ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD
APPLICATION FOR PERMIT

SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION

RECEIVED
JAN 31 2020
HEALTH FACILITIES & SERVICES REVIEW BOARD

This Section must be completed for all projects.

Facility/Project Identification

Facility Name:	Northwestern Memorial Hospital		
Street Address:	251 East Huron Street		
City and Zip Code:	Chicago, Illinois 60611		
County:	Cook	Health Service Area: 6	Health Planning Area: A-01

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

Exact Legal Name:	Northwestern Memorial Hospital
Street Address:	251 East Huron Street
City and Zip Code:	Chicago, Illinois 60611
Name of Registered Agent:	Danae Prousis
Registered Agent Street Address:	211 East Ontario Street Suite 1800
Registered Agent City and Zip Code:	Chicago, IL 60611
Name of Chief Executive Officer:	Dean M. Harrison
CEO Street Address:	251 East Huron Street
CEO City and Zip Code:	Chicago, Illinois 60611
CEO Telephone Number:	312-926-3007

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:	Bridget Orth
Title:	Director, Regulatory Planning
Company Name:	Northwestern Memorial HealthCare
Address:	211 East Ontario Street Suite 1750
Telephone Number:	312-926-8650
E-mail Address:	borth@nm.org
Fax Number:	312-926-0373

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

Name:	Rob Christie
Title:	SVP, External Affairs, NMHC
Company Name:	Northwestern Memorial HealthCare
Address:	211 East Ontario Street Suite 1750
Telephone Number:	312-926-7527
E-mail Address:	robert.christie@nm.org
Fax Number:	312-926-0373

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Post Permit Contact

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

Name:	Bridget Orth
Title:	Director, Regulatory Planning
Company Name:	Northwestern Memorial HealthCare
Address:	211 East Ontario Street Suite 1750
Telephone Number:	312-926-8650
E-mail Address:	borth@nm.org
Fax Number:	312-926-0373

Site Ownership

[Provide this information for each applicable site]

Exact Legal Name of Site Owner: Northwestern Memorial Hospital

Address of Site Owner: 251 East Huron Street, Chicago, Illinois 60611

Street Address or Legal Description of the Site:

Proof of ownership or control of the site is to be provided as Attachment 2. Examples of proof of ownership 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: Northwestern Memorial Hospital

Address: 251 East Huron Street, Chicago, Illinois 60611

- ☒ 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.

Northwestern Memorial Hospital (NMH) proposes to increase medical/surgical and ICU capacity in the Galter Pavilion in downtown Chicago. One 24-bed ICU unit is proposed for the 11th floor. One medical/surgical unit is proposed for the 12th floor with 28 inpatient beds and 12 observation beds. Also part of this project is a 3-story building connector from the Feinberg Pavilion to the Galter Pavilion on the 10th, 11th, and 12th floors. Because of the required placement of the connectors, one medical/surgical bed on each of the three floors in Feinberg and one observation bed on the 10th floor in Feinberg will be lost, therefore resulting in a net addition of 25 medical/surgical beds and 11 observation beds.

Because the floors in the Galter Pavilion were originally designed/constructed as business occupancy and had been used as physicians' offices, there is significant infrastructure work that must be performed to convert the proposed floors to institutional occupancy. For that reason, the project should be considered "new construction".

The project will have the following impact on NMH's bed count:

Increase the number of medical/surgical beds – currently, 422 medical/surgical beds are located in the Feinberg/Galter Pavilion. Additionally, there are 108 medical/surgical beds in Prentice Women's Hospital for Hematology/Oncology and Women's Health for a total of 530 beds on campus. This project proposes to add 28 medical/surgical beds in the Galter Pavilion but will reduce the number of medical/surgical beds in the Feinberg Pavilion by 3 due to the connectors for a total of 555 beds.

Increase the number of ICU beds – currently, there are 91 ICU beds in the Feinberg Pavilion and 24 ICU beds in the Galter Pavilion for a total of 115 ICU beds on campus. This project proposes to add 24 ICU beds in the Galter Pavilion for a total of 139 beds.

The anticipated project closeout is December, 2022.

Total cost of the project is $77,607,985.

Location of the project is in the Galter Pavilion, 251 East Huron Street, which is on the campus of Northwestern Memorial Hospital in downtown Chicago.

The project is classified as substantive pursuant to Section 1110.40 because it increases the number of beds by more than 20 beds.

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	$ 153,434	$ 123,983	$ 277,417
Site Survey and Soil Investigation			
Site Preparation	$ 1,188,035	$ 959,992	$ 2,148,027
Off Site Work			
New Construction Contracts	$ 21,671,762	$ 17,512,225	$ 39,183,987
Modernization Contracts			
Contingencies	$ 2,167,176	$ 1,751,223	$ 3,918,399
Architectural/Engineering Fees	$ 1,851,354	$ 1,030,886	$ 2,882,240
Consulting and Other Fees	$ 2,843,885	$ 1,583,555	$ 4,427,440
Movable or Other Equipment (not in construction contracts)	$ 17,279,700	$ 5,059,407	$ 22,339,107
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	$ 1,344,746	$ 1,086,622	$ 2,431,368
Acquisition of Building or Other Property (excluding land)			
TOTAL USES OF FUNDS	**$ 48,500,091**	**$ 29,107,893**	**$ 77,607,985**
SOURCE OF FUNDS	**CLINICAL**	**NONCLINICAL**	**TOTAL**
Cash and Securities	$ 48,500,091	$ 29,107,893	$ 77,607,985
Pledges			
Gifts and Bequests			
Bond Issues (project related)			
Mortgages			
Leases (fair market value)			
Governmental Appropriations			
Grants			
Other Funds and Sources			
TOTAL SOURCES OF FUNDS	**$ 48,500,091**	**$ 29,107,893**	**$ 77,607,985**

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: $___N/A_____
Fair Market Value: $___N/A_____

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 $ __N/A_____.

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): __December, 2022_____

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: Northwestern Memorial Hospital	**CITY: Chicago**				
REPORTING PERIOD DATES: CY18	**From: 1/1/18**		**to: 12/31/18**		
Category of Service	**Authorized Beds**	**Admissions**	**Patient Days**	**Bed Changes**	**Proposed Beds**
Medical/Surgical	530	25,881	161,749	+25	555
Obstetrics	134	12,311	32,454	0	134
Pediatrics	0	0	0	0	0
Intensive Care	115	7,248	29,429	+24	139
Comprehensive Physical Rehabilitation	0	0	0	0	0
Acute/Chronic Mental Illness	29	1,272	11,467	0	29
Neonatal Intensive Care	86	1,473	17,267	0	86
General Long Term Care	0	0	0	0	0
Specialized Long Term Care	0	0	0	0	0
Long Term Acute Care	0	00	0	0	0
Other ((identify)	0	0	0	0	0
TOTALS:	894	46,146	252,366	+49	943

CERTIFICATION

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

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

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

Julie L Creamer
SIGNATURE

Julie L. Creamer
PRINTED NAME

SVP, NMHC & President, NMH
PRINTED TITLE

Notarization:
Subscribed and sworn to before me
this 30th day of January 2020

Millisa Vasich
Signature of Notary

Seal

MILLISA VASICH
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
March 05, 2022

Millisa Vasich
01-30-2020

Howard B Chrisman
SIGNATURE

Howard B. Chrisman, M.D.
PRINTED NAME

SVP, NMHC & President, NMG
PRINTED TITLE

Notarization:
Subscribed and sworn to before me
this 30th day of January 2020

Millisa Vasich
Signature of Notary

Seal

MILLISA VASICH
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
March 05, 2022

Millisa Vasich
01-30-2020

*Insert the EXACT legal name of the applicant

CERTIFICATION

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- in the case of estates and trusts, two of its beneficiaries (or the sole beneficiary when two or more beneficiaries do not exist); and
- in the case of a sole proprietor, the individual that is the proprietor.

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

SIGNATURE

Dean M. Harrison
PRINTED NAME

President & CEO, NMHC
PRINTED TITLE

Notarization:
Subscribed and sworn to before me
this 30th day of January 2020 (2020) MV

Signature of Notary

Seal

MILLISA VASICH
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
March 05, 2022

01-30-2020

SIGNATURE

John A. Orsini JOHN A. ORSINI
PRINTED NAME

SVP & CFO, NMHC SVP + CFO
PRINTED TITLE

Notarization:
Subscribed and sworn to before me
this 30th day of January 2020 (2020) MV

Signature of Notary

Seal

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01-30 2020

*Insert the 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.

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.

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**	**530**	**555**
☐ **Obstetric**		
☐ **Pediatric**		
☒ **Intensive Care**	**115**	**139**

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

APPLICABLE REVIEW CRITERIA	Establish	Expand	Modernize
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.

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 projects 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 39.

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

File Number 5008-768-9

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

NORTHWESTERN MEMORIAL HOSPITAL, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON SEPTEMBER 01, 1972, 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* 5TH *day of* DECEMBER *A.D.* 2019 .

Authentication #: 1933903330 verifiable until 12/05/2020
Authenticate at: http://www.cyberdriveillinois.com

Jesse White

SECRETARY OF STATE

ATTACHMENT-1

File Number 5257-740-3

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

NORTHWESTERN MEMORIAL HEALTHCARE, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON NOVEMBER 30, 1981, 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* 5TH *day of* DECEMBER *A.D.* 2019 .

Jesse White

SECRETARY OF STATE

Authentication #: 1933903286 verifiable until 12/05/2020
Authenticate at: http://www.cyberdriveillinois.com

ATTACHMENT-1

COMMITMENT FOR TITLE INSURANCE

Chicago Title Insurance Company

CHICAGO TITLE INSURANCE COMPANY, a Florida corporation, herein called the Company, for valuable consideration, commits to issue its policy or policies of title insurance, as identified in Schedule A, in favor of the Proposed Insured named in Schedule A, as owner or mortgagee of the estate or interest in the Land described or referred to in Schedule A, upon payment of the premiums and charges and compliance with the Requirements; all subject to the provisions of Schedule A and B and to the Conditions of this Commitment.

This Commitment shall be effective only when the identity of the Proposed Insured and the amount of the policy or policies committed for have been inserted in Schedule A by the Company.

All liability and obligation under this Commitment shall cease and terminate 6 months after the Effective Date or when the policy or policies committed for shall issue, whichever first occurs, provided that the failure to issue the policy or policies is not the fault of the Company.

The Company will provide a sample of the policy form upon request.

IN WITNESS WHEREOF, Chicago Title Insurance Company has caused its corporate name and seal to be affixed by its duly authorized officers on the date shown in Schedule A.

CHICAGO TITLE INSURANCE COMPANY

By

Authorized Signatory

Issued By:

CHICAGO TITLE INSURANCE COMPANY
10 S. LASALLE ST. 3100
CHICAGO, IL 60603

Refer Inquiries To:
(312)223-4627

CHICAGO TITLE INSURANCE COMPANY CORPORATE SEAL

Commitment No.: 1401 008986177 D2

CHICAGO TITLE INSURANCE COMPANY

COMMITMENT FOR TITLE INSURANCE

SCHEDULE A

YOUR REFERENCE: FEINBERG/GALTER/PRENTICE ORDER NO.: 1401 008986177 D2

EFFECTIVE DATE: OCTOBER 31, 2017

1. **POLICY OR POLICIES TO BE ISSUED:**

OWNER'S POLICY:	ALTA OWNERS 2006
AMOUNT:	$10,000.00
PROPOSED INSURED:	NORTHWESTERN MEMORIAL HOSPITAL, AN ILLINOIS NOT-FOR-PROFIT CORPORATION, OR THEIR NOMINEE

2. **THE ESTATE OR INTEREST IN THE LAND DESCRIBED OR REFERRED TO IN THIS COMMITMENT IS FEE SIMPLE, UNLESS OTHERWISE NOTED.**

3. **TITLE TO THE ESTATE OR INTEREST IN THE LAND IS AT THE EFFECTIVE DATE VESTED IN:**
NORTHWESTERN MEMORIAL HOSPITAL, AN ILLINOIS NOT-FOR-PROFIT CORPORATION

CHICAGO TITLE INSURANCE COMPANY

COMMITMENT FOR TITLE INSURANCE

SCHEDULE A (CONTINUED)

ORDER NO.: 1401 008986177 D2

4A. LOAN POLICY 1 MORTGAGE OR TRUST DEED TO BE INSURED:

NONE

4B. LOAN POLICY 2 MORTGAGE OR TRUST DEED TO BE INSURED:

NONE

CHICAGO TITLE INSURANCE COMPANY

COMMITMENT FOR TITLE INSURANCE
SCHEDULE A (CONTINUED)

ORDER NO.: 1401 008986177 D2

5. THE LAND REFERRED TO IN THIS COMMITMENT IS DESCRIBED AS FOLLOWS:

PARCEL 1:

LOTS 1 TO 24 IN THE SUBDIVISION OF LOT A IN NEWBERRY'S SUBDIVISION OF BLOCK 43 IN KINZIE'S ADDITION TO CHICAGO IN THE NORTH 1/2 OF SECTION 10, TOWNSHIP 39 NORTH, RANGE 14, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS

PARCEL 2:

LOTS 1 TO 24 INCLUSIVE IN NEWBERRY ESTATE SUBDIVISION OF BLOCK 43 IN KINZIE'S ADDITION TO CHICAGO IN SECTION 10, TOWNSHIP 39 NORTH, RANGE 14 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS

PARCEL 3:

THE EAST AND WEST VACATED ALLEY LYING BETWEEN PARCELS 1 AND 2 AFORESAID;

PARCEL 4:

EASEMENT IN FAVOR OF PARCELS 1, 2 AND 3 FOR STRUCTURAL MEMBERS, COLUMNS, BEAMS AND OTHER SUPPORTING COMPONENTS; PEDESTRIAN INGRESS AND EGRESS FOR THOSE SERVICES TO BE PROVIDED BY NORTHWESTERN MEDICAL FACULTY FOUNDATION, INC. AND FOR TRANSPORTATION OF EQUIPMENT, MATERIAL AND SUPPLIES; INGRESS AND EGRESS AND TO TRANSPORT EQUIPMENT, MATERIAL AND SUPPLIES; THE RIGHT TO INSTALL, USE, REMOVE AND REPLACE FACILITIES WHICH SERVICE THE AMBULATORY CARE CENTER; MAINTENANCE OF ENCROACHMENTS AND GENERAL INGRESS AND EGRESS, AS CREATED BY EASEMENT AND OPERATING AGREEMENT RECORDED FEBRUARY 22, 1995 AS DOCUMENT 95124055 OVER THE FOLLOWING DESCRIBED REAL ESTATE:

THAT PART OF THE PROPERTY AND SPACE LYING ABOVE A HORIZONTAL PLANE HAVING AN ELEVATION OF 229.58 FEET ABOVE CHICAGO CITY DATUM AND BELOW A HORIZONTAL PLANE HAVING AN ELEVATION OF 346.06 FEET ABOVE CHICAGO CITY DATUM, EXCEPTING THEREFROM THAT PART LYING ABOVE A HORIZONTAL PLANE HAVING AN ELEVATION OF 257.06 FEET ABOVE CHICAGO CITY DATUM AND BELOW A HORIZONTAL PLANE 278.06 FEET ABOVE CHICAGO CITY DATUM, AND LYING WITHIN THE BOUNDARIES, PROJECTED VERTICALLY, OF A PARCEL OF LAND COMPRISED OF PARTS OF LOTS 1 AND 8, AND ALL OF LOTS 2 THROUGH 7 INCLUSIVE, IN THE SUBDIVISION OF LOT A IN NEWBERRY'S SUBDIVISION OF BLOCK 43 IN KINZIE'S ADDITION TO CHICAGO IN THE NORTH HALF OF SECTION 10, TOWNSHIP 39 NORTH, RANGE 14, EAST OF THE THIRD PRINCIPAL MERIDIAN, AND PARTS OF LOTS 1 AND 8, AND ALL LOTS 2 THROUGH 7 INCLUSIVE, IN NEWBERRY ESTATE SUBDIVISION OF BLOCK 43 IN KINZIE'S ADDITION TO CHICAGO IN SECTION 10, TOWNSHIP 39 NORTH, RANGE 14, EAST OF THE THIRD PRINCIPAL MERIDIAN, TOGETHER WITH A PART OF THE EAST AND WEST 18 FOOT WIDE ALLEY (VACATED BY ORDINANCE PASSED MAY 25, 1950 AND RECORDED JUNE 15, 1950 AS DOCUMENT NUMBER 14827730) LYING BETWEEN AND ADJOINING THE AFORESAID SUBDIVISIONS, SAID PARCEL OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

CONTINUED ON NEXT PAGE

CHICAGO TITLE INSURANCE COMPANY

COMMITMENT FOR TITLE INSURANCE

SCHEDULE A (CONTINUED)

ORDER NO.: 1401 008986177 D2

5. THE LAND REFERRED TO IN THIS COMMITMENT IS DESCRIBED AS FOLLOWS (CONTINUED):

BEGINNING AT A POINT ON THE NORTH LINE OF BLOCK 43, AND THE SOUTH LINE OF EAST HURON STREET, WHICH IS 14.76 FEET EAST FROM THE NORTHWEST CORNER OF SAID BLOCK; THENCE EAST ALONG SAID NORTH LINE (BEING ALSO THE SOUTH LINE OF EAST HURON STREET), A DISTANCE OF 184.67 FEET TO A POINT; THENCE SOUTH ALONG A LINE DRAWN PARALLEL WITH, AND 199.43 FEET EAST FROM THE WEST LINE OF SAID BLOCK, A DISTANCE OF 218.31 FEET TO A POINT ON THE SOUTH LINE OF SAID BLOCK 43; THENCE WEST ALONG SAID SOUTH LINE OF BLOCK 43 (BEING ALSO THE NORTH LINE OF EAST ERIE STREET), A DISTANCE OF 184.67 FEET TO A POINT 14.76 FEET EAST FROM THE WEST LINE OF SAID BLOCK; THENCE NORTH ALONG A LINE DRAWN 14.76 FEET EAST FROM AND PARALLEL WITH SAID WEST LINE OF BLOCK 43, A DISTANCE OF 218.27 FEET TO THE POINT OF BEGINNING; IN COOK COUNTY, ILLINOIS.

PARCEL 5:

(5A):

THAT PART OF THE SOUTH 41 FEET OF LOT 1 (THE NORTH 16 FEET THEREOF BEING ON THE EAST AND WEST VACATED ALLEY) AND THAT PART OF LOT 2 LYING WEST OF THE WEST LINE OF FAIRBANKS COURT IN THE COUNTY CLERK'S DIVISION OF THE UNSUBDIVIDED ACCRETIONS LYING EAST OF AND ADJOINING THE SUBDIVIDED PARTS OF BLOCKS 43, 44, AND 54, INCLUDING LOT 19 IN THE SOUTH PART OF SAID BLOCK 54 AND LOT 'A' IN THE NORTH PART OF SAID BLOCK 54 AND LOT 'A' IN THE NORTH PART OF SAID BLOCK 44 AND ACCRETIONS TO SUPERIOR AND HURON STREETS AND THEALLEYS IN SAID BLOCKS 43 AND 44 IN KINZIE'S ADDITION TO CHICAGO, IN COOK COUNTY, ILLINOIS.

(5B)

THAT PART OF LOT 1 LYING WEST OF THE WEST LINE OF FAIRBANKS COURT (EXCEPT THE EAST AND WEST 16 FEET VACATED ALLEY AND EXCEPT THAT PART LYING SOUTH OF SAID VACATED ALLEY) IN THE COUNTY CLERK'S DIVISION OF THE UNSUBDIVIDED ACCRETIONS LYING EAST OF AND ADJOINING THE SUDDIVIDED PART OF BLOCKS 43, 44 AND 54, INCLUDING LOT 19 IN THE SOUTH PART OF SAID BLOCK 54 AND LOT 'A' IN THE NORTH PART OF SAID BLOCK 54 AND LOT 'A' IN THE NORTH PART OF SAID BLOCK 44 AND ACCRETIONS TO SUPERIOR AND HURON STREETS AND THE ALLEY IN BLOCKS 43 AND 44 ALL IN KINZIE'S ADDITION TO CHICAGO

Northwestern Memorial HealthCare
Central DuPage Hospital Association (NP)
Delnor-Community Hospital (NP)
Mananoy Rehabilitation Hospital & Clinics, Inc. (NP)
Northwestern Lake Forest Hospital (NP)
Northwestern Memorial Hospital (NP)
Northwestern Medical Faculty Foundation (NP)
Central DuPage Physician Group (NP)
Rehabilitation Medicine Clinic, Inc. (NP)
Northwestern Medicine Physician Network LLC (Disregarded)
Kishwaukee Health System (NP)
Northwestern Memorial Foundation (NP)
Northwestern Medicine Insurance Company, LLC (Disregarded)
Northwestern Medicine Holdings Company (FP)
Community Nursing Service of DuPage County (NP)
Central DuPage Special Health Association (NP)
PAHCS II (NP)
Centegra Health System (NP)
Subsidiary NMHC is Sole Member
Subsidiary wholly-owned and/or controlled
Joint Venture with other members
Effective September 1, 2019

Flood Plain Requirements

The location for the proposed project is 251 East Huron Street in Chicago.

By their signatures on the Certification pages of this application, the Applicants attest that the project is not located in a flood plain and complies with the Flood Plain Rule under Illinois Executive Order #2006-5.

MAP SCALE 1" = 500'
0
500
1000
FEET
METE
NFIP
NATIONAL FLOOD INSURANCE PROGRAM
PANEL 0438J
FIRM
FLOOD INSURANCE RATE MAP
COOK COUNTY,
ILLINOIS
AND INCORPORATED AREAS
PANEL 438 OF 832
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
CHICAGO, CITY OF 170074 0438 J
COOK COUNTY 170054 0438 J
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.
MAP NUMBER
17031C0438J
MAP REVISED
AUGUST 19, 2008
Federal Emergency Management Agency
This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.mac.fema.gov
COOK COUNTY
CITY OF CHICAGO
City of Chicago
170074
ZONE X
ME 153
E CHICAGO AVE
E SUPERIOR ST
E HURON ST
E ERIE ST
E ONTARIO ST
E GRAND AVE
E ILLINOIS ST
N NEW ST
N PARK ST
N COLUMBUS DR
CITYFRONT PLAZA DR
N SHOLAR ST
N ST CLAIR ST
PERSHING CT
N MICHIGAN AVE
E PEARSON ST
E DELAWARE PL

Historic Resources Preservation Act Requirements

The location for the proposed project is 251 East Huron Street in Chicago. The attached letter from the Illinois Historic Preservation Agency indicates that the project area is not considered a historic, architectural or archaeological site.

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

Cook County
Chicago
CON - Conversion of Floors 11 and 12 of Galter Pavilion from Physicians Offices to Inpatient Bed Units
251 E. Huron St./675 N. St. Clair Street
SHPO Log #006041819

June 12, 2019

Bridget Orth
Northwestern Memorial HealthCare
251 E. Huron St.
Chicago, IL 60611-2908

Dear Ms. Orth:

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

The line item costs attributed to clinical components were calculated as a percentage of clinical square footage or clinical cost to the total project when actual break-outs were not available.

Itemization of each line item:

Line 1 – Preplanning Costs – ($277,417) – this includes:

- Feasibility Study/Concept planning - $50,000
- Testing/Balancing of existing system - $50,000
- Pre-Construction Services - $177,417

Of the total amount, $153,434 is the clinical Preplanning Costs cost which is 0.37% of the clinical new Construction, Contingencies, and Moveable Capital Equipment costs.

Line 3 – Site Preparation – ($2,148,027) – this includes:

- Interior Demolition - $1,849,727
    - Includes demolition of the interiors for Galter 11 and 12 including removal of all existing flooring, drywall partitions, finished ceilings, fixtures, plumbing, and horizontal HVAC (excluding the main risers). The only areas remaining will be the elevator shafts, electrical closets, communication closets, and stairwells.
- Applied fireproofing - $45,000
- Floor preparation - $253,300

Of the total amount, $1,188,035 is the clinical Site Preparation cost. This is 4.98% of the clinical new Construction and Contingencies costs.

Line 5 – New Construction Contracts – ($39,183,987) – this includes:

- All construction contracts/costs to complete the addition portion of the project. Includes Group I fixed equipment and contractor's markups, overhead, and profit. Costs are escalated to the mid-point of construction.

The Galter Pavilion was designed as a business occupancy building in the late 1990's. As such, it was designed with lower design parameters than an inpatient occupancy as defined by NFPA 101 – the life safety code. To accommodate the new building occupancy classification, the project will be upgrading fire ratings and upgrading HVAC systems including supply, return, and exhaust ductwork to support new inpatient functions. In addition, existing electrical and communications risers must be moved and closets reconfigured to hold distribution panels to serve the floor. New plumbing systems must be provided to support toilet rooms for the ICU, medical/surgical, and observation beds.

Additionally, the project includes three floors of connectors – including the demolition of existing precast, development of new structural supports and reinforcing existing columns and beams, creating a new building enclosure for the connector, and installing

lighting, HVAC, and exterior drainage to facilitate movement of patients and materials between the Feinberg and Galter Pavilions on the 10th, 11th, and 12th floors.

The project will also include new communications devices including new nurse call and telemetry monitoring that was not required in the business occupancy.

In conclusion, the floors of the projected project were not built as a "health care facility" and this project is a substantial change in the bed count and therefore is not considered a modernization per IAC1100.220.

Of the total amount, $21,671,762 is the clinical New Construction cost.

Line 7 – Contingencies - ($3,918,399) – this includes:

- Allowance for unforeseen New Construction costs

Of the total amount, $2,167,176 is the clinical Contingency cost which is 10.0% of the clinical New Construction costs.

Line 8 – Architectural / Engineering Fees – ($2,882,240) – this includes:

- Schematic Design:
  - Develop diagrammatic plans and documentation to describe the size and character of the space in a way that meets all programmatic and functional objectives, as well as accounting for all existing structure, shafts, elevators and stairs, communications and electrical closets, and all other pre-existing design constraints.
  - Evaluate the capacity of all building systems (such as electrical, mechanical, plumbing, fire protection, and pneumatic tube and vertical transportation) as well as support functions (such as food service, pharmacy, materials management) to determine modifications necessary for the new uses proposed on the floors.
- Design Development:
  - Develop detailed drawings and documentation to describe the size and character of the space. Includes room layouts, structural, mechanical, electrical, and plumbing.
  - The equipment and furniture consultants will prepare room-by-room FF&E requirement list. The requirements list identify room name, item description, product specification, and total quantity required. The product specifications include installation requirements that will be provided to the architect/engineer to ensure that spaces and building systems are planned to appropriately accommodate the equipment.
- Construction Documents:
  - Provide proposed Reconciled Statement of Probable Construction Cost
  - Provide drawings and specifications
  - Prepare documentation for alternate bids
  - Assist in filing Construction Documents for approval by City and State agencies

  - Signage and Way Finding expertise
- Bidding and Negotiation Phase Services:
  - Revise Construction Documents as necessary in accordance with Reconciled Statement of Probable Construction Cost
- Construction Administration Phase Services:
  - Advise and consult during Construction Phase
  - Attend weekly job progress meetings
  - Provide on-site representation to review progress/quality of Work
  - Prepare written interpretations of Contract Documents including Bulletins and information requests
  - Correct Errors or Omissions in the drawings, specifications and other documents
  - Review and approve Contractor's submittals
  - Submit notifications for work which does not conform to Contract Documents
  - Review and analyze requests for Change Orders
  - Assist Construction Manager with punchlist completion
  - Assist Construction Manager with Final Completion including system testing and commissioning
  - Inspect Project after correction of Work period for deficiencies and update Construction Manager

Of the total amount, $1,851,354 is the clinical Architectural / Engineering Fee. This amount is 7.77% of the clinical New Construction and Contingencies costs.

Line 9 – Consulting and Other Fees – ($4,427,440) – this includes:

- Charges for the services of various types of consulting and professional experts including:
  - Technology Planning Services (IT/AV) - $165,000
  - Equipment Planning Consultant - $440,000
  - Signage/Wayfinding Services - $94,000
  - Vertical Transportation Consultant - $58,000
  - Accessibility Consultant - $2,000
  - Commissioning - $153,000
  - Project Management Services - $2,163,000
  - Construction Management Services - $1,352,440

Of the total amount, $2,843,885 is the clinical Consultant and Other Fees cost.

Line 10 – Movable Capital Equipment – ($22,339,107) – this includes:

- All furniture, furnishings, and equipment for the proposed project. Group I (fixed) equipment is included in the New Construction line item above. Group II and III medical equipment is included herein. The equipment cost is a budget yet to be finalized.

At this stage, the itemized list of equipment to be purchased is not complete. The aggregate equipment budget, however, is considered appropriate, as it is based on a similar approach that worked for the Feinberg/Galter Pavilion, the new Prentice Women's Hospital, and the Galter 9, 10, 13 Floors project.

The Architect will be retained to provide specific expertise during equipment planning and specification, and to assist the hospital in ensuring effective use of available funding. Equipment planning will be closely coordinated with architectural design.

FFE procurement will be managed by the hospital with support from outside consultants. Total acquisition costs will be evaluated during market assessment and contract award, including purchase, installation, training, and maintenance. The approval process during contract award will be consistent with existing hospital financial procedures.

Warehousing, training, acceptance testing and other logistical issues will be defined and scheduled.

Product standards will facilitate detailed equipment planning and appropriate building design, maximize the effectiveness of competitive bidding, and minimize costs for training and long-term maintenance.

Clinical and/or financial analysis of new technology will be done to determine that it is a prudent investment. New technology selected for use will support the hospital's primary mission, via criteria such as clinical outcomes, turnaround, or productivity.

Freight and installation costs are also included in the estimate.

Equipment Type	Estimated Cost
Beds	$1,006,345
Headwalls	$578,982
Monitors Telemetry Pulse Oximeters Physiology	$6,520,498
Other Medical Equipment Portable ultrasound Defibulators EKGs VADs Patient Lifts PT/OT Equipment	$8,826,224

Patient over-bed tables Chest Carts Respiratory Equipment Dialysis Equipment Medical Refrigerators	
Furnishings Waiting Room Furniture Sofa Sleepers Patient Recliners Side chairs Nightstands Monitor Arms Office Furniture	$1,820,019
Technology Computers Monitors Printers Televisions Device Integration Phones iPad Translation Wireless Network Distributed Antenna System	$3,269,256
Other Artwork Interior Signage Keying	$317,783

Of the total amount, $17,279,700 is the clinical component of the Moveable Capital Equipment cost.

Line 14 – Other Costs To Be Capitalized – ($2,431,368) – this includes:

- Permits and Fees – IDPH, CON, etc.
- In-house staff (project managers)
- NM care enhancements during construction (for patients on existing inpatient units on Galter 10th and 13th floors)

Of the total amount, $1,344,746 is the clinical component of the Other Costs to be Capitalized.

Project Status and Completion Schedules

Anticipated project construction start date: September, 2020

Anticipated midpoint of construction date: June, 2021

Anticipated project construction substantial completion date: November, 2021

Anticipated project completion date: December, 2022

Project obligation is contingent upon permit issuance. NMH plans to sign the contract with the general construction contractor in February, 2020 that will be subject to CON approval. This contract will obligate the project. The CON Contingency section of the contract is below:

Certificate of Need. NMHC and the Contractor acknowledge and agree that in addition to permitting required by the City of Chicago, Illinois Department of Public Health ("IDPH") and any other Governmental Authority, this Project and Agreement are subject to the issuance of an appropriate Certificate of Need ("CON") by the Illinois Health Facilities and Services Review Board (the "Board"). The Contractor shall cooperate with NMHC's application to the Board for the CON.

Cost Space Requirements

Department	Cost	Departmental Gross Square Feet		Building Gross Square Feet		Amount of Proposed Total Gross Square Feet That Is:			
		Existing DGSF	Proposed DGSF	Floor Gross Factor	Proposed BGSF	New Const.	Modern-ized	As Is	Vacated Space
CLINICAL									
ICU	$ 9,543,191	*	19,067	1.21	23,107	23,107			
Medical/Surgical/Observation	$ 12,128,571	*	24,232	1.21	29,367	29,367			
Clinical Subtotal =	**$ 21,671,762**		**43,299**			**52,474**			
NON-CLINICAL									
Connectors	$ 9,728,480	*	4,895	1.21	5,932	5,932			
Administration	$ 2,142,725	*	5,440	1.21	6,593	6,593			
Reception/Waiting/Public Space	$ 1,701,000	*	3,743	1.21	4,536	4,536			
Nursing and Physician Support	$ 955,640	*	2,253	1.21	2,730	2,730			
Classrooms/Conference Rooms	$ 742,350	*	1,750	1.21	2,121	2,121			
Environmental Services	$ 212,080	*	875	1.21	1,060	1,060			
Staff / Back of House Corridors	$ 2,029,950	*	5,154	1.21	6,246	6,246			
Non-Clinical Subtotal =	**$ 17,512,225**		**24,110**			**29,219**			
TOTAL =	**$ 39,183,987**		**67,409**			**81,693**			
OTHER									
Preplanning Costs	$ 277,417								
Site Survey & Soil Investigation	$ -								
Site Preparation	$ 2,148,027								
Off-Site Work	$ -								
Contingencies	$ 3,918,399								
A/E Fees	$ 2,882,240								
Consulting & Other Fees	$ 4,427,440								
Movable or Other Equipment	$ 22,339,107								
Bond Issuance Expense	$ -								
Net Interest Expense	$ -								
Other Costs To Be Capitalized	$ 2,431,368								
Acquisition of Building	$ -								
Other Subtotal =	**$ 38,423,998**								
GRAND TOTAL =	**$ 77,607,985**								

* The proposed project space was previously physicians' offices and does not have any existing departments.

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

Criterion 1110.110(a)

BACKGROUND OF APPLICANT

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

Northwestern Memorial HealthCare:

	IDPH License No.	Joint Commission Organization No.
Northwestern Memorial Hospital	0003251	7267
Northwestern Lake Forest Hospital	0005660	3918
Central DuPage Hospital Association	0005744	7444
Delnor-Community Hospital	0005736	5291
Marianjoy Rehabilitation Hospital & Clinics	0003228	7445
Kishwaukee Community Hospital	0005470	7325
Valley West Community Hospital	0004690	382957
Grayslake Freestanding Emergency Center	22002	3918
Grayslake ASTC	7003156	3918
Grayslake Endoscopy ASTC	7003149	3918
Cadence Ambulatory Surgery Center	7003173	n/a
The Midland Surgical Center*	7003148	n/a
Illinois Proton Center	n/a	n/a
Northern Illinois Medical Center (McHenry)	0003889	7375
Northern Illinois Medical Center (Huntley)	0003890	7375
Memorial Medical Center (Woodstock)	0004606	7447

*denotes partial ownership in excess of 51%

A certified listing of any adverse action taken against any facility owned and/or operated by the applicants, directly or indirectly, during the three years prior to the filing of the application.

By their signatures on the Certification pages of this application, each of the Applicants attest that no adverse action has been taken against any facility owned and/or operated by Northwestern Memorial HealthCare during the three years prior to the filing of this application. For the purpose of this letter, the term "adverse action" has the meaning given to it in the Illinois Administrative Code, Title 77, Section 1130.140.

Authorization permitting HFSRB and DPH access to any documents necessary to verify the information submitted, including, by 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.

By their signatures on the Certification pages of this application, each of the Applicants authorize HFSRB and DPH to access any documentation which it finds necessary to verify any information submitted, including, but not limited to official records of DPH or other State agencies and/or the records of nationally recognized accreditation organizations.

Criterion 1110.110(b)

PURPOSE OF PROJECT

1. The purpose of the proposed project is to improve health care for residents of City of Chicago, Cook County, and the region by increasing access to health care services at Northwestern Memorial Hospital.

   The proposed project will add capacity to continue to meet growing demand for ICU and medical/surgical services at NMH: 28 medical/surgical beds (net 25), 24 ICU beds, and 12 observation beds (net 11).

   This is the 4th NMH project to add medical/surgical capacity in order to keep up with demand at NMH following the opening of the new Feinberg/Galter pavilion in 1999:
   1) Addition of 13 medical/surgical beds as part of the new Prentice Women's Hospital in 2007
   2) Addition of 72 medical/surgical (hematology/oncology) beds on new Prentice's 15th and 16th floors (originally planned as physicians' offices) in 2007
   3) Conversion of Galter 9th and 10th floors from physicians' offices to inpatient bed units in 2012, adding 24 medical/surgical beds, 23 ICU beds and 12 observation beds
   4) The proposed project

   The additional bed capacity will allow continued growth of tertiary medical/surgical programs such as cardiac care.

2. The market area for the project is Cook County which accounts for 72.3% of medical/surgical admissions at NMH.

3. The projects listed above have been in response to the increasing demand at NMH since the opening of the Feinberg/Galter pavilion in 1999. Over the last two decades, medical/surgical patient days at NMH have increased by 52.6%. Since CY15 alone, medical/surgical patient days have increased by 15%, for an average annual growth of 5.1%. Without additional medical/surgical beds, capacity-constrained conditions will continue. As in other years of high demand, lack of ICU and medical/surgical bed availability causes backups in the Emergency Department which has led to over 3,000 hours of ED diversion per year, over 3,000 patients per year leaving the ED without being seen, and beds not being available to receive patients from other hospitals needing transfer to NMH for specialty services.

4. Sources of information include:
   - Hospital Records
   - IDPH Data & Statistics
   - *U.S. News & World Report*
   - Centers for Medicare and Medicaid Services

5. NMH is one of the largest providers of inpatient service in Chicago. As stated above, 73.2% of NMH medical/surgical patients reside in Cook County. From 2000 to 2018, Cook County mortality rates for deaths due to "Diseases of the Heart" have dropped from 30% to 24.8% in 2018 (source: IDPH Data & Statistics).

   In 2019-20, *U.S. News & World Report* named the cardiovascular program at NMH a top ten Cardiology and Heart Surgery program in the United States—a reflection of the leading-edge cardiac and vascular services offered at NMH and the results obtained for NMH patients and their families. According to the Centers for Medicare and Medicaid Services, NMH is the only U.S. hospital to achieve exceptional high-quality outcomes at the lowest-possible costs in two of the country's biggest public health threats, heart failure and heart attack.

   Our efforts to accommodate demand at NMH, especially in the cardiac care area, are intended to continue improvement in this mortality trend.

6. The goal of the proposed project is to avoid bed capacity-constrained conditions which have led to ED diversion and patients leaving the ED without being treated. Measureable objectives are:
   - Medical/surgical occupancies no greater than 90% by FY22
   - 0 hours on ED diversion due to lack of beds

Criterion 1110.110(d)

ALTERNATIVES

Preferred Alternative – Proposed Project

The Galter Pavilion is the west tower of the Feinberg/Galter building, which opened in 1999. The Feinberg Pavilion was built to Institutional occupancy codes and houses NMH's inpatient medical/surgical and ICU beds as well as many diagnostic and treatment services (D&Ts). The Galter Pavilion was originally built to Institutional occupancy on the 4th – 8th floors where outpatient services are located and Business occupancy on the 9th – 21st floors where NMH leased space for physicians' offices. In 2012, the 9th, 10th, and 13th floors of the Galter Pavilion were converted from physicians' offices to inpatient beds units, housing 24 medical/surgical beds, 23 ICU beds, 12 observation beds and 29 acute mental illness beds (CON #09-039). Each floor in the Galter tower is approximately 38,000 square feet. Like the 9th, 10th, and 13th floors, the 11th and 12th floors must be upgraded to meet Institutional occupancy requirements in order to house inpatient functions, as in the proposed project.

The proposed project will add 24 ICU beds on Galter 11th floor, 25 medical/surgical beds (28 new beds on Galter 12th floor minus 1 each from the existing units on Feinberg 10th, 11th, 12th floors due to the connectors), and 11 observation beds (12 new beds on Galter 12th floor minus 1 bed on Feinberg 12th floor).

In order to provide an enhanced safety transport for critically deteriorating patients, a connector will be built from the Feinberg Pavilion to the Galter Pavilion on the 10th, 11th, and 12th floors.

One of the most significant advantages to this project is the adjacency of the Galter Pavilion to the 24 hour/7 day per week Feinberg Pavilion. Its location in Galter provides convenient access to D&T services and support for inpatients, with Food and Ancillary service support also available (IT, pneumatic tube system, medical gases). Emergency support/response is also adjacent in the Feinberg pavilion. In this location, physician coverage will not be an issue.

As with the past projects that have added beds to the NMH campus (CON #05-062 and #09-039), this project will help accommodate the continued growth in ICU, medical/surgical services. In CON #09-039, NMH highlighted that if additional inpatient bed capacity was needed, that Galter 11th and 12th floors would be the next likely proposal.

NMH understands that the solution to accommodating increased demand for services lies not only in building more space. Operational improvements for capacity management continue to increase the efficient use of our facilities and include:

- Decreasing length of stay for complex patients, neurology patients, and surgery patients by creating a complex discharge team, modifying PT/OT schedules and transfer protocols, and improving discharge planning checklists
- Developing an acute neurology ED triage model for low risk neurology patients

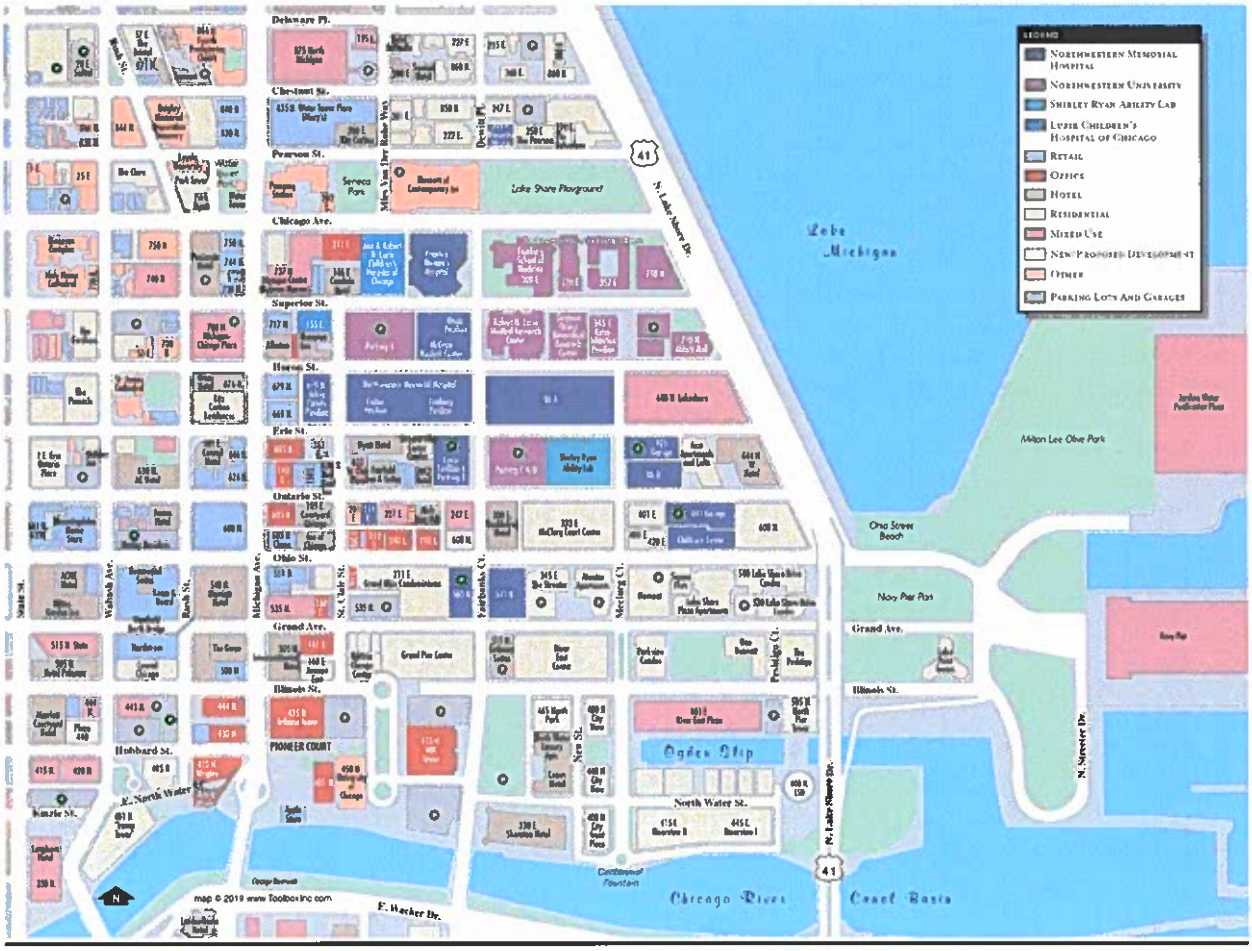
The proposed additional beds will improve outcomes by creating capacity to help to keep pace with increasing medical/surgical/ICU/observation growth at NMH. Without the additional medical/surgical beds, the average annual occupancy will exceed 90% by CY22, and a return of previous capacity-constrained conditions. In the past couple of years, lack of ICU and medical/surgical bed availability has caused backups in the Emergency Department which have led to 3,000 hours of ED diversion per year, over 3,000 patients per year leaving the ED without being seen, and beds not being available to receive patients from other hospitals needing transfer to NMH for specialty services. ICU occupancy has exceeded the State standard of 60% for over a decade.

NMH has evaluated several alternatives for adding medical/surgical capacity to respond to growing demand for care at NMH. The proposed project is the least expensive of the realistic options for providing the clinical elements of the project. It is also the most practical in both the short- and long-term and is therefore the preferred alternative.

Alternatives considered:

1. Expansion within the current Feinberg Pavilion;
2. Vertical expansion of the existing Feinberg Pavilion;
3. Accelerate plans for a medical/surgical pavilion on the VA site;
4. Utilize floors in Prentice Women's Hospital;
5. Use underutilized capacity at existing area hospitals;

A map of the campus is on the next page, showing all current buildings discussed as alternative locations.


Northwestern Memorial Hospital
Northwestern University
Shirley Ryan Ability Lab
Lurie Children's Hospital of Chicago
Retail
Office
Hotel
Residential
Mixed Use
New Proposed Development
Other
Parking Lots And Garages
Lake Michigan
Lake Shore Playground
Milton Lee Olive Park
Ohio Street Beach
Navy Pier Park
Grand Ave.
Illinois St.
North Water St.
Ogden Slip
PIONEER COURT
Chicago River
Canal Basin
N. Lake Shore Dr.
E. Wacker Dr.
N. Columbus Dr.
Chicago Ave.
Superior St.
Huron St.
Erie St.
Ontario St.
Ohio St.
Hubbard St.
Kinzie St.
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Alternative 1: Expansion within the existing Feinberg Pavilion

Description

The 17-story Feinberg Pavilion opened in 1999, with 7 floors of medical/surgical beds in the east tower and ICU beds on the 7th – 9th floors. Authorized bed counts were 378 medical/surgical beds and 92 ICU beds at the time of opening. There are also 14 undesignated observation beds. An additional 20 medical/surgical beds were added in 2002, under the conversion of substance abuse beds to medical/surgical beds, allowed by IHFSRB. Each medical/surgical floor has capacity for 60 beds, in two 30-bed units per floor. The 1st – 3rd floors are public floors, housing the lobby, restaurants, conference space, and other public support functions. The 1st floor also houses the Emergency Department. The 4th – 8th floors are radiology, surgery, laboratory, rehabilitation services, diagnostic testing, cardiac services and other D&T functions supporting both inpatient and outpatient services.

There are limited opportunities to add clinical capacity within the building. NMH has evaluated the entire building to identify opportunities for adding beds, which collectively could expand capacity to some degree. Several small projects may be possible, but in the aggregate they do not add sufficient capacity to accommodate the growing demand. Examples are the following:

- The 2nd and 3rd floors are part of the rectangular, public base of the Feinberg/Galter Pavilion. Although there are windows along the 560 foot by 218 foot perimeter, this portion of the building has been designed to meet applicable codes for business and assembly occupancies and not for inpatient occupancy. There are no alternative locations for the conference center and other public areas that are now occupying that space. Furthermore, even if the space were available, the building form would require all rooms to be along the perimeter walls only, leading to a linear nursing unit which is inefficient for patient room coverage. In comparison, each of the 7 floors in the Feinberg inpatient tower has two U-shaped floor plates, providing windows for each room around an efficient 30-bed nursing station.
- Locating medical/surgical beds on the 4th through 8th floors would require relocating D&T functions (laboratory, radiology, etc.) with its attendant cost. Other campus buildings would need modification, and additional capital investment, in order to accommodate one or more of these functions. Most importantly, space is needed for growth in D&T, to keep pace with the growth in clinical services.

Although there may be some locations on the medical/surgical floors where incremental beds could be added, collectively these would not meet the current demand for additional medical/surgical beds.

This alternative was rejected because it does not meet the program need for ICU, medical/surgical or observation beds. Cost estimates were not developed for this option since it is not realistic for the project.

Alternative 2: Vertical expansion of existing Feinberg Pavilion

Description
Prior to the acquisition of the VA properties in 2004, NMH considered adding above the top (17th) floor of the Feinberg Pavilion among the several options for expanding bed capacity on campus. This option was not pursued because it was considerably more costly than other options being considered and it would be disruptive to existing services.

Advantages
- Feinberg floor plate is an efficient layout for inpatient services.
- Locating medical/surgical and ICU beds in Feinberg would take advantage of the technology, systems, and clinical and non-clinical support services already in the building.

Disadvantages
- The cost of the project would be approximately $145 million for the proposed number of inpatient beds, making this option the most expensive alternative for adding inpatient bed capacity (short of building a new hospital for a larger bed complement).
- Disruption to existing hospital operations in the building would be significant. Several elevators would have to be taken out of patient or support service for construction; the medical/surgical service on the 16th floor would have to be closed for periods of time due to noise and extension of mechanical/electrical systems in the ceiling; and mechanical systems on 17th floor would have to be replaced with temporary systems to maintain building services. Disruption outside the building would also be significant, and include sidewalk closures on the perimeter. Temporary use of streets for erecting hoists and other work would reduce traffic lanes.
- The Planned Development zoning of the campus would be affected. By adding increased bulk on the Feinberg/Galter site, development on the other sites would be restricted, in order to meet campus-wide density regulations.

Cost
Total Cost: approximately $145 million

Timetable
Beds open for occupancy in November 2024.

This alternative was rejected because of its high cost, disruptive nature to hospital operations, and its extended time to completion beyond the proposed project.

Alternative 3: Accelerate plans for a medical/surgical pavilion on the VA site

Description
NMH purchased the Chicago VA Lakeside Hospital from the federal government in November, 2004. The purchase included two properties on the Northwestern campus: the VA hospital site on the east side of Fairbanks Court immediately across the street from NMH's Feinberg Pavilion, and a small 2-story research building located at the northeast corner of McClurg and Ontario. The 2-story research building was demolished in late 2007 and demolition of the hospital building on the main site was completed in August, 2009.

Given the density of the NMH campus, this site provides valuable adjacent space for growth in response to NMH's long-term demand for services. A building on this site could include diagnostic and treatment services (D&T) to support medical/surgical beds, expanded Emergency Department services, and other services.

Advantages
- A new, large pavilion provides a longer term response to growth in the area and demand for services at NMH.
- It provides an opportunity to accommodate a more comprehensive solution to Emergency Department and trauma services on campus, as opposed to incremental projects supporting the current ED within the Feinberg Pavilion.
- D&T support services can be expanded in a new building, relieving current capacity pressures.

Disadvantages
- The expense of this alternative significantly exceeds all other alternatives. The project cost will be at least $1 billion.
- At the earliest, a new building would be open for occupancy in 2027. In the meantime, there would be no response to the growing demand for medical/surgical services at NMH.
- Currently, there is not yet sufficient rationale to justify approval and construction of 250+ beds, based on current patient service volumes.
- Complex planning remains to be done: determination of which clinical services to place in a new pavilion, how D&T and emergency/trauma services there would be linked to current Feinberg, etc.

Cost
At least $1 billion, in current construction dollars

Timetable
Available 2027 at earliest.

This alternative was rejected because planning for a new facility has not been completed, and timing to plan and construct this new building does not bring needed capacity soon enough to address current capacity needs. In addition, the cost of this alternative is much higher than the proposed project.

Alternative 4: Utilize floors in Prentice Women's Hospital

Description
The new Prentice Women's Hospital opened in October, 2007 with 134 OB beds, 86 Neonatal ICU beds, 36 Women's Health beds, and 72 Hematology/Oncology beds. There are also 32 LDRs, 4 c-section rooms, 10 ORs, comprehensive breast center, diagnostic imaging and a Women's Health Center. The building totals 937,637 square feet.

The new building expanded inpatient and outpatient services that had been located in the previous Prentice/Stone Pavilion. The new building allowed Prentice to broaden its function from the Midwest's largest maternity center to a more complete array of women's health care.

The building was sized to accommodate a maximum of 13,600 births/year. Since its opening in 2007, births have increased over 5%. In CY18, there were 12,076 births. While average annual obstetric volume is slightly less than the State's target occupancy, there are several months of the year when the beds are at 100% occupancy.

There is no available capacity in the Prentice Women's Hospital for the proposed project.

This alternative was rejected because it does not meet the program need for ICU, medical/surgical and observation beds. Cost estimates were not developed for this option since it is not realistic for the project.

Alternative 5: Use underutilized capacity at existing area hospitals

Description
There are hospitals in the A-1 planning area that are below the State's target utilization standards. While it appears there is physical capacity to locate 25 medical/surgical beds, 24 ICU beds, and 11 observation beds in other area facilities, continuity of care could not be accomplished if this additional capacity were to be distributed at one or two other hospitals. The operation of the ICUs must be proximate to the NMH Emergency Department and surgery, and cannot be located off campus. Similarly, the observation bed unit is closely integrated with the Emergency Room, a source of admission, and medical/surgical beds for patients requiring specialized overnight treatments. Additionally, it is also not clear that other facilities have the D&T services to support extra patient loads.

The logistics of coordinating attending physician coverage, GME residency rotations, and/or hospitalist coverage would be complex. Procedures, practices, and standards of care vary from one institution to another. While developing shared approaches to care delivery would be beneficial, they would be complex and difficult to establish. Even the process of developing care models would be time consuming, diverting physicians, nurses, and technicians from direct service delivery. Coordinating different information

systems (patient admitting, scheduling, discharge, and medical records) would also be difficult and may require development of system interfaces. Agreements between insurance companies and Northwestern Medicine are not automatically extended to other hospitals and their physician groups, which means patients eligible for care at NMH may not be able to be cared for at other hospitals. Additionally, there are many services that require specialized technology that other area providers may not have.

Advantages

- Utilization of area institution(s) would be increased.

Disadvantages

- The description statement above cites numerous problems and disadvantages.
- Lack of integration on campus with the Northwestern University Medical School faculty and graduate medical education training would result in reduced efficiency and effectiveness of care delivery.
- It is expected that patient care would be compromised, operating costs would be significantly higher and possibly exceed the savings in capital, and patient satisfaction and outcomes would decline.
- Significant capital expenditures would be required to modify and upgrade space and mechanical/electrical/plumbing systems in older nursing units. Remedial efforts would be necessary to meet codes and patient care requirements.

Cost

- Capital costs associated with this option would depend on unit upgrades needed at area hospitals and could exceed the costs of the proposed project.
- Operating costs would be significant and would be expected to exceed capital costs.

Timetable

At a minimum, it would take 2 years to develop arrangements and make necessary capital improvements. However, given the complexity of the arrangements, the timetable may be longer.

This alternative was rejected because it is not realistic to support the proposed project at another hospital. The programs are integrated with many significant clinical, educational, and research functions and investments on campus, and it would be difficult and costly to relocate them to another site(s).

The following table provides a summary cost benefit analysis of the preferred project and the 5 alternatives:

Location/Alternative	Meets functional program?	Total Cost	Availability
Galter Pavilion, Floors 11 and 12 (preferred option)	**Yes**	**$ 77.6 million**	**2022**
Expansion within Feinberg Pavilion	No	N/A	N/A
Vertical Expansion of Feinberg Pavilion	Yes	$145 million	2024
New facility on the VA-Lakeside site	Yes	$1 billion	2027
Prentice Women's Hospital	No	N/A	N/A
Underutilized Existing Area Hospitals	unknown	unknown	2023

Constructing inpatient beds on 2 floors in the Galter Pavilion on campus is the preferred option. It delivers a significant number of beds for relatively less cost than other options. It is realistic and practical.

SECTION IV. PROJECT SCOPE, UTILIZATION, AND UNFINISHED/SHELL SPACE

Criterion 1110.234 – Project Scope, Utilization, and Unfinished/Shell Space

SIZE OF PROJECT

1. Document that the amount of physical space proposed for the proposed project is necessary and not excessive.

The Galter Pavilion at Northwestern Memorial Hospital was designed as a business occupancy building in the late 1990's. As such, it was designed with lower design parameters than an inpatient occupancy as defined by NFPA 101 – the life safety code. To accommodate the new building occupancy classification, the project requires upgraded fire ratings and upgraded HVAC systems including supply, return, and exhaust ductwork to support the proposed inpatient functions. In addition, existing electrical and communications risers must be moved and closets must be reconfigured to hold distribution panels to serve the floor. The project will also be providing new plumbing systems to support toilet rooms for the ICU, medical/surgical, and observation beds.

The project also includes the construction of three floors of connectors – including the demolition of existing precast, development of new structural supports and reinforcing existing columns and beams, creating a new building enclosure for the connector, and installing lighting, HVAC, and exterior drainage to facilitate movement of patients and materials between the Feinberg and Galter Pavilions on the 10th, 11th, and 12th floors.

The project will also include new communications systems including new nurse call and telemetry monitoring that was not required in the business occupancy. In summary, the construction is so transformative that it should be classified as new construction rather than modification.

As with CON #09-039, the building floor size and structural grid set dimensions and restrictions on how the physical space can be arranged. The existing stairs, elevator shafts and mechanical shaft locations have dictated the number, size and configuration of patient rooms that can be organized on each floor.

Because the 9th – 21st floors were originally constructed as business occupancy to accommodate physicians' offices, the existing stairs, elevators and mechanical shafts were located to accommodate business functions rather than clinical functions, and as a result they are spread out around the perimeter or dispersed to serve multiple tenants rather than being located centrally on the floor and inboard from the perimeter (as it would have been designed for clinical occupancy).

The existing stairs are all located on the perimeter and the shaft locations have resulted in jogs in the perimeter corridor at the corners of the floor to maintain the required corridor width clearances. In a typical healthcare design, the perimeter of the floor would be reserved for patient rooms to maximize the number of rooms available to

place on the floor because of the requirement to have a window in each patient room. The mechanical shafts would be located more centrally along with the vertical circulation in the core spaces so as not to conflict with the primary patient care space layout or circulation.

The existing structural grid spacing was also designed for business occupancy and does not fully coincide with how an inpatient unit would be laid out. Ideally, the first line of columns inboard from the perimeter would fall on the patient room side of the corridor to allow for more flexibility in the core, corridor, and patient rooms. In that case, the patient room depth could be set to the desired dimension and an unobstructed corridor could then be run outside the rooms and column line. The existing grid is located such that it falls on the core side of the perimeter corridor, which means that the minimum required corridor width falls between the grid and perimeter wall and limits the maximum depth of the patient room.

The overall width of the existing floor plate, combined with the structural grid and shaft locations, has resulted in a central service core that is three times wider than the central service core in the Feinberg Pavilion, which would be a more typical core width for inpatient units. This in turn has increased the intra-departmental corridor square footage dramatically and led to program redundancy due to travel distances.

Because the floor plate in the Galter Pavilion is substantially larger than that in the Feinberg Pavilion inpatient floors (approximately 23,000 square feet in Feinberg vs. 38,000 square feet in Galter), measures were taken to provide an optimal patient care delivery setting. The greater travel distances among the patient rooms due to the larger floor plate and the patient rooms being located along the perimeter have been mitigated with the placement of intermediate corridors, bisecting the unit and creating efficient routes among rooms and support spaces.

Longer travel distances to support spaces have necessitated that more supplies and equipment be distributed in closer proximity to the patient rooms. While supporting fewer beds than in the Feinberg Pavilion, each supply, equipment and nourishment room will be stocked with duplicate materials to ensure that staff only makes one trip to the nearest room to retrieve supplies and equipment.

The longer linear perimeter of the Galter unit has created challenges to providing visual observation from staffed work areas. The design solution involves additional decentralized nursing stations that will support staff being in close proximity to all patient rooms.

The proposed layouts are based on the design of the units in CON #09-039. When determined for that project, functional programmers/space planners translated volume projections, utilization standards, and operating input from User Groups to define the programs and uses to be located on each floor. In determining square footage and layouts, the User Groups and architects used AIA and State and City codes and standards, which were adapted based on practices observed during site visits to other

leading programs in the U.S. and on "lessons learned" from operations in both the new Prentice Women's Hospital and the Feinberg/Galter Pavilions.

As with the previously approved CON project, the maximum number of beds was placed on each floor of the proposed project.

The patient unit is based on the previously approved CON project, which was based on the typical medical/surgical units in Feinberg Pavilion and the 3 floors of medical/surgical units in the new Prentice Women's Hospital. Similar patient rooms, staff support space and offices are provided.

Clinical Components of the Project

The following clinical programs are included in the proposed project:

ICU Beds

The proposed ICU beds will be on the 11th floor of Galter. These beds will be used for Cardiac Intensive Care patients. The patients will be pre and post-surgical patients for major open heart and transplant surgery, in some cases they may be in the hospital for weeks at a time.

The 11th floor will consist of 24 private ICU patient rooms along the perimeter of the floor along the East, South, and West sides of the floor plate. There will be 5 nurse stations, each responsible for a specific group of rooms in their immediate area. All 24 ICU rooms will be equipped with patient toilet rooms with showers because of the projected length of stay and continuity of care, 3 of the 24 rooms will be Isolation rooms that have ADA compliant toilet rooms, and lift capacities for bariatric patients; the three isolation rooms will be negative pressure rooms with Ante-rooms for donning and doffing personal protective equipment.

The ICU will have its own support spaces such as clean utility rooms, clean work/medicine rooms, nourishments rooms, equipment storage, housekeeping closets, a staff lounge and dedicated waiting space. Because of the broad nature of the floorplate, there are multiple support spaces to support the 5 nurse stations to minimize travel distances for nursing and tech support staff.

The north side of the floorplate contains the elevator cores for visitor transport and "high-rise" elevator core which passes through these floors to the upper floors of the Galter Pavilion. Family support spaces have been organized along the north perimeter of the floor.

Medical/Surgical/Observation Beds

There will be 28 medical/surgical beds on the 12th floor of Galter. These beds will be used for Cardiac patients who are also pre and post-surgical patients awaiting open heart surgery and transplants. These patients are not in as critical condition as the ICU patients but will still have a higher nursing to patient ratio than is typical on most medical/surgical units.

All rooms will be private rooms and will include a full bathroom with shower (100% will be wheelchair accessible and 12.5% will be ADA compliant). The typical patient toilet room is located inboard along the corridor wall of each patient room. This creates an entry alcove into each room where a work counter and hand washing station is located.

The unit will have its own support and administrative space such as clean and soiled utility rooms, nourishment rooms, report/conference room, etc. As with the ICU and the broad nature of Galter, there are multiple support rooms distributed near the 6 nursing stations to minimize travel distances.

The 12th floor of Galter will also include a 12-bed observation unit. Because the observation rooms are 23-hour stay rooms, they do not require an exterior window and therefore will be located in the central part of the floor, thereby maximizing the windowed perimeter for the inpatient medical/surgical beds.

The observation unit will have a dedicated soiled linen room, equipment storage area, and nourishment room. The two units will share other functional spaces including: family consultation rooms, family waiting areas, equipment rooms, staff locker and staff lounge classroom/conference rooms, on-call rooms and nursing stations.

2. Comparison of Space to Standards in Section 1110.Appendix B.

ICU Beds

The proposed square footage for the ICU unit on the 11th floor is 19,067 DGSF.

Components and Space Standards used are as follows:

24-bed ICU unit, as designed	**19,067 DGSF**
State Standard for 24 ICU beds @ 685 dgsf/bed	**16,440 DGSF**
Amount of difference	2,627

Explanation of difference, by component

1. All Private Bathrooms

Because of the duration of the patient stay (in many cases patients will remain on the unit for weeks due to the severity of their condition), it is necessary for patients to be able to use the toilet and shower more than the typical ICU patient. By Illinois licensure, an ICU unit often has one patient shower for every twelve patients. For this patient population, this ratio is not sufficient. The patients need to be up and moving even though they are in critical condition to keep them as active as possible prior to and after transplant surgery.

24 x (36 nsf/room difference) x 1.55 n-g conversion factor = 1,339

2. Design Impact of Existing Floorplate

Due to the travel distances generated by the large floorplate configuration, it is necessary to create redundancies in several program areas. For example, five nurse sub-stations were designed for the staff to be in closer proximity to the patient. The main nursing station is positioned to allow anyone entering the unit from the public elevators to be immediately greeted by staff. This allows the unit staff better control over access to the unit, and visibility of the family/visitor to ensure they conduct proper handwashing and gowning techniques. However, the location of the public elevators and unit entries are too remote from the patient rooms and requiring the staff to use only one centralized station does not allow optimal patient care. Therefore, providing a nursing sub-station for every 4-5 beds enables staff to be closer to the patients giving them better visibility, proximity for quicker response to patient calls, and immediate access to supplies and equipment.

2 Additional Nursing sub-stations to reduce distance to patients
400 nsf x 2 stations x 1.55 n-g conversion factor = 1,240

Inter-department circulation: The width of the existing floor plate and location of the existing staff elevators is such that a single internal corridor for inter-department use (EVS, FNS, supply, etc.) is not possible and a series of corridors is required to access all the central support spaces. These additional corridors are required maintain the separation between patient/public corridors and staff only corridors. 3,061

TOTAL AMOUNT JUSTIFIED 5,640

The square footage justifications exceed the difference from the State standard by 3,013 sf.

Medical/Surgical/Observation Beds

The proposed square footage for the Medical/Surgical/Observation unit on the 12th floor is 24,232 DGSF.

Components and Space Standards used are as follows:

28-bed Medical/Surgical/Observation unit, as designed	**24,232 DGSF**
State Standard for 28 Medical/Surgical beds @ 685 dgsf/bed	**18,480 DGSF**
Amount of difference	5,752

Explanation of difference, by component

1. Observation Beds **2,640**

Northwestern Medicine as a system has a center-of-excellence for patients with the most complicated cardio-vascular conditions in the region. Many patients need to come to NMH before and after their surgical interventions for observation and/or testing. These patients come from the Central, North, and West Regions and interact with the care team for up to 23 hours. Patients are assessed and may be admitted to the ICU or medical/surgical unit following the initial critical decision period. Locating the observation beds on the medical/surgical unit helps to create a more seamless cardiac care experience for the patient and allows for specially trained staff to be available for both patient populations.

12 x 142 nsf/room x 1.55 n-g conversion factor = 2,640

2. Design Impact of Existing Floorplate **4,634**

Due to the travel distances generated by the large floorplate configuration, it is necessary to create redundancies in several program areas. For example, two nurse sub-stations were designed for the staff to be in closer proximity to the patient than a centralized Nursing Station affords. Providing a nursing sub-station for every 12 beds enables staff to be closer to the patients giving them better visibility, proximity for quicker response to patient calls, and immediate access to supplies and equipment.

Additional Nursing station to reduce distance to patients

200 nsf x 1.55 n-g conversion factor = 310

Inter-department circulation: The width of the existing floor plate and location of the existing staff elevators is such that a single internal corridor for inter-department use (EVS, FNS, supply, etc.) is not possible and a series of corridors is required to access all the central support spaces. These additional corridors are required maintain the separation between patient/public corridors and staff only corridors. 2,717

The large floorplate also creates the need to provide additional support spaces for Clean Utilities, Housekeeping, Nourishment, and Equipment storage. While only one room for each support space type is required by licensure, one additional room for each support has been provided to reduce staff travel distances.
Proximate support spaces due to large floor plate
1,037 nsf x 1.55 n-g conversion factor = 1,607

TOTAL AMOUNT JUSTIFIED 7,274

The square footage justifications exceed the difference from the State standard by 1,522 sf.

SIZE OF PROJECT				
DEPARTMENT	**PROPOSED DGSF**	**STATE STANDARD**	**DIFFERENCE**	**MET STANDARD?**
ICU	19,067	16,440	2,627	No*
Medical/Surgical/ Observation	24,232	18,480	5,752	No*

*See justification of difference above.

Non-Clinical Components of the Project

The following non-clinical programs are also included in the proposed project:

Building Connectors

Horizontal connectors on the 10th, 11th, and 12th floors between the Galter and Feinberg Pavilions are included in the proposed project. While the 10th floor is not part of the proposed project, it was determined that a connector was also needed for that floor. The connectors are needed to safely transport critically deteriorating patients by reducing the number of elevator trips and allowing better clinical connectivity between the Feinberg and Galter inpatient units. There is no potential to add elevators to the Galter Pavilion so in addition to better patient unit connectivity, the connectors allow for better logistical movement of supplies, medications, equipment, and food between the two buildings.

In order to make the connection to Feinberg, one medical/surgical bed on Feinberg 10th, 11th, and 12th floors will be removed. Similarly, one observation bed on Galter 10th floor will be removed.

The building connectors between the Galter Pavilion and the Feinberg Pavilion on the 10th, 11th, and 12th floors total 4,895 DGSF.

Administration

The proposed administration space will provide administrative and managerial space for supervision of all nursing functions, patient care areas, and programs for the new beds.

The Administration area of the proposed project totals 5,440 DGSF.

Reception/Waiting/Public Space

While not required by the Illinois Administrative Code for medical/surgical units, family waiting areas will be provided on the 12th floor (the waiting area on the 11th floor is required by code and is therefore included in the departmental square footage).

The Reception/Waiting/Public areas of the proposed project total 3,743 DGSF.

Nursing/Physician Support

In association with the above Administration space, space has been provided for the inpatient programs to support the academic, clinical, research and administrative functions of its physicians in a manner consistent with the Feinberg and Prentice Pavilions. Graduate Medical Education (GME) functions will also use this space.

The Nursing/Physician support spaces include clinical conference spaces for physicians and students to use during their rounds, touch-down spaces which will serve as work space for clinicians not based on the units, on-call rooms and reporting/treatment planning spaces.

The Nursing/Physician Support space of the proposed project totals 2,253 DGSF.

Classrooms/Conference Rooms

Classrooms and conference rooms to support the many clinical teams associated with providing comprehensive medical services to the proposed patient populations are required. In concert with the Northwestern University Feinberg School of Medicine, the needs for proper teaching, lecturing, and teleconferencing facilities are required.

The Classrooms/Conference rooms of the proposed project total 1,750 DGSF.

Environmental Services

"Trash" and "Soil Hold" will be located on each floor. It is preferable to separate the trash and red bag waste going into the waste stream from soiled linen and instruments that need to be sent out for processing.

The Environment Services areas on the two floors of the proposed project total 875 DGSF.

Staff/Back of House Corridors

The space allocated for Staff Lockers will be shared by all staff located on each floor. Each full-time employee will be assigned their own locker with enough space to hang a coat and store other personal belongs. In most cases, locker rooms will be unisex. Adjacent to the locker rooms will be separate male and female bathrooms with showers.

The Staff/Back of House Corridors area of the proposed project totals 5,154 DGSF.

Firewall Separation

The change in occupancy from business to institutional on the 9th through 13th floors requires that each floor be separated into at least 2 fire/smoke compartments. The 11th and 12th floors were not previously divided to meet this requirement since they were not part of CON #09-039. A new 2-hour fire/smoke separation is required for the 11th and 12th floors to meet this code requirement. In addition to the new fire/smoke separations that will compartmentalize the floors, the underside of the 11th floor will need to have additional spray-on fireproofing to increase the rating to 3-hour as required by high-rise institutional occupancy.

The sprinkler system will be redesigned to follow the separation and create two sprinkler zones, the fire alarm will follow suit also. In addition there will be changes necessary to the HVAC systems to comply.

Floor Gross Assumptions

As in previous CON applications submitted by Northwestern Memorial HealthCare, floor gross elements that are not part of the "usable floor area" were not included in the departmental square footage (DGSF) determination. These elements include:

- Elevator cores and lobbies
- Stairs
- Shafts including mechanical and plumbing
- Electrical rooms
- Communication rooms
- Non-departmental circulation

The building gross takes the departmental square footage and adds the floor gross as well as the building's exterior wall, resulting in a building gross square footage (BGSF).

PROJECT SERVICES UTILIZATION

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.

INTENSIVE CARE

Occupancy of NMH's ICU beds has been over 60% (State Target Utilization) every year for the past decade. Average annual occupancy has ranged from 65% - 81%. CY18 ICU patient day volume justifies an additional 19 beds.

ICU	CY12	CY13	CY14	CY15	CY16	CY17	CY18
Cases	6,712	6,735	7,064	7,605	7,766	7,888	7,375
Patient Days	28,183	27,244	29,901	29,923	30,786	31,430	29,429
ADC	77.2	74.6	81.9	82.0	84.3	86.1	80.6
Beds	115	115	115	115	115	115	115
Occupancy	67.1%	64.9%	71.2%	71.3%	73.3%	74.9%	70.1%

From CY12 – CY18, NMH's ICU patient days have increased by 4.4% which is an average annual growth rate of 0.7%. Using the same growth rate to project future ICU patient days, NMH can justify an additional 24 beds by CY24, two years after project completion.

ICU	CY19	CY20	CY21	CY22	CY23	CY24
Cases	7,411	7,464	7,518	7,573	7,628	7,683
Patient Days	29,642	29,857	30,074	30,292	30,511	30,733
ADC	81.2	81.8	82.4	83.0	83.6	84.2
Beds	115	115	115	115	139	139
Occupancy	70.6%	71.1%	71.6%	72.2%	60.1%	60.6%

MEDICAL/SURGICAL

From CY12 – CY18, NMH's medical/surgical patient days have increased by 9.1% which is an average annual growth rate of 1.5%. However, in the past three years, from CY15 – CY18, patient day volume has increased by 15%, for an average annual growth rate of 5.1%.

MED/SURG	CY12	CY13	CY14	CY15	CY16	CY17	CY18
Cases	27,948	27,305	24,729	22,491	23,443	23,439	25,881
Patient Days	148,198	145,406	141,650	140,405	146,362	149,838	161,749
ADC	406.0	398.4	388.1	384.7	401.0	410.5	443.1
Beds	530	530	530	530	530	530	530
Occupancy	76.6%	75.2%	73.2%	72.6%	75.7%	77.5%	83.6%

Because of factors detailed in ATTACHMENT-18 that are expected to have an impact on the demand for medical/surgical services at NMH, NMH projects medical/surgical patient days will increase by an average annual growth rate of 2.1% (assuming the same average length of stay as CY18). NMH can justify an additional 25 beds by CY24, two years after project completion.

MED/SURG	CY19	CY20	CY21	CY22	CY23	CY24
Cases	26,403	26,936	27,480	28,035	28,601	29,179
Patient Days	165,016	168,350	171,750	175,220	178,759	182,370
ADC	452.1	461.2	470.5	480.1	489.8	499.6
Beds	530	530	530	530	555	555
Occupancy	85.3%	87.0%	88.8%	90.6%	88.2%	90.0%

Utilization Tables

ICU

UTILIZATION					
	SERVICE	UTILIZATION (Patient Days)	OCCUPANCY	STATE STANDARD	MET STANDARD?
CY17 (actual)	ICU	31,430	75%	60%	Yes
CY18 (actual)	ICU	29,429	70%	60%	Yes
CY23 (projected)	ICU	30,511	60%	60%	Yes
CY24 (projected)	ICU	30,733	61%	60%	Yes

MEDICAL/SURGICAL

UTILIZATION					
	SERVICE	UTILIZATION (Patient Days)	OCCUPANCY	STATE STANDARD	MET STANDARD?
CY17 (actual)	Med/Surg	149,838	78%	90%	No
CY18 (actual)	Med/Surg	161,749	84%	90%	No
CY23 (projected)	Med/Surg	178,759	88%	90%	No
CY24 (projected)	Med/Surg	182,370	90%	90%	Yes

UNFINISHED OR SHELL SPACE / ASSURANCES

Not Applicable – there is no unfinished or shell space planned in the project.

SECTION V. SERVICE SPECIFIC REVIEW CRITERIA

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

Category of Service	# Existing Beds	# Proposed Beds
ICU	**115**	**139**
Medical/Surgical	**530**	**555**

1110.200(b)(2) – Planning Area Need – Service to Planning Area Residents

The table below provides ICU and medical/surgical patient origin data by zip code for CY18. The data is presented in ascending zip code order. Data in bold denotes Cook County, NMH's service area.

The proposed beds will provide increased access to Northwestern Medicine care for residents of City of Chicago, Cook County, and beyond. The service area for the project is Cook County.

INTENSIVE CARE

As shown in the table below, in CY18, 4,493 ICU admissions were residents of Cook County. This is 61.5% of the total 7,307 ICU admissions.

MEDICAL/SURGICAL

In CY18, 18,908 medical/surgical admissions were residents of Cook County. This is 72.3% of the total 26,152 medical/surgical admissions.

NMH CY18 ICU & Medical/Surgical Patient Origin Data by Zip Code

ZIP CODE	ICU CASES	M/S CASES
00659	1	
00908	1	1
00985		2
01057		2
01507		1
01520		1
01775	1	
01776	1	
01887	1	
01907	1	

01945		1
02021	1	
02081		1
02356	1	
02370	1	
02464		1
02601		1
02670		1
02703		1
02840	1	
02908	1	
03225		1
04072		1
04614		1
05601		1
05780	1	
06473	1	
06787		6
06880	1	1
07040		1
07078		1
07093		2
07450	1	
07601		1
07660		1
07704	1	
07825		1
07826	1	
07920		1
07930		1
08050		1
08402	1	
08520		1
08530		1
08807	1	
10005		1
10011	1	
10012		1
10019		1
10022		1
10023		1
10024	1	

10035		1
10036	1	
10038		1
10065		1
10463	1	1
10521		1
11003		1
11021		1
11050	1	
11207		1
11209	1	
11231		1
11238	1	
11412		1
11520		1
11720		2
11756		1
11976		1
13057		1
13066	1	
13421		1
14004		1
14020		1
14068		1
14127		1
14209		1
14220		1
14616	1	
15102		1
15106		1
15222		2
15642		1
15864	1	
16635	1	
16865	1	
16868	1	
17331		1
18301	1	
18428		1
18901		1
19004		1
19013	1	

19107	1	
19317	1	
19335		1
19426	1	
19603		1
19606		1
20001		1
20105		1
20136		1
20147	1	
20155	1	
20176		2
20190		2
20706		1
20814		1
20817	1	
20871		1
20903		1
20904		1
20910	1	1
21029		1
21090	1	
21201		1
21224		1
21401		1
21702		1
21791		1
21801		1
22033	1	
22066	1	
22102	1	1
22222	3	6
22304		1
22902		1
23185		2
23219		1
23223		2
23462		3
23510		1
23661		1
23669	1	
24011		1

24121		1
25311		1
25411	1	
25425	1	
25526		1
25705		1
27006		1
27105		1
27407		1
27513		1
27529		1
27576		1
27597		1
27604		1
27615		2
27616		1
28078		1
28090		1
28105		1
28110		1
28211	1	
28315		1
28412		2
28560		1
28562	1	
28590		1
29036		1
29045	1	1
29118		1
29205		1
29229	1	
29451		1
29572		1
29577		1
29609		1
29690		1
29745		1
29829	1	
29846		1
29909		1
29910		1
29926	1	2

29927	1	
29928	1	2
30024		1
30034		1
30039		2
30043		1
30062		1
30094		1
30096	1	
30126		1
30189		1
30214		1
30265		1
30296		1
30303		1
30308		1
30310		1
30311		1
30316		2
30331		1
30363		1
30519		1
30607		1
30721	1	
30906		1
31021	1	
32009		1
32081		1
32082		1
32118	1	
32159		1
32163		1
32164	1	2
32169	1	
32204		1
32211		2
32259	1	
32401		1
32408		1
32541	1	
32561		1
32583	1	1

32708		1
32750		1
32778		1
32789	1	
32793		1
32814		1
32822		1
32869		1
33036	1	
33040		1
33051		1
33062		1
33064		1
33131		1
33135	1	
33139	1	
33141	1	1
33146		1
33154		1
33157		1
33166		1
33175		1
33180	1	1
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61606	1	
61607	4	4
61610		2
61611	5	8
61614	1	7
61615	3	3
61701	8	12
61704	10	22
61705	2	6
61720		1
61725		4
61727	2	1
61728	1	1
61732	1	1
61734		1
61736	1	1
61737	1	4
61738	2	
61741		1
61744	1	3
61745	1	
61748		1
61752	1	
61753	1	4
61754	1	
61755	2	
61759	1	1
61761	9	30
61764	3	10
61770	1	1
61776	1	

61801	3	15
61802	3	7
61811	1	
61812		1
61813	1	4
61814		6
61820	6	9
61821	11	16
61822	13	29
61826	1	
61832	15	33
61833	1	
61834		3
61841		2
61842		1
61843		2
61844	1	
61846		1
61847	1	
61849		1
61853	1	7
61854	1	2
61856	4	3
61858		3
61859	2	1
61863		1
61864	1	3
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61873		7
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61882		1
61883	1	4
61920	5	8
61924		2
61932		2
61938	2	2
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61953	1	1
62002		1
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62034		1
62056	1	6
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62233		1
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62441		1
62442		4
62447	3	2
62448		2
62450		1
62454		2
62466	2	4
62501		3
62514	1	
62521	10	10
62522	2	3
62526	1	9
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62548	1	
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62565		1
62568	2	1

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72661		2
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75218	1	1
75243		1
75693	1	
76008		1
76016		2
76109	1	
76131		1
76135		6
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77007		1
77040		1
77041		1
77054		1
77056	1	
77057	1	
77081		1
77227		1
77381		1
77546		1
77566	1	
77845		1
78023		1
78045		3
78114	1	
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78521		1
78572		1
78626		1
78641		1
78660		1
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78704		3

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78749		1
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83002	1	1
83338		1
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84060		1
84087	1	
84088		1
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85016		1
85044	1	
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90034		1
90046		1
90066		1
90077	1	
90210	1	
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90272		1
90740		1
90803	1	

91103		1
91302		1
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91326	1	
91354		1
91423		1
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91741		1
91744		1
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92056		1
92075		1
92106		1
92118	1	
92119		1
92129	1	
92159		1
92220		1
92253		1
92260		1
92506	1	
92629		1
92646		2
92663		1
92823		1
93110		1
93111		1
93314	1	
93446		1
93901		1
94002		1
94010		1
94027		1
94066		1
94103		1
94109	1	
94124		1
94526		1
94579		1
94611		1

94804		1
94901		1
95031		1
95134		1
95616	1	
95628	1	
95648		1
95776		1
96150		1
96707		1
96745		1
96753	2	
96789		1
97034	1	
97216	1	
97420		1
97448	1	
97520		1
98027		1
98032	1	
98038		1
98092		1
98103		1
98260		1
98403	1	
98404	1	
98407		1
98445		1
98466	1	
98501		1
98638		1
98660		1
98671		1
98682	1	
98802		1
99207	1	1
99362		1
Total Cases	7,307	26,152

Note: Zip codes in **bold** are Cook County zip codes.

1110.200(b)(4) – Planning Area Need – Service Demand – Expansion of an Existing Category of Service

As an academic medical center (AMC), NMH serves as a major referral center for high acuity care and has very specialized expertise, providing care to those patients who are unable to receive necessary care elsewhere and therefore having a patient population that is often more complex, sicker, and more vulnerable than the general patient population.

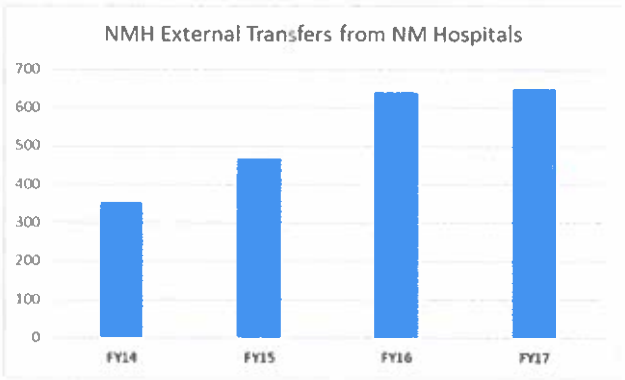
NMH continues to build advanced care capabilities in areas such as Heart and Vascular, Neurosciences, and Oncology. NMH's advancements in Heart and Vascular through the Bluhm Cardiovascular Institute have resulted in superior outcomes and innovations. For the second year in a row, NMH ranked first in the nation for heart failure survival and performed the most heart transplants in Illinois, with a one-year survival rate of 93.5%. In CY18, NMH performed an Illinois-record 54 heart transplants.

Since its founding in 2005, the Bluhm Cardiovascular Institute has more than tripled the number of ongoing clinical trials. Now totaling more than 100, these trials provide access to innovative cardiovascular technologies, medications, and devices. The PARTNER trial established NMH's national leadership in transcatheter therapies offering minimally invasive treatments for the aortic, mitral and tricuspid valves.

As a result of NMH's role as the preferred high acuity and specialty provider in the region, demand for NMH's ICU, medical/surgical, and observation services has increased. As similarly experienced by other AMCs throughout the country, NMH has seen continued increases in complex patient populations. Drivers of this growth are:

- Increases in emergent ED cases (compared to non-emergent)
- Chronicity of aging population
- Precision therapeutics and other technological advancements that require delivery in high-acuity hospitals
- Increase in population of residents aged 65+

Due to these factors, requests for transfers to NMH have increased. External transfers from other Northwestern Medicine hospitals alone have increased by 83.9% from FY14 – FY17.



INTENSIVE CARE

The request for more ICU beds is based on two supporting justifications:

1. Historic average annual occupancy above the State Standard
2. Projected continued growth in patient days due to increased complexity

1. Historic Occupancy above the State Utilization Standard

Category of Service	State Standard	CY17	CY18
ICU	60%	74.9%	70.1%

Occupancy of NMH's ICU beds has been over 60% (State Target Utilization) every year for the past decade. Average annual occupancy has ranged from 65% - 81%. CY18 ICU patient day volume justifies an additional 19 beds.

Historic Utilization

ICU	CY12	CY13	CY14	CY15	CY16	CY17	CY18
Cases	6,712	6,735	7,064	7,605	7,766	7,888	7,375
Patient Days	28,183	27,244	29,901	29,923	30,786	31,430	29,429
ADC	77.2	74.6	81.9	82.0	84.3	86.1	80.6
Beds	115	115	115	115	115	115	115
Occupancy	67.1%	64.9%	71.2%	71.3%	73.3%	74.9%	70.1%

2. Projected continued growth in patient days

From CY12 – CY18, NMH's ICU patient days have increased by 4.4% which is an average annual growth rate of 0.7%. Using the same growth rate to project future ICU patient days, NMH can justify an additional 24 beds by CY24, two years after project completion.

ICU	CY19	CY20	CY21	CY22	CY23	CY24
Cases	7,411	7,464	7,518	7,573	7,628	7,683
Patient Days	29,642	29,857	30,074	30,292	30,511	30,733
ADC	81.2	81.8	82.4	83.0	83.6	84.2
Beds	115	115	115	115	139	139
Occupancy	70.6%	71.1%	71.6%	72.2%	60.1%	60.6%

MEDICAL/SURGICAL

The request for additional medical/surgical beds is based on three supporting justifications:

1. Impact of limited bed availability on NMH's emergency department
2. Projected population growth in Cook County for residents aged 65+
3. Projected continued growth in patient days

1. Impact of limited bed availability on NMH's emergency department (ED)

   As the only adult Level I trauma center in downtown Chicago, NMH provides crucial emergency services to the residents of Chicago. However, the amount of time NMH was on ED diversion status increased 480% between CY15 and CY18. In CY15, NMH was on diversion 544 hours (6.2% of the year) while in CY18, NMH was on diversion 3,156 hours (36% of the year). The root cause for the ED congestion was found to be the continued demand for inpatient or observation care beds. Specifically, in the typical diversion event, NMH did not have any available inpatient or observation care beds which forced patients who needed to be monitored to stay in the ED.

   Also during CY15 – CY18, the number of ED patients who left without being seen as a result of high wait times increased by 40%, from 3,328 in CY15 to 4,655 in CY18. Additionally, external transfers from other hospitals for specialty services at NMH could not be accommodated because of lack of ICU, medical/surgical or observation bed availability.

   While operational changes were made to help alleviate these issues, NMH anticipates continued capacity constraints on the ED without the proposed additional beds.

2. Projected population growth in Cook County for residents aged 65+

   Older adults use far more health care services than younger age groups. Although older adults vary greatly in terms of health status, the majority have at least one chronic condition that requires care. Projections indicate that the demand for services for older adults will rise substantially in the coming decades, which will put increasing pressure on the capacity of health care facilities.

   Over the coming decades, the total number of Americans ages 65 and older will increase sharply. As a result, an increasing number of older Americans will be living with illness and disability, and more care resources will be required to meet their needs for health care services.

   Older adults have much higher rates of health services utilization than do non-elderly persons. Although they represent about 12 percent of the U.S. population, adults

ages 65 and older account for approximately 35 percent of all hospital stays (source: www.nih.gov).

According to an analysis by SG2, while the overall population of Cook County is projected to remain about the same from 2019 to 2024, there will be a large increase in the number of residents aged 65+.

	Cook County Population 2019	Cook County Population 2024	Projected Population Change 2019-2024
0-17	1,137,427	1,119,842	(17,585)
18-44	1,975,858	1,902,039	(73,819)
45-64	1,277,987	1,260,833	(17,154)
65+	742,253	845,532	103,279
Total	**5,133,525**	**5,128,246**	**(5,279)**

Because over 42% of NMH's medical/surgical patients are age 65+, based on these population projections for Cook County, NMH can assume that there will be an even higher average annual growth rate than the historical growth rate.

3. Projected continued growth in patient days

From CY12 – CY18, NMH's medical/surgical patient days have increased by 9.1% which is an average annual growth rate of 1.5%. However, in the past three years, from CY15 – CY18, patient day volume has increased by 15%, for an average annual growth rate of 5.1%.

MED/SURG	CY12	CY13	CY14	CY15	CY16	CY17	CY18
Cases	27,948	27,305	24,729	22,491	23,443	23,439	25,881
Patient Days	148,198	145,406	141,650	140,405	146,362	149,838	161,749
ADC	406.0	398.4	388.1	384.7	401.0	410.5	443.1
Beds	530	530	530	530	530	530	530
Occupancy	76.6%	75.2%	73.2%	72.6%	75.7%	77.5%	83.6%

As expressed in previous CONs, it is not optimal for NMH to have an average annual occupancy of 90%. For the reasons detailed above, occupancies over 80% begin to create capacity issues that have negative impacts on other areas of the hospital. Northwestern University McCormick School of Engineering studied NMH operations and capacity constraints; as a result of their study, they recommended an optimal occupancy of 80% for NMH for the following reasons:

- An average annual occupancy target includes fluctuations between high Monday – Friday census levels and lower weekend census levels as well as seasonal fluctuations. An average annual occupancy of 90% means that Monday-Friday daytime census levels are at or above 100%.

- As is typical for an AMC, NMH has many specialized units. Specialized care teams at NMH have led to the superior outcomes mentioned above. Because of the specialized care needs, not all beds at NMH are interchangeable. Different units have varying optimal occupancy rates based on cohort types – in the bigger homogeneous cohorts such as medicine, a higher average occupancy is easier to achieve, whereas in smaller, limited cohorts, the optimal occupancy rate is much lowers.

Because of the factors detailed above that are expected to have an impact on the demand for medical/surgical services at NMH, NMH projects medical/surgical patient days will increase by an average annual growth rate of 2.1% (assuming the same average length of stay as CY18). NMH can justify an additional 25 beds by CY24, two years after project completion.

MED/SURG	CY19	CY20	CY21	CY22	CY23	CY24
Cases	26,403	26,936	27,480	28,035	28,601	29,179
Patient Days	165,016	168,350	171,750	175,220	178,759	182,370
ADC	452.1	461.2	470.5	480.1	489.8	499.6
Beds	530	530	530	530	555	555
Occupancy	85.3%	87.0%	88.8%	90.6%	88.2%	90.0%

OBSERVATION

Dedicated observation beds are important to NMH because as the demand for inpatient medical/surgical services continues to increase, efficient and effective utilization of inpatient beds is critical for meeting projected volumes. While not entirely avoidable, observation care in inpatient beds decreases capacity for inpatient services.

Observation beds are used to evaluate a patient's condition or to determine the need for a possible admission to the hospital as an inpatient. Observation patients can also be surgical patients who have post-operative complications, beyond usual/expected after surgery, which require further monitoring.

Most observation patients can be evaluated and/or treated in less than 24 hours. Typically, observation units have higher utilization during the day than overnight. Most patients are evaluated/treated during the day and either discharged or admitted as an inpatient by early evening.

There is no HFSRB occupancy standard for observation beds.

Historic Utilization and Future Projections

From CY12 – CY18, NMH's observation days have increased by 25.1% which is an average annual growth rate of 4.2%.

OBSERVATION	CY12	CY13	CY14	CY15	CY16	CY17	CY18
Patient Days	14,375	16,048	14,059	16,757	17,169	18,535	17,986
ADC	39.4	44.0	38.5	45.9	47.0	50.8	49.3
Beds	48	48	48	48	48	51	57
Occupancy	82.0%	91.6%	80.2%	95.6%	98.0%	99.6%	86.5%

Note: NMH added 6 observation beds in CY18 to help alleviate patient throughput issues in the emergency department.

Using the same growth rate to project future observation days, NMH observation beds, including the 11 beds included in this project, will be over 90% occupied by CY24, two years after project completion.

OBSERVATION	CY19	CY20	CY21	CY22	CY23	CY24
Patient Days	18,669	19,379	20,115	20,880	21,673	22,497
ADC	51.1	53.1	55.1	57.2	59.4	61.6
Beds	57	57	57	57	68	68
Occupancy	89.7%	93.1%	96.7%	100.4%	87.3%	90.6%

1110.200(e) – Staffing Availability

The Division of Patient Care at NMH is responsible for ensuring a safe patient care environment. NMH's framework for Nursing Practice and Guiding Principles for Care Delivery are based on the Northwestern Medicine Interprofessional Relationship Based Care Model.

All inpatient nursing units maintain a staffing plan that enables the nurse in charge (usually a Clinical Coordinator or charge nurse) to identify the complement of registered nurses needed to care for the patients on the unit. Patient assignments are commensurate with the qualifications of each staff member and meet the identified nursing needs of the patient and the prescribed medical regimen. A Registered Nurse (RN) is accountable and responsible for assessing, planning, supervising, and evaluating the nursing care of every patient.

Each patient care area has specific staffing standards that address:

- Patient Census
- Patient Acuity

- Staff skill mix
- Staff competency
- Unit geography

NMH requires patient care staffing assignments to:

- Minimize the risk of transfer of infection and accidental contamination
- Allow for appropriate supervision of patient care staff
- Take into consideration the patient's individual needs for nursing care and patient activities, including admission, discharge and transfers to tests and procedures
- Take into consideration the patient's need for on-going nursing assessments and interventions, as well as the present medical plan of care
- Reflect the knowledge of technology, skills, competence, needed to provide patient care
- Provide for coverage for attendance at educational programs, professional development activities and involvement in quality improvement activities.
- Define responsibility for completion of unit specific tasks and activities including care of used equipment, cleaning of unit areas, and quality control checks/monitors of equipment.

NMH is successful at recruiting and retaining nurses, technicians, and other essential employees. In FY19, there were 2,702 total registered nurses at NMH, up from approximately 2,578 in FY14. NMH hired 485 RNs in FY18 and 540 in FY19. 94% of NMH nurses hold a baccalaureate degree or higher which compares to the national average of 56% (source: American Association of Colleges of Nursing (AACN), 2017).

The nurse vacancy rate has risen slightly from 6.3% in FY18 to 6.6% in FY19 but is still approximately the same as the national benchmark of 6.4% for teaching hospitals (Labor Management Institute, 2017). Vacant positions are covered using an overtime/supplemental time program. NMH is confident it can continue to fully staff its clinical inpatient and outpatient services.

NMH has numerous initiatives to create a healthy work environment for nurses and to improve nurse retention:

- The NMH RN Residency Transition into Practice Program, an orientation program for new graduate nurses, was accredited with distinction through the ANCC in 2019.
- The stress management and resilience session "Happiness: The Highest Form of Health" has been presented in Nursing Grand Rounds and is included in the NMH RN Residency Transition into Practice Program.
- The Northwestern Medicine *Better You* initiative is a comprehensive workforce well-being initiative. *Better You* highlights resources, rewards, and ways of receiving care that optimize the ongoing commitment to the physical, emotional, and financial well-being of every NMH employee. Enhanced benefits include: 1) annual $250 reimbursable well-being fund; 2) student loan repayment services; 3) paid parental leave benefit; and 4) workforce physician referral service.

- The Nursing Professional Development Pathway was created to provide an opportunity for professional development and career growth for clinical nurses throughout the organization. The intent was to increase retention and engagement of clinical nurses, while promoting inter-professional collaboration and excellent patient care.
- NMH provides opportunities for career growth and advancement for nurses at NMH. These include: leadership roles such as charge nurse, clinical coordinator, manager, etc.; educational paths such as staff educator, breastfeeding counselor, etc.; involvement in professional organizations, advanced education or community volunteerism; and participation in quality, safety, or research initiatives.

NMH is proud to have achieved Magnet® recognition, the gold standard for nursing excellence and quality care awarded by the American Nurses Credentialing Center in 2006. This designation recognizes NMH's ongoing commitment to provide the best for our patients. NMH is currently working towards a third re-designation.

Central to the NMH Mission is improving the health of our community. To champion this effort, NMH employees have established two volunteer initiatives that benefit the public: *NM Food Surplus Project* and *Operation Warm Blanket*.

NM Food Surplus Project

As part of Magnet® designation, nursing leadership showcased how NMH gives back to the community and supports nurse volunteerism. In 2019, the NMH Shared Leadership Magnet® Subcommittee initiated the *NM Food Surplus Project* in alignment with Healthy People 2020 NWS-13 Goal: Reduce household food insecurity and in doing so reduce hunger. Every Monday and Tuesday, nurses from the Magnet® Subcommittee collect food left over from catering events and meetings at NMH and package it for donation.

Nursing leadership ensured all volunteers became certified in food handling. The team engaged catering and spread the word to other departments. The food is provided to the Chicago Help Initiative© and The Kindness Campaign, which works to provide meals to homeless, underprivileged, and unemployed Chicagoans. A representative from the Chicago Help Initiative© comes to NMH every Wednesday to collect the food.

Food collection went live in April 2019. The first delivery collected enough food to feed 200 people. The items ranged from boxed lunches and trays of mostaccioli to desserts. The success of the *NM Food Surplus Project* is due in large part to the inter-professional collaboration of the nurses who collect the food to the food services and catering teams that have supported food packaging, storage, and communication of the initiative.

Operation Warm Blanket

Since it was established in 2019 at NMH, *Operation Warm Blanket* has helped nearly 100 patients experiencing homelessness in Chicago by providing food, clothing, medical

care, social support, enrollment into an entry housing program, and a referral to local shelter services or supportive housing.

The program is a collaboration among the hospital's Transitional Care Clinic and Emergency Department, the social service agency Thresholds, and the affordable housing property Lawson House. It was established in 2019 on Valentine's Day, and operates one day a week, year round, out of the Transitional Care Clinic. The NMH ED refers patients to the clinic, where Northwestern University Feinberg School of Medicine medical student volunteers, Northwestern Medicine staff, and community health workers from Thresholds provide critical resources to help improve patient outcomes.
Patients who experience chronic homelessness as well as severe mental illness are often unable to follow through with treatment plans, frequent the emergency department for their basic needs, and often exhibit suboptimal clinical outcomes. *Operation Warm Blanket* strives to do better for these patients by transitioning them into primary care while providing them with basic needs and social support.

1110.200(f) – Performance Requirements

The minimum bed capacity for a medical/surgical category of service within a Metropolitan Statistical Area (MSA) is 100 beds. NMH currently has a total of 530 medical/surgical beds and is proposing to add 25 more for a total of 555 beds.

The minimum unit size for an intensive care unit is 4 beds. The proposed ICU unit is 24 beds. The total number of NMH ICU beds will be 139.

1110.200(g) – Assurances

See letter at the end of this ATTACHMENT.

Northwestern Medicine

January 30, 2020

Ms. Courtney Avery
Illinois Health Facilities and Services Review Board
525 West Jefferson Street, 2nd Floor
Springfield, IL 62761

RE: 1110.200(g) – Assurances
Northwestern Memorial Hospital
Galter (Floors 11, 12) Beds Project

Dear Ms. Avery:

I hereby attest that it is my understanding that Northwestern Memorial Hospital in Chicago, Illinois, will achieve and maintain the occupancy standards specified in 77 Ill. Adm. Code 1100 for the ICU and medical/surgical categories of service by the second year of operation after project completion.

Sincerely,

Julie L. Creamer

Julie L. Creamer
President, Northwestern Memorial Hospital
President, Marianjoy Rehabilitation Hospital
Senior Vice President, Northwestern Memorial HealthCare

Notarization:
Subscribed and sworn to before me
This 30th day of January, 2020.

Millisa Vasich
Notary Public

MILLISA VASICH
OFFICIAL SEAL
Notary Public, State of Illinois
My Commission Expires
March 05, 2022

Millisa Vasich
01-30-2020

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ATTACHMENT-18

SECTION VI. 1120.120 – AVAILABILITY OF FUNDS

Not Applicable – see bond rating documents

SECTION VII. 1120.130 – FINANCIAL VIABILITY

Not Applicable – see bond rating documents

S&P Global
Ratings

RatingsDirect®

Summary:

Illinois Finance Authority Northwestern Memorial HealthCare; CP; System

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Summary:

Illinois Finance Authority
Northwestern Memorial HealthCare; CP; System

Credit Profile		
Illinois Finance Authority, Illinois		
Northwestern Mem HlthCare, Illinois		
Illinois Finance Authority (Northwestern Memorial HealthCare) (Direct Issue Taxable Commercial Paper)		
Short Term Rating	A-1+	Affirmed
Series 2008A-1 & A-2		
Long Term Rating	AA+/A-1+/Stable	Affirmed

Rationale

S&P Global Ratings affirmed its 'AA+/A-1+' rating on Illinois Finance Authority's outstanding 2008A-1 and 2008A-2 bonds, issued for Northwestern Memorial HealthCare (NMHC). The bonds are being remarketed from variable-rate demand bonds supported by standby bond purchase agreements into self-liquidity. The 'A-1+' rating now reflects self-liquidity rather than the standby bond purchase agreements provided by the banks.

In addition, S&P Global Ratings affirmed its 'A-1+' short-term rating on the authority's taxable commercial paper (CP) notes, issued on behalf of NMHC. NMHC is increasing the taxable CP program limit to $200 million from $100 million.

The long-term ratings are based on our 'AA+' long-term rating on NMHC's debt.

We base the 'A-1+' short-term ratings on NMHC's ability to fund from its own liquidity. In addition, the 'A-1+' rating on the CP is based on NMHC's ability to fund from its own liquidity any CP not successfully remarketed. The taxable CP program has increased the limit to $200 million from the $100 million limit.

Northwestern Memorial HealthCare has identified approximately $1.39 billion in assets (market value) as of June 30, 2019, to cover the $200 million authorized CP program and $69.3 million of series 2008A-1 and series 2008A-2 weekly variable-rate demand obligations. Northwestern Memorial HealthCare's liquidity assessment is based on its identification of several sources of cash, fixed income, and domestic equities. Northwestern Memorial HealthCare has procedures in place to meet its liquidity demands on a timely basis. S&P Global Ratings monitors the liquidity and sufficiency of Northwestern Memorial HealthCare's assets committed to self-liquidity on a monthly basis.

The ratings reflect our view of NMHC's sustained solid operational performance and balance sheet metrics in a period of significant growth. As a system, NMHC has successfully integrated new members into the organization, and it has reaped the benefits of operating more as a system than a federation of hospitals. NMHC recently successfully completed its Project One IT implementation, which has resulted in the same health IT platform across its acute care hospitals with the exception of Centegra, which NMHC expects to integrate in fiscal 2019 and fiscal 2020. Finally,

NMHC's management team is maintaining financial discipline as it executes the system's growth strategy. We expect NMHC will remain an important provider in the very competitive Chicagoland market. In addition, we believe management will continue to focus on integration as well as aligning services in ambulatory facilities as a growth strategy.

The 'AA+' rating continues to reflect our view of NMHC's:

- Strong liquidity position that we expect will be stable given manageable capital needs;
- Solid financial performance despite a period of significant growth, aided by management's continued focus on cost containment;
- Outstanding governance and management, including the numerous benefits realized through affiliations with Northwestern University-related entities, including the Feinberg School of Medicine; and
- Expanding business position through its acquisition strategy.

Partly offsetting the above strengths, in our view, are NMHC's:

- Expectation for dilutive results in fiscal 2019 given the recent Centegra acquisition, and
- Increasingly competitive service area, with provider consolidation continuing in the greater Chicago area.

The analysis and financial figures in this report pertain to the activities of NMHC, the sole corporate member of Northwestern Memorial Hospital (NMH), Northwestern Medicine Lake Forest Hospital, Northwestern Medical Faculty Foundation (doing business as Northwestern Medical Group), Northwestern Memorial Foundation, Northwestern Medicine Central DuPage Hospital, Northwestern Medicine Delnor Hospital, Cadence Physician Group (doing business as Northwestern Medicine Regional Medical Group), KishHealth System, Marianjoy Rehabilitation Hospital & Clinic Inc., Rehabilitation Medicine Clinic Inc., and Centegra Health System.

For more information on the group, see the report published Feb. 4, 2019, on RatingsDirect.

Outlook

The stable outlook reflects our expectation that the system will maintain strong operations as NMHC's leadership implements its overall strategy and as the market consolidates. We expect the dilution from the Centegra acquisition will be manageable and expect operating losses will be diminished during the ongoing integration.

Downside scenario

While we do not expect this, if operations begin to trend negatively for a sustained period and liquidity declines notably, we could revise the outlook to negative or lower the rating. In addition, we could lower the rating if there is a material increase in leverage, a dilutive acquisition, or a sustained decline in NMHC's market position.

Upside scenario

A higher rating is unlikely within the outlook period given the already high rating and S&P Global Ratings' general view of risk in the health care sector and highly competitive environment.

Credit Snapshot

- Security pledge: The revenue bonds and commercial paper are an unsecured general obligation of the NMHC obligated group, which consists of Northwestern Memorial HealthCare, Northwestern Memorial Hospital, Northwestern Lake Forest Hospital, Northwestern Memorial Foundation, Lake Forest Health and Fitness Institute, Northwestern Medical Faculty Foundation d/b/a Northwestern Medical Group, Central DuPage Hospital Association, Central DuPage Physician Group d/b/a Northwestern Medicine Regional Medical Group, Delnor-Community Hospital, KishHealth System, Kishwaukee Community Hospital, Valley West Community Hospital, Marianjoy Rehabilitation Hospital & Clinics, Inc., Rehabilitation Medicine Clinic, Inc., Centegra Health System, Northern Illinois Medical Center (d/b/a Northwestern Medicine McHenry Hospital, d/b/a Northwestern Medicine Huntley Hospital, and d/b/a Northwestern Medicine Woodstock Hospital), Memorial Medical Center--Woodstock, NIMED Corp. and Centegra Hospital-- Huntley Holdings.
- Organization description: NMHC operates hospitals in the northern and western suburbs of Chicago as well as its flagship NMH. NMH is a major academic medical center and is the primary teaching hospital for Northwestern University's Feinberg School of Medicine. It provides a range of services.
- Swaps: The organization has four swap agreements outstanding with a total notional amount of about $325.6 million. It has no collateral posted and a negative mark-to-market of $73.4 million as of fiscal 2018.

U.S. PUBLIC FINANCE

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CREDIT OPINION
24 July 2019

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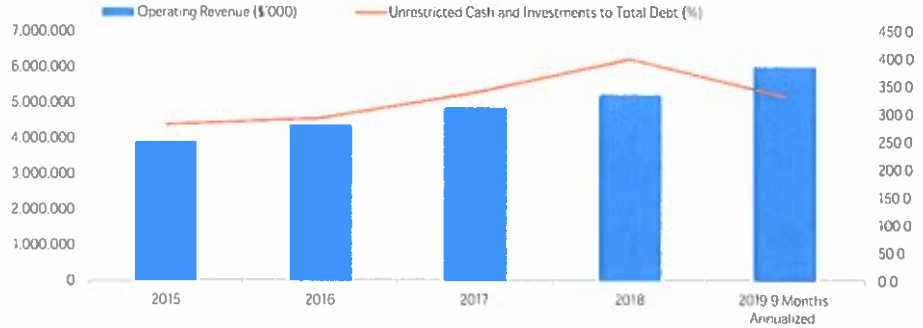
Northwestern Memorial HealthCare, IL

Update to credit analysis

Summary

Northwestern Memorial HealthCare (NMHC) (Aa2, stable) will grow its prominent market position in the broader Chicago region because of its strong brand, favorable locations and affiliation with Northwestern University's Feinberg School of Medicine. The system's consolidated operating model and comprehensive IT systems will allow it to effectively execute growth strategies, while maintaining very good margins, which it has recently demonstrated during a rapid growth period. While the acquisition of Centegra Health System (Centegra) will dilute financial metrics in fiscal 2019, demonstrated management discipline will drive improvement at that location as reflected in year-to-date results. Manageable capital plans will help maintain a strong investment position. Leverage will remain moderate, particularly since the system has a fully funded pension plan and modest operating lease obligations. However, competition will continue to increase as the market further consolidates.

Exhibit 1
Strong balance sheet will be maintained during rapid expansion



Source: Moody's Investors Service

Credit strengths

» Market position will continue to grow as strong brand, favorable locations and affiliation with Northwestern University's Feinberg School of Medicine will drive demand

» Consolidated and comprehensive operating model and IT systems will allow efficient execution of growth strategies

» Strong investment position will be maintained with cash flow supporting manageable capital needs

ATTACHMENTS-33, 34, 35, 36

- Very good cash flow margins will be sustained, supported by a disciplined management approach to quickly addressing challenges
- Anticipate operating and balance sheet leverage to remain moderate
- Relatively low Medicare and Medicaid dependency will limit risk of cuts and delays
- Fully funded pension plan and modest operating lease obligations

Credit challenges

- Competition will increase as area providers continue to consolidate into larger systems with financial resources
- Recent merger with Centegra will dilute fiscal 2019 operating and balance sheet metrics; favorably, Centegra's year-to-date losses are down
- High allocation to alternative investments will drive comparatively low monthly liquidity

Rating outlook

The stable outlook is based on our expectation that NMHC will maintain strong operating cash flow margins by managing growth strategies with little disruption to operations. We expect the dilution from Centegra will be manageable and operating losses at that location will be materially reduced in the next year as integration progresses. The outlook also reflects our view that NMHC will maintain liquidity and debt metrics since capital spending will be funded with cash flow.

Factors that could lead to an upgrade

- Geographic diversification of cash flow
- Significant increase in market share
- Material and sustained improvement in operating margins, along with reduction in leverage
- Stronger liquidity

Factors that could lead to a downgrade

- Large increase in leverage with weakening of debt metrics
- Material decline in margins or investment position
- Meaningful dilution from acquisition or merger

Key indicators

Exhibit 2
Northwestern Memorial HealthCare, IL

	2015	2016	2017	2018	2019 9 Months Annualized
Operating Revenue ($'000)	3,885,630	4,359,873	4,830,996	5,226,663	6,016,695
3 Year Operating Revenue CAGR (%)	31.7	36.6	25.8	10.4	11.4
Operating Cash Flow Margin (%)	13.2	12.4	12.7	11.3	11.9
PM: Medicare (%)	34.6	35.8	37.3	37.9	N/A
PM: Medicaid (%)	10.6	10.6	10.7	10.8	N/A
Days Cash on Hand	435	413	422	437	401
Unrestricted Cash and Investments to Total Debt (%)	282.0	293.7	340.0	400.4	332.6
Total Debt to Cash Flow (x)	1.9	1.9	1.6	1.6	1.7

Based on financial statements for Northwestern Memorial HealthCare & Subsidiaries, fiscal year ended August 31

Adjustments: Grants and academic support provided (representing transfers to the school of medicine) reallocated to operating expenses from nonoperating gains (losses)

Investment returns normalized at 6% prior to FY 2015 and 5% in FY 2015 and beyond
Source: Moody's Investors Service

Profile

NMHC operates sizable hospitals in the northern and western suburbs of Chicago as well as the flagship Northwestern Memorial Hospital (NMH). NMH is a major academic medical center located in the Streeterville neighborhood of Chicago, providing a complete range of adult inpatient and outpatient services. NMH is the primary teaching hospital for Northwestern University's Feinberg School of Medicine (FSM).

Detailed credit considerations

Market position: growing market position in competitive market

NMHC will remain a key prominent player in a highly competitive market. The hospital system will continue to grow, having already more than doubled its size since fiscal year end 2014 to a $6 billion regional system (annualized nine months fiscal 2019). NMHC's acquisition last year of Centegra Health System will further expand its footprint as the system integrates and makes investments in this northern market. The system's completion of a replacement hospital for Northwestern Medicine Lake Forest Hospital will provide opportunity to grow volumes in that region. With significant expansion in the north and west completed, NMHC's strategies will mostly focus on further investments in ambulatory capabilities. Additionally, following the centralization of most business functions, NMHC will continue to integrate and coordinate clinical protocols across the system to improve patient outcomes and experience.

NMHC will continue to integrate and align strategies with Northwestern University's Feinberg School of Medicine (FSM) to further the Northwestern Medicine brand and build clinical capabilities. An ongoing joint planning process and governance oversight structure will help coordinate activities for the school, Northwestern Medical Group and hospitals.

The Chicago market will become more competitive as the pace of consolidation among hospitals increases and larger systems with deeper financial resources develop. Over the last two years, Presence Health merged with AMITA, a joint operating company formed by Ascension Health and Adventist Health System Sunbelt, Inc. Advocate Health Network and Aurora Health (Wisconsin based) merged to create a two-state system. Competition for physicians will also continue, including that from a large independent medical group with private investors. On a positive note, the state's strict Certificate of Need process will continue to reduce the presence of for-profit hospital companies.

Operating performance, balance sheet and capital plans: strong margins and investment position will be maintained

We expect NMHC will continue to enjoy good operating margins, despite the dilutive impact of Centegra in fiscal 2019. This is supported by the system's ability to generate generally stable operating cash flow margins, averaging about 12% over three years, while rapidly expanding, opening a replacement hospital, and undertaking a major IT installation.

Based on management's budget, NMHC expects its operating cash flow margin in fiscal 2019 to decline slightly versus fiscal 2018 but remain within the recent 11%-12% range. Specifically in fiscal 2018, strong management discipline was evident as margins were maintained while absorbing costs related to the opening of the replacement Lake Forest Hospital as well as the installation of a system wide electronic medical record. In addition, NMHC saw lower supplemental Medicaid payments in 2018. Also helping to support margins, as was seen in fiscal 2018, good volume trends will continue to drive strong same-facility revenue growth in the coming year.

NMHC's most significant challenge in fiscal 2019 will be reducing material operating losses at Centegra. The system's centralized business model will allow quick integration of support functions to achieve savings. Centegra will be rolled onto IT platforms, which will drive revenue cycle improvements. Through nine months of fiscal 2019, Centegra's losses declined, evidencing positive progress on these initiatives. Like other systems in the region, NMHC will also face growing denials as traditional Medicaid shifts to managed care plans. Despite absorbing Centegra, NMHC's operating cashflow margin through nine months of fiscal 2019 was a strong 11.9%, ahead of prior year.

Margins will be aided by the system's annual efficiency expectations across the organization including corporate services and IT capabilities. With the exception of Centegra, all acute inpatient and outpatient facilities are on one electronic medical record platform, including the revenue cycle component, and one ERP system.

LIQUIDITY

Over the coming year, NMHC will maintain a strong investment position, with 437 days cash on hand at fiscal year end 2018. Growth was due to operating performance and investment returns. Days cash on hand declined to a still strong 401 days at May 31, 2019 due to the effect of Centegra. Liquidity will be comparatively lower than peers due to its asset allocation. Fiscal year end 2018 monthly liquidity was comparatively low at 47%, reflecting a heavy allocation to alternative investments. NMHC will have minimal liquidity needs associated with swaps (limited collateral postings) and its pension, which is fully funded.

We expect capital spending will be manageable and funded with operating cash flow. NMHC will plan to spend about $389 million in fiscal 2019, which is lower than the last several years following the completion of the new Lake Forest Hospital and the IT installation.

Debt structure and legal covenants: leverage and debt structure risks will be manageable

With revenue and cash flow growth, NMHC will continue to de-leverage, as the system has done over the last several years. Balance sheet and operating leverage is modest. Based on May 31, 2019, cash-to-debt was very strong at 333%. Debt-to-cash flow was favorably low at 1.7 times. We do not anticipate incremental leverage in the next couple years, outside of merger-related debt.

DEBT STRUCTURE

NMHC's debt structure risks will be manageable given good bank diversification and strong liquidity. Following the proposed plan of finance, NMHC will have approximately 30% bank-related debt, including bonds supported by bank standby bond purchase agreements and private bank placements. The bank counterparties are diversified and expiration dates are staggered. NMHC's bank agreements have consistent covenants and reporting requirements.

Following the plan of finance, NMHC's self-liquidity obligations will increase, but will be manageable relative to strong liquidity. Conversion of the Series 2008A-1 and 2008A-2 to self-liquidity will add $69 million of weekly variable rate demand obligations. The authorized amount of the commercial paper program will increase to $200 million from $100 million and the system expects to have $78 million of CP issued within the next six months. Although not legally restricted in the Issuing and Paying Agent Agreement, NMHC intends to limit maturities to $60 million within any five business-day period. On a proforma basis and based on liquidity at June 30, 2019, NMHC will have over six times coverage of self-liquidity obligations (2.6 times excluding the largest money market fund).

LEGAL SECURITY

Bonds and commercial paper are unsecured general obligations of the Obligated Group, which includes virtually all of NMHC's assets and revenues. Effective September 1, 2018 Centegra and its affiliates joined the NMHC Obligated Group. A Supplemental Master Trust

Indenture (MTI) was executed to issue obligations pursuant to the NMHC MTI in order to secure all debt that was previously secured by obligations issued pursuant to the Centegra MTI prior to the release of the Centegra MTI. The MTI allows substitution of notes without bondholder approval and has no additional indebtedness tests.

DEBT-RELATED DERIVATIVES

NMHC's debt-related derivatives will pose minimal credit risk, given modest collateral posting requirements and NMHC's strong liquidity. At fiscal year end 2018, NMHC had interest rate swaps with a total notional amount of $326 million and no collateral was posted.

PENSIONS AND OPEB

NMHC's pension plan is fully funded.

Management and governance

NMHC's extensive and comprehensive creation of a standard operating model, consolidated and centralized business functions, and single IT platforms (EMR and ERP) will allow it to effciently achieve further clinical integration and execute growth strategies. We expect the management team will continue to demonstrate a disciplined and detailed approach to evaluating strategic alternatives and capital commitments. These capabilities have allowed the system to integrate new hospitals during a rapid growth period while maintaining operating and balance sheet strength.

REPORT NUMBER 1186650

SECTION VIII. 1120.140 – ECONOMIC FEASIBILITY

A. Reasonableness of Financing Arrangements

Not Applicable – see bond rating documents

B. Conditions of Debt Financing

Not Applicable – the proposed project will be funded by cash and securities

C. Reasonableness of Project and Related Costs

COST AND GROSS SQUARE FEET BY DEPARTMENT									
Department	A	B	C	D	E	F	G	H	
	Cost/Square Foot		BGSF		BGSF		Const. $	Mod. $	Total Cost
	New	Mod.	New	Circ.*	Mod.	Circ.*	(A x C)	(B x E)	(G + H)
CLINICAL									
ICU	$ 413.00		23,107	17.5%			$ 9,543,191		$ 9,543,191
Medical/Surgical/Observation	$ 413.00		29,367	17.5%			$12,128,571		$12,128,571
Clinical Subtotal	$ 413.00		52,474	17.5%			$21,671,762		$21,671,762
Clinical Contingency	$ 41.30		52,474				$ 2,167,176		$ 2,167,176
Clinical Total	**$ 454.30**		**52,474**				**$23,838,938**		**$23,838,938**
NON-CLINICAL									
Connectors	$ 1,640		5,932	17.5%			$ 9,728,480		$ 9,728,480
Administration	$ 325		6,593	17.5%			$ 2,142,725		$ 2,142,725
Reception/Waiting/Public Space	$ 375		4,536	17.5%			$ 1,701,000		$ 1,701,000
Nursing and Physician Support	$ 350		2,730	17.5%			$ 955,640		$ 955,640
Classrooms/Conference rooms	$ 350		2,121	17.5%			$ 742,350		$ 742,350
Environmental Services	$ 200		1,060	17.5%			$ 212,080		$ 212,080
Staff / Back of House Corridors	$ 325		6,246	17.5%			$ 2,029,950		$ 2,029,950
Non-Clinical Subtotal	$ 599.35		29,219	17.5%			$17,512,225		$17,512,225
Non-Clinical Contingency	$ 59.93		29,219				$ 1,751,223		$ 1,751,223
Non-Clinical Total	**$ 659.28**		**29,219**				**$19,263,448**		**$19,263,448**
TOTALS	**$ 527.61**		**81,693**	**17.5%**			**$43,102,386**		**$43,102,386**

D. Projected Operating Costs

Project Direct Operating Expenses – FY24

	M/S/Obs Unit	ICU Unit
Total Direct Operating Costs	$ 6,909,984	$ 8,822,187
Equivalent Patient Days	13,716	6,205
Direct Cost per Equivalent Patient Day	$ 504	$ 1,422

E. Total Effect of the Project on Capital Costs

Projected Capital Costs – FY24

Equivalent Adult Patient Days (All NMH)	575,319
Total Project Cost	$ 77,607,985
Useful Life	12
Total Annual Depreciation	$ 6,467,332
Depreciation Cost per Equivalent Patient Day	$ 11.24

SECTION IX. SAFETY NET IMPACT STATEMENT

NMH is an 894-bed, adult acute-care, nationally ranked, academic medical center (AMC) hospital in downtown Chicago that provides a complete range of adult inpatient and outpatient services in an educational and research environment. For more than 150 years, NMH and its predecessor institutions have served the residents of Chicago. The commitment to provide health care, regardless of the patients' ability to pay, reaches back to the founding principles of our predecessors, and continues to be integral to our mission to put patients first. NMH serves a large, complex and diverse area, with patients coming from the City of Chicago and surrounding counties.

NMH is among the limited number of hospitals in the United States to be designated as a major teaching hospital by the Association of American Medical Colleges (AAMC). The AAMC has found that while major teaching hospitals comprise a small percentage of the acute-care, general-service hospitals in the United States, in aggregate, they provide a disproportionate amount of charity care and Medicaid inpatient services.

As an AMC, NMH serves as a major referral center and has very specialized expertise. NMH provides care to those patients who are unable to receive necessary care elsewhere and therefore has a patient population that is often more complex, sicker and more vulnerable than the general patient population.

To best address the diverse needs of our patients, NMH routinely works with trusted health and social service partners in the Chicagoland area to advance key community-based initiatives. For many years, NMH has worked with multiple federally qualified health centers (FQHCs) to address access to care concerns and other community health initiatives.

Access to Care

NMH has longstanding relationships with major FQHCs and a free health clinic within the City of Chicago: Erie Family Health Centers (Erie), Near North Health Services Corporation (Near North) and CommunityHealth. NMHC provides grant funding and care coordination to each of these organizations to support expanded access to health services for underserved patients in Chicago and the surrounding areas. Through support from NMHC, Erie, Near North and CommunityHealth are able to enhance their efforts to provide quality care in a community, culturally competent setting. This includes expanded access to clinical care, improved care coordination, and Education-Centered Medical Home (ECMH) student clinics.

An ECMH embeds teams of medical students into primary care, community-based clinics to care for a panel of complex patients over time. The ECMH model serves the dual purpose of increasing the capacity of community clinics as well as providing early and comprehensive educational exposure to team-based medicine in an authentic outpatient environment. In collaboration with the Feinberg School of Medicine, NMHC underwrote the cost of ECMHs at Erie, Near North, and CommunityHealth in FY18.

Through NMH's collaborations with the community health services providers, NMH learned that the greatest need of patients receiving care in the community setting is often access to subspecialty care and diagnostic services. To help address this need, much of the care provided to NMH patients who have been referred from a community partner is now provided by our physician groups. By building capacity for community organizations to provide primary care, while simultaneously increasing access to subspecialty care and diagnostic services at our physician groups, these collaborations ensure that the patient receives quality, efficient care in the most appropriate setting.

Many patients who are referred to NMHC for care from our community affiliations receive free or substantially discounted services. Other patients receive care that is underwritten as part of NMHC's Community Service Expansion Program (CSEP), which covers costs associated with specialty consultations and services, and hospital-based diagnostic services. To enhance access to this care, NMHC continues to refine processes to make the transition of patients from community organizations to NMHC entities more efficient and to continue to incorporate presumptive eligibility requirements.

Coordinating Care for Vulnerable Populations

Care transition refers to the process in which a patient moves from one healthcare setting or provider to another. Poorly managed transitions can result in preventable health complications, increased costs, and potentially unnecessary readmissions. Researchers estimate that inadequate care coordination results in billions of dollars in wasteful spending each year. While hospitals have historically directed efforts to reduce readmissions by focusing on components such as quality care during hospitalization and the discharge planning process, multiple factors beyond hospitalization and discharge can drive readmissions.

Transitioning between care settings or providers can be especially difficult for medically complex and vulnerable patients. Recognizing the need to improve care coordination for vulnerable populations, NMH developed the Innovations in Managing Patients Across Care Transitions (IMPACT) initiative. Aligned with NMH's mission to put patients first, IMPACT is a collaboration of care transition programs that addresses the needs of NMH's most medically and psychosocially complex patients.

By building trusting relationships, identifying and addressing barriers, providing patient-centered comprehensive care, and connecting with community resources, IMPACT is able to sustain partnerships with patients across the healthcare continuum.

IMPACT collaborates with community-based organizations in Chicago in an effort to address the underlying social determinants of health that impact care coordination and to improve the health of NMH patients. Social determinants of health are the economic and social conditions that affect health outcomes and are the underlying, contributing factors to health inequities.

By improving care coordination of patient transfers among care sites and the community, and addressing the social determinants of health, NMH is proactively

addressing the needs of the patients. NMH is targeting the root causes of health issues, improving quality of care, reducing costs, and ensuring that patients are receiving the care and support they need in the most appropriate setting.

1. **Impact of the Project on Essential Safety Net Services in the Community**

   NMH underwrites the cost of, and provides expertise and leadership to, many critically important/safety net healthcare services in the community. From being the only adult Level I trauma center in downtown Chicago with 24/7 service, to providing an inpatient psychiatry unit, NMH provides safety net services that would otherwise fall to local government, public institutions, or other healthcare organizations to provide. By forging lasting relationships with private and public health organizations, NMH works to ensure that a full spectrum of high-quality, well-coordinated healthcare services is available to the community.

   This project will improve access to the safety net services that NMH provides by increasing ICU, medical/surgical, and observation capacity and improving patient through-put in the emergency department.

2. **Impact of the Project on Safety Net Services at Other Hospitals**

   Other area hospitals in NMH's service area provide emergency services as well as other services considered to be safety net services. The proposed addition of beds is in response to the demand for services at NMH and is expected to decrease the number of hours NMH must go on ED diversion due to lack of bed availability. The emergency services volume that is redirected to other providers during the periods when NMH is on ED diversion may be creating an unintended burden on those hospitals. The proposed project will reduce this burden by providing capacity to ensure emergency transports can receive care at NMH.

3. **Impact of discontinuation of a facility or service on remaining safety net providers**

   Not Applicable – the project does not include a discontinuation of a facility of service.

NMH Charity Care and Medicaid

Safety Net Information per PA 96-0031			
CHARITY CARE			
Charity (# of patients)	**FY16**	**FY17**	**FY18**
Inpatient	573	601	589
Outpatient	11,980	14,467	14,902
Total	**12,553**	**15,068**	**15,491**
Charity (cost in dollars)			
Inpatient	$ 16,306,886	$ 9,198,780	$ 8,833,792
Outpatient	$ 21,828,581	$ 13,677,173	$ 14,329,981
Total	**$ 38,135,467**	**$ 22,875,953**	**$ 23,163,773**
MEDICAID			
Medicaid (# of patients)	**FY16**	**FY17**	**FY18**
Inpatient	6,270	6,293	6,763
Outpatient	50,884	60,464	74,675
Total	**57,154**	**66,757**	**81,438**
Medicaid (revenue)			
Inpatient	$ 115,195,778	$ 204,276,186	$ 153,040,479
Outpatient	$ 52,157,084	$ 99,732,399	$ 47,205,269
Total	**$ 167,352,862**	**$ 304,008,585**	**$ 200,245,748**

Source: IDPH Annual Hospital Questionnaires

Note: NMH Medicaid revenue reported for FY17 includes payments for services provided in previous years.

NMHC Community Benefit

To help meet the needs of all NMHC communities during FY18, NMHC contributed $846.5 million in community benefits. The major components of the $846.5 million community benefit contribution are:

- $612.5 million government sponsored indigent healthcare (unreimbursed cost of Medicaid and Medicare).
- $65.9 million charity care, at cost.
- $64.8 million education, at cost. This includes the unreimbursed education costs of NMHC's medical residency, fellowship, and internship programs.
- $42.3 million bad debt, at cost. An important part of NMHC's commitment to providing quality and accessible healthcare is covering the expense of payments that were expected but not received.

- $39.9 million research, at cost. NMHC provides support to advance medical and scientific research and academic pursuits.

- $13.1 million subsidized health services, at cost. This includes the uncompensated cost of providing behavioral health service, health education, and information and programs to positively impact the wellness of the community.

- $8.0 million of other community benefits. NMHC provides community benefits through donations to charitable and community organizations, volunteer efforts, language assistance and translation services for patients and their families, and more.

SECTION X. CHARITY CARE INFORMATION

With a mission-driven commitment to providing quality medical care, regardless of the patients' ability to pay, NMHC/NMH maintain their dedication to improve the health of the most medically underserved members of the community.

Northwestern Memorial Hospital

	FY16	FY17	FY18
Net Patient Revenue	$1,535,917,670	$1,703,649,205	$1,896,462,325
Amount of Charity Care (charges)	$ 187,858,944	$ 118,565,236	$ 123,087,483
Cost of Charity Care	$ 38,135,467	$ 22,875,953	$ 23,163,773

Like many hospitals located in the State of Illinois, NMH experienced a decline in the amount of charity care provided from 2016 to 2017. This decline was driven in large part by the coverage expansions implemented as part of the Affordable Care Act (ACA) – in particular, the expansion of Medicaid to those not previously eligible. During this same time, NMH experienced an increase in Medicaid inpatient volume of 7.6% and an increase in Medicaid outpatient volume of nearly 25%. NMH is the 8th largest Medicaid provider in Illinois.

Northwestern Memorial HealthCare

	FY16	FY17	FY18
Net Patient Revenue	$4,081,581,000	$4,547,371,208	$4,877,615,420
Amount of Charity Care (charges)	$ 386,070,000	$ 308,814,605	$ 321,715,102
Cost of Charity Care	$ 80,459,000	$ 65,761,106	$ 65,929,276

Note: numbers do not reflect the impact on acquisitions/affiliations for periods prior to the acquisition/affiliation.

During FY18, Northwestern Memorial HealthCare contributed $846.5 million in community benefits including charity care, other unreimbursed care, research, education, language assistance, donations and other community benefits.

#20-011

Northwestern Medicine
Northwestern Memorial HealthCare

251 East Huron Street
Chicago, Illinois 60611-2908
312.926.2000
northwesternmedicine.org

January 30, 2020

Ms. Courtney Avery
Illinois Health Facilities and Services Review Board
525 West Jefferson Street – 2nd Floor
Springfield, Illinois 62761

RE: Application submittals
Northwestern Memorial Hospital
Galter (Floors 11, 12) Beds project

Dear Ms. Avery:

Enclosed are the following materials supporting Northwestern Memorial Hospital's Certificate of Need application for the addition of beds on Galter Floors 11 and 12:

- CON Permit Application (2 unbound copies, including original)
- CON Permit Application Fee - in the amount $2,500

If you have any questions/comments, please feel to contact me at (312) 926-8650.

Sincerely,

Bridget S. Orth
Director, Regulatory Planning

enclosures