - Service Demand - Expansion of Existing Category of Service		X	
1110.200(b)(5) - Planning Area Need - Service Accessibility	X		
1110.200(c)(1) - Unnecessary Duplication of Services	X		
1110.200(c)(2) - Maldistribution	X	X	
1110.200(c)(3) - Impact of Project on Other Area Providers	X		
1110. 200(d)(1), (2), and (3) - Deteriorated Facilities			X
1110.200(d)(4) - Occupancy			X
1110.200(e) - Staffing Availability	X	X	
1110.200(f) - Performance Requirements	X	X	X
1110.200(g) - Assurances	X	X	
APPEND DOCUMENTATION AS ATTACHMENT 18, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.			

Category of Service	
Medical Surgical Beds	
Expansion of Existing Services	(b)(2) – Planning Area Need – Service to Planning Area Residents
	(b)(4) – Planning Area Need – Service Demand – Expansion of Existing Category of Service
	(e) – Staffing Availability
	(f) – Performance Requirements
	(g) – Assurances

Modernization	(d)(1) & (2) & (3) – Deteriorated Facilities
	(d)(4) – Occupancy
	(f) – Performance Requirements

b) Planning Area Need – Review Criterion

The applicant shall document that the number of beds to be established or added is necessary to serve the planning area's population, based on the following:

2) Service to Planning Area Residents

A) Applicants proposing to establish or add beds shall document that the primary purpose of the project will be to provide necessary health care to the residents of the area in which the proposed project will be physically located (i.e., the planning or geographical service area, as applicable), for each category of service included in the project.

Advocate Condell Medical Center is located in the center of Lake County in Libertyville, IL. The hospital has been providing medical-surgical services to the service area since 1923.

The proposed medical surgical floor will modernize the Fifth floor of the West Tower to include a new unit of 34 medical-surgical beds. This unit will be designed with the current standard of care, supporting patient safety and quality, enhancing the patient experience, improving staff efficiency and reducing unnecessary costs. The patient rooms will be right-sized and designed in the Advocate Aurora Health (AAH) standard developed by a team of clinicians and hospital facility experts from throughout the AAH system. This will provide the updated infrastructure for more integrated and advanced technology and offer more appropriate space for patients and their families.

Tower 5 will replace the original unit on 3 West that is undersized in functional space and located in an area that is the corridor which connects the two inpatient buildings and functions as the thoroughfare between the buildings.

The new unit will be designed to support clinicians, nurses and physicians spending more time with the patient. The larger patient rooms provide improved work space for the multidisciplinary health care team. The rooms will provide comfortable designated space for family members to stay with the patient. It will provide improved safety with newest technologic solutions for alarms, nurse call systems and computers in each room for ease of access to the electronic medical record (EMR). This medical-surgical unit will have large storage areas for medical

supplies and patient care equipment for a variety of medical-surgical patients. The designated dialysis area will increase access to acute dialysis facilities with more spaces; increasing comfort and ease in providing care during acute dialysis sessions.

A key principal in the design is flexibility to meet the changing needs of the patients and respond to changes in the delivery of health care. This flexibility will include the infrastructure for future implementation of Smart Room technology.

B) Applicants proposing to add beds to an existing category of service shall provide patient origin information for all admissions for the last 12-month period, verifying that at least 50% of admissions were residents of the area. For all other projects, applicants shall document that at least 50% of the projected patient volume will be from residents of the area.

In 2018, 88% of the medical-surgical patients resided in the Hospital's service area and 91% within Lake County. The table below provides the medical-surgical inpatient patient origin.

Medical-Surgical IP Patient Origin 2018	
Service Area	
Primary	74%
Secondary	14%
Other	12%
Lake County	91%

Source: Hospital records

Medical-surgical patient origin by zip code for 2018 is shown in Attachment 18, Exhibit 2.

C) Applicants proposing to expand an existing category of service shall submit patient origin information by zip code, based upon the patient's legal residence (other than a health care facility).

The Hospital expects that the additional medical-surgical patients to have similar patient origin.

4) Service Demand – Expansion of Existing Category of Service

The number of beds to be added for each category of service is necessary to reduce the facility's experienced high occupancy and to meet a projected demand for service. The applicant shall document subsection (b)(4)(A) and either subsection (b)(4)(B) or (C):

A) Historical Service Demand

i) An average annual occupancy rate that has equaled or exceeded occupancy standards for the category of service, as specified in 77 Ill. Adm. Code 1100, for each of the latest 2 years;

Medical-Surgical Bed Utilization 2014-2018				
Year	Beds Authorized	Patient Days	Average Daily Census	CON Occupancy
2014	214	60,023	164.4	76.8%
2015	214	63,450	173.8	81.2%
2016	214	61,499	168.0	78.5%
2017	214	63,474	173.9	81.3%
2018	214	66,136	181.2	84.7%

Source: Hospital Profile

The medical-surgical occupancy has grown markedly since 2014, increasing by 8% points over the last 5 years.

Patient days reported are reflective of the census at midnight. The average daily census at 1:00 pm is 6% higher in the medical-surgical units. The fluctuation in seasonality often creates situations where the medical-surgical units are full, and patients are waiting in the ED for patient placement.

Advocate Condell is committed to serving all critically ill patients presenting for care. When the existing ICU beds are occupied, the critical care services are expanded outside of the current ICU. This is accomplished by caring for the "overflow" ICU population in our current medical-surgical step-down unit. The appropriately trained ICU staff from the ICU provide the critical care required. This physical expansion outside of the ICU results in a reduction and/or relocation of step-down beds onto other medical-surgical nursing units. This is not optimal, as the critical care patients are located away from the intensivist physicians and the multidisciplinary team and a redistribution of highly acute medical-surgical step-down patient population.

Medical-surgical step-down units provide the ability to improve patient throughput and improve ICU utilization. Evidence demonstrates the use of step-down beds "allows an increase of ICU admissions without increasing mortality, may decrease ICU length of stay without increasing readmissions to the ICU, and may decrease the proportion of step-down patients residing in ICU beds" (Prin & Wunsch, 2014, p. 1214). When there is an overflow of ICU patients, there is an overall negative impact on patient throughput due to this shifting of patients and acuity.

In addition, due to the increased number of critically ill patients, Advocate Condell Medical Center has experienced an increase in patient acuity on the Medical-Surgical and Intensive Care units.

National trends project the acuity of inpatient admissions will continue to rise and result in an increase in average length of stay and patient days. Inpatient days are projected to continue to increase in part due to the growth of the aging population in Lake County.

The population for the Planning Area A-09 illustrated a projected 8% growth in total population. The 65+ population is projected to grow by 31%, expecting an increase of over 30,000 additional older residents.

ii) If patients have been referred to other facilities in order to receive the subject services, the applicant shall provide documentation of the referrals, including: patient origin by zip code; name and specialty of referring physician; and name and location of the recipient hospital, for each of the latest 2 years.

Inpatient admissions would not be referred to other facilities as it is the routine practice of the hospital to admit all patients that present needing inpatient care. No referrals to other facilities have been included.

B) Projected Referrals

The applicant shall provide the following:

The applicant did not include letters of referral from physicians. The patients are already presenting to the hospital and included in the current demand. The members of the medical staff continue to send their patients to Advocate Condell Medical Center.

Therefore, criteria i) to iv) are not included.

i) Physician referral letters that attest to the physician's total number of patients (by zip code of residence) who have received care at existing facilities located in the area during the 12-month period prior to submission of the application;
ii) An estimated number of patients the physician will refer annually to the applicant's facility within a 24-month period after project completion. The anticipated number of referrals cannot exceed the physician's experienced caseload. The percentage of project referrals used to justify the proposed expansion cannot exceed the historical percentage of applicant market share within a 24-month period after project completion;
iii) Each referral letter shall contain the physician's notarized signature, the typed or printed name of the physician, the physician's office address and the physician's specialty; and
iv) Verification by the physician that the patient referrals have not been used to support another pending or approved CON application for the subject services.

C) Projected Service Demand – Based on Rapid Population Growth:

If a projected demand for service is based upon rapid population growth in the applicant facility's existing market area (as experienced annually within the latest 24-month period), the projected service demand shall be determined as follows:

The growth in population does not meet the criteria for Rapid Growth so criteria i) to vii) are not included.

i) The applicant shall define the facility's market area based upon historical patient origin data by zip code or census tract;
ii) Population projections shall be produced, using, as a base, the population census or estimate for the most recent year, for
county, incorporated place, township or community area, by the U.S. Census Bureau or IDPH;
iii) Projections shall be for a maximum period of 10 years from
the date the application is submitted;
iv) Historical data used to calculate projections shall be for a number of years no less than the number of years projected;
v) Projections shall contain documentation of population changes in terms of births, deaths and net migration for a period of time equal to or in excess of the projection horizon;
vi) Projections shall be for total population and specified age groups for the applicant's market area, as defined by HFSRB, for each category of service in the application; and
vii) Documentation on projection methodology, data sources, assumptions and special adjustments shall be submitted to HFSRB.

d) Category of Service Modernization

1) If the project involves modernization of a category of hospital bed service, the applicant shall document that the inpatient bed areas to be modernized are deteriorated or functionally obsolete and need to be replaced or modernized, due to such factors as, but not limited to:

A) High cost of maintenance;
B) Non-compliance with licensing or life safety codes;
C) Changes in standards of care (e.g., private versus multiple bedrooms); or
D) Additional space for diagnostic or therapeutic purposes.

The proposed modernization to create this replacement medical-surgical unit addresses many advancements in the standards of care and space for diagnostic and therapeutic purposes. The

new medical-surgical rooms will be constructed and sized according to industry standards. The current size of the medical-surgical and ICU rooms are too small. They lack the room proportions needed for high tech bedside care. The existing rooms average 208 net square feet. The Advocate Aurora standards and FGI Guidelines are 300 square feet.

The limitations in the current 3West medical-surgical nursing unit include insufficient space:

- to accommodate families, patient care, procedures and/or medical equipment at the patient bedside,
- for storage of routine pharmaceuticals, patient care supplies and medical equipment utilized routinely,
- for the multidisciplinary healthcare team to document patient care, provide team education and private communication regarding patients and families.

The new medical-surgical unit will provide updated facilities and equipment. The technology demands have changed the way that nurses' access and use the patient information through systems in the room. Storage of linens, supplies and medications need to be immediately available and can be replenished without entering the room thus improving infection prevention. The new unit will offer improved lighting and in-ceiling lifts to provide a safer environment for both the patient and staff. Medication safety is high priority and the new unit will provide multiple large medication rooms utilizing the latest in pharmaceutical dispensing technology and space for safe medication handling/preparation close to the patient.

2) Documentation shall include the most recent:

A) IDPH Centers for Medicare and Medicaid Services (CMMS) inspection reports; and
B) The Joint Commission reports.) Additional space for diagnostic or therapeutic purposes.

No citations from CMMS or accrediting organizations.

3) Other documentation shall include the following, as applicable to the factors cited in the application:

A) Copies of maintenance reports;
B) Copies of citations for life safety code violations; and
C) Other pertinent reports and data.

The proposed modernization in this project is not related to the high cost of maintenance, non-compliance with life safety codes or other code issues.

4) Projects involving the replacement or modernization of a category of service or hospital shall meet or exceed the occupancy standards for the categories of service, as specified in 77 Ill. Adm. Code 1100.

Projected Bed Need

The projections for demand are driven by the pattern of growth of patients currently admitted to the medical-surgical Units.

	2014	2015	2016	2017	2018	% Change 2014-2018	Compound Annual Growth Rate
Med Surg Days	60,023	63,450	61,499	63,474	66,136	10.2%	2.5%

Source: Hospital Profile

The high occupancy of the medical-surgical units poses challenges to providing efficient, patient focused care. With the increasing patient days on these units and increasing number of days at high census, patient placement is frequently changed to accommodate additional critically ill patients. The practice of adjusting the patient placement on high capacity days involves many staff and increases the potential for costly and disruptive patient care. It is important to develop a better solution to accommodate current and forecasted demand.

To project demand for the medical-surgical units, the Compound Annual Growth Rate (CAGR) was applied to develop the trend line to 2025 (2 years post completion of the project).

Compound Annual Growth Rate	2019	2020	2021	2022	2023	2024	2025
2.5%	67,759	69,422	71,126	72,872	74,660	76,492	78,370

Source: Calculated based on past Hospital Profiles

By the second year after the proposed project is completed, the patient days are projected to be 78,370.

The state target of occupancy is 90%. With this occupancy, the 239 medical-surgical beds are needed.

365 days per year x 90% =328.5 days per bed
78,370 patient days divided by 328.5 days per bed = 239 beds

It was determined that 3 additional medical-surgical beds will be needed, knowing that many of these patients will continue to have critical care needs and the intensive care beds will be increasing in demand for these patients. Based on the 31% growth in the 65 and older population and the acuity increases demonstrated, it was determined that 3 additional medical-surgical beds will be needed within the next 5 years.

These ICU beds will support some of the need demonstrated for medical-surgical beds knowing that many of the medical-surgical patients will appropriately stay in the ICU unit for a longer duration with this increased capacity. This was illustrated in the previous medical-surgical

section that although 239 medical-surgical beds are projected to be needed, the project would be conservative and increase capacity by only 3 additional medical-surgical beds to 217.

These three additional medical-surgical beds along with the additional ICU beds will alleviate the pressure at Advocate Condell for appropriate inpatient placement to better serve the needs of the patients in the service area.

e) Staffing Availability – Review Criterion

The applicant shall document that relevant clinical and professional staffing needs for the proposed project were considered and that licensure and The Joint Commission staffing requirements can be met. In addition, the applicant shall document that necessary staffing is available by providing a narrative explanation of how the proposed staffing will be achieved.

Advocate Condell has evaluated the staffing needs and does not expect any issues meeting the licensure and accreditation staffing requirements as a result of the proposed project. The hospital's ability to attract and place nurses has historically been strong.

Staffing needs for the medical-surgical units were evaluated and additional staff is not projected to be needed with an additional 3 beds added in the project.

The Hospital's current time to fill for RN positions is below industry benchmarks at 40.2 days. The Advocate Aurora Health system has a dedicated team of Recruiters and Sourcing Specialists. If there is a significant staff need anywhere in the system, resources are shifted quickly to address the situation. The staffing consultants at Advocate Aurora Health work in a collaborative manner.

Advocate Aurora Health enjoys a strong brand name that has made its career website a robust source of candidate activity and is a primary source for filling open needs. An additional source for Condell's applicant pool comes from its active partnerships with local nursing programs such as College of Lake County and Chamberlain University.

Many nurses are interested in working at Advocate Condell as the only Level 1 Trauma Center in Lake County and Condell has been designated by the American Nurses Credentialing Center as a Magnet Hospital for Excellence in Patient Care and Nursing.

Additionally, much of the success can be attributed to the total rewards package that includes market competitive wages, comprehensive medical and dental insurance plans and a generous 401(k) Plan. Currently, 69.8% of the nurses are BSN, MSN or PhD prepared. All are required to achieve their BSN within 4 years of employment, and many take full advantage of the robust Tuition Reimbursement program.

Advocate Condell has continually benefited from the strong reputation of AAH as an excellent place of employment, as evidenced by consistently being named as one of the Top 100 Places to work in Illinois.

f) Performance Requirements – Bed Capacity Minimum

1) Medical-Surgical

The minimum bed capacity for a new medical-surgical category of service

within a Metropolitan Statistical Area (MSA), as defined by the U.S. Census Bureau, is 100 beds.

The Hospital will have 217 medical-surgical beds, exceeding the State minimum requirements.

g) Assurances

The applicant representative who signs the CON application shall submit a signed and dated statement attesting to the applicant's understanding that, by the second year of operation after project completion, the applicant will achieve and maintain the occupancy standards specified in 77 Ill. Adm. Code 1100 for each category of service involved in the proposal.

See Attachment #18, Exhibit 1.

Category of Service		
Intensive Care Beds		
Expansion of Existing Services	(b)(2)	– Planning Area Need – Service to Planning Area Residents
	(b)(4)	– Planning Area Need – Service Demand – Expansion of Existing Category of Service
	(e)	– Staffing Availability
	(f)	– Performance Requirements
	(g)	– Assurances

Modernization	(d)(1) & (2) & (3)	– Deteriorated Facilities
	(d)(4)	– Occupancy
	(f)	– Performance Requirements

b) Planning Area Need – Review Criterion

The applicant shall document that the number of beds to be established or added is necessary to serve the planning area's population, based on the following:

2) Service to Planning Area Residents

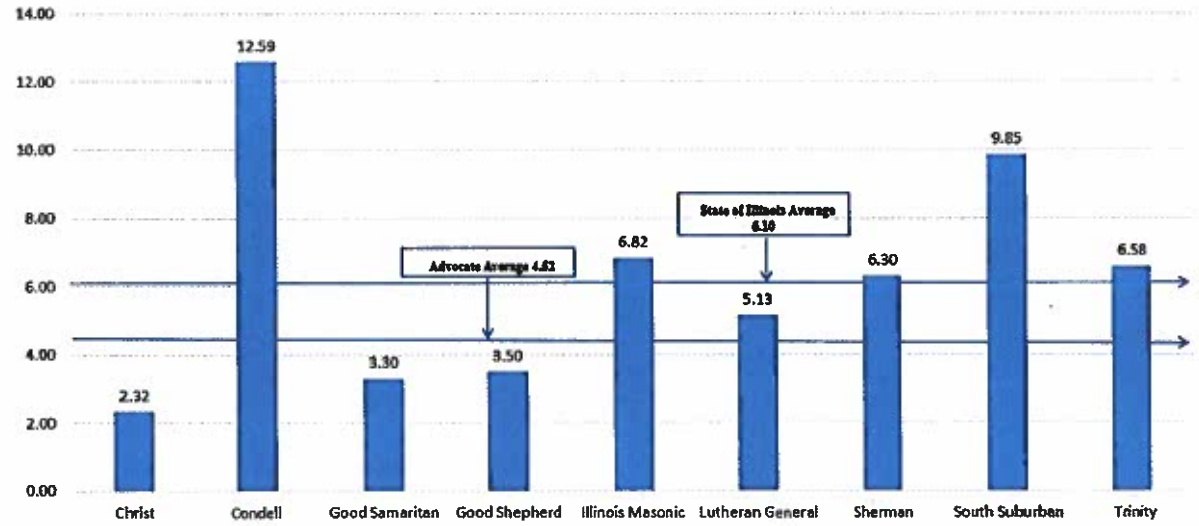
A) Applicants proposing to establish or add beds shall document that the primary purpose of the project will be to provide necessary health primary purpose of the project will be to provide necessary health care to the residents of the area in which the proposed project will be physically located (i.e., the planning or geographical service area, as applicable), for each category of service included in the project.

Advocate Condell Medical Center is located in the center of Lake County in Libertyville, IL. Critically ill patients are often admitted to the Intensive Care Unit (ICU) as a phase in their stay for other services such as surgery, cardiac care, cancer or trauma. As the only Level 1 Trauma Hospital in Lake County, the ICU unit is often at maximum capacity. Condell has seen an increasing number of the most critically-ill patients. As the volumes in neurosurgery, cardiac and critical care services grow, patients flow into the ICU. Many advanced procedures require patients to be monitored and receive intensive care for extended periods of time. The shortage of critical care capacity will continue to be compounded with key service line expansion and the population growth projected in Lake County. Condell's critical care capacity constraints have led to an annual average of 104 bypass hours over the last three years.

At a census level of 16 patients, the unit is essentially full, due to the need to keep one ICU bed available for emergency trauma or 'code' patients who require an immediate higher level of care from a medical-surgical unit or the ED. Lack of ICU capacity puts pressure on clinicians to continually find alternative locations for the care of patients outside of the ICU. Over the last year, the ICU was at maximum capacity of 16 patients 62% of the days and 17 patients 32% of days, requiring critical patients to be cared for in a medical-surgical bed.

The ratio of medical-surgical beds to intensive care beds is significantly higher than needed to support the patients admitted to Advocate Condell. Compared with other Advocate Hospitals, Condell's ratio is three times higher than the 4.5 Advocate average and double the State of Illinois average. This illustrates the deficiency of Intensive care beds.

Med Surg Beds Per ICU Bed By State of Illinois and Advocate Site
2018



Source: Hospital Records & IHFSRB Inventory of Health Facilities & Services

The Hospital has 17 CON authorized ICU beds. The proposed project would increase to 32 ICU beds for a net addition of 15 beds.

The Illinois Health Facilities and Services Review Board "Health Facilities Inventory Data" shows the need for 10 additional ICU beds in Planning Area A-09. The proposed project would fulfill the need and provide for the growth projected over the next 5 years.

B) Applicants proposing to add beds to an existing category of service shall provide patient origin information for all admissions for the last 12-month period, verifying that at least 50% of admissions were residents of the area. For all other projects, applicants shall document that at least 50% of the projected patient volume will be from residents of the area.

In 2018, 85% of the Intensive Care patients resided in the Hospital's service area and 88% within Lake County. The table below provides the Intensive Care Unit patient origin.

Intensive Care Patient Origin 2018	
Service Area	
Primary	72%
Secondary	13%
Other	15%
Lake County	88%

Source: Hospital records

Intensive care patient origin by zip code for 2018 is shown in Attachment 18, Exhibit 2.

C) Applicants proposing to expand an existing category of service shall submit patient origin information by zip code, based upon the patient's legal residence (other than a health care facility).

The Hospital expects that the additional ICU patients will have similar patient origin.

4) Service Demand – Expansion of Existing Category of Service

The number of beds to be added for each category of service is necessary to reduce the facility's experienced high occupancy and to meet a projected demand for service. The applicant shall document subsection (b)(4)(A) and either subsection (b)(4)(B) or (C):

A) Historical Service Demand

i) An average annual occupancy rate that has equaled or exceeded occupancy standards for the category of service, as specified in 77 Ill. Adm. Code 1100, for each of the latest 2 years;

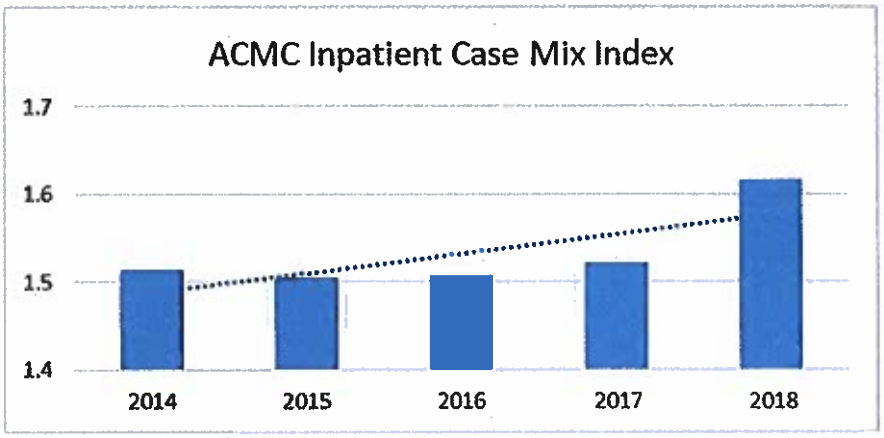
Advocate Condell Medical Center's ICU occupancy at Advocate Condell has exceeded the State Standard minimum of 60% for each of the past five years.

Intensive Care Bed Utilization 2014-2018				
Year	**Beds Authorized**	**Patient Days**	**Average Daily Census**	**CON Occupancy**
2014	17	4,644	12.7	76.8%
2015	17	4,783	13.1	77.1%
2016	17	4,977	13.6	80.0%
2017	17	5,129	14.1	82.7%
2018	17	5,254	14.4	84.7%

Source: Hospital Questionnaire and Hospital Profiles

The occupancy has not only exceeded the minimum, but has grown consistently year over year, increasing by over 10% over the last 5 years.

In addition to the increased number of critically ill patients, Advocate Condell Medical Center has experienced an increase in patient acuity as shown that the Case Mix Index (CMI) increased from 1.504 in 2015 to a CMI of 1.616 in 2018.



Source: Hospital records

Sg2, a national healthcare consulting firm, identified that national trends project the acuity of inpatient admissions will continue to rise and result in an increase in average length of stay and patient days in Intensive Care units. The utilization of the ICU at Advocate Condell is expected to continue to increase in part due to the growth of the aging population in Lake County.

The population for the Planning Area A-09 illustrated a projected 8% growth in total population. The 65+ population is projected to grow by 31%, expecting an increase of over 30,000 additional older residents.

ii) If patients have been referred to other facilities in order to receive the subject services, the applicant shall provide documentation of the referrals, including: patient origin by zip code; name and specialty of referring physician; and name and location of the recipient hospital, for each of the latest 2 years.

Critically ill patients requiring ICU care would not be referred to other facilities as it is the routine practice of the hospital to admit all patients that present needing inpatient care. The current critical care services provided are inclusive of all critical care therapies except organ transplantation which is provided in regional designated centers. No referrals to other facilities have been anticipated.

B) Projected Referrals
The applicant shall provide the following:

The applicant did not include letters of referral from physicians. The patients are already presenting to the hospital as shown by the current demand. The members of the medical staff are sending their patients to Advocate Condell including at times of high occupancy.

Therefore, criteria i) to iv) are not included.

i) Physician referral letters that attest to the physician's total number of patients (by zip code of residence) who have received care at existing facilities located in the area during the 12-month period prior to submission of the application;
ii) An estimated number of patients the physician will refer annually to the applicant's facility within a 24-month period after project completion. The anticipated number of referrals cannot exceed the physician's

experienced caseload. The percentage of project referrals used to justify the proposed expansion cannot exceed the historical percentage of applicant market share within a 24-month period after project completion;
iii) Each referral letter shall contain the physician's notarized signature, the typed or printed name of the physician, the physician's office address and the physician's specialty; and
iv) Verification by the physician that the patient referrals have not been used to support another pending or approved CON application for the subject services.

C) Projected Service Demand – Based on Rapid Population Growth:

If a projected demand for service is based upon rapid population growth in the applicant facility's existing market area (as experienced annually within the latest 24-month period), the projected service demand shall be determined as follows:

The growth in population does not meet the criteria for Rapid Growth so criteria i) to vii) are not included.

i) The applicant shall define the facility's market area based upon historical patient origin data by zip code or census tract;
ii) Population projections shall be produced, using, as a base, the population census or estimate for the most recent year, for
county, incorporated place, township or community area, by the U.S. Census Bureau or IDPH;
iii) Projections shall be for a maximum period of 10 years from
the date the application is submitted;
iv) Historical data used to calculate projections shall be for a number of years no less than the number of years projected;
v) Projections shall contain documentation of population changes in terms of births, deaths and net migration for a period of time equal to or in excess of the projection horizon;
vi) Projections shall be for total population and specified age groups for the applicant's market area, as defined by HFSRB, for each category of service in the application; and
vii) Documentation on projection methodology, data sources, assumptions and special adjustments shall be submitted to HFSRB.

d) Category of Service Modernization

1) If the project involves modernization of a category of hospital bed service, the applicant shall document that the inpatient bed areas to be modernized are deteriorated or functionally obsolete and need to be replaced or modernized, due to such factors as, but not limited to:

A) High cost of maintenance;
B) Non-compliance with licensing or life safety codes;
C) Changes in standards of care (e.g., private versus multiple bedrooms); or
D) Additional space for diagnostic or therapeutic purposes.

The proposed modernization in the ICU unit addresses many advancements in the standards of care and space for diagnostic and therapeutic purposes. In the past 18 years, since the last renovation of the Intensive Care Unit in 2002, Advocate Condell has expanded its critical care services to provide current evidence-based critical care services based on the Society of Critical Care Medicine (SCCM). The increase in services has expanded the population being cared for and reduced the need to transfer patients for specialty services except on rare occasions. This proposed modernization will increase the ICU capacity from 17 to 32 beds by adding 15 ICU beds to its authorized bed count. The new ICU will be constructed and sized according to industry standards. In addition to the 15 new beds, the existing 17 rooms and adjacent work spaces will be modernized to meet the same specifications, workflows and resources as the new spaces. Right-sizing rooms will provide the safest, most flexible environment.

The current ICU rooms are 208 net square feet and the new standard ICU room with the bathroom will be an average of 330 net square feet. The new bariatric ICU rooms will be on average 450 net square feet. The increase in provider, patient and family space will support the intensity and technology required to care for these patients.

The proposed new unit will provide updated facilities and equipment. The technology demands have changed the way that nurses' access and use the patient information through systems in the room. Storage of linens, supplies and medications needs to be immediately available within the patient room and can be replenished without entering the room thus improving infection prevention and time to access essential supplies. The new unit will offer:

1. Improved lighting and in-ceiling lifts to provide a safer environment for both the patient and staff.
2. Four specially equipped bariatric rooms to accommodate the special physical needs of this patient population. The growth in the number of patients with these limitations has increased in Lake County (Attachment 18 Exhibit 4). These rooms will include a special patient lift system capable of 1000 lb. limit, bariatric bathroom accommodations, and bariatric critical care specialty bed and chairs. The larger room size accommodates the size of such equipment and patient as well as providing enough space for the healthcare team and to improve safety for the patient and staff during the provision of care.
3. Three negative air flow isolation rooms, two of which will accommodate the bariatric patient.
4. Increase the number and size of utility rooms strategically located for improved workflow and storage of medications, supplies and equipment.
5. Improved medication safety with three large medication rooms with updated pharmaceutical distribution technology and space for safe medication preparation strategically located to reduce the time needed to obtain emergent medications.
6. Three Consultation Rooms for private medical consultation with families related to the care of the patients.
7. Improved educational resources including a library, education office and storage for educational materials as well as a breakroom that can serve as a multidisciplinary classroom.
8. Increased space and technology for the multidisciplinary team to provide special critical care services including:
    a. ExtraCorporeal Membrane Oxygen therapy (ECMO) also known as "bypass"
    b. Continuous Renal Replacement Therapy (CRRT) also known as "slow dialysis"
    c. Bedside bronchoscopy to reduce the need to move the critically ill patient to a surgical suite
    d. Bedside surgical procedures and diagnostic procedures reducing the need to move the unstable patient to another area of the hospital for services. Reducing movement of the critically ill increases safety and reduces risk of patient deterioration due to excessive movement.

2) Documentation shall include the most recent:

A) IDPH Centers for Medicare and Medicaid Services (CMMS) inspection reports; and
B) The Joint Commission reports.) Additional space for diagnostic or therapeutic purposes.

No citations from CMMS or accrediting organization.

3) Other documentation shall include the following, as applicable to the factors cited in the application:

A) Copies of maintenance reports;
B) Copies of citations for life safety code violations; and
C) Other pertinent reports and data.

The proposed modernization in this project is not related to the high cost of maintenance, non-compliance with life safety codes or other code issues.

4) Projects involving the replacement or modernization of a category of service or hospital shall meet or exceed the occupancy standards for the categories of service, as specified in 77 Ill. Adm. Code 1100.

Projected Bed Need
The projections for demand are driven by the pattern of growth of patients currently admitted to the Intensive Care Unit.

	2014	2015	2016	2017	2018	% Change 2014-2018	Compound Annual Growth Rate
ICU Days	4,644	4,783	4,977	5,129	5,254	13.1%	3.1%

Source: Hospital Profile

The high occupancy of the ICU unit continues to pose challenges in providing efficient, patient focused care. At high census, critical care patients are being cared for with ICU-competent staff, but in less desirable patient settings (intermediate unit for ICU patients and medical-surgical units for intermediate patients) or in locations such as the Emergency Department, cath lab and PACU. This further creates bottlenecks in the areas holding these patients. When the ICU is operating at full or near full capacity, patient placement is frequently changed to accommodate additional critically ill patients. The practice of adjusting the patient placement on high capacity days involves many staff and increases the potential for costly and disruptive patient care. It is important to develop a better solution to accommodate current and forecasted demand. The Advocate Condell ICU is staffed 24/7 with a specially trained critical care physician responsible for the direct care of the critically ill.

The Advocate Condell Intensive Care Unit is led by board certified intensive care physicians (intensivists) to meet the acuity of the patient population it serves. This physician leadership meets the Society of Critical Care (SCCM) definition of a "high-intensity ICU staffing model" (Nates, et al., 2016, pp. 1565 - 1566). Research demonstrates this high intensity model improves clinical outcomes and is supported by the Leapfrog Group and the American College of Critical Care Medicine. (Leapfrog Group, 2019)

Critical care services provided in a multidisciplinary manner with an intensivist leading the care has been shown to decrease mortality rates, complications and length of stay in the ICU as well as the overall hospital stay.

To project demand for intensive care, the Compound Annual Growth Rate (CAGR) was applied to develop the trend line to 2025 (2 years post completion of the project).

Compound Annual Growth Rate	2019	2020	2021	2022	2023	2024	2025
3.1%	5,419	5,588	5,764	5,944	6,130	6,322	6,521

Source: Calculated based on past Hospital Profiles

By the second year after the proposed project is completed, the patient days are projected to be 6,521.

The state target of occupancy is 60%. With this occupancy, the 30 ICU beds are needed.

365 days per year x 60% =219 days per bed
6,521 patient days divided by 219 days per bed = 30 beds

It was determined that 2 additional ICU beds will be needed in the future, thus the project included 32 ICU beds. Based on the 31% growth in the 65 and older population and the acuity increases demonstrated, it was determined that 2 additional ICU beds will be needed within the next 5 years.

These will replace some of the need demonstrated for medical-surgical beds knowing that many of the medical-surgical patients would appropriately stay in the ICU unit for a longer duration that will be made available with the increased capacity. This was illustrated in the previous medical-surgical section that although 239 medical-surgical beds were needed, the project would be conservative and increase capacity by only 3 additional medical-surgical beds to 217.

The 15 ICU beds will help address the well documented need for additional ICU beds in the A-09 Health Planning Area, to alleviate the pressure at Advocate Condell for ICU beds, and better serve the needs of the patients in the service area.

e) Staffing Availability – Review Criterion
The applicant shall document that relevant clinical and professional staffing needs for the proposed project were considered and that licensure and The Joint Commission staffing requirements can be met. In addition, the applicant shall document that necessary staffing is available by providing a narrative explanation of how the proposed staffing will be achieved.

Advocate Condell has evaluated the staffing needs and does not expect any issues meeting the licensure and accreditation staffing requirements as a result of the proposed project. The hospital's ability to attract and place nurses has historically been strong.

The Hospital's current time to fill for RN positions is below industry benchmarks at 40.2 days. The Advocate Aurora system has a dedicated team of Recruiters and Sourcing Specialists. If

there is a significant staff need anywhere in the system, resources are shifted quickly to address the situation. The staffing consultants at AAH work in a collaborative manner.

Advocate Aurora Health enjoys a strong brand name that has made its career website a robust source of candidate activity and is a primary source for filling open needs. An additional source for Condell's applicant pool comes from its active partnerships with local nursing programs such as College of Lake County and Chamberlain University.

Many nurses are interested in working at Advocate Condell as the only Level 1 Trauma Center in Lake County and Condell has been designated by the American Nurses Credentialing Center as a Magnet Hospital for Excellence in Patient Care and Nursing.

Additionally, much of the success can be attributed to the total rewards package that includes comprehensive medical and dental insurance plans and a generous 401(k) Plan. Currently, 69.8% of the nurses are BSN, MSN or PhD prepared. All are required to achieve their BSN within 4 years of employment, and many take full advantage of the robust Tuition Reimbursement program.

Advocate Condell has continually benefited from the strong reputation of AAH as an excellent place of employment. As evidenced by consistently being named as one of the Top 100 Places to work in Illinois.

f) Performance Requirements – Bed Capacity Minimum

3) Intensive Care

The minimum unit size for an intensive care unit is 4 beds.

The proposed unit will have 32 ICU beds, exceeding the minimum requirements.

g) Assurances

The applicant representative who signs the CON application shall submit a signed and dated statement attesting to the applicant's understanding that, by the second year of operation after project completion, the applicant will achieve and maintain the occupancy standards specified in 77 Ill. Adm. Code 1100 for each category of service involved in the proposal.

See Attachment #18, Exhibit 1.

Advocate Condell Medical Center

801 South Milwaukee Avenue || Libertyville, IL 60048 || T 847.362.2900 || advocatehealth.com

December 3, 2019

Illinois Health Facilities and Services Review Board
525 West Jefferson Street, Second Floor
Springfield, Illinois 62761

To Whom It May Concern:

This letter is to provide the Illinois Health Facilities and Services Review Board the assurance required with the Certificate of Need application for a modernization project at Advocate Condell Medical Center.

Based on the information available at this time, it is my understanding that by the second year of operations after project completion, Advocate Condell Medical Center reasonably expects to achieve and maintain the occupancy standards for medical/surgical and intensive care beds, as specified in 77 Ill. Administrative code 1100.520 c) and 1100.540 c).

Sincerely,

Matthew L. Primack
President

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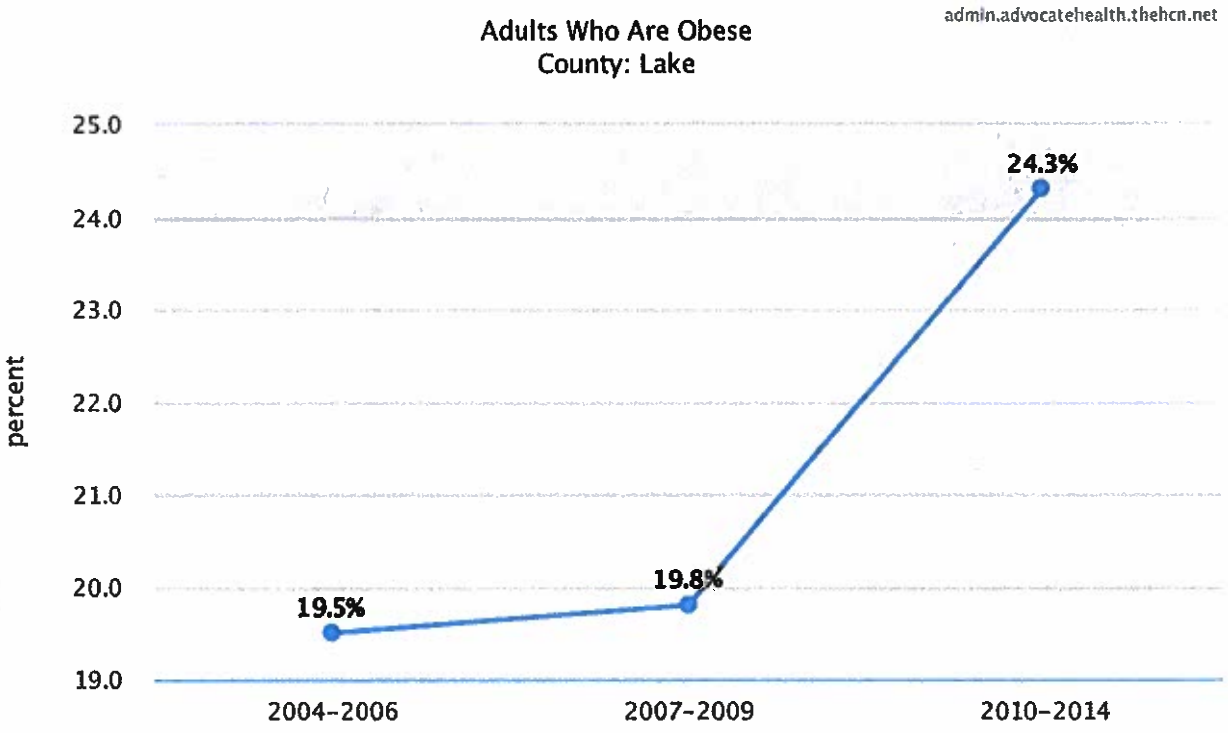
Medical-Surgical Patient Origin 2018		
Patient Zip Code	**Service Area**	**Med Surg Patient Volume**
60073	Primary	1,810
60030	Primary	1,489
60060	Primary	1,342
60031	Primary	1,129
60048	Primary	1,121
60046	Primary	1,005
60061	Primary	939
60085	Primary	759
60002	Primary	637
60044	Primary	70
60045	Primary	58
60099	Secondary	343
60087	Secondary	341
60020	Secondary	248
60069	Secondary	232
60041	Secondary	182
60089	Secondary	170
60064	Secondary	151
60084	Secondary	147
60083	Secondary	140
	Other	1,724
	TOTAL	**14,037**

Source: Hospital records

Intensive Care Patient Origin 2018		
Patient Zip code	**Service Area**	**ICU Patient Volume**
60073	Primary	238
60060	Primary	182
60030	Primary	170
60046	Primary	134
60031	Primary	132
60048	Primary	127
60085	Primary	107
60061	Primary	91
60002	Primary	85
60044	Primary	10
60045	Primary	9
60099	Secondary	42
60087	Secondary	34
60020	Secondary	30
60069	Secondary	26
60041	Secondary	21
60089	Secondary	16
60064	Secondary	20
60084	Secondary	24
60083	Secondary	16
	Other	271
	TOTAL	**1,785**

Source: Hospital records



Source: Illinois Behavioral Risk Factor Surveillance System (2010-2014)

M. Criterion 1110.270 - Clinical Service Areas Other than Categories of Service

1. Applicants proposing to establish, expand and/or modernize Clinical Service Areas Other than categories of service must submit the following information:

2. Indicate changes by Service: Indicate # of key room changes by action(s):

Service	# Existing Key Rooms	# Proposed Key Rooms
☐ **IP Dialysis**	**4 stations**	**6 stations**
☐		
☐		

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

Project Type	Required Review Criteria
New Services or Facility or Equipment	(b) – Need Determination – Establishment
Service Modernization	(c)(1) – Deteriorated Facilities
	AND/OR
	(c)(2) – Necessary Expansion
	PLUS
	(c)(3)(A) – Utilization – Major Medical Equipment
	OR
	(c)(3)(B) – Utilization – Service or Facility
APPEND DOCUMENTATION AS ATTACHMENT 30, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM	

(c) (2) Necessary Expansion

The Inpatient Dialysis Service at Advocate Condell Medical Center provides End Stage Renal Disease (ESRD) treatment to tertiary inpatients who require treatments during their inpatient admission for other medical care. The service is outsourced, and treatments are provided by DaVita Hospital Services, which includes DaVita employed staff and DaVita owned equipment. The existing inpatient dialysis unit/treatment room has 4 dedicated patient stations located on the medical-surgical unit within the main hospital.

The proposed project requires relocating the dialysis unit/treatment room to the West Tower 5th Floor. The new dialysis suite will increase capacity with a net add of 2 stations totaling 6 stations: 4 patient stations will be located within an open bay and 2 patient stations will function as private rooms to accommodate contact precaution patients, who cannot be treated within the

open bay. When not in use for isolation patients, the private rooms can be used to increase capacity and patient throughput for the service. Patients benefit with increased efficiencies for their dialysis care, a definitive scheduled time and earlier delivery of treatment to avoid conflict with other required medical care and testing.

Modernization and expansion of this service is necessary as the volume of IP dialysis patients has increased by 7% over the last 3 years. As outlined below, the number of patients at Condell has followed the growing trend for dialysis treatments needed in the service area. The HSA service area is projected to grow by 8%, with the 65+ population expected to increase by over 30% over the next 5 years. This population has a higher incidence for kidney disease and with an increase of over 30,000 older adults in the area, there is a demonstrated need in the HSA for dialysis treatment. (The 2019 Inventory outlines an additional 35 stations are shown to be needed in the HSA). The inpatient need parallels the increased outpatient need, as this service supports these patients requiring dialysis during their inpatient stay for other co-morbidities.

Approximately 30-40% of Condell inpatients that require dialysis are currently able to receive their treatment in the dialysis bay acute suite. The other 60% that require dialysis, receive treatment at their bed side. This is due either to the need for isolation from other patients and the inability to co-mingle in this location (for example patients with high risk infections such as C-diff or MRSA) or the patient's acuity. It is projected that this proposed project will allow an additional 10% to 20% of patients to receive dialysis treatment in the new private acute suite rooms.

The additional stations will support the increasing volume growth and accommodate the increased number of patients that will now be able to receive dialysis treatment in the private rooms in the dialysis suite. It is projected that between 220 to 450 additional patients each year will require dialysis treatment in a private room due to an isolation requirement.

Dialysis treatments Advocate Condell	**2016**	**2017**	**2018**	**2019 AY**	**Variance**
1:1 (Bedside)	1,281	1,720	1,315	1,509	18%
2:1 (Acute Suite)	833	669	896	759	-9%
TOTAL Dialysis Treatments	2,114	2,389	2,211	2,268	7%
% of 2:1 vs 1:1	39%	28%	40%	33%	

Source: Hospital records

This dialysis unit/treatment room is being designed to support the deficiencies of the current unit. The current four stations do not have the recommended clearances around each bed. This will be resolved with the new space. The new space will be designed to include an equipment room and clean and soiled utility rooms designated specifically for the dialysis service. The existing dialysis equipment is located in multiple areas that include unoccupied patient rooms. Safety concerns with the current dialysis unit/treatment includes an inefficient communication system (Nurse Call notification and emergent rapid response/code buttons) and an insufficient water source to maintain prescribed dialysis treatments.

Patient safety and efficiency concerns include:

- Patient communication to dialysis and hospital nursing staff is occurring with a phone and service bell
- No designated isolation bay for patients under contact/droplet precautions
- When at capacity, space between patients who are receiving treatment is insufficient
- Patients who require urgent or emergent care will take priority, creating delay of care for non-emergent / non-urgent patients

As there are no utilization standards for IP dialysis, the following outlines the anticipated utilization in terms of incidence for Lake County, IL based on the Sg2 model to forecast demand.

Lake County Kidney Disease Outpatient Volume Projections
Source: Sg2 Market Demand Forecast

Site of Care	2018	2020	2023	Change 2018-2023
Office/Clinic	12,080	13,187	13,862	15%
Hosp OP/ASC	3,677	3,989	4,252	16%
Home	3,274	3,547	3,894	19%
Other	245	257	268	9%
ED	153	157	160	5%
SNF	9	10	11	22%
Virtual	0	20	1180	
Grand Total	**19,438**	**21,167**	**23,627**	**22%**

The total square footage of the proposed dialysis suite is 1,700 DGSF and is within the standards for 6 dialysis stations. No additional equipment will be needed as part of the new unit.

Appendix 3, pages 220-228 includes Isolation Guidelines to be used for these patients.

N/A, Advocate Aurora Health, Inc has a AA long-term bond rating from Fitch and Standard & Poor's.

The following Sections DO NOT 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)**

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]:**

_____	a) Cash and Securities – statements (e.g., audited financial statements, letters from financial institutions, board resolutions) as to: 1) the amount of cash and securities available for the project, including the identification of any security, its value and availability of such funds; and 2) 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 time table of gross receipts and related fundraising expenses, and a discussion of past fundraising experience.
_____	c) Gifts and Bequests – verification of the dollar amount, identification of any conditions of use, and the estimated time table 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: 1) 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; 2) 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.; 4) 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; 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 ATTACHMENT 33, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

FitchRatings

Fitch Rates Advocate Aurora Health's Taxable CP Program 'F1+'; Affirms IDR and Rev Bond Rating

Fitch Ratings-Chicago-22 February 2019: Fitch Ratings has assigned an 'F1+' short-term rating to Advocate Aurora Health's (AAH) taxable commercial paper (CP) program. Fitch has also affirmed the following ratings for AAH:

--Issuer Default Rating (IDR) at 'AA';
--Revenue bonds issued by the Wisconsin Health and Educational Facilities Authority, Illinois Finance Authority, and Illinois Health Facilities Authority on behalf of AAH as well as taxable fixed-rate bonds issued directly by AAH at 'AA';
--Existing variable rate debt supported by self-liquidity at 'F1+'.

The Rating Outlook is Stable.

The taxable CP program will be supported by AAH's internal liquidity and used initially to refund $49 million of outstanding series 2008-C-2A variable rate demand obligation (VRDO) bonds that are supported by a standby bond purchase agreement (SBPA). The taxable CP program will also be available for general corporate purposes.

SECURITY

Bonds are unsecured joint and several obligations of the obligated group. The obligated group consists of the vast majority of AAH hospitals, the Advocate Aurora Health parent, and the Advocate Health Care Network and Aurora Medical Group physician practices.

ANALYTICAL CONCLUSION

The long-term 'AA' rating on AAH is driven by the system's very strong financial profile assessment, leading market position over a broad and diversified service area covering the population centers of two states (albeit with competition in many key markets), and expectations for maintenance of a strong operating profile. The Stable Outlook reflects Fitch's expectation that AAH will sustain strong capital-related ratios through the cycle in the stressed rating case of Fitch's FAST scenario analysis.

The 'F1+' short-term rating is based on AAH maintaining a long-term rating of at least 'AA-' as well as adequate internal liquidity and written procedures consistent with Fitch's criteria. AAH has "eligible" discounted cash, U.S. Treasuries, municipal bonds, and corporate bonds in excess of the 125% threshold of its maximum self-liquidity funding exposure for assignment of the 'F1+' rating.

KEY RATING DRIVERS

Revenue Defensibility: 'bbb'; Largest Health System in Two States

AAH's revenue defensibility is midrange. The system has a broad market reach operating in multiple markets across Illinois and Wisconsin, and is the largest health system in both states.

Operating Risk: 'a'; Expectation of Strong Operating Margins with Manageable Capital Plans

AAH's operating risk profile is strong. The combined system has a track-record of generating double-digit operating EBITDA margins. Capital spending plans are manageably elevated.

Financial Profile: 'aa'; Strong Capital-Related Ratios

AAH's financial profile is strong. Continued profitability and strong operating EBITDA margins should lead to maintenance of favorably negative net adjusted debt-to-adjusted EBITDA and strong cash-to-adjusted debt.

Asymmetric Additional Risk Considerations

There are no asymmetric risk factors identified with AAH's rating.

RATING SENSITIVITIES

EXPECTATION OF STRONG MARGINS AND CAPITAL-RELATED RATIOS: Fitch expects that the combined AAH system will maintain strong operating margins, as Advocate Health Care and Aurora Health Care did separately for years. On a combined basis, AAH's operating EBITDA margin averaged over 11% over the last six years. Fitch expects AAH to sustain an operating EBITDA margin in the 9% range or better in Fitch's FAST base case. Even under the stressed rating case, Fitch expects AAH to maintain strong capital-related ratios through the cycle. Unexpected material integration challenges leading to sustained weakening of operating margins and capital-related ratios could pressure the rating downward.

CREDIT PROFILE

AAH is the result of the April 2018 merger between Advocate Health Care (IL) and Aurora Health Care (WI). The system includes 25 hospitals, approximately 3,500 employed physicians, and operates roughly 500 outpatient locations and 100 retail clinics in contiguous markets stretching from Bloomington/Normal in central Illinois in the south, through Chicago and Milwaukee, to Green Bay in the north. AAH is the largest healthcare provider in both Illinois and Wisconsin. AAH is utilizing a co-CEO management model. Combined, AAH recorded $11.5 billion in revenue in 2017 and was on-track to approach $12 billion in 2018.

Revenue Defensibility
AAH's payor mix is midrange. Combined Medicaid and self-pay accounted for 18% of 2017 combined gross revenues (18.2% through nine months 2018), and Fitch expects the system will sustain payor mix well in-line with mid-range characteristics (under 25%). Illinois expanded Medicaid

under the Affordable Care Act (ACA). While Wisconsin did not expand Medicaid under the ACA guidelines, the state did expand eligibility in prior years.

AAH's market position is midrange. The system operates 25 hospitals and more than 500 outpatient locations covering multiple markets between central Illinois and north Wisconsin. AAH is the market share leader in both states. Despite the leading position, the system operates in many competitive service areas, notably Chicago (where AAH is the market share leader in a crowded market) and Milwaukee, the population hubs of the combined service area. AAH's largest competitor is Ascension Health (AA+), which also operates multiple facilities in both the Milwaukee and Chicago markets. AAH also has one of the largest and most sophisticated physician integration models in the industry with broad population health management capabilities, including employing approximately 3,500 physicians.

Like most large multi-market health systems, AAH operates in varying service area profiles. The system's service area characteristics are generally stable supporting a midrange assessment. Much of suburban Chicago (e.g., Lake County), suburban Milwaukee, and other markets such as Brown County, WI (Green Bay) demonstrate generally favorable characteristics such as median household income levels in-line with or better than the national average and low poverty rates. Fitch does not expect AAH's payor mix to change materially in the coming years.

Operating Risk
AAH's operating cost flexibility is strong. Combining Advocate's and Aurora's financial statements, over the last six years (through nine months fiscal 2018) the combined system's operating EBITDA margin averaged over 11% (including 10.1% in fiscal 2017 and 9.7% through nine months fiscal 2018).

Looking forward, Fitch expects that AAH's operating EBITDA margin may be somewhat compressed as the system merges functions and executes strategies. Nevertheless, we assume in the base case of Fitch's FAST scenario analysis that AAH will sustain an operating EBITDA margin in the 9% range -- if not better -- in the coming years.

Fitch expects AAH's capital expenditure requirements to be only elevated in the coming years. The system has approximately $1.3 billion of capital spending plans in 2019 (translating to a capital spending ratio of more than 2.2x). Capital spending is expected to remain high in 2020 with a capital spending ratio of approximately 2x. After 2020, the capital spending ratio is expected to moderate to the 1.3x-1.4x range. AAH's capital spending is focused on continued ambulatory development. Fitch believes the system's capital plans are flexible, and management would have the ability to downsize/defer projects if needed. While AAH does not currently have new money debt plans, Fitch expects a system of AAH's scope and scale will access the capital markets from time-to-time.

Financial Profile
AAH has approximately $3 billion of debt outstanding. Unrestricted cash and investments measured nearly $7.9 billion at Sept. 30, 2018 (unaudited).

AAH's debt equivalents are manageable, measuring roughly $705 million at fiscal year-end 2017. Combined, AAH has three defined benefit pension plans, two of which are frozen. The three plans combined were only $67 million underfunded at year-end 2017 relative to a projected benefit

obligation of just over $2.6 billion, translating to a funded status of 97%. Because the pension plan is more than 80% funded, Fitch does not include the underfunded status in calculating adjusted debt. Operating lease expenses totaled $141 million in fiscal 2017, translating to a debt equivalent of $705 million (based on 5x lease expense). Consequently, AAH's adjusted debt (direct debt plus underfunded defined benefit pension plan below 80% funded plus operating leases) measures $3.7 billion. Net adjusted debt (adjusted debt minus unrestricted cash and investments) is negative at $4.2 billion, and Fitch expects it to remain favorably negative, including through the cycle in the rating case over the next five years.

Per Fitch's FAST scenario analysis, AAH's capital-related ratios should be consistent with the broad 'AA' category, including in the stressed rating case. Based on combined fiscal 2017 results, AAH's net adjusted debt-to-adjusted EBITDA measures nearly negative 3x and cash-to-adjusted debt is over 200%. In the rating case (which assumes a modest recession in year one followed by a recovery and then stability), net adjusted debt-to-adjusted EBITDA remains below negative 1x through the cycle and cash-to-adjusted debt does not fall below 150% and measures nearly 200% by year five.

The 'F1+' short-term rating is based on AAH maintaining a long-term rating of at least 'AA-' and is consistent with Fitch's "U.S. Public Finance Short-Term Debt Rating Criteria." AAH maintains sufficient discounted internal liquid resources (composed of cash, U.S. Treasuries, municipal bonds, and corporate bonds) and has implemented written procedures to fund any un-remarketed put on the $545 million of maximum potential pro forma debt supported by self-liquidity. AAH's self-liquidity supported demand debt is comprised of $70 million of series 2011B VRDO bonds in Windows mode (due seven months after a put) as well as the $475 million maximum authorized under the expected taxable CP program (management notes that initially AAH will only draw $50 million of the CP). Based on Fitch's rating criteria related to U.S. Public Finance Short-Term Debt, AAH had "eligible" cash, U.S. Treasuries, municipal bonds and corporate bonds in excess of the 125% threshold of its maximum self-liquidity funding exposure for assignment of the 'F1+' rating. Using Fitch's Criteria, coverage of self-liquidity debt measures 2.6x. Management notes further that the CP program is structured that only $50 million of CP can be called within a seven day period. AAH also has $275 million of bank lines of credit available.

Asymmetric Additional Risk Considerations
There are no asymmetric risk factors associated with AAH's rating.

The senior management team is deep and is comprised of members of both the legacy Advocate and Aurora systems. The combined system currently is utilizing a co-CEO model. AAH's chief medical officer retired in late 2018. The system does not have any additional near-term senior management retirements planned.

AAH will have approximately $3 billion of debt outstanding. The initial $50 million draw on the CP program will refund the series 2008-C-2A bonds that are supported by an SBPA. AAH's pro forma variable rate debt is comprised of the planned taxable CP, mandatory tender bonds, floating-rate notes, Windows, direct loans, and VRDO bonds. The VRDO bonds are supported by standby bond purchase agreements (SBPA) that expire in August 2020 and August 2021, respectively. Maximum annual debt service (MADS) is $191 million. Based on nine months fiscal 2018 results (unaudited, as of Sept. 30, 2018), MADS coverage is 7.5x and does not pose an asymmetric risk. The MTI includes

a minimum historical debt service coverage covenant of 1.10x.

AAH has fixed payor swaps with Wells Fargo Bank and PNC Bank. The notional amount of the swaps outstanding is roughly $325 million and they will mature in November 2038. The swaps had a net termination value of negative $74 million to AAH at Dec. 31, 2017 and negative $57 million at Sept. 30, 2018.

AAH had over 260 days cash on hand at Sept. 30, 2018, and cash on hand does not pose an asymmetric risk.

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In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis.

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Additional information is available on www.fitchratings.com
Applicable Criteria
Fitch Internal Liquidity Worksheet (pub. 15 Feb 2019)
Rating Criteria for Public-Sector, Revenue-Supported Debt (pub. 26 Feb 2018)
U.S. Not-For-Profit Hospitals and Health Systems Rating Criteria (pub. 04 Feb 2019)
U.S. Public Finance Short-Term Debt Rating Criteria (pub. 01 Nov 2017)

Additional Disclosures
Dodd-Frank Rating Information Disclosure Form
Solicitation Status

Endorsement Policy

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S&P Global
Ratings

(/en_US/web/guest/home) Advocate Aurora Health, IL Series 2019 Taxable Commercial Paper Notes Rated 'A-1+'

25-Feb-2019 19:26 EST
View Analyst Contact Information

CHICAGO (S&P Global Ratings) Feb. 25, 2019--S&P Global Ratings assigned its 'A-1+' short-term rating to Advocate Aurora Health (AAH), Ill.'s series 2019 taxable commercial paper (CP) notes, authorized for up to $475 million.

Similar to AAH's other bonds outstanding, AAH's CP debt will be secured by the general, unsecured joint, and several obligations of the AAH obligated group (also known as Advocate Aurora Health Credit Group).

AAH maintains 'AA' long-term ratings on various series of debt. AAH also maintains an existing 'A-1+' short-term component of the dual rating on the series 2011B (Windows) bonds, which are also backed by self-liquidity.

"The short-term rating on the CP reflects our view of the credit strength inherent in the 'AA' long-term rating on AAH's existing debt, and the sufficiency of AAH's unrestricted reserves to provide liquidity support for the bonds," said S&P Global Ratings credit analyst Suzie Desai.

Specifically, the 'AA' long-term rating reflects our expectation that AAH will continue to build on its already excellent enterprise profile and leading market position in the broad Chicagoland and eastern Wisconsin markets. AAH now has considerable size and scale, with more than $11 billion in revenue and more than $16 billion in assets, servicing a very large population base.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

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N/A, Advocate Aurora Health, Inc has a AA long-term bond rating from Fitch and Standard & Poor's.

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:

27. "A" Bond rating or better
28. All of the project's capital expenditures are completely funded through internal sources
29. 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
30. 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 ATTACHMENT 34, 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.

	Historical 3 Years			Projected
Enter Historical and/or Projected Years:				
Current Ratio				
Net Margin Percentage				
Percent Debt to Total Capitalization				
Projected Debt Service Coverage				
Days Cash on Hand				
Cushion Ratio				

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 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 N/A

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 of 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;

3) 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:

2. 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).
3.

COST AND GROSS SQUARE FEET BY DEPARTMENT OR SERVICE

Department (list below)	A	B	C	D	E	F	G	H	Total Cost (G + H)
	Cost/Square Foot New	Cost/Square Foot Mod.	Gross Sq. Ft. New	Gross Sq. Ft. Circ.*	Gross Sq. Ft. Mod.	Gross Sq. Ft. Circ.*	Const. $ (A x C)	Mod. $ (B x E)	
Contingency									
TOTALS									

* 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.

F. 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 ATTACHMENT 36, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

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#20-004

Advocate Health Care
3075 Highland Parkway, Suite 600 || Downers Grove, Illinois 60515 || T 630.572.9393 || advocatehealth.com

December 23, 2019

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

RE: Advocate Condell Medical Center
Construction & Modernization Project

Dear Ms. Avery:

This letter is to attest to the fact that the selected form of debt financing for the proposed Advocate Condell Medical Center project will be at the lowest net cost available, or if a more costly form of financing is selected, that form is more advantageous due to such terms as prepayment privileges, no required mortgage, access to additional debt, term financing costs, and other factors.

Respectfully,

William Santulli
Chief Operating Officer
Advocate Aurora Health

Notarization:

Subscribed and sworn to before me
This 23 day of December, 2019.

(Seal of Notary)

OFFICIAL SEAL
CRISTIN G FOSTER
NOTARY PUBLIC - STATE OF ILLINOIS

Signature of Notary

OFFICIAL SEAL
CRISTIN G FOSTER
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:03/13/23

OFFICIAL SEAL
CRISTIN G FOSTER

OFFICIAL SEAL
CRISTIN G FOSTER

150

Cost & Gross Square Feet by Department									
Dept. / Area	A	B	C	D	E	F	G	H	
	Cost / Sq. Ft.		Gross Sq. Ft.		Gross Sq. Ft.		Const. $	Mod. $	Total Cost (G+H)
	New	Mod.	New	Circ.*	Mod.	Circ.*	A x C	B x E	(G+H)
REVIEWABLE									
ICU	$565.00	$417.00	15,388	15%	6,526	15%	$8,694,220	$2,721,342	$11,415,562
Medical/Surgical Nursing Unit (5 Tower)		$ 402.00			21,831	15%		$8,776,062	$ 8,776,062
Medical/Surgical Nursing Unit (2 East)		$106.92			538	15%		$ 57,525	$ 57,525
Dialysis		$ 370.50			1,700	15%		$ 629,858	$ 629,858
Total Clinical							$8,694,220	$12,184,786	$20,879,006
Clinical Contingency									$ 921,027
Total Clinical Reviewable + Contingency									$21,800,033
NON-REVIEWABLE									
Administrative offices / support`	$545.00	$408.00	1,651	15%	566	15%	$899,795	$230,928	$1,130,723
Staff Support	$549.00	$410.00	912	15%	1,525	15%	$500,688	$625,250	$1,125,938
Education Spaces		$410.00	0		645	15%	$ -	$264,450	$ 264,450
Building System/Support	$595.00	$455.00	3,266	15%	2,317	15%	$1,943,270	$1,054,235	$2,997,505
Security	$ -	$ -	0		0		$ -	$ -	$ -
Public Corridors / Waiting	$540.00	$405.00	811	15%	2,284	15%	$ 437,940	$925,020	$1,362,960
Reception/Waiting	$ -	$ -	0		0		$ -	$ -	$ -
Material Management	$590.00	$451.00	597	15%	457	15%	$ 352,230	$206,107	$ 558,337
Admin Offices (vacated space 3W)	$ -	-	0		0		-	$ -	$ -
Education (vacated space 3W)	$ -	$ -	0		0		$ -	$ -	$ -
On-call (vacated space 3W)	-	$ -	0		0		$ -	$ -	$ -
Building Storage (vacated space 3W)	$ -	$ -	0		0		$ -	$ -	$ -
Air Handling Units (roof)	$1,915.00	$ -	1,800	15%	0		$3,447,000	$ -	$ 3,447,000
Boiler Installation	$ -	$2,930.16	0		1,200	15%	$ -	$3,516,192	$ 3,516,192
Elevator	$4,375.89	$ -	430	100%	0		$1,881,632	$ -	$ 1,881,632
Total Non-Clinical							$9,462,555	$ 6,822,182	$16,284,737
Non-Reviewable Contingency									$ 2,782,216
Total Clinical Non-Reviewable + Contingency									$19,066,953
Total									$37,163,743
Contingency									$3,703,243
Total + Contingency									$40,866,986

2023 Projected Operating Costs Per Equivalent Patient Day = $159.54

2023 Impact of Project on Capital Costs Per Equivalent Patient Day = $91.34

Complexity of Construction Impact on Cost - ICU Expansion

1	The new ICU expansion requires all waste plumbing lines for plumbing fixtures to be core drilled through the existing roof deck slab. This includes removing ceilings and walls in the existing space below and investigating existing conditions in order to connect the plumbing lines to the existing waste lines below. Existing ceilings and walls will need to be patched after the fact and other existing mechanical systems need to be re-routed in order to allow for plumbing connections from above.	$512,000
2	Since the new ICU expansion is built above existing clinical space, precautions will need to be put in place on the floors below to ensure patient safety. Temporary partitions, reworking egress doors and signage and equipment to ensure negative pressure will be required for the interim life safety measures on the floors below the expansion.	$105,000
3	The new ICU expansion is to be constructed directly adjacent to the existing active ICU. In order to maintain daylight in the adjacent rooms, a temporary light well will need to be constructed within the new structure. This involves a second mobilization for the steel, enclosure and roofing trades as well as a temporary exterior enclosure and temporary roof to create the light well.	$285,000
4	The new ICU expansion is to be constructed on the existing roof of the B & C buildings. This means protecting the existing roof membrane until the new structure is water tight, providing temporary roofing in areas to allow for the installation of construction elements and removing the existing roof once the new expansion is water tight.	$425,000
5	Due to the necessity to keep the existing structure water tight as well as ensure the safety of patient and staff, the productivity of the steel, curtainwall, and architectural precast erection is limited compared to building a new green field structure.	$205,000
6	In order to keep the first-floor emergency department open during construction the ICU expansion requires a canopy constructed at the entrance to ensure public safety, scaffold access to the project site rather than interior elevator use and several new driveways to not affect public and ambulance routing.	$449,000
7	In order to allow for the architectural layout of the new ICU expansion, several existing structural column locations will need to be reinforced. This requires the actual structural modifications within the existing hospital as well as required patching and mechanical system rerouting.	$180,000
8	As part of the new ICU expansion the existing air handling unit that serves the existing ICU will need to be removed and then relocated on top of the new expansion. In the interim the existing ICU HVAC systems will need to be reworked to ensure no disruption of patient comfort. Temporary equipment will be provided as well as rework of existing ductwork.	$320,000
9	In order to feed the new ICU expansion electrical and medical gas systems, piping will need to be routed through existing spaces. This is a slow process that requires patching and ceiling rework along the way.	$255,000
10	Due to the location of the expansion above the existing hospital, hoisting material into the construction space and removal of debris is a much more laborious process than a project built within green field. All material going in or out needs to be rigged and hoisted via a crane or similar piece of equipment.	$296,000
11	The new ICU expansion ties into the existing ICU and will require the existing façade to be reworked at this tie in point. Curtainwall, roofing, and expansion joints will all need modifications to allow for the two areas to be combined into the new ICU.	$75,000
12	There will be two stairwells that serve the new ICU Expansion. In order to allow for the extension of the two existing stairwells the existing structure needs to be removed including portions of the existing façade.	$74,000

13	The existing hospital kitchen exhaust fan in located on the roof where the new ICU expansion is to be located. This fan will need to be disconnected and relocated on top of the new ICU. This requires extending the ductwork to the new roof as well as removing and reinstalling the architectural enclosure around the existing fan.	$250,000
	Total	$3,431,000

Complexity of Construction Impact on Cost - ICU Renovation

1	The renovation work requires routing through the renovation workspace into the completed ICU expansion. This requires temporary partitions, additional phasing and equipment to provide negative air in the construction space.	$220,000
2	Since the new ICU renovation is built above existing clinical space, precautions will need to be put in place on the floors below to ensure patient safety. Temporary partitions, reworking egress doors and signage and equipment to ensure negative pressure will be required for the interim life safety measures on the floors below the expansion.	$75,000
3	In order to account for the new architectural layout, the existing curtainwall system will need to be modified to allow for vision glass in each new patient room within the renovation space.	$160,000
4	The roof deck of the existing ICU is lower than a typical healthcare structure, so the existing ductwork is routed above the deck within water tight enclosures. In order to allow for the new architectural layout, the ductwork and roofing will need to be reworked above the renovation space which includes cutting a new opening through the concrete. This is made more complex as the hospital helicopter pad is located on this roof as well.	$330,000
	Total	$785,000

Complexity of Construction Impact on Cost – Medical-Surgical Unit (5 Tower)

1	The use of hospital elevators to access the 5th floor of the west tower will be limited so an opening within the side of the building will need to be created and material and debris will be needed to be hoisted via a crane.	$275,000
2	Since the 5th floor west tower buildout is built above existing clinical space, precautions will need to be put in place on the floors below to ensure patient safety. Temporary partitions, reworking egress doors and signage and equipment to ensure negative pressure will be required for the interim life safety measures on the floors below the expansion.	$95,000
3	The existing west tower isolation fans are not performing as designed. The issues will need to be investigated and the fans replaced.	$180,000
4	The existing building automation system (BAS) has reached its limit for adding new spaces that require controlled HVAC systems. A new BAS will be incorporated as part of the 5th floor west tower buildout in order to prevent any issues with patient comfort.	$245,000
	Total	$795,000

SECTION IX. SAFETY NET IMPACT STATEMENT

SAFETY NET IMPACT STATEMENT that describes all the following must be submitted for ALL SUBSTANTIVE 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)	**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 ATTACHMENT 37, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

Safety Net Information per PA 96-0031			
CHARITY CARE			
Charity (# of patients)	**2016**	**2017**	**2018**
Inpatient	426	398	313
Outpatient	2,856	2,351	2,909
Total	**3,282**	**2,749**	**3,222**
Charity (cost in dollars)			
Inpatient	$2,658,000	$3,888,000	$3,386,000
Outpatient	$2,452,000	$3,408,000	$4,720,000
Total	**$5,110,000**	**$7,296,000**	**$8,106,000**
MEDICAID			
Medicaid (# of patients)	**2016**	**2017**	**2018**
Inpatient	2,921	2,284	1,794
Outpatient	48,179	40,934	39,201
Total	**51,100**	**43,218**	**40,995**
Medicaid (revenue)			
Inpatient	$31,969,521	$32,139,966	$30,430,446
Outpatient	$20,731,747	$20,730,817	$19,124,815
Total	**$52,701,268**	**$52,870,783**	**$49,555,261**
APPEND DOCUMENTATION AS ATTACHMENT 37, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.			

Advocate Condell Medical Center has a long history of serving Lake County, Illinois, and has continued to provide high quality, acute care to residents for over 90 years. The hospital takes great pride in the relationship it has with the neighborhood, communities, organizations, and agencies it serves. The following illustrates some of the ways that the Medical Center addresses the needs of the people in its service area.

Advocate Condell is the only Level 1 Trauma Center in Lake County and is Lake County's Emergency Medical Services (EMS) resource hospital, providing training and education to emergency medicine providers. It is responsible for coordinating disaster medical response upon the activation of the Emergency Medical Disaster Plan. In addition, the Medical Center offers educational training courses to prepare individuals to earn an emergency medical technician (EMT) and emergency communications registered nurse (ECRN) certification.

The Sexual Assault Examiner program (SANE) provides services within the Emergency Department. Developed in 2011, it remains the only Lake County program with certified Sexual Assault Nurse Examiners available 24 hours a day, 7 days a week. These highly-trained practitioners not only provide compassionate care to victims but are able to collect forensic evidence, counsel the victim and testify in court, assisting the victim through the entire process. In addition, the SANE program coordinator works closely with local advocates, law enforcement and prosecutors to assure victims of sexual assault in Lake County receive the best care possible. In 2018, the Medical Center's SANE team trained over 200 professionals on sexual assault, how

to use medical evidence to prosecute a case and how to talk to victims. In 2018, the Advocate Condell highly skilled SANE team treated 87 victims of sexual violence.

Advocate Condell devotes resources to training student nurses from Chamberlain, DePaul, Georgetown, Indiana State, Northern Michigan, Olivet Nazarene, Loyola and Rush universities, as well as Oakton Community College and the College of Lake County. The Medical Center also trains students in physical, occupational and speech therapy.

In partnership with several community organizations, including the Round Lake Library, Mano a Mano Family Resource Center, YWCA of Lake County, Avon Cares Food Pantry and the Northern Illinois Food Bank, Advocate Condell launched the Rx Mobile Pantry Program in Round Lake in 2019, to provide access to healthy food for Round Lake Area residents who are food insecure. Vouchers are provided through these organizations and available in English and Spanish.

Advocate Condell's Cancer Institute offers complementary and integrative therapies to serve patients, their families and community members including, navigation, counseling, and support.

Free education for cancer prevention and screening includes the following:

- The Medical Center partners with the Lake County Health Department to provide medical imaging (radiology) services to uninsured Lake County Health Department patients through its Illinois breast and cervical cancer program (IBCCP). The IBCCP helps provide financial assistance for mammograms and diagnostic screenings.
- Educational sessions on skin cancer prevention along with free skin cancer screenings were provided in both English and Spanish, in collaboration with the YWCA of Lake County in Gurnee.

Advocate Condell conducts a Community Health Needs Assessment every three years to identify health needs for low income and underserved communities and help identify programming to meet those needs with measurable impact. The 2016 CHNA Report identified needs for service development in clinical areas including, Mental Health and Obesity.

Community partnerships are important and include the following:

- Advocate Condell collaborated with the Lake County Health Department in the Community Health Needs Assessment (CHNA) completed in 2016. In partnership with the Medical Center, the Health Department conducted two additional surveys of underserved communities within the Advocate Condell service area-Waukegan and Wauconda, Illinois. Results were used for the Mobilizing for Action Through Planning and Partnerships (MAPP) process, the Health Department Community Health Improvement Plan and were used to inform the Advocate Condell CHNA.
- Advocate Condell is continuing to work with the Lake County supplemental nutrition education for women, infants and children (WIC) program through the "Look What We Can Do Group." WIC attends the group's sessions at Advocate Condell and educates the participants about WIC services to increase WIC enrollment for clients who qualify.
- Provided concussion baseline testing to Lake County schools and sports teams.
- Developed the new Condell Medical Center Community Health Worker Program, focused on decreasing low-acuity visits to the emergency department by educating and navigating

patients to other options for primary care access. This initiative is part of the Lake County CHW Partnership and is funded by the Healthcare Foundation of Northern Lake County.

Condell routinely provides services to veterans, active duty, active duty family members and retirees from the Capt. James A. Lovell Federal Health Care Center (FHCC). The patients are often transferred to Condell due to the lack of capability or capacity restraints of the FHCC. Condell prides itself on supporting the Veterans Health Administration and Defense Health Agency (TRICARE) in this respect and would like to continue to be a resource for the FHCC.

Staff from Advocate Condell are active members of the Live Well Lake County Initiative, focused on improving the overall health of Lake County through strategies outlined in the Lake County Health Department Improvement Plan (CHIP). In 2017, Advocate Condell staff participated with the Lake County Health Department to launch a county-wide initiative named the Together Summit. The summit gathered over 200 leaders from Lake County to collectively focus on improving the health and quality of life of all Lake County residents. Advocate Condell continues to work collaboratively with the health department, participating in action teams addressing obesity and co-chairing the diabetes action team. The focus is to strategically align with Lake County partners and address health disparities in the community.

In summary, the impact of the Medical Center is far-reaching and is a critical organization supporting the communities within Lake County. The communities have come to rely on many of these programs designed to focus on improving access to care, addressing special needs and improving overall community health in the service area. Advocate Condell and team members are aware of changes in health care and in the community and have been developing new partnerships and services to support the health and well-being of all they serve.

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 **audited** 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 must be provided at cost.

A table in the following format must be provided for all facilities as part of Attachment 38.

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

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

See Attachment #38, Exhibit 1.

CHARITY CARE			
	2016	2017	2018
Net Patient Revenue	$346,565,758	$355,279,280	$350,747,922
Amount of Charity Care (charges)	$ 28,561,161	$ 39,917,731	$ 40,941,841
Cost of Charity Care	$ 5,110,190	$ 7,296,203	$ 8,105,829

Source: Hospital records

APPENDICES

Advocate Aurora Health, Inc. and its Affiliates and Subsidiaries

Consolidated Financial Statements and Supplementary Information
As of and for the Period Ended December 31, 2018

AdvocateAuroraHealth

Advocate Health Care Aurora Health Care

Document Dated as of March 27, 2019

ADVOCATE AURORA HEALTH, INC. AND ITS AFFILIATES AND SUBSIDIARIES
TABLE OF CONTENTS

Ernst & Young LLP
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Report of Independent Auditors

The Board of Directors
Advocate Aurora Health, Inc. and its Affiliates and Subsidiaries

We have audited the accompanying consolidated financial statements of Advocate Aurora Health Care, Inc. and its Affiliates and Subsidiaries, which comprise the consolidated balance sheet as of December 31, 2018, and the related consolidated statements of operations and changes in net assets, and cash flows for the period from April 1, 2018 through December 31, 2018, and the related notes to the consolidated financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in conformity with U.S. generally accepted accounting principles; this includes the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free of material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the 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 entity'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 financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Building a better working world

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Advocate Aurora Health Care, Inc. and its Affiliates and Subsidiaries at December 31, 2018, and the consolidated results of their operations and their cash flows for the period from April 1, 2018 through December 31, 2018, in conformity with U.S. generally accepted accounting principles.

Ernst & Young LLP

March 27, 2019

ADVOCATE AURORA HEALTH, INC. AND ITS AFFILIATES AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEET
(dollars in thousands)

	December 31, 2018
Assets	
Current assets:	
Cash and cash equivalents	$ 584,887
Assets limited as to use	106,244
Patient accounts receivable	1,486,260
Other current assets	512,556
Third-party payors receivables	17,793
Collateral proceeds under securities lending program	18,869
Total current assets	2,726,609
Asset limited as to use:	
Internally designated for capital and other	6,941,646
Held for self-insurance	632,372
Donor restricted	119,759
Investments under securities lending program	18,310
Total assets limited as to use	7,712,087
Property and equipment, net	5,626,475
Other assets:	
Intangible assets and goodwill, net	89,329
Investments in unconsolidated entities	202,331
Reinsurance receivable	60,741
Other noncurrent assets	315,217
Total other assets	667,618
Total assets	$ 16,732,789

ADVOCATE AURORA HEALTH, INC. AND ITS AFFILIATES AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEET
(dollars in thousands)

	December 31, 2018
Liabilities and net assets	
Current liabilities:	
Current portion of long-term debt	$ 49,927
Long-term debt subject to short-term financing arrangements	162,025
Accounts payable and accrued liabilities	1,671,124
Third-party payors payables	303,633
Current portion of accrued insurance and claim costs	122,361
Collateral under securities lending program	18,869
Total current liabilities	2,327,939
Noncurrent liabilities:	
Long-term debt, less current portion	2,796,906
Accrued insurance and claims cost, less current portion	593,296
Accrued losses subject to insurance recovery	60,741
Obligations under swap agreements	65,376
Other noncurrent liabilities	645,554
Total noncurrent liabilities	4,161,873
Total liabilities	6,489,812
Net assets:	
Without donor restrictions:	
Controlling interest	9,900,718
Noncontrolling interest in subsidiaries	118,468
Total net assets without donor restrictions	10,019,186
With donor restrictions	223,791
Total net assets	10,242,977
Total liabilities and net assets	$ 16,732,789

See accompanying notes to consolidated financial statements.

ADVOCATE AURORA HEALTH, INC. AND ITS AFFILIATES AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS
(dollars in thousands)

	Nine Months Ended December 31, 2018
Revenue:	
Patient service revenue	$ 7,533,468
Capitation revenue	1,035,995
Other revenue	643,943
Total revenue	9,213,406
Expenses:	
Salaries, wages and benefits	4,993,014
Supplies and purchased services	2,233,107
Contract medical services	478,393
Depreciation and amortization	410,790
Interest	81,385
Other	602,668
Total expenses	8,799,357
Operating income before nonrecurring expenses	414,049
Nonrecurring expenses	55,182
Operating income	358,867
Nonoperating loss:	
Investment loss, net	(258,118)
Loss on debt refinancing	(29,859)
Change in fair value of interest rate swaps	993
Other nonoperating income, net	646
Total nonoperating loss, net	(286,338)
Excess of revenue over expenses	72,529
Less noncontrolling interest	(34,383)
Excess of revenue over expenses – attributable to controlling interest	$ 38,146

ADVOCATE AURORA HEALTH, INC. AND ITS AFFILIATES AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF OPERATIONS AND CHANGES IN NET ASSETS
(dollars in thousands)

	Nine Months Ended December 31, 2018
Net assets without donor restrictions, controlling interest	
Excess of revenue over expenses – attributable to controlling interest	$ 38,146
Pension-related changes other than net periodic pension costs	(86,283)
Net assets released from restrictions for purchase of property and equipment	5,460
Other, net	(414)
Decrease in net assets without donor restrictions, controlling interest	(43,091)
Net assets without donor restrictions, noncontrolling interest	
Excess of revenue over expenses	34,383
Distributions to noncontrolling interest	(20,572)
Other, net	(81)
Increase in net assets without donor restrictions, noncontrolling interest	13,730
Net assets with donor restrictions	
Contributions	16,614
Investment loss, net	(2,347)
Net assets released from restrictions for operations	(17,720)
Net assets released from restrictions for purchase of property and equipment	(5,460)
Other, net	858
Decrease in net assets with donor restrictions	(8,055)
Decrease in net assets	(37,416)
Net assets at beginning of period	10,280,393
Net assets at end of period	$ 10,242,977

See accompanying notes to consolidated financial statements.

ADVOCATE AURORA HEALTH, INC. AND ITS AFFILIATES AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS
(dollars in thousands)

	Nine Months Ended December 31, 2018
Cash flows from operating activities	
Decrease in net assets	$ (37,416)
Adjustments to reconcile change in net assets to net cash provided by operating activities:	
Depreciation, amortization and accretion	404,012
Loss on debt refinancing	29,859
Gain on sale of property and equipment	(3,853)
Change in fair value of swap agreements	(993)
Pension-related changes other than net periodic pension cost	86,283
Restricted contributions and gains on investments, net of assets released from restrictions used for operations	(11,304)
Distribution to noncontrolling interest	33,101
Changes in operating assets and liabilities:	
Trading securities, net	348,851
Accounts receivable, net	(15,547)
Accounts payable and accrued liabilities	141,680
Third-party payors receivable and payable, net	(14,993)
Other assets and liabilities, net	(79,962)
Net cash provided by operating activities	879,718
Cash flows from investing activities	
Capital expenditures	(552,933)
Proceeds from sale of property and equipment	7,626
Sales of investments designated as non-trading, net	10,093
Investments in unconsolidated entities, net	(3,100)
Other	3,118
Net cash used in investing activities	(535,196)
Cash flows from financing activities	
Proceeds from long-term debt	1,226,853
Repayments of long-term debt and other obligations	(1,371,174)
Distribution to noncontrolling interest	(33,101)
Proceeds from restricted contributions and gains on investments	9,682
Net cash used in financing activities	(167,740)
Net increase in cash and cash equivalents	176,782
Cash and cash equivalents at beginning of period	408,105
Cash and cash equivalents at end of period	$ 584,887

See accompanying notes to consolidated financial statements.

ADVOCATE AURORA HEALTH, INC. AND ITS AFFILIATES AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE PERIOD ENDED DECEMBER 31, 2018
(Dollars in thousands)

1. ORGANIZATION AND BASIS OF PRESENTATION

Description of Business

On April 1, 2018, Advocate Aurora Health, Inc., a Delaware nonprofit corporation (the Parent Corporation) became the sole corporate member of Advocate Health Care Network, an Illinois not-for-profit corporation (Advocate) and Aurora Health Care, Inc., a Wisconsin nonstock not-for-profit corporation (Aurora) (the Affiliation). The Parent Corporation, Advocate and Aurora and their controlled subsidiaries and affiliates are collectively referred to herein as the "System." The System was formed to further the parties' common and unifying charitable health care mission to promote and improve the quality and expand the scope and accessibility of affordable health care and health care-related services for the communities they serve.

The System is comprised of various not-for-profit and for-profit entities, the primary activities of which are the delivery of health care services and the provision of goods and services ancillary thereto.

The System provides a continuum of care through its 25 acute care hospitals, an integrated children's hospital, psychiatric hospital, primary and specialty physician services, outpatient centers, physician office buildings, pharmacies, behavioral health care, rehabilitation and home health and hospice care in northern and central Illinois and eastern Wisconsin.

Principles of Consolidation

Included in the System's consolidated financial statements are all of its wholly owned or controlled subsidiaries and affiliates. All significant intercompany transactions have been eliminated in consolidation.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates, assumptions and judgments that affect the reported amounts of assets, liabilities and notes to the consolidated financial statements at the date of the consolidated financial statements. Estimates also affect the reported amounts of revenues and expenses during the reporting period. Although estimates are considered to be fairly stated at the time made, actual results could differ materially from those estimates.

Cash Equivalents

The System considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents.

Investments

The System has designated substantially all of its investments as trading. Investments in debt and equity securities with readily determinable fair values are measured at fair value using quoted market prices or otherwise observable inputs. Investments in private equity limited partnerships and derivative products (hedge funds) are reported at fair value using net asset value as a practical expedient. Commingled funds are carried at fair value based on other observable inputs. Investment income or loss (including realized gains and losses, interest, dividends and unrealized gains and losses) is included in the nonoperating section of the consolidated statement of operations and changes in net assets unless the income or loss is restricted by donor or law or is related to assets designated for self-insurance programs. Investment income on self-insurance trust funds is reported in other revenue. Investment income that is restricted by donor or law is reported as a change in net assets with donor restrictions.

Assets Limited as to Use

Assets limited as to use consist of investments set aside by the System for future capital improvements and certain medical education and other health care programs. The System retains control of these investments and may, at its discretion, subsequently use them for other purposes. Additionally, assets limited as to use include investments held by trustees or in trust under debt agreements, self-insurance trusts, assets held in reinsurance trust accounts and donor-restricted funds.

Patient Service Revenue and Accounts Receivable

Patient service revenue is reported at the amount that reflects the consideration to which the System expects to be entitled in exchange for providing patient care. These amounts are due from patients, third-party payors (including managed care payors and government programs) and others and includes variable consideration for retroactive revenue adjustments due to settlement of audits, reviews and investigations. Generally, patients and third-party payors are billed within days after the services are performed or shortly after discharge. Revenue is recognized as performance obligations are satisfied. Provisions for third-party payor settlements and adjustments are estimated in the period the related services are provided and adjusted in future periods as additional information becomes available and final settlements are determined.

As the System's performance obligations relate to contracts with a duration of less than one year, the System has applied the optional exemption provided in the guidance and, therefore, is not required to disclose the aggregate amount of the transaction price allocated to performance obligations that are unsatisfied or partially unsatisfied at the end of the reporting period. 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 generally completed when the patients are discharged, which generally occurs within days or weeks of the end of the reporting period.

As provided for under the guidance, the System does not adjust the promised amount of consideration from patients and third-party payers for the effects of a significant financing component due to the expectation that the period between the time the service is provided to a patient and the time that the patient or a third-party payer pays for that service will be one year or less.

The System has entered into payment arrangements with patients that allow for payments over a term in excess of one year. The System has evaluated historical collections in excess of one year and current market interest rates to determine whether a significant financing component exists which would require an adjustment to the promised amount of consideration from patients and third-party payors. The System has determined that the impact of implicit financing arrangements for payment agreements in excess of one year is insignificant to the consolidated statement of operations and changes in net assets.

The System does not incur significant incremental costs in obtaining contracts with patients. As permitted in the guidance, any costs which are incurred are expensed in the period of occurrence, as the amortization period of any asset that the System would have recognized is one year or less in duration.

Laws and regulations governing the Medicare and Medicaid programs are complex and subject to interpretation. As a result, there is a possibility that recorded estimates will change by a material amount.

Inventories

Inventories, consisting primarily of medical supplies, pharmaceuticals and durable medical equipment, are stated at the lower of cost (first-in, first-out) or market. Retail pharmaceutical inventories are stated at replacement cost.

Reinsurance Receivables

Reinsurance receivables are recognized in a manner consistent with the liabilities relating to the underlying reinsured contracts.

Intangible Assets and Goodwill, Net

Goodwill of $65,862 is included in intangible assets and goodwill, net in the accompanying consolidated balance sheet. Goodwill is not amortized and is evaluated for impairment at least annually. Intangible assets with expected useful lives are amortized over that period.

Asset Impairment

The System considers whether indicators of impairment are present and performs the necessary tests to determine if the carrying value of an asset is appropriate. Impairment write-downs are recognized in the statement of operations and changes in net assets as a component of operating expense at the time the impairment is identified.

Property and Equipment, Net

Property and equipment are reported at cost or, if donated, at fair value at the date of the gift. Costs of computer software developed or obtained for internal use, including external and internal direct costs of materials and labor directly associated with internal-use software development projects, are capitalized and included in property and equipment. Internal labor and interest expense incurred during the period of construction of significant capital projects is capitalized as a component of the costs of the asset.

Property and equipment capitalized under capital leases are recorded at the net present value of future minimum lease payments and are amortized on the straight-line method over the lessor of the related lease term or the estimated useful life of the asset. Amortization of property and equipment under capital leases is included in the accompanying consolidated statement of operations and changes in net assets in depreciation and amortization expense.

Property and equipment assets are depreciated on the straight-line method over a period ranging from 3 years to 80 years.

Investments in Unconsolidated Entities

Investments in unconsolidated entities are accounted for using the cost or equity method. The System applies the equity method of accounting for investments in unconsolidated entities when its ownership or membership interest is 50% or less and the System has the ability to exercise significant influence over the operating and financial policies of the investee. All other unconsolidated entities are accounted for using the cost method. The income (loss) on health-related unconsolidated entities is included in other operating revenue in the accompanying consolidated statement of operations and changes in net assets. Nonhealth-related unconsolidated entities are included within other nonoperating income, net.

Derivative Financial Instruments

The System has entered into transactions to manage its interest rate, credit and market risks. Derivative instruments, including exchange-traded and over-the-counter derivative contracts and interest rate swaps, are recorded as either assets or liabilities at fair value. Subsequent changes in a derivatives fair value are recognized in nonoperating loss.

Bond Issuance Costs, Discounts and Premiums

Bond issuance costs, discounts and premiums are amortized over the term of the bonds using the effective interest method and are included in long-term debt in the consolidated balance sheet.

General and Professional Liability Risks

The provision for self-insured general and professional liability claims includes estimates of the ultimate costs for both reported claims and claims incurred but not reported. The System measures the cost of its unfunded obligations under such programs based upon actuarial calculations and records a liability on a discounted basis.

Net Assets With Donor Restrictions

Net assets with donor restrictions are those assets whose use by the System has been limited by donors to a specific time period or purpose, or consist of gifts with corpus values that have been restricted by donors to be maintained in perpetuity. Net assets with donor restrictions are used in accordance with the donor's wishes primarily to purchase property and equipment, to fund medical education or to fund health programs.

Assets released from restrictions to fund purchases of property and equipment are reported in the consolidated statement of operations and changes in net assets as increases to net assets without donor restrictions. Those assets released from restriction for operating purposes are reported in the consolidated statement of operations and changes in net assets as other revenue. When restricted, earnings are recorded as net assets with donor restrictions until amounts are expended in accordance with the donor's specifications.

Other Nonoperating Income, Net

Revenues and expenses from delivering health care services and the provision of goods and services ancillary thereto are reported in operations. Income and losses that arise from transactions that are peripheral or incidental to the System's main purpose are included in other nonoperating income, net. Other nonoperating income, net primarily consists of impairment charges that are not related to delivering health care services, fund-raising expenses, contributions to charitable organizations, income taxes and the net non-service components of the periodic benefit income on the System's pension plans.

Excess of Revenues Over Expenses and Changes in Net Assets

The consolidated statement of operations and changes in net assets includes the excess of revenues over expenses as the performance indicator. Changes in net assets without donor restrictions, which are excluded from excess of revenues over expenses, primarily include contributions of long-lived assets (including assets acquired using contributions, which by donor restriction were to be used for the purposes

of acquiring such assets), pension-related changes other than net periodic pension costs and distributions to noncontrolling interests.

Nonrecurring Expenses

The System has incurred salary, purchased services and other expenses in connection with the Affiliation and the implementation of an electronic medical records system. As a result, these costs were recorded as nonrecurring in the consolidated statement of operations and changes in net assets.

Accounting Pronouncements Adopted

In August 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-14, *Presentation of Financial Statements of Not-for-Profit Entities.* The guidance requires net assets to be categorized either as net assets with donor restrictions or net assets without donor restrictions rather than the previous three classes of net assets. The guidance also requires additional quantitative and qualitative disclosures related to liquidity and financial performance, as well as disclosure of expenses by their natural and functional classifications. The System adopted this guidance for annual reporting as of December 31, 2018.

Accounting Pronouncements Not Yet Adopted

In August 2018, the FASB issued ASU 2018-15, *Intangibles–Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Contract.* This guidance requires an entity in a hosting arrangement that is a service contract to follow the guidance in Subtopic 350-40 to determine which implementation costs to capitalize as an asset and which costs to expense as incurred. Also, this guidance requires the entity to expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting arrangement. Further, the guidance requires the entity to present the expense related to the capitalized implementation costs in the same line item in the consolidated statement of operations and changes in net assets as the fees associated with the hosting element (service) of the arrangement and classify payments for capitalized implementation costs in the consolidated statement of cash flows in the same manner as payments made for fees associated with the hosting element. The entity is also required to present the capitalized implementation costs in the consolidated balance sheet in the same line item that a prepayment for the fees of the associated hosting arrangement would be presented. This guidance is effective for the fiscal years and interim periods within those fiscal years beginning after December 15, 2020, early adoption is permitted. The System early adopted this guidance effective January 1, 2019, on a prospective basis.

In June 2018, the FASB issued ASU 2018-08, *Clarifying the Scope and the Accounting Guidance for Contributions Received and Contributions Made.* This guidance clarifies whether a transfer of assets is a contribution or an exchange transaction and further clarifies how an entity determines whether a resource provider is participating in an exchange transaction by evaluating whether the resource provider is receiving

commensurate value in return for the resources transferred. This standard was effective for the System beginning January 1, 2019, on a modified prospective basis. This guidance did not have a material impact on the System's consolidated statement of operations and changes in net assets.

In November 2016, the FASB issued ASU 2016-18, *Restricted Cash*. This guidance will require restricted cash and restricted cash equivalents to be included with cash and cash equivalents when reconciling the beginning of period and end of period total amounts shown on the consolidated statement of cash flows. This guidance is effective for the fiscal years and interim periods within those fiscal years beginning after December 15, 2018. The System adopted this standard effective January 1, 2019. This guidance did not have a material impact on the System's consolidated statement of cash flows.

In August 2016, the FASB issued ASU 2016-15, *Classification of Certain Cash Receipts and Cash Payments*, which amends guidance in Accounting Standards Codification (ASC) 230 on the classification of certain cash receipts and payments in the statement of cash flows. This standard is effective for the System beginning January 1, 2019. This guidance did not have a material impact on the System's consolidated statement of cash flows, with the primary change being the movement of certain distributions from equity method investees from cash used in investing activities to cash flows from operations.

In February 2016, the FASB issued ASU 2016-02, *Leases*. This guidance introduces a lessee model that brings most leases on to the balance sheet. The standard also aligns certain of the underlying principles of the new lessor model with those in ASU 2014-09, the new revenue recognition standard. This standard was effective for the System effective January 1, 2019, and was adopted using a modified retrospective approach. The System recorded a right of use asset and right of use liability of approximately $425,000 due to the adoption of this standard. This guidance did not have a material impact on the System's consolidated statement of operations and changes in net assets.

3. COMMUNITY BENEFIT

Community Benefit

The System provides health care services without charge to patients who meet the criteria of its charity care policies. Charity care services are not reported as patient service revenue because payment is not anticipated while the related costs to provide the health care are included in operating expenses. Charity care is provided to patients who meet the criteria established under the applicable financial assistance policy. Qualifying patients can receive up to 100% discounts from charges and extended payments plans. The System's cost of providing charity care for the nine months ended December 31, 2018, as determined using total cost to charge ratios, was $101,192.

In addition to the provision of charity care, the System provides significant financial support to its communities to sustain and improve health care services.

These activities include:

- The unreimbursed cost of providing care to patients covered by the Medicare and Medicaid programs.
- The cost of providing services, which are not self-sustaining, for which patient service revenues are less than the costs required to provide the services. Such services benefit uninsured and low-income patients, as well as the broader community, but are not expected to be financially self-supporting.
- Other community benefits include the unreimbursed costs of community benefits programs and services for the general community, not solely for those demonstrating financial need, including the unreimbursed cost of medical education, health education, immunizations for children, support groups, health screenings and fairs.

4. REVENUE AND RECEIVABLES

Patient Service Revenue

Patient service revenue is reported at the amount that reflects the consideration to which the System expects to be entitled in exchange for providing patient care. These amounts are due from patients, third-party payors (including managed care payors and government programs) and others and include variable consideration for retroactive revenue adjustments due to settlement of audits, reviews and investigations. Generally, patients and third-party payors are billed shortly after discharge. Revenue is recognized as performance obligations are satisfied.

Performance obligations are identified based on the nature of the services provided. Revenue associated with performance obligations satisfied over time is recognized based on actual charges incurred in relation to total expected (or actual) charges. Performance obligations satisfied over time relate to patients receiving inpatient acute care services. The System measures the performance obligation from admission into the hospital to the point when there are no further services required for the patient, which is generally the time of discharge. 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. Management believes this method provides a faithful depiction of the transfer of services over the term of performance obligations based on the inputs needed to satisfy the obligations.

The System 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 the historical collection trends and other analysis, the System believes that revenue recognized by utilizing the portfolio approach approximates the revenue that would have been recognized if an individual contract approach were used.

The System determines the transaction price, which involves significant estimates and judgment, based on standard charges for goods and services provided, reduced by explicit and implicit price concessions, including contractual adjustments provided to third-party payors, discounts provided to uninsured and underinsured patients in accordance with policy and/or implicit price concessions based on the historical collection experience of patient accounts. The System determines the transaction price associated with services provided to patients who have third-party payor coverage based on reimbursement terms per contractual agreements, discount policies and historical experience. For uninsured (and underinsured in the case of Advocate) patients who do not qualify for charity care, the System determines the transaction price associated with services on the basis of charges reduced by implicit price concessions. Implicit price concessions included in the estimate of the transaction price are based on historical collection experience for applicable patient portfolios. Patients who meet the System's criteria for free care "charity" are provided care without charge; such amounts are not reported as revenue. Subsequent changes to the estimate of the transaction price are generally recorded as adjustments to patient service revenue in the period of the change. 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.

For the nine months ended December 31, 2018, changes in the System's estimates of implicit price concessions, discounts and contractual adjustments or other reductions to expected payments for performance obligations in prior years were not significant.

In certain instances, the System does receive payment in advance of the services provided and would consider these amounts to represent contract liabilities. Contract liabilities at December 31, 2018 were not significant.

Currently, the state of Illinois utilizes supplemental reimbursement programs to supplement reimbursement to providers to offset a portion of the cost of providing care to Medicaid and indigent patients. These programs are designed with input from the Centers for Medicare and Medicaid Services and are funded with a combination of state and federal resources, including assessments levied on the providers. Under these supplemental programs, the System recognizes revenue and related expenses in the period in which amounts are estimable and collection is reasonably assured. Reimbursement under these programs is reflected in patient service revenue and the assessment is reflected in other expense in the consolidated statement of operations and changes in net assets. For the nine months ended December 31, 2018, patient service revenue includes $197,614 related to this program and expenses include $124,898 of tax assessment fees.

The state of Wisconsin assesses a fee or tax on patient service revenue. The revenues from this assessment are used to increase payments made to hospitals for services provided to Medicaid and other medically indigent patients. The System's patient service revenue reflects this increase in payment for services to Medicaid and other medically indigent patients and hospital tax assessment expense reflects the fees assessed by the state. For the nine months ended December 31, 2018, patient service revenue includes $79,600, related to this program, and other expenses include $73,800 of tax assessment fees.

The System has filed formal appeals relating to the settlement of certain prior-year Medicare cost reports. The outcome of these appeals cannot be determined at this time.

Management has determined that the nature, amount, timing, and uncertainty of revenue and cash flows are affected by the payors geographical location, the line of business that renders services to patients and the timing of when revenue is recognized and billed. The composition of patient service revenue by payor for the nine months ended December 31, 2018, is as follows:

Managed care	$ 4,232,627	56%
Medicare	2,269,578	30
Medicaid – Wisconsin	299,951	4
Medicaid – Illinois	529,780	7
Self-pay and other	201,532	3
	$ 7,533,468	100%

Deductibles, copayments and coinsurance under third-party payment programs which are the patient's responsibility are included within the primary payor category in the table above.

The composition of patient service revenue by service line and state for the nine months ended December 31, 2018, is as follows:

	Wisconsin	Illinois	Patient Service Revenue	Percent of Total
Hospital	$ 2,679,106	$ 2,927,812	$ 5,606,918	75%
Clinic	1,235,242	433,896	1,669,138	22
Home Health	88,529	79,310	167,839	2
Other	22,898	66,675	89,573	1
Total	$ 4,025,775	$ 3,507,693	$ 7,533,468	100%

Capitation Revenue

The System has agreements with various managed care organizations under which the System provides or arranges for medical care to members of the organizations in return for a monthly payment per member. Revenue is earned each month as a result of agreeing to provide or arrange for their medical care.

Substantially all of the System's capitation revenue is generated in Illinois.

Other Revenue

Other revenue is recognized at an amount that reflects the consideration to which the System expects to be entitled in exchange for providing goods and services. The amounts recognized reflect consideration due from customers, third-party payors and others. Primary categories of other revenue include income from joint ventures, retail pharmacy revenue, grant revenue, cafeteria revenue, rent revenue and other miscellaneous revenue.

Patient Accounts Receivable

The System's patient accounts receivable is reported at the amount that reflects the consideration to which it expects to be entitled, in exchange for providing patient care.

The revenues related to patient accounts receivable are reported at net realizable value based on certain assumptions. For third-party payors including Medicare, Medicaid and Managed Care, the net realizable value is based on the estimated contractual reimbursement percentage, which is based on current contract prices or historical paid claims data by payor. For self-pay, the net realizable value is determined using estimates of historical collection experience including an analysis by aging category. These estimates are adjusted for expected recoveries and any anticipated changes in trends including significant changes in payor mix, shared revenue cycle operations, economic conditions or trends in federal and state governmental health care coverage.

The composition of patient accounts receivable is summarized as follows:

	December 31, 2018		April 1, 2018	
Managed care	$ 627,409	42%	$ 607,349	41%
Medicare	285,837	19	261,674	18
Medicaid – Wisconsin	39,958	3	45,394	3
Medicaid – Illinois	229,139	15	223,888	15
Self-pay and other	303,917	21	332,408	23
	$ 1,486,260	100%	$ 1,470,713	100%

The self-pay patient accounts receivable above includes amounts due from patients for co-insurance, deductibles, installment payment plans and amounts due from patients without insurance.

5. POOLED INVESTMENT FUND

In September 2018, a pooled investment fund (pool) was created. The pool investments are owned by Advocate Health and Hospitals Corporation (AHHC), a System subsidiary. Each participant in the pool is an affiliate of AHHC. Per the Investment Agreement, each participant in the pool has no ownership interest in the pool's investment assets. The participant receives a commensurate value in units of the pool which is

adjusted each month to the current market value. If redemption is sought under the terms of the agreement, the participant is only entitled to receive the fair market value of its units in cash.

At December 31, 2018, the total value of the pool investments is $7,483,361. The pool invests in a diversified portfolio of investments, including alternative investments, such as real asset funds, hedge funds and private equity limited partnerships. Collectively, these funds have liquidity terms ranging from daily to annual with notice periods typically ranging from 1 to 90 days. Due to redemption restrictions, investments in certain of these funds, whose fair value was approximately $3,685,071 at December 31, 2018, cannot currently be redeemed for periods ranging from one to eleven years. However, the potential for the pool to sell its interest in these funds in a secondary market prior to the end of the fund term does exist, for prices at or other than the then carrying value.

At December 31, 2018, the System had additional commitments to fund alternative investments, including recallable distributions of $1,043,005 over the next seven years.

In the normal course of operations and within established investment policy guidelines, the System may enter into various exchange-traded and over-the-counter derivative contracts for trading purposes, including futures, options and forward contracts. These instruments are used primarily to maintain the System's strategic asset allocation. These instruments require the System to deposit cash collateral with the broker or custodian. At December 31, 2018, the collateral provided was $44,560. At December 31, 2018, the notional value of the derivatives in long positions was $190,305 and those in a short position was $(129,391).

By using derivative financial instruments, the System exposes itself to credit risk and market risk. Credit risk is the failure of the counterparty to perform under the terms of the derivative contracts. When the fair value of a derivative contract is positive, the counterparty owes the System, which creates credit risk for the System. When the fair value of a derivative contract is negative, the System owes the counterparty, and therefore, it does not possess credit risk. The System minimizes the credit risk in derivative instruments by entering into transactions that may require the counterparty to post collateral for the benefit of the System based on the credit rating of the counterparty and the fair value of the derivative contract. Market risk is the adverse effect on the value of a financial instrument that results from a change in the underlying reference security. The market risk associated with market changes is managed by establishing and monitoring parameters that limit the types and degree of market risk that may be undertaken.

Receivables and payables for investment trades not settled are presented with other current assets and accounts payable and accrued liabilities. Unsettled sales resulted in receivables due from brokers of $37,699 at December 31, 2018. Unsettled purchases resulted in payables of $13,494 at December 31, 2018.

6. CASH AND CASH EQUIVALENTS AND INVESTMENTS (including assets limited as to use)

Investments (including assets limited as to use) and other financial instruments at December 31, 2018, are summarized as follows:

Assets limited as to use:	
Internally designated for capital and other	$ 6,941,646
Held for self-insurance	738,616
Donor restricted	119,759
Investments under securities lending program	18,310
	7,818,331
Other financial instruments:	
Cash and cash equivalents	584,887
	$ 8,403,218

The composition and carrying value of assets limited as to use, investments and cash and cash equivalents at December 31, 2018, are set forth in the following table:

Cash and short-term investments	$ 807,549
Corporate bonds and other debt securities	577,406
United states governmental obligations	609,160
Non-governmental fixed-income obligations	26,328
Bond and other debt security funds	578,088
Hedge funds	2,593,506
Private equity limited partnerships	1,113,544
Equity securities	1,164,533
Equity funds	933,104
	$ 8,403,218

Investment returns for assets limited as to use and cash and cash equivalents are comprised of the following for the nine months ended December 31, 2018:

Interest income and dividends	$ 55,944
Income from alternative investments	19,556
Net realized gains	156,757
Net unrealized losses	(474,189)
Total	$ (241,932)

Investment returns are included in the consolidated statement of operations and changes in net assets as follows for the nine months ended December 31, 2018:

Other revenue	$	18,533
Investment loss, net		(258,118)
Net assets with donor restrictions		(2,347)
Total	$	(241,932)

As part of the management of the investment portfolio, the System has entered into an arrangement whereby securities owned by the System are loaned primarily to brokers and investment banks. The loans are arranged through a bank. Borrowers are required to post collateral for securities borrowed equal to no less than 102% of the value of the security on a daily basis, at a minimum. The bank is responsible for reviewing the creditworthiness of the borrowers. The System has also entered into an arrangement whereby the bank is responsible for the risk of borrower bankruptcy and default. At December 31, 2018, the System loaned $18,310 in securities and accepted collateral for these loans in the amount $18,869, which represents cash and governmental securities and are included in current liabilities and current assets, respectively, in the accompanying consolidated balance sheet.

7. FAIR VALUE

The System accounts for certain assets and liabilities at fair value and categorizes assets and liabilities measured at fair value in the consolidated financial statements based upon whether the inputs used to determine their fair values are observable or unobservable. Observable inputs are inputs which are based on market data obtained from sources independent of the reporting entity. Unobservable inputs are inputs that reflect the reporting entity's own assumptions about pricing the asset or liability, based on the best information available under the circumstances.

The fair value of all assets and liabilities recognized or disclosed at fair value is classified based on the lowest level of significant inputs. Assets and liabilities that are measured at fair value are disclosed and classified in one of three categories. Category inputs are defined as follows:

Level 1 — Quoted prices (unadjusted) in active markets for identical assets or liabilities on the reporting date.

Level 2 — Inputs other than quoted market prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. If the asset or liability has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3 — Inputs that are unobservable for the asset or liability for which there is little or no market data.

The following section describes the valuation methodologies used by the System to measure financial assets and liabilities at fair value. In general, where applicable, the System uses quoted prices in active markets for identical assets and liabilities to determine fair value. This pricing methodology applies to Level 1 investments such as domestic and international equities, exchange-traded funds and agency securities.

If quoted prices in active markets for identical assets and liabilities are not available to determine fair value, then quoted prices for similar assets and liabilities or inputs other than quoted prices that are observable either directly or indirectly are used. These investments are included in Level 2 and consist primarily of corporate notes and bonds, foreign government bonds, mortgage-backed securities, fixed-income securities, including fixed-income government obligations, commercial paper and certain agency, United States and international equities, which are not traded on an active exchange. The fair value for the obligations under swap agreements included in Level 2 is estimated using industry standard valuation models. These models project future cash flows and discount the future amounts to a present value using market-based observable inputs, including interest rate curves. The fair values of the obligation under swap agreements include adjustments related to the System's credit risk.

Investments owned by the System are exposed to various kinds and levels of risk. Equity securities and equity funds expose the entity to market risk, performance risk and liquidity risk for both domestic and international investments. Market risk is the risk associated with major movements of the equity markets. Performance risk is that risk associated with a company's operating performance. Fixed-income securities and fixed-income mutual funds expose the System to interest rate risk, credit risk and liquidity risk. As interest rates change, the value of many fixed-income securities is affected, including those with fixed interest rates. Credit risk is the risk that the obligor of the security will not fulfill its obligations. Liquidity risk is affected by the willingness of market participants to buy and sell particular securities. Liquidity risk tends to be higher for equities related to small capitalization companies and certain alternative investments. Due to the volatility in the capital markets, there is a reasonable possibility of subsequent changes in fair value resulting in additional gains and losses in the near term.

The carrying values of cash and cash equivalents, accounts receivable and payable, other current assets and accrued liabilities are reasonable estimates of their fair values due to the short-term nature of these financial instruments.

The fair values of financial assets and liabilities that are measured at fair value on a recurring basis at December 31, 2018, are as follows:

	December 31, 2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Other Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Investments				
Cash and short-term investments	$ 807,549	$ 430,889	$ 376,660	$ —
Corporate bonds and other debt securities	577,406	—	577,406	—
United States government obligations	609,160	—	609,160	—
Bond and other debt security funds	578,088	102,552	475,536	—
Non-government fixed-income obligations	26,328	—	26,328	—
Equity securities	1,164,533	1,164,533	—	—
Equity funds	933,104	185,247	747,857	—
	4,696,168	$ 1,883,221	$ 2,812,947	—
Investments at net asset value				
Hedge funds	2,593,506			
Private equity limited partnerships	1,113,544			
Total investments	$ 8,403,218			
Collateral proceeds received under securities lending program	$ 18,869		$ 18,869	
Liabilities				
Obligations under swap agreements	$ (65,376)		$ (65,376)	
Obligations to return capital under securities lending program	$ (18,869)		$ (18,869)	

8. PROPERTY AND EQUIPMENT, NET

The components of property and equipment at December 31, 2018, are summarized as follows:

Land and improvements	$ 473,862
Buildings and fixed equipment	7,102,622
Movable equipment and computer software	2,956,722
Construction-in-progress	306,531
Total property and equipment	10,839,737
Accumulated depreciation and amortization	(5,213,262)
Property and equipment, net	$ 5,626,475

Property and equipment include net assets under capitalized leases and other financing arrangements totaling $157,452 (gross of $232,971, accumulated amortization of $75,519) at December 31, 2018.

For the nine months ending December 31, 2018, depreciation expense was $409,950.

9. INVESTMENTS IN UNCONSOLIDATED ENTITIES

The System has a 49% interest in Bay Area Medical Center (BAMC), a 99-bed general acute care hospital located in Marinette, Wisconsin. The System's investment in BAMC is accounted for under the equity method of accounting and is presented within investments in unconsolidated entities in the accompanying consolidated balance sheet. The System's investment in BAMC at December 31, 2018, was $26,547. In January 2019, the System entered into an agreement to acquire the remaining 51% interest in BAMC. See additional discussion of this transaction in Note 21. SUBSEQUENT EVENTS.

The System has a 27% interest in Aurora Bay Area Medical Group (ABAMG), which provides inpatient, outpatient and other necessary professional medical services in Marinette, Wisconsin and its surrounding communities. BAMC owns the remaining 73% of ABAMG. The System's investment in ABAMG is accounted for under the equity method and is presented within investments in unconsolidated entities in the accompanying consolidated balance sheet. The System leases employees and buildings to ABAMG and recognized $12,888 of other revenue for the nine months ended December 31, 2018, under these leasing agreements. The System made additional capital contributions to ABAMG of $4,361 during the nine months ended December 31, 2018. The System's investment in ABAMG was $703 at December 31, 2018.

In connection with the acquisition of a medical center, the System acquired an interest in the net assets of the Masonic Family Health Foundation (MFHF), an independent organization, under the terms of an asset purchase agreement (the Agreement). The use of substantially all MFHF's net assets are designated to support the operations and/or capital needs of one of the System's medical facilities. Additionally, 90% of MFHF's investment yield, net of expenses, on substantially all MFHF's investments is designated for the

support of one of the System's medical facilities. MFHF must pay the System, annually, 90% of the investment yield or an agreed-upon percentage of the beginning of the year net assets.

The interest in the net assets of MFHF amounted to $81,865 at December 31, 2018, and is presented within investments in unconsolidated entities in the accompanying consolidated balance sheet. The System's interest in the investment income is reflected in the consolidated statement of operations and changes in net assets and amounted to $(4,270) for the nine months ended December 31, 2018. There were no cash distributions received by the System from MFHF under terms of the Agreement during the nine months ended December 31, 2018. In addition, MFHF made $354 in contributions to the System for program support during the nine months ended December 31, 2018.

At December 31, 2018, the System had a 49.5% ownership interest in RML Health Providers, L.P. (RML) that is accounted for on an equity basis. RML is an Illinois, not-for-profit limited partnership that operates a 115-bed licensed long-term acute care hospital in Hinsdale, Illinois, and 86-bed licensed long-term acute care hospital in Chicago, Illinois. The System's investment in RML was $33,883 at December 31, 2018, and is presented within investments in unconsolidated entities in the accompanying consolidated balance sheet.

RML leases the Chicago, Illinois, facility from the System. The lease has a fixed term through June 30, 2020, with a five-year renewal term remaining executable at the option of RML. The System recorded rental income of $847 for the nine months ended December 31, 2018.

The summarized financial position and results of operations for significant entities accounted for under the equity method as of and for the periods ended December 31, 2018, is as follows:

	BAMC	ABAMG	RML	MFHF
Total assets	$ 232,239	$ 4,898	$ 125,087	$ 85,533
Total liabilities	106,444	2,294	56,994	3,440
Equity	125,795	2,604	68,093	82,093
Total revenue	80,715	17,091	83,208	(3,075)
Net income (loss)	13,478	(14,942)	11,400	(5,265)

10. LONG-TERM DEBT

Long-term debt, net of unamortized original issue discount or premium and unamortized deferred bond issuance costs, consisted of the following at December 31, 2018:

Revenue bonds and revenue refunding bonds:	
Series 2003A (weighted average rate of 1.38% during the nine-month period ended December 31, 2018), principal payable in varying annual installments through November 2022; interest based on prevailing market conditions at time of remarketing	$ 10,153

Series 2003C (weighted average rate of 1.60% during the nine-month period ended December 31, 2018), principal payable in varying annual installments through November 2022; interest based on prevailing market conditions at time of remarketing	10,169
Series 2008A (weighted average rate of 5.00% during the nine-month period ended December 31, 2018), principal payable in varying annual installments through November 2030; interest based on prevailing market conditions at time of remarketing	123,078
Series 2008C (weighted average rate of 1.43% during the nine-month period ended December 31, 2018), principal payable in varying annual installments through November 2038; interest based on prevailing market conditions at time of remarketing	320,718
Series 2010D, 5.00%, principal payable in annual installments through April 2019	15,014
Series 2011A, 4.00% to 5.00%, principal payable in annual installments through April 2041	32,378
Series 2011B (weighted average rate of 1.78% during the nine-month period ended December 31, 2018), principal payable in varying annual installments through April 2051, subject to a put provision that provides for a cumulative seven-month notice and remarketing period; interest tied to a market index plus a spread	69,274
Series 2011C (weighted average rate of 2.31% during the nine-month period ended December 31, 2018), principal payable in varying annual installments through April 2049, subject to a put provision on September 3, 2024; interest tied to a market index plus a spread	49,722
Series 2011D (weighted average rate of 2.31% during the nine-month period ended December 31, 2018), principal payable in varying annual installments through April 2049, subject to a put provision on September 3, 2024; interest tied to a market index plus a spread	49,722
Series 2012, 4.00% to 5.00%, principal payable in varying annual installments through June 2047	147,826
Series 2013A, 5.00%, principal payable in varying annual installments through June 2031	93,356
Series 2014, 4.00% to 5.00%, principal payable in varying annual installments through August 2038	330,682
Series 2015, 4.13% to 5.00%, principal payable in varying annual installments through May 2045	102,705
Series 2015B, 4.00% to 5.00%, principal payable in varying annual installments through May 2044	72,428
Series 2018A, 4.00% to 5.00%, principal payable in varying annual installments through August 2044	106,345
Series 2018B (weighted average rate of 5.00% during the period August 16, 2018 through December 31, 2018), principal payable in varying annual installments through August 2054; interest based on prevailing market conditions at time of remarketing	211,196

Series 2018C (weighted average rate of 2.09% during the period August 16,2018 through December 31, 2018), principal payable in varying annual installments through August 2054; interest tied to a market index plus a spread	198,182
	1,942,948
Taxable bonds:	
Taxable Bond Series 2018, 3.83% to 4.27%, principal payable in varying annual installments through August 2048	709,392
	709,392
Capital lease obligations and financing arrangements	241,677
Taxable Term Loan, (weighted average rate of 2.61% during the nine-month period ended December 31, 2018), principal payable in varying annual installments through September 2024	114,841
	3,008,858
Less amounts classified as current:	
Current portion of long-term debt	(49,927)
Long-term debt subject to short-term financing arrangements	(162,025)
	(211,952)
	$ 2,796,906

Maturities of long-term debt, capital leases, and sinking fund requirements, assuming remarketing of the variable rate demand revenue refunding bonds, for the five years ending December 31, 2023, are as follows: 2019 – $49,927; 2020 – $53,631; 2021 – $53,333; 2022 – $56,603; and 2023 – $58,164.

The System's outstanding bonds are secured by obligations issued under the Second Amended and Restated Master Trust Indenture dated as of August 1, 2018, as the same may be amended from time to time, between Advocate Aurora Health, Inc., the other affiliates identified therein as the Members of the Obligated Group and U.S. Bank National Association, as master trustee (the System Master Indenture). Under the terms of the bond indentures and other arrangements, various amounts are to be on deposit with trustees, and certain specified payments are required for bond redemption and interest payments. The System Master Indenture and other debt agreements, including a bank credit agreement, also place restrictions on the System and require the System to maintain certain financial ratios.

The System's unsecured variable rate revenue bonds, Series 2008A-3 of $42,795 and Series 2011B of $70,000, while subject to a long-term amortization period, may be put to the System at the option of the bondholders in connection with certain remarketing dates. To the extent that bondholders may, under the terms of the debt, put their bonds within 12 months after December 31, 2018, the principal amount of such

bonds has been classified as a current obligation in the accompanying consolidated balance sheet. Management believes the likelihood of a material amount of bonds being put to the System is remote. However, to address this possibility, the System has taken steps to provide various sources of liquidity, including assessing alternate sources of financing, including lines of credit and/or net assets without donor restrictions as a source of self-liquidity.

The System has standby bond purchase agreements with banks to provide liquidity support for substantially all of the Series 2008C Bonds. In the event of a failed remarketing of the supported Series 2008C Bond upon its tender by an existing holder and subject to compliance with the terms of the standby bond purchase agreement, the standby bank would provide the funds for the purchase of such tendered bonds, and the System would be obligated to repay the bank for the funds it provided for such bond purchase (if such bond is not subsequently remarketed), with the first installment of such repayment commencing on the date one year and one day after the bank purchases the bond. As of December 31, 2018, there were no bank-purchased bonds outstanding. To the extent that the standby bond purchase agreement expiration date is within 12 months after December 31, 2018, the principal amount of such bonds has been classified as a current obligation in the accompanying consolidated balance sheet. The standby bond purchase agreements expire as follows: $49,829 in August 2019; $129,456 in August 2020; and $145,919 in August 2021.

In August 2018, the Wisconsin Health and Educational Facilities Authority (WHEFA), for the benefit of the System, issued its Revenue Bonds, Series 2018ABC, in the amount of $487,895 and the System issued Taxable Bonds, Series 2018 in the amount of $714,500. The proceeds of the Series 2018ABC Bonds and the Series 2018 Taxable Bonds were used to refund certain WHEFA Bonds previously issued for the benefit of Aurora, refinance Aurora's taxable bonds, the drawn portion of an Aurora line of credit and to pay certain financing costs. In connection with this transaction, the System recognized a loss on refinancing in the amount of $29,859.

The System maintains an interest rate swap program on certain of its variable rate debt as described in Note 11. INTEREST RATE SWAP PROGRAM.

The System's interest paid, net of capitalized interest, amounted to $80,559 for the nine months ended December 31, 2018. The System capitalized interest of $1,207 for the nine months ended December 31, 2018.

At December 31, 2018, the System had lines of credit with banks aggregating to $585,000. These lines of credit provide for various interest rates and payment terms and expire as follows: $100,000 in December 2019, $275,000 in August 2020, $50,000 in September 2020 and $160,000 in August 2021. These lines of credit may be used to redeem bonded indebtedness, to pay costs related to such redemptions, for capital expenditures or for general working capital purposes. At December 31, 2018, under a line of credit there were three letters of credit issued totaling $40,947. At December 31, 2018, no amounts were outstanding on these lines or letters of credit.

11. INTEREST RATE SWAP PROGRAM

The System has interest rate-related derivative instruments to manage exposure of its variable rate debt instruments. By using derivative financial instruments to manage the risk of changes in interest rates, the System exposes itself to credit risk and market risk. Credit risk is the failure of the counterparty to perform under the terms of the derivative contracts. When the fair value of a derivative contract is positive, the counterparty owes the System, which creates credit risk for the System. When the fair value of a derivative contract is negative, the System owes the counterparty, and therefore, it does not possess credit risk. The System minimizes the credit risk in derivative instruments by entering into transactions that may require the counterparty to post collateral for the benefit of the System based on the credit rating of the counterparty and the fair value of the derivative contract. Market risk is the adverse effect on the value of a financial instrument that results from a change in interest rates. The market risk associated with interest rate changes is managed by establishing and monitoring parameters that limit the types and degree of market risk that may be undertaken. The System also mitigates risk through periodic reviews of its derivative positions in the context of its total blended cost of capital.

At December 31, 2018, the System maintains an interest rate swap program on its Series 2008C variable rate demand revenue bonds. These bonds expose the System to variability in interest payments due to changes in interest rates. The System believes that it is prudent to limit the variability of its interest payments. To meet this objective and to take advantage of low interest rates, the System entered into various interest rate swap agreements to manage fluctuations in cash flows resulting from interest rate risk. These swaps convert the variable rate cash flow exposure on the variable rate demand revenue bonds to synthetically fixed cash flows. The notional amount under each interest rate swap agreement is reduced over the term of the respective agreement to correspond with reductions in the principal outstanding under various bond series. The following is a summary of the outstanding positions under these interest rate swap agreements at December 31, 2018:

Bond Series	Notional Amount	Maturity Date	Rate Received	Rate Paid
2008C-1	$ 129,900	November 1, 2038	61.7% of LIBOR + 26 bps	3.605%
2008C-2	108,425	November 1, 2038	61.7% of LIBOR + 26 bps	3.605%
2008C-3	88,000	November 1, 2038	61.7% of LIBOR + 26 bps	3.605%

The swaps are not designated as hedging instruments, and therefore, hedge accounting has not been applied. As such, unrealized changes in fair value of the swaps are classified as changes in fair value of interest rate swaps in the consolidated statement of operations and changes in net assets. The net cash settlement payments, representing the realized changes in fair value of the swaps, are included as interest expense in the consolidated statement of operations and changes in net assets.

The fair value of the interest rate swap agreements was a liability of $65,376 and no collateral was posted under these swap agreements at December 31, 2018.

Amounts recorded in the consolidated statement of operations and changes in net assets for the swap agreements for the nine months ended December 31, 2018, are as follows:

Net cash payments on interest rate swap agreements (interest expense)	$ 4,850
Change in fair value of interest rate swaps	$ 993

The interest rate swap instruments contain provisions that require the System to maintain an investment grade credit rating on its tax-exempt bonds from certain major credit rating agencies. If the System's tax-exempt bonds were to fall below investment grade on the valuation date, it would be in violation of these provisions and the counterparty to the derivative instruments could request immediate payment or demand immediate and ongoing full overnight collateralization on derivative instruments in net liability positions.

12. RETIREMENT PLANS

The System maintains various employee retirement benefit plans available to qualifying employees and retirees.

Advocate maintains defined benefit pension plans that cover substantially all its employees. The consolidated balance sheet contains an other noncurrent liability related to the Advocate Health Care Network Pension Plan (Advocate Plan) totaling $45,570 at December 31, 2018. In addition, the consolidated balance sheet contains an other noncurrent asset related to the Condell Health Network Retirement Plan (Condell Plan) of $1,424 at December 31, 2018. The Condell Plan was frozen effective January 1, 2008, to new participants and participants ceased to accrue additional pension benefits. During the nine months ended December 31, 2018, no contributions were made to the Advocate or Condell Plans.

The consolidated balance sheet contains an other noncurrent liability related to the Aurora defined benefit pension plan (Aurora Plan) of $104,979 at December 31, 2018. The Aurora Plan covers substantially all of its employees, hired before January 1, 2013, with at least 1,000 hours of work in a calendar year. The Aurora Plan was frozen on December 31, 2012. During the nine months ended December 31, 2018, cash contributions of $22,200 were made to the Aurora Plan.

A summary of changes in the plan assets, projected benefit obligation and the resulting funded status of the plans for the nine months ended December 31, 2018, is as follows:

	Advocate	Condell	Aurora	Total
Change in plan assets:				
Plan assets at fair value at beginning of period	$ 1,008,843	$ 66,731	$ 1,511,225	$ 2,586,799
Actual return on plan assets	(23,256)	(3,956)	(119,447)	(146,659)
Employer contributions	—	—	22,200	22,200
Benefits paid	(56,222)	(4,545)	(86,612)	(147,379)
Plan assets at fair value at end of period	$ 929,365	$ 58,230	$ 1,327,366	$ 2,314,961
Change in projected benefit obligation:				
Projected benefit obligation at beginning of period	$ 960,935	$ 70,993	$ 1,622,605	$ 2,654,533
Service cost	41,279	—	—	41,279
Interest cost	26,332	1,877	45,375	73,584
Actuarial loss (gain)	2,611	(11,520)	(149,023)	(157,932)
Benefits paid	(56,222)	(4,544)	(86,612)	(147,378)
Projected benefit obligation at end of period	$ 974,935	$ 56,806	$ 1,432,345	$ 2,464,086
Plan assets (less) greater than projected benefit obligation	$ (45,570)	$ 1,424	$ (104,979)	$ (149,125)
Accumulated benefit obligation at end of period	$ 907,526	$ 56,806	$ 1,432,345	$ 2,396,677

The Condell Plan paid lump sums totaling $3,854 in 2018. The amount in 2018 was greater than the sum of the Condell Plan's service cost and interest cost resulting in a settlement charge in the amount of $787.

Pension plan expense (income) included in the consolidated statement of operations and changes in net assets is as follows for the nine months ended December 31, 2018:

	Advocate	Condell	Aurora	Total
Service cost	$ 41,279	$ —	$ —	$ 41,279
Interest cost	26,332	1,877	45,375	73,584
Expected return on plan assets	(49,884)	(2,124)	(57,426)	(109,434)
Amortization of:				
Actuarial loss	3,974	1,259	8,816	14,049
Prior service cost	(2,987)	—	2	(2,985)
Settlement/curtailment	—	787	—	787
Net pension expense (income)	$ 18,714	$ 1,799	$ (3,233)	$ 17,280

The components of net periodic benefit costs other than the service cost component are included in other nonoperating income, net in the consolidated statement of operations and changes in net assets.

The net change recognized in net assets without donor restrictions as a component of pension-related changes other than net periodic pension cost was as follows:

	Advocate	Condell	Aurora	Total
Net change recognized	$ 74,763	$ (7,486)	$ 19,033	$ 86,310

Included in net assets without donor restrictions at December 31, 2018, are the following amounts that have not yet been recognized in net pension expense:

	Advocate	Condell	Aurora	Total
Unrecognized prior credit	$ (143)	$ —	$ 105	$ (38)
Unrecognized actuarial loss	198,918	11,609	460,317	670,844
	$ 198,775	$ 11,609	$ 460,422	$ 670,806

The expected amortization amount to be included in the net periodic pension cost in 2019 is as follows:

	Advocate	Condell	Aurora	Total
Net actuarial loss	$ 7,268	$ 108	$ 7,631	$ 15,007
Prior service (credit) cost	(143)	—	3	(140)
	$ 7,125	$ 108	$ 7,634	$ 14,867

Expected employee benefit payments are as follows:

	Advocate	Condell	Aurora	Total
2019	$ 79,786	$ 6,739	$ 62,238	$ 148,763
2020	66,794	4,310	66,384	137,488
2021	71,046	4,087	70,097	145,230
2022	75,632	3,865	73,191	152,688
2023	75,410	4,982	76,022	156,414
2024-2028	409,915	18,761	413,823	842,499
Total	$ 778,583	$ 42,744	$ 761,755	$ 1,583,082

Expected contributions to the pension plans employee benefit payments are as follows:

	Advocate	Condell	Aurora	Total
2019	$ 42,400	$ —	$ 57,200	$ 99,600

Employer contributions were paid from employer assets. No plan assets are expected to be returned to the employer. All benefits paid under the plans were paid from the plans' assets.

The System's asset allocation and investment strategies are designed to earn returns on plan assets consistent with a reasonable and prudent level of risk. Investments are diversified across classes, economic

sectors and manager style to minimize the risk of loss. The System utilizes investment managers specializing in each asset category and, where appropriate, provides the investment manager with specific guidelines that include allowable and/or prohibited investment types. The System regularly monitors manager performance and compliance with investment guidelines.

The System's target and actual pension asset allocations for the plans at December 31, 2018, are as follows:

Asset Category – Advocate Plan	Target	Actual
Domestic and International equity securities	35%	34%
Alternative investments	45	46
Cash and fixed-income securities	20	20
	100%	100%

Asset Category – Condell Plan	Target	Actual
Domestic and international equity securities	15%	15%
Cash and fixed-income securities	85	85
	100%	100%

Asset Category – Aurora Plan	Target	Actual
Domestic and International equity securities	33%	33%
Real estate	3	3
Cash and fixed-income securities	64	64
	100%	100%

At December 31, 2018, the Advocate Plan had commitments to fund private equity limited partnerships, including recallable distributions of $107,305 over the next six years.

In the normal course of operations and within established investment policy guidelines, the Advocate Plan may enter into various exchange-traded and over-the-counter derivative contracts for trading purposes, including futures, options and forward contracts. These instruments are used primarily to maintain the Advocate Plan's strategic asset allocation. These instruments require the Advocate Plan to deposit cash collateral with the broker or custodian.

At December 31, 2018, the collateral provided was as follows:

	Advocate	Aurora	Total
Collateral provided	$ 6,239	$ 10,357	$ 16,596
Notional value – long position	45,061	65,053	110,114
Notional value – short position	(2,610)	(46,656)	(49,266)

By using derivative financial instruments, the System exposes itself to credit risk and market risk. Credit risk is the failure of the counterparty to perform under the terms of the derivative contracts. When the fair value of a derivative contract is positive, the counterparty owes the System, which creates credit risk for the System. When the fair value of a derivative contract is negative, the System owes the counterparty, and therefore, it does not possess credit risk. The System minimizes the credit risk in derivative instruments by entering into transactions that may require the counterparty to post collateral for the benefit of the System based on the credit rating of the counterparty and the fair value of the derivative contract. Market risk is the adverse effect on the value of a financial instrument that results from a change in the underlying reference security. The market risk associated with market changes is managed by establishing and monitoring parameters that limit the types and degree of market risk that may be undertaken.

Receivables and payables for investment trades not settled are presented within Advocate Plan assets. Unsettled sales resulted in receivables due from brokers of $4,105 at December 31, 2018. Unsettled purchases resulted in payables of $9,825 at December 31, 2018.

Receivables and payables for investment trades not settled are presented within Aurora Plan assets. Unsettled sales resulted in receivables due from brokers of $1,360 at December 31, 2018. Unsettled purchases resulted in payables of $3,174 at December 31, 2018.

Fair value methodologies for Level 1 and Level 2 are consistent with the inputs described in Note 4. Real estate commingled funds for which an active market exists are included in Level 2. The System opted to use the net asset value per share, or its equivalent, as a practical expedient for fair value of the plans' interest in hedge funds, private equity limited partnerships and real estate commingled funds for which there is not an active market. There is inherent uncertainty in such valuations and the estimated fair values may differ from the values that would have been used had a ready market for these investments existed. Private equity limited partnerships and real estate commingled funds typically have finite lives ranging from five to ten years, at the end of which all invested capital is returned. For hedge funds, the typical lockup period is one year, after which invested capital can be redeemed on a quarterly basis with at least 30 days' but no more than 90 days' notice. The plans' investment assets are exposed to the same kinds and levels of risk as described in Note 7.

The following are the plans' financial instruments at December 31, 2018, measured at fair value on a recurring basis by the valuation hierarchy defined in Note 7 FAIR VALUE:

Description		Quoted Prices In Active Markets for Identical Assets (Level 1)	Other Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and short-term investments	$ 86,131	$ 36,453	$ 49,678	$ —
Corporate bonds and other debt securities	647,429	—	647,429	—
United States government obligations	221,420	—	221,420	—
Non-government fixed-income obligations	571	—	571	—
Bond and other debt security funds	176,550	97,562	78,988	—
Equity securities	229,057	229,057	—	—
Equity funds	398,881	248,639	150,242	—
Real estate funds	19,302	2,516	16,786	—
Assets at net asset value:				
Hedge funds	264,726			
Private equity limited partnerships and real estate funds	270,894			
Total	$ 2,314,961			

Assumptions used to determine benefit obligations at December 31, 2018, are as follows:

Discount rate – Advocate and Condell Plans	4.38%
Discount rate – Aurora Plan	4.48%
Assumed rate of return on assets – Advocate Plan	7.00%
Assumed rate of return on assets – Condell Plan	4.25%
Assumed rate of return on assets – Aurora Plan	5.50%
Weighted average rate of increase in future compensation (age-based table) – Advocate Plan	3.77%

Assumptions used to determine net pension expense are as follows:

Discount rate – Advocate and Condell Plans	3.60%
Discount rate – Aurora Plan	3.79%
Assumed rate of return on assets – Advocate Plan	7.00%
Assumed rate of return on assets – Condell Plan	5.00%
Assumed rate of return on assets – Aurora Plan	5.50%
Weighted average rate of increase in future compensation (age-based table) – Advocate Plan	3.61%

The assumed rate of return on Advocate and Condell Plans assets is based on historical and projected rates of return for asset classes in which the portfolio is invested. The expected return for each asset class was then weighted based on the target asset allocation to develop the overall expected rate of return on assets for the portfolio. The Aurora Plan's expected long-term rate of return is based on the asset allocation of the total portfolio considering capital return assumptions from various sources.

The 2018 mortality assumption for the Advocate and Condell Plans was the RP-2014 no-collar adjustment with improvements projected generationally using Scale MP-2018. The 2018 mortality assumption for the Aurora Plan was the RP-2014 100% white-collar adjustment with improvements projected generationally using Scale MP-2018.

In addition to these plans, the System sponsors various defined contribution plans for its employees. Contributions to these plans, which are included in salaries, wages and benefits expense in the consolidated statement of operations and changes in net assets, were $140,381 for the nine months ended December 31, 2018.

13. NET ASSETS WITH DONOR RESTRICTIONS

Net assets with donor restrictions are available for the following purposes at December 31, 2018:

Purchases of property and equipment	$ 22,767
Medical education and other health care programs	201,024
	$ 223,791

14. FUNCTIONAL OPERATING EXPENSES

Operating expenses directly attributable to a specific functional area of the System are reported as expenses of those functional areas. Expenses other than interest expense are directly allocated to functional departments at the time they are incurred. Interest expense that relates to debt financing is allocated based on the use of the related funds. General and administrative expenses primarily include legal, finance,

purchasing and human resources. A majority of fundraising costs are reported as other nonoperating items, net in the consolidated statement of operations and changes in net assets.

Functional operating expenses for the nine months ended December 31, 2018, are as follows:

	Health Care Services	General and Administrative	Consolidated
Salaries, wages and benefits	$ 4,634,289	$ 381,527	$ 5,015,816
Supplies and purchased services	2,037,979	223,058	2,261,037
Contract medical services	478,393	—	478,393
Depreciation and amortization	346,655	64,380	411,035
Interest	81,385	—	81,385
Other	293,970	312,903	606,873
Total operating expenses	$ 7,872,671	$ 981,868	$ 8,854,539

15. LIQUIDITY

The System maintains a policy of structuring its financial assets to be available as its general expenditures, liabilities and other obligations come due. In addition, as part of its liquidity management, the System invests cash in excess of daily requirements in various investments.

As more fully described in Note 10. LONG-TERM DEBT, the System had lines of credit with banks aggregating to $585,000. These lines of credit may be used to redeem bonded indebtedness, to pay costs related to such redemptions, for capital expenditures or for general working capital purposes.

The System's financial assets available within one year of the consolidated balance sheet date for general expenditures are as follows:

Current assets:	
Cash and cash equivalents	$ 584,887
Assets limited as to use	106,244
Patient accounts receivable	1,486,260
Third-party payors receivables	17,793
Collateral proceeds under securities lending program	18,869
Total current assets	2,214,053
Asset limited as to use:	
Internally designated for capital and other	6,941,646
Held for self-insurance	632,372
Donor restricted	119,759
Investments under securities lending program	18,310
Total assets limited as to use	7,712,087
Total financial assets	$ 9,926,140
Less:	
Amounts unavailable for general expenditures:	
Private equity	$ (1,113,544)
Hedge funds	(343,603)
Total amounts unavailable for general expenditure	(1,457,147)
Amounts unavailable to management without approval:	
Held for self-insurance	(738,616)
Donor restricted	(119,759)
Investments under securities lending program	(18,310)
Total amounts unavailable to management without approval	(876,685)
Total financial assets available to management for general expenditure within one year	$ 7,592,308

16. COMMITMENTS AND CONTINGENCIES

The System has various noncancelable operating lease agreements, primarily for medical support buildings and equipment. Some leases contain renewal options, fair value purchase options and escalation clauses.

Net future minimum lease payments under non-cancelable operating leases with initial or remaining lease terms in excess of one year at December 31, 2018, are as follows:

	Lease Payments
2019	$ 91,870
2020	86,204
2021	78,659
2022	67,928
2023	58,784
Thereafter	139,111
Total	$ 522,556

Aurora West Allis Medical Center has the right to operate the hospital under the terms of a lease agreement with the City of West Allis (the City). In accordance with the lease agreement, the City has title to all assets and any subsequent additions (with the exception of certain equipment used by Aurora for laboratory services). Aurora West Allis Medical Center has exclusive right to the use of the assets and the obligation to maintain and replace them. The historical cost to the System of the leased facilities is included within the System's property and equipment, net. The agreement provides for annual payments of less than $100 in lieu of annual lease payments and includes payment escalations each subsequent year. The lease expires in 2063.

Rent expense, which is included in other expenses, amounted to $94,821 for the nine months ended December 31, 2018.

The System is committed to constructing additions and renovations to its medical facilities that are expected to be completed in future years. The estimated cost of these commitments is $455,188, of which $365,262 has been incurred as of December 31, 2018.

The System entered into agreements for information technology services provided by a third parties. The maximum amount of future payments that the System could be required to make under these agreements is approximately $250,000 over the next twelve years and approximately $40,000 is included in accrued liabilities in the consolidated balance sheet at December 31, 2018. The System has also entered into various other agreements. The future commitments under these agreements is $38,894 over the next seven years.

17. GENERAL AND PROFESSIONAL LIABILITY RISKS

The System is self-insured for substantially all general and professional liability risks. The self-insurance programs combine various levels of self-insured retention with excess commercial insurance coverage. Aurora's hospitals, clinics, surgery centers, physicians and certified registered nurse anesthetist providers that provide health care in Wisconsin are qualified health care providers that are fully covered for losses in excess of statutory limits through mandatory participation in the State of Wisconsin Injured Patients and Families Compensation Fund. In addition, various umbrella insurance policies have been purchased to provide coverage in excess of the self-insured limits. Revocable trust funds, administered by a trustee and a captive insurance company, have been established for the self-insurance programs. Actuarial consultants have been retained to determine the estimated cost of claims, as well as to determine the amount to fund into the irrevocable trust and captive insurance company.

The estimated cost of claims is actuarially determined based on past experience, as well as other considerations, including the nature of each claim or incident and relevant trend factors. Accrued insurance liabilities and contributions to the trust were determined using a discount rate of 3.00% as of December 31, 2018. Total accrued insurance liabilities would have been $76,620 greater at December 31, 2018, had these liabilities not been discounted.

The System entities are defendants in certain litigation related to professional and general liability risks, and other matters. Although the outcome of the litigations cannot be determined with certainty, management believes, after consultation with legal counsel, that the ultimate resolution of the litigations will not have a material adverse effect on the System's operations or financial condition.

18. LEGAL, REGULATORY AND OTHER CONTINGENCIES

Laws and regulations governing the Medicare and Medicaid programs are extremely complex and subject to interpretation. During the last few years, due to nationwide investigations by governmental agencies, various health care organizations have received requests for information and notices regarding alleged noncompliance with those laws and regulations, which, in some instances, have resulted in organizations entering into significant settlement agreements. Compliance with such laws and regulations may also be subject to future government review and interpretation, as well as significant regulatory action, including fines, penalties, exclusion from the Medicare and Medicaid programs and revocation of federal or state tax-exempt status. Moreover, the System expects that the level of review and audit to which it and other health care providers are subject will increase.

Various federal and state agencies have initiated investigations, which are in various stages of discovery, relating to reimbursement, billing practices and other matters of the System. There can be no assurance that regulatory authorities will not challenge the System's compliance with these laws and regulations, and

it is not possible to determine the impact, if any, such claims or penalties would have on the System. To foster compliance with applicable laws and regulations, the System maintains a compliance program designed to detect and correct potential violations of laws and regulations related to its programs.

19. INCOME TAXES AND TAX STATUS

The affiliates and subsidiaries of the System are primarily tax-exempt organizations under Internal Revenue Code Section 501(c)(3) and their related income is exempt from federal income tax. Accordingly, no income taxes are provided for the majority of the income in the accompanying consolidated financial statements for these entities. Unrelated business income is generated by certain of these entities through the provision of services or other activities not directly related to the provision of patient care.

At December 31, 2018, the System had $40,338 of federal and $60,481 of state net operating loss carryforward with unutilized amounts expiring between 2021 and 2037.

The System calculated income taxes for its taxable subsidiaries and affiliates. Taxable income differs from pretax book income primarily due to certain income and deductions for tax purposes being recorded in the consolidated financial statements in different periods. Deferred income tax assets and liabilities are recorded for the tax effect of these differences using enacted tax rates for the years in which the differences are expected to reverse.

In assessing the realizability of deferred tax assets, management considers whether it is more likely that not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent on the generation of future taxable income during the periods in which those temporary differences become deductible.

At December 31, 2018, the System had deferred tax assets of $34,812, including $13,167 related to net operating loss carryforwards. These deferred tax assets are partially offset by a valuation allowance of $12,748, which was recorded due to the uncertainty regarding the use of the deferred tax assets.

Provisions for federal, state and deferred income taxes of $(3,480) for the nine months ended December 31, 2018, are included in other nonoperating income, net in the consolidated statement of operations and changes in net assets.

20. AFFILIATION

On April 1, 2018, Advocate Aurora Health, Inc. became the sole corporate member of Advocate Health Care Network and Aurora Health Care, Inc. The System was formed in furtherance of the parties' common and unifying charitable health care mission to promote and improve the quality and expand the scope and accessibility of affordable health care and health care-related services for the communities they serve.

The Affiliation was accounted for as a merger in accordance with accounting principles generally accepted in the United States; therefore, the System has accounted for the merger by applying the carryover method.

The following pro forma financial information is prepared on a consolidated basis utilizing accounting records of Advocate and Aurora as if the System had been operating for the twelve-month period ended December 31, 2018 as a combined company. The System's pro forma revenues have been adjusted to include a previously non-consolidated lab joint venture (A2CL) as well as associated eliminations of activity and balances due between Advocate and Aurora. Additionally, certain accounting policies have been adjusted to align Advocate and Aurora within the pro forma information presented. Management believes the assumptions underlying the pro forma financial information presented, including the assumptions regarding the elimination of inter-company activity and accounting policy changes are reasonable. Nevertheless, the pro forma information may not reflect the results of operations and financial position had the System been a combined company and is not intended to project the System's results of operations for any future periods.

Total revenue	$	12,155,979
Increase in net assets without donor restrictions - attributable to controlling interest	$	74,009
Increase in net assets without donor restrictions - noncontrolling interest	$	2,166
Decrease in net assets with donor restrictions	$	(10,597)

ADVOCATE AURORA HEALTH, INC. AND ITS AFFILIATES AND SUBSIDIARIES
PROFORMA CONSOLIDATED BALANCE SHEET
(dollars in thousands)

	April 1, 2018				
	Aurora	Advocate	A2CL	Eliminations	Consolidated
ASSETS					
CURRENT ASSETS:					
Cash and cash equivalents	$ 171,402	$ 235,425	$ 1,278	$ —	$ 408,105
Assets limited as to use	4,523	104,543	—	—	109,066
Patient accounts receivable	744,668	726,045	—	—	1,470,713
Other current assets	193,669	348,921	12,317	(21,510)	533,397
Total current assets	1,114,262	1,414,934	13,595	(21,510)	2,521,281
Assets limited as to use	1,737,381	6,187,437	—	—	7,924,818
Property and equipment, net	2,445,763	2,987,734	—	—	5,433,497
Total other assets	273,788	498,605	1,579	(10,075)	763,897
TOTAL	$ 5,571,194	$ 11,088,710	$ 15,174	$ (31,585)	$ 16,643,493
LIABILITIES AND NET ASSETS					
CURRENT LIABILITIES:					
Current portion of long term-debt	$ 136,239	$ 120,901	$ —	$ —	$ 257,140
Accounts payable and accrued liabilities	623,687	829,635	18,127	(21,510)	1,449,939
Other current liabilities	31,653	425,468	—	—	457,121
Total current liabilities	791,579	1,376,004	18,127	(21,510)	2,164,200
NONCURRENT LIABILITES:					
Long-term debt, less current portion	1,266,070	1,539,105	—	—	2,805,175
Accrued insurance and claims costs, less current portion	27,381	636,856	—	—	664,237
Other long-term liabilities	382,919	359,597	—	(13,028)	729,488
Total noncurrent liabilities	1,676,370	2,535,558	—	(13,028)	4,198,900
Total liabilities	2,467,949	3,911,562	18,127	(34,538)	6,363,100
NET ASSETS:					
Without donor restrictions:					
Controlling interest	2,934,281	7,009,528	(2,953)	2,953	9,943,809
Noncontrolling interest in subsidiaries	104,168	570	—	—	104,738
Total net assets without donor restrictions	3,038,449	7,010,098	(2,953)	2,953	10,048,547
Net assets with donor restrictions	64,796	167,050	—	—	231,846
Total net assets	3,103,245	7,177,148	(2,953)	2,953	10,280,393
TOTAL	$ 5,571,194	$ 11,088,710	$ 15,174	$ (31,585)	$ 16,643,493

21. SUBSEQUENT EVENTS

In January 2019, Advocate Aurora Health, Inc., entered into a definitive agreement to acquire the remaining 51% interest in BAMC in exchange for a donation to a foundation to benefit BAMC. Upon completion of the transaction, BAMC and ABAMG will be fully consolidated within the consolidated financial statements of Aurora. This transaction is expected to close on April 1, 2019 pending regulatory approval. As of the issuance date of this report, management is unable to estimate the impact of this transaction to the consolidated financial statements.

On March 5, 2019, the System issued commercial paper in the amount of $50,000. The proceeds of the commercial paper were used to redeem the Series 2008C-2A bonds of $49,230 plus accrued interest, and certain costs related to the issuance of the commercial paper. The remaining proceeds were used for general corporate purposes. The standby bond purchase agreement related to the Series 2008C-2A bonds was canceled effective March 5, 2019.

The System evaluated events and transactions subsequent to December 31, 2018 through March 27, 2019, the date of financial statement issuance.

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Supplementary Information

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Report of Independent Auditors on Supplementary Information

The Board of Directors
Advocate Aurora Health, Inc. and its Affiliates and Subsidiaries

Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The accompanying consolidating balance sheet and consolidating statement of operations are presented for purposes of additional analysis and are not a required part of the 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 financial statements. The information has been subjected to the auditing procedures applied in the audit 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 financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States. In our opinion, the information is fairly stated, in all material respects, in relation to the financial statements as a whole.

Ernst & Young LLP

March 27, 2019

ADVOCATE AURORA HEALTH, INC AND ITS AFFILIATES AND SUBSIDIARIES
CONSOLIDATING BALANCE SHEET
December 31, 2018

Assets	Credit Group	Noncredit Group	Eliminations	Consolidated
Current assets:				
Cash and cash equivalents	$ 220,354	$ 377,503	$ (12,970)	$ 584,887
Assets limited as to use	102,003	4,241	–	106,244
Patient accounts receivable	1,275,630	210,630	–	1,486,260
Other current assets	436,189	116,691	(40,324)	512,556
Third-party payors receivables	17,165	628	–	17,793
Receivable from affiliate	75,953	226,679	(302,632)	–
Collateral proceeds received under securities lending program	18,869	–	–	18,869
Total current assets	2,146,163	936,372	(355,926)	2,726,609
Assets limited as to use:				
Internally designated for capital and other	6,902,505	39,141	–	6,941,646
Held for self-insurance	585,605	46,767	–	632,372
Donor restricted	61,239	58,520	–	119,759
Investments under securities lending program	18,310	–	–	18,310
Total assets limited as to use	7,567,659	144,428	–	7,712,087
Note receivable from affiliate	74,023	–	(74,023)	–
Property and equipment, net	5,088,044	530,144	8,287	5,626,475
Other assets:				
Intangible asset and goodwill, net	56,740	34,030	(1,441)	89,329
Investment in subsidiaries/affiliates	266,519	–	(266,519)	–
Investments in unconsolidated entities	201,948	25,107	(24,724)	202,331
Reinsurance receivable	60,741	–	–	60,741
Other noncurrent assets	592,025	37,190	(313,998)	315,217
Total other assets	1,177,973	96,327	(606,682)	667,618
Total assets	$ 16,053,862	$ 1,707,271	$ (1,028,344)	$ 16,732,789

ADVOCATE AURORA HEALTH, INC AND ITS AFFILIATES AND SUBSIDIARIES
CONSOLIDATING BALANCE SHEET
December 31, 2018

Liabilities and net assets	Credit Group	Noncredit Group	Eliminations	Consolidated
Current liabilities:				
Current portion of long-term debt	$ 48,558	$ 21,035	$ (19,666)	$ 49,927
Long-term debt subject to short-term financing arrangements	162,025	–	–	162,025
Accounts payable and accrued liabilities	1,391,277	304,710	(24,863	1,671,124
Third-party payors payables	301,444	2,189	–	303,633
Current portion of accrued insurance and claims costs	117,815	4,546	–	122,361
Accounts payable to affiliate	226,830	75,06	(301,892)	–
Collateral under securities lending program	18,869	–	–	18,869
Total current liabilities	2,266,818	407,542	(346,421)	2,327,939
Noncurrent liabilities:				
Long-term debt, less current portion	2,789,699	99,172	(91,965)	2,796,906
Accrued insurance and claims cost, less current portion	558,859	34,437	–	593,296
Accrued losses subject to reinsurance recovery	60,741	–	–	60,741
Obligations under swap agreements	65,376	–	–	65,376
Due to affiliate	178,109	(104,086)	(74,023)	–
Other noncurrent liabilities	618,118	28,320	(884)	645,554
Total noncurrent liabilities	4,270,902	57,843	(166,872)	4,161,873
Total liabilities	6,537,720	465,385	(513,293)	6,489,812
Net assets:				
Without donor restrictions:				
Controlling interest	9,146,236	1,140,677	(386,195)	9,900,718
Noncontrolling interest in subsidiaries	37	2,308	116,123	118,468
Total net assets without donor restrictions	9,146,273	1,142,985	(270,072)	10,019,186
With donor restrictions	369,869	87,099	(233,177)	223,791
Common stock	–	1,863	(1,863)	–
Additional paid-in capital	–	84,672	(84,672)	–
Retained (deficit) earnings/partnership losses	–	(74,733)	74,733	–
Total net assets	9,516,142	1,241,886	(515,051)	10,242,977
Total liabilities and net assets	$ 16,053,862	$ 1,707,271	$ (1,028,344)	$ 16,732,789

ADVOCATE AURORA HEALTH, INC AND ITS AFFILIATES AND SUBSIDIARIES
CONSOLIDATING STATEMENT OF OPERATIONS
Nine Months Ended December 31, 2018

	Credit Group	Noncredit Group	Eliminations	Consolidated
Revenue:				
Patient service revenue	$ 6,609,409	$ 1,210,444	$ $(286,385)	$ 7,533,468
Capitation revenue	479,970	570,112	(14,087)	1,035,995
Other revenue	433,244	521,400	(310,701)	643,943
Total revenue	7,522,623	2,301,956	(611,173)	9,213,406
Expenses:				
Salaries, wages and benefits	4,253,713	763,311	(24,010)	4,993,014
Supplies and purchased services	1,912,984	423,576	(103,453)	2,233,107
Contract medical services	188,767	631,580	(341,954)	478,393
Depreciation and amortization	374,296	38,216	(1,722)	410,790
Interest	79,303	5,748	(3,666)	81,385
Other	353,156	344,509	(94,997)	602,668
Total expenses	7,162,219	2,206,940	(569,802)	8,799,357
Operating income (loss) before nonrecurring expenses	360,404	95,016	(41,371)	414,049
Nonrecurring expenses	55,182	–	–	55,182
Operating income (loss)	305,222	95,016	(41,371)	358,867
Nonoperating income (loss)				
Investment loss, net	(253,683)	(4,435)	–	(258,118)
Loss on debt refinancing	(29,859)	–	–	(29,859)
Change in fair value of interest rate swaps	993	–	–	993
Other nonoperating income, net	4,809	(4,163)	–	646
Total nonoperating loss, net	(277,740)	(8,598)	–	(286,338)
Excess of revenue over expenses	27,482	86,418	(41,371)	72,529
Less noncontrolling interest	(610)	(355)	(33,418)	(34,383)
Excess of revenue over expenses - attributable to controlling interest	$ 26,872	$ 86,063	$ (74,789)	$ 38,146

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HBV Isolation/Precautions

Introduction

In addition to Standard Precautions, isolation (separate room) for HBsAg positive patients is standard of practice in HD facilities, for several reasons:

1. Environmental stability: HBV can persist on surfaces and equipment and remain infectious at ambient room temperature for up to 7 days. HBsAg has been detected on clamps, machine control surfaces, doorknobs, and other surfaces in dialysis facilities. These blood-contaminated surfaces can serve as a reservoir for HBV transmission, creating the potential for contamination of healthcare personnel hands, equipment, and supplies.
2. High viral titer: Persons with HBV infection tend to have high concentrations of virus in their blood. This, along with its environmental stability, makes the risk of HBV transmission from blood contaminated items in this setting greater than would be expected for other common bloodborne viruses.

While HCV and HIV also pose potential infection risk to employees and patients, the risk is significantly less than that related to HBV:

- HIV infection from an exposure occurs at a rate of 0.2%–0.4%.
- HCV infection from an exposure occurs at a rate of less than 1%.
- HBV infection from an exposure occurs at a rate of up to 30%.

Note: The relative risk of HIV/HCV infection is significantly less than that of HBV for both HCWs and patients, though the rates above reflect only HCW conversions.

HBV Isolation/Precautions

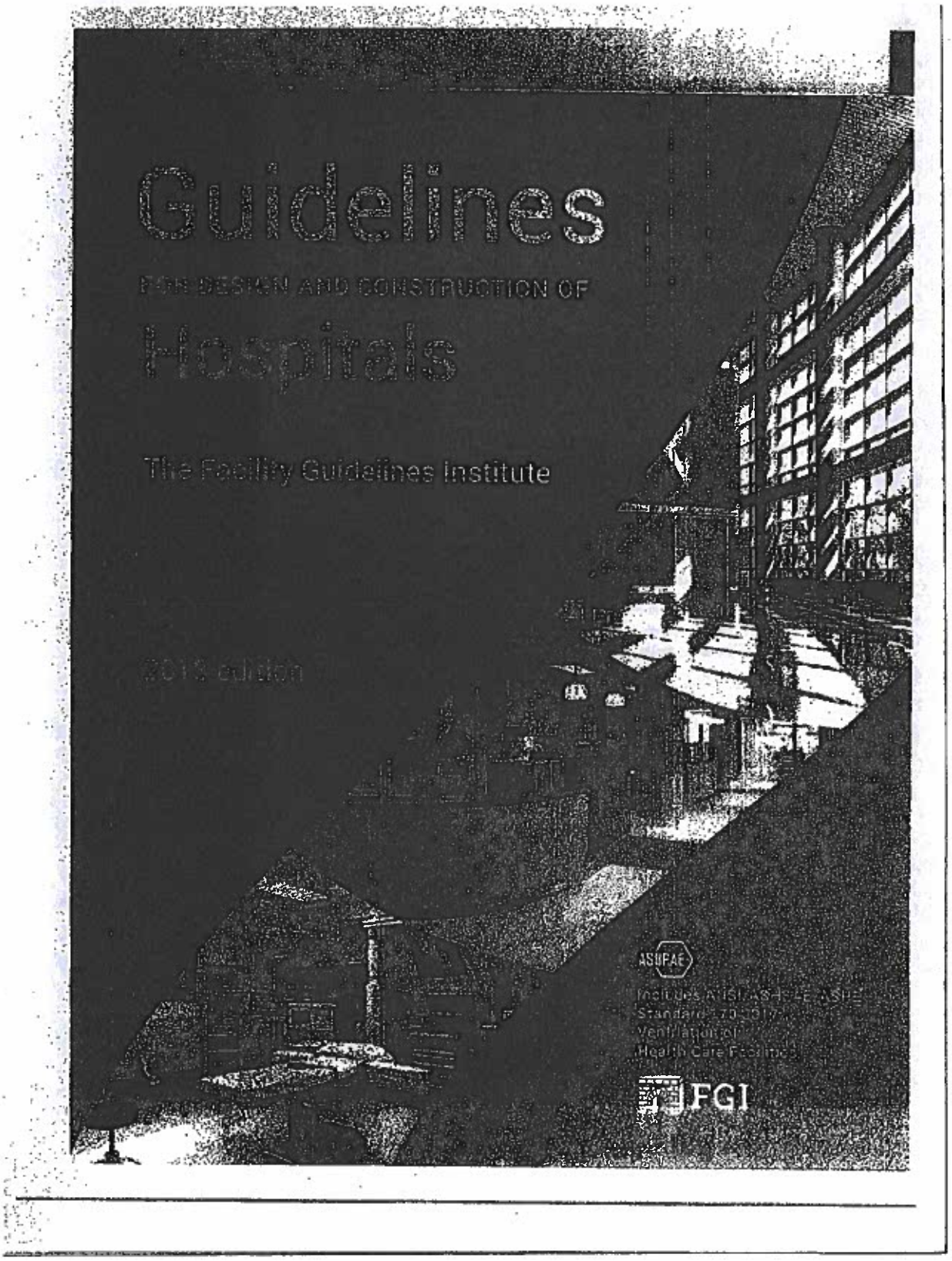
- Patients are placed in a private room or segregated area.
- Dedicated dialysis machine is used for HBV-positive patients.
- Dialyzers are discarded in biomedical waste after treatment.
- Dialyzers can not be reprocessed/reused.
- Gown and gloves are required for each entry into room.
- Mask with eye protection is required for cannulation and decannulation.
- Staff caring for HBV patients cannot care for HBV susceptible patients at the same time.[1,2]
- Staff caring HBV patients should be HBV-immune.
- Required when the surface antigen is positive and not required when the surface antigen is not detectable.

Since the introduction of universal HBV vaccination in 1991 in the U.S., the prevalence of chronic HBV infection in the general population including dialysis patients has decreased. In the 1999–2004 *National Health and Nutrition Examination Survey* (NHANES),[3] the prevalence was reported to be 0.27%. However, it must be remembered that certain racial groups have much higher prevalence of positivity. A survey of the general population in Rochester County, Minnesota, showed a prevalence of 2.1% among Asians, 1.9% among African-Americans, and 0.02% among Caucasians. A total of 86% of the population with chronic HBV infection were born outside the U.S.[4] Other groups at high risk include men who have sex with men and IV drug users.[5]

Transmission-Based Precautions

Transmission-Based Precautions are recommended in addition to Standard Precautions by the CDC when the route(s) of transmission is (are) not completely interrupted using Standard Precautions alone. There are three categories of Transmission-Based Precautions: Contact Precautions, Droplet Precautions, and Airborne Precautions.

1. **Airborne Precautions:** Transmissible airborne illnesses include varicella, disseminated varicella, TB, and measles. Microorganisms can remain airborne for up to 2 hours.
   - **Inpatient Setting:** Patients are placed in a negative airflow room. Respirators are required for TB and for anyone not immune to varicella, measles, or other airborne disease. It is recommended that those individuals who are not immune be reassigned to prevent exposure to vaccine preventable diseases. Hospital policies should be followed.
   - **Ambulatory Setting:** Patient identified with a suspected airborne disease should be masked immediately and geographically separated from other patients, preferably in a single room. Arrangements should be made for HD treatments at a facility that can provide a negative pressure isolation room.
2. **Droplet Precautions:** Illnesses transmitted by large respiratory droplets include pertussis, influenza, mumps, strep throat, rubella, diphtheria, Mycoplasma pneumonia, adenovirus, Neisseria meningitidis, Haemophilus influenzae type b, and acute respiratory infections with MRSA/VRE/other MDRO.
   - **Inpatient:** Hospital policies should be followed.
   - **Ambulatory Setting:** Respiratory Hygiene/Cough Etiquette Precautions should be followed. If hospitalization is required, the patient should be spatially separated by at least 6 feet from other patients and a mask worn until transport can be arranged. In HD facilities, dialysis center exposure management and follow-up policies should be followed in the event of a vaccine preventable disease exposure or meningitis. Only immune staff should care for patients with a vaccine preventable disease (i.e., mumps, rubella, diphtheria).
3. **Contact Precautions:** Illnesses transmitted via contact include *C. difficile*, adenovirus, rotavirus, impetigo, scabies, pediculosis, and MDROs (e.g., MRSA, vancomycin intermediate-resistant *S. aureus*, VRE, and other MDROs).
   - **Inpatient Setting:** Hospital policy should be followed.
   - **Ambulatory Setting:** Routine contact precautions are not required in HD units for patients infected or colonized with pathogenic bacteria for several reasons. First, although contact transmission of pathogenic bacteria is well-documented in hospitals, similar transmission has not been well-documented in HD centers. Transmission might not be apparent in dialysis centers, possibly because it occurs less frequently than in acute-care hospitals or results in undetected colonization rather than overt infection. Also, because dialysis patients are frequently hospitalized, determining whether transmission occurred in the inpatient or outpatient setting is difficult. Second, contamination of the patient's skin, bedclothes, and environmental surfaces with pathogenic bacteria is likely to be more common in hospital settings (where patients spend 24 hours a day) than in outpatient HD centers (where patients spend approximately 10 hours a week). Third, the routine use of infection control practices recommended for HD units (gloves for all patient and environmental contact), which are more stringent than the Standard Precautions routinely used in hospitals, should prevent transmission by the contact route.


Guidelines
FOR DESIGN AND CONSTRUCTION OF
Hospitals
The Facility Guidelines Institute
2018 edition
ASHRAE
FGI

2.2-3.9.8.1 Reserved

2.2-3.9.8.2 Reception and control station

(1) The reception and control station shall permit visual control of waiting and activity areas.
(2) Combination of the reception and control station with office and clerical space shall be permitted.

2.2-3.9.8.3 Reserved

2.2-3.9.8.4 Office and clerical space. Provision shall be made for filing and retrieving patient records.

2.2-3.9.8.5 – 2.2-3.9.8.11 Reserved

2.2-3.9.8.12 Space and utilities for cleaning and disinfecting respiratory therapy equipment. Facilities for cleaning and decontaminating respiratory equipment shall be provided independent of hand-washing stations.

(1) This equipment processing shall be permitted to take place in other parts of the facility, such as the sterile processing department (Section 2.1-5.1—Sterile Processing).
(2) Where a dedicated reprocessing room is provided, it shall meet the following requirements:
   (a) The room shall be arranged to provide a soiled-to-clean workflow.
   (b) The room shall include the following:
      (i) Work counters for drop-off, soaking tubs, and pasteurization units
      (ii) Documentation area
      (iii) A hand-washing station
      (iv) A large sink for washing instruments

2.2-3.9.8.13 Equipment and supply storage

2.2-3.9.9 Support Areas for Staff

2.2-3.9.9.1 Reserved

2.2-3.9.9.2 Staff toilet. A staff toilet room [illegible] readily accessible to the respiratory [illegible]

2.2-3.9.9.3 Staff storage. Locking [illegible] shall be provided immediately accessible [illegible] area for securing staff personal effects.

2.2-3.10 Renal Dialysis Services (Acute and Chronic)

2.2-3.10.1 General

2.2-3.10.1.1 Application. This section applies to renal dialysis facilities in the hospital for patients with acute and chronic end-stage renal disease (ESRD).

2.2-3.10.1.2 Location

(1) Where dialysis is provided in an inpatient care unit, all support areas for [illegible] provided but shall be permitted [illegible] patient care unit.
(2) Where dialysis functions as a separate unit, the requirements of this section [illegible]

2.2-3.10.2 Hemodialysis Treatment

2.2-3.10.2.1 General

(1) The treatment area shall be permitted [illegible] open-plan area.
(2) The treatment area shall be separated from administrative waiting areas.
*(3) Built-in cabinetry shall not be permitted [illegible] individual hemodialysis patient [illegible]

2.2-3.10.2.2 Space requirements

(1) Area. Individual hemodialysis patient [illegible] shall have a minimum clear floor area [illegible]
   (a) 80 square feet (7.44 square meters) [illegible] dialysis chairs are used
   (b) 90 square feet (8.36 square meters) [illegible] are used

APPENDIX

A.2.2-3.10.2.1(3) [illegible] station is [illegible] [illegible] supplies are [illegible]

...ances. The following minimum clearances ... be provided:

... feet (1.22 meters) between the sides of beds, ...neys, or dialysis chairs
... feet (1.22 meters) between the sides of beds/ ...neys/dialysis chairs and adjacent walls or ...titions
... feet (60.96 centimeters) between the foot ... beds/gurneys/dialysis chairs and cubicle ...tains

...3 Reserved

...4 Patient privacy. Space shall be available ... ...mediate provisions for patient privacy.

...5 Hand-washing stations

...-washing stations shall be provided in ...dance with Section 2.1-2.8.7 (Hand-Washing ...

...-washing station shall be located at the ... of the hemodialysis treatment area. This ...shing station shall be permitted to ...e to the total number of hand-washing ... required.

...ome Training Room

... Where patients are trained to use dialysis ... home, a private treatment room of at ...re feet (11.15 square meters) shall be ...

... This room shall contain the following:

...shing station
... drain for fluid disposal

... 2.2-3.10.7 Reserved

...upport Areas for the Renal Dialysis ...

... requirement for a minimum of 4 feet ... chairs is due to the potential ... conducted and clearance needed ...

2.2-3.10.8.1 Reserved

2.2-3.10.8.2 Nurse station

(1) A nurse station that meets the requirements in Section 2.1-2.8.2 (Administrative Center or Nurse Station) shall be located in the hemodialysis treatment area.
(2) The nurse station shall be designed to provide visual observation of all individual dialysis treatment bays.

2.2-3.10.8.3 – 2.2-3.10.8.7 Reserved

2.2-3.10.8.8 Medication safety zone

(1) See Section 2.1-2.8.8 (Medication Safety Zones) for requirements.
(2) A dedicated medication safety zone shall be centrally located in the dialysis unit and shall be at least 6 feet (1.83 meters) from any individual dialysis treatment chair or bed.

2.2-3.10.8.9 – 2.2-3.10.8.10 Reserved

2.2-3.10.8.11 Clean workroom or supply room. A clean workroom shall be provided in accordance with Section 2.1-2.8.11 (Clean Workroom or Clean Supply Room).

2.2-3.10.8.12 Soiled workroom. A soiled workroom shall be provided in accordance with Section 2.1-2.8.12 (Soiled Workroom or Soiled Holding Room).

2.2-3.10.8.13 Equipment and supply storage

(1) Clean linen storage. A clean linen storage area shall be provided in accordance with Section 2.1-2.8.13.1 (Clean linen storage).
(2) Clinical equipment and supply storage. Storage areas or space for supply carts shall be provided.
(3) Storage space for gurneys and wheelchairs
   (a) Where gurneys are used, storage space shall be provided.
   (b) Where outpatient dialysis services are provided, a designated area shall be provided for wheelchair parking.

... for safe patient care. Requirements for additional clearance may be a consideration for the AHJ.

The following minimum clearances
ovided:

(122 meters) between the sides of beds,
or dialysis chairs
(122 meters) between the sides of beds/
dialysis chairs and adjacent walls or
ions
(60.96 centimeters) between the foot
gurneys/dialysis chairs and cubicle

served

atient privacy. Space shall be available
provisions for patient privacy.

Hand-washing stations

ing stations shall be provided in
with Section 2.1-2.8.7 (Hand Washing

king station shall be located at the
hemodialysis treatment area. This
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the total number of hand-washing
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Training Room

ere patients are trained to use dialysis
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m room shall contain the following:

g station
n for fluid disposal

2.2-3.10.7 Reserved

pport Areas for the Renal Dialysis

2.2-3.10.8.1 Reserved

2.2-3.10.8.2 Nurse station

(1) A nurse station that meets the requirements in Section 2.1-2.8.2 (Administrative Center or Nurse Station) shall be located in the hemodialysis treatment area.
(2) The nurse station shall be designed to provide visual observation of all individual dialysis treatment bays.

2.2-3.10.8.3 – 2.2-3.10.8.7 Reserved

2.2-3.10.8.8 Medication safety zone

(1) See Section 2.1-2.8.8 (Medication Safety Zones) for requirements.
(2) A dedicated medication safety zone shall be centrally located in the dialysis unit and shall be at least 6 feet (1.83 meters) from any individual dialysis treatment chair or bed.

2.2-3.10.8.9 – 2.2-3.10.8.10 Reserved

2.2-3.10.8.11 Clean workroom or supply room. A clean workroom shall be provided in accordance with Section 2.1-2.8.11 (Clean Workroom or Clean Supply Room).

2.2-3.10.8.12 Soiled workroom. A soiled workroom shall be provided in accordance with Section 2.1-2.8.12 (Soiled Workroom or Soiled Holding Room).

2.2-3.10.8.13 Equipment and supply storage

(1) Clean linen storage. A clean linen storage area shall be provided in accordance with Section 2.1-2.8.13.1 (Clean linen storage).
(2) Clinical equipment and supply storage. Storage areas or space for supply carts shall be provided.
(3) Storage space for gurneys and wheelchairs
   (a) Where gurneys are used, storage space shall be provided.
   (b) Where outpatient dialysis services are provided, a designated area shall be provided for wheelchair parking.

for safe patient care. Requirements for additional clearance may be a
consideration for the AHJ.

(i) This area shall be located in a non-public area out of any required egress width or other required clearance.
(ii) A minimum of one wheelchair storage or parking space shall be provided for every four patient care stations, with at least one storage or parking space provided where there are fewer than four patient care stations.

2.2-3.10.8.14 Environmental services room. An environmental services room shall be provided that meets the requirements in Section 2.1-2.8.14 (Environmental Services Room) as well as the additional requirements included here:

(1) The environmental services room shall be adjacent to and for the exclusive use of the dialysis unit.
(2) Water supply and drain connection for testing machines shall be provided.

2.2-3.10.8.15 Reserved

2.2-3.10.8.16 Dialyzer reprocessing room. Where dialyzers are processed for reuse on-site, a reprocessing room shall be provided.

(1) The dialyzer reprocessing room design shall provide for a one-way flow of materials from soiled to clean.
(2) This room shall include the following:

(a) Refrigeration for temporary storage of dialyzers
(b) Decontamination/cleaning area
(c) Hand-washing station
(d) Processors
(e) Computer processors and label printers
(f) A packaging area
(g) Dialyzer storage cabinets

2.2-3.10.8.17 Dialysate preparation room. Where a central dialysate mixing and delivery system is used to provide individual dialysate solutions for treatment of patients requiring special dialysate prescriptions, a dialysate preparation room shall be provided.

(1) The dialysate preparation [illegible] to accommodate the [illegible] distribution equipment.
(2) The dialysate preparation [illegible]

(a) Hand-washing station
(b) Storage space
(c) Work counter
(d) Floor drain
(e) Treated water outlet [illegible] water distribution system. See Section 2.1-8.4.2.2 (1) [illegible] hemoperfusion water [illegible] water distribution system.

2.2-3.10.8.18 Hemodialysis [illegible] equipment area. Water treatment equipment shall be located in a dedicated secure area and all components of the equipment

(1) This area shall include [illegible]
(2) This area shall be located [illegible] room.

***2.2-3.10.8.19 Equipment repair room.** An equipment repair and bench work room shall be equipped with the following:

(1) Hand-washing station
(2) Treated water outlet for equipment and drain or clinical service connection and testing
(3) Work counter
(4) Storage cabinet

2.2-3.10.9 Support Areas for Staff

2.2-3.10.9.1 General. Staff areas shall be shared with adjacent diagnostic [illegible]

2.2-3.10.9.2 Staff areas provided shall include:

(1) Lockers
(2) Toilet room
(3) Hand-washing stations
(4) Eyewash station and emergency [illegible]

#20-004

[illegible] from the patient bed to an exterior [illegible] shall not exceed 50 feet (15.24 [illegible]

[illegible] privacy

[illegible] the corridor with a means to allow [illegible] shall be provided in critical care [illegible]

[illegible] projects where multiple patient [illegible] provided in the same room, each [illegible] station shall have provisions for visual [illegible] observation by other patients

[illegible] washing stations. For design [illegible] Section 2.1-2.8.7.2 (Hand-Washing [illegible] requirements).

[illegible] station shall be provided in each [illegible]

[illegible] projects where cubicles are provided, [illegible] requirements shall apply:

[illegible] hand-washing station shall be [illegible] for every three cubicles in open-plan [illegible]

[illegible] washing station shall be located near [illegible] to each patient cubicle.

[illegible] room or human waste disposal [illegible]

[illegible] patient room, both adult and [illegible] have direct access to an enclosed [illegible] human waste disposal room.

[illegible] toilet room is provided, it shall be [illegible] with a toilet with bedpan-rinsing [illegible]

(b) Where a human waste disposal room is provided, it shall be equipped with a flushing-rim clinical sink with bedpan-rinsing device.

*(2) A hand-washing station shall not be required in the toilet room or human waste disposal room.

*2.2-2.6.2.7 **Nurse call system.** A nurse call system shall be provided in accordance with Section 2.1-8.5.1 (Call Systems).

2.2-2.6.3 Reserved

2.2-2.6.4 Special Patient Care Areas

2.2-2.6.4.1 Reserved

2.2-2.6.4.2 Airborne infection isolation (AII) room

(1) At least one AII room shall be provided in the critical care unit, unless provided in another critical care unit. The number of additional AII rooms shall be based on an ICRA.

(2) Each AII room shall comply with the requirements in Section 2.1-2.4.2 (AII Room) except that the bathtub or shower is not required.

2.2-2.6.5 – 2.2-2.6.7 Reserved

2.2-2.6.8 Support Areas for the Critical Care Unit

2.2-2.6.8.1 General The following shall be provided for all types of critical care units unless otherwise noted.

*2.2-2.6.8.2 **Administrative center or nurse station**

(1) An administrative center or nurse station shall be provided in accordance with Section 2.1-2.8.2 (Administrative Center or Nurse Station).

[illegible] and staff safety, a hand-washing [illegible] to support standard infection [illegible] the toilet room or human waste [illegible] to be used as the primary [illegible]

A2.2-2.6.2.7 The staff emergency assistance system should be located so it can be reached easily. The system should annunciate at the nurse station with backup from another staffed area from which assistance can be summoned.

A2.2-2.6.8.2 Critical care patients should be visually observed at all times. This can be achieved in a variety of ways.

a. If a central station is chosen, it should be located to allow for complete visual observation of all patient beds in the critical care unit. It should be designed to maximize efficiency in traffic patterns.

Additional Resources Available, but I'm unable to access

OSHA Requirements/Standards

- 8092: Kidney Dialysis Center

FDA Requirements/Standards

CMS

AAMI

- Hemodialysis Horizons publication
- Offers specific Dialysis related links: https://www.aami.org/newsviews/content.aspx?ItemNumber=1861
-

Illinois State Regulations (Would not include as a source, not well written or detailed as compared to federal agency)

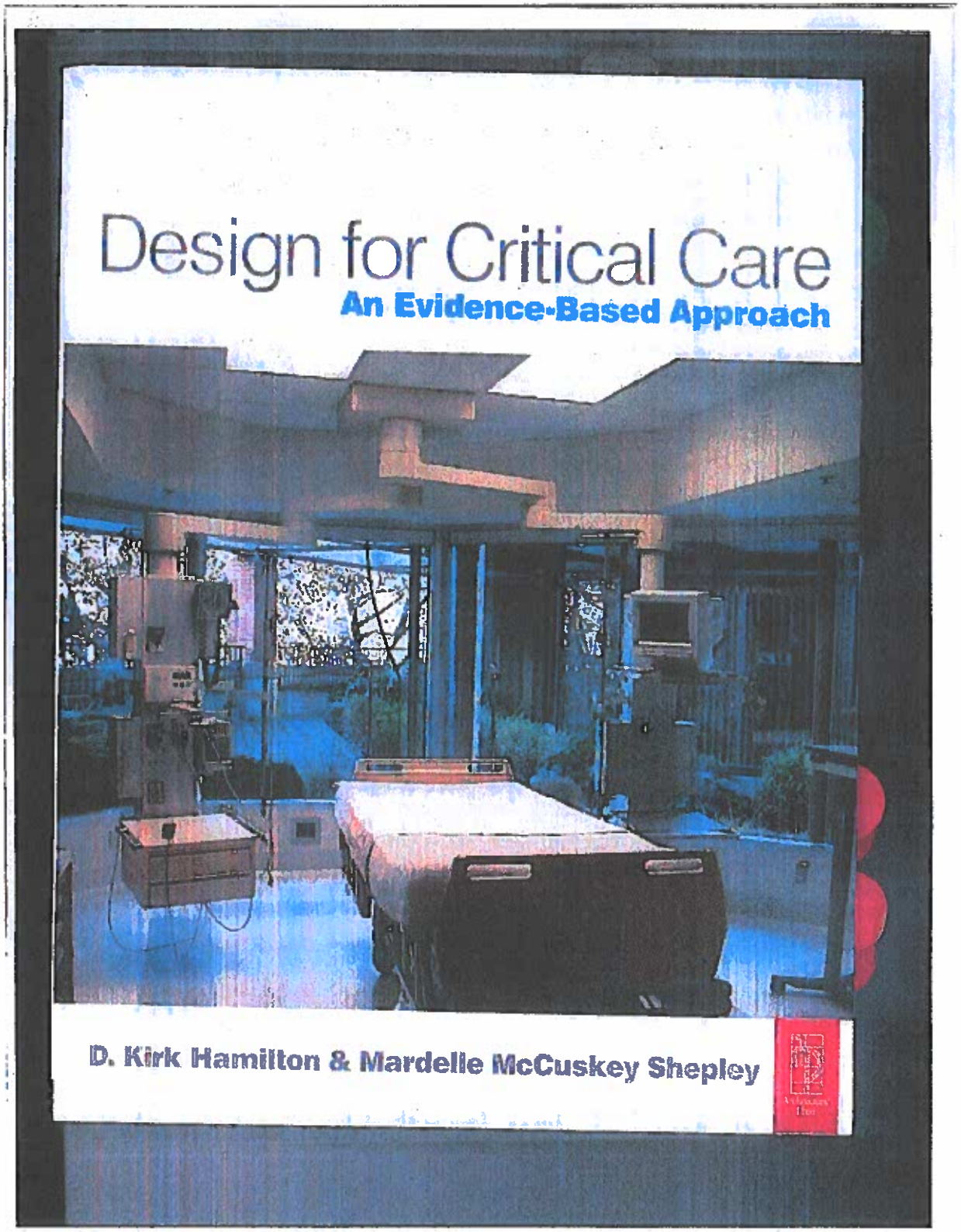
- **PCTS allowed to Administer Heparin and Saline: NO**
- **Delegation authority of RNs/Liminations on LPN/LVNs or UAP:**
- **Delegation: The transfer of responsibility for the performance of selected tasks by the registered nurse (RN) to qualified, competent assistive personnel in a selected situation, based upon the RN's plan of care. http://dph.illinois.gov/topics-services/health-care-regulation/facilities/hospitals**
- **Dialysis Technician Legislation: None**
- **Dialysis Facility Legislation: Licensure law passed; no rules promulgated**

Resources

Centers for Disease Control and Preventions (CDC). (2007). Revised 2019. Guideline for isolation precautions: Preventing transmission of infectious agents in healthcare settings. Retrieved from: https://www.cdc.gov/infectioncontrol/pdf/guidelines/isolation-guidelines-H.pdf

Centers for Disease Control and Prevention (CDC). (2001). Revised 2016. Recommendations for preventing transmission of infections among chronic hemodialysis patients. *Morbidity and Mortality Weekly Report (MMR). 50,* (RR-5). Atlanta, GA: U.S. Department of Health and Human Services. Retrieved from: https://www.cdc.gov/dialysis/guidelines/index.html

Facility Guidelines Institute. (2018). Guidelines for design and construction of hospitals. St. Louis, MO: The Facility Guidelines Institute.


Design for Critical Care
An Evidence-Based Approach
D. Kirk Hamilton & Mardelle McCuskey Shepley

Introduction

The critical care unit of a hospital is where life can hang in the balance every day and where skillful and timely intervention literally saves lives. The critical care setting, frequently known as the intensive care unit, the ICU, or the CCU, is where some of the hospital's most difficult and demanding work takes place. The ICU is the stage for many of life's most extraordinary dramas. Design of the setting in which this vitally important work is done will be increasingly important to physicians, nurses, pharmacists, respiratory therapists, patients, families, and hospital executives, to name only a few of those affected.

This book attempts to make the case for effective and supportive facility design that enhances rather than hinders the work of clinicians. It endorses the approach that design informed by the findings of credible research is likely to be more successful than design based on unsupported concepts. This book explores key issues in the design of facilities for critical care and provides examples of credible evidence relevant to those issues. It includes suggestions for a collaborative method in which designers and clinicians can work together to achieve improved results. We hope that design of future critical care units will be powerfully influenced by strong visions of better, more effective care, and innovative settings, rather than hollow reproductions of what has been built in the past.

We hope the book will find an audience in the world of architects and designers as well as in the medical world of intensivists, physicians, nurses, pharmacists, therapists, members of the critical care staff, and hospital executives.

Need for effective design in critical care

A facility design that supports the crucially important work of critical care must serve the minimum functional needs of physicians, staff, patients, and their families. If the physical facility can be either an enabler of high performance, or a barrier to effective performance, then appropriate design is vitally important. A good facility design will efficiently support functional requirements and will also effectively serve the physical, psychological, and emotional needs of those who use it. The best facility designs make it more likely that optimum performance can be achieved.

When time is of the essence, needed equipment and supplies should be at the fingertips of the clinicians and should be found in familiar locations. The most appropriate technologies and information systems should be present, accessible, and simple to use. Staff in one room should be able to find things intuitively based on their familiarity with other standardized rooms.

Under non-emergency conditions the space should support routine functions such as the washing of hands, best-practice care models, communication, and documentation. It should directly address the psychosocial needs of the patient and family members while serving as a pleasant, stress-free work environment for the staff.

The scientific foundation

Roger S. Ulrich, Ph.D.

"The scientific foundation for evidence-based healthcare design is already large and surprisingly strong. A joint project at Texas A&M University and the Georgia Institute of Technology in the USA indentified nearly 700 rigorous studies, most published in international medical journals, about how the architecture of acute care hospitals affects health. A collaborative of more than 30 healthcare organizations set up by the Center for Health Design has done several multi-year clinical and safety evaluations of specific design interventions and new buildings. Much credible evidence now shows that good design of a hospital's physical environment promotes better clinical outcomes, increases safety, and reduces stress for both patients and staff" (Ulrich, 2006).

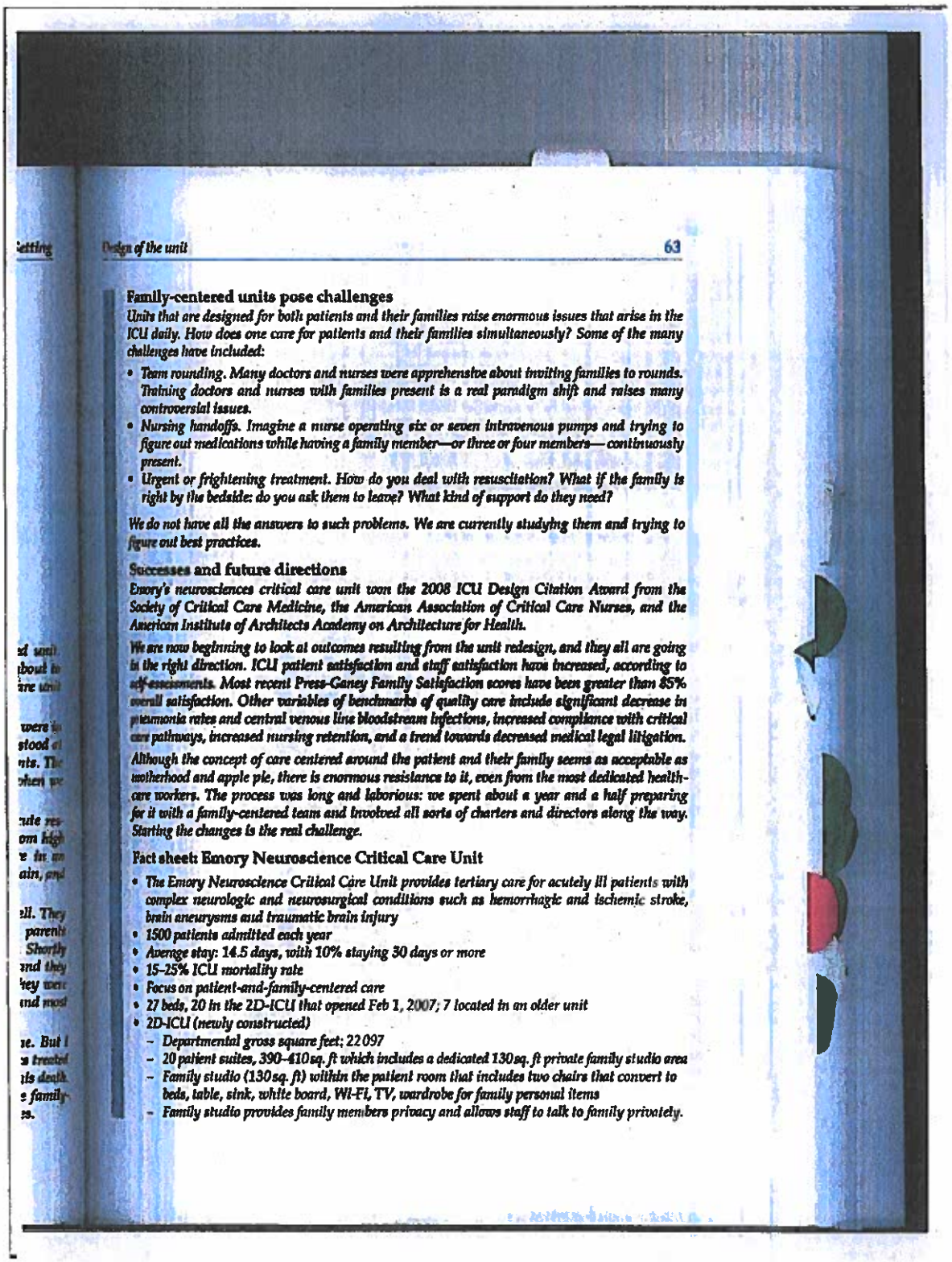
Dr. Roger Ulrich is a professor at Texas A&M University where he is a Fellow in the Center for Health Systems & Design.

Designers have used research from medicine, nursing, management, industrial design, engineering, and technology. Relevant sources also include the literature of psychology, sociology, anthropology, and economics. The journals of science may be a useful source, along with the popular press, newspapers and magazines, and documentary films and television programs. Industry data guides, guidelines from speciality boards, quality review data, infection control data, manufacturers' testing information, association reports, and the documents of accreditation agencies and code authorities provide helpful information. Practitioners can gather new information from conference presentations, workshops, continuing education programs, and benchmarking tours of exemplary facilities. The Internet has also become a rich source of information for designers. The possible sources of relevant findings are limited only by the issues being addressed.

1.3 Therapeutic environments

While there are healing environments that have nothing to do with evidence-based design, many healing environments are the result of an evidence-based design that has demonstrated measurable improvements in the physical and/or psychological states of patients and/or staff, physicians, and visitors. If it meets these standards, a healing environment is therefore a complementary treatment modality that makes a therapeutic contribution to the course of care (van den Berg, 2005). The role played by the environment is certainly not as therapeutically effective as the role of surgery, pharmacology, medical interventions, or perhaps even the caring touch of an empathetic nurse. The therapeutic role of the physical environment is, however, absolutely real and must therefore be considered as contributing to the course of care and the patient outcome.

If the physical environment can contribute to improved clinical outcomes, then surely there is a moral obligation to provide critical care environments that are supportive of the teams of healthcare professionals who work with patients and their families. Designers have a responsibility to provide environments conducive to the safety, health, therapeutic interventions, and recovery of critical care patients. Above all, the environment, like every other aspect of healthcare, should "do no harm."



Family-centered units pose challenges

Units that are designed for both patients and their families raise enormous issues that arise in the ICU daily. How does one care for patients and their families simultaneously? Some of the many challenges have included:

- *Team rounding. Many doctors and nurses were apprehensive about inviting families to rounds. Training doctors and nurses with families present is a real paradigm shift and raises many controversial issues.*
- *Nursing handoffs. Imagine a nurse operating six or seven intravenous pumps and trying to figure out medications while having a family member—or three or four members—continuously present.*
- *Urgent or frightening treatment. How do you deal with resuscitation? What if the family is right by the bedside: do you ask them to leave? What kind of support do they need?*

We do not have all the answers to such problems. We are currently studying them and trying to figure out best practices.

Successes and future directions

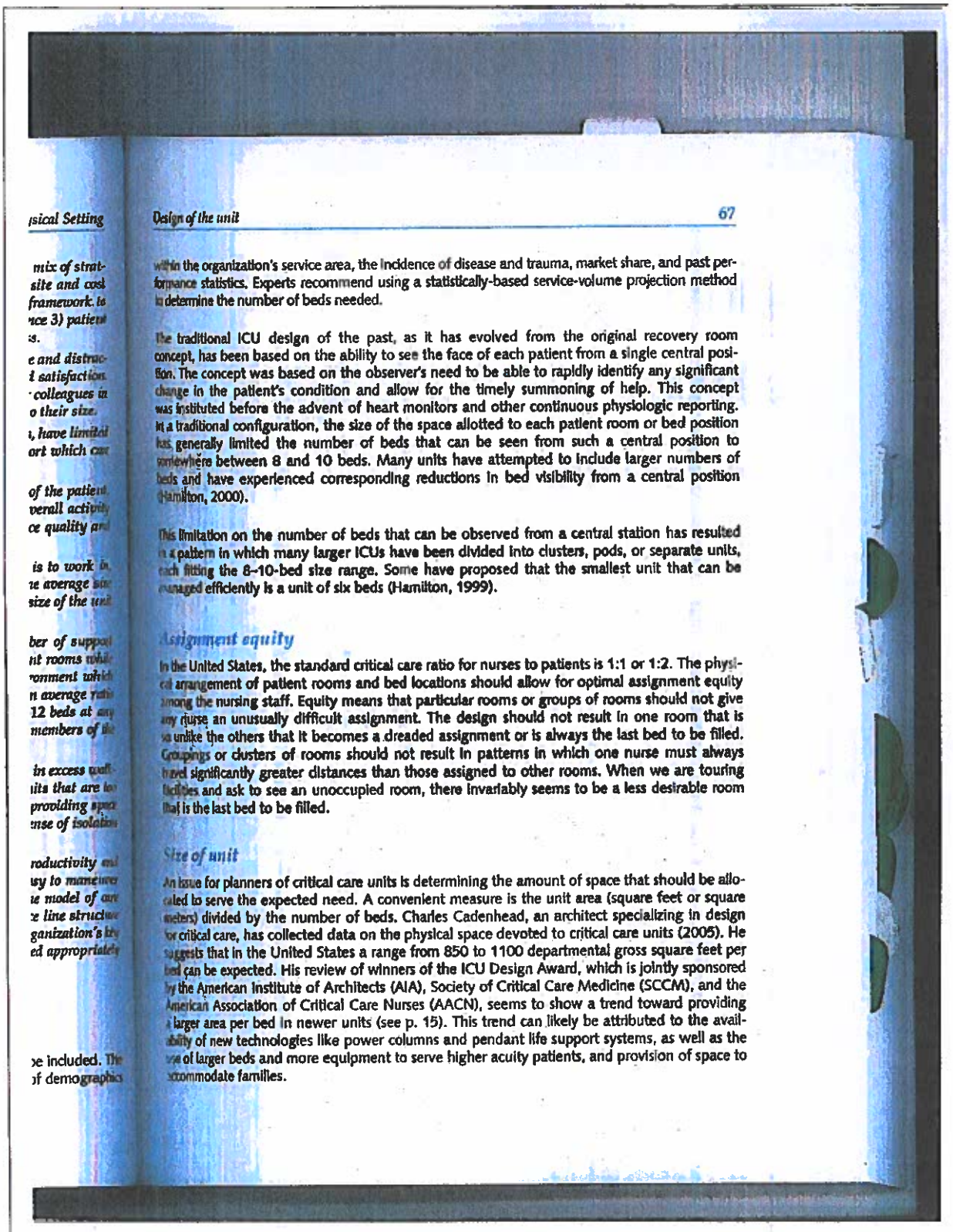
Emory's neurosciences critical care unit won the 2008 ICU Design Citation Award from the Society of Critical Care Medicine, the American Association of Critical Care Nurses, and the American Institute of Architects Academy on Architecture for Health.

We are now beginning to look at outcomes resulting from the unit redesign, and they all are going in the right direction. ICU patient satisfaction and staff satisfaction have increased, according to self-assessments. Most recent Press-Ganey Family Satisfaction scores have been greater than 85% overall satisfaction. Other variables of benchmarks of quality care include significant decrease in pneumonia rates and central venous line bloodstream infections, increased compliance with critical care pathways, increased nursing retention, and a trend towards decreased medical legal litigation.

Although the concept of care centered around the patient and their family seems as acceptable as motherhood and apple pie, there is enormous resistance to it, even from the most dedicated health-care workers. The process was long and laborious: we spent about a year and a half preparing for it with a family-centered team and involved all sorts of charters and directors along the way. Starting the changes is the real challenge.

Fact sheet: Emory Neuroscience Critical Care Unit

- *The Emory Neuroscience Critical Care Unit provides tertiary care for acutely ill patients with complex neurologic and neurosurgical conditions such as hemorrhagic and ischemic stroke, brain aneurysms and traumatic brain injury*
- *1500 patients admitted each year*
- *Average stay: 14.5 days, with 10% staying 30 days or more*
- *15–25% ICU mortality rate*
- *Focus on patient-and-family-centered care*
- *27 beds, 20 in the 2D-ICU that opened Feb 1, 2007; 7 located in an older unit*
- *2D-ICU (newly constructed)*
  - *Departmental gross square feet: 22 097*
  - *20 patient suites, 390–410 sq. ft which includes a dedicated 130 sq. ft private family studio area*
  - *Family studio (130 sq. ft) within the patient room that includes two chairs that convert to beds, table, sink, white board, Wi-Fi, TV, wardrobe for family personal items*
  - *Family studio provides family members privacy and allows staff to talk to family privately.*



within the organization's service area, the incidence of disease and trauma, market share, and past performance statistics. Experts recommend using a statistically-based service-volume projection method to determine the number of beds needed.

The traditional ICU design of the past, as it has evolved from the original recovery room concept, has been based on the ability to see the face of each patient from a single central position. The concept was based on the observer's need to be able to rapidly identify any significant change in the patient's condition and allow for the timely summoning of help. This concept was instituted before the advent of heart monitors and other continuous physiologic reporting. In a traditional configuration, the size of the space allotted to each patient room or bed position has generally limited the number of beds that can be seen from such a central position to somewhere between 8 and 10 beds. Many units have attempted to include larger numbers of beds and have experienced corresponding reductions in bed visibility from a central position (Hamilton, 2000).

This limitation on the number of beds that can be observed from a central station has resulted in a pattern in which many larger ICUs have been divided into clusters, pods, or separate units, each fitting the 8–10-bed size range. Some have proposed that the smallest unit that can be managed efficiently is a unit of six beds (Hamilton, 1999).

Assignment equity

In the United States, the standard critical care ratio for nurses to patients is 1:1 or 1:2. The physical arrangement of patient rooms and bed locations should allow for optimal assignment equity among the nursing staff. Equity means that particular rooms or groups of rooms should not give any nurse an unusually difficult assignment. The design should not result in one room that is so unlike the others that it becomes a dreaded assignment or is always the last bed to be filled. Groupings or clusters of rooms should not result in patterns in which one nurse must always travel significantly greater distances than those assigned to other rooms. When we are touring facilities and ask to see an unoccupied room, there invariably seems to be a less desirable room that is the last bed to be filled.

Size of unit

An issue for planners of critical care units is determining the amount of space that should be allocated to serve the expected need. A convenient measure is the unit area (square feet or square meters) divided by the number of beds. Charles Cadenhead, an architect specializing in design for critical care, has collected data on the physical space devoted to critical care units (2005). He suggests that in the United States a range from 850 to 1100 departmental gross square feet per bed can be expected. His review of winners of the ICU Design Award, which is jointly sponsored by the American Institute of Architects (AIA), Society of Critical Care Medicine (SCCM), and the American Association of Critical Care Nurses (AACN), seems to show a trend toward providing a larger area per bed in newer units (see p. 15). This trend can likely be attributed to the availability of new technologies like power columns and pendant life support systems, as well as the use of larger beds and more equipment to serve higher acuity patients, and provision of space to accommodate families.

during a crisis. In some ICU models, the normal nursing support functions and certain high-u supplies are accommodated within the room. In addition, there is a clear trend to provide space t accommodate family within the patient room without creating problems for the staff.

Today's standard for a head-to-toe dimension is in the range of 14–17 feet. A truly flexible roo of the future might be expected to be 16–20 feet in the head-to-toe length. Contemporary IC rooms in the United States are designed with 15–18 feet on the headwall in a side-to-side or entation. The truly flexible room of the future, suited for the highest-acuity patient and multi equipment items, might need as much as 18–22 feet of side-to-side clearance.

The new *SCCM ICU Design Guidelines* (expected in 2010), if approved as written by the revis task force, will probably be performance-based rather than prescriptive, so they will not describe minimum dimension. They are likely to suggest an optimum distance of at least four feet from th bed to the wall at the head and foot, and at least six feet of space for staff and equipment on eithe side of the bed. This is exclusive of space allocated to family and a work zone for clinical staff.

The patient room can also be too big. There are procedure rooms in which it is not possibl to reach the patient with equipment that has been plugged into the wall without an extensio cord. An oversized patient room can have similar problems. The reach of cords and lines can b exceeded. Distances between the patient and supplies, or between the patient and staff work areas, can be stretched beyond the dimensions associated with optimum efficiency.

Zones of use

Some designers have begun to identify distinct zones of use within the patient room. The concep of a zone allows the designer to consider the performance of the space for specific purposes.

Patient zone

This is the area comprising the patient, the bed, bedside and overbed tables, and the immediat area occupied by clinicians in the act of providing care.

Hygiene zone

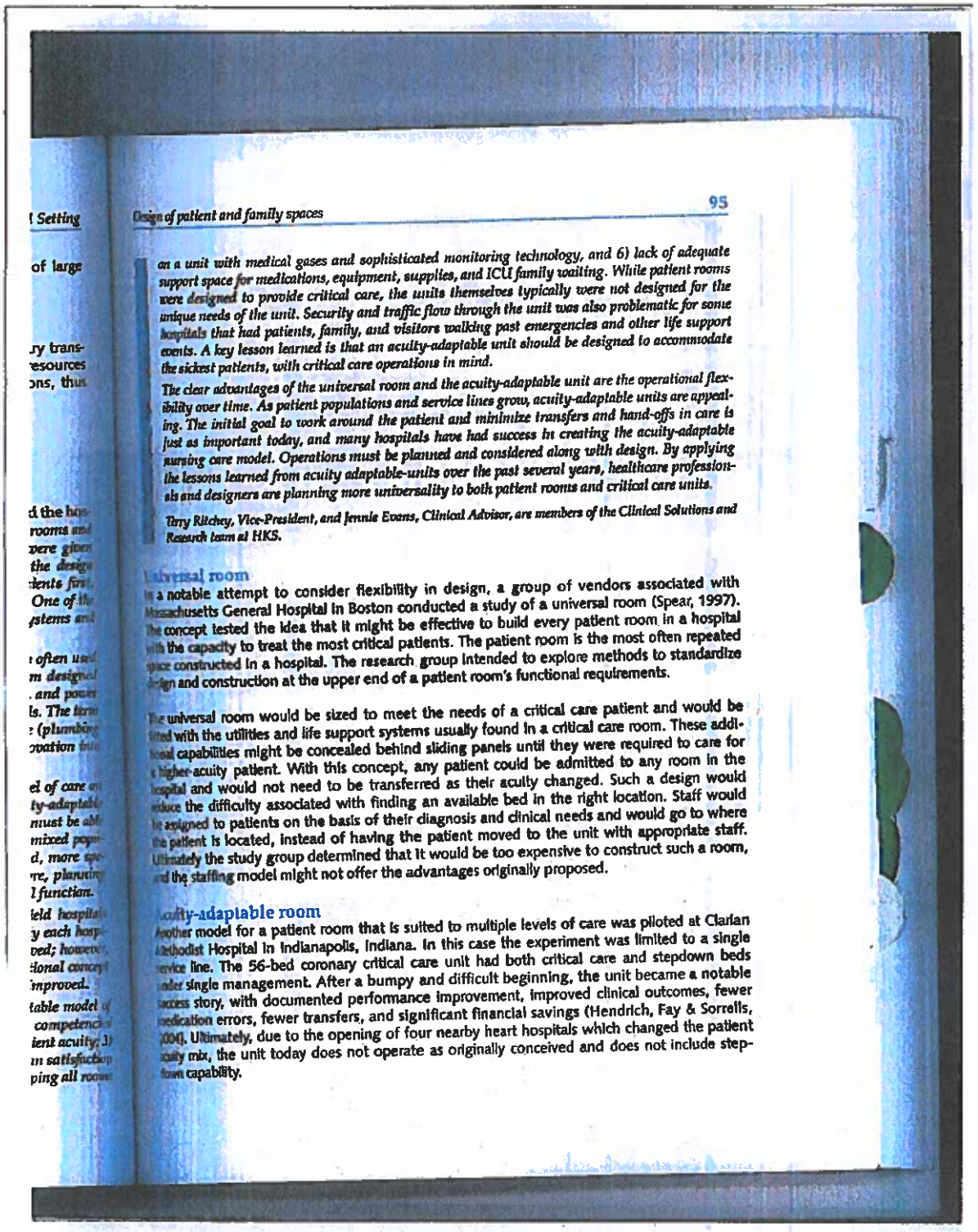
This area, usually in a separate room, comprises the patient toilet, sink, and activities associate with maintaining the patient's hygiene.

Staff zone

An area just inside or outside the entry to the patient room that is suited to support nursing an caregiver functions: this can potentially include a writing surface, provisions for hand hygiene, patient information (computer or chart), medication, and supplies.

Family zone

Space dedicated to family use and social support for the patient can include seating, provision for overnight stay, storage for personal effects, separate lighting, access to the Internet, and a writing surface, among other potential amenities.



an a unit with medical gases and sophisticated monitoring technology, and 6) lack of adequate support space for medications, equipment, supplies, and ICU family waiting. While patient rooms were designed to provide critical care, the units themselves typically were not designed for the unique needs of the unit. Security and traffic flow through the unit was also problematic for some hospitals that had patients, family, and visitors walking past emergencies and other life support events. A key lesson learned is that an acuity-adaptable unit should be designed to accommodate the sickest patients, with critical care operations in mind.

The clear advantages of the universal room and the acuity-adaptable unit are the operational flexibility over time. As patient populations and service lines grow, acuity-adaptable units are appealing. The initial goal to work around the patient and minimize transfers and hand-offs in care is just as important today, and many hospitals have had success in creating the acuity-adaptable nursing care model. Operations must be planned and considered along with design. By applying the lessons learned from acuity adaptable-units over the past several years, healthcare professionals and designers are planning more universality to both patient rooms and critical care units.

Terry Ritchey, Vice-President, and Jennie Evans, Clinical Advisor, are members of the Clinical Solutions and Research team at HKS.

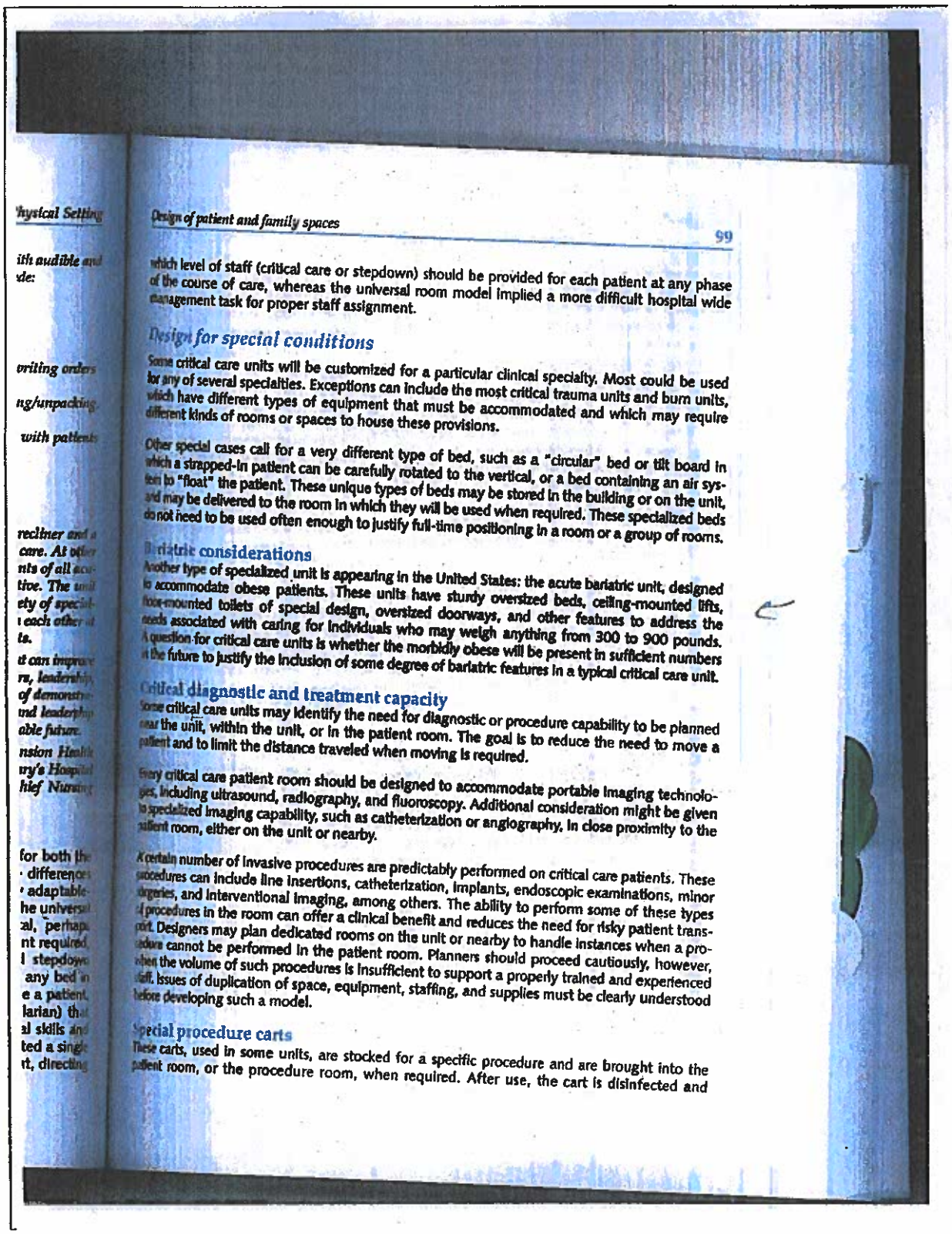
Universal room

In a notable attempt to consider flexibility in design, a group of vendors associated with Massachusetts General Hospital in Boston conducted a study of a universal room (Spear, 1997). The concept tested the idea that it might be effective to build every patient room in a hospital with the capacity to treat the most critical patients. The patient room is the most often repeated space constructed in a hospital. The research group intended to explore methods to standardize design and construction at the upper end of a patient room's functional requirements.

The universal room would be sized to meet the needs of a critical care patient and would be fitted with the utilities and life support systems usually found in a critical care room. These additional capabilities might be concealed behind sliding panels until they were required to care for a higher-acuity patient. With this concept, any patient could be admitted to any room in the hospital and would not need to be transferred as their acuity changed. Such a design would reduce the difficulty associated with finding an available bed in the right location. Staff would be assigned to patients on the basis of their diagnosis and clinical needs and would go to where the patient is located, instead of having the patient moved to the unit with appropriate staff. Ultimately the study group determined that it would be too expensive to construct such a room, and the staffing model might not offer the advantages originally proposed.

Acuity-adaptable room

Another model for a patient room that is suited to multiple levels of care was piloted at Clarian Methodist Hospital in Indianapolis, Indiana. In this case the experiment was limited to a single service line. The 56-bed coronary critical care unit had both critical care and stepdown beds under single management. After a bumpy and difficult beginning, the unit became a notable success story, with documented performance improvement, improved clinical outcomes, fewer medication errors, fewer transfers, and significant financial savings (Hendrich, Fay & Sorrells, 2004). Ultimately, due to the opening of four nearby heart hospitals which changed the patient acuity mix, the unit today does not operate as originally conceived and does not include stepdown capability.



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which level of staff (critical care or stepdown) should be provided for each patient at any phase of the course of care, whereas the universal room model implied a more difficult hospital wide management task for proper staff assignment.

Design for special conditions

Some critical care units will be customized for a particular clinical specialty. Most could be used for any of several specialties. Exceptions can include the most critical trauma units and burn units, which have different types of equipment that must be accommodated and which may require different kinds of rooms or spaces to house these provisions.

Other special cases call for a very different type of bed, such as a "circular" bed or tilt board in which a strapped-in patient can be carefully rotated to the vertical, or a bed containing an air system to "float" the patient. These unique types of beds may be stored in the building or on the unit, and may be delivered to the room in which they will be used when required. These specialized beds do not need to be used often enough to justify full-time positioning in a room or a group of rooms.

Bariatric considerations

Another type of specialized unit is appearing in the United States: the acute bariatric unit, designed to accommodate obese patients. These units have sturdy oversized beds, ceiling-mounted lifts, floor-mounted toilets of special design, oversized doorways, and other features to address the needs associated with caring for individuals who may weigh anything from 300 to 900 pounds. A question for critical care units is whether the morbidly obese will be present in sufficient numbers in the future to justify the inclusion of some degree of bariatric features in a typical critical care unit.

Critical diagnostic and treatment capacity

Some critical care units may identify the need for diagnostic or procedure capability to be planned near the unit, within the unit, or in the patient room. The goal is to reduce the need to move a patient and to limit the distance traveled when moving is required.

Every critical care patient room should be designed to accommodate portable imaging technologies, including ultrasound, radiography, and fluoroscopy. Additional consideration might be given to specialized imaging capability, such as catheterization or angiography, in close proximity to the patient room, either on the unit or nearby.

A certain number of invasive procedures are predictably performed on critical care patients. These procedures can include line insertions, catheterization, implants, endoscopic examinations, minor surgeries, and interventional imaging, among others. The ability to perform some of these types of procedures in the room can offer a clinical benefit and reduces the need for risky patient transport. Designers may plan dedicated rooms on the unit or nearby to handle instances when a procedure cannot be performed in the patient room. Planners should proceed cautiously, however, when the volume of such procedures is insufficient to support a properly trained and experienced staff. Issues of duplication of space, equipment, staffing, and supplies must be clearly understood before developing such a model.

Special procedure carts

These carts, used in some units, are stocked for a specific procedure and are brought into the patient room, or the procedure room, when required. After use, the cart is disinfected and

to bear in mind the need for electricity and gases in these locations. The absence of life su technology will mean a number of portable devices, including "splitters" that will allow one ice to be provided to a second patient.

4.4 Disposal of human waste

Choosing the correct solution for toileting or disposal of human waste in the critical care u a major problem for the design team. There are no demonstrated models that solve all o potential problems associated with proper hygiene, infection control, disposal of contamin biological waste, protection of staff who handle waste, convenience for staff, and economy.

Patient toileting options

There are examples of critical care patient rooms with and without toilets. When toilets present, they may be attached to an individual room or shared between rooms. When a toi present, and when the patient is permitted to use it, the issue of distance from the bed is im tant because monitoring leads are usually connected to the patient and there is usually a need to move multiline infusion pumps with the patient.

With the exception of medical cardiac patients, the majority of critical care patients do not u toilet. The majority will be catheterized, will use a bedpan, or will soil an absorbent pad and bedding. Some physicians have declared that any patient capable of using the toilet should be in critical care.

There are conventional toilet fixtures, and there are fold-out toilets contained in cabinetry nearly every case, the toilets are used most often to dump bedpans, rather than as a site for patient to use for elimination. Unfortunately none of these devices allows for the disposal completely contained. The washing and spraying activity of disposal is a major source of aer contaminants and a frequent source of infectious organisms. A paper by Michelle Burrin RN, (see the Appendix), reviewed the literature and described some of the most common h of problems with organisms and nosocomial infections originating in bedpan disposal and wa ing (Burrington, 1999).

An excellent alternative to a toilet is a mobile commode chair that contains a bedpan. In a st of cardiology patients at the University of Michigan, surveys indicated that the commode c was the strong preference for that type of patient (Clipson & Wehrer, 1973). The ability to m the chair directly adjacent to the bed allowed toileting to occur without disconnecting monitor leads, which contributed to patient confidence. Sitting was preferred over using a bedpan wh prone in the bed. One could hypothesize that the result would be similar for any type of a patient who is capable of leaving the bed to use a toilet.

The great toilet debate

David R. Vincent, AIA, ACHA, LEED® AP

The dilemma of whether or not to provide either a separate adjacent toilet room or a toilet fixture the critical care patient room is only partially spelled out in healthcare facility design codes. W the exception of coronary critical care and critical care isolation rooms, the majority of cri

Toilets in critical care patient rooms, if they are provided, should assume that every patient is ha capped in some way, even if only temporarily impaired by a regimen of drugs. In the United St a civil law, the Americans with Disabilities Act (ADA), requires consideration in all public facilities persons with a disability. It has been up to the courts to decide what that means in normal prac except in some states, such as Texas, where the expectations have been clarified by other do ments. The Texas Accessibility Standards clarify this ambiguous situation for projects in that state.

It would appear that best practice in a critical care patient toilet would include provision of higher than normal height of the toilet fixture, with appropriate handrails to assist in moving and from the toilet and sink as well as to assist in rising from a sitting position on the toilet. standard recommendations for handrails in the United States were promulgated based on needs of a population of wounded veterans from the Vietnam War who possessed upper bo strength. A fragile, elderly woman disoriented by medication is unlikely to be helped by a handrails in rising from the toilet.

One might question whether someone capable of toileting without staff assistance belongs critical care unit. It is not often that a critical care patient would be using a wheelchair, and can expect that a staff member, or members, will be assisting the patient. For this reason, width of the doorway into the toilet is an issue. A patient being assisted by one or more members needs a wider than normal opening to allow for all to move together. Some falls been documented as a result of staff members' inability to accompany the patient through a row doorway; such falls occur when the staff member is "peeled off."

Closed disposal systems

Devices that macerate disposable papier-mâché pans and dispose of the waste inside a sea chamber have been used in Europe, and are only recently available in North America. The de is about the size of a household dishwasher and may offer an alternative for North Ameri designers interested in a different and safer disposal method. There are currently only a f installations of this technology in the U.S. and Canada.

The design question for a sealed disposal system is whether the device should be provided every patient room, shared between a pair of rooms (as has been done at the University of Iow or provided in a utility room that serves a larger number of beds. The infection control perspec would likely suggest a design that avoids the carrying of soiled bedpans in the corridor. Infecti control experts are contending that dumping biohazard waste into a sewer is not a good idea, there are early explorations of devices to sterilize the waste before it is flushed or macerated.

Selecting a toileting option remains one of the most difficult decisions in critical care desi because the options are few, and none seems to solve every variation of the problem. This is highly important area for further study and innovation.

4.5 Design for isolation

There is a need to design for the capability to isolate certain patients, either to protect the larger population from the patient's known or unidentified infection or to protect the immun compromised patient from acquiring an infection present in the larger population. The filtered

Design of the staff support spaces

5

A portion of the space on any critical care unit will be devoted to the staff and their work requirements. These spaces should be configured to optimize the work process, offer convenient support for the normal activities of the staff, and contribute to the quality of the work experience.

5.1 The staff core

The quality of patient care is thought to improve when delivered by a dedicated team representing multiple disciplines (Hanson & Aranda, 1999; Rainey, 2000). Interdisciplinary team members may include clinical specialists, pharmacists, dieticians, social services personnel, chaplain services staff, case management workers, child life specialists, respiratory therapists, and other therapists.

Historically, centralized critical care nursing station design is a result of dependence on a single paper medical record, the presence of central monitors, and a variety of regulations that encouraged the design of a single centrally located station intended to offer direct visual observation of all beds within the unit. This historic model is most appropriate for designs of smaller units with good visibility of patients from a central position, such as those featuring an open bay design. The numerous factors influencing the design of centralized nursing stations have changed.

Interdisciplinary team center

Interdisciplinary teams are more prevalent, and nursing is moving closer to the bedside. The old nurses' station terminology is therefore less appropriate, as the station serves many others besides the nurse, and the nurse is more likely to spend the majority of their time in decentralized locations. The draft *SCCM Design Guidelines* proposes to use *Interdisciplinary team center (ITC)* as a term to describe a location for the centralized activities and interactions of the interdisciplinary team. The task force felt the "nurse station" language no longer reflected the true purpose of the team's principal collaborative work setting.

Emergency crash cart storage

Provisions must be made for the storage and rapid retrieval of emergency life support equipment such as a CPR resuscitation cart or an airway cart. The equipment should be easily seen and identified. If there is more than one ICU, the cart or carts should be housed in the same location on each unit so that personnel will always know where life support equipment is located. An uninterrupted power supply to charge the batteries of the cart's equipment should be provided at the location where the cart is stored. These carts can be in an alcove. They should not be located out of sight, as in a room or behind a door.

Medication

Each critical care unit must have a secure medication space, centrally located in an alcove or room. It should have adequate space for storage of medications and needles, a refrigerator restricted to pharmaceuticals, a double-locking cabinet for control of narcotics, and a sink with hands-free faucets. There should be a counter for medication preparation. A disposable sharps container should be provided. If the medication prep area is in a room, windows or glass walls should be considered to allow for visualization of the patient area during medication preparation. A telephone, intercom, or other mode of communication should allow contact with others, including the main pharmacy. The medication space should allow an individual nurse and a colleague to double-check accuracy without interruption of the task. If there is only one such space, it should be located in proximity to the central work zone for the interdisciplinary team. In the case of multiple med prep stations, they should be evenly distributed on the unit to minimize nurses' travel distance.

While medication prep can include the mixing of some IV fluids or other custom mixes of ingredients, preparation generally involves the acquisition and administration of drugs, compounds, and liquids prepared elsewhere. These items can come from the main pharmacy, a satellite pharmacy, or in some cases from a pharmacy outside the hospital. If a satellite pharmacy is nearby and serves the unit, medication prep and storage on the unit may be less extensive.

also

Automated medication dispensing systems

If automated medication dispensing systems are used, space should be allowed for the computerized device. Electrical outlets and data ports may be necessary. Automated dispensing systems should be centrally located, and, in the case of larger critical care units, strong consideration should be given to providing more than one device.

Charting and dictation

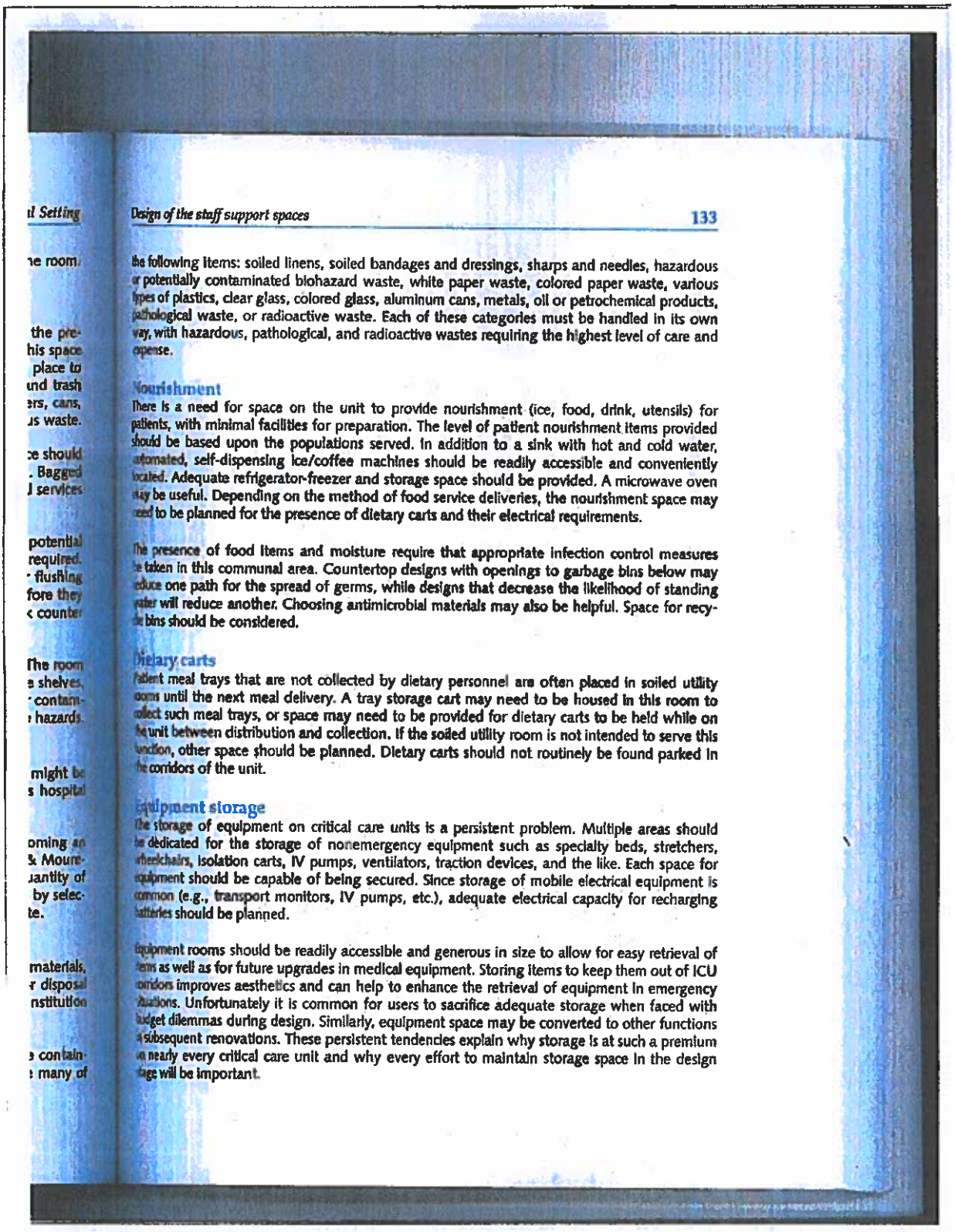
There may be a need to offer a central space for interdisciplinary medical personnel to sit, review cases, write orders, and dictate into the medical record. Such areas should be visually and acoustically private, offering a minimum of distractions, perhaps similar to a library carrel. Such a space is perhaps best located adjacent or proximate to the ITC. It should be equipped with dictation equipment, telephones, and monitors.

Report and conference space

There is frequently a need for a relatively quiet space in which nurses finishing a shift can report to the nurse just arriving for the next shift about the condition of their patients. Sometimes this reporting takes place on the fly, in the patient room, in the corridor, or in a crowded central station. This activity should be focused and thorough, as a lapse in reporting can lead to a deterioration of the patient's condition, and the requirement suggests a distinct room with sound control. A report room can be used at other times for meetings and conferences. Such a room will often have shelving for reference books and a computer intended for Internet searches. At times, this adaptable space will be used as a classroom or training room.

window views

Some critical care units make frequent use of computer-based education modules. Staff members can play a DVD to receive training and educational refreshers. A space specifically suited to this activity might be in the form of a study carrel, which could either be separate or included in a conference space.



the following items: soiled linens, soiled bandages and dressings, sharps and needles, hazardous or potentially contaminated biohazard waste, white paper waste, colored paper waste, various types of plastics, clear glass, colored glass, aluminum cans, metals, oil or petrochemical products, pathological waste, or radioactive waste. Each of these categories must be handled in its own way, with hazardous, pathological, and radioactive wastes requiring the highest level of care and expense.

Nourishment

There is a need for space on the unit to provide nourishment (ice, food, drink, utensils) for patients, with minimal facilities for preparation. The level of patient nourishment items provided should be based upon the populations served. In addition to a sink with hot and cold water, automated, self-dispensing ice/coffee machines should be readily accessible and conveniently located. Adequate refrigerator-freezer and storage space should be provided. A microwave oven may be useful. Depending on the method of food service deliveries, the nourishment space may need to be planned for the presence of dietary carts and their electrical requirements.

The presence of food items and moisture require that appropriate infection control measures be taken in this communal area. Countertop designs with openings to garbage bins below may reduce one path for the spread of germs, while designs that decrease the likelihood of standing water will reduce another. Choosing antimicrobial materials may also be helpful. Space for recycle bins should be considered.

Dietary carts

Patient meal trays that are not collected by dietary personnel are often placed in soiled utility rooms until the next meal delivery. A tray storage cart may need to be housed in this room to collect such meal trays, or space may need to be provided for dietary carts to be held while on the unit between distribution and collection. If the soiled utility room is not intended to serve this function, other space should be planned. Dietary carts should not routinely be found parked in the corridors of the unit.

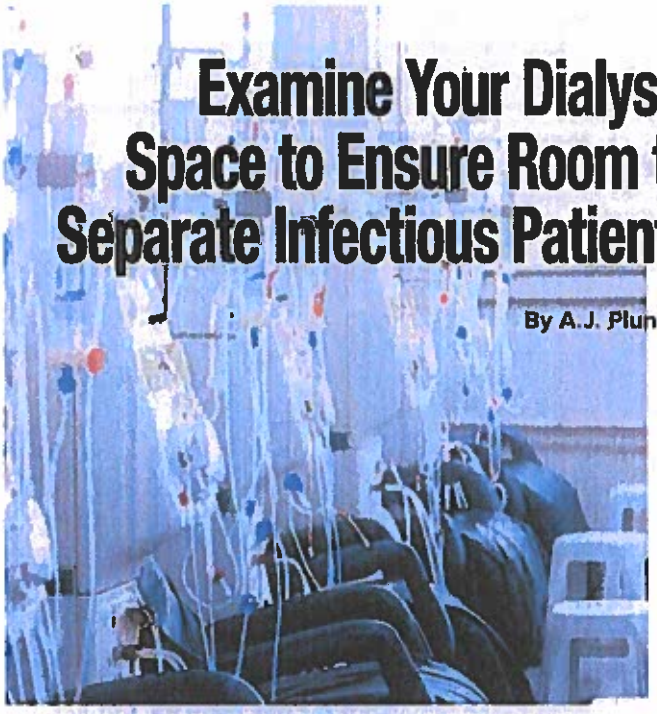
Equipment storage

The storage of equipment on critical care units is a persistent problem. Multiple areas should be dedicated for the storage of nonemergency equipment such as specialty beds, stretchers, wheelchairs, isolation carts, IV pumps, ventilators, traction devices, and the like. Each space for equipment should be capable of being secured. Since storage of mobile electrical equipment is common (e.g., transport monitors, IV pumps, etc.), adequate electrical capacity for recharging batteries should be planned.

Equipment rooms should be readily accessible and generous in size to allow for easy retrieval of items as well as for future upgrades in medical equipment. Storing items to keep them out of ICU corridors improves aesthetics and can help to enhance the retrieval of equipment in emergency situations. Unfortunately it is common for users to sacrifice adequate storage when faced with budget dilemmas during design. Similarly, equipment space may be converted to other functions in subsequent renovations. These persistent tendencies explain why storage is at such a premium on nearly every critical care unit and why every effort to maintain storage space in the design stage will be important.

Examine Your Dialysis Space to Ensure Room to Separate Infectious Patients

By A.J. Plunkett



Hemodialysis is one of four areas The Joint Commission (TJC) says it's increasing focus on during surveys. With this in mind, ensure that your hospital's hemodialysis patients remain in clear view of staff while undergoing the procedure. In addition, make sure there's enough space to separate patients with respiratory illnesses, fevers, fecal incontinence, or other infectious conditions.

That includes a way to care for dialysis patients with hepatitis B completely separate from non–hep B dialysis patients—using a curtain for separation is not enough, warns Kathleen Good, MSN, RN, a former surveyor with TJC and now an associate of Patton Healthcare Consulting, which is based in Naperville, Illinois.

In a November 7 blog post, Andrew Bland, MD, MBA, MSAP, FAAP, FACP, medical director of TJC's Division of Healthcare Quality Evaluation, wrote that among other infection control practices for hemodialysis, surveyors will be observing water and dialysate testing, medication storage, preparation and administration, and "patient placement in full view of staff during dialysis treatment."

What this means, says Good, is that patients must be observable at all times for their safety. In particular, staff must be able to see "dialysis lines where they are connected to the bovine graft, AV fistula, intrajugular catheter, or Permacath™," she says. Staff must also be able to hear and see the dialysis machines as patients are undergoing dialysis.

Patients with respiratory illnesses or fevers must also be kept at least six feet away, says Good. While a curtain in that case may be used as a barrier, the patient still shouldn't be close to other patients. This guideline also applies to patients with skin wound drainage or fecal incontinence, to reduce the risk of transmission of infection, notes Good.

"HEP B–POSITIVE PATIENTS SHOULD BE PLACED IN A SEPARATE ROOM OR SEPARATE AREA AWAY FROM OTHER NON–HEP B PATIENTS."

—Kathleen Good, MSN, RN, a former surveyor with TJC and now an associate of Patton Healthcare Consulting

Isolate Hepatitis B patients

Patients diagnosed as positive for hepatitis B must be treated in a separate room, reiterates Good. "This is according to ESRD [end-stage renal disease] *Conditions of Participation [CoP]* for outpatient dialysis centers," which Patton Healthcare Consulting recommends hospitals review when setting policies and procedures for dialysis.

"Hep B–positive patients should be placed in a separate room or separate area away from other non–hep B patients and taken care of by one nurse who does not take care of other hemodialysis patients," says Good.

In a recent HCPro webinar on survey hot spots, including dialysis, Good recommended facilities should:

- Vaccinate all susceptible patients against hepatitis B
- Consider influenza (inactivated) and pneumococcal vaccinations for patients
- Conduct routine testing for hepatitis B and hepatitis C viruses

To prevent the spread of hepatitis B related to dialysis, Good recommended the following:

- Hospitals must dialyze hepatitis B (HBsAg+) patients in a separate room, using separate machines, equipment, instruments, and supplies. (HBsAg+ means a hepatitis B surface antigen in a lab test was positive.)

DIALYSIS TIPS

Expect more focus on hemodialysis this year. The Joint Commission (TJC) and CMS have indicated that surveyors will focus on infection control practices, including isolation of infectious patients and medication storage, preparation, and administration.

Here are some additional tips from Kathleen Good, MSN, RN, a former surveyor with TJC and now an associate of Patton Healthcare Consulting, for ensuring you keep patients safe and meet surveyor expectations. Among other areas, Good has expertise in end-stage renal disease and dialysis programs.

Use personal protective equipment

In addition to gloves, staff overseeing dialysis of patients should wear gowns and face protection to protect themselves as needed:

- During initiation and termination of dialysis
- When cleaning dialyzers
- When handling lab samples

All of these procedures are at high risk for splash of contaminated fluids. Personal protective equipment should be changed if it becomes dirty.

Separate clean from contaminated areas

Often hospitals have a single space for dialysis operations. However, there must be distinct clean and contaminated areas, says Good.

Clean areas should be used for the preparation, handling, and storage of medications and unused supplies and equipment. Contaminated areas are where used supplies and equipment are handled.

Do not handle or store medications or clean supplies in the same area as where used equipment or blood samples are handled. And remember: Treatment stations are contaminated areas, warns Good.

Dedicate supplies to a single patient

Remember that any item taken to a patient's dialysis station could become contaminated.

Items taken into the dialysis station should either be disposed of or cleaned and disinfected before being taken to a common clean area or being used on another patient. Do not return unused medications or supplies taken to the patient's station to a common clean area (e.g., medication vials, syringes, alcohol swabs).

Here are guidelines for carrying medications:

- **Do not use the same medication cart** to deliver medications to multiple patients
- **Do not carry medication** vials, syringes, alcohol swabs, or supplies in pockets
- **Prepare the medication in a clean area** away from the patient station and bring it to the patient station for that patient only at the time of use

Cleaning and disinfecting the station

Train staff to take particular care when cleaning and disinfecting stations between patients, warns Good. Personnel must be able to talk about the process with surveyors.

Cleaning should be done using cleaning detergent, water, and friction, and it is intended to remove blood, body fluids, and other contaminants from objects and surfaces, notes Good.

Meanwhile, disinfection is a process that kills "many or all remaining infection-causing germs on clean objects and surfaces."

Remember to use an EPA-registered hospital disinfectant and follow the label's instructions for proper dilution. Also, wear gloves during the cleaning/disinfection process.

- Nurses or other staff treating patients must wear a separate gown with hep B patients.
- Staff caring for hep B patients shouldn't care for HBV-susceptible patients at the same time, including during the same shift or even during a patient changeover. (HBV-susceptible means anyone who has never been infected and lacks immunity to the hepatitis B virus, explains Good.)

Train staff on talking with surveyors

Ensure that nurses and other staff understand how to clean and disinfect the dialysis station, and that they know the procedures to prevent the spread of hepatitis B and other infections, says Good.

Among other things, according to the ESRD *CoPs*, you can expect CMS surveyors to ask the dialysis nurse:

- What the facility will do to prevent and control the spread of infections
- What the facility's policies and procedures are regarding hepatitis testing and control among patients and staff
- How the staff collects and disposes of waste, including needles
- When and where protective clothing is worn, and where the clothing is stored during breaks *

Special Article

Guidelines for Family-Centered Care in the Neonatal, Pediatric, and Adult ICU

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Endorsements: American Association of Critical-Care Nurses, American College of Chest Physicians, American Thoracic Society, British Association of Critical Care Nurses, European Society of Intensive Care Medicine, Institute for Patient- and Family-Centered Care, Pediatric Cardiac Intensive Care Society, Society of Critical Care Anesthesiologists, World Federation of Societies of Intensive and Critical Care Medicine.

The American College of Critical Care Medicine (ACCM), which honors individuals for their achievements and contributions to multidisciplinary critical care medicine, is the consultative body of the Society of Critical Care Medicine (SCCM) that possesses recognized expertise in the practice of critical care. The College has developed administrative guidelines and

Executive Summary of Recommendations

All recommendations in these guidelines are made from moderate, low, or very low quality evidence and constitute weak recommendations per GRADE methodology (23). When outcomes are listed at the conclusion of a recommendation, it is because these outcomes have been tested (whereas others may not have been). We note the lack of research addressing the use of multiple simultaneous interventions. Although it seems likely that some combination of the interventions may improve outcomes, there are currently no data on the additive or synergistic effects of combined interventions. Clinicians and institutions will need to make a judgment about which intervention or combination of interventions are likely to be most successful in specific circumstances. We also note that adverse effects have not been described for most of the interventions, but are possible. Statements as to adverse effects or risks for each PICO question are not repeated below; unless the intervention's specific adverse effects or risks were described. Recommendations apply to neonatal ICU (NICU), PICU, and adult ICUs unless otherwise specified. When specified, it is because the evidence was available in only one age category.

ICU Family-Centered Care Recommendations

We suggest the following:

1. Family presence in the ICU
   - 1.1. Family members of critically ill patients be offered open or flexible family presence at the bedside that meets their needs while providing support for staff and positive reinforcement for staff to work in partnership with families to improve family satisfaction. (2D)
   - 1.2. Family members of critically ill patients be offered the option of participating in interdisciplinary team rounds to improve satisfaction with communication and increase family engagement. (2C)
   - 1.3. Family members of critically ill patients be offered the option of being present during resuscitation efforts, with a staff member assigned to support the family. (2C)
2. Family support
   - 2.1. Family members of critically ill neonates be offered the option to be taught how to assist with the care of their critically ill neonate to improve parental confidence and competence in their caregiving role and improve parental psychological health during and after the ICU stay. (2B)
   - 2.2. Family education programs be included as part of clinical care as these programs have demonstrated beneficial effects for family members in the ICU by reducing anxiety, depression, post-traumatic stress, and generalized stress while improving family satisfaction with care. (2C)
   - 2.3. Peer-to-peer support be implemented in NICUs to improve family satisfaction, reduce parental stress, and reduce depression. (2D)
   - 2.4. ICUs provide family with leaflets that give information about the ICU setting to reduce family member anxiety and stress. (2B)
   - 2.5. ICU diaries be implemented in ICUs to reduce family member anxiety, depression, and post-traumatic stress. (2C)
   - 2.6. Validated decision support tools for family members be implemented in the ICU setting when relevant validated tools exist to optimize quality of communication, medical comprehension, and reduce family decisional conflict. (2D)
   - 2.7. Among surrogates of ICU patients who are deemed by a clinician to have a poor prognosis, clinicians use a communication approach, such as the "VALUE" mnemonic (Value family statements, Acknowledge emotions, Listen, Understand the patient as a person, Elicit Questions), during family conferences to facilitate clinician-family communication. (2C)
3. Communication with family members
   - 3.1. Routine interdisciplinary family conferences be used in the ICU to improve family satisfaction with communication and trust in clinicians and to reduce conflict between clinicians and family members. (2C)
   - 3.2. Healthcare clinicians in the ICU should use structured approaches to communication, such as that included in the "VALUE" mnemonic, when engaging in communication with family members, specifically including active listening, expressions of empathy, and making supportive statements around nonabandonment and decision making. In addition, we suggest that family members of critically ill patients who are dying be offered a written bereavement brochure to reduce family anxiety, depression, and post-traumatic stress and improve family satisfaction with communication. (2C)
   - 3.3. ICU clinicians receive family-centered communication training as one element of critical care training to improve clinician self-efficacy and family satisfaction. (2D)
4. Use of specific consultations and ICU team members
   - 4.1. Proactive palliative care consultation be provided to decrease ICU and hospital length of stay (LOS) among selected critically ill patients (e.g., advanced dementia, global cerebral ischemia after cardiac arrest, patients with prolonged ICU stay, and patients with subarachnoid hemorrhage [SAH] requiring mechanical ventilation). (2C)
   - 4.2. Ethics consultation be provided to decrease ICU and hospital LOS among critically ill patients for whom there is a value-related conflict between clinicians and family. (2C)
   - 4.3. A psychologist's intervention be provided to specifically incorporate a multimodal cognitive behavioral technique (CBT)-based approach to improve outcomes in mothers of preterm babies admitted to the NICU; furthermore, targeted video and reading materials be provided in the context of psychological support to mothers of preterm babies admitted to the ICU. (2D)

Special Article

ICU Admission, Discharge, and Triage Guidelines: A Framework to Enhance Clinical Operations, Development of Institutional Policies, and Further Research

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The American College of Critical Care Medicine (ACCM), which honors individuals for their achievements and contributions to multidisciplinary critical care medicine, is the consultative body of the Society of Critical Care Medicine (SCCM) that possesses recognized expertise in the practice of critical care. The College has developed administrative guidelines and clinical practice parameters for the critical care practitioner. New guidelines and practice parameters are continually developed, and current ones are systematically reviewed and revised.

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Objectives: To update the Society of Critical Care Medicine's guidelines for ICU admission, discharge, and triage, providing a framework for clinical practice, the development of institutional policies, and further research.

Design: An appointed Task Force followed a standard, systematic, and evidence-based approach in reviewing the literature to develop these guidelines.

Measurements and Main Results: The assessment of the evidence and recommendations was based on the principles of the Grading

that do not fit into one of the specialty ICUs. However, the complexities of critical care make it difficult to conclusively demonstrate efficacy for specialization (63). Studies have suggested that the organization and management of an ICU may have more of an effect on outcomes (64, 65). ICU specialization is likely motivated by physician convenience and the pooling of clinical resources around specialty departments to improve efficiency (66). Although some studies have shown the benefit of specialization of ICUs for certain fields, the literature does not support a survival benefit for specialized over general ICU care in the case of common admitting diagnoses such as acute coronary syndrome, ischemic stroke, intracranial hemorrhage, pneumonia, abdominal surgery, or coronary artery bypass graft surgery. Admission to a specialized ICU of a patient with a primary diagnosis not associated with that specialty (i.e., "boarding") is associated with increased risk-adjusted mortality (66).

Although there are notable limitations in published studies, cumulative evidence suggests that neurocritical care unit patients show improved outcomes when compared with the treatment in a general ICU, especially for intracerebral hemorrhage and head injury (67–70). Neuro-ICU patients were reported to undergo more invasive intracranial and hemodynamic monitoring, continuous electroencephalogram monitoring, tracheostomy, and nutritional support as well as to receive less IV sedation compared with general ICU patients, possibly explaining the observed differences in outcome between neurocritical care and general ICUs (68, 69).

Modern trauma care has also become highly specialized for the critically ill patient with multiple-system injuries. Despite the development of surgical trauma ICUs, little information currently exists to compare outcomes with general ICUs. Most patients admitted to a trauma ICU appear to be sicker and more severely injured than general-ICU patients, making accurate comparisons and retrospective studies difficult (71).

Different Staffing Models.
Recommendations:

- We recommend a high-intensity ICU model, characterized by the intensivist being responsible for day-to-day management of the patient, either in a "closed ICU" setting (in which the intensivist serves as the primary physician) or through a hospital protocol for mandatory intensivist consultation (grade 1B).
- We do not recommend a 24-hour/7-day intensivist model if the ICU has a high-intensity staffing model (as described above) during the day or night (grade 1A).
- We suggest optimizing ICU nursing resources and nursing ratios, taking into consideration available nursing resources (e.g., levels of education, support personnel, specific workloads), patients' needs, and patients' medical complexity (grade 2D).
- Because of current constraints on the availability and cost of 24-hour intensivist coverage, further studies are needed to address the efficacy of coverage with critical care–trained advanced practice providers, including nurse practitioners and physician assistants, and critical care telemedicine (ungraded).

This section will assess staffing models in regard to intensity of ICU physician participation in treatment of the critically ill patient, both in terms of low- and high-intensity ICU models and 24-hour intensivist care. The high-intensity model is characterized by the intensivist being responsible for day-to-day management of the patient, either in a closed ICU setting or through a hospital protocol for mandatory intensivist consultation. A low-intensity model involves elective intensivist consultation, either in an "open ICU" setting (in which patient management is mainly by another primary physician) or because there is no intensivist available. The superiority of closed ICU and high-intensity staffing in improving the outcomes of critically ill patients is supported by an abundant amount of evidence, as well as recommendations from the Leapfrog Group and the American College of Critical Care Medicine (72–79). Results of the latest systematic review and meta-analysis of ICU physician staffing models (80) further support the high-intensity staffing model. The authors showed that when compared with low-intensity staffing, the high-intensity model was associated with lower hospital mortality (pooled RR, 0.83; 95% CI, 0.70–0.99) and lower ICU mortality (pooled RR, 0.81; 95% CI, 0.68–0.96).

Our assessment of the literature reveals that the greater use of intensivists in the ICU led to significant reductions in ICU and hospital mortality and LOS. Although most of the studies were observational, these findings were consistent across a variety of populations and hospital settings. These improved outcomes were not only limited to medical ICUs but also included neurological and surgical ICUs and oncologic patient populations (81–85). Patients receiving care under the high-intensity intensivist staffing model were more likely to receive evidence-based care, including prophylaxis for deep vein thrombosis, stress ulcer prophylaxis, and spontaneous breathing trials (86). Interestingly, one study showed a higher mortality rate with the use of a high-intensity staffing model, but it was limited to patients with low severity of illness, suggesting that patients who are not critically ill may be exposed to unnecessary risk in the ICU (74, 87).

The literature supporting the need for 24-hour/7-day intensivist coverage of the ICU is not as abundant and presents several controversial issues. Although continuous 24-hour onsite critical care specialist coverage of an ICU has benefits in improved processes of care, increased staff and family satisfaction, decreased complication rate, and shorter hospital LOS, the evidence on improving patient mortality is weaker (88–90). In a retrospective study of 49 ICUs, the mortality rate improved with nighttime coverage of the ICU only when a low-intensity daytime staffing model was used (90). Although there was no difference in mortality in comparison with partial-day high-intensity coverage, 24-hour intensivist coverage was associated with improved compliance with evidence-based processes of

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Preventing Transmission of Multidrug-Resistant Pathogens in the Intensive Care Unit

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Keywords

Intensive care unit; Infection control; Transmission; Drug resistance

INTRODUCTION

Intensive care unit (ICU) beds in the United States are increasing as a proportion of all hospital beds, reflecting increasing need for critical care, particularly among neonates and the elderly.[1] Although nosocomial infections complicate 4% of overall hospital admissions,[2] 9% to 20% of critically ill patients develop infections while in the ICU.[2–4] Nearly half of all health care–associated infections that occur in hospitals are attributable to the ICU.[2] At the same time, the proportion of nosocomial infections caused by multidrug-resistant organisms is increasing, limiting treatment options and increasing length of stay, mortality, and cost.[5] Increasing use of critical care resources and high risk of nosocomial infection in the context of increasing antimicrobial resistance make infection prevention a leading priority in the ICU.

Guidelines from the Centers for Disease Control and Prevention (CDC) from 2006,[6] and the Society for Hospital Epidemiology of America from 2003,[7] provide infection control guidance to prevent the spread of multidrug-resistant pathogens. This article examines more recent evidence for methods of preventing the transmission of multidrug-resistant pathogens in the ICU.

Importance of Preventing Transmission of Resistant Organisms

ICU patients are highly vulnerable to nosocomial infection because of invasive devices, immune compromise caused by underlying diseases or medications, poor nutritional states, uncontrolled hyperglycemia, and sepsis, which can lead to a paradoxical immune suppression.[8] Multidrug-resistant pathogens represent a substantial proportion of nosocomial infections in the ICU, including 10% to 16% of US device-related infections.[9] Infection with multidrug-resistant organisms causes significant mortality in hospitalized

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patients. Approximately 23,000 persons in the United States die each year from these organisms, most of which are acquired in health care settings.[10] Nosocomial bloodstream infections with resistant gram-negative organisms can have mortality as high as 80% to 85%.[11,12]

In addition to host susceptibility, the logistics and complexity of critical care medicine put patients at risk of acquiring nosocomial organisms. Invasive procedures and indwelling devices, often essential to providing supportive care to critically ill patients, serve as portals of entry for pathogens. Lifesaving critical care treatment requires the concurrent contributions of many health care team members and the use of many patient care devices, potentially posing additive risk of transmission from personnel or fomites. Infection control precautions may not be the predominant priority in situations in which seconds matter, such as resuscitating patients suffering trauma, sepsis, cardiac arrest, and other emergencies. Antimicrobial use may select out resistant strains that are potentially transmissible from patient to patient.

Transmission of Resistant Organisms in the Intensive Care Unit

Bacterial pathogens of epidemiologic concern in the ICU tend to inhabit specific sites on or in the human body, or in the hospital environment, that serve as reservoirs for transmission. The reservoirs of resistant organisms include niches in the human microbiome. The microbiota of skin, respiratory epithelium, and the gastrointestinal tract are altered within a few days in the hospital. Patients' flora can be deranged by antibiotics, chemotherapy, or acquisition of nosocomial organisms, among other sources. Patients who are colonized with resistant bacteria serve inadvertently as potential reservoirs for transmission. Colonization pressure, or the proportion of patients in a given unit who are colonized with resistant bacteria, is an independent risk factor for transmission.[13,14] Resistant organisms are generally thought to be transmitted from person to person via the hands of health care personnel, or from contaminated patient care equipment or contaminated surfaces in the health care environment. Antimicrobial stewardship, hand hygiene, and proper disinfection of equipment and hospital surfaces are thus important means of preventing spread.

Hospitals should have policies and procedures in place that outline clear infection control guidelines, along with contingency procedures for special situations. ICU staff must receive periodic training and education in infection control, which should be informed by data on infection rates, hand hygiene rates, and other relevant outcome measures. In addition, compliance with infection control procedures requires adequate staffing, infrastructure (such as handwashing sinks), and supplies (such as gloves, masks, and alcohol-based hand gel).

ANTIMICROBIAL STEWARDSHIP

Antimicrobial stewardship has an important and distinct role to play in the ICU, and has been shown to improve the treatment of critically ill patients and reduce antimicrobial resistance.[15,16] The goals of antimicrobial stewardship are to improve the quality of care and avert adverse outcomes, including antimicrobial resistance, by optimizing dosing and selection of drugs, along with reducing duration of therapy.[17] Intensivists face a challenge of balancing the need to administer broad antibiotic coverage for the immediate welfare of

PULMONARY PERSPECTIVE

The Role of Stepdown Beds in Hospital Care

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Abstract

Stepdown beds provide an intermediate level of care for patients with requirements somewhere between that of the general ward and the intensive care unit. Models of care include incorporation of stepdown beds into intensive care units, stand-alone units, or incorporation of beds into standard wards. Stepdown beds may be used to provide a higher level of care for patients deteriorating on a ward ("step-up"), a lower level of care for patients transitioning out of intensive care ("stepdown") or a lateral transfer of care from a recovery room for postoperative patients. These units are one possible strategy to improve critical care cost-effectiveness and patient flow without compromising quality, but these potential benefits remain primarily theoretical as few patient-level studies provide concrete evidence. This narrative review provides a general overview of the theory of stepdown beds in the care of hospitalized patients and a summary of what is known about their impact on patient flow and outcomes and highlights areas for future research.

Keywords: critical care; intermediate care; intensive care unit; continuity of patient care

Improvements in healthcare have contributed to longer life expectancy in developed countries. But with an escalation in healthcare delivery, the demands and costs of healthcare have risen dramatically. Intensive care provision contributes to these costs: from 2000 to 2005 in the United States, the number of critical care beds increased more than 6.5%, and critical care spending is now estimated to account for almost 1% of the Gross Domestic Product (1). The increasing availability of intensive care unit (ICU) beds is costly, but the alternative option of foregoing this expansion raises the concern of potential delays in admission of patients from wards and emergency departments (EDs) (2) and in elective surgery (3). In 2005 the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) approved a new standard calling on U.S. hospital leadership to implement plans that identify and mitigate barriers to efficient patient flow across the continuum of care (4). Stepdown beds, also referred to as intermediate care beds or high-dependency beds, are one possible approach to providing higher levels of care while improving the efficiency of patient flow. The concept of a stepdown unit (SDU) is not a new one: in 1995 a study of 40 U.S. hospitals reported that 63% had at least one such unit (5), and the number of respiratory SDUs in Italy nearly doubled from 1997 to 2007 (6). Yet SDUs and their role in hospital care receive little focus.

Definition of a Stepdown Unit Bed

Gotsman and Schrire introduced the concept of SDUs in 1968. They proposed a patient-care area with specialized monitoring and nursing care for cardiac patients no longer requiring full intensive care but not ready for discharge to a regular ward (7). Since then, terminology and definitions of SDU beds remain diverse (Table 1) (5, 8–14), although implicit is the provision of a level of care that is intermediate between what is available in a ward bed and in an intensive care bed. Two themes emerge from attempts to define an SDU bed: (1) the nurse to patient ratio for these beds, and (2) the ability to provide specific organ support.

In England, patient care is stratified into levels ranging from 0 (general ward care) to 3 (full intensive care). In this system, level 2 corresponds to SDU care and is defined as: "Patients requiring more detailed observation or intervention including support for a single failing organ system or post-operative care and those 'stepping down' from higher levels of care" (14). The definition also explicitly excludes respiratory support in the form of invasive mechanical ventilation and states that this is only available in level 3 (full intensive care).

In the United States, critical care has remained more heterogeneous and

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Table 1. Examples of Terms and Definitions for Stepdown Units

Reference	Term	Definition	Country
Nguyen *et al.*, 2010 (8)	Stepdown unit	"... to allow for the care of patients who do not require full intensive care but cannot be safely cared for on a normal ward. These patient requirements may include (but are not limited to) specific organ support, nursing needs, vital sign monitoring, or ventilator weaning."	Nonspecific
McIlroy *et al.*, 2006 (9)	High dependency care unit	"... provides the capability for all the invasive monitoring of ICU but without the provision of mechanical ventilation. With a nursing ratio that is typically 1:2, HDU is believed to be a lower cost alternative to ICU in critically ill patients who do not require mechanical ventilation."	Australia
Keenan *et al.*, 1998 (10)	Transitional care unit	"... units were developed to provide varying levels of noninvasive monitoring with or without the capability to ventilate patients ... [patients] require a lower nurse:patient ratio and may require fewer investigations when compared to patients in ICUs."	Canada
Ambrosino *et al.*, 2010 (11)	Respiratory intermediate unit	"Respiratory intermediate care units (RICUs) within acute care hospitals manage patients with ARF or ACRF with noninvasive ventilation ... may also provide multidisciplinary rehabilitation and serve as a bridge to home care programs or long-term care facilities ... may work also as 'step-down' units for difficult-to-wean patients ..."	Italy
Comprehensive Critical Care, 2000 (14)	Level 2 care	"Patients requiring more detailed observation or intervention including support for a single failing organ system or post-operative care and those 'stepping down' from higher levels of care."	UK
American Association of Critical-Care Nurses Progressive Care Task Force (12)	Progressive care unit	"... patients whose needs fall along the less acute end of [the patient care] continuum ... moderately stable with less complexity, require moderate resources and require intermittent nursing vigilance or are stable with a high potential for becoming unstable and require increased intensity of care and vigilance."	United States
Nasraway *et al.*, 1998 (13)	Intermediate care unit	"... does not require intensive care but needs more care than that provided on a general ward. These patients may require frequent monitoring of vital signs and/or nursing interventions, but usually do not require invasive monitoring."	United States
Zimmerman *et al.*, 1995 (5)	Intermediate care unit	"... patients who received only monitoring and floor care services ... and were at such low risk of receiving active life-supporting treatment that routine ICU admission might not be necessary."	United States

Definition of abbreviations: ACRF = acute on chronic respiratory failure; ARF = acute respiratory failure; HDU = high-density care unit; ICU = intensive care unit.