

**ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD**  
**APPLICATION FOR PERMIT**

ORIGINAL

**SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION****This Section must be completed for all projects.****Facility/Project Identification**

|                    |                                                                    |                       |      |
|--------------------|--------------------------------------------------------------------|-----------------------|------|
| Facility Name:     | Northwestern Medicine Lake Forest Hospital Expansion/Modernization |                       |      |
| Street Address:    | 1000 North Westmoreland Road                                       |                       |      |
| City and Zip Code: | Lake Forest, IL 60045                                              |                       |      |
| County:            | Lake                                                               | Health Service Area:  | 08   |
|                    |                                                                    | Health Planning Area: | A-09 |

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

|                                     |                                    |
|-------------------------------------|------------------------------------|
| Exact Legal Name:                   | Northwestern Lake Forest Hospital  |
| Street Address:                     | 1000 North Westmoreland Road       |
| City and Zip Code:                  | Lake Forest, IL 60045              |
| 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 Harrison                      |
| CEO Street Address:                 | 251 East Huron Street              |
| CEO City and Zip Code:              | Chicago, IL 60611                  |
| CEO Telephone Number:               | 312-926-3007                       |

**Type of Ownership of Applicants**

|                                                            |                                              |                                |
|------------------------------------------------------------|----------------------------------------------|--------------------------------|
| <input checked="" type="checkbox"/> Non-profit Corporation | <input type="checkbox"/> Partnership         |                                |
| <input type="checkbox"/> For-profit Corporation            | <input type="checkbox"/> Governmental        |                                |
| <input type="checkbox"/> Limited Liability Company         | <input type="checkbox"/> Sole Proprietorship | <input type="checkbox"/> 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:   | <a href="mailto:borth@nm.org">borth@nm.org</a> |
| Fax Number:       | 312-926-0373                                   |

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

|                   |                                                      |
|-------------------|------------------------------------------------------|
| Name:             | Ann Hall                                             |
| Title:            | Vice President, Administration                       |
| Company Name:     | Northwestern Memorial HealthCare                     |
| Address:          | 211 East Ontario Street Suite 1750                   |
| Telephone Number: | 312-926-6668                                         |
| E-mail Address:   | <a href="mailto:ann.hall@nm.org">ann.hall@nm.org</a> |
| Fax Number:       | 312-926-0370                                         |

## ILLINOIS HEALTH FACILITIES AND SERVICES REVIEW BOARD APPLICATION FOR PERMIT

### SECTION I. IDENTIFICATION, GENERAL INFORMATION, AND CERTIFICATION

**This Section must be completed for all projects.**

#### Facility/Project Identification

|                    |                                                                    |                      |                               |
|--------------------|--------------------------------------------------------------------|----------------------|-------------------------------|
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| Street Address:    | 1000 North Westmoreland Road                                       |                      |                               |
| City and Zip Code: | Lake Forest, IL 60045                                              |                      |                               |
| County:            | Lake                                                               | Health Service Area: | 08 Health Planning Area: A-09 |

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

|                                     |                                    |  |  |
|-------------------------------------|------------------------------------|--|--|
| Exact Legal Name:                   | Northwestern Memorial HealthCare   |  |  |
| Street Address:                     | 251 East Huron Street              |  |  |
| City and Zip Code:                  | Chicago, IL 60611                  |  |  |
| Name of Registered Agent:           | Danae Prousis                      |  |  |
| Registered Agent Street Address:    | 211 East Ontario Street Suite 1800 |  |  |
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#### Type of Ownership of Applicants

- |                                                            |                                              |                                |
|------------------------------------------------------------|----------------------------------------------|--------------------------------|
| <input checked="" type="checkbox"/> Non-profit Corporation | <input type="checkbox"/> Partnership         |                                |
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- 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.

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| Title:            | Director, Regulatory Planning                  |
| Company Name:     | Northwestern Memorial HealthCare               |
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| E-mail Address:   | <a href="mailto:borth@nm.org">borth@nm.org</a> |
| Fax Number:       | 312-926-0373                                   |

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

|                   |                                                      |
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| Name:             | Ann Hall                                             |
| Title:            | Vice President, Administration                       |
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| Telephone Number: | 312-926-6668                                         |
| E-mail Address:   | <a href="mailto:ann.hall@nm.org">ann.hall@nm.org</a> |
| Fax Number:       | 312-926-0370                                         |

**Post Permit Contact**

[Person to receive all correspondence after 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:   | <a href="mailto:borth@nm.org">borth@nm.org</a> |
| Fax Number:       | 312-926-0373                                   |

**Site Ownership**

[Provide this information for each applicable site]

|                                                                                                                |                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Exact Legal Name of Site Owner:                                                                                | Northwestern Lake Forest Hospital                                                                                                                                                                                                                                                                        |
| Address of Site Owner:                                                                                         | 1000 North Westmoreland Road, Lake Forest, IL 60045                                                                                                                                                                                                                                                      |
| 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 Lake Forest Hospital                   |                          |                     |
| Address:                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1000 North Westmoreland Road, Lake Forest, IL 60045 |                          |                     |
| <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                 | Non-profit Corporation                              | <input type="checkbox"/> | Partnership         |
| <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                            | For-profit Corporation                              | <input type="checkbox"/> | Governmental        |
| <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                            | Limited Liability Company                           | <input type="checkbox"/> | Sole Proprietorship |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                     | <input type="checkbox"/> | Other               |
| <ul style="list-style-type: none"> <li>Corporations and limited liability companies must provide an Illinois Certificate of Good Standing.</li> <li>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.</li> <li>Persons with 5 percent or greater interest in the licensee must be identified with the % of ownership.</li> </ul> |                                                     |                          |                     |
| 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](http://www.FEMA.gov) or [www.illinoisfloodmaps.org](http://www.illinoisfloodmaps.org). **This map must be in a readable format.** In addition, please provide a statement attesting that the project complies with the requirements of Illinois Executive Order #2006-5 (<http://www.hfsrb.illinois.gov>). **NOTE:** A SPECIAL FLOOD HAZARD AREA AND 500-YEAR FLOODPLAIN DETERMINATION FORM has been added at the conclusion of this Application for Permit that must be completed to deem a project complete.

APPEND DOCUMENTATION AS **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 Medicine Lake Forest Hospital (LFH) proposes to construct an addition to the existing hospital located at 1000 North Westmoreland Road in Lake Forest, IL.

The project will add 96 inpatient beds - 84 medical/surgical beds and 12 ICU beds - to accommodate the significant demand for acute care services since the opening of the replacement hospital in 2018. If approved, LFH will be authorized for 168 medical/surgical beds, 24 ICU beds and 18 obstetric beds for a total of 210 inpatient beds.

Other clinical services will be part of the project including 18 observation beds, relocation and expansion of the emergency department, diagnostic imaging equipment and inpatient rehabilitation services. Modernization of various support spaces is also included in the project.

The total project square footage will be 356,358 BGSF (290,468 bgsf new construction and 65,892 bgsf modernization).

The total project cost is \$388,787,687.

The anticipated project completion date is April 2028.

The project is classified as substantive because it involves the addition 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                                                                                                                                     | \$ 898,274            | \$ 1,611,996          | \$ 2,510,270          |
| Site Survey and Soil Investigation                                                                                                                    | \$ 357,840            | \$ 642,160            | \$ 1,000,000          |
| Site Preparation                                                                                                                                      | \$ 3,301,626          | \$ 5,924,926          | \$ 9,226,552          |
| Off Site Work                                                                                                                                         | \$ 1,185,930          | \$ 2,128,209          | \$ 3,314,139          |
| New Construction Contracts                                                                                                                            | \$ 67,069,254         | \$ 133,086,643        | \$ 200,155,897        |
| Modernization Contracts                                                                                                                               | \$ 3,112,098          | \$ 37,463,052         | \$ 40,575,150         |
| Contingencies                                                                                                                                         | \$ 7,018,135          | \$ 17,054,970         | \$ 24,073,105         |
| Architectural/Engineering Fees                                                                                                                        | \$ 3,942,071          | \$ 7,074,236          | \$ 11,016,307         |
| Consulting and Other Fees                                                                                                                             | \$ 7,441,306          | \$ 13,353,783         | \$ 20,795,089         |
| Movable or Other Equipment (not in construction contracts)                                                                                            | \$ 45,500,000         | \$ 14,223,471         | \$ 59,723,471         |
| 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                                                                                                                         | \$ 5,867,749          | \$ 10,529,958         | \$ 16,397,707         |
| Acquisition of Building or Other Property (excluding land)                                                                                            |                       |                       |                       |
| <b>TOTAL USES OF FUNDS</b>                                                                                                                            | <b>\$ 145,694,282</b> | <b>\$ 243,093,405</b> | <b>\$ 388,787,687</b> |
| SOURCE OF FUNDS                                                                                                                                       | CLINICAL              | NONCLINICAL           | TOTAL                 |
| Cash and Securities                                                                                                                                   | \$ 149,694,282        | \$ 243,093,405        | \$ 388,787,687        |
| Pledges                                                                                                                                               |                       |                       |                       |
| Gifts and Bequests                                                                                                                                    |                       |                       |                       |
| Bond Issues (project related)                                                                                                                         |                       |                       |                       |
| Mortgages                                                                                                                                             |                       |                       |                       |
| Leases (fair market value)                                                                                                                            |                       |                       |                       |
| Governmental Appropriations                                                                                                                           |                       |                       |                       |
| Grants                                                                                                                                                |                       |                       |                       |
| Other Funds and Sources                                                                                                                               |                       |                       |                       |
| <b>TOTAL SOURCES OF FUNDS</b>                                                                                                                         | <b>\$ 145,694,282</b> | <b>\$ 243,093,405</b> | <b>\$ 388,787,687</b> |
| <b>NOTE: ITEMIZATION OF EACH LINE ITEM MUST BE PROVIDED AT ATTACHMENT 7, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.</b> |                       |                       |                       |

**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 <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span><br>Purchase Price: \$ <u>N/A</u><br>Fair Market Value: \$ <u>N/A</u>                                                                                                         |
| The project involves the establishment of a new facility or a new category of service<br><span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span>                                                                                                                            |
| If yes, provide the dollar amount of all <b>non-capitalized</b> 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.<br><br>Estimated start-up costs and operating deficit cost is \$ <u>N/A</u> |

**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:

- |                                                 |                                        |
|-------------------------------------------------|----------------------------------------|
| <input type="checkbox"/> None or not applicable | <input type="checkbox"/> Preliminary   |
| <input checked="" type="checkbox"/> Schematics  | <input type="checkbox"/> Final Working |

Anticipated project completion date (refer to Part 1130.140): : April 30, 2028

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 departments or area's portion of the surrounding circulation space. **Explain the use of any vacated space.**

**Not Reviewable Space [i.e., non-clinical]:** means an area for the benefit of the patients, visitors, staff, or employees of a health care facility and not directly related to the diagnosis, treatment, or rehabilitation of persons receiving services from the health care facility. "Non-clinical service areas" include, but are not limited to, chapels; gift shops; newsstands; computer systems; tunnels, walkways, and elevators; telephone systems; projects to comply with life safety codes; educational facilities; student housing; patient, employee, staff, and visitor dining areas; administration and volunteer offices; modernization of structural components (such as roof replacement and masonry work); boiler repair or replacement; vehicle maintenance and storage facilities; parking facilities; mechanical systems for heating, ventilation, and air conditioning; loading docks; and repair or replacement of carpeting, tile, wall coverings, window coverings or treatments, or furniture. Solely for the purpose of this definition, "non-clinical service area" does not include health and fitness centers. [20 ILCS 3960/3]

| Dept. / Area          | Cost | Gross Square Feet |          | Amount of Proposed Total Gross Square Feet That Is: |            |       |               |
|-----------------------|------|-------------------|----------|-----------------------------------------------------|------------|-------|---------------|
|                       |      | Existing          | Proposed | New Const.                                          | Modernized | As Is | Vacated Space |
| <b>REVIEWABLE</b>     |      |                   |          |                                                     |            |       |               |
| Medical Surgical      |      |                   |          |                                                     |            |       |               |
| Intensive Care        |      |                   |          |                                                     |            |       |               |
| Diagnostic Radiology  |      |                   |          |                                                     |            |       |               |
| MRI                   |      |                   |          |                                                     |            |       |               |
| Total Clinical        |      |                   |          |                                                     |            |       |               |
| <b>NON-REVIEWABLE</b> |      |                   |          |                                                     |            |       |               |
| Administrative        |      |                   |          |                                                     |            |       |               |
| Parking               |      |                   |          |                                                     |            |       |               |
| Gift Shop             |      |                   |          |                                                     |            |       |               |
| Total Non-clinical    |      |                   |          |                                                     |            |       |               |
| <b>TOTAL</b>          |      |                   |          |                                                     |            |       |               |

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: NM Lake Forest Hospital |                 | CITY: Lake Forest |              |              |               |
| REPORTING PERIOD DATES: CY21           |                 |                   |              |              |               |
|                                        |                 | From: 1/1/21      |              | to: 12/31/21 |               |
| Category of Service                    | Authorized Beds | Admissions        | Patient Days | Bed Changes  | Proposed Beds |
| Medical/Surgical                       | 84              | 7,280             | 29,805       | +84          | 168           |
| Obstetrics                             | 18              | 1,696             | 4,198        | No Change    | 18            |
| Pediatrics                             | 0               | 0                 | 0            | No Change    | 0             |
| Intensive Care                         | 12              | 1,243             | 6,028        | +12          | 24            |
| Comprehensive Physical Rehabilitation  | 0               | 0                 | 0            | No Change    | 0             |
| Acute/Chronic Mental Illness           | 0               | 0                 | 0            | No Change    | 0             |
| Neonatal Intensive Care                | 0               | 0                 | 0            | No Change    | 0             |
| General Long-Term Care                 | 0               | 0                 | 0            | No Change    | 0             |
| Specialized Long-Term Care             | 0               | 0                 | 0            | No Change    | 0             |
| Long Term Acute Care                   | 0               | 0                 | 0            | No Change    | 0             |
| Other ((identify))                     | 0               | 0                 | 0            | No Change    | 0             |
| TOTALS:                                | 114             | 10,219            | 40,031       | +96          | 210           |

**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 Lake Forest Hospital (LFH) \*  
**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.**

Marsha L. Oberrieder  
 SIGNATURE

Marsha L. Oberrieder  
 PRINTED NAME

President, Lake Forest Hospital  
 PRINTED TITLE

Richard A. Franco  
 SIGNATURE

Richard A. Franco  
 PRINTED NAME

VP and CFO, Northwestern Medicine – North and Northwest  
 PRINTED TITLE

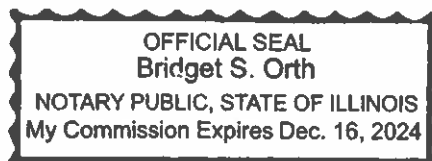
Notarization:

Subscribed and sworn to before me  
 this 22 day of November, 2022

[Signature]

Signature of Notary

Seal



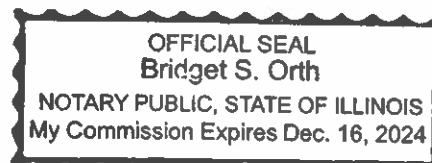
Notarization:

Subscribed and sworn to before me  
 this 6th day of December 2022

[Signature]

Signature of Notary

Seal



\*Insert the EXACT legal name of the applicant

**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 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

CEO  
PRINTED TITLE



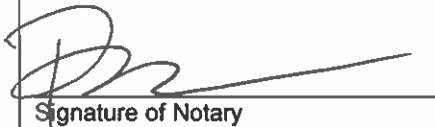
SIGNATURE

John A. Orsini  
PRINTED NAME

Senior VP and CFO  
PRINTED TITLE

Notarization:

Subscribed and sworn to before me  
this 1<sup>st</sup> day of December 2022

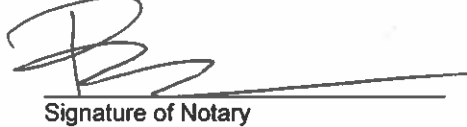


Signature of Notary

Seal

Notarization:

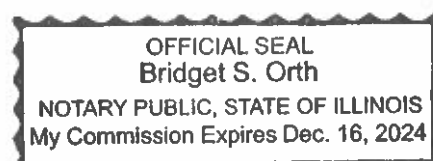
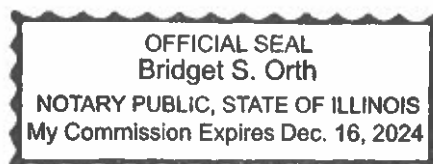
Subscribed and sworn to before me  
this 1<sup>st</sup> day of December 2022



Signature of Notary

Seal

\*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 can 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** 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<br>BGSF/DGSF | STATE<br>STANDARD | DIFFERENCE | MET<br>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./<br>SERVICE | HISTORICAL<br>UTILIZATION<br>(PATIENT DAYS)<br>(TREATMENTS)<br>ETC. | PROJECTED<br>UTILIZATION | STATE<br>STANDARD | MEET<br>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 VI. 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 |
|-------------------------------------------------------------|-----------------|-----------------|
| <input checked="" type="checkbox"/> <b>Medical/Surgical</b> | 84              | 168             |
| <input type="checkbox"/> <b>Obstetric</b>                   |                 |                 |
| <input type="checkbox"/> <b>Pediatric</b>                   |                 |                 |
| <input checked="" type="checkbox"/> <b>Intensive Care</b>   | 12              | 24              |

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

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

1. Applicants proposing to establish, expand and/or modernize Clinical Service Areas Other than categories of service must submit the following information:
2. Indicate changes by Service: Indicate # of key room changes by action(s):

| Service                                                                        | # Existing Key Rooms | # Proposed Key Rooms |
|--------------------------------------------------------------------------------|----------------------|----------------------|
| <input checked="" type="checkbox"/> <b>Emergency Department</b>                | <b>16</b>            | <b>24</b>            |
| <input checked="" type="checkbox"/> <b>Diagnostic Imaging (CT, U/S, X-ray)</b> | <b>8</b>             | <b>11</b>            |
| <input checked="" type="checkbox"/> <b>IP Rehabilitation Services</b>          | <b>2</b>             | <b>4</b>             |

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

| Project Type                                                                                                             | Required Review Criteria                          |
|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| New Services or Facility or Equipment                                                                                    | (b) – Need Determination – Establishment          |
| Service Modernization                                                                                                    | (c)(1) – Deteriorated Facilities                  |
|                                                                                                                          | AND/OR                                            |
|                                                                                                                          | (c)(2) – Necessary Expansion                      |
|                                                                                                                          | PLUS                                              |
|                                                                                                                          | (c)(3)(A) – Utilization – Major Medical Equipment |
|                                                                                                                          | OR                                                |
|                                                                                                                          | (c)(3)(B) – Utilization – Service or Facility     |
| <b>1 APPEND DOCUMENTATION AS ATTACHMENT 31, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.</b> |                                                   |

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)

## VII. 1120.120 - AVAILABILITY OF FUNDS

The applicant shall document those 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 timetable 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 timetable of receipts.                                                                                                                                                                     |
|  | d) | Debt – a statement of the estimated terms and conditions (including the debt time, variable or permanent interest rates over the debt time, 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.                                                                                                                                                                                                                            |

|       |                                                                                                                                                                                                                                                                                                                                       |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <hr/> | 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. |
| <hr/> | f) Grants – a letter from the granting agency as to the availability of funds in terms of the amount and time of receipt.                                                                                                                                                                                                             |
| <hr/> | g) All Other Funds and Sources – verification of the amount and type of any other funds that will be used for the project.                                                                                                                                                                                                            |
|       | <b>TOTAL FUNDS AVAILABLE</b>                                                                                                                                                                                                                                                                                                          |

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

**SECTION VIII. 1120.130 - FINANCIAL VIABILITY**

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

**Financial Viability Waiver**

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

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

See Section 1120.130 Financial Waiver for information to be provided

**APPEND DOCUMENTATION AS ATTACHMENT 35, 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<br>3 Years |  |  | Projected |
|-------------------------------------------------|-----------------------|--|--|-----------|
| <b>Enter Historical and/or Projected Years:</b> |                       |  |  |           |
| 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 36, IN NUMERICAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

**SECTION IX. 1120.140 - ECONOMIC FEASIBILITY**

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

**A. Reasonableness of Financing Arrangements**

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

- 1) That the total estimated project costs and related costs will be funded in total with cash and equivalents, including investment securities, unrestricted funds, received pledge receipts and funded depreciation; or
- 2) That the total estimated project costs and related costs will be funded in total or in part by borrowing because:
  - A) A portion or all the cash and equivalents must be retained in the balance sheet asset accounts 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<br>(List below)                          | A                       | B    | C                    | D      | E                     | F      | G                    | H                  | Total<br>Cost<br>(G + H) |
|                                                     | Cost/Square Foot<br>New | Mod. | Gross Sq. Ft.<br>New | Circ.* | Gross Sq. Ft.<br>Mod. | Circ.* | Const. \$<br>(A x C) | Mod. \$<br>(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 37, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.**

**SECTION X. 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, **including the impact on racial and health care disparities 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 each community, if reasonably known by the applicant.

**Safety Net Impact Statements shall also include all 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                            |      |      |      |
| <b>Total</b>                          |      |      |      |
| Charity (cost in dollars)             |      |      |      |
| Inpatient                             |      |      |      |
| Outpatient                            |      |      |      |
| <b>Total</b>                          |      |      |      |
| MEDICAID                              |      |      |      |
| Medicaid (# of patients)              | Year | Year | Year |
| Inpatient                             |      |      |      |
| Outpatient                            |      |      |      |
| <b>Total</b>                          |      |      |      |
| Medicaid (revenue)                    |      |      |      |
| Inpatient                             |      |      |      |

|  |            |  |  |  |
|--|------------|--|--|--|
|  | Outpatient |  |  |  |
|  | Total      |  |  |  |

APPEND DOCUMENTATION AS ATTACHMENT 38, 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 39**, IN NUMERIC SEQUENTIAL ORDER AFTER THE LAST PAGE OF THE APPLICATION FORM.

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

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

1. Applicant: Northwestern Medicine Lake Forest Hospital 1000 North Westmoreland Road  
 (Name) (Address)  
Lake Forest Illinois 60045 847-234-5600  
 (City) (State) (ZIP Code) (Telephone Number)

2. Project Location: 1000 North Westmoreland Road Lake Forest, IL  
 (Address) (City) (State)  
Lake County Shields Township Section 29, 30, 32  
 (County) (Township) (Section)

3. You can create a small map of your site showing the FEMA floodplain mapping using the FEMA Map Service Center website (<https://msc.fema.gov/portal/home>) by entering the address for the property in the Search bar. If a map, like that shown on page 2 is shown, select the **Go to NFHL Viewer** tab above the map. You can print a

copy of the floodplain map by selecting the  icon in the top corner of the page. Select the pin tool icon  and place a pin on your site. Print a FIRMETTE size image.

If there is no digital floodplain map available select the **View/Print FIRM** icon above the aerial photo. You will then need to use the Zoom tools provided to locate the property on the map and use the **Make a FIRMette** tool to create a pdf of the floodplain map.

**IS THE PROJECT SITE LOCATED IN A SPECIAL FLOOD HAZARD AREA?: Yes\_\_\_ No X**

**IS THE PROJECT SITE LOCATED IN THE 500-YEAR FLOOD PLAIN? No**

If you are unable to determine if the site is in the mapped floodplain or 500-year floodplain, contact the county or the local community building or planning department for assistance.

If the determination is being made by a local official, please complete the following:

FIRM Panel Number: \_\_\_\_\_ Effective Date: \_\_\_\_\_

Name of Official: \_\_\_\_\_ Title: \_\_\_\_\_

Business/Agency: \_\_\_\_\_ Address: \_\_\_\_\_

(City) (State) (ZIP Code) (Telephone Number)

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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

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

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

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File Number

5257-740-3

***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 27TH*  
*day of JULY A.D. 2022 .*

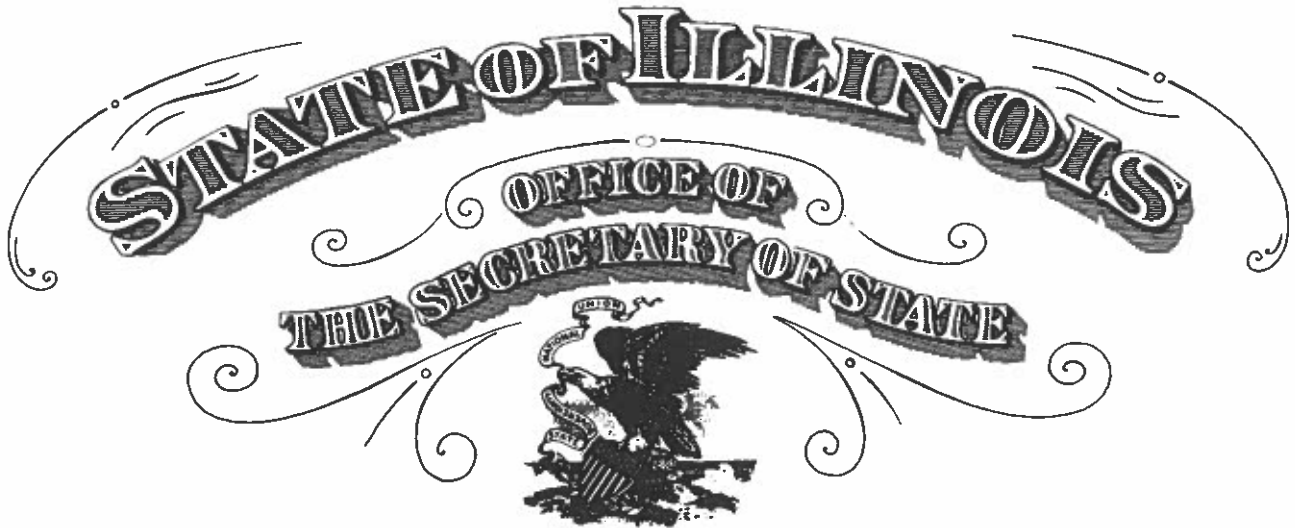
*Jesse White*

SECRETARY OF STATE

Authentication #: 2220802798 verifiable until 07/27/2023  
Authenticate at: <http://www.ilsos.gov>

File Number

1476-732-1

***To all to whom these Presents Shall Come, Greeting:***

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

NORTHWESTERN LAKE FOREST HOSPITAL, A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON DECEMBER 10, 1918, APPEARS TO HAVE COMPLIED WITH ALL THE PROVISIONS OF THE GENERAL NOT FOR PROFIT CORPORATION ACT OF THIS STATE, AND AS OF THIS DATE, IS IN GOOD STANDING AS A DOMESTIC CORPORATION IN THE STATE OF ILLINOIS.



***In Testimony Whereof, I hereto set  
my hand and cause to be affixed the Great Seal of  
the State of Illinois, this 27TH  
day of JULY A.D. 2022 .***

*Jesse White*

SECRETARY OF STATE

Authentication #: 2220802746 verifiable until 07/27/2023  
Authenticate at: <http://www.ilsos.gov>

THIS INSTRUMENT WAS PREPARED BY:

111 West Washington Street  
Chicago, Illinois 60602ER 0 Mail  
RELEASE DEED

F. 1699 R. 12/73

Thomas Szymczyk  
% Chicago Title and Trust Company  
630-2168

2523020

2523020  
RECORDED  
LAKE COUNTY, ILLINOIS  
1987 JAN -7 AM 9:12

THE ABOVE SPACE FOR RECORDERS USE ONLY

KNOW ALL MEN BY THESE PRESENTS, That CHICAGO TITLE AND TRUST COMPANY, a  
corporation of the State of Illinois, as Trusteein consideration of one dollar, and other good and valuable considerations, the receipt whereof is hereby  
acknowledged, does hereby release, convey and quit-claim untoLake Forest Hospital, not for profit,  
the heirs, legal representatives and assigns of the grantee or grantees herein, (or if the grantee is a  
corporation, its successors and assigns) all the right, title, interest, claim or demand whatsoever it may have  
acquired in, through or by a certain Trust Deed, recorded in the Recorder's Office of  
Lake County, in the State of Illinois, as Document Number 1934995in book , page , to the premises situated in the said County, State of Illinois,  
described as follows, to-wit:

## PARCEL 1:

The West half of the South West quarter of Section 29, Town-  
ship 44 North, Range 12, East of the 3rd P.M., (except that  
part thereof lying Easterly of the Westerly line of Skokie  
Highway, according to the plat of Dedication, therefore re-  
corded as Document 418857, on November 18, 1935 and also  
except the South 18.79 acres thereof, lying South of a line  
parallel with the South line of said West half of the South  
West quarter), in Lake County, Illinois.

## PARCEL 2:

That part of the North West quarter of Section 29, and the  
North East quarter of Section 30, all in Township 44 North,  
Range 12, East of the 3rd P.M., described as follows: Beginning  
at the South East corner of said North East quarter of Section  
30; thence West along the South line of said North East quarter  
of Section 30, 1452.00 feet; thence North 13 degrees West  
149.82 feet; thence East parallel with said South line of the  
North East quarter of Section 30, 1485.59 feet, more or less,  
to the East line of the North East quarter aforesaid; thence  
East parallel with the South line of said North West quarter  
of Section 29, 941.75 feet, more or less, to the Westerly line  
of Skokie Highway, according to the plat of Dedication therefore,  
recorded as Document 418857, on November 18, 1935; thence  
Southerly along said Westerly line of Skokie Highway 147.30  
feet, more or less, to said South line of the North West  
quarter of Section 29, and thence, West along said South line  
of the North West quarter of Section 29, 960.60 feet, more or  
less, to the corner of beginning, in Lake County, Illinois.

## PARCEL 3:

2523020

That part of the North half of the South East quarter of Section  
30, Township 44 North, and Range 12, East of the 3rd P.M., lying  
Easterly of the Easterly line of the public highway known as  
Waukegan Road, except that part thereof described as follows:  
Beginning at a point on the Easterly line of the public highway  
known as Waukegan Road 341.00 feet Northerly of the South line of  
said North half of the South East quarter of Section 30, (measured  
along said Easterly line of Waukegan Road) and; thence, Northerly  
along said Easterly line of Waukegan Road 350.00 feet; thence  
Easterly along a line perpendicular to said Easterly line of  
Waukegan Road, 376.61 feet; thence Southerly parallel with said  
Easterly line of Waukegan Road, 350.00 feet; and thence  
Westerly along the line perpendicular to said Easterly line of  
Waukegan Road 376.61 feet to the place of beginning, in Lake  
County, Illinois.

CHICAGO TITLE INSURANCE CO.

RECORDED IN OFFICE OF RECORDER

ATTACHMENT-2

THIS IN: **Thomas Szymczyk**  
**CHICAGO TITLE AND TRUST COMPANY**

**2523020**

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in  
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together with all the appurtenances and privileges thereunto belonging or appertaining.

IN WITNESS WHEREOF, Said CHICAGO TITLE AND TRUST COMPANY, as Trustee as aforesaid, has caused these presents to be signed by its Assistant Vice-President, and attested by its Assistant Secretary, and its corporate seal to be hereto affixed.

(Date) **December 30, 1986**

**CHICAGO TITLE AND TRUST COMPANY**  
 as Trustee as aforesaid,

By

*Elizabeth Smith*

Assistant Vice-President

Attest

*Joseph L. M... ..*

Assistant Secretary



**FOR THE PROTECTION OF THE  
 OWNER, THIS RELEASE SHALL  
 BE FILED WITH THE RECORDER  
 OF DEEDS IN WHOSE OFFICE  
 THE MORTGAGE OR DEED OF  
 TRUST WAS FILED.**

STATE OF ILLINOIS, } ss.  
 COUNTY OF COOK

I, the undersigned, a Notary Public in and for the County and State aforesaid, DO HEREBY CERTIFY, that the above named Assistant Vice President and Assistant Secretary of the CHICAGO TITLE AND TRUST COMPANY, Grantor, personally known to me to be the same persons whose names are subscribed to the foregoing instrument as such Assistant Vice President and Assistant Secretary respectively, appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act and as the free and voluntary act of said Company for the uses and purposes therein set forth; and the said Assistant Secretary then and there acknowledged that said Assistant Secretary, as custodian of the corporate seal of said Company, caused the corporate seal of said Company to be affixed to said instrument as said Assistant Secretary's own free and voluntary act and as the free and voluntary act of said Company for the uses and purposes therein set forth.

Given under my hand and Notarial Seal

Date **12/30/86**

*Diane Helms*

Notary Public

NAME  
 STREET  
 CITY  
 INSTRUCTIONS  
 RECORDER'S OFFICE BOX NUMBER

**Wilson & McIlvaine**  
**ATTN: B. Adler**  
**135 S. La Salle Street**  
**Chicago, IL 60603**

OR

FOR INFORMATION ONLY  
 INSERT STREET ADDRESS OF ABOVE  
 DESCRIBED PROPERTY HERE

**"OFFICIAL SEAL"**  
**Diane Helms**

Notary Public  
 My Commission Expires

CHICAGO TITLE INSURANCE

32

ATTACHMENT-2

BLANKS 100,000  
(NEW FEB. 1960)  
GRANTY DEED—Statutory  
(INDIVIDUAL TO CORPORATION) 410137

1942003

1934994

1934994

Approved By Chicago Title and Trust Co.  
(Chicago Real Estate Board)

S-3 1 of 2

(The Above Space For Recorder's Use Only)

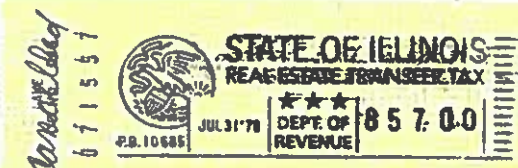
THE GRANTOR— William J. Halligan, Jr. and Marydith Halligan,  
his wife

of the City of Lake Forest County of Lake State of Illinois  
for and in consideration of TEN and no/100----- (\$10.00 DOLLARS,  
and other valuable consideration in hand paid,  
CONVEY and WARRANT to Lake Forest Hospital, an Illinois corpora-  
tion of Lake Forest, Illinois  
a corporation created and existing under and by virtue of the Laws of the State of Illinois  
having its principal office in the City of Lake Forest and  
State of Illinois the following described Real Estate situated in the County  
of Lake in the State of Illinois, to wit:

Exhibit A attached hereto and made a part hereof.



#900



20758

Grantee's Address: Lake Forest Hospital, 660 Westmorland, Lake Forest  
Illinois

hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of  
the State of Illinois.

DATED this 30th day of June 1978

PLEASE PRINT OR TYPE NAME(S) BELOW  
William J. Halligan, Jr. (Seal)  
Marydith Halligan (Seal)  
SIGNATURE(S) Marydith Halligan

State of Illinois, County of Cook ss., I, the undersigned, a Notary Public in  
and for said County, in the State aforesaid, DO HEREBY CERTIFY that  
William J. Halligan, Jr. and Marydith Halligan,  
his wife  
personally known to me to be the same persons whose names are  
subscribed to the foregoing instrument appeared before me this day  
person, and acknowledged that they signed, sealed and delivered the said  
instrument as their free and voluntary act, for the uses and purposes  
therein set forth, including the release and waiver of the right of homestead.

Given under my hand and official seal, this 14th day of July 1978

Commission expires 4/11 1979 Thomas J. Kelly Notary Public

Prepared by:  
Thomas J. Kelly  
Pedersen & Houpt  
Suite 3400

ADDRESS OF PROPERTY:

THE ABOVE ADDRESS IS FOR STATISTICAL  
PURPOSES ONLY AND IS NOT A PART OF  
THIS DEED.

SEND SUBSEQUENT TAX BILLS TO:

NAME  
ADDRESS 180 North LaSalle Street  
CITY AND STATE Chicago, Illinois

OR RECORDER'S OFFICE BOX NO. 33

DOCUMENT NUMBER

THIS INSTRUMENT IS REACKNOWLEDGED AND RECORDED IN ORDER TO SHOW THE  
CONSIDERATION PAID.

ATTACHMENT 2

1934994

DOC \_\_\_\_\_  
LAKE COUNTY, ILLINOIS

'78 JUL 31 PM 2 43

*Frank J. Quetta*  
RECORDER OF DEEDS

1942003

DOC \_\_\_\_\_  
LAKE COUNTY, ILLINOIS

'78 AUG 29 AM 11 17

*Frank J. Quetta*  
RECORDER OF DEEDS*Mail to ..*CHICAGO TITLE AND TRUST COMPANY  
111 WEST WASHINGTON  
CHICAGO, ILLINOIS 60602  
ATTN: J. WERLE LL50

36313F

STATE OF ILLINOIS )  
                          ) SS  
COUNTY OF COOK )

I, the undersigned, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that William J. Halligan, Jr. and Marydith Halligan, his wife, personally known to me to be the same persons whose names are subscribed to the foregoing instrument appeared before me this day in person and acknowledged that they signed, sealed and delivered the said instrument as their free and voluntary act, for the uses and purposes therein set forth, including the release and waiver of the right of homestead.

Given under my hand and official seal, this 15th day of August, 1978.

1942003

My Commission Expires 6/24/80

*William J. Halligan, Jr.*  
\_\_\_\_\_  
COUNTY, ILL.

EXHIBIT A

1934994

## PARCEL 1:

That part of the West half of Section 29, Township 44 North, Range 12, East of the 3rd P.M., described as follows: The South 18.79 acres lying South of a line drawn parallel with the South line of the West half of the South West quarter of said Section 29, (except that part thereof lying Easterly of the Westerly line of Skokie Highway, according to the plat of Dedication, therefore recorded as Document 418857, on November 18, 1935), in Lake County, Illinois.

## PARCEL 2:

The West half of the South West quarter of Section 29, Township 44 North, Range 12, East of the 3rd P.M., (except that part thereof lying Easterly of the Westerly line of Skokie Highway, according to the plat of Dedication, therefore recorded as Document 418857, on November 18, 1935 and also except the South 18.79 acres thereof, lying South of a line parallel with the South line of said West half of the South West quarter), in Lake County, Illinois.

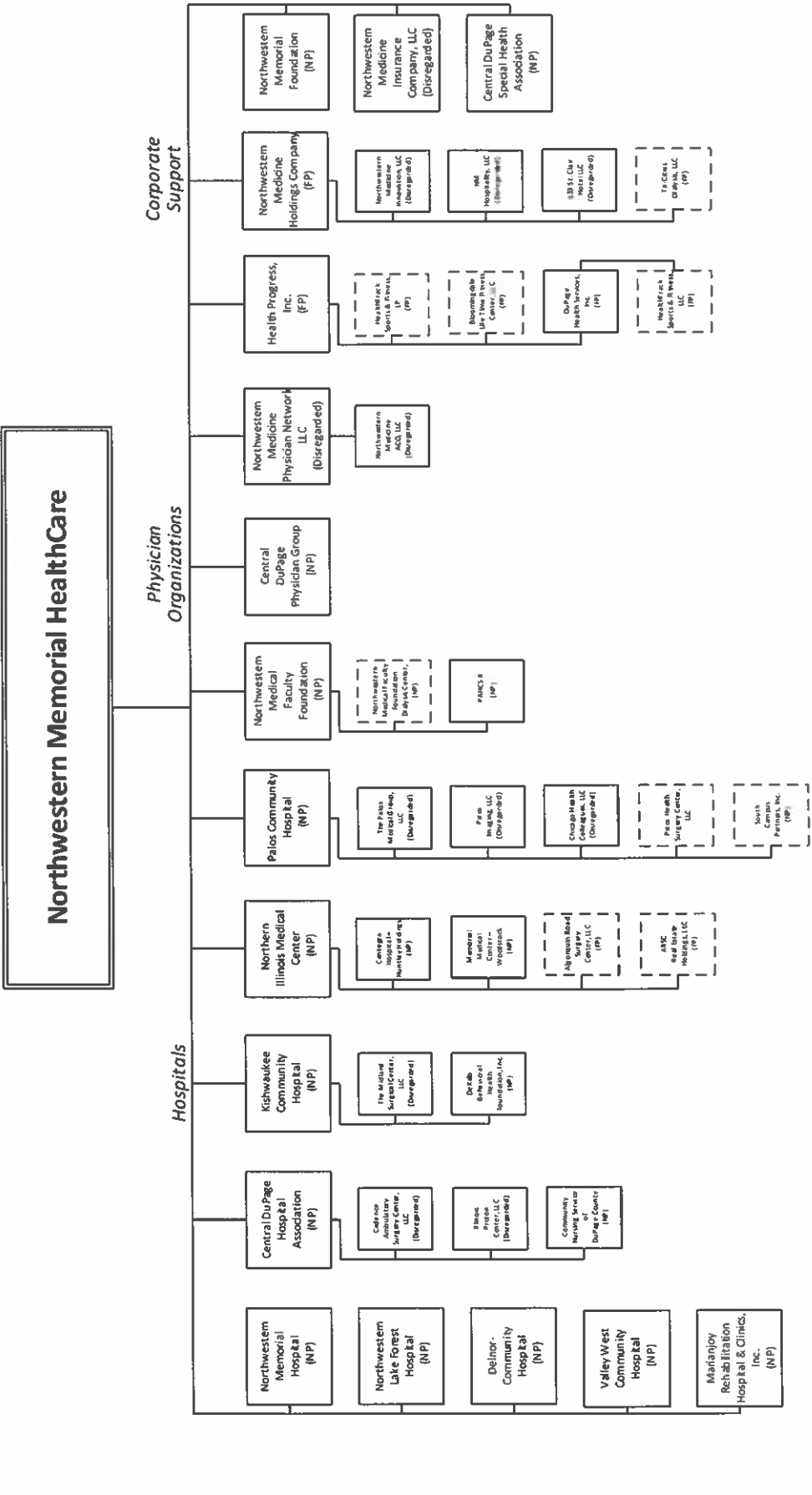
## PARCEL 3:

That part of the North West quarter of Section 29, and the North East quarter of Section 30, all in Township 44 North, Range 12, East of the 3rd P.M., described as follows: Beginning at the South East corner of said North East quarter of Section 30; thence West along the South line of said North East quarter of Section 30, 1452.00 feet; thence North 13 degrees West 149.82 feet; thence East parallel with said South line of the North East quarter of Section 30, 1485.59 feet, more or less, to the East line of the North East quarter aforesaid; thence East parallel with the South line of said North West quarter of Section 29, 941.75 feet, more or less, to the Westerly line of Skokie Highway, according to the plat of Dedication therefore, recorded as Document 418857, on November 18, 1935; thence Southerly along said Westerly line of Skokie Highway 147.30 feet, more or less, to said South line of the North West quarter of Section 29, and thence, West along said South line of the North West quarter of Section 29, 960.60 feet, more or less, to the corner of beginning, in Lake County, Illinois.

1942003

## PARCEL 4:

That part of the North half of the South East quarter of Section 30, Township 44 North, and Range 12, East of the 3rd P.M., lying Easterly of the Easterly line of the public highway known as Waukegan Road, except that part thereof described as follows: Beginning at a point on the Easterly line of the public highway known as Waukegan Road 341.00 feet Northerly of the South line of said North half of the South East quarter of Section 30, (measured along said Easterly line of Waukegan Road) and; thence, Northerly along said Easterly line of Waukegan Road 350.00 feet; thence Easterly along a line perpendicular to said Easterly line of Waukegan Road, 376.61 feet; thence Southerly parallel with said Easterly line of Waukegan Road, 350.00 feet; and thence Westerly along the line perpendicular to said Easterly line of Waukegan Road 376.61 feet to the place of beginning, in Lake County, Illinois.



Subsidiary  
MMHC is Sole  
Member

Subsidiary  
Wholly owned  
and/or  
controlled

Joint Venture  
with  
other parties  
involved

Effective December 31, 2021

**Flood Plain Requirements**

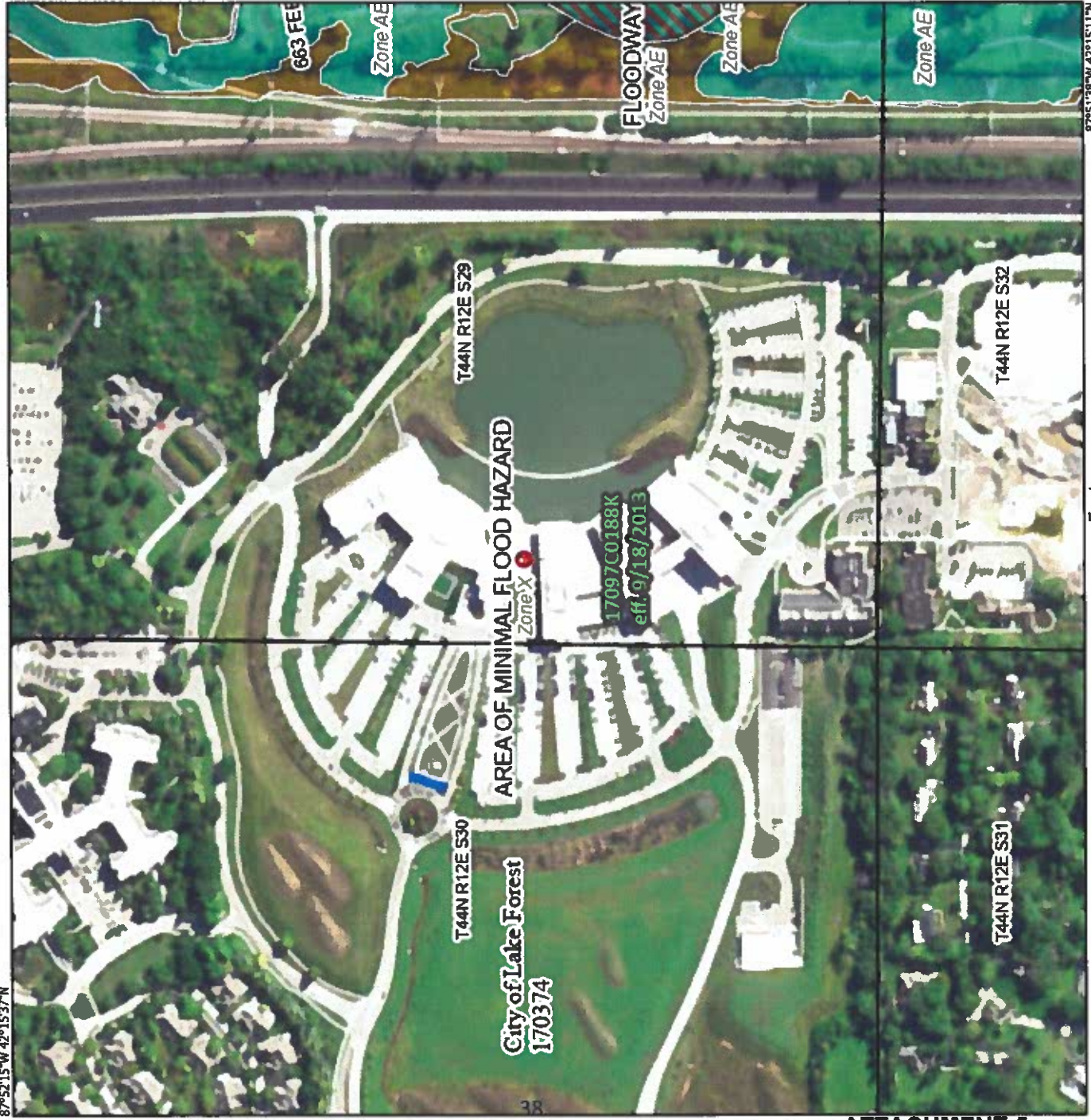
The location for the proposed project is on the NM Lake Forest Hospital campus – 1000 North Westmoreland Road, Lake Forest.

By their signatures on the Certification page 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 according to the FEMA floodplain map on the following page.

# National Flood Hazard Layer FIRMette



87°52'15"W 42°15'37"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

|                                    |                                                                                                                                                                                                                                            |                                                               |                                                              |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|--------------------------------------------------------------|
| <b>SPECIAL FLOOD HAZARD AREAS</b>  | Without Base Flood Elevation (BFE)<br>Zone A, V, AE9                                                                                                                                                                                       | With BFE or Depth Zone AE, AO, AH, VE, AP                     | Regulatory Floodway                                          |
| <b>OTHER AREAS OF FLOOD HAZARD</b> | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile<br>Zone X                                                                       | Future Conditions 1% Annual Chance Flood Hazard<br>Zone X     | Area with Reduced Flood Risk due to Levee. See Notes. Zone X |
| <b>OTHER AREAS</b>                 | Area with Flood Risk due to Levee<br>Zone D                                                                                                                                                                                                | Area of Minimal Flood Hazard<br>Zone X                        | Effective LOMRIs                                             |
| <b>GENERAL STRUCTURES</b>          | Area of Undetermined Flood Hazard<br>Zone D                                                                                                                                                                                                | Channel, Culvert, or Storm Sewer<br>Levee, Dike, or Floodwall |                                                              |
| <b>OTHER FEATURES</b>              | Cross Sections with 1% Annual Chance<br>Water Surface Elevation<br>Coastal Transect<br>Base Flood Elevation Line (BFE)<br>Limit of Study<br>Jurisdiction Boundary<br>Coastal Transect Baseline<br>Profile Baseline<br>Hydrographic Feature |                                                               |                                                              |
| <b>MAP PANELS</b>                  | Digital Data Available<br>No Digital Data Available<br>Unmapped                                                                                                                                                                            |                                                               |                                                              |

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/14/2022 at 10:13 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

**Historic Resources Preservation Act Requirements**

The location for the proposed project is on the NM Lake Forest Hospital campus – 1000 North Westmoreland Road, Lake Forest.

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

One Natural Resources Way Springfield, Illinois 62702-1271  
[www.dnr.illinois.gov](http://www.dnr.illinois.gov)

JB Pritzker, Governor  
Colleen Callahan, Director

Lake County  
Lake Forest

CON - New Construction of a 3-Story Plus Lower Level Addition, Northwestern  
Medicine Lake Forest Hospital  
1000 N. Westmoreland Road  
SHPO Log #022091422

October 13, 2022

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 contact Rita Baker, Cultural Resources Manager, at 217/785-4998 or at [Rita.E.Baker@illinois.gov](mailto:Rita.E.Baker@illinois.gov).

Sincerely,

A handwritten signature in black ink that reads "Carey L. Mayer".

Carey L. Mayer, AIA  
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 when actual break-outs were not available.

*Itemization of each line item:*

### **Line 1 – Preplanning Costs – (\$2,510,270) – this includes:**

- Pre-design services:
  - Feasibility studies
  - Development of project concept and programming
  - Preparation of rendering, sketches, and presentations of potential project for presentation to City Advisory Group. All documents noted as 'pending regulatory approval'.
  - Preparation of bid solicitation package

Of the total amount, \$898,274 is the clinical Preplanning costs which is 0.73% of the clinical New Construction, Modernization, Contingencies, and Equipment costs.

### **Line 2 – Site Survey and Soil Investigation – (\$1,000,000) – this includes:**

- Geotechnical Soil testing

Of the total amount, \$357,840 is the clinical Site Survey and Soil Investigation cost.

### **Line 3 – Site Preparation – (\$9,226,552) – this includes:**

- Utility company construction work
- Demolition and site clearing
- Shoring for excavation
- Building excavation and foundation prep
- Site grading

Of the total amount, \$3,301,626 is the clinical Site Preparation cost. Together with Site Survey and Soil Investigation, this is 4.94% of the clinical new Construction and Contingencies costs.

### **Line 4 – Off Site Work – (\$3,314,139) – this includes:**

- Stormwater and sanitary utilities
- Roadway curb and gutter and paving
- Sidewalks
- Helistop

Of the total amount, \$1,185,930 is the clinical Off Site Work cost.

**Line 5 – New Construction Contracts – (\$200,155,897) – this includes:**

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

Of the total amount, \$67,069,254 is the clinical New Construction cost.

**Line 6 – Modernization Contracts – (\$40,575,150) – this includes:**

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

Of the total amount, \$3,112,098 is the clinical Modernization cost.

**Line 7 – Contingencies - (\$24,073,105) – this includes:**

- Allowance for unforeseen New Construction and Modernization costs

Of the total amount, \$7,018,135 is the clinical Contingency cost which is 10.0% of the clinical New Construction and Modernization costs.

**Line 8 – Architectural / Engineering Fees – (\$11,016,307) – this includes:**

- Programming
  - Gather information for occupant space requirements. Review and analyze NMHC space standards and prepare the Space Occupancy Program which will list square footage requirements and include individual attributes of the departments and all information pertinent to the planning and design of the Project.
- Schematic Design:
  - Develop diagrammatic plans and documentation to describe the size and layout of each floor in a way that meets all programmatic and functional objectives, as well as accounting for all structure, shafts, elevators and stairs, communications and electrical closets, and all other design constraints.
  - Determine the capacity needed for all building systems (such as electrical, mechanical, plumbing, fire protection, and vertical transportation) as well as support functions (such as pharmacy and materials management) necessary for the uses proposed on the floors.
  - Provide statement of Probable Construction Cost.
- Design Development:
  - Develop detailed drawings and documentation to describe the size and character of the interior space. Includes room layouts, structural, mechanical, electrical, plumbing, fire protection, medical gas, and technology.
  - The equipment and furniture consultants will prepare room-by-room FF&E requirement list. The requirements list identifies 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 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:
  - Review and respond to bidder requests for information and clarifications to the Bid Documents.
  - Participate in pre-bid conferences, and assist NMHC in evaluating contractor bid proposals
  - Correspond, coordinate and respond to authorities having jurisdiction during their reviews.
- 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, \$3,942,071 is the clinical Architectural / Engineering Fee. This amount is 5.11% of the clinical New Construction, Modernization, and Contingencies costs.

**Line 9 – Consulting and Other Fees – (\$20,795,089) – this includes:**

- Charges for the services of various types of consulting and professional experts including:
 

|                                         |           |
|-----------------------------------------|-----------|
| • IT Consultant                         | \$649,150 |
| • Landscape Consultant                  | \$134,300 |
| • Civil Engineering Consultant          | \$446,480 |
| • Cost Estimating Consultant            | \$91,275  |
| • Kitchen Design & Equipment Consultant | \$60,000  |

|                                                |              |
|------------------------------------------------|--------------|
| • Medical Equipment Planning Consultant        | \$1,006,890  |
| • Signage and Wayfinding Consultant            | \$522,500    |
| • Wind Tunnel Consultant                       | \$117,000    |
| • Federal Aviation Administration Consultant   | \$36,400     |
| • Acoustical Consultant                        | \$86,000     |
| • Vertical Transportation Consultant           | \$56,320     |
| • Traffic and Parking Consultant               | \$150,000    |
| • Commissioning, Mechanical Systems Consultant | \$300,000    |
| • Building Envelope Consultant                 | \$300,000    |
| • Vibration Monitoring Consultant              | \$500,000    |
| • Test & Balance Consultant                    | \$250,000    |
| • LEED Consultant                              | \$250,000    |
| • Accessibility Consultant                     | \$10,000     |
| • Sound Masking Consultant                     | \$150,000    |
| • Quality Assurance Consultant                 | \$500,000    |
| • Safety Consultant                            | \$500,000    |
| • Project Engineer, Owner's Representative     | \$572,108    |
| • Construction Manager, Owner's Representative | \$14,106,666 |

Of the total amount, \$7,441,306 is the clinical Consulting and Other Fees cost.

**Line 10 – Movable Capital Equipment – (\$59,723,471) – 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.

| Equipment Type                                                                           | Estimated Cost |
|------------------------------------------------------------------------------------------|----------------|
| Beds                                                                                     | \$1,742,631    |
| Headwalls                                                                                | \$875,454      |
| Imaging Equipment<br>CT Scanner<br>Ultrasound<br>X-ray                                   | \$3,177,739    |
| Monitoring<br>Central Station<br>Physiological Monitors<br>Pulse Oximeter<br>Vital Signs | \$3,722,150    |
| Other<br>IV Pumps<br>Warming Cabinets<br>Biohazard Waste bins<br>Defibrillator           | \$20,430,467   |

|                                                                                                                                                                                                   |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Drug dispensing containers<br>Carousel<br>Lab analyzers<br>Patient lifts<br>Microscopes                                                                                                           |              |
| Furnishings<br>Waiting Room Furniture<br>Sofa Sleepers<br>Patient Recliners<br>Side chairs<br>Nightstands<br>Monitor Arms<br>Office / Consult Room Furniture<br>Lab Casework<br>Pharmacy Casework | \$9,554,440  |
| Technology<br>Computers<br>Monitors<br>Workstations on Wheels<br>Printers<br>Televisions<br>Device Integration<br>Phones<br>iPad Translation<br>Wireless Network<br>Distributed Antenna System    | \$16,059,370 |
| Other<br>Artwork<br>Interior & Exterior Signage<br>Keying                                                                                                                                         | \$4,161,220  |

Of the total amount, \$45,500,000 is the clinical component of the Moveable Capital Equipment cost.

**Line 14 – Other Costs To Be Capitalized – (\$16,397,707) – this includes:**

- Permits and Fees – IDPH, CON, Helistop, etc.
- Insurance
- Landscaping

Of the total amount, \$5,867,749 is the clinical component of the Other Costs to be Capitalized.

**Project Status and Completion Schedules**

Anticipated project construction start date: June 2023

Anticipated midpoint of construction date: June 2025

Anticipated project construction substantial completion date: June 2027

Anticipated project completion date: April 30, 2028

Project obligation is contingent upon permit issuance. NM LFH plans to sign the contract with the general construction contractor in April 2023 that will be subject to CON approval. This contract will obligate the project. The CON Contingency section of the contract is below:

The following Supplementary Conditions modify the Agreement and General Conditions between Northwestern Memorial Healthcare and Power/Ujamaa 6, LLC ("the Contractor"). Where a portion of the Agreement or General Conditions is modified or deleted by these Supplementary Conditions, these Supplementary Conditions shall control. The unaltered portions of the Agreement or General Conditions shall remain in effect.

**S-1. Certificate of Need.** NMHC and the Contractor acknowledge and agree that in addition to permitting required by the City of Lake Forest, 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.

**Northwestern Memorial HealthCare Open CON Permits**

CON #21-008: Old Irving Park Medical Office Building

CON #21-015: Winfield Town Center Medical Office Building

CON #21-032: NM Cancer Center Delnor – Expansion/Modernization

CON #22-011: Oak Brook Medical Office Building

## Cost Space Requirements

|                                                |                | DGSF     |                  | BGSF             | Amount of Proposed BGSF That Is: |             |
|------------------------------------------------|----------------|----------|------------------|------------------|----------------------------------|-------------|
| Department                                     | Cost           | Existing | Proposed Project | Proposed Project | New Const.                       | Modern-ized |
| <b>CLINICAL</b>                                |                |          |                  |                  |                                  |             |
| Medical/Surgical                               | \$ 42,902,072  | 55,650   | 62,467           | 77,162           | 77,162                           | 0           |
| ICU                                            | \$ 3,112,098   | 9,381    | 7,575            | 8,503            | 0                                | 8,503       |
| Observation                                    | \$ 7,778,760   | 12,890   | 11,128           | 13,695           | 13,695                           | 0           |
| Emergency Department                           | \$ 13,518,127  | 12,289   | 18,906           | 23,267           | 23,267                           | 0           |
| ED Imaging                                     | \$ 2,436,183   | 0        | 3,187            | 3,923            | 3,923                            | 0           |
| Inpatient Rehabilitation Services              | \$ 434,112     | 794      | 787              | 969              | 969                              | 0           |
| Clinical Subtotal =                            | \$ 70,181,352  | 91,004   | 104,050          | 127,519          | 119,016                          | 8,503       |
| <b>NON-CLINICAL</b>                            |                |          |                  |                  |                                  |             |
| Administration                                 | \$ 14,183,705  | 37,318   | 29,493           | 35,706           | 29,578                           | 6,128       |
| Education/Conference Space                     | \$ 2,889,337   | 12,151   | 8,686            | 9,979            | 2,604                            | 7,375       |
| Clinical Operation Services                    | \$ 19,824,207  | 11,208   | 19,648           | 23,106           | 11,955                           | 11,152      |
| Clinical Support Services                      | \$ 8,612,383   | 5,745    | 13,635           | 16,312           | 11,449                           | 4,863       |
| Dietary Services                               | \$ 8,857,342   | 11,495   | 7,977            | 9,795            | 9,562                            | 232         |
| Environmental Services                         | \$ 1,546,311   | 2,263    | 3,870            | 4,552            | 2,368                            | 2,185       |
| General Services                               | \$ 16,444,486  | 7,443    | 32,388           | 39,262           | 31,846                           | 7,417       |
| Hospital Staff Support                         | \$ 9,626,382   | 6,598    | 18,208           | 22,224           | 20,233                           | 1,991       |
| Reception/Waiting/Public Spaces                | \$ 6,122,578   | 25,808   | 10,386           | 12,782           | 12,782                           | 0           |
| MEP Systems                                    | \$ 82,442,964  | 16,881   | 46,045           | 55,121           | 39,075                           | 16,046      |
| Non-Clinical Subtotal =                        | \$ 170,549,695 | 136,910  | 190,336          | 228,839          | 171,452                          | 57,389      |
| TOTAL =                                        | \$ 240,731,047 | 227,914  | 294,386          | 356,358          | 290,468                          | 65,892      |
| <b>OTHER</b>                                   |                |          |                  |                  |                                  |             |
| Preplanning Costs                              | \$ 2,510,270   |          |                  |                  |                                  |             |
| Site Survey & Soil Investigation               | \$ 1,000,000   |          |                  |                  |                                  |             |
| Site Preparation                               | \$ 9,226,552   |          |                  |                  |                                  |             |
| Off-Site Work                                  | \$ 3,314,139   |          |                  |                  |                                  |             |
| Contingencies                                  | \$ 24,073,105  |          |                  |                  |                                  |             |
| A/E Fees                                       | \$ 11,016,307  |          |                  |                  |                                  |             |
| Consulting & Other Fees                        | \$ 20,795,089  |          |                  |                  |                                  |             |
| Movable or Other Equipment                     | \$ 59,723,471  |          |                  |                  |                                  |             |
| Bond Issuance Expense                          | \$ -           |          |                  |                  |                                  |             |
| Net Interest Expense During Construction       | \$ -           |          |                  |                  |                                  |             |
| Fair Market Value of Leased Space or Equipment | \$ -           |          |                  |                  |                                  |             |
| Other Costs To Be Capitalized                  | \$ 16,397,707  |          |                  |                  |                                  |             |
| Acquisition of Building (excluding Land)       | \$ -           |          |                  |                  |                                  |             |
| Other Subtotal =                               | \$ 148,056,640 |          |                  |                  |                                  |             |
| GRAND TOTAL =                                  | \$ 388,787,687 |          |                  |                  |                                  |             |

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

#### Criterion 1110.110(a)

#### BACKGROUND OF APPLICANT

1. *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                            |
| Northern Illinois Medical Center (McHenry)  | 0003889          | 7375                              |
| Northern Illinois Medical Center (Huntley)  | 0003890          | 7375                              |
| Memorial Medical Center (Woodstock)         | 0004606          | 7447                              |
| Palos Community Hospital                    | 0003210          | 7306                              |
| 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                               |
| Palos Health Surgery Center*                | 7003224          | n/a                               |

\*denotes partial ownership > 50%

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.*

See list above.

3. *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 the signatures on the Certification page of this application, 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.

4. *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 the signatures on the Certification page of this application, 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. *Document that the project will provide health services that improve the health care or well-being of the market area population to be served.*

Northwestern Medicine Lake Forest Hospital (LFH) has a rich history of caring for the community. Founded in 1899 as Alice Home on the campus of Lake Forest College, LFH joined Northwestern Medicine in 2010 and opened a new state-of-the-art replacement hospital building in 2018. As a pillar in the community, LFH is uniquely positioned to lead efforts to positively impact community health. This mission is accomplished by providing culturally informed care to meet the needs of those who live in the community, maintaining strong relationships with community partners that share our vision of building stronger, healthier communities, and by being a major economic driver in the communities we serve.

LFH's recent recognition:

- Ranked No. 12 in the Chicago Metro Area and No. 12 in Illinois by U.S. News & World Report Best Hospitals, 2022 – 2023
- Nationally ranked by U.S. News & World Report in two specialties: Neurology & Neurosurgery and Pulmonology & Lung Surgery
- Received Magnet redesignation from the American Nurses Credentialing Center in 2020, the gold standard for nursing excellence and quality care

2. *Define the planning area or market area.*

While LFH provides care for residents of Lake County and beyond (including northern Cook County and southern Wisconsin), the primary service area consists of the following 18 zip codes in Lake County:

| ZIP Code | City          |
|----------|---------------|
| 60030    | Grayslake     |
| 60031    | Gurnee        |
| 60035    | Highland Park |
| 60037    | Fort Sheridan |
| 60040    | Highwood      |
| 60044    | Lake Bluff    |
| 60045    | Lake Forest   |
| 60046    | Lake Villa    |
| 60048    | Libertyville  |
| 60060    | Mundelein     |
| 60061    | Vernon Hills  |
| 60064    | North Chicago |

|       |               |
|-------|---------------|
| 60073 | Round Lake    |
| 60079 | Waukegan      |
| 60085 | Waukegan      |
| 60086 | North Chicago |
| 60087 | Waukegan      |
| 60088 | Great Lakes   |

This primary service area is the source of 67.2% of LFH admissions.

3. *Identify the existing problems or issues that need to be addressed.*

Since opening the replacement hospital in March 2018, LFH has been experiencing extremely high occupancy. In the six months prior to the COVID-19 pandemic (September 2019 to February 2020), the average medical/surgical/ICU/observation occupancy was 107%. During the pandemic, LFH added observation beds and, utilizing flexibility provided by the COVID-19 emergency provisions, converted 48 inpatient rooms to double occupancy and 12 – 20 pre-/post-procedure care spaces to temporary holding beds for boarders. Following these additions, the average occupancy at LFH (not including obstetrics) for the six months ending May 2022 decreased marginally to 100%.

One of the reasons for the significant growth at LFH is the increased access to specialty care. Since the affiliation with Northwestern Medicine in 2010, LFH has continued to build advanced care capabilities in areas such as Heart and Vascular, Orthopedics, Endocrinology, Interventional Gastrointestinal, Pulmonology, and Oncology. Many sub-specialists from Northwestern Memorial Hospital practice at LFH (example: electrophysiology) which increases access to the residents of the LFH service area. With the ability to provide higher acuity care close to home, LFH has treated more complex cases that previously would have been transferred to downtown to NMH. Accordingly, LFH's CMI increased from 1.7 in FY16 to 2.0 in FY21 (17.6% increase).

Another contributor of growth at LFH is the closure of the Vista West Hospital Emergency Department just months prior to the opening of the new LFH. At LFH, 88% of inpatient admissions come through the emergency departments at the hospital and Northwestern Medicine Grayslake Freestanding Emergency Center; scheduled procedures represent only about 11% of admissions. A look at the most recent Region X comparative data reveals the magnitude of the challenge LFH faces: LFH has more than twice as many emergency department and trauma visits per licensed bed and 1.5 times more emergency department admissions per licensed bed than any other hospital in the region (*source: CY20 IDPH AHQ Facility Profiles*).

Patient preference to receive care at LFH is also a major factor influencing the high occupancy. Hospital data shows that over 40% of LFH emergency department patients live outside of LFH's local communities, more than 10 miles from LFH, indicating that many are passing another hospital on the way to LFH.

A significant proportion of the increase in volume is attributable to growth of patients originating from under-resourced communities, particularly Waukegan, Round Lake, and North Chicago. Since the opening of the new hospital, total patient days have increased by nearly 50% while patient days from the under-resourced ZIP codes have increased by 85%.

In 2020, LFH provided more charity care than any other Lake County hospital by a wide margin; LFH's charity care as a percentage of net patient revenue was double that of any other Lake County hospital. Additionally, the rate of increase for patients on Medicaid is the highest in the county. While the total number of inpatients served at LFH increased by 43% from CY15 – CY21, the number of Medicaid inpatients increased by 186% and Charity Care inpatients increased by 199%.

*4. Cite the sources of the documentation.*

Sources of information include:

- Hospital Records
- 2022 Lake Forest Hospital Community Health Needs Assessment
- CY20 IDPH Annual Hospital Profiles

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

The proposed project will improve access to care across the LFH service area. Access to comprehensive, quality healthcare services is important for the achievement of optimal health and increasing quality of life. It impacts overall physical, social and mental health status, including prevention of disease and disability, detection and treatment of health conditions, preventable death, and life expectancy. The proposed addition of beds, emergency department stations, and diagnostic imaging equipment will allow LFH to return to the target occupancy/utilization levels.

*6. Provide goals for the proposed project.*

The purpose of this project is to increase access to care by accommodating the demand for services at LFH.

The goals of this project include:

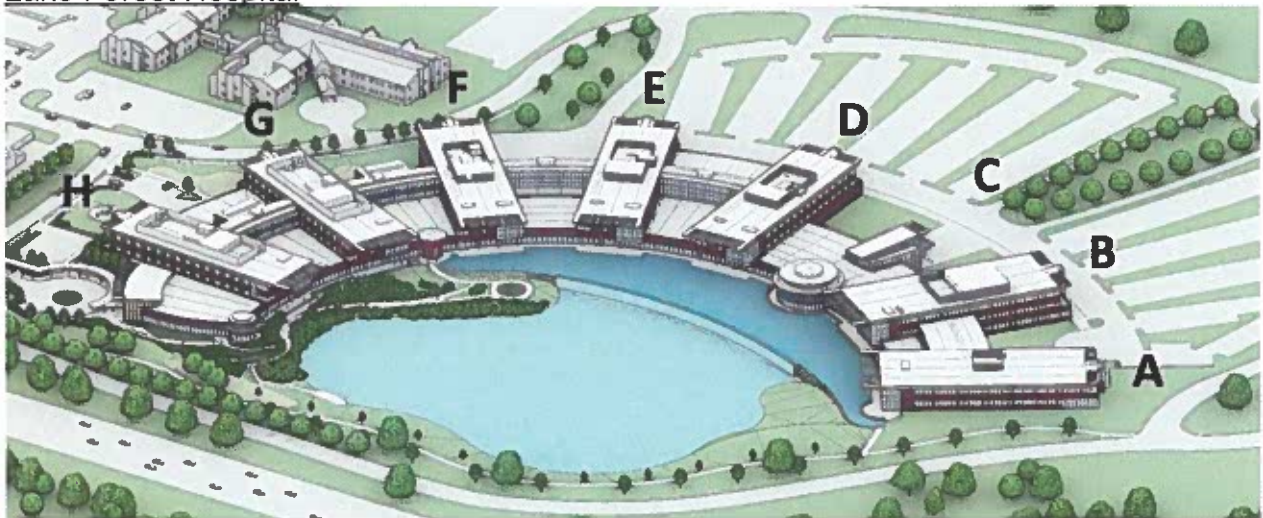
- Reduction of inpatient occupancy to the target levels
- Decrease in patient hold times in the ED
- Elimination of the need for ED Bypass

**Criterion 1110.110(d)****ALTERNATIVES**

Additional beds are needed at LFH to keep pace with current and projected demand. Without the additional beds, the average annual occupancies will continue to exceed 100% and patient demand will not be able to be accommodated.

LFH has implemented many operational improvements to maximize the use of the current facility which are detailed in ATTACHMENT-19.

LFH has determined that the best option for accommodating demand is to construct two new pavilions attached to the current hospital. The hospital is made up of 5 pavilions connected by building segments comprised of public common areas and staff support space. Pavilions A and B house physician practice clinics, cancer center, diagnostic imaging, and other outpatient clinics. Beds are located in Pavilions D, E, and F. There is space on the south side of Pavilion F for up to two more pavilions. The proposed project is for the addition of Pavilions G and H.

**Lake Forest Hospital**

The proposed project will add 12 ICU beds by converting 12 medical/surgical beds on the second floor of the E Pavilion (E2). It will also add a net new 84 medical/surgical beds: 24 on G2, 24 on G3, 24 on H2, and 24 on H3 (12 new and 12 relocated from E2).

The proposed project also includes the expansion and relocation of the Emergency Department. Relocating the ED not only allows for the necessary expansion of the department but also allows for a separate Emergency Entrance which will improve traffic flow and pedestrian access to the general "south entrance" to the campus. Additionally, in order to accommodate one of the recent observation bed unit additions, half of the current ambulance bay was eliminated. Relocating the ED will provide the space needed for an appropriately-sized ambulance garage.

Before determining that the proposed project was the best option, LFH evaluated several alternatives for adding bed capacity. The proposed project is the most practical in both the short- and long-term and is therefore the preferred alternative.

Alternatives considered:

1. Add beds in Pavilions A and B;
2. Construct one pavilion instead of two as proposed;
3. Vertical expansion of the existing pavilions;
4. Utilize the 600 Building.

### **Alternative 1: Add Beds in Pavilions A and B**

#### **Description**

As mentioned above, Pavilions A and B house physician practice clinics, cancer center, diagnostic imaging, and other outpatient clinics. Even prior to the COVID pandemic, inpatient capacity was constrained and efforts were made to identify areas within Pavilions A and B to potentially add beds.

In order to create capacity to accommodate the proposed number of beds, all of the existing functions in both pavilions would have to be relocated. Unfortunately, there are no other buildings on campus that could accommodate the relocation. While it is not impossible to add beds to the A and B Pavilions, they are designed to be outpatient buildings and extensive/expensive retrofitting would be required to convert the 2<sup>nd</sup> floor of the A Pavilion and the 2<sup>nd</sup> and 3<sup>rd</sup> floors of the B Pavilion from business occupancy to institutional occupancy. Even so, the placement of existing mechanical and electrical risers and overall floorplate of the buildings would force smaller inpatient rooms than on the current inpatient units. In addition, Pavilion C is only a one-story plus basement structure so potential beds in the A and B Pavilions would be disconnected from all diagnostic and treatment functions that are housed in the D, E and F Pavilions.

#### **Advantages**

- Lower cost than proposed project because building core & shell is already constructed.

#### **Disadvantages**

- Would create a need for space for all functions currently in the two pavilions.
- Does not allow for current inpatient room layout/size.
- Significant costs associated with conversion from business to institutional occupancy.
- Inpatient units in Pavilions A and B would be separated from the inpatient units in Pavilions D, E, and F.

**This alternative was rejected because there is no other location to relocate all of the existing functions in the two pavilions. Cost estimates were not developed for this option since it is not realistic.**

**Alternative 2: Construct Pavilion G Only****Description**

This option includes the construction of only one Pavilion (G) on the south side of Pavilion F and would add 48 inpatient beds.

**Advantages**

- Lower cost than proposed project

**Disadvantages**

- Does not even accommodate current volume demands.
- Does not allow for the relocation/expansion of the Emergency Department.

**Cost**

Approximately \$180 million for 48 beds.

**Timeline**

This alternative would take approximately 8 months less than the proposed project.

**This alternative was rejected because it does not meet the program need for ICU, medical/surgical, observation beds or emergency department.**

**Alternative 3: Vertical Expansion of Existing Pavilion****Description**

Pavilion A was built with the capability of having an additional floor added above the current roof level. One floor could accommodate 24 beds.

**Advantages**

- Lower cost than proposed project.

**Disadvantages**

- Requires conversion from business to institutional occupancy.
- Disruption to existing hospital operations in the building would be significant and would require interruption of mechanical/electrical and conveying systems.
- An inpatient unit in Pavilion A would be separated from the inpatient units in Pavilions D, E, and F.

**Cost**

Approximately \$50 million for 24 beds.

**This alternative was rejected because it does not meet the program need for ICU, medical/surgical, observation beds or emergency department.**

**Alternative 4: Utilize the 600 Building****Description**

The Women's Health Building of the former Lake Forest Hospital, known as the 600 Building, was constructed in 2004. Because of its age and condition, it was not demolished when the rest of the old facility was razed. During the pandemic it was used as LFH's COVID vaccination/testing location. Currently, it is being used as administrative space and a training/simulation center for clinical students and staff.

LFH explored the use of the 600 Building for inpatient care during the high COVID census peaks since the former obstetrics rooms remain relatively untouched. However, because the building is located more than 250 yards from the new hospital, per the Illinois Hospital Licensing Act, it cannot be used for inpatient services. Additionally, because the building had been supported by the former hospital building, it doesn't have many of the necessary support services, such as pharmacy and food service.

**Advantages**

- Patient rooms are already in existence.

**Disadvantages**

- Does not meet the requirement of being within 250 yards from the main hospital building.
- Existing patient rooms are not configured for accessible toilet rooms and do not have the clearances required in modern bed configurations.
- Does not have many of the necessary support service functions.
- Is not large enough to accommodate the proposed number of additional beds. Because the ground floor and the 3<sup>rd</sup> floor cannot accommodate inpatient rooms, this alternative would only provide between 36-41 rooms.

**This alternative was rejected because it does not meet licensure requirements for inpatient use. Cost estimates were not developed for this option since it is not realistic.**

The following table provides a summary cost benefit analysis of the preferred project and the 4 alternatives:

| Location/Alternative                       | Meets functional program? | Total Cost           | Availability |
|--------------------------------------------|---------------------------|----------------------|--------------|
| <b>Pavilion G and H (proposed project)</b> | <b>Yes</b>                | <b>\$389 million</b> | <b>2027</b>  |
| Add Beds in Pavilions A and B              | No                        | N/A                  | N/A          |
| Pavilion G only                            | No                        | \$180 million        | 2026         |
| Vertical Expansion of Pavilion A           | No                        | \$50 million         | N/A          |
| Utilize 600 Building                       | No                        | N/A                  | N/A          |

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

| <b>SIZE OF PROJECT</b> |                      |                       |                   |                      |
|------------------------|----------------------|-----------------------|-------------------|----------------------|
| <b>DEPARTMENT</b>      | <b>PROPOSED DGSF</b> | <b>STATE STANDARD</b> | <b>DIFFERENCE</b> | <b>MET STANDARD?</b> |
| Medical/Surgical       | 62,467               | 63,360                | (893)             | Yes                  |
| ICU                    | 7,575                | 8,220                 | (645)             | Yes                  |
| Observation Unit       | 11,128               | N/A                   | N/A               | N/A                  |
| Emergency Department   | 18,906               | 21,600                | (2,694)           | Yes                  |
| Diagnostic Imaging     | 3,187                | 4,000                 | (813)             | Yes                  |
| IP Rehab Services      | 787                  | N/A                   | N/A               | N/A                  |

**General Size of the Proposed Project**

The Special Use Permit (SUP) approved by the City of Lake Forest included a Campus Master Plan for the site and provided guidance regarding allowable building height in various zones of the campus. The maximum height was set at 81-feet in a zone in the central portion of campus, with allowances of 45-feet on the north and western portions of campus, and 60-feet and 55-feet to the south. The building design respects the intent of the SUP with heights of 60-feet to the top of the Pavilions and 75-feet to the top of the mechanical roof screening as measured relative to the lowest adjacent existing grade.

**Building Structural Grid**

The existing building attempted to accommodate the space and operational needs of the space program in a way that was both functional, in providing the appropriate area and clearances necessary to perform a given procedure, and efficient, in the use of space necessary to support the given function.

To maximize the future flexibility of the facility, a 31'- 4" x 30'- 0" structural module was chosen. The uniqueness of this structural grid, however, lies in the variation due to the radial nature of the building. At the heart of the Interventional space, the building's centerline rests at the module noted above, yet the bays gradually reduce as they fan out from that centerline. The inpatient units follow the 31'- 4" x 30'- 0" module since they are linear pavilions resting atop the radial podium below.

**Floor Gross Assumptions**

Consistent with previous CON applications submitted by Northwestern Medicine facilities, 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, plumbing, ComEd, and Life Safety
- 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).

### **Sustainability/Green Design**

Northwestern Memorial HealthCare (NMHC) has set clear and concise facility and site performance standards for all NMHC projects including Lake Forest Hospital. NMHC projects will meet USGBC LEED Silver requirements, ASHREA 189.1 standards, and utilize EnergyStar equipment to meet our corporate-social responsibility to design, build and operate sustainable/green facilities and sites within the NMHC System.

#### USGBC Leadership in Energy and Environmental Design (LEED)

The goal of the LFH project is to achieve US Green Building Council LEED Silver Certification. LEED addresses sustainable design issues such as:

- Site design features
- Water consumption
- Energy efficiency
- Envelope design
- Natural and electrical lighting approach
- Material and finish selection
- Healthy environment

#### ASHAE Standard 189.1

The American Society of Heating and Air-Conditioning Engineers (ASHAE) Standard 189.1 provides a total building sustainability standard for the design, construction and operations of green buildings. From site location to energy use to recycling, this standard used for LFH sets the foundation for green buildings by addressing site sustainability, water use efficiency, energy efficiency, indoor environmental quality, and the building's impact on the atmosphere, materials and resources. ASHAE Standard 189.1 serves as a compliance option in the 2012 International Green Construction Code™ (IgCC), which has not yet been adopted by the State of Illinois.

#### ENERGY STAR

A U.S. Environmental Protection Agency (EPA) voluntary program, the ENERGY STAR program has been instrumental in reducing a significant amount of greenhouse gas (GHG) emission. As part of a comprehensive Northwestern Medicine System-wide program to address the challenges of climate change, and to achieve reduced carbon

emissions generated by facility heating, cooling, and other equipment, the project will select ENERGY STAR certified equipment.

## **Clinical Components**

### **Medical/Surgical**

With the driving functionality of universal design and flexible, adaptable spaces, the medical/surgical platform is comprised of 24-bed units, divisible into “pods” of twelve, six or even down to pods of two to accommodate acuity and visualization. The high degree of flexibility of this design is intended to accommodate varying levels of patient acuity as well as help to maintain adequate nursing ratios. While the project includes the construction of 4 new 24-bed units, or 96 beds, the net addition of medical/surgical beds is 84 because of the conversion of 12 existing medical/surgical beds to ICU beds.

### *The Inpatient Experience*

To achieve exceptional patient care and safety, the inpatient platform will continue to feature lean efficiency measures such as deployment of supplies and medications, decentralized level of care and electronic medical records, and a state-of-the-art environment capable of supporting a flexible, adaptable, high quality, best practice model of care.

The expanded inpatient platform is driven by the need for an exceptional level of patient care and experience; through an efficient and universal design, patients will continue to feel empowered, informed, and connected in the care plan operating in a stress-free, reliable care environment. The units will incorporate direct accessibility to staff and supplies for a high level of personalized care and communication.

### *Unit Design*

The new units will serve as an expansion to the existing units, with slight modifications to improve staff functionality. All of the patient rooms continue to be private spaces with dedicated family areas incorporated in each room where family can stay overnight comfortably. Units will be flanked by a single-loaded corridor design of patient rooms along the outside of the unit with a support core extending through the middle. LFH continues to deploy a semi-decentralized model of supplies and medications; therefore the support core contains a 2:12 supply room ratio to patient rooms, 1:12 meds room, 1:12 nourishment, 1:12 equipment, and 1:24 soiled utility access. Additional support spaces for staff have been created in the connectors between Pavilions F, G, and H.

Patient rooms will be private yet have direct visibility to staff charting stations for adequate monitoring and connection to the patient. A staff “collaboration hub” has been designed into the support core of each unit and is strategically placed to provide direct views into four patient rooms; through this model, all hubs are able to monitor all patient rooms in a unit.

Hubs will contain charting capabilities as well as provide a touch-down space for staff to collaborate but still maintain proximity to patients. In addition to charting in the core, each patient room will support and include the technology for staff to chart and increase their time at the patient bedside.

#### *Room Design*

Consistent with the existing units, each patient room will feature a “supply server” intended to support the supply decentralization model. Research has shown how room-side supplies and medications greatly decrease staff travel times and increase time at the bedside. Staff is better able to concentrate on a single patient, reduce opportunity for error, and reduce patient falls due to increased monitoring and increased one-on-one staff and patient time. The design of these room-side servers allows staff access from the corridor to quickly provide for needs in the patient room and houses most-frequently used supplies, linens, and PPE.

In terms of the patient room detail, rooms will be oriented in a same-handed fashion vs. the mirrored approach, directly supporting the universal nature of the unit and encouraging an efficient and intuitive environment. Research has shown that same-handed patient room orientation supports staff and physicians by promoting an environment where the main variable is the patient, therefore eliminating distractions and the opportunity for errors by driving focus to the patient.

Patient rooms will feature outboard and footwall toilet room configuration where it resides on the outer wall of the room, opposite from the entry and on the opposite wall than the patient's head. Footwall orientation enables patients to maintain a direct and unobstructed path of travel from the bed to the toilet room. Often, furniture, like recliners or family chairs, or even equipment, such as ventilators, flank the sides of the patient headwall and can be an obstacle when in the path to a headwall toilet configuration. Outboard allows staff to maintain a designated and accessible “staff zone” where they can chart, work with the patient, prep supplies and/or medications, and monitor the patient effectively.

Visualization is also an added benefit to the same-handed, outboard toilet configuration of the patient rooms. This design orientation, along with the placement of the collaboration hubs within the support core allow a high degree of visibility into the patient rooms from the corridor for staff to monitor and maintain connection with patients.

#### *Unit Innovations*

The inpatient environment will promote healing through the connection to natural light and views to nature. Patients will also have the opportunity to feel comfort through the inclusion of family space within each private patient room to enhance the comfort and healing nature of the unit.

The hospital benefits from the design of separated “on-stage” and “off-stage” circulation, keeping public corridors and elevators separate from those used by patients, staff, and

support services. This design feature allows a private and efficient experience for patients and staff so public are not intermixed with workflows and interrupting modes of travel for staff. The patient units include this separation of circulation, allowing supplies to be brought up directly to the units and distributed as well as allowing the movement of patients discretely to hospital services such as surgery, ED, and imaging services.

Medical/Surgical units benefit from the integration of inpatient rehabilitative services through a dedicated workroom/inpatient rehab gym in the connector between Pavilions G and H on both the 2<sup>nd</sup> and 3<sup>rd</sup> floors. Although these areas will not support the full extent of rehabilitative functions (i.e. a fully-equipped and sized rehab gym) but will allow rehab staff to interact with patients and remain in close proximity to them in order to maintain a good relationship and be a part of the care plan.

Lastly, the units will feature technological support to connect patients and staff while maintaining a quiet and calming atmosphere. Staff will utilize personal communication devices to eliminate the need and disturbance of overhead paging. Patient rooms will also feature an element of connection to staff as well as education to remain informed about the care plan.

#### *Comparison of Space to Square Footage Standard*

Square footage for the Medical/Surgical department is 62,467 DGSF. Components and space standards used are as follows:

| <b>MEDICAL/SURGICAL</b>                                   | <b>DGSF</b> |
|-----------------------------------------------------------|-------------|
| 96 Medical/Surgical beds, as designed                     | 62,467      |
| State Standard for 96 medical/surgical beds, 660 dgsf/bed | 63,360      |
| Amount of difference, explained and justified below       | (863)       |

The square footage of the Medical/Surgical units fall within the State Standard for department size.

Intensive Care Unit (ICU)

Twelve (12) existing medical/surgical beds that are in the unit adjacent to the existing ICU beds will be converted to ICU beds. The only construction needed for this conversion is the addition of miscellaneous steel supports and patient lift equipment in the ceiling of each of the rooms.

In keeping with the universal nature of the hospital's design, the Intensive Care Unit was designed in the same fashion as the medical/surgical units, as explained above. All inpatient rooms were fitted to the codes/standards/clearances of ICU rooms for the highest degree of flexibility and adaptability as patient acuities flex throughout the day, week and seasons.

*Comparison of Space to Square Footage Standard*

Square footage for the ICU department is 7,575 DGSF.  
Components and space standards used are as follows:

| ICU                                          | DGSF  |
|----------------------------------------------|-------|
| 12 ICU beds, existing                        | 7,575 |
| State Standard for 12 ICU beds, 685 dgsf/bed | 8,220 |
| Amount of difference                         | (645) |

The square footage of the ICU unit falls within the State Standard for department size.

### Observation Unit

The Observation unit will be located adjacent to the Emergency Department. It will consist of 18 identically sized and outfitted rooms, each with a patient toilet.

The unit will be accessed by the public through an entrance portal that is independent from other units in the building.

The unit will be used to expedite treatment of inpatient and observation patients. Patients in the unit will begin admission protocols such as administration of antibiotics and ordering of tests.

All support spaces including medication, clean supply, soiled and nutrition will be included in the unit so that it is self-sufficient. Equipment alcoves will be distributed throughout the care area to provide timely, convenient access from any location.

### *Comparison of Space to Square Footage Standard*

Square footage for the Observation Unit is 11,128 DGSF.

There is no State space standard for Observation beds.

### Emergency Department

As part of the proposed project, the Emergency Department will be relocated to the new H Pavilion. This is because expansion and additional isolation and controlled airflow capabilities that were determined necessary during the COVID-19 pandemic could not be accommodated in the current location. Locating the ED at the end of the Hospital also optimizes wayfinding and patient safety and allows for ED waiting areas and treatment spaces to have enough space to meet social distancing requirements.

A new vehicular drop-off will be provided at the south entrance of the H Pavilion. The new ED will have its own entrance vestibule and greeter/registration desk at this drop-off. A secondary public entrance vestibule will be used for the obstetrics patients arriving through the same vehicular drop-off. Obstetrics patients will enter the building at the new south entrance and be escorted to the dedicated Women's Center elevator in the F Pavilion. The two waiting areas and vestibules will be separated by a fritted glass wall to maintain physical separation between the two patient populations.

The 24 ED treatment rooms will be private and outfitted similarly. Of the 24 patient rooms, 16 will be standard treatment rooms, 2 will be isolation rooms with attached ante room and patient toilet, 3 will be outfitted for behavioral health patients, 1 will be outfitted for sexual assault patients, 1 will support patients of size, and 1 will serve as trauma/resuscitation. The trauma/resuscitation room is located to provide discrete, direct access from the ambulance garage, access to specialty equipment located in adjacent alcoves, and key supervision from adjacent staff spaces. Access from the resuscitation room to the CT will be convenient, off-stage, and direct. Six additional spaces will be provided for triage and designed for quick patient assessment before being transferred to a treatment room. Patient toilet rooms will be dispersed throughout the department and 2 patient toilet/shower rooms will be provided for use by behavioral health and sexual assault patients.

All patient rooms are designed to include staff, patient, and family zones to provide faster access, better outcomes, consistent care of pre- and post-procedure patients, higher productivity of staff, and utilization of space in a patient and family-friendly way.

All support spaces including medication, clean supply, soiled and nutrition will be standardized and equipped to provide the same level of added safety and efficiency being provided in each patient care space. Equipment alcoves will be distributed throughout the care area to provide timely, convenient access from any location.

The ED will be divided into a high-acuity zone located adjacent to the ambulance garage and trauma room and a low-acuity zone located adjacent to the triage area.

*Comparison of Space to Square Footage Standard*

Square footage for the Emergency Department is 18,906 DGSF.  
Components and space standards used are as follows:

| <b>EMERGENCY DEPARTMENT</b>                                        | <b>DGSF</b> |
|--------------------------------------------------------------------|-------------|
| 24 Emergency Department rooms, as designed                         | 18,906      |
| State Standard for 24 Emergency Department rooms, 900 dgsf/station | 21,600      |
| Amount of difference                                               | (2,694)     |

The Emergency Department falls within the State standard for department size.

ED Imaging

The proposed project includes a diagnostic imaging department dedicated to the Emergency Department. It will be located adjacent to the ED in the connector between the H and G pavilions on the 1<sup>st</sup> floor.

The ED Imaging area will consist of 1 CT, 1 X-Ray machine, and 1 Ultrasound machine.

The Ultrasound room is sized and outfitted to accommodate diagnostic as well as procedural cases.

*Comparison of Space to Square Footage Standard*

Square footage for the ED Imaging Department is 3,187 DGSF.  
Components and space standards used are as follows:

| <b>ED IMAGING</b>                           | <b>DGSF</b> |
|---------------------------------------------|-------------|
| ED Imaging Department, as designed          | 3,187       |
| 1 CT room                                   |             |
| 1 Ultrasound room                           |             |
| 1 X-Ray room                                |             |
| State Standards                             |             |
| 1 CT unit, 1,800 dgsf/unit                  | 1,800       |
| 1 Ultrasound unit, 900 dgsf/unit            | 900         |
| 1 General Radiography unit, 1,300 dgsf/unit | 1,300       |
|                                             | <hr/> 4,000 |
| Amount of difference                        | (813)       |

The ED Imaging Department falls within the State standard for department size.

### IP Rehabilitation Services

Currently, there are two Inpatient Rehabilitation spaces used for Physical and Occupational Therapy. The existing spaces are located on the 2<sup>nd</sup> and 3<sup>rd</sup> floors of the connector between the D and E Pavilions. The proposed project includes two additional spaces, one on the 2<sup>nd</sup> floor and one on the 3<sup>rd</sup> floor of the connector between the G and H Pavilions. These areas will be utilized by PT/OT staff to support the functions of the new inpatient units. Inpatient therapy spaces will be utilized to support staff as well as provide gym space for staff interaction with patients (i.e. therapy tables, small equipment to monitor patients' limitations as well as abilities).

The IP Rehab areas will support a provision of services to help patients develop, maintain, and restore maximum movement and functional ability. Spaces such as these are key to accommodate different patient types, activities, and acuity levels; not all patients work well in larger therapy gyms and need immediate attention after certain procedures/surgeries. By including these spaces near the Inpatient units, staff will be better equipped and readily available to work with patients and monitor progress.

#### *Comparison of Space to Square Footage Standard*

Square footage for the IP Rehabilitation spaces is 787 DGSF.

There is no State space standard for IP Rehabilitation space.

### **Non-Clinical Components**

There are no State Guidelines for the non-clinical components of this project. In determining the square footages for these components, NM's planning team members, architects, and consultants utilized existing functional standards and incorporated experience from other developments in the healthcare system during the past 2+ decades of growth.

#### **Administration**

Space will be provided for General Administration, Offices, Central Transport, Hospital Operators, and Volunteers.

The specific locations for administrative spaces were determined by the degree to which these services need to be proximate to patients, staff, or physicians. For example, offices for clinical managers will be located near the clinical areas while functions such as General Administration, Hospital Operators, and Volunteers will be in the lower level of the hospital. Additional General Administration will be located in vacated areas of the existing Emergency Department and Ambulance Garage.

The Administration areas of the proposed project total 29,493 DGSF.

#### **Education/Conference Space**

Conference rooms will be dispersed throughout the hospital. These rooms are planned for use across multiple departments for staff meetings and education.

The Education/Conference areas of the proposed project total 8,686 DGSF.

#### **Clinical Operation Services**

The proposed project includes areas that support clinical operations but do not provide direct patient care. These departments include:

- Central Sterile Supply
- Pharmacy
- Processing Laboratory

##### ***Central Sterile Supply***

The Central Sterile Processing department will be expanding in place in its current location in the lower level immediately below the operating rooms to provide direct access for outgoing sterile instruments and supplies and for incoming soiled instruments. This location also provides convenient vendor access from the loading dock and vendor parking areas located on the lower level. An existing internal clean elevator connects the sterile storage/case cart picking area in Central Sterile Processing to the central sterile core above. Post-procedure dirty case carts have waste off-loaded

in the Soiled Holding room that is located at the edge of the semi-restricted surgical suite and then will have instruments delivered to the CSP decontamination area via the dedicated dirty elevator. All deliveries, both ways will be discreet and off-stage.

The Central Sterile Processing serves the operating rooms, Emergency Department, and LDRs from their central, off-stage location. All instrument deliveries will be made off-stage through a dedicated staff/patient/materials transport corridor and elevator network.

The Decontamination area is not being altered as a part of this project.

Central Sterile Staff Lockers will be located adjacent to the department in the lower level. Administrative space is provided within the department for direct management of the area.

#### *Pharmacy*

The Pharmacy will be expanding in place in the lower level of the E Pavilion. It will be responsible for providing first medications, stat medications, routine doses, IV prep, and Compounding.

The Pharmacy is located with other support services on the lower level of the hospital along the service spine. This provides efficiencies through sharing staff support spaces such as lounges, locker rooms, and toilet rooms. The Pharmacy is connected vertically to the patient care areas through the use of stairs and elevators as well as through the use of a pneumatic tube system.

The Pharmacy will be fitted with the latest technologies (including an additional new medication carousel to increase capacity) and will ensure compliance with all regulatory agencies (including USP-797/800 Guidelines).

The Pharmacy is designed for maximum flexibility and adaptability. Casework will be composed of modular furniture which can easily be modified to accommodate future technologies and new equipment.

#### *Processing Laboratory*

Laboratory services are being relocated from the lower level of the E Pavilion to the lower level of the G Pavilion. Lab services consist of a combination of high volume/low mix activities that require less than a 24-hour turnaround. Operationally, the LFH Lab will be capable of performing an abbreviated battery of tests and will serve as a receiving lab to process and send out tests to other NM hospitals or outside reference labs.

The Lab will be responsible for providing the following services: Chemistry, Urinalysis, Hematology/Coagulation, Blood Bank, Microbiology/Kit Work, Molecular Microbiology, Fine Needle Aspiration, Blood Culture, Bone Marrow, Histology, IHC Staining, and full Pathology Services.

Like the Pharmacy, the Lab will be co-located with other support services on the lower level of the hospital along the service spine. The Lab will be connected vertically to the patient care areas through the use of stairs and elevators as well as through the use of a pneumatic tube system. As a part of this project, the phlebotomists supply and workrooms will be relocated from the 900 Building on campus to the lower level of the G Pavilion adjacent to but separate from the main Lab. Phlebotomists will be deployed throughout the facility to retrieve specimens. Outpatients will have their blood draws done in the outpatient areas of the hospital, while inpatient blood draws will be done at the bedside by phlebotomists.

The Lab is designed for maximum flexibility and adaptability. Lab benches will be composed of modular furniture which can easily be modified to accommodate future technologies and new equipment. A new Beckman Coulter automated line will be included in the activation of this project.

The Clinical Operation Services areas of the proposed project total 19,648 DGSF.

### Clinical Support Services

The proposed project includes Clinical Support Service areas that include:

- Ambulance Garage/EMS
- Biomedical Support
- Morgue
- Dialysis Cleaning/Storage
- Respiratory Care

#### *Ambulance Garage*

The Ambulance Garage will be located on the 1<sup>st</sup> floor between the G and H Pavilions adjacent to the Emergency Department with an access drive that is completely separate from traffic from the main ED patient entrance. The Garage layout and design allows for controlled, drive-through traffic and parallel internal parking for four ambulances.

The Emergency Medical Services (EMS) Workroom, EMS Storage, and Biohazard Equipment Storage spaces will be located at the adjacent, internal edge of the Ambulance Garage.

Additional Ambulance, Police, and Security vehicle parking will be provided at paved surface spaces located immediately adjacent to the Garage. Within the Garage, wall mounted electrical and water outlets will be provided.

#### *Biomedical Support*

The Biomedical Support department will be expanded in place in the lower level of the F Pavilion. It is responsible for procuring, evaluating, repairing, and maintaining clinical equipment for the facility. In addition to servicing equipment, biomedical engineers use their technical expertise to train patient care staff during in-services, evaluate new products, monitor and enforce recall campaigns, and perform routine quality control

inspections. A satellite Biomed Workroom will be provided in the lower level of the H Pavilion to shorten travel distances for engineers servicing the new G and H Pavilions.

#### *Morgue*

The Morgue will be relocating from adjacent to the Ambulance Garage on the 1<sup>st</sup> floor of the F Pavilion to the lower level of the F Pavilion near the main loading dock discharge door. The existing Morgue consists of 6 individual coolers accessed via a mobile body lift. The new Morgue will include a walk-in cooler with 12 individual drawers for body storage and a separate bin cooler that will include shelves for large specimen storage for the Lab. A new viewing room adjacent to the Morgue will provide compassionate care for family members of the deceased to be able to view the body and uphold religious traditions.

#### *Dialysis*

New space will be provided for the Dialysis team in the lower level of the F Pavilion for machine cleaning, equipment storage, and supply storage.

#### *Respiratory Care*

Throughout COVID, the Respiratory Care team grew exponentially. While there is some dedicated equipment/supply closets and a team workroom in the lower level of the E Pavilion, the existing space does not support the current department need nor can it support the proposed inpatient expansion. As a part of this project, Respiratory Care support spaces will be consolidated and expanded into one area. The new department will include a manager's office, a small staff nourish alcove, a team workroom and a large equipment and supply storage room. The new space will be located the lower level of the E Pavilion.

The Clinical Support Services areas of the proposed project total 13,635 DGSF.

#### Dietary

The Dietary department will be expanded in the lower level and will be separated from the existing kitchen in the C Pavilion. The existing kitchen will continue to service the cafeteria and catering functions. The new kitchen will be in the lower level between Pavilions G and H to serve all patients in the hospital (medical/surgical units, ICU, Labor and Delivery, obstetrics, and observation units). This location allows staff to transport patient meals along the lower level service spine and up to the patient care areas through service elevators.

In a continuation of the current hospital process, patient meals will be prepared using a room service concept. Patients will order al la carte with on demand delivery, and orders will be processed by the Dietary office. Meals will be cooked to order and delivered in less than one hour. Each patient care floor will have a nourishment room to fulfill beverage and snack requests immediately. Patients will make choices throughout the day, contributing positively to their healthcare experience and overall patient

satisfaction. Safeguards will be in place for monitoring restricted diets, and for feeding critically ill patients who may be unable to place their own orders.

The Dietary spaces in the proposed project total 7,977 DGSF.

### Environmental Services

The Environmental Services Department (EVS) operates 24/7 and is responsible for housekeeping services for both clinical and non-clinical areas, stocking areas with soap and paper products, sorting and stocking of clean linen, removal of soiled linen, removal of waste and recycling for disposal, and collection of pharmaceutical and bio-hazardous waste.

EVS is co-located with other support services on the lower level of the hospital along the service spine. This provides efficiencies through sharing staff support spaces. EVS staff will move throughout the facility using back of house corridors and elevators.

The main EVS department is being expanded to provide appropriate storage for cleaning supplies, paper products, large equipment, and equipment not used on a regular basis. Housekeeping carts will be deployed to the units in standardized housekeeping closets located within each department.

Trash and Linen Chutes will also be integrated into the new Pavilions similar to the existing design of the hospital, connecting the EVS department in the lower level up through the platforms, all the way up into the bed areas. These chutes will allow a great deal of efficiency and ensure a hygienic workflow by eliminating travel of waste and soiled linens in the elevators, releasing further airborne pathogens into the hospital.

The EVS areas of the proposed project total 3,870 DGSF.

### General Services

The following General Services will be included in the proposed project:

- Materials Management
- Storage
- Security
- Vendor Badging

#### *Materials Management*

The Materials Management department is responsible for purchasing, shipping and receiving, inventory control, and distribution services for the hospital.

A Just-In-Time supply replenishment system was implemented when the hospital was constructed. The support space adjacent to the existing loading dock will be expanded in place to support the proposed bed expansion. Linen is provided on exchange carts

using an off-site commercial laundry for processing. Waste management is also incorporated into this function.

Materials Management is co-located with other support services on the lower level of the hospital along the service spine. This provides efficiencies through sharing staff support spaces. Materials Management team members will move supplies throughout the facility using back of house corridors and elevators.

The Loading Dock includes space for pre-packed totes and carts that will move straight to the units. The Loading Dock will not be re-configured as a part of this project.

#### *Storage*

Storage rooms will be provided in the lower level of the expansion to support hospital operations and on-site storage needs.

#### *Security*

There will be a new Security kiosk inside the waiting area of the Emergency Department, as well as a satellite Security workroom located on the 1<sup>st</sup> floor behind the new south entry accessed from an off-stage corridor. The main Security Operations Center will be expanded and relocated to the lower level of the H Pavilion and will consist of a workroom, office, lounge/locker Room, and small storage room for evidence holding and supplies. It will support multiple locations in the North and Northwest regions

#### *Vendor Badging*

A Vendor Badging area will be located along the east corridor of the new south entrance.

The General Services areas of the proposed project total 32,388 DGSF.

#### Hospital Staff Support

Each floor in the addition will have staff locker rooms, toilets, lounges, and lactation rooms. These facilities will be shared by the departments located on each floor.

Expanded and relocated spaces for residents will be provided to support the additional inpatient beds. In the lower level of the H Pavilion, a new resident suite with a lounge, small gym, and 4 on-call sleep rooms will be provided. On the 2<sup>nd</sup> floor connector between the G and H Pavilions, a new resident workroom will be provided to allow residents to quickly access the inpatient units.

Additionally, new hospitalist workrooms will be provided on the 2<sup>nd</sup> and 3<sup>rd</sup> levels of the connectors between the F and G Pavilions. In total, there will be 5 new on-call sleep rooms associated with the hospitalists space.

The Hospital Staff Support spaces of the proposed project total 18,208 DGSF.

### Reception/Waiting/Public Spaces

The new south entrance to the campus will be located to the east of the H Pavilion. It will include a small reception desk and waiting area primarily for obstetrics patients, but it will also be open to all visitors who may park on that end of the hospital campus. The south entrance will connect to the existing lakeside boardwalk through a bright sun-lit corridor with lounge seating on the furthest east side. A retail space will be located at the junction between the boardwalk and the east corridor for retail functions for hospital visitors and staff.

The Reception/Waiting/Public areas of the proposed project total 10,386 DGSF.

### MEP Systems

#### *Mechanical Central Plant and Distribution*

The hospital is served by the existing South Central Plant. The Central Plant provides high pressure steam, 140 degree heating water, chilled water, and oxygen to the new facility. The Central Plant houses the high-pressure steam boilers, deaerators, condensing hot water boilers, chillers, cooling towers, and pumps, as well as the fuel oil storage tanks for the dual fuel boilers and for the emergency generators. The Central Plant connects to the hospital via underground piping for the steam, condensate return, heating water supply and return piping, and chilled water supply and return piping. High pressure steam will be used for sterilization and for generating low pressure steam via a heat exchanger. 140 degree hot water will be used for heating via reheat coils and perimeter finned tube radiation, unit heaters, and radiant heating panels. Chilled water will be available 24/7/365 and used for air handling unit cooling coils and high energy intensity spaces such as the electrical rooms, the telecommunication rooms, refrigerators and freezers, and some imaging equipment.

#### *Ventilation and Air Conditioning – Hospital Addition*

The hospital addition will be served by air handling units in two locations. In a lower level mechanical room, the air handling units will serve: lower level and 1<sup>st</sup> floor of Pavilions G & H. The other location for the air handling units will be on the roof of each of the two pavilions. These air handling units will serve the 2<sup>nd</sup> and 3<sup>rd</sup> floors of their respective pavilion.

Systems will be Variable Air Volume (VAV) with terminal units with reheat coils. Toilet rooms and other general exhaust rooms will be exhausted. The Ambulance garage will be exhausted based on CO levels in the garage. The Emergency Department waiting and triage area will be 100% exhausted, along with one isolation room in the ED area. Isolation Rooms will be exhausted to the building exterior, through vertical shafts to the roof and via a separate exhaust fan. Isolation Rooms will be individually monitored for pressure. Pharmacy Chemo and Compounding Hoods will be exhausted to the building exterior through vertical shafts to the roof and via a separate exhaust fan. Hood Exhaust ducts shall be located in separate shafts from environmental air.

*Automatic Controls*

The automatic control system will be a direct digital control system. The control system will use an open protocol platform (such as the Tridium Niagara framework) with the capability of interfacing with other open protocol systems in a seamless fashion.

*Plumbing – Hospital Addition*

The hospital addition will be served by new services extended to the building from available municipal and utility services. Two new 6" domestic water lines will be provided and connected to one new meter for the hospital addition. The water service will enter at the Mechanical Room location. Storm water will discharge into the retention pond. Multiple connections will be made from the city sewer to the building. A duplex sewage ejector will be provided for the Lower Level of the addition. Foundation drainage systems will be provided as required to protect the facility from groundwater intrusion. At a minimum, the recessed mechanical room and all elevator sumps will be protected.

*Potable Water*

Domestic cold, hot, and recirculating hot water piping will be provided to building fixtures and equipment. Piping will be concealed within building shafts, walls, and above ceiling spaces in finished areas. A triplex domestic water booster pump, with associated tank and controls, will be provided, in order to increase domestic water pressure by 25 psi. It will be located in the lower level mechanical room. 110°F water will be provided to all patient use fixtures. Domestic water heating for the hospital will be generated by multiple plate and frame heat exchangers. The water heaters will be located in the lower level mechanical room. In-line centrifugal circulating pumps will be provided to recirculate domestic hot water. The hot water branch lines will have flow fittings and balancing valves to balance the flow of recirculated hot water. Water piping will be provided with shutoff valves for isolation of piping sections for maintenance and repair. Means will be provided to drain piping.

*Fire Protection*

The fire protection system will tie back to the mains for the existing hospital. The fire pump is adequate to support the new addition. The fire protection sprinkler and standpipe system will consist of 2-1/2-inch fire department valves at each floor and will be provided in or near each stair enclosure and elsewhere as required for full coverage with 100-foot hoses. There will be two standpipes per pavilion, plus additional standpipes on the ground floor to meet NFPA 14 requirements. All areas will be sprinkled for 100% coverage. Sprinkler zones will match the life safety plan.

*Medical Gases*

Medical Vacuum/WAGD and Medical Air units will be provided to serve the hospital expansion. These units will be located in the lower level mechanical room. The Medical Vacuum/WAGD unit will be skid mounted, triplex type vacuum pump system, with space on the skid for a fourth pump, with a 200 gallon receiver, single point connection and control package. The Medical Air unit will be skid mounted, triplex type with space for a fourth compressor, compressors with a 200 gallon receiver, desiccant

dryers, single point connection and control package. A new duplex Instrument Air unit, located in the Lower Level mechanical room, will provide instrument air to serve the OR/ED. Piping will be extended above grade in ceiling plenums and wall cavities to medical gas outlets and equipment throughout the building. Medical gas piping will be Type L or K hard drawn copper tubing with brazed joints. Piping will be cleaned and suitable for oxygen service. Piping will be installed and tested by a certified ASSE 6010 medical gas installer and certifier. Medical gas wall outlets and wall inlets will be "Quick-Connect" type for O<sub>2</sub>, MA, MV, N<sub>2</sub>O, and WAGD. High pressure IA, CO<sub>2</sub> and N<sub>2</sub> and ceiling mounted outlets and inlets will be DISS type. Medical gas zone valve boxes will be recessed type with removable clear covers. Valves will be 3-piece, full-port, ball valve type with handles that swing out. Medical gas line pressure sensors, master alarm panels and area alarm panels will be installed per NFPA 99. New master alarm panels will be provided for all new medical gas and vacuum equipment and new CO<sub>2</sub> manifold. Piping systems will be installed according to state and local plumbing codes, including State Health Department and NFPA-99 requirements.

#### *Electrical Infrastructure*

**Electrical Distribution:** The new hospital addition will be served by the existing South Central Plant Building.

**Hospital Addition Electrical Infrastructure:** Medium voltage feeders will be routed from the existing central plant to new medium voltage substations in the lower level of the hospital addition. The normal distribution main electrical room will have two medium voltage substations and the emergency distribution main electrical room will house two medium voltage substations: one substation for essential systems and one for equipment and optional branch loads. Additional automatic transfer switches and panels will be located in the emergency distribution room.

**Electrical Systems New Central Campus Hospital Electrical Distribution:** Electrical rooms will be stacked from the lower level, to the ground level to floors two and three for each of the new pavilions. The lower level and 1<sup>st</sup> floor will be a traditional 480/277V to 120/208V distribution and will provide power for life safety, critical and normal power loads. The 2<sup>nd</sup> and 3<sup>rd</sup> levels of the pavilion will be furnished with 480/277V power from the lower level substations and will step down to a 120/208V distribution panel to distribute branch circuit panels for both second and third floors at 120/208V. Technology loads will be served from a single distribution panel via the emergency distribution and a UPS. The power will be stepped down to three 120/208V distribution panels, one located in each of the three Lower-Level pavilion electrical rooms. A dedicated panel in each telecom room will be fed from the distribution panel at the lower level. Mechanical equipment on the lower level and the roof level will be provided with separate equipment branch and normal power panels and associated infrastructure.

#### *Technology/Communication Systems*

Multiple technology systems comprise the communications systems for the proposed project. These systems can be grouped into several broad categories:

- Facility systems (Fire Alarm, Building Management, etc.)

- Security Systems (Access Control, Video Surveillance, Duress Alarm, Emergency Intercom, etc.)
- Communications Structured Cabling System (14 new Intermediate Distribution Frame (IDF) rooms, fiber optic and copper backbone cabling, Cat6A copper horizontal cabling, cable support system, pathways, and raceways)
- Network Systems (Wide Area Network (WAN) and Local Area Network (LAN), Telephone (Voice Over Internet Protocol (VoIP) and analog), Wireless Data Systems, Distributed Antenna Systems for cell phones and code required EMS frequencies)
- Two-Way Radio Systems (Police, Fire, Ambulance, and hospital facilities management/security personnel)
- Video/Instructional Technology Systems (IP TV, Conference Room Audio/Visual, Overhead Code Paging via Fire Alarm system)
- Medical Systems (Nurse Call System, Physiological Monitoring, Wireless Medical Telemetry, PACS, etc.)
- Miscellaneous Systems (Localized Intercom, Emergency Phone System, Master Clock, Digital Signage, etc.)

The MEP Systems areas in the proposed facility total 46,045 DGSF.

### **Building Infrastructure**

The new hospital expansion will include two 3-story Pavilions placed radially along the existing hospital campus. The expansion includes two 3-story building connectors to adjoin the new pavilions to the existing hospital buildings. The new pavilions will match the existing hospital buildings in height at 47'-8" to the top of the roof level concrete slab.

The new buildings will be constructed with cast-in-place concrete foundation walls, columns, and beams. The exterior perimeter of the new pavilions and connectors will be 1,590 total linear feet. The building story heights will be:

- Floors LL-1 = 18'-0"
- Floors 1 – 2 = 18'-0"
- Floors 2 – 3 = 14'-8"
- Floors 3 – Roof = 15'-0"

In order to maintain isolation of the existing 2<sup>nd</sup> and 3<sup>rd</sup> floor L&D/obstetrics units from through traffic, there will not be access from existing 2<sup>nd</sup> and 3<sup>rd</sup> floors to new Pavilions. However, an egress stair will be provided where the F and G Pavilion connector terminates at the F Pavilion.

The primary building materials will be a precast concrete wall with face brick, both field glazed and unitized glass curtain walls, natural stone, solid and corrugated metal panel.

**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.*

Detailed projection rationale is provided in ATTACHMENT-19 and ATTACHMENT-31. Projections are provided through CY29, two years after project completion.

| Department       | Historical Utilization CY20 | Historical Utilization CY21 | Projected Utilization CY28 | Projected Utilization CY29 | State Standard | Met Std? |
|------------------|-----------------------------|-----------------------------|----------------------------|----------------------------|----------------|----------|
| Medical/Surgical | 31,961                      | 33,559                      | 49,395                     | 52,228                     | 52,122         | Yes      |
| ICU              | 3,490                       | 6,028                       | 5,521                      | 5,846                      | 5,256          | Yes      |
| Observation      | 2,512                       | 6,348                       | 13,155                     | 14,600                     | N/A            | Yes      |
| Emergency Dept   | 29,770                      | 35,487                      | 46,316                     | 48,112                     | 48,000         | Yes      |
| CT               | 19,127                      | 25,000                      | 33,546                     | 34,985                     | >21,000        | Yes      |
| Ultrasound       | 9,288                       | 11,242                      | 14,694                     | 15,268                     | >9,300         | Yes      |
| X-Ray            | 13,550                      | 17,579                      | 19,781                     | 20,117                     | >16,000        | Yes      |
| IP Rehab Svcs    | 21,314                      | 22,505                      | 40,575                     | 43,050                     | N/A            | 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                 | <b>12</b>       | <b>24</b>       |
| Medical/Surgical    | <b>84</b>       | <b>168</b>      |

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

The proposed beds will provide increased access to Northwestern Medicine care for residents of Lake County and beyond. The primary service area for the project includes the following 18 zip codes in Lake County:

| ZIP Code | City          |
|----------|---------------|
| 60030    | Grayslake     |
| 60031    | Gurnee        |
| 60035    | Highland Park |
| 60037    | Fort Sheridan |
| 60040    | Highwood      |
| 60044    | Lake Bluff    |
| 60045    | Lake Forest   |
| 60046    | Lake Villa    |
| 60048    | Libertyville  |
| 60060    | Mundelein     |
| 60061    | Vernon Hills  |
| 60064    | North Chicago |
| 60073    | Round Lake    |
| 60079    | Waukegan      |
| 60085    | Waukegan      |
| 60086    | North Chicago |
| 60087    | Waukegan      |
| 60088    | Great Lakes   |

The table below provides ICU and medical/surgical patient origin data by zip code for CY21. The data is presented in ascending zip code order. Data in bold denotes LFH's primary service area.

**INTENSIVE CARE**

As shown in the table below, in CY21, 1,044 ICU admissions were residents of the service area. This is 68.8% of the total 1,518 ICU admissions.

**MEDICAL/SURGICAL**

In CY21, 4,820 medical/surgical admissions were residents of the service area. This is 66.2% of the total 7,280 medical/surgical admissions.

**NM LFH CY21 ICU & Medical/Surgical Patient Origin Data by Zip Code**

| Zip Code | ICU Cases | M/S Cases |
|----------|-----------|-----------|
| 03874    |           | 1         |
| 10027    |           | 1         |
| 11215    |           | 1         |
| 13078    |           | 1         |
| 19041    | 1         |           |
| 19380    |           | 1         |
| 27846    |           | 1         |
| 28216    |           | 1         |
| 28805    |           | 1         |
| 20876    | 1         |           |
| 22204    | 1         |           |
| 29401    |           | 1         |
| 29466    |           | 1         |
| 29576    |           | 1         |
| 30126    | 1         |           |
| 30328    |           | 1         |
| 30350    | 1         | 1         |
| 31520    | 1         | 1         |
| 32246    |           | 1         |
| 33024    |           | 1         |
| 33160    |           | 1         |
| 33404    |           | 1         |
| 33418    |           | 2         |
| 33473    | 1         | 1         |
| 33475    |           | 1         |
| 33480    |           | 1         |
| 33496    |           | 2         |
| 33573    |           | 1         |
| 33837    | 1         | 1         |

|       |   |    |
|-------|---|----|
| 33880 |   | 1  |
| 33931 | 1 |    |
| 34104 |   | 1  |
| 34105 |   | 1  |
| 34108 | 1 | 2  |
| 34223 |   | 1  |
| 34293 |   | 1  |
| 34601 |   | 1  |
| 34698 |   | 1  |
| 34785 |   | 1  |
| 34994 |   | 1  |
| 35243 |   | 2  |
| 37207 |   | 1  |
| 39367 |   | 1  |
| 39531 |   | 1  |
| 42071 |   | 1  |
| 43560 |   | 2  |
| 44141 |   | 1  |
| 46033 |   | 1  |
| 46143 |   | 1  |
| 46322 |   | 3  |
| 46324 |   | 1  |
| 46342 |   | 1  |
| 47421 |   | 1  |
| 48009 |   | 1  |
| 48342 |   | 1  |
| 49031 |   | 1  |
| 49071 |   | 1  |
| 49448 |   | 1  |
| 49910 |   | 1  |
| 49938 |   | 1  |
| 50313 |   | 1  |
| 50677 |   | 1  |
| 53092 |   | 1  |
| 53104 | 1 | 6  |
| 53105 |   | 2  |
| 53115 |   | 1  |
| 53128 |   | 1  |
| 53140 | 1 | 4  |
| 53142 | 1 | 7  |
| 53143 | 1 | 7  |
| 53144 | 2 | 10 |

|       |    |     |
|-------|----|-----|
| 53147 | 2  | 3   |
| 53151 |    | 1   |
| 53158 |    | 13  |
| 53168 | 1  | 4   |
| 53170 |    | 1   |
| 53177 |    | 1   |
| 53179 |    | 11  |
| 53181 | 1  | 5   |
| 53182 |    | 3   |
| 53185 |    | 1   |
| 53192 | 1  | 1   |
| 53202 |    | 1   |
| 53211 |    | 1   |
| 53212 | 1  |     |
| 53228 | 1  |     |
| 53402 |    | 2   |
| 53405 |    | 2   |
| 53548 |    | 1   |
| 54235 |    | 1   |
| 54304 | 1  |     |
| 54501 |    | 1   |
| 54541 |    | 1   |
| 54913 |    | 1   |
| 55416 |    | 1   |
| 55760 | 1  |     |
| 60002 | 34 | 190 |
| 60004 | 8  | 34  |
| 60005 | 1  | 7   |
| 60007 |    | 5   |
| 60008 | 2  | 3   |
| 60009 |    | 1   |
| 60010 | 2  | 30  |
| 60012 | 3  | 7   |
| 60013 | 6  | 10  |
| 60014 | 7  | 20  |
| 60015 | 21 | 128 |
| 60016 | 2  | 25  |
| 60018 |    | 9   |
| 60020 | 14 | 58  |
| 60021 | 1  | 1   |
| 60022 | 6  | 16  |
| 60025 | 9  | 41  |

|              |            |            |
|--------------|------------|------------|
| 60026        | 6          | 26         |
| <b>60030</b> | <b>80</b>  | <b>471</b> |
| <b>60031</b> | <b>81</b>  | <b>380</b> |
| 60033        | 3          | 8          |
| 60034        |            | 3          |
| <b>60035</b> | <b>21</b>  | <b>146</b> |
| <b>60040</b> | <b>2</b>   | <b>25</b>  |
| 60041        | 10         | 62         |
| 60042        | 1          | 9          |
| 60043        |            | 4          |
| <b>60044</b> | <b>69</b>  | <b>297</b> |
| <b>60045</b> | <b>147</b> | <b>538</b> |
| <b>60046</b> | <b>60</b>  | <b>336</b> |
| 60047        | 11         | 77         |
| <b>60048</b> | <b>43</b>  | <b>246</b> |
| 60050        | 11         | 42         |
| 60051        | 4          | 41         |
| 60053        | 2          | 12         |
| 60056        | 2          | 11         |
| <b>60060</b> | <b>34</b>  | <b>216</b> |
| <b>60061</b> | <b>31</b>  | <b>186</b> |
| 60062        | 15         | 103        |
| <b>60064</b> | <b>103</b> | <b>351</b> |
| 60065        |            | 1          |
| 60067        | 3          | 18         |
| 60068        | 2          | 21         |
| 60069        | 12         | 83         |
| 60070        | 5          | 8          |
| 60071        | 1          | 7          |
| 60072        |            | 1          |
| <b>60073</b> | <b>110</b> | <b>506</b> |
| 60074        | 2          | 12         |
| 60076        | 3          | 6          |
| 60077        | 4          | 24         |
| 60078        |            | 1          |
| <b>60079</b> | <b>1</b>   | <b>8</b>   |
| 60081        | 8          | 32         |
| 60083        | 27         | 127        |
| 60084        | 5          | 26         |
| <b>60085</b> | <b>189</b> | <b>783</b> |
| <b>60086</b> | <b>1</b>   |            |
| <b>60087</b> | <b>67</b>  | <b>305</b> |

|              |          |           |
|--------------|----------|-----------|
| <b>60088</b> | <b>5</b> | <b>26</b> |
| 60089        | 12       | 92        |
| 60090        | 4        | 33        |
| 60091        | 4        | 31        |
| 60093        | 4        | 37        |
| 60096        | 9        | 37        |
| 60097        | 4        | 11        |
| 60098        | 9        | 26        |
| 60099        | 50       | 254       |
| 60102        | 3        | 7         |
| 60103        |          | 1         |
| 60106        |          | 1         |
| 60107        | 2        | 3         |
| 60110        |          | 7         |
| 60115        |          | 2         |
| 60118        |          | 7         |
| 60120        |          | 1         |
| 60123        |          | 2         |
| 60124        |          | 1         |
| 60126        |          | 2         |
| 60133        | 1        | 1         |
| 60136        |          | 1         |
| 60137        | 1        | 2         |
| 60140        | 2        | 1         |
| 60142        | 5        | 9         |
| 60152        | 3        | 2         |
| 60155        |          | 2         |
| 60156        | 3        | 5         |
| 60157        |          | 1         |
| 60164        |          | 3         |
| 60169        |          | 2         |
| 60172        | 1        | 3         |
| 60173        |          | 4         |
| 60174        | 1        | 2         |
| 60175        |          | 1         |
| 60176        |          | 1         |
| 60177        | 1        |           |
| 60178        |          | 4         |
| 60179        |          | 2         |
| 60180        |          | 1         |
| 60184        |          | 1         |
| 60185        |          | 3         |

|       |   |    |
|-------|---|----|
| 60188 |   | 1  |
| 60190 |   | 2  |
| 60191 | 1 | 1  |
| 60192 | 1 |    |
| 60193 |   | 2  |
| 60194 |   | 1  |
| 60201 |   | 17 |
| 60202 | 2 | 4  |
| 60203 |   | 5  |
| 60406 | 1 |    |
| 60411 |   | 3  |
| 60430 |   | 1  |
| 60436 | 1 | 1  |
| 60438 | 1 | 1  |
| 60440 |   | 2  |
| 60442 |   | 1  |
| 60451 |   | 1  |
| 60455 |   | 1  |
| 60458 |   | 1  |
| 60464 | 1 |    |
| 60466 |   | 1  |
| 60479 | 1 |    |
| 60480 |   | 1  |
| 60502 |   | 3  |
| 60506 |   | 1  |
| 60511 |   | 1  |
| 60516 |   | 3  |
| 60523 |   | 1  |
| 60525 |   | 2  |
| 60527 |   | 4  |
| 60538 | 1 | 1  |
| 60540 | 1 | 1  |
| 60546 | 1 |    |
| 60561 | 1 | 1  |
| 60563 | 1 | 2  |
| 60585 |   | 1  |
| 60601 |   | 1  |
| 60605 | 1 |    |
| 60608 | 2 | 2  |
| 60609 | 2 | 2  |
| 60610 |   | 4  |
| 60611 | 1 | 7  |

|       |   |    |
|-------|---|----|
| 60612 |   | 1  |
| 60613 |   | 2  |
| 60614 | 1 | 2  |
| 60615 |   | 1  |
| 60616 | 1 | 3  |
| 60617 |   | 2  |
| 60618 | 4 | 8  |
| 60619 |   | 3  |
| 60620 | 1 | 1  |
| 60621 |   | 1  |
| 60622 |   | 1  |
| 60623 | 3 | 4  |
| 60624 | 1 | 1  |
| 60625 | 4 | 13 |
| 60626 | 1 | 7  |
| 60629 | 2 | 3  |
| 60630 | 6 | 10 |
| 60631 | 3 | 15 |
| 60632 | 1 | 3  |
| 60634 | 4 | 13 |
| 60637 |   | 3  |
| 60639 | 2 | 2  |
| 60640 |   | 5  |
| 60641 | 1 | 3  |
| 60642 |   | 1  |
| 60644 |   | 3  |
| 60645 | 2 | 4  |
| 60646 | 4 | 13 |
| 60647 | 1 | 9  |
| 60649 |   | 1  |
| 60651 |   | 2  |
| 60652 |   | 1  |
| 60653 |   | 2  |
| 60655 |   | 1  |
| 60656 | 1 | 15 |
| 60657 | 1 | 1  |
| 60659 | 1 | 11 |
| 60660 | 2 |    |
| 60661 |   | 1  |
| 60680 |   | 1  |
| 60706 | 1 | 4  |
| 60707 |   | 5  |

|       |   |    |
|-------|---|----|
| 60712 | 2 | 20 |
| 60714 | 1 | 12 |
| 60804 |   | 2  |
| 60901 |   | 1  |
| 60940 |   | 1  |
| 61008 |   | 1  |
| 61032 |   | 1  |
| 61038 |   | 1  |
| 61068 |   | 2  |
| 61072 |   | 1  |
| 61101 |   | 1  |
| 61107 |   | 1  |
| 61108 | 1 | 1  |
| 61201 | 1 |    |
| 61455 |   | 1  |
| 61554 |   | 1  |
| 61802 | 1 |    |
| 61821 |   | 1  |
| 62062 |   | 1  |
| 62223 |   | 1  |
| 62704 |   | 1  |
| 64501 |   | 1  |
| 65804 |   | 1  |
| 66209 |   | 1  |
| 68503 |   | 1  |
| 72653 |   | 1  |
| 75248 |   | 1  |
| 75254 |   | 1  |
| 76903 |   | 1  |
| 80021 |   | 1  |
| 80210 | 1 |    |
| 84098 |   | 1  |
| 85250 |   | 1  |
| 85254 |   | 1  |
| 85260 | 1 |    |
| 85388 |   | 1  |
| 85710 |   | 1  |
| 86326 |   | 1  |
| 89138 |   | 1  |
| 89408 |   | 1  |
| 89450 |   | 1  |
| 90069 |   | 1  |

|       |       |       |
|-------|-------|-------|
| 90077 |       | 1     |
| 90094 |       | 1     |
| 90602 |       | 1     |
| 92240 |       | 1     |
| 92618 |       | 1     |
| 92649 |       | 1     |
| 92663 |       | 1     |
| 93023 |       | 1     |
| 94589 | 1     | 1     |
| Total | 1,518 | 7,280 |

Note: Zip codes in **bold** are service area zip codes.

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

#### Contributors of Growth

As stated in ATTACHMENT-12, since opening the replacement hospital in March 2018, LFH has been experiencing extremely high occupancy. In the six months prior to the COVID-19 pandemic (September 2019 to February 2020), the average medical/surgical/ICU/observation occupancy was 107%. During the pandemic, LFH added observation beds and, utilizing flexibility provided by the COVID-19 emergency provisions, converted 48 inpatient rooms to double occupancy and 12 – 20 pre-/post-procedure care spaces to temporary holding beds for boarders. Following these additions, the average medical/surgical/ICU/observation occupancy at LFH for the six months ending May 2022 decreased marginally to 100%.

One of the reasons for the significant growth at LFH is the increased access to specialty care. Since the affiliation with Northwestern Medicine in 2010, LFH has continued to build advanced care capabilities in areas such as Heart and Vascular, Orthopedics, Endocrinology, Interventional Gastrointestinal, Pulmonology, and Oncology. Many sub-specialists from Northwestern Memorial Hospital practice at LFH (example: electrophysiology) which increases access to the residents of the LFH service area. With this ability to provide higher acuity care close to home, LFH has treated more complex cases that previously would have been transferred to Northwestern Memorial Hospital. Accordingly, LFH's CMI increased from 1.7 in FY16 to 2.0 in FY21 (17.6% increase).

Another contributor of growth at LFH is the closure of the Vista West Hospital emergency department just months prior to the opening of the new LFH. At LFH, 88% of inpatient admissions come through the emergency departments at the hospital and Northwestern Medicine Grayslake Freestanding Emergency Center; scheduled procedures represent only about 11% of admissions. A look at the most recent Region X comparative data reveals the magnitude of the challenge LFH faces: LFH has more

than twice as many emergency department and trauma visits per licensed medical/surgical bed and 1.5 times more emergency department admissions per licensed bed than any other hospital in the region (*source: CY20 IDPH AHQ Facility Profiles*).

Patient preference to receive care at LFH is also a major factor influencing the high occupancy. Hospital data shows that over 40% of LFH emergency department patients live outside of the local communities, more than 10 miles from LFH, indicating that many are passing another hospital on the way to LFH.

A significant proportion of the increase in volume is attributable to growth of patients originating from under-resourced communities, particularly Waukegan, Round Lake, and North Chicago. Since the opening of the new hospital, total patient days have increased by nearly 50% while patient days from the under-resourced ZIP codes have increased by 85%.

In 2020, LFH provided more charity care than any other Lake County hospital by a wide margin; LFH's charity care as a percentage of net patient revenue was double that of any other Lake County hospital. Additionally, the rate of increase for patients on Medicaid is the highest in the county. While the total number of inpatients served at LFH increased by 43% from CY15 – CY21, the number of Medicaid inpatients increased by 186% and Charity Care inpatients increased by 199%.

#### Operational Changes Implemented to Accommodate Volume

Many initiatives targeting bed capacity optimization and patient throughput improvement have been implemented to address the continued high volumes. These efforts have reduced the number of patients diverted from the emergency department, streamlined internal processes, and improved LFH's ability to operate at extremely high occupancy. The following are projects that have resulted in increased bed capacity:

- Shape Demand
  - Implemented Outpatient Care Pathways – Developed care pathways for clinically appropriate patients to receive outpatient care rather than be admitted for observation following an emergency department visit. Patients included Low Risk Chest Pain, Neuro Spell, and Atrial Fibrillation. This generated increased capacity equivalent to 4 beds.
  - Reduced Readmissions – Two initiatives: Preventing Readmission of High Utilizer Patients and Reducing Readmissions After Sepsis combined to generate increased capacity equivalent to 0.5 bed.
  - Creation of Transitional Care Clinic – This clinic was opened to support high-risk patients who do not have a primary care provider and may not have the resources to coordinate proper follow-up care following a health crisis. This generated capacity equivalent to 0.2 bed.

- Match Capacity and Demand
  - Double Occupancy on Medical/Surgical Units – As allowed under the Emergency Preparedness Response Report regulations (Section 1130.240), a second bed was added to each room of two medical/surgical units, increasing capacity by 48 beds.
  - Addition of Observation Beds – LFH opened two observation units in February 2021, adding 24 observation beds.
  - Alternative Care Space Plan – This project developed pathways to place inpatient and observation patients in locations such as pre-/post-procedure care space during peak census. The number of temporary holding beds was increased in the pre/post-procedure care space by shifting surgical/procedural volume to the Grayslake ASTC. This generated increased capacity equivalent to 12 to 20 beds.
  - Real-Time Demand Capacity (RTDC) – A daily assessment of anticipated bed demand and projected discharges is conducted. An interdisciplinary team is assembled, responsible for identifying potential discharges for the day and eliminating all barriers by expediting tests, procedures, transportation, and placement for those patients clinically ready to discharge. RTDC has generated a reduction in avoidable days, equivalent to adding 2.5 beds.
  - Reduction in Bed Turnaround Times – Adding Environmental Services staff during peak discharge hours has generated increased capacity equivalent to 0.3 bed.
  - Departure Lounge/Complimentary Arranged Transportation – Approximately 10% of patients who are determined to be ready to discharge are discharged late because of transportation issues. These two efforts, aimed at removing transportation barriers for these patients, has generated increased capacity equivalent to 0.1 bed.
- Redesign of Emergency Department/Admissions Process
  - Emergency Department Care at Arrival Track (CAAT) – Implementation of a split flow model called “Care at Arrival Track” has successfully accelerated care and reduced length of stay for lower-acuity patients (ESI 4/5), generating increased capacity equivalent to 1.8 emergency department beds.
  - Expedited Safe Patient Handoff (ESPH) – Implementation of an efficient, asynchronous ED-to-Inpatient handoff process, leveraging Epic and Vocera, generated increased capacity equivalent to 1.3 emergency department beds.

As a result of LFH's role as the preferred high acuity and specialty provider in the region, it is expected that demand for ICU, medical/surgical, and observation services

will continue to increase. It is expected that LFH will continue to see increases in complex patient populations. Drivers of projected 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+

It is important to note that the growth rate projections used to justify additional medical/surgical, ICU, and observation beds are less than what was actually experienced at LFH since CY13.

### **INTENSIVE CARE**

Occupancy of LFH's ICU beds has been over 60% (State Target Utilization) since before the opening of the replacement facility. While CY21 ICU patient day volume justifies an additional 16 beds, this is likely due to the long lengths of stay associated with COVID-related cases.

| Category of Service | State Standard | CY20 | CY21 |
|---------------------|----------------|------|------|
| ICU                 | 60%            | 80%  | 138% |

### **Historic Utilization**

From CY13 – CY20, LFH's ICU patient days increased by 58.2% which is an average annual growth rate of 8.3%.

| ICU          | CY13  | CY14  | CY15  | CY16  | CY17  | CY18  | CY19  | CY20  | CY21   |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Cases        | 923   | 902   | 920   | 951   | 947   | 1,146 | 3,574 | 1,324 | 1,519  |
| Patient Days | 2,206 | 2,409 | 2,463 | 2,519 | 2,524 | 3,305 | 3,491 | 3,490 | 6,028  |
| ADC          | 6.0   | 6.6   | 6.7   | 6.9   | 6.9   | 9.1   | 9.6   | 9.6   | 16.5   |
| Beds         | 10    | 10    | 10    | 10    | 10    | 12    | 12    | 12    | 12     |
| Occupancy    | 60.4% | 66.0% | 67.5% | 69.0% | 69.2% | 75.5% | 79.7% | 79.7% | 137.6% |

**Projections**

It is anticipated that ICU demand will return to the volumes experienced prior to CY21 and increase at an average annual growth rate of 7.3%.

| ICU          | CY22  | CY23  | CY24   | CY25   | CY26   | CY27   | CY28  | CY29  |
|--------------|-------|-------|--------|--------|--------|--------|-------|-------|
| Cases        | 1,450 | 1,535 | 1,626  | 1,722  | 1,823  | 1,931  | 2,045 | 2,165 |
| Patient Days | 3,914 | 4,145 | 4,389  | 4,648  | 4,923  | 5,213  | 5,521 | 5,846 |
| ADC          | 10.7  | 11.4  | 12.0   | 12.7   | 13.5   | 14.3   | 15.2  | 16.0  |
| Beds         | 12    | 12    | 12     | 12     | 12     | 12     | 24    | 24    |
| Occupancy    | 89.4% | 94.6% | 100.2% | 106.1% | 112.4% | 119.0% | 63.4% | 66.7% |

**MEDICAL/SURGICAL**

Occupancy of LFH's medical/surgical beds has been over 80% (State Target Utilization for Addition of Beds for a Hospital with 1-99 beds) since CY19 (first full calendar year since the opening of the new hospital). CY21 Patient Day volume justifies an additional 31 beds.

| Category of Service | State Standard | CY20 | CY21 |
|---------------------|----------------|------|------|
| Medical/Surgical    | 80%            | 104% | 110% |

LFH continues to bring specialized care to the service area. One of the factors contributing to the increased use of LFH's services is the aging of the population in the service area.

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](http://www.nih.gov)).

According to an analysis by SG2, while the overall population of the primary service area is projected to increase slightly from 2022 to 2027, there will be a 17.2% increase in the number of residents aged 65+.

| Age Group    | LFH PSA Population 2022 | LFH PSA Population 2027 | Projected Population Δ 2022-2027 | % Change     |
|--------------|-------------------------|-------------------------|----------------------------------|--------------|
| 0-17         | 109,186                 | 103,610                 | (5,576)                          | -5.1%        |
| 18-44        | 161,026                 | 161,747                 | 712                              | +0.4%        |
| 45-64        | 117,749                 | 115,569                 | (2,180)                          | -1.9%        |
| 65+          | 66,744                  | 78,236                  | 11,492                           | +17.2%       |
| <b>Total</b> | <b>454,705</b>          | <b>459,162</b>          | <b>4,457</b>                     | <b>+1.0%</b> |

Because over 50% of LFH's medical/surgical patients are age 65+, this will be a major driver of the projected demand for medical/surgical services at LFH.

Additionally, as mentioned above, growth in bed demand at LFH is being heavily driven by patients from the under-resourced communities served by LFH (60040 – Highwood, 60064 – North Chicago, 60073 – Round Lake, 60085 – Waukegan, 60087 – Waukegan, 60999 – Zion). This trend is expected to continue as the rate of increase for patients on Medicaid at LFH is the highest in the county.

|                                       | 2017   | 2021   | Δ    |
|---------------------------------------|--------|--------|------|
| Total LFH Patient Days                | 30,602 | 45,499 | +49% |
| Under-Resourced ZIP Code Patient Days | 7,827  | 13,418 | +85% |

### Historic Utilization

From CY13 – CY21, LFH's medical/surgical patient days increased by 69.1% (average annual growth rate of 8.6%) and observation days in an inpatient bed increased by 19.9% (average annual growth rate of 2.5%). Projections for medical/surgical patient days for CY19 that were included in CON #14-006 for the replacement hospital were exceeded by 18%.

| MEDICAL/SURGICAL   | CY13   | CY14   | CY15   | CY16   | CY17   | CY18   | CY19   | CY20   | CY21   |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Cases              | 5,490  | 4,554  | 4,289  | 4,862  | 5,080  | 6,789  | 7,189  | 6,871  | 7,280  |
| Inpatient Days     | 17,625 | 16,867 | 18,039 | 17,361 | 17,616 | 20,791 | 24,990 | 26,929 | 29,805 |
| Observation Days   | 3,131  | 4,437  | 2,971  | 3,631  | 4,070  | 5,271  | 4,137  | 5,032  | 3,754  |
| Total Patient Days | 20,756 | 21,304 | 21,010 | 20,992 | 21,686 | 26,062 | 29,127 | 31,961 | 33,559 |
| ADC                | 56.9   | 58.4   | 57.6   | 57.4   | 59.4   | 71.4   | 79.8   | 87.3   | 91.9   |
| Beds               | 74     | 84     | 84     | 84     | 84     | 84     | 84     | 84     | 84     |
| Occupancy          | 76.8%  | 69.5%  | 68.5%  | 68.3%  | 70.7%  | 85.0%  | 95.0%  | 104.0% | 109.5% |

### Projections

Because of the factors detailed above that are expected to have a continued impact on the demand for medical/surgical services at LFH, projections for the number of beds needed include an average annual growth rate of 7.6% for medical/surgical

patient days and an average annual growth rate of 2.0% for observation days in an inpatient bed (both less than actual growth rate experienced from CY13-CY21). Using these growth rates, LFH can justify an additional 84 beds by CY29, two years after project completion.

| MEDICAL/SURGICAL   | CY22   | CY23   | CY24   | CY25   | CY26   | CY27   | CY28   | CY29   |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Cases              | 9,481  | 10,059 | 10,673 | 11,324 | 12,015 | 12,748 | 13,525 | 14,350 |
| Inpatient Days     | 31,623 | 33,552 | 35,599 | 37,770 | 40,074 | 42,519 | 45,112 | 47,864 |
| Observation Days   | 3,825  | 3,898  | 3,972  | 4,048  | 4,124  | 4,203  | 4,283  | 4,364  |
| Total Patient Days | 35,448 | 37,450 | 39,571 | 41,818 | 44,199 | 46,722 | 49,395 | 52,228 |
| ADC                | 97.1   | 102.6  | 108.1  | 114.6  | 121.1  | 128.0  | 135.0  | 143.1  |
| Beds               | 84     | 84     | 84     | 84     | 84     | 84     | 168    | 168    |
| Occupancy          | 115.6% | 122.1% | 128.7% | 136.4% | 144.2% | 152.4% | 80.3%  | 85.2%  |

### **DEDICATED OBSERVATION**

Dedicated observation beds are important to LFH 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. In recent years, many surgical cases have been moved by CMS from inpatient only to observation status (example: total joints).

A high percentage of observation patients can be evaluated and/or treated in less than 24 hours. Because of that, observation units typically 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. Approximately 87% of LFH's observation cases have an average length of stay of less than 2 midnights however there has been a shift by managed care companies to classify stays of less than 3 midnights as observation status.

### **Historic Utilization**

LFH added dedicated observation beds in CY15. Since that time, LFH's observation days in a dedicated observation bed have increased by 223.5% which is an average annual growth rate of 37.3%.

| DEDICATED OBSERVATION | CY15  | CY16  | CY17  | CY18  | CY19   | CY20  | CY21  |
|-----------------------|-------|-------|-------|-------|--------|-------|-------|
| Observation Days      | 1,962 | 2,148 | 2,231 | 2,536 | 3,520  | 2,512 | 6,348 |
| ADC                   | 5.4   | 5.9   | 6.1   | 6.9   | 9.6    | 6.9   | 17.4  |
| Beds                  | 12    | 12    | 12    | 8     | 8      | 8     | 32    |
| Occupancy             | 44.8% | 48.9% | 50.9% | 86.8% | 120.5% | 85.8% | 54.3% |

Note: 24 observation beds were added in March, 2021

### **Projections**

Using an average annual growth rate of 16.2% (less than half the rate that was experienced from CY15-CY21), LFH's dedicated observation beds will be at 80% occupancy in CY29, two years after project completion.

| DEDICATED OBSERVATION | CY22  | CY23  | CY24  | CY25  | CY26   | CY27   | CY28   | CY29   |
|-----------------------|-------|-------|-------|-------|--------|--------|--------|--------|
| Observation Days      | 7,044 | 7,817 | 8,675 | 9,626 | 10,682 | 11,854 | 13,155 | 14,600 |
| ADC                   | 19.3  | 21.4  | 23.7  | 26.4  | 29.3   | 32.5   | 35.9   | 40.0   |
| Beds                  | 32    | 32    | 32    | 32    | 32     | 32     | 50     | 50     |
| Occupancy             | 60.3% | 66.9% | 74.1% | 82.4% | 91.5%  | 101.5% | 71.9%  | 80.0%  |

There is no HFSRB occupancy standard for observation beds.

### **1110.200(e) – Staffing Availability**

The Division of Patient Care Services at LFH is responsible for ensuring a safe patient care environment. LFH's framework for Nursing Practice and Guiding Principles for Care Delivery are based on the Northwestern Medicine Interprofessional Relationship Based Care Model. LFH uses its Nursing Shared Leadership structure, which is comprised of all clinical RN unit operations leaders, to plan and evaluate the approved staffing guidelines.

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 location

LFH 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.

LFH is successful at recruiting and retaining nurses, technicians, and other essential employees. In FY22, there were 574 total registered nurses at LFH, with an average tenure of 6.1 years. LFH hired 177 RN's in FY22. 89% of LFH nurses hold a baccalaureate degree or higher which compares to the national average of 56% (source: American Association of Colleges of Nursing (AACN), 2019).

The department of nursing had a 10.9% vacancy rate at the end of FY22, down from 12.6% earlier in the year. We continue to work to stabilize our workforce after the effects of COVID-19 and continue to see decreasing vacancy rates. LFH's vacancy rate is less than the national average of 17% in 2022 (2022 NSI National Healthcare and RN Staffing Report). Vacant positions are covered using an overtime/supplemental pay program or through using agency contracted RN's. LFH is confident it can continue to fully staff its clinical inpatient and outpatient services.

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

- The LFH New Graduate RN Residency Program, a one-year long supportive orientation program for new graduate nurses, was accredited with distinction through the ANCC in 2019 and reaccruited in 2022.
- LFH implemented the *CALM hospital* program to ensure teams have training, access to and daily opportunities to practice guided meditation and mindfulness exercises.
- In 2022, LFH opened a "Zen Den" which is a room open to all staff, 24 hours per day which contains massage chairs, calming music, essential oils to provide a calming location for staff.

- LFH participated in an international research study associated with the Magnet 4 Europe Consortium entitled “The Clinician Well Being” study to learn about how positive work environments affect clinician well-being.
- LFH participates in the NDNQI Nurse Satisfaction Survey which includes an assessment of nursing well-being and satisfaction and helps calculate the anticipated timeframe for staff considering retirement and uses results to drive program development and proactive workforce planning.
- 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 LFH employee. Enhanced benefits include: 1) annual \$250 reimbursable well-being fund; 2) student loan repayment services; 3) paid parental leave benefit; and 4) workforce referral service.
- LFH Department of Nursing has multiple opportunities for professional development and career growth for clinical nurses throughout the organization. These professional development opportunities serve to increase retention and engagement of clinical nurses, while promoting inter-professional collaboration and excellent patient care.
- LFH provides opportunities for career growth and advancement for nurses at LFH. These include: leadership roles such as charge nurse, clinical coordinator, manager, etc.; educational paths such as staff educator (Clinical Practice Specialist), breastfeeding counselor, etc.; involvement in professional organizations, advanced education or community volunteerism; and participation in quality, safety, or research initiatives.
- LFH also provides reimbursement for professional development up to \$1,000 per year for full-time employees and \$500 for part-time employees.

LFH is proud to have achieved Magnet® recognition, the gold standard for nursing excellence and quality care awarded by the American Nurses Credentialing Center in 2010. This designation recognizes LFH’s ongoing commitment to provide the best for our patients. We have since been re-designated as a magnet organization twice and are currently working towards a third re-designation.

#### **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. NM LFH currently has a total of 84 medical/surgical beds and is proposing to add 84 more for a total of 168 beds.

The minimum unit size for an intensive care unit is 4 beds. NM LFH currently has 12 ICU beds and is proposing to add 12 more for a total of 24 beds.

#### **1110.200(g) – Assurances**

See letter at the end of this ATTACHMENT.



November 28, 2022

Mr. John Kniery  
Illinois Health Facilities and Services Review Board  
525 West Jefferson Street, 2<sup>nd</sup> Floor  
Springfield, IL 62761

**RE: 1110.200(g) – Assurances**  
***Northwestern Medicine Lake Forest Hospital***

Dear Mr. Kniery:

I hereby attest that it is my understanding that Northwestern Medicine Lake Forest Hospital in Lake Forest, 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,

A handwritten signature in cursive script, reading 'Marsha L. Oberrieder'.

Marsha L. Oberrieder  
President, Northwestern Medicine Lake Forest Hospital

Notarization:

Subscribed and sworn to before me

This 28 day of November, 2022.

A handwritten signature in cursive script, likely belonging to the Notary Public.

Notary Public



**M. Criterion 1110.270 – Clinical Service Areas Other than Categories of Service**

| Service                     | # of Existing Key Rooms | # of Proposed Key Rooms |
|-----------------------------|-------------------------|-------------------------|
| <b>Emergency Department</b> | 16                      | 24                      |
| <b>ED Imaging</b>           |                         |                         |
| CT                          | 3                       | 4                       |
| Ultrasound                  | 3                       | 4                       |
| X-Ray                       | 2                       | 3                       |
| <b>IP Rehab Services</b>    | 2                       | 4                       |

**(c)(2) Service Modernization – Necessary Expansion****(c)(3) Utilization – Service and Major Medical Equipment****Emergency Department**

The Emergency Department (ED) at NM LFH is a Level II Trauma Center staffed by board-certified emergency medicine physicians who are trained and equipped to stabilize patients who have undergone major trauma, or who are suffering from a heart attack, stroke, or other health emergency. It is also designated as an Emergency Department Approved for Pediatrics, a certification awarded by Emergency Medical Services for Children in conjunction with the Illinois Department of Public Health. This certification means that NM LFH can provide superior emergency care to children in the form of preventative, acute, and rehabilitative services.

Since CY13, ED visits have increased by 35.6% (average annual increase of 4.5%). The projections for CY19 that were included in CON #14-006 for the Replacement hospital were exceeded by almost 20%, necessitating an expansion of the current ED. However, expansion and additional isolation/controlled airflow capabilities that were determined necessary during the COVID-19 pandemic cannot be accommodated in the current location. Relocating the ED not only allows for the necessary expansion of the department but also allows for a separate Emergency Entrance which will improve traffic flow and pedestrian access to the general “south entrance” to the campus. It also allows for ED waiting areas and treatment spaces to have enough space to meet social distancing recommendations. Additionally, to accommodate one of the recent Observation bed unit additions, half of the current Ambulance Garage was eliminated. Relocating the ED will provide the space needed for an appropriately sized Ambulance Garage and will allow the ED to function at full capacity through the construction of the proposed project.

|                    | CY13   | CY14   | CY15   | CY16   | CY17   | CY18   | CY19   | CY20   | CY21   |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Visits             | 26,169 | 26,885 | 27,181 | 37,526 | 31,638 | 37,526 | 34,612 | 29,770 | 35,487 |
| # Stations         | 17     | 17     | 17     | 17     | 17     | 16     | 16     | 16     | 16     |
| Visits/Station     | 1,539  | 1,581  | 1,599  | 2,207  | 1,861  | 2,345  | 2,163  | 1,861  | 2,218  |
| Standard           | 2,000  | 2,000  | 2,000  | 2,000  | 2,000  | 2,000  | 2,000  | 2,000  | 2,000  |
| Stations Justified | 13     | 13     | 14     | 19     | 16     | 19     | 17     | 15     | 18     |

Using the same average annual growth rate of 4.5% from CY21 to CY29 NM LFH can justify 24 ED stations (based on the State standard of 2,000 visits/station/year).

|                    | CY22   | CY23   | CY24   | CY25   | CY26   | CY27   | CY28   | CY29   |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Visits             | 36,863 | 38,293 | 39,778 | 41,320 | 42,923 | 44,587 | 46,316 | 48,112 |
| # Stations         | 16     | 16     | 16     | 16     | 16     | 16     | 24     | 24     |
| Visits/Station     | 2,304  | 2,393  | 2,486  | 2,583  | 2,683  | 2,787  | 1,930  | 2,005  |
| Standard           | 2,000  | 2,000  | 2,000  | 2,000  | 2,000  | 2,000  | 2,000  | 2,000  |
| Stations Justified | 18     | 19     | 20     | 21     | 21     | 22     | 23     | 24     |

Please note that the Emergency Department Benchmarking Alliance reported the average patient visits/ED station for 2019 was 1,345 which would justify 12 more ED stations than is being proposed.

### **ED Imaging**

The proposed project includes the following types of diagnostic imaging equipment:

- 1 CT
- 1 Ultrasound
- 1 X-Ray unit

All three Imaging rooms will be located adjacent to the higher acuity area of the ED near the new Trauma room. In addition to needing additional pieces of equipment due to high utilization of the existing equipment, it was determined that the location of the proposed ED was too far from the existing Diagnostic Imaging area (440 feet) for very sick patients to travel. Additionally, the separate imaging area can be better staffed if located adjacent to the new ED.

### **CT**

NM LFH has 3 CT machines. Since the opening of the new facility in 2018, CT procedures have increased by 50% (16.8% average annual increase). CY21 volume justifies one additional CT scanner.

|               | CY18   | CY19   | CY20   | CY21   |
|---------------|--------|--------|--------|--------|
| Procedures    | 16,638 | 18,905 | 19,127 | 25,000 |
| # of CTs      | 2      | 3      | 3      | 3      |
| Procedures/CT | 8,319  | 6,302  | 6,376  | 8,333  |
| Standard      | 7,000  | 7,000  | 7,000  | 7,000  |
| CTs Justified | 2      | 3      | 3      | 4      |

Using a very conservative growth rate of 5% per year, NM LFH can justify 5 CT scanners in CY29 (two years after project completion); however, the proposed project includes only one additional CT scanner.

|               | CY28   | CY29   |
|---------------|--------|--------|
| Procedures    | 33,546 | 34,985 |
| # of CTs      | 4      | 4      |
| Procedures/CT | 8,387  | 8,746  |
| Standard      | 7,000  | 7,000  |
| CTs Justified | 5      | 5      |

#### Ultrasound

NM LFH has 3 ultrasound rooms in the Diagnostic Imaging Department. Since the opening of the new facility in 2018, ultrasound procedures have increased by 14% (4.5% average annual increase). CY21 volume justifies one additional Ultrasound room.

|                   | CY18  | CY19   | CY20  | CY21   |
|-------------------|-------|--------|-------|--------|
| Procedures        | 9,904 | 10,268 | 9,288 | 11,242 |
| # of U/S Rooms    | 2     | 3      | 3     | 3      |
| Procedures/U/S    | 4,952 | 3,423  | 3,096 | 3,747  |
| Standard          | 3,100 | 3,100  | 3,100 | 3,100  |
| U/S Rms Justified | 3     | 3      | 3     | 4      |

Using a same growth rate as previously experienced (average 4.5% per year), NM LFH can justify 4 ultrasound rooms in CY29 (two years after project completion); however, the proposed project includes only one additional Ultrasound room.

|                   | CY28   | CY29   |
|-------------------|--------|--------|
| Procedures        | 14,694 | 15,268 |
| # of U/S Rooms    | 4      | 4      |
| Procedures/U/S    | 3,674  | 3,817  |
| Standard          | 3,100  | 3,100  |
| U/S Rms Justified | 5      | 5      |

#### General Radiography (X-Ray)

NM LFH has 2 General Radiography (X-ray) machines in the Diagnostic Imaging Department. Since the opening of the new facility in 2018, X-ray procedures have increased by 6% (1.8% average annual increase). CY21 volume justifies one additional X-ray room.

|                     | CY18   | CY19   | CY20   | CY21   |
|---------------------|--------|--------|--------|--------|
| Procedures          | 16,658 | 19,364 | 13,550 | 17,579 |
| # of X-Ray Rooms    | 2      | 2      | 2      | 2      |
| Procedures/X-Ray    | 8,329  | 9,682  | 6,775  | 8,790  |
| Standard            | 8,000  | 8,000  | 8,000  | 8,000  |
| X-Ray Rms Justified | 3      | 3      | 2      | 3      |

Using a same growth rate as previously experienced (average 1.8% per year), NM LFH can justify 3 x-ray rooms in CY29 (two years after project completion).

|                     | CY28   | CY29   |
|---------------------|--------|--------|
| Procedures          | 19,781 | 20,117 |
| # of X-Ray Rooms    | 3      | 3      |
| Procedures/X-Ray    | 6,594  | 6,706  |
| Standard            | 8,000  | 8,000  |
| X-Ray Rms Justified | 3      | 3      |

### **IP Rehab Services**

Currently, there is space for Inpatient Rehabilitative services (Physical Therapy/Occupational Therapy) on the 2<sup>nd</sup> and 3<sup>rd</sup> floor connectors between Pavilions D and E. The proposed project includes two additional IP Rehab spaces, on the 2<sup>nd</sup> and 3<sup>rd</sup> floor connectors between Pavilions G and H, for a total of 4 spaces.

From CY19-CY21 there were approximately 3 Rehabilitation visits for each medical/surgical case at LFH.

|                     | CY19   | CY20   | CY21   |
|---------------------|--------|--------|--------|
| Visits              | 21,036 | 21,314 | 22,505 |
| # of IP Rehab Rms   | 2      | 2      | 2      |
| Visits/Room         | 10,518 | 10,657 | 11,253 |
| Standard            | N/A    | N/A    | N/A    |
| Rehab Rms Justified | N/A    | N/A    | N/A    |

Projections are based on the same visits per medical/surgical admission ratio as previously experienced. There is no State Standard for IP Rehabilitative Services.

|                     | CY28   | CY29   |
|---------------------|--------|--------|
| Visits              | 40,575 | 43,050 |
| # of IP Rehab Rms   | 4      | 4      |
| Visits/Room         | 10,144 | 10,763 |
| Standard            | N/A    | N/A    |
| Rehab Rms Justified | N/A    | N/A    |

**SECTION VII. 1120.120 – AVAILABILITY OF FUNDS**

Not Applicable – see bond rating documents

**SECTION VIII. 1120.130 – FINANCIAL VIABILITY**

Not Applicable – see bond rating documents

**CREDIT OPINION**

16 July 2021

 Rate this Research

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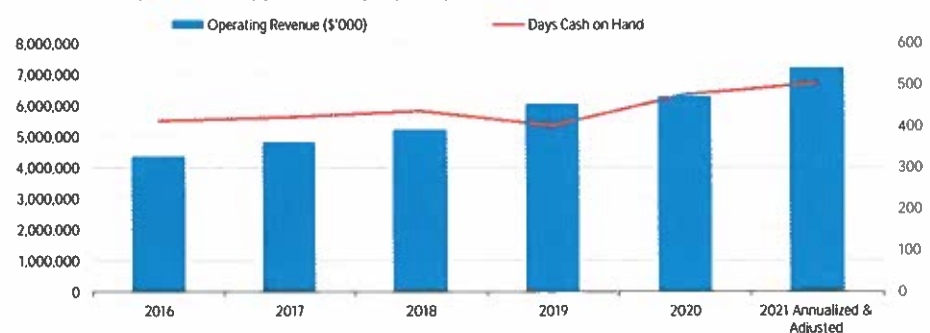
# Northwestern Memorial HealthCare, IL

## Update to credit analysis

**Summary**

Northwestern Memorial HealthCare's (NMHC) (Aa2, stable) consolidated operating model and financial discipline will allow it to effectively execute strategies, while maintaining a strong financial position. As demonstrated during a period of rapid growth and amid the pandemic, this will support its ability to integrate and improve performance at Palos Health following its merger in January. NMHC will likely expand 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. Manageable capital plans will help maintain a very strong investment position. Direct and indirect leverage will remain moderate, particularly since the system has a fully funded pension plan and modest operating lease obligations. Similar to others in the industry, the most significant operating challenge will likely be managing workforce needs, given national shortages in clinical staff amid burnout from the pandemic. In addition, competition from large healthcare systems and academic medical centers will continue to rise as the market further consolidates in a region with projected population declines.

Exhibit 1

**Financial discipline will support strong liquidity during expansion**


Source: Moody's Investors Service

**Credit strengths**

- » Market position will continue to grow, driven by strong brand, favorable locations and affiliation with Northwestern University's Feinberg School of Medicine
- » Centralized operating model and IT systems as well as strong financial discipline will allow efficient execution of growth strategies and drive consistent operating performance, as seen during the pandemic

- » Very strong cash measures will be maintained as cash flow will support manageable capital spend
- » Long track record of strong operating cash flow margins will be sustained by good volume recovery from the pandemic and cost management
- » Operating and balance sheet leverage will likely remain moderate; limited indirect debt with fully funded pension plan and modest operating leases

### Credit challenges

- » Competition will increase as numerous large systems with financial resources as well as several academic medical centers continue to consolidate; presence of major commercial payer raises risk
- » Merger with Palos Health will be slightly dilutive to operating and balance sheet metrics, but NMHC's demonstrated ability to integrate and improve new entities will mitigate negative effects
- » National shortages in clinical staff will elevate workforce challenges and potential costs
- » 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 executing growth strategies and exercising financial discipline as it has in the past. The outlook also reflects our view that NMHC will maintain very favorable cash and debt metrics since capital spending will be funded with cash flow.

### Factors that could lead to an upgrade

- » Further geographic diversification of cash flow
- » Significant increase in market share
- » Material and sustained improvement in operating margins, along with reduction in leverage

### Factors that could lead to a downgrade

- » Sizable increase in leverage and weakening of debt metrics
- » Material and sustained decline in margins or cash measures
- » Meaningful dilution from acquisition or merger

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on [www.moodys.com](http://www.moodys.com) for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 2

### Northwestern Memorial HealthCare, IL

|                                                     | 2016      | 2017      | 2018      | 2019      | 2020      | 2021 Annualized & Adjusted |
|-----------------------------------------------------|-----------|-----------|-----------|-----------|-----------|----------------------------|
| Operating Revenue (\$'000)                          | 4,359,873 | 4,830,996 | 5,226,663 | 6,052,028 | 6,288,427 | 7,208,000                  |
| 3 Year Operating Revenue CAGR (%)                   | 36.6      | 25.8      | 10.4      | 11.6      | 9.2       | 11.4                       |
| Operating Cash Flow Margin (%)                      | 12.4      | 12.7      | 11.3      | 11.1      | 10.2      | 13.0                       |
| PM: Medicare (%)                                    | 35.8      | 37.3      | 37.9      | 39.6      | 39.5      | N/A                        |
| PM: Medicaid (%)                                    | 10.6      | 10.7      | 10.8      | 10.4      | 10.8      | N/A                        |
| Days Cash on Hand                                   | 413       | 422       | 437       | 402       | 477       | 504                        |
| Unrestricted Cash and Investments to Total Debt (%) | 293.7     | 340.0     | 400.4     | 342.1     | 429.2     | 437.7                      |
| Total Debt to Cash Flow (x)                         | 1.9       | 1.6       | 1.6       | 1.7       | 1.7       | 1.5                        |

Based on financial statements for Northwestern Memorial HealthCare & Subsidiaries, fiscal year ended August 31; fiscal year 2021 reflects nine months ended May 31, 2021, annualized. Excluding \$412 million in Medicare advances and \$48 million in FICA deferral, FY20 days cash on hand and cash-to-debt are 447 and 402%, respectively.

Adjustments: Grants and academic support provided (representing transfers to the school of medicine) reallocated to operating expenses from nonoperating gains (losses); FY21 excludes the Medicare advances and FICA and reflects year-to-date CARES grants only.

Investment returns normalized at 5%

Source: Moody's Investors Service

## Profile

NMHC includes ten acute care hospitals, one specialty hospital, and more than 200 diagnostic and ambulatory sites across Chicago, Illinois, and its surrounding counties. The flagship, Northwestern Memorial Hospital (NMH), is a major academic medical center located in the Streeterville neighborhood of Chicago and is the primary teaching hospital for Northwestern University's Feinberg School of Medicine (FSM). NMHC's medical staff of more than 5,400 includes more than 2,000 employed physicians. NMHC has over 33,000 employees.

## Detailed credit considerations

### Market position: prominent and growing position in competitive market

NMHC will remain a prominent player in a highly competitive market. The \$7.2 billion (annualized fiscal 2021) regional system will continue to grow, on track to triple its size since fiscal year end 2014. Based on management-provided data, the system's market share in most large service lines grew between 2018 and 2020 amid significant volume declines in the region during the pandemic. NMHC's recent merger with Palos Health will further expand its footprint in the southern Chicago region via integration and investment in this market. With significant expansion in the north and west completed, NMHC will focus on additional investments in ambulatory capabilities. In the southern region, a 48,000 square foot ambulatory site opened in Mokena, Illinois in June of 2021. 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. The most mature example of these efforts is in cardiovascular care. NMHC's Bluhm Cardiovascular Institute will now manage heart care across all of the system's acute care hospitals, lead physician recruitment efforts, oversee quality and direct program development.

NMHC will continue to align its strategies with Northwestern University's Feinberg School of Medicine (FSM) to further the Northwestern Medicine brand and build clinical and research capabilities. Advances in clinical capabilities will elevate the system's reputation as an academic medical center, as it did during the pandemic when NMHC performed the first double lung transplant to treat a COVID patient; twenty-two of these procedures have been performed as of June 30, 2021. An ongoing joint planning process and governance oversight structure will help coordinate activities for the school, Northwestern Medical Group and hospitals.

NMHC's market position will continue to benefit from its tight integration with a large number of physicians. Northwestern Medical Group (NMG) is a multispecialty group practice that employs more than 1,650 physicians and 700 advanced practice providers. NMG is the third largest physician group in Chicago and serves as the clinical faculty practice plan of FSM. Additionally, Northwestern Medicine Regional Medical Group is a multispecialty group practice that employs more than 565 physicians, including 409 specialists.

The Chicago market will become more competitive as consolidation among hospitals continues and large systems with deeper financial resources develop. Based on management-provided data, market share in 2020 was 15.6% for NMHC, 17.6% for Advocate Health Care (part of Advocate Aurora Health), 14.6% for AMITA Health (part of Ascension), and 8.4% for NorthShore University HealthSystem. In addition, there are several AMC's located in the Chicago market, including the University of Chicago Medical Center and Rush University Medical Center. Competition for physicians will stem from other hospital systems as well as a large independent medical group owned by private investors. A projected population decline of 0.3% over the next five years will contribute to heightened competition. 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**

NMHC's centralized model and financial discipline will support a continuation of strong operating cash flow (OCF) margins, as demonstrated in 2020 when the system absorbed a material impact from the pandemic and generated a 10% margin. The system's nine-month year-to-date fiscal 2021 margin of 13% (including \$53 million of CARES grants) will likely moderate somewhat in the fourth quarter as the system makes previously deferred investments. The system's ability to return to 11%-12% pre-pandemic margins will be driven by good volume recovery and cost management. Centralized management and predictive analytical capabilities will help the system sustain volumes, which have recovered to pre-pandemic levels. Among numerous cost management strategies, NMHC will benefit from supply savings under a new group purchasing contract.

While margins will likely remain strong, NMHC will face some operating challenges. The merger with Palos Health will be slightly dilutive to margins. However, management plans to initiate strategies that will quickly improve performance as it has done with prior mergers. The system's centralized business model, including a single electronic medical record and revenue cycle platform and single ERP system, will allow quick integration of support functions to achieve savings. A key operating challenge will be managing clinical workforce needs, given national shortages and burnout from the pandemic.

#### **Liquidity**

NMHC will maintain strong cash metrics, with 504 days cash on hand at May 31, 2021, excluding \$412 million in Medicare advances and \$87 million in FICA deferrals. The \$1.7 billion increase in cash and investment balances since fiscal year end 2020 was primarily driven by strong investment returns and cash flow. Liquidity will be comparatively lower than peers, with fiscal 2020 monthly liquidity at 50%, due to high asset allocation to alternative investments.

Reflecting NMHC's approach to capital investments, capital spending will be very manageable and funded with operating cash flow. NMHC will plan to spend about 1.3 times depreciation in fiscal 2021. Consistent and long-term investment in the system, as evidenced in a low average age of plant of 7.6 years, will provide flexibility to adjust capital spending if needed. This was highlighted by the reduction of non-essential capital spending during the pandemic.

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

NMHC will continue to enjoy moderately low leverage given expectations of steady operating performance and liquidity. Based on annualized nine months fiscal 2021 and excluding the Medicare advance and FICA deferral, cash-to-debt was very strong at 438%. On the same basis, debt-to-cash flow was favorably low at 1.5 times. We do not anticipate the system will incur incremental debt or higher leverage over the next couple of years, outside of merger-related debt. The upcoming financing will refinance certain outstanding debt.

Upon execution of an Amended and Restated Master Indenture (discussed below), NMHC will have ample headroom to covenants. MTI and bank covenants are expected to be aligned. There will be a debt service coverage covenant of 1.0 times. If coverage is under 1.0 times, no consultant will be required if the breach is due to a force majeure event. An event of default would occur if coverage is under 1.0 times for two consecutive years and days cash is under 175 days at the end of the second year and the funded indebtedness ratio exceeds 65%.

#### **Debt structure**

The upcoming financing will simplify NMHC's debt structure by reducing the number of series from 26 to 14, reduce interest rates, and provide longer-term fixed financing. Post-financing, debt structure risks will be manageable given good bank diversification and strong liquidity. NMHC will have approximately 20% 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 proforma self-liquidity obligations will be manageable because of strong liquidity and effective management. Following the financing, the system will have \$126 million in weekly variable rate demand obligations and \$78 million in outstanding commercial paper (\$200 million authorized). 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. Based on liquidity at June 30, 2021, NMHC's coverage of proforma self-liquidity obligations would be 8.6 times (3.6 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 January 1, 2021, Palos Community Hospital joined the Obligated Group. Upon issuance of the Series 2021 bonds, it is anticipated that an Amended and Restated Master Indenture will become effective. Changes to covenants are described above. The MTI allows substitution of notes without bondholder approval if certain conditions are met 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 2020, NMHC had interest rate swaps with a total notional amount of \$321 million and \$12 million in collateral was posted.

#### **Pensions AND OPEB**

NMHC's pension plan is fully funded.

#### **ESG considerations**

##### **Environmental**

Environmental considerations are not a major rating driver.

##### **Social**

The most significant social consideration will be workforce challenges given national shortages in clinical labor, the lingering effect of the pandemic, and the system's location in a competitive market. Potential increases in labor costs will be partly mitigated by NMHC's strong cashflow and liquidity. The Northwestern Memorial Hospital's service employees are unionized, with a contract expiring in early 2023.

##### **Governance**

NMHC's single operating model, centralized business functions, and uniform IT platforms (EMR and ERP) will allow it to efficiently achieve further clinical integration and execute growth strategies. The management team will likely continue to demonstrate a disciplined and analytic approach to evaluating strategic alternatives and capital commitments. These capabilities will allow the system to maintain operating and balance sheet strength as it has in the past, while integrating new locations amid rapid growth.

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## Illinois Finance Authority Northwestern Memorial HealthCare; CP; System

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# Illinois Finance Authority

## Northwestern Memorial HealthCare; CP; System

### Credit Profile

**Illinois Finance Authority, Illinois**

Northwestern Mem HlthCare, Illinois

Illinois Fin Auth (Northwestern Mem HlthCare) SYS

*Long Term Rating*

AA+/Stable

Current

### Rationale

S&P Global Ratings' long-term rating on Northwestern Memorial HealthCare's (NMHC) debt outstanding is 'AA+' and the short-term rating on NMHC's commercial paper (CP) notes is 'A-1+'. The outlook, where applicable, is stable.

S&P Global Ratings' dual ratings on NMHC's bonds are 'AA+/A-1+' and 'AA+/A-1'. The long-term component of the ratings reflects the credit quality of NMHC, the obligor. The short-term component of the ratings reflects the standby bond purchase agreements provided by the various banks.

We base the 'A-1+' short-term rating on the CP on NMHC's ability to fund from its own liquidity any CP not successfully remarketed. The taxable CP program has a \$200 million limit, and NMHC has issued \$77.7 million. NMHC has internally set maturity restrictions of a maximum of \$60 million during a period of five business days.

### Credit overview

The ratings reflect our view of NMHC's sustained robust operational performance and balance-sheet metrics during 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. We expect NMHC will remain an important provider in the very competitive Chicagoland market, and we believe management will continue to focus on integration as well as aligning services in ambulatory facilities as a growth strategy. NMHC has a prominent position in a competitive market, with a management team that is focused on strategic growth and pioneering efforts that include telehealth and artificial intelligence.

NMHC's management team continues to maintain financial discipline as it executes the system's growth strategy. In January 2021, NMHC acquired Palos Community Hospital, a 425-bed hospital in Palos Heights, which is a strategic growth area for NMHC. As expected, Palos was easily absorbed into the system based on the healthy credit profile of NMHC and management's track record of integrating new entities and improving operations within a short time frame.

NMHC's operations have been affected by the COVID-19 pandemic and industry-related challenges of elevated staffing and supply costs; however, management continues to be proactive in cost containment and execution. In addition, NMHC has received significant CARES Act and other pandemic-related grant funding, with \$44 million through the interim period ended Feb. 28, 2022, and \$106 million and \$289 million for fiscal years 2021 and 2020, respectively. In addition, the system still has \$188.7 million in Medicare accelerated payments as of Feb. 28, 2022,

which we removed from unrestricted reserves as per our practice.

The 'AA+' rating reflects our view of NMHC's:

- Very healthy liquidity position that we expect will be stable, given manageable capital needs;
- Solid financial performance despite a period of significant growth and the pandemic, 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
- Very strong brand name recognition and expanding business position through its acquisition strategy.

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

- Industry pressures including elevated staffing and supply costs and reimbursement challenges with sequestration for Medicare; and
- Increasingly competitive service area, as provider consolidation continues 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 (NMLFH), Northwestern Medical Faculty Foundation (d/b/a Northwestern Medical Group, or NMG), Northwestern Memorial Foundation (NMF), Northwestern Medicine Central DuPage Hospital, Northwestern Medicine Delnor Hospital, Central DuPage Physician Group (CPG; d/b/a Northwestern Medicine Regional Medical Group, or NMRMG), Northwestern Medicine Kishwaukee Hospital, Northwestern Medicine Valley West Hospital, Marianjoy Rehabilitation Hospital & Clinic Inc., Northern Illinois Medical Center (d/b/a Northwestern Medicine Huntley Hospital, Northwestern Medicine McHenry Hospital, and Northwestern Medicine Woodstock Hospital), and Palos Community Hospital.

The stable outlook reflects our expectation that the system will maintain its extremely strong financial profile, as well as its prominent position in the Chicago market. We expect management will continue to execute on the strategy of ambulatory growth and maintaining stable market share, despite a highly competitive market. Our stable outlook also reflects our view of the system's lack of any significant debt plans.

### **Environmental, social, and governance**

We view environmental, social, and governance risks as being neutral in our credit rating analysis. That said, we believe the pandemic exposes the entire sector to additional social risks that, although improving given widespread vaccine distribution, may remain a threat and point of uncertainty. We view positively management's focus on innovation, as well as strategic growth, amid an evolving health care market. In addition, the overall financial profile remains extremely strong, and although we expect cost pressures to persist, we note management has a track record of execution.

## Stable Outlook

### Downside scenario

Although we do not expect this to occur, if operations trend negatively for a sustained period and liquidity declines notably, we could revise the outlook to negative or lower the rating. We could also 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

We are unlikely to raise the rating within the outlook period, given S&P Global Ratings' general view of risk in the health care sector and the highly competitive environment, in addition to industry challenges, and a continued weakening in the overall payer mix over time.

## Credit Opinion

### Enterprise Profile: Very Strong

#### Enterprise

NMHC operates more than 200 diagnostic and ambulatory sites and 11 hospitals across Chicagoland, including its flagship, NMH. NMH is a major academic medical center and is the primary teaching hospital for Northwestern University's Feinberg School of Medicine, providing a range of services.

As of Feb. 28, 2021, NMHC has a total of 2,639 licensed beds (2,578 staffed), including 943 licensed beds (949 staffed) at NMH. NMHC also includes Northwestern Medicine Insurance Company LLC.

Northwestern University is a separate corporation and is not obligated to repay debt service associated with the bonds, but we believe the University's Feinberg School of Medicine is integrally linked with NMHC through a shared strategic plan.

#### Organic growth as well as growth through strategic acquisitions

NMHC has taken a disciplined approach to growth, having more than doubled in size over the past several years through both organic growth and strategic acquisitions. NMHC has also continued to integrate its physician practice, and this has been instrumental in the implementation of the system's strategic plan.

Before acquiring Palos, NMHC's most recent acquisition was Centegra, which provided the system with a new market segment with an attractive payer mix. Other entities that were acquired include the Lake Forest Hospital, Central DuPage Hospital, Delnor Hospital, Kishwaukee Hospital, Valley West Hospital, and Marianjoy. All of these entities have added to the overall footprint and, in our opinion, the acquisitions have made strategic sense. We expect management will continue evaluating opportunities, and we note that the current growth strategy remains focused, including on building out the ambulatory-care footprint.

In fiscal 2018, NMHC successfully executed Project One, which remains the vehicle to move all acute-care hospitals and physician groups onto one electronic medical record system.

### Utilization

NMHC management reports that overall volumes continue to recover and are at pre-pandemic levels. The team has noted that nine of the top 10 service lines are showing healthy growth in market share, particularly those that are aligned with strategic growth. Also, because the NMHC-aligned physicians' patients tend to remain within the system, and NMHC can take advantage of the favorable geographic relationship of the hospitals and health care sites in the system, it has been able to maintain its business position.

NMHC has a 16.4% market share in its primary service area (a 17-county area), which includes Palos. The market will remain competitive as consolidation occurs.

### Management remains proactive and has a track record of execution

NMHC has a strong leadership team that produces strong operations and balance-sheet measures while investing in its facilities. To date, NMHC has had no major missteps in aligning with the facilities that it has acquired over the years, including Kishwaukee Hospital, Valley West Hospital, Marianjoy, and Centegra. NMHC uses an integration team that assesses the positives and negatives of an acquired entity. The team then prepares a plan to help NMHC and the new entity integrate with little to no disruption.

NMHC remains focused on system integration, as it has grown rather rapidly over the years. Project One is one example of the steps that NMHC has taken to become further aligned. Management noted that it has already begun to see some benefits from Project One. The project, along with other measures, will help to increase efficiency.

We note that the board remains very engaged and continues to collaborate with the senior management team. There were some changes to the board composition with the affiliation of Centegra and Palos.

**Table 1**

#### Northwestern Memorial HealthCare, Illinois--Enterprise Statistics

|                                 | --Six months ended Feb. 28-- | --Fiscal year ended Aug. 31-- |           |           |
|---------------------------------|------------------------------|-------------------------------|-----------|-----------|
|                                 | 2022                         | 2021                          | 2020      | 2019      |
| PSA population                  | N.A.                         | 9,628,018                     | 9,524,699 | 9,621,069 |
| PSA market share (%)            | N.A.                         | 16.4                          | 13.4      | 12.8      |
| Inpatient admissions            | 61,890                       | 113,887                       | 97,460    | 103,132   |
| Equivalent inpatient admissions | 155,560                      | 283,806                       | 246,576   | 259,959   |
| Emergency visits                | 203,995                      | 364,050                       | 328,385   | 361,220   |
| Inpatient surgeries             | 15,728                       | 30,887                        | 27,618    | 25,774    |
| Outpatient surgeries            | 35,220                       | 66,871                        | 52,866    | 58,376    |
| Medicare case mix index         | 1.9410                       | N.A.                          | 1.9100    | 1.8900    |
| FTE employees                   | N.A.                         | N.A.                          | 26,431    | 25,496    |
| Active physicians               | 5,451                        | 5,498                         | 4,866     | 4,858     |
| Based on net/gross revenues     | Net                          | Net                           | Net       | Net       |
| Medicare (%)                    | 29.7                         | 28.9                          | 28.1      | 27.2      |
| Medicaid (%)                    | 9.8                          | 9.6                           | 5.2       | 8.1       |
| Commercial/Blues (%)            | 59.8                         | 61.5                          | 66.0      | 64.1      |

N/A--Not applicable. N.A.--Not available. Inpatient admissions exclude normal newborn, psychiatric, rehabilitation, and long-term care facility admissions.

## Financial Profile: Extremely Strong

### Operations remain very healthy and have benefited from strong volumes and management's focus on cost containment

In fiscal 2021, NMHC's financial performance was healthy, in our view, despite challenges from the pandemic and higher labor and supply costs. The system benefited from significant CARES Act and other pandemic-related grant funding of \$106 million. The system was able to post a healthy margin of 6.41% for fiscal 2021 and management remained focused on cost containment. The system also benefited from continued healthy volumes, in addition to cost containment, given the industry headwinds. Management has continued to focus on its efficiency plans in order to offset some slight payer mix degradation. As the state transitions more Medicaid recipients to managed Medicaid, NMHC is exploring how to best manage this population as related to the payers in the market.

NMHC's interim results for the six months ended Feb. 28, 2022, were very healthy, with a 5.17% operating margin that benefited from \$44 million of CARES Act funding, cost containment, and continued volume recovery.

We believe that NMHC should be able to achieve its fiscal 2022 budget, based on historical performance and management's ability to adjust and respond to changes in the market and the system's operations. Management will continue to integrate both Palos' and Centegra's operations, and we expect the team will continue to make notable progress on integrating both into the overall system. We believe overall margins will operate at lower levels relative to historical margins in excess of 5%, given industry headwinds and the continued gradual shift into a higher percentage of Medicare.

With strong operations and investment income, NMHC continues to post what we consider strong maximum annual debt service (MADS) coverage; for fiscal 2021, it reported MADS coverage of 12.1x and lease-adjusted MADS coverage of 8.9x.

### Balance sheet remains a key credit strength with robust unrestricted reserves

As of fiscal 2021, NMHC's liquidity was solid, with 525 days' cash on hand, in line with that of other 'AA+' rated systems. NMHC has benefited from healthy investment returns. In our view, the capital plans are manageable, and we understand they will be funded with operating cash flow. For fiscal 2022, NMHC estimates spending about \$541.6 million, up from fiscal 2021.

Overall unrestricted reserves-to-long-term debt remains very healthy, at 461.4%% in fiscal 2021. The overall asset allocation had a high percentage of alternative investments, at 53%, with the remainder in cash and equivalents (16%), fixed income (7%), equities (23%), and other (1%).

### Debt and contingent liabilities remain moderate

NMHC has moderate leverage and debt to capitalization was 15.4% for the interim period ended Feb. 28, 2022. There is about 27.2% contingent debt, due to variable-rate demand debt and private placements; however, unrestricted reserves more than cover any potential acceleration risk. We have included \$77.7 million of drawn CP as long-term debt, given that this continues to be rolled and refinanced existing term debt. We view this as longer term in nature and also have included this in contingent liabilities.

NMHC's debt includes taxable CP authorized up to \$200 million. The internally set restrictions are not legally binding. In the event of a failed rollover, the assets identified in the portfolio would provide sufficient liquidity. The eligible assets include cash, fixed-income instruments, and domestic equities. NMHC has provided us with the operational procedures that, upon a failed remarketing, it would follow to liquidate assets to provide for timely payment of a CP maturity. NMHC provides monthly self-liquidity.

NMHC historically had a fully funded pension plan and has a moderate amount of operating leases.

Table 2

## Northwestern Memorial HealthCare, Illinois--Financial Statistics

|                                                        | —Six months ended<br>Feb. 28— | —Fiscal year ended Aug. 31— |           | —Medians for 'AA+' rated<br>health care systems— |           |
|--------------------------------------------------------|-------------------------------|-----------------------------|-----------|--------------------------------------------------|-----------|
|                                                        | 2022                          | 2021                        | 2020      | 2019                                             | 2020      |
| <b>Financial performance</b>                           |                               |                             |           |                                                  |           |
| Net patient revenue (\$000s)                           | 3,677,506                     | 6,810,600                   | 5,570,737 | 5,665,736                                        | 4,157,684 |
| Total operating revenue (\$000s)                       | 3,956,225                     | 7,352,896                   | 6,279,495 | 6,043,454                                        | 4,425,375 |
| Total operating expenses (\$000s)                      | 3,751,814                     | 6,881,668                   | 5,995,882 | 5,769,692                                        | MNR       |
| Operating income (\$000s)                              | 204,411                       | 471,228                     | 283,613   | 273,762                                          | MNR       |
| Operating margin (%)                                   | 5.17                          | 6.41                        | 4.52      | 4.53                                             | 4.50      |
| Net nonoperating income (\$000s)                       | 247,338                       | 346,499                     | 67,832    | 174,980                                          | MNR       |
| Excess income (\$000s)                                 | 451,749                       | 817,727                     | 351,445   | 448,742                                          | MNR       |
| Excess margin (%)                                      | 10.75                         | 10.62                       | 5.54      | 7.22                                             | 5.50      |
| Operating EBIDA margin (%)                             | 11.18                         | 12.71                       | 11.27     | 11.69                                            | 11.30     |
| EBIDA margin (%)                                       | 16.41                         | 16.64                       | 12.22     | 14.18                                            | 12.20     |
| Net available for debt service (\$000s)                | 689,747                       | 1,280,922                   | 775,782   | 881,686                                          | 775,782   |
| Maximum annual debt service (\$000s)                   | 106,334                       | 106,344                     | 106,334   | 106,334                                          | MNR       |
| Maximum annual debt service coverage (x)               | 12.97                         | 12.05                       | 7.30      | 8.29                                             | 8.00      |
| Operating lease-adjusted coverage (x)                  | 9.33                          | 8.98                        | 5.34      | 6.18                                             | 6.30      |
| <b>Liquidity and financial flexibility</b>             |                               |                             |           |                                                  |           |
| Unrestricted reserves (\$000s)                         | 8,953,288                     | 9,312,844                   | 7,030,452 | 5,988,485                                        | 5,550,716 |
| Unrestricted days' cash on hand                        | 462.2                         | 525.1                       | 456.2     | 405.0                                            | 425.00    |
| Unrestricted reserves/total long-term debt (%)         | 445.6                         | 461.4                       | 401.0     | 334.9                                            | 382.50    |
| Unrestricted reserves/contingent liabilities (%)       | 1,641.1                       | 1,701.5                     | 1,125.0   | 942.9                                            | 1,105.80  |
| Average age of plant (years)                           | 7.8                           | 7.7                         | 7.6       | 6.7                                              | 9.10      |
| Capital expenditures/depreciation and amortization (%) | 179.0                         | 120.5                       | 104.3     | 103.7                                            | 124.60    |
| <b>Debt and liabilities</b>                            |                               |                             |           |                                                  |           |
| Total long-term debt (\$000s)                          | 2,009,126                     | 2,018,367                   | 1,753,211 | 1,788,390                                        | MNR       |
| Long-term debt/capitalization (%)                      | 15.4                          | 15.3                        | 16.9      | 18.6                                             | 20.90     |
| Contingent liabilities (\$000s)                        | 545,562                       | 547,332                     | 624,948   | 635,137                                          | MNR       |
| Contingent liabilities/total long-term debt (%)        | 27.2                          | 27.1                        | 35.6      | 35.5                                             | 26.50     |
| Debt burden (%)                                        | 1.26                          | 1.38                        | 1.68      | 1.71                                             | 1.60      |

Table 2

## Northwestern Memorial HealthCare, Illinois--Financial Statistics (cont.)

|                                        | —Six months ended<br>Feb. 28— | —Fiscal year ended Aug. 31— |         |        | —Medians for 'AA+' rated<br>health care systems— |
|----------------------------------------|-------------------------------|-----------------------------|---------|--------|--------------------------------------------------|
|                                        | 2022                          | 2021                        | 2020    | 2019   | 2020                                             |
| Defined-benefit plan funded status (%) | N/A                           | 130.85                      | 107.35  | 107.74 | 82.70                                            |
| <b>Miscellaneous</b>                   |                               |                             |         |        |                                                  |
| Medicare advance payments (\$000s)*    | 188,745                       | 314,509                     | 412,000 | N/A    | MNR                                              |
| Short-term borrowings (\$000s)*        | 0                             | 0                           | 0       | 0      | MNR                                              |
| COVID-19 stimulus recognized (\$000s)  | 44,000                        | 106,000                     | 289,000 | N/A    | MNR                                              |
| Risk based capital ratio (%)           | N/A                           | N/A                         | N/A     | N/A    | MNR                                              |
| Total net special funding (\$000s)     | 36,055                        | 54,618                      | 46,923  | 39,145 | MNR                                              |

\*Excluded from unrestricted reserves, long-term debt, and contingent liabilities. N.A.—Not available. N/A—Not applicable. MNR—Median not reported.

## Credit Snapshot

- **Security pledge:** The revenue bonds and CP are an unsecured general obligation of the NMHC obligated group, which consists of NMHC; NMH; NLFH; Central DuPage Hospital (CDH); Delnor-Community Hospital (Delnor); Cadence Physician Group (CPG) d/b/a Northwestern Medicine Regional Medical Group (NMRMG); the Foundation, Northwestern Medical Faculty Foundation d/b/a Northwestern Medical Group (NMG); Kishwaukee Community Hospital; Valley West Community Hospital; Marianjoy Rehabilitation Hospital & Clinic Inc.; Northern Illinois Medical Center; Memorial Medical Center--Woodstock; and Centegra Hospital--Huntley Holdings; Palos Community Hospital, with Computershare Trust Co. N.A., as successor to Wells Fargo Bank, N.A., as master trustee.
- **Organization description:** NMHC operates hospitals in the northern, southern, and western suburbs of Chicago, as well as NMH, its downtown flagship. NMH is a major academic medical center and is the primary teaching hospital for Northwestern University's Feinberg School of Medicine, providing a range of services.
- **Swaps:** The organization has four swap agreements outstanding with a total notional amount of about \$318.3 million. It has \$2.6 million of collateral posted and a negative mark-to-market of \$106.45 million as of fiscal 2021.

## Related Research

- Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

This report does not constitute a rating action.

## Ratings Detail (As Of June 2, 2022)

## Ratings Detail (As Of June 2, 2022) (cont.)

Northwestern Mem HlthCare taxable rev bnds ser 2021 dtd 08/11/2021 due 07/15/2051

Long Term Rating

AA+/Stable

Current

**Illinois Finance Authority, Illinois**

Northwestern Mem HlthCare, Illinois

Illinois Finance Authority (Northwestern Memorial HealthCare) (Direct Issue Taxable Commercial Paper)

Short Term Rating

A-1+

Current

Illinois Finance Authority (Northwestern Mem HlthCare) var rt demand rev rfdg bnds

Long Term Rating

AA+/A-1+/Stable

Current

Illinois Finance Authority (Northwestern Mem HlthCare) var rt demand rev rfdg bnds (Northwestern Mem HlthCare) ser 2021E  
dtd 08/14/2021 due 07/15/2054

Long Term Rating

AA+/A-1+/Stable

Current

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**SECTION IX. 1120.140 – ECONOMIC FEASIBILITY****A. Reasonableness of Financing Arrangements**

Not Applicable – see bond rating documents

**B. Conditions of Debt Financing**

Not Applicable – see bond rating documents

**C. Reasonableness of Project and Related Costs**

| COST AND GROSS SQUARE FEET BY DEPARTMENT |                  |            |         |        |        |        |               |              |                       |
|------------------------------------------|------------------|------------|---------|--------|--------|--------|---------------|--------------|-----------------------|
| Department                               | A                | B          | C       | D      | E      | F      | G             | H            | Total Cost<br>(G + H) |
|                                          | Cost/Square Foot |            | GSF     |        | GSF    |        | Const. \$     | Mod. \$      |                       |
|                                          | New              | Mod.       | New     | Circ.* | Mod    | Circ.* | (A x C)       | (B x E)      |                       |
| CLINICAL                                 |                  |            |         |        |        |        |               |              |                       |
| Medical/Surgical                         | \$ 556.00        |            | 77,162  | 22.9%  | 0      |        | \$ 42,902,072 | \$ -         | \$ 42,902,072         |
| ICU                                      |                  | \$ 366.00  | 0       |        | 8,503  | 20.6%  | \$ -          | \$ 3,112,098 | \$ 3,112,098          |
| Observation                              | \$ 568.00        |            | 13,695  | 22.2%  | 0      |        | \$ 7,778,760  | \$ -         | \$ 7,778,760          |
| Emergency Department                     | \$ 581.00        |            | 23,267  | 25.7%  | 0      |        | \$ 13,518,127 | \$ -         | \$ 13,518,127         |
| ED Imaging                               | \$ 621.00        |            | 3,923   | 14.1%  | 0      |        | \$ 2,436,183  | \$ -         | \$ 2,436,183          |
| Inpatient Rehab Services                 | \$ 448.00        |            | 969     | 0.0%   | 0      |        | \$ 434,112    | \$ -         | \$ 434,112            |
| Clinical Subtotal                        | \$ 563.53        | \$ 366.00  | 119,016 |        | 8,503  |        | \$ 67,069,254 | \$ 3,112,098 | \$ 70,181,352         |
| Clinical Contingency                     | \$ 56.35         | \$ 36.60   |         |        |        |        | \$ 6,706,925  | \$ 311,210   | \$ 7,018,135          |
| Clinical Total                           | \$ 619.88        | \$ 402.60  | 119,016 |        | 8,503  |        | \$ 73,776,179 | \$ 3,423,308 | \$ 77,199,487         |
| NON-CLINICAL                             |                  |            |         |        |        |        |               |              |                       |
| Administration                           | \$ 441.00        | \$ 186     | 29,578  | 0.0%   | 6,128  | 0.0%   | \$ 13,043,897 | \$ 1,139,808 | \$ 14,183,705         |
| Education/Conference Space               | \$ 478.00        | \$ 223     | 2,604   | 0.0%   | 7,375  | 0.0%   | \$ 1,244,712  | \$ 1,644,625 | \$ 2,889,337          |
| Clinical Operation Services              | \$ 981.00        | \$ 726     | 11,955  | 4.9%   | 11,152 | 4.5%   | \$ 11,727,855 | \$ 8,096,352 | \$ 19,824,207         |
| Clinical Support Services                | \$ 604.00        | \$ 349     | 11,449  | 4.4%   | 4,863  | 0.0%   | \$ 6,915,196  | \$ 1,697,187 | \$ 8,612,383          |
| Dietary Services                         | \$ 915.00        | \$ 466     | 9,562   | 3.1%   | 232    | 0.0%   | \$ 8,749,230  | \$ 108,112   | \$ 8,857,342          |
| Environmental Services                   | \$ 462.00        | \$ 207     | 2,368   | 0.0%   | 2,185  | 0.0%   | \$ 1,094,016  | \$ 452,295   | \$ 1,546,311          |
| General Services                         | \$ 467.00        | \$ 212     | 31,846  | 1.6%   | 7,417  | 0.0%   | \$ 14,872,082 | \$ 1,572,404 | \$ 16,444,486         |
| Hospital Staff Support                   | \$ 456.00        | \$ 201     | 20,233  | 2.0%   | 1,991  | 0.0%   | \$ 9,226,191  | \$ 400,191   | \$ 9,626,382          |
| Reception/Waiting/Public/Retail          | \$ 479.00        |            | 12,782  | 7.0%   | 0      |        | \$ 6,122,578  | \$ -         | \$ 6,122,578          |
| MEP Systems                              | \$1,537.83       | \$ 1,393   | 39,075  | 0.0%   | 16,046 | 0.0%   | \$ 60,090,886 | \$22,352,078 | \$ 82,442,964         |
| Non-Clinical Subtotal                    | \$ 776.23        | \$ 653     | 171,452 |        | 57,389 |        | \$133,086,643 | \$37,463,052 | \$170,549,695         |
| Non-Clinical Contingency                 | \$ 77.62         | \$ 65.28   |         |        |        |        | \$ 13,308,664 | \$ 3,746,305 | \$ 17,054,969         |
| Non-Clinical Total                       | \$ 853.86        | \$ 718.07  | 171,452 |        | 57,389 |        | \$146,395,307 | \$41,209,357 | \$187,604,664         |
| TOTALS                                   | \$1,473.74       | \$1,120.67 | 290,468 |        | 65,892 |        | \$220,171,487 | \$44,632,665 | \$264,804,152         |

**D. Projected Operating Costs****Project Direct Operating Expenses – FY29**

|                                           |                |
|-------------------------------------------|----------------|
| Total Direct Operating Costs              | \$ 134,264,000 |
| Patient Days (Med/Surg, ICU, Observation) | 72,674         |
| Direct Cost per Patient Day               | \$ 1,847.48    |

**E. Total Effect of the Project on Capital Costs****Projected Capital Costs – FY29**

|                                           |                |
|-------------------------------------------|----------------|
| Patient Days (Med/Surg, ICU, Observation) | 72,674         |
| Total Project Cost                        | \$ 388,787,687 |
| Useful Life (years)                       | 40             |
| Total Annual Depreciation                 | \$ 9,719,692   |
| Depreciation Cost per Patient Day         | \$ 133.74      |

## SECTION IX. SAFETY NET IMPACT STATEMENT

### 1. Impact of the project on essential safety net services in the community, including the impact on racial and health care disparities in the community

A significant proportion of the demand for inpatient services at LFH comes from patients originating from under-resourced communities, particularly Waukegan, Round Lake, and North Chicago. Since the opening of the new hospital, total patient days have increased by nearly 50% while patient days from the under-resourced ZIP codes have increased by 85%.

In 2020, LFH provided more charity care than any other Lake County hospital by a wide margin; LFH's charity care as a percentage of net patient revenue was double that of any other Lake County hospital. Additionally, the rate of increase for patients on Medicaid at LFH is the highest in the county. While the total number of inpatients served at LFH increased by 43% from CY15 – CY21, the number of Medicaid inpatients increased by 186% and Charity Care inpatients increased by 199%. This project will improve access to the safety net services that LFH provides by increasing ICU, medical/surgical, observation, and Emergency Department capacity and improving patient through-put in the Emergency Department.

This project will allow LFH to continue implementing strategies like the following to address the priority health needs of the community:

- Implemented an integrated quality equity plan  
Northwestern Medicine established an organization-wide Quality Equity Plan in June 2021. The plan included a vision for advancing quality equity for NM patients over the next five years, with improved infrastructure, programming and partnership with Community Affairs colleagues, Northwestern University faculty and other community organizations. The Quality Equity Plan was developed with four categories and a focus in 11 areas. These focus areas and outcomes include:
  - Accessing Care at Northwestern Medicine
    - Addressed barriers due to change in insurance status
    - Mitigated barriers for patients with limited English proficiency
  - Meeting Diverse Needs
    - Integrated Health Outreach Promoting Equity (HOPE) program with Ambulatory Care Coordination and focused on patients with chronic conditions including diabetes, hypertension and complex social needs
    - Launched Social Determinants of Health (SDOH) pilot and developed comprehensive implementation plan for upcoming year
  - Focused Clinical Areas (flu vaccine, COVID-19, diabetes, maternal care, hypertension)
    - Increased flu vaccination rates and reduce disparities for Black and Latin American patients

- Piloted systemwide diabetes “tune-up pathway” to connect Black and Latin American patients with a multidisciplinary team for education and resources and to decrease disparities in glycemic control
  - Developed equity framework for COVID-19 process and outcome metrics
  - Prioritized hypertension improvement initiative based on identified disparity
- Infrastructure (analytics/quality approach to measuring equity with high-fidelity data, collaborating with IPHAM and other research groups at Northwestern Medicine/Northwestern University)
  - Further developed standard approach on how to assess for disparities
  - Launched systemwide Equity Grand Rounds program highlighting Workforce, Community Affairs and Clinical Quality with continuing nurse education and continuing medical education contact hours awarded to attendees
- Implemented a Transitional Care Clinic (TCC) at LFH to medically transition patients in the Emergency Department and inpatients without a medical home  
 In 2018 nearly 1,900 people in the LFH ED and/or those admitted to LFH did not have a primary care physician identified in their electronic health record. Among ED encounters without a PCP, 40% of patients were from Waukegan, North Chicago, Zion, and the Round Lake area, where many residents are covered by Medicaid or have no medical insurance. In February 2020, LFH opened the TCC at LFH with a model adapted from the TCC at NMH. This clinic provides comprehensive services through a series of appointments to help patients after they are discharged from the ED or inpatient care. TCC staff connects patients with a primary care physician at Erie HealthReach Waukegan, a Federally Qualified Health Center (FQHC) serving nearly 10,000 patients in Lake County, or other medical home. The TCC team also addresses complex barriers to care, including medication access, health literacy, insurance, and transportation. From February 2020 through October 2022, the TCC provided care to more than 700 patients. It supported patients in addressing core psychosocial and medical issues, stabilizing their health and enabling them to effectively receive care in the primary care setting.
- Developed a health system-level approach to better serve uninsured and underinsured patients through clinical community relationships  
 In 2019, LFH recommitted its support to Erie HealthReach Waukegan and the Lake County community through a three-year, \$1.8 million grant. LFH additionally worked with the Lake County Health Department (LCHD) to coordinate care for patients at LCHD. Those patients who meet residency requirements can access care at LFH through the Financial Assistance Program. LFH's grant funding enabled Erie Waukegan to continue to address the health needs of people with significantly more acute health needs than patients at their other FQHC sites due to lack of primary care in the community for many years, cultural barriers, and a significant number of patients needing high-risk obstetrics

care. With this funding, patients have better access to medically necessary health care, including primary care, behavioral health care, and comprehensive case management. Erie Waukegan was able to hire additional clinical staff, expand their telehealth capabilities, and address the social determinants of health for their patients.

- Implemented an electronic tool to screen patients for social determinants of health (SDOH) and refer patients to social service organizations

Northwestern Medicine identified the implementation of routine SDOH screenings as a top organizational priority and included it as a key initiative for the health system in 2020. In 2021, a screening tool that evaluated six social determinant domains was created and piloted across multiple care locations. The six domains include: housing, transportation, food, mental health, medication affordability, and social isolation. The tool is in the Epic electronic medical record so clinical employees and staff can see reported patient needs. As of August 2021, more than 2,200 patients at Northwestern Medicine had been screened using this tool. An additional pilot was designed in collaboration with Mano a Mano Family Resource Center. Mano a Mano is a nonprofit local-agency that serves immigrants. It provides a one-stop-shop for educational classes, workshops and immigration legal services for some of the families and individuals living in Lake County who are hardest to reach. Mano a Mano works to empower immigrants and their families living in Lake County to become full participants in American life. Mano a Mano conducts multiple initiatives to serve the residents of Lake County, including: the Healthy Families Program, aimed at expanding health literacy and improving the health of immigrants by helping them integrate into and understand the U.S. healthcare system; the Community Health Workers Program, which is a collaboration that focuses on community health needs that have been identified by local research as priorities for low-income and immigrant communities, including the health literacy and training priorities in areas such as hypertension, diabetes, prenatal care, insurance benefits, nutrition and obesity; and expanded access to healthcare and social services through transportation support, among others. The pilot with Mano a Mano focuses on patients in the Northwestern Medicine Grayslake Family Medicine Clinic who are Latin American and prefer to speak Spanish. The goal of this pilot is to link patients and community members to resources in or near their neighborhood to address social needs in a timely, efficient and culturally appropriate manner. Mano a Mano Community Health Workers will be the main point of contact for patient referrals. This pilot was launched in 2020. Both pilots led to patients getting follow-up health education and access to social services through organizations whose employees are culturally and linguistically aligned with their clients. More culturally and linguistically appropriate care leads to: more trust in medical professionals, a better understanding of clinical conditions and self-care, a higher likelihood of following through on recommendations to link with social service providers.

- Increased access to social service and community organizations

In 2021, LFH provided grant funding and support to United Way of Lake County to promote Lake County 211, a free, confidential, 24/7/365 helpline operated by

United Way that connects people with locally available and appropriate health and human service resources. It is designed to reduce time and frustration by acting as a central access point to these resources in Lake County. It helps individuals, families, and medical professionals navigate and connect with a wide range of local health and human services, including: mental health services, shelter and affordable housing options, crisis counseling, employment and education support, supplemental food programs, and financial support. Since 2019, 211 has made more than 100,000 connections to critical services for Lake County residents. Individuals can more easily navigate to find needed social services. Individuals who might otherwise “give up” and not receive services can access them more efficiently. An additional grant was provided in FY22.

- Increased flu vaccination rates

To help increase flu vaccination rates in the communities that were hit hardest by COVID-19, LFH collaborated with Catholic Charities and the Mexican Consulate in FY21 to sponsor a flu vaccine clinic in Round Lake Beach. LFH vaccinated community members against influenza, helping them avoid illness and hospitalization. In October 2022, in partnership with Mano a Mano, LFH provided a flu vaccine clinic in North Chicago.

- Increased behavioral health services and capacity in community settings

The Josselyn Center is a long-standing behavioral health provider that opened a new location in LFH’s service area in 2020. In February 2021, LFH collaborated with The Josselyn Center for operational capacity and to support a new role, a behavioral health care coordinator. The coordinator creates an immediate connection with patients being discharged from LFH settings and establishing care at The Josselyn Center. During the first seven months, more than 240 patients were referred for assessment and care. Also, in collaboration with the Waukegan Public Library, LFH launched a pilot to reduce barriers to behavioral health services in the community. LFH provided funding for the library to contract two social workers with The Josselyn Center: one spoke Spanish and one was Black. These social workers were to be available to library patrons for 30- to 60-minute appointments. Patrons also had access to the library’s community health workers. By bringing a diverse team of social workers to a community setting, LFH worked to address barriers to cost and access. Additionally, LFH provided grant funding to expand capacity for behavioral health services at Erie HealthReach Waukegan. Patients are more likely to engage in and persist in treatment if access is offered quickly. As a result of these collaborations, patients needing mental health services were offered access to assessment and care within a shorter period of time following an ED or inpatient discharge. In addition, offering behavioral health resources in the community expanded access and reduced stigma associated with care.

- Implemented Calm Classroom, a classroom-based mindfulness program, in Lake County schools

Calm Classroom is a simple and accessible way to add mindfulness to classroom culture. The daily practice of breathing, stretching, focusing, and relaxation exercises creates a greater sense of self-awareness, mental focus, and emotional resilience in the classroom. Calm Classroom is the largest provider of

schoolwide mindfulness programming in the U.S. In 2008, Calm Classroom launched in Chicago Public Schools, and since then, the program has been implemented in thousands of classrooms all over the world. In 2021, LFH continued support of the Calm Classroom curriculum in two school districts that have been historically under-resourced: Waukegan School District 60 and Beach Park School District 3. The program is intended to help students cope with trauma and everyday stressors in their lives. LFH has committed to sustaining funding for the program in each school district for two years. As a direct result of LFH funding, Calm Classroom became available to more than 25,000 students.

- Provided drug education and prevention programming for students in the local school and with parents in the local community through Text-A-Tip

In collaboration with Lake Forest Linking Efforts Against Drugs (LEAD), LFH supported a 24/7 anonymous text crisis line, Text-A-Tip. LEAD's online and social media presence has seen an increase of over 500% in the past three years. Text-A-Tip has been able to request wellness checks and send emergency personnel to teens in crisis. This has led to interventions with people at high risk of suicide and self-harm, violence, and drug overdose. This safe, anonymous resource saves lives and gives students a place to turn 24/7 when they need emotional support. The Text-A-Tip hotline is now accessible to more than 7 million people, almost double the number from 2020. Additionally, LFH provided a \$15,000 grant in FY22.

- Provided health education at Beacon Place

In November 2021, NM joined volunteers from Lake Forest School District and their food service vendor to host an event called "GreatFULL" at Beacon Place, an organization serving primarily Hispanic families focusing on academic growth and improved health. NM participated in planning and provided health information on childhood diabetes and prevention in Spanish and English, as well as provided information on healthier eating. Additionally, NM conducted a series of health education classes for parents and children over four weeks in the summer of 2022. Children learned about nutrition and physical activity and parents learned about nutrition and cooking.

- Provided free blood pressure screenings

In August 2022, NM provided free blood pressure screenings at North Chicago Community Days. Over the course of one Saturday, more than 60 patients were checked, and many were provided health education to better control hypertension.

- Developed youth pipeline programs for future healthcare careers

LFH hosted its 3<sup>rd</sup> year of the NM Discovery program. On one Saturday per month, students attend sessions to learn about different careers in healthcare. More than half of the students in this program come from under-resourced communities. In collaboration with North Chicago Community High School and College of Lake County, NM also supports a youth pipeline program. Each year, 1-2 graduating students pursuing healthcare careers are provided a scholarship for non-tuition expenses at College of Lake County. Most are eligible for full tuition coverage but need support for books, transportation, housing, and other expenses to allow them to persist in higher education. Each student is paired

with a mentor at LFH in their field of study, starting with their first semester, to help them navigate academic and professional pathways.

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

Other area hospitals in LFH'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 LFH and will increase access to inpatient care at LFH. The project will eliminate the need for LFH to go on ED diversion due to lack of bed availability. The emergency services volume that is redirected to other providers during the periods of ED diversion can create an unintended burden on other hospitals. The proposed project will reduce this potential burden by providing capacity to ensure emergency transports can receive care at LFH.

## 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 or service.

### LFH Charity Care and Medicaid

| Safety Net Information per PA 96-0031 |                      |                      |                      |
|---------------------------------------|----------------------|----------------------|----------------------|
| CHARITY CARE                          |                      |                      |                      |
| Charity (# of patients)               | FY19                 | FY20                 | FY21                 |
| Inpatient                             | 353                  | 428                  | 424                  |
| Outpatient                            | 5,241                | 5,516                | 5,985                |
| <b>Total</b>                          | <b>5,594</b>         | <b>5,944</b>         | <b>6,409</b>         |
| Charity (cost in dollars)             |                      |                      |                      |
| Inpatient                             | \$ 2,997,169         | \$ 4,404,620         | \$ 3,927,727         |
| Outpatient                            | \$ 5,520,666         | \$ 8,168,619         | \$ 6,576,666         |
| <b>Total</b>                          | <b>\$ 8,517,834</b>  | <b>\$ 12,573,239</b> | <b>\$ 10,504,393</b> |
| MEDICAID                              |                      |                      |                      |
| Medicaid (# of patients)              | FY19                 | FY20                 | FY21                 |
| Inpatient                             | 1,287                | 1,317                | 1,342                |
| Outpatient                            | 29,434               | 24,197               | 35,912               |
| <b>Total</b>                          | <b>30,721</b>        | <b>25,514</b>        | <b>37,254</b>        |
| Medicaid (revenue)                    |                      |                      |                      |
| Inpatient                             | \$ 9,879,077         | \$ 14,612,099        | \$ 15,445,678        |
| Outpatient                            | \$ 19,333,850        | \$ 19,191,240        | \$ 24,710,965        |
| <b>Total</b>                          | <b>\$ 29,212,927</b> | <b>\$ 33,803,339</b> | <b>\$ 40,156,644</b> |

Source: IDPH Annual Hospital Questionnaires

**SECTION X. CHARITY CARE INFORMATION**

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

**Lake Forest Hospital**

|                                  | <b>FY19</b>    | <b>FY20</b>    | <b>FY21</b>    |
|----------------------------------|----------------|----------------|----------------|
| Net Patient Revenue              | \$ 379,206,376 | \$ 364,555,239 | \$ 409,934,548 |
| Amount of Charity Care (charges) | \$ 37,392,124  | \$ 50,808,525  | \$ 57,875,943  |
| Cost of Charity Care             | \$ 8,517,834   | \$ 12,573,239  | \$ 10,504,393  |

**Northwestern Memorial HealthCare**

|                                  | <b>FY19</b>     | <b>FY20</b>     | <b>FY21</b>     |
|----------------------------------|-----------------|-----------------|-----------------|
| Net Patient Revenue              | \$5,665,736,442 | \$5,570,736,744 | \$6,810,599,673 |
| Amount of Charity Care (charges) | \$ 354,450,428  | \$ 411,965,498  | \$ 476,740,967  |
| Cost of Charity Care             | \$ 68,334,946   | \$ 89,728,349   | \$ 79,890,361   |

**NMHC Community Benefit**

To help meet the needs of all NMHC communities during FY21, NMHC contributed over \$1.1 billion, or approximately 17% of net patient service revenue. The major components of the \$1.1 billion community benefit contribution are:

- \$849.1 million of government sponsored indigent healthcare (unreimbursed cost of Medicaid and Medicare).
- \$79.9 million of charity care, at cost.
- \$76.3 million of education, at cost. This includes the unreimbursed education costs of NMHC's medical residency, fellowship, and internship programs.
- \$22.9 million of bad debts, 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.
- \$61.2 million of research, at cost. NMHC provides support to advance medical and scientific research and academic pursuits.
- \$40.3 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.
- \$17.9 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.