ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

FINDINGS

C = Conforming CA = Conditional NC = Nonconforming NA = Not Applicable

Decision Date: June 27, 2017 Findings Date: June 27, 2017

Project Analyst: Celia C. Inman Team Leader: Fatimah Wilson

Project ID #: J-11337-17

Facility: University of North Carolina Hospitals

FID #: 923517 County: Orange

Applicant: University of North Carolina Hospitals at Chapel Hill

Project: Add 9 new acute care beds on the Chapel Hill campus for a total of 798 acute beds

on that campus and 931 on the hospital license

REVIEW CRITERIA FOR NEW INSTITUTIONAL HEALTH SERVICES

N.C. Gen. Stat. §131E-183(a) The Department shall review all applications utilizing the criteria outlined in this subsection and shall determine that an application is either consistent with or not in conflict with these criteria before a certificate of need for the proposed project shall be issued.

(1) The proposed project shall be consistent with applicable policies and need determinations in the State Medical Facilities Plan, the need determination of which constitutes a determinative limitation on the provision of any health service, health service facility, health service facility beds, dialysis stations, operating rooms, or home health offices that may be approved.

CA

The University of North Carolina Hospitals at Chapel Hill (UNC Hospitals), the applicant, proposes to develop nine additional acute care beds at UNC Hospitals Chapel Hill Campus (UNC Main), for a total of 798 licensed acute care beds at UNC Main upon project completion.

Need Determination

The 2017 State Medical Facilities Plan (SMFP) includes an Acute Care Bed Need Determination for 41 additional acute care beds in the Orange County Service Area. Page 41 of the 2017 SMFP states:

"Any qualified applicant may apply for a certificate of need to acquire the needed acute care beds. A person is a qualified applicant if he or she proposes to operate the additional acute care beds in a hospital that will provide:

- (1) a 24-hour emergency services department,
- (2) inpatient medical services to both surgical and non-surgical patients, and
- (3) if proposing a new licensed hospital, medical and surgical services on a daily basis within at least five of the major diagnostic categories as recognized by the Centers for Medicare and Medicaid services (CMS), as follows: ... [as listed on page 41 of the 2017 SFMP]."

The applicant submitted two concurrent and complementary applications in response to the need identified in the 2017 SMFP for 41 additional beds in Orange County. This application (Project ID # J-11337-17) proposes to develop nine additional acute care beds at UNC Main, located at 101 Manning Drive, Chapel Hill, NC, for a total of 798 acute care beds upon project completion. The concurrently filed application (Project ID #J-11338-17) proposes to develop 32 additional acute care beds at UNC Hillsborough located at 460 Waterstone Drive, Hillsborough, NC, for a total of 133 acute care beds at UNC Hillsborough. Both hospitals operate under UNC Hospitals License #HO157, which will be licensed for a total of 931 acute care beds upon completion of both projects and previously approved Project ID #J-11163-16 (add 29 at UNC Hillsborough), and Project ID #J-11164-16 (add 55 at UNC Main)

The applicant does not propose to develop more acute care beds than are determined to be needed in the Orange County Service Area. In Section B.1, page 16, the applicant states that UNC Hospitals currently operates a 24-hour emergency services department and provides inpatient medical services to both surgical and non-surgical patients. The applicant is not proposing a new hospital or new service. Thus, UNC Hospitals is a qualified applicant and the proposal is consistent with the need determination in the 2017 SMFP for acute care beds in Orange County.

Policies

Policy GEN-3: BASIC PRINCIPLES, on page 33 of the 2017 SMFP is applicable to this review. Policy GEN-3 states:

"A certificate of need applicant applying to develop or offer a new institutional health service for which there is a need determination in the North Carolina State Medical Facilities Plan shall demonstrate how the project will promote safety and quality in the delivery of health care services while promoting equitable access and maximizing healthcare value for resources expended. A certificate of need applicant shall document its plans for providing access to services for patients with limited financial resources

and demonstrate the availability of capacity to provide these services. A certificate of need applicant shall also document how its projected volumes incorporate these concepts in meeting the need identified in the State Medical Facilities Plan as well as addressing the needs of all residents in the proposed service area."

The applicant responds to Policy GEN-3 in Section B.10, pages 26-29.

Promote Safety and Quality

In Section B.10(a), pages 26-27, the applicant discusses patient safety and quality of care, stating that UNC believes the proposed project will promote the provision of quality healthcare services to patients from all 100 North Carolina counties. The applicant further states:

"UNC Hospitals is known for providing high quality services and expects the proposed project to expand its acute care programs while bolstering its high quality reputation. The proposed project will not only add needed capacity to UNC Hospitals, but will also ensure that the needs of patients are being met in the most appropriate setting."

Exhibit B.10 contains copies of UNC Hospitals' Competency Assessment Policy, Performance Improvement Program, Utilization Management Plan, and Risk Management Program. The applicant also discusses UNC Hospital's quality awards and designations on page 27.

The applicant adequately demonstrates that the proposal will promote safety and quality care.

Promote Equitable Access

In Section B.10(b), pages 27-28, the applicant discusses how the proposed project will promote equitable access. The applicant states:

"As North Carolina's only state-owned comprehensive, full service hospital-based program, UNC Hospitals has the obligation to accept any North Carolina citizen requiring medically necessary treatment. No North Carolina citizen is presently denied access to non-elective care because of race, sex, creed, age, handicap, financial status or lack of medical insurance as demonstrated in Section C."

In Section C.10, page 51, the applicant states that UNC Hospitals traditionally provides services to a wide variety of patient groups and provides the following supporting FY2016 data.

	Low Income	Racial & Ethnic Minorities	Women	Elderly	Other Underserved
UNC Hospitals Total	16.14%	36.2%	58.7%	26.4%	9.23%
Medical/Surgical Inpatients	27.89%	38.3%	46.3%	33.2%	5.42%

Low Income = Medicaid and ½ of Medicaid Pending; Other Underserved = Self Pay and ½ of Medicaid Pending. "Low income" is based on Federal poverty guidelines as outlined in the Patient Financial Assistance Policy contained in Exhibit C.10. "Elderly" is defined as patients age 65 and over.

In Section B.10, page 28, the applicant references Exhibit B.10 and its "Assuring Access at UNC Health Care" document, which outlines UNC Health System's commitment to provide adequate financial assistance and expand overall capacity in order to meet the health care needs of North Carolinians.

In Section L.4, page 85, the applicant discusses charity care, stating that UNC Hospitals' charity care program ensures that all eligible individuals receive medically necessary care at UNC Hospitals regardless of their ability to pay. In Section L.2(b), page 83, the applicant states that charity care provided by UNC Hospitals for FY2016 is estimated to be \$245 million and that UNC Hospitals provides care to all persons based only on their need for care, and without regard to minority status or handicap/disability. The applicant provides UNC Hospitals' current policies on access to services in Exhibit B.10.

The applicant adequately demonstrates that the proposal will promote adequate access.

Maximize Healthcare Value

In Section B.10(c), page 28, the applicant states that the proposed complementary applications are indicative of UNC Hospitals' commitment to containing healthcare costs and maximizing healthcare benefit per dollar expended. The applicant states that this proposed project will maximize healthcare value because:

- The proposed project will provide additional capacity to meet the continued need at UNC Main and UNC Hillsborough in the most cost effective manner;
- UNC Hospitals, as a member of the larger UNC Health Care System, benefits from the significant cost saving measures through the consolidation of multiple services and large economies of scale, resulting in lower costs that are passed to patients in the form of lower charges; and
- The project enables UNC Hospitals to continue to provide its patient population with the best patient care possible while being responsive to a healthcare environment that emphasizes cost containment, efficient utilization of existing resources, coordination with managed care and continued healthcare system development.

On page 29, the applicant states:

"...the proposed project incorporates the concepts of safety, quality, access, and maximum value for resources expended."

The information provided by the applicant is reasonable and adequately supports the determination that the applicant's proposal would maximize healthcare value and that its projected volumes incorporate the concepts of quality, equitable access and maximum value for resources expended in meeting the need identified in the 2017 SMFP. Therefore the application is conforming to Policy GEN-3.

Policy GEN-4: ENERGY EFFICIENCY AND SUSTAINABILITY FOR HEALTH SERVICE FACILITIES, on page 33 of the 2017 SMFP, is also applicable to this review. Policy GEN-4 states:

"Any person proposing a capital expenditure greater than \$2 million to develop, replace, renovate or add to a health service facility pursuant to G.S. 131E-178 shall include in its certificate of need application a written statement describing the project's plan to assure improved energy efficiency and water conservation.

In approving a certificate of need proposing an expenditure greater than \$5 million to develop, replace, renovate or add to a health service facility pursuant to G.S. 131E-178, Certificate of Need shall impose a condition requiring the applicant to develop and implement an Energy Efficiency and Sustainability Plan for the project that conforms to or exceeds energy efficiency and water conservation standards incorporated in the latest editions of the North Carolina State Building Codes. The plan must be consistent with the applicant's representation in the written statement as described in paragraph one of Policy GEN-4.

Any person awarded a certificate of need for a project or an exemption from review pursuant to G.S. 131E-184 are required to submit a plan of energy efficiency and water conservation that conforms to the rules, codes and standards implemented by the Construction Section of the Division of Health Service Regulation. The plan must be consistent with the applicant's representation in the written statement as described in paragraph one of Policy GEN-4. The plan shall not adversely affect patient or resident health, safety or infection control."

In Section B.10-11, pages 29-30, the applicant addresses Policy GEN-4, stating:

"UNC Hospitals will develop and implement an Energy Efficiency and Sustainability Plan for the proposed project that conforms to or exceeds the energy efficiency and water conservation standards incorporated in the latest editions of the NC State Building Codes. The Plan shall not adversely affect patient or resident health, safety or infection control."

UNC Hospitals proposes to add nine additional acute care beds to the Main Campus. The addition of the beds will require renovation of 15,900 square feet of existing space in the facility.

The applicant states that UNC Hospitals' Energy Efficiency and Sustainability Plan for the proposed project will address the following systems and features:

- 1. Lighting Systems Lighting systems will provide higher energy efficiency in accordance with energy efficiency and water conservation standards incorporated in the latest editions of the North Carolina State Building Codes. The lighting systems shall not adversely affect patient or resident health, safety or infection control.
- 2. Water Systems Water systems, hand wash facilities, and toilets will provide higher energy efficiency ...
- 3. Heating, Ventilation, and Air-conditioning (HVAC) Systems HVAC systems will provide higher energy efficiency ...
- 4. Minor Equipment will be evaluated prior to purchase and implementation based on energy efficiency and water conservation. ...
- 5. Other potential energy conservation measures for the project will be researched and evaluated by the project engineer and architect as well as UNCH administration.

The applicant adequately demonstrates the proposal includes a plan to assure improved energy efficiency and water conservation. Therefore, the application is consistent with Policy GEN-4, subject to Condition (4) in Criterion (4).

Conclusion

In summary, the applicant adequately demonstrates that its proposal to add acute care beds is consistent with the 2017 Acute Care Bed Need Determination, Policy GEN-3 and Policy GEN-4. Therefore, the application is conforming to this criterion, subject to Condition 4 in Criterion (4).

- (2) Repealed effective July 1, 1987.
- (3) The applicant shall identify the population to be served by the proposed project, and shall demonstrate the need that this population has for the services proposed, and the extent to which all residents of the area, and, in particular, low income persons, racial and ethnic minorities, women, handicapped persons, the elderly, and other underserved groups are likely to have access to the services proposed.

C

The applicant submitted two concurrent and complementary applications in response to the need identified in the 2017 SMFP for 41 additional beds in Orange County. In this application

UNC Hospitals proposes to develop nine additional general acute care beds at UNC Main. The nine proposed beds will be developed to backfill space on 4 West that is currently occupied by an unlicensed observation bed unit as well as respiratory services and support space. In addition to the development of nine new beds, the proposed project also includes the conversion of five existing double occupancy rooms to single occupancy, resulting in five existing licensed beds that will be developed in single occupancy rooms on 4 West alongside the nine additional new beds.

As part of an ongoing project deemed exempt from review by the Healthcare Planning and Certificate of Need Section on July 27, 2016, (Exhibit C.1-1), UNC Hospitals is in the process of renovating space on the first floor of the hospital to house a 25-bed unlicensed observation unit. As part of that exempt project, the existing observation spaces on 4 West will relocate to the first floor. That project is expected to be complete in June 2017, at which time the space on 4 West currently occupied by observation beds will be vacated.

The remainder of the space on 4 West that is proposed to be renovated as part of this project is currently occupied by respiratory services. UNC Hospitals proposes to relocate respiratory services to existing space on the ground floor of the hospital that has historically been used for central supply and distribution. The applicant states that several years ago, UNC Hospitals acquired an offsite shared central service center that houses, and distributes supplies for the hospital on an on-time delivery basis; thus the hospital has been reducing supplies stored onsite, such that, much of the ground floor central supply and distribution space is already vacant. When the limited amount of supplies remaining in that space are depleted, they will not be re-stocked onsite, rendering the entire space vacant and available for renovation to house respiratory services, which will be relocated from 4 West. The applicant states that all costs that are associated with the renovation of that space is included in the proposed capital cost in Form F.1a in Section Q.

The applicant states that the unit being vacated by observation and respiratory services on 4 West has sufficient space to accommodate up to 14 licensed acute care beds. As such, UNC Hospitals proposes to maximize that space by converting five existing double occupancy rooms elsewhere in the hospital (Rooms 6114, 6115, and 6116 in the Neurosciences Hospital; and 8309 and 8330 on the eighth floor of the bed tower) to single occupancy rooms, which will result in five displaced, existing licensed beds that will be developed in the renovated space on 4 West alongside the nine proposed new beds being developed in response to the need determination in the 2017 SMFP. Line drawings are provided in Exhibit C.1-2.

UNC Hospitals is not proposing to acquire additional major medical equipment or develop any other health services as part of this proposed project.

Patient Origin

On page 39, the 2017 SMFP defines the service area for acute care services as the planning area in which the bed is located. "An acute care bed's service area is the acute care bed planning area in which the bed is located. The acute care bed planning areas are the single and multicounty groupings shown in Figure 5.1." Figure 5.1 on page 42 of the SMFP shows Orange County as a single county acute care bed planning area. UNC Hospitals is located in Orange County. Thus, the service area for this facility consists of Orange County. Facilities may also serve residents of counties not included in their service area.

In Section C.2(a), pages 33-36, the applicant identifies the patient origin for UNC Main non-specialty medical/surgical (N-S M/S) acute care beds during FY2016, as summarized below.

Historical Patient Origin UNC Main N-S M/S Acute Care Bed

County of Residence	Days of Care as a Percent of Total
Orange	13.5%
Wake	10.6%
Alamance	7.7%
Cumberland	6.9%
Chatham	6.1%
Durham	5.4%
Lee	4.2%
Harnett	3.1%
Robeson	2.6%
Johnston	2.2%
Other NC Counties	34.7%
Total NC	97.0%
Other	3.0%
Total	100.0%

Totals may not sum due to rounding

Source: UNC Hospitals internal data. Other NC Counties includes patients from NC counties as listed on pages 33-36

As illustrated in the above table, residents of Orange, Wake, Alamance, Cumberland, Chatham, Durham, Lee, Harnett, Robeson and Johnston counties represent approximately 62% of UNC Main's N-S M/S acute care bed days of care. The table on pages 33-36 of the application illustrates that UNC Main provided inpatient acute care services to patients from all 100 counties across North Carolina and outside the State.

In C.3, pages 36-40, the applicant provides the projected patient origin for UNC Main's N-S M/S acute care beds, as a percent of total days, for the first three years following completion of the proposed project. The table below illustrates the ten North Carolina counties projected to have patient origin of at least two percent of the total N-S M/S acute care bed days of care, with 13.5%, the highest percentage originating in Orange County, and 10.6% originating in Wake County.

UNC Main Projected Patient Origin N-S M/S Acute Care Bed

	Days of C	are as a Percent	of Total
County of Residence	FY2022	FY2023	FY2024
Orange	13.5%	13.5%	13.5%
Wake	10.6%	10.6%	10.6%
Alamance	7.7%	7.7%	7.7%
Cumberland	6.9%	6.9%	6.9%
Chatham	6.1%	6.1%	6.1%
Durham	5.4%	5.4%	5.4%
Lee	4.2%	4.2%	4.2%
Harnett	3.1%	3.1%	3.1%
Robeson	2.6%	2.6%	2.6%
Johnston	2.2%	2.2%	2.2%
Other NC Counties	34.7%	34.7%	34.7%
Total NC	97.0%	97.0%	97.0%
Other	3.0%	3.0%	3.0%
Total	100.0%	100.0%	100.0%

Totals may not sum due to rounding.

The applicant states that the proposed project is not expected to change acute care patient origin; therefore, patient origin for the proposed project will remain consistent with its FY2016 patient origin.

The applicant adequately identifies the population it proposes to serve.

Analysis of Need

The applicant submitted two concurrent and complementary applications in response to the need identified in the 2017 SMFP for 41 additional beds in Orange County. In this application, the applicant proposes to develop nine additional acute care beds at UNC Main for a total of 798 acute care beds on that campus upon project completion. In Section C.4, pages 40-49, the applicant discusses the need for the project. On page 41, the applicant states:

"The overall need for the proposed complementary projects is based on the following factors:

- The need for additional acute care beds in Orange County identified in the 2017 SMFP;
- The continued need for additional capacity at UNC Hospitals;
- The projected population growth in Orange County; and
- The projected aging of the population in Orange County."

The applicant discusses the above factors on pages 41-49 of the application, as summarized below.

2017 SMFP Identified Need for Additional Acute Care Beds

In Section C.4, pages 41-43, the applicant discusses the identified need for additional acute care beds in the 2017 SMFP being triggered by the utilization of the total number of existing and approved acute care beds within a given service area. The applicant states that the 2015 utilization data from Truven Health Analytics is used to project the acute care bed need for 2019, using the Orange County growth rate multiplier of 1.0367, based on total UNC Hospitals' annual percentage of change in days of care, as shown in the table below.

	2015 Acute	Growth Rate	2019 Projected	2019 Projected
	Days of Care	Multiplier	Acute Care Days	ADC
UNC Hospitals	229,915	1.0367	265,570	728

Source: Table 5A, 2017 SMFP, page 48

Per the methodology in the 2017 SMFP, the Average Daily Census (ADC) is then multiplied by the appropriate target occupancy factor (1.28 for ADC > 400) to determine the projected bed need. Subtracting the existing and approved beds from the projected need results in the need determination for an additional 41 beds in Orange County, as shown in the table below.

	2019 Projected	Occupancy	Projected 2019	Existing and	Need
	ADC	Factor	Bed Need	Approved Beds	Determination
UNC Hospitals	728	1.28	931	890	41

On pages 42-43, the applicant states that since 2010, five need determinations for Orange County have been identified, as shown below:

Year	UNC Hospitals Project ID #	Additional AC Beds
2010	J-8501-10	36
2012	J-8812-12	27
2015	J-11032-15 and J-11034-15	46
2016	J-11163-16 and J-11164-16	84
2017	Currently Proposed, J-11337-17 and J-11338-17	41

UNC Hospitals received approval to develop the 36 bed (Project ID #J-8501-10), the 27 bed (Project ID #J-8812-12), the 46 bed (Project ID #J-11032-15 and #J-11034-15), and the 84 bed (Project ID J-11163-16 and J-11164-16) need determinations. The applicant states that despite these additional beds, UNC Hospitals still requires additional capacity to meet the needs of its patients as discussed below.

UNC Hospitals' Continued Need for Additional Capacity

On page 43, the applicant states:

"For several years, UNC Hospitals has experienced periods of extremely high utilization during which the availability of beds for new admissions has been challenged. The need for the additional 41 beds between [emphasis in original] the two UNC Hospitals campuses is primarily based on the inadequacy of the existing number of acute care beds to meet current and projected patient demand."

The applicant further states that because UNC Hospitals is a quaternary referral hospital, trauma center, and provider of specialty care for complex diseases for patients from all 100 North Carolina counties, the issue of capacity constraints is of great concern. The applicant also states that in spite of the submittal and approval of several CON applications to address patient needs, UNC Hospitals continues to experience high occupancies, must divert trauma patients, and occasionally must refuse to accept patients or delay transfers of patients from other facilities due to lack of an appropriate bed. The applicant further states that when a general (medical or surgical) acute care bed unit is full and new patients require admission, patients must be placed in beds in other units, not those dedicated to the patient's specific condition. This, the applicant states, can create a problem for access to beds for patients who would normally be admitted to the receiving unit for that specialty service's patients, which can lead to admissions being deferred, even for patients with life threatening disorders. The applicant also states that similar instances of delays occur when patients require private rooms and one is not available for admission.

On page 44, the applicant states:

"... despite the addition of capacity through previously approved acute care beds projects, UNC Hospitals operates consistently at high utilization rates, with a

compound annual growth rate in total patients days of 2.4 percent. For each of the past five federal fiscal years, UNC Hospitals has operated at occupancy levels greater than the 78 percent target identified in the 2017 SMFP for facilities with an average daily census (ADC) greater than 400."

The applicant provides a table on page 45 showing UNC Hospitals total acute care utilization from Federal Fiscal Year (FFY) 2012 through FFY2016, supporting the statement above.

The applicant discusses the development of UNC Hillsborough as a means to reduce crowded conditions at UNC Main, and its delay in development because of an appeal. UNC Hillsborough began offering inpatient services in September 2015, over two years after it originally intended to provide services. The applicant says the delay exacerbated the need at UNC Hospitals and for Orange County as the demand for inpatient services has outpaced the development of capacity.

UNC Hospitals expects its growth to continue in the future due to a number of factors: the addition of programming and physicians, increasing volume in its emergency department and inpatient beds, and the recent affiliation with several hospitals across the state which may result in increased transfers for tertiary and quaternary patients.

Population Growth and Aging

In Section C.4, pages 47-49, the applicant provides population data for Orange County. According to data from the North Carolina Office of State Budget and Management (NC OSBM), Orange County is the 19th fastest growing county in North Carolina based on numerical growth and the 25th fastest growing county based on percentage growth (Exhibit C.4). The NC OSBM projects Orange County's population to grow by 10.4% between 2010 and 2020, adding over 13,000 people within the decade. The applicant also provides a map on page 48 that shows that the county populations east, west and south of Orange County are growing at a medium to high rate, while the two counties north of Orange County are growing at a lower rate.

In discussing the aging of the population, the applicant states that by 2020, 15 percent of the total population in Orange County will be over the age of 65 (more than 22,000 people), up from 9.7% in 2010 (Exhibit C.4). Further, between 2010 and 2020, Orange County's population over the age of 65 is projected to grow by 72.4 percent. The applicant further states on page 47, that the aging is significant, "because, typically, older residents utilize healthcare services at a higher rate than those who are younger".

The applicant states that the improvement in access to acute care services will support the expected higher utilization of this population group. The applicant further states:

"Additionally, given that UNC Hospitals also serves patients residing outside of Orange County, the higher growth projected in other surrounding areas, such as Wake, Durham, and Chatham counties, will influence the utilization of UNC Hospitals.

Projected Utilization

UNC Hospitals operates on a July 1 to June 30 fiscal year (FY). This proposed project is expected to being operations July 1, 2020; thus the first three operating years for this project are UNC Hospitals' FY2021, FY2022 and FY2023. The concurrently filed, Project ID #J-11338-17 (add 32 acute care beds at UNC Hillsborough), is not expected to begin operations until October 1, 2020; thus, Project Year One (PY1) for that project begins October 1, 2020, the second quarter of UNC Hospitals' FY2021, and runs through September 30, 2021. The applicant provides its assumptions and methodology for projecting UNC Hospitals Main and Hillsborough N-S M/S and total acute care bed utilization through FY2024 in Section Q, Form C–Assumptions and Methodology, pages 1-14.

Total Acute Care Bed Utilization

The applicant provides its assumptions and methodology for projecting total acute care bed utilization for the proposed project in Section Q, Form C–Assumptions and Methodology, pages 1-6, as summarized below:

- FY = July 1 to June 30.
- PY1 = FY2021 = July 1, 2020 June 30, 2021.
- The table on page 2 of Form C-Assumptions and Methodology provides a summary of projects that impact UNC Hospitals' acute care bed capcity over the proposed projects' projected time horizon.
- UNC Hospitals intends to continue to develop programs and services to direct the shift of appropriate patients from UNC Main to UNC Hillsborough, including specialty physician coverage, transitional care services, and expanded ambulance patient transfer services between the two campuses.
- The table on Form C-Assumptions and Methodology, page 3, provides the historical utilization for UNC Main and UNC Hillsborough, showing a three-year compound annual growth rate (CAGR) of 2.2% from FY2014 through annualized FY2017.
- Given facility challenges and construction to develop additional acute care capacity
 at each campus, UNC Hospitals is not expected to add a substantial number of acute
 care beds until FY2021. As such, the applicant projects growth at the historical
 2.2% CAGR through FY2020, resulting in the following projection of total acute
 care days.

Projected UNC Hospitals Total Acute Care Bed Utilization

	FY2017	FY2018	FY2019	FY2020	CAGR
UNC Hospitals Total Acute Care Days	232,748	237,753	242,865	248,088	2.2%
UNC Hospitals Total Acute Care Beds	799	824	831	831	
UNC Hospitals Total AC Occupancy	79.8%	79.1%	80.1%	81.8%	

Totals may not sum due to rounding – Calculations show applicant actually used a more conservative 2.15% CAGR, rather than the computer rounded 2.2%

 The applicant further assumes UNC Hillsborough will achieve the acute care bed utilization through FY2020 shown in its previously approved application, Project ID #J-11163-16, which leaves the remainder of the projected utilization for UNC Main, as shown below.

Projected UNC Hospitals Total Acute Care Bed Utilization Apportioned to UNC Hillsborough and UNC Main

	FY2018	FY2019	FY2020
UNC Hospitals Total Acute Care Days	237,753	242,865	248,088
UNC Hillsborough Acute Care Patient			
Days per Project ID #J-11163-16	19,038	20,121	20,756
UNC Main Total Acute Care Patient Days	218,715	222,744	227,332

Totals may not sum due to rounding

• In FY2021, both campuses are projected to add beds: 30 at UNC Main, including nine in the concurrently filed Project ID #J-11337-17 and 21 beds that will backfill space currently occupied by inpatient rehabilitation beds to be relocated to UNC Hillsborough as part of Project ID #J-11164-16, and 50 at UNC Hillsborough in the four-story bed wing, including the 32 in this project and the 18 approved as part of Project ID #J-11163-16. With the additional beds, the applicant believes it will have capacity to grow utilization at a rate consistent with the SMFP growth rate of 3.7% annually, which is the historical growth rate for UNC Hospitals shown in the 2017 SMFP. The following table shows the projection of total acute care days for both campuses combined for FY2021 through FY2024, using the 3.7% annual growth rate.

Projected UNC Hospitals Total Acute Care Bed Utilization

	FY2021	FY2022	FY2023	FY2024	CAGR
UNC Hospitals Total Acute Care Days	257,193	266,632	276,417	286,562	3.7%
UNC Hospitals Total Acute Care Beds*	911	931	931	931	
UNC Hospitals Total AC Occupancy	77.3%	78.5%	81.3%	84.3%	

Totals may not sum due to rounding

• The applicant believes UNC Hillsborough will experience higher percentage growth than UNC Main given UNC Hillsborough will add more beds and those beds will result in a greater relative increase than for UNC Main; therefore, the applicant assumes that UNC Main utilization will continue to grow at its historical growth rate of 2.2% annually from FY2021 through FY2024 and that UNC Hillsborough will provide the remainder of the acute care days projected for the two UNC campuses, as shown in the following table.

UNC Hospitals Total Acute Care Bed Utilization by Campus

	FY2021	FY2022	FY2023	FY2024
UNC Hospitals Total Acute Care Days	257,193	266,632	276,417	286,562
UNC Main (assuming 2.2% growth)	232,221	237,214	242,316	247,526
UNC Hillsborough Acute Care Days				
(remainder)	24,972	29,417	34,102	39,035

Totals may not sum due to rounding

The applicant states that the resulting utilization at each campus is consistent with their historical experience and the relative size of the each facility and provides a table demonstrating occupancy on each campus, as summarized below.

UNC Hospitals Acute Care Bed Occupancy

	FY2021	FY2022	FY2023	FY2024
UNC Hillsborough Acute Care Days	24,972	29,417	34,102	39,035
UNC Hillsborough Acute Care Beds	133	133	133	133
UNC Hillsborough AC % Occupancy	51.4%	60.6%	70.2%	80.4%
UNC Main Acute Care Days	232,221	237,214	242,316	247,526
UNC Main Acute Care Beds	778	798	798	798
UNC Main Acute Care % Occupancy	81.8%	81.4%	83.2%	85.0%

Totals may not sum due to rounding

^{*}Table on page 2, Form C-Assumptions and Methodology provides assumption for total number of beds by year

As the table above shows, utilization of the total acute care beds on each campus will exceed 80 percent occupancy by FY2024.

Non-Specialty Medical/Surgical Acute Care Bed Utilization

The applicant provides its assumptions and methodology for projecting N-S M/S acute care bed utilization in Section Q, Form C-Assumptions and Methodology, pages 7-14, as summarized below:

• Consistent with the projection for total acute care days, N-S M/S acute care days for both campuses combined will grow 2.2% annually from FY2017 through FY2020 and 3.7% annually from FY2020 through FY2024, as shown below.

Projected UNC Hospitals N-S M/S Acute Care Bed Utilization

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
UNC Hospitals N-S M/S								
Acute Care Days	103,957	106,193	108,476	110,809	114,876	119,091	123,462	127,993
Growth Rate		2.2%	2.2%	2.2%	3.7%	3.7%	3.7%	3.7%

Totals may not sum due to rounding

 The applicant expects the distribution of the above projected utilization to change over time because of the proposed shift in appropriate patients to UNC Hillsborough to decompress UNC Main. The following table shows the distribution from FY2014 through FY2017, with the shift that occurred in FY2016 and FY2017.

UNC Hospitals Total N-S M/S Acute Care Bed Utilization Historical Distribution

	FY2014	FY2015	FY2016	FY2017
UNC Main N-S M/S Acute Care Days	100,763	102,559	101,352	95,316
UNC Main Total Acute Care Beds	218,356	220,376	217,892	221,859
UNC Main N-S M/S as % of Total UNC Main Acute Care	46.1%	46.5%	46.5%	43.0%
UNC Hillsborough N-S M/S Acute Care Days			5,506	8,641
UNC Hillsborough Total Acute Care Beds			5,999	10,889
UNC Hillsborough N-S M/S as % of Total Hillsborough AC			91.8%	79.4%

Totals may not sum due to rounding

• From FY2018 to FY2020, the applicant projects that N-S M/S days will continue to comprise 79.4% of total acute care days at UNC Hillsborough, resulting in the following table.

UNC Hillsborough Projected Acute Care Bed Utilization

	FY2018	FY2019	FY2020
UNC Hillsborough Total Acute Care Days	19,038	20,121	20,756
UNC Hillsborough N-S M/S as % of Total Hillsborough AC	79.4%	79.4%	79.4%
UNC Hillsborough N-S M/S Acute Care Days	15,108	15,968	16,471

Totals may not sum due to rounding

• The applicant assumes UNC Main will provide the remainder of the N-S M/S acute care days at UNC Hospitals, as shown below.

UNC Main Projected N-S M/S AC Bed Utilization

	FY2018	FY2019	FY2020
UNC Hospitals Total N-S M/S AC Days	106,193	108,476	110,809
UNC Hillsborough N-S M/S AC Days	15,108	15,968	16,471
UNC Main N-S M/S AC Days	91,085	92,508	94,337

Totals may not sum due to rounding

The resulting utilization at each campus is shown below.

UNC Hospitals Total N-S M/S Acute Care Bed Utilization

	FY2018	FY2019	FY2020
UNC Hillsborough N-S M/S Acute Care Days	15,108	15,968	16,471
UNC Hillsborough N-S M/S Acute Care Beds	65	65	65
UNC Hillsborough N-S M/S Acute Care % Occupancy	63.7%	67.3%	69.4%
UNC Main N-S M/S Acute Care Days	91,085	92,508	94,337
UNC Main N-S M/S Acute Care Beds	304	304	304
UNC Main N-S M/S Acute Care % Occupancy	82.1%	83.4%	85.0%

Totals may not sum due to rounding

• With the opening of the additional acute care beds at both campuses in FY2021, and in particular the 50 additional N-S M/S acute care beds at UNC Hillsborough, the applicant expects the N-S M/S acute care days to comprise 85% of the total acute care days at UNC Hillsborough, resulting in the following projection.

UNC Hillsborough Projected Total N-S M/S Acute Care Bed Utilization

	FY2021	FY2022	FY2023	FY2024
UNC Hillsborough Acute Care Days	24,972	29,417	34,102	39,035
UNC Hillsborough N-S M/S AC %	85%	85%	85%	85%
UNC Hillsborough N-S M/S AC Days	21,226	25,005	28,986	33,180

Totals may not sum due to rounding

• The applicant assumes UNC Main will provide the remainder of the N-S M/S days at UNC Hospitals, as shown below.

UNC Main Projected N-S M/S Acute Care Bed Utilization

	FY2021	FY2022	FY2023	FY2024
UNC Hospitals Total N-S M/S AC Days	114,876	119,091	123,462	127,993
UNC Hillsborough N-S M/S AC Days	21,226	25,005	28,986	33,180
UNC Main N-S M/S AC Days	93,649	94,087	94,476	94,813

Totals may not sum due to rounding

As a result of the above assumptions, and consistent with UNC Hospitals' historical experience and its intention to shift patients to UNC Hillsborough where they can be appropriately served while decompressing UNC Main, N-S M/S acute care days at UNC Main are projected to comprise a decreasing percentage of total acute care days, as shown in the following table.

UNC Main Total N-S M/S Acute Care Bed Utilization

	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
UNC Main N-S M/S								
Acute Care Days	95,316	91,085	92,508	94,337	93,649	94,087	94,476	94,813
UNC Main Total Acute								
Care Days	221,859	218,715	222,744	227,332	232,221	237,214	242,316	247,526
UNC Main N-S M/S AC								
Days as a % of Total AC								
Days	43.0%	41.6%	41.5%	41.5%	40.3%	39.7%	39.0%	38.3%

The following table summarizes the applicant's fiscal year projections (Form C) through FY2024 for UNC Hospitals total acute care beds, based on the assumptions and methodology, as discussed above.

Fiscal Year Projection of UNC Hospitals Acute Care Beds

	FY17 7/16-6/17^	FY18 7/17-6/18	FY19 7/18-6/19	FY20 7/19-6/20	FY21 7/20-6/21	FY22 7/21-6/22	FY23 7/22-6/23	FY24 7/23-6/24	
Non-Specialty	Medical/Surgi	ical Acute Ca	re Bed Utiliz	ation					
UNC Main Non-specialty Medical/Surgical Bed Utilization									
# Beds	304	304	304	304	334	354	354	354	
Discharges	17,135	16,374	16,630	16,959	16,835	16,914	16,984	17,044	
Patient Days	95,316	91,085	92,508	94,337	93,649	94,087	94,476	94,813	
UNC Hillsboro	ough Non-spec	ialty Medical	/Surgical Be	d Utilization					
# Beds	54	65	65	65	115	115	115	115	
Discharges	2,092	3,657	3,865	3,987	5,138	6,052	7,016	8,031	
Patient Days	8,641	15,108	15,968	16,471	21,226	25,005	28,986	33,180	
UNC Hospitals	UNC Hospitals Combined Non-specialty Medical/Surgical Bed Utilization								
# Beds	358	369	369	369	449	469	469	469	
Discharges	19,227	20,031	20,495	20,946	21,973	22,966	24,000	25,075	
Patient Days	103,957	106,193	108,476	110,808	114,875	119,092	123,462	127,993	
Total Acute Ca	are Bed Utiliza	tion							
UNC Main Tot	tal Acute Care	Bed Utilizati	on						
# Beds	727	741	748	748	778	798	798	798	
Discharges	35,105	34,498	35,124	25,875	36,513	37,239	37,978	38,730	
Patient Days	221,859	218,715	222,744	227,332	232,221	237,214	242,316	247,526	
UNC Hillsboro	ough Total Acı	ite Care Bed	Utilization						
# Beds	72	83	83	83	133	133	133	133	
Discharges	2,419	4,230	4,470	4,611	5,684	6,695	7,762	8,885	
Patient Days	10,889	19,038	20,121	20,756	24,972	29,417	34,102	39,035	
UNC Hospitals	UNC Hospitals Combined Acute Care Bed Utilization								
# Beds	799	824	831	831	911	931	931	931	
Discharges	37,524	38,728	39,594	30,486	42,197	43,934	45,740	47,615	
Patient Days	232,748	237,753	242,865	248,088	257,193	266,632	276,417	286,562	

^Annualized

Assumptions:

- FY2017 Annualized is based on 215 days of actual FY2017 data annualized over 365 days.
- Number of total acute care beds is based on UNC Hospitals' current acute care beds by campus and approved and proposed projects impacting beds by campus.
- Number of discharges is based on UNC Hospitals' number of patient days by bed type and location and FY2017 actual average length of stay.
- Number of patient days is based on assumptions and methodology for Form C.

In Section C.4, beginning on page 45, the applicant discusses occupancy rates for UNC Hospitals Main and Hillsborough, stating that UNC Hospitals (Main and Hillsborough combined) must meet the target occupancy of 75.2%, as required in Section .3800 Criteria and Standards for Acute Care Beds – 10A NCAC 14C .3803(a). This rule states:

"An applicant proposing to develop new acute care beds shall demonstrate that the projected average daily census (ADC) of the total number of licensed acute care beds proposed to be licensed within the service area, under common ownership with the applicant, divided by the total number of those licensed acute care beds is reasonably projected to be at least 66.7 percent when the projected ADC is less than 100 patients, 71.4 percent when the projected ADC is 100 to 200 patients, and 75.2 percent when the projected ADC is greater than 200 patients, in the third operating year following completion of the proposed project or in the year for which the need determination is identified in the State Medical Facilities Plan, whichever is later."

On page 14 of Form C-Assumptions and Methodology in Section Q, the applicant provides the projected utilization for the first three project years at UNC Main, which co-inside with UNC Hospitals' FY2021, FY2022, and FY2023.

Projected UNC Hospitals Total Acute Care Inpatient Utilization

Trojected erre trospitais rotal fredte eare inputient etilization						
	PYI	PY2	PY3			
	FY2021	FY2022	FY2023			
UNC Main Total AC Days	232,221	237,214	242,316			
UNC Hillsborough Total AC Days	24,972	29,417	34,102			
UNC Hospitals Total AC Days	257,193	266,632	276,417			
UNC Hospitals Total AC Beds	911	931	931			
UNC Hospitals Total AC % Occupancy	77.3%	78.5%	81.3%			

Totals may not sum due to rounding.

As the table above shows, UNC Hospitals' total utilization at the end of the proposed project's third operating year is above the required 75.2% occupancy rate required in the performance standard, 10A NCAC 14C .3803(a).

The applicant demonstrates the projected utilization is based on reasonable and adequately supported assumptions. The applicant adequately demonstrates the need the identified population has for the nine additional acute care beds at UNC Main.

Access

In Section C.10, page 51, the applicant discusses how the proposed project will promote equitable access. The applicant states:

"As North Carolina's only state-owned comprehensive, full service hospital-based program, UNC Hospitals has the obligation to accept any North Carolina citizen requiring medically necessary treatment. No North Carolina citizen is presently denied access to non-elective care because of race, sex, creed, age, handicap, financial status or lack of medical insurance."

In Section B.10(b), page 28, the applicant states that the document "Assuring Access at UNC Health Care" found in Exhibit B.10, highlights UNC Hospital's effort to provide adequate financial assistance and expand its overall capacity in order to meet the health care needs of North Carolinians.

In Section L.1, page 82, the applicant provides the following information on the percentage of patients served by UNC Hospitals, based on FY2016 data.

	Percentage Served by UNC Hospitals	Percentage in Orange County
Women	58.7%	52.1%
65 and Older	26.4%	12.0%
Racial Minorities	36.2%	27.6%

Source: UNC Hospitals internal data and ESRI population reports

In Section C.10, page 51, and Section L.2(b), page 84, the applicant states that UNC Hospitals has traditionally provided services to a wide variety of patient groups, as evidenced by the information as summarized below.

		Racial & Ethnic			Other
	Low Income	Minorities	Women	Elderly	Underserved
UNC Hospitals Total	16.1%	36.3%	58.7%	26.4%	9.2%
Med/Surg Inpatients	27.9%	38.3%	46.3%	33.2%	5.4%

Low Income = Medicaid and ½ of Medicaid Pending; Other Underserved = Self Pay and ½ of Medicaid Pending. "Low income" is based on Federal poverty guidelines as outlined in the Patient Financial Assistance Policy contained in Exhibit C.10. "Elderly" is defined as patients age 65 and over.

In Section L.4, page 85, the applicant discusses charity care, stating that UNC Hospitals' charity program ensures that all eligible individuals receive medically necessary care at UNC Hospitals regardless of their ability to pay. Exhibit B.10 contains the Hospital's current policies on access to services.

In Section Q, Form F.3, the applicant shows that UNC Hospitals will provide approximately \$342,500,000 and \$366,000,000 in charity care in project years one and two, respectively; and approximately \$143,000,000 and \$153,000,000 in bad debt in project years one and two, respectively.

The applicant adequately demonstrates the extent to which residents of the area, including underserved groups, are likely to have access to the proposed services.

Conclusion

In summary, the applicant adequately identifies the population to be served, demonstrates the need the population to be served has for the proposed project and the extent to which all residents of the area, including underserved groups, are likely to have access to the proposed services. Therefore, the application is conforming to this criterion.

(3a) In the case of a reduction or elimination of a service, including the relocation of a facility or a service, the applicant shall demonstrate that the needs of the population presently served will be met adequately by the proposed relocation or by alternative arrangements, and the effect of the reduction, elimination or relocation of the service on the ability of low income persons, racial and ethnic minorities, women, handicapped persons, and other underserved groups and the elderly to obtain needed health care.

NA

The applicant is not proposing a reduction or elimination of a service.

(4) Where alternative methods of meeting the needs for the proposed project exist, the applicant shall demonstrate that the least costly or most effective alternative has been proposed.

CA

In Section E.2, pages 59-60, the applicant describes the alternatives considered, which include the following:

- 1) Maintain Status Quo UNC Hospitals considered maintaining the status quo, however, the applicant concluded this option would force UNC Hospitals to continue to operate with inefficiencies and the frequent inability to place patients in the most appropriate beds. The applicant also states that patients would continue to endure long wait times in the emergency room while waiting for a bed, in addition to surgical case delays and delays in the delivery of critical treatment due to lack of appropriate bed availability. Furthermore, the applicant states that without investing in additional beds, UNC Hospitals would have limited options to accommodate future population growth. Therefore, the applicant did not consider maintaining the status quo a practical alternative.
- 2) Build a New Bed Tower on the Main Campus the applicant evaluated this alternative and future master facility plans do include a new bed tower at UNC Main; however, the

applicant states that this option is not practically or financially feasible in the near term and is therefore not the most effective alternative at this time.

3) Develop the Concurrently Filed Projects as Proposed – The applicant states on page 60 that UNC Hospitals' concurrently filed applications for 32 additional beds at UNC Hillsborough and nine additional beds at UNC Main is the most effective alternative to meet the identified need for 41 additional acute care beds in Orange County. The applicant states:

"The proposals are cost-effective because the 41 additional beds can be developed in existing/previously [sic] space at each facility that will require minimal construction /renovation as compared to new construction to house the proposed beds."

The applicant states that the project as proposed is the most reasonable and cost-effective alternative for meeting the identified need for additional beds in Orange County and at UNC Hospitals.

The applicant adequately demonstrates that the proposed project to develop 32 additional acute care beds at UNC Hillsborough is the most effective alternative to meet the identified need.

Furthermore, the application is conforming or conditionally conforming to all other applicable statutory and regulatory review criteria, and thus, is approvable. A project that cannot be approved cannot be an effective alternative.

In summary, the applicant adequately demonstrates that its proposal is the least costly or most effective alternative to meet the identified need. Therefore, the application is conforming to this criterion and approved subject to the following conditions.

- 1. University of North Carolina Hospitals at Chapel Hill shall materially comply with all representations made in the certificate of need application.
- 2. University of North Carolina Hospitals at Chapel Hill shall not acquire, as part of this project, any equipment that is not included in the project's proposed capital expenditure in Section Q, Form F.1a of the application and which would otherwise require a certificate of need.
- 3. University of North Carolina Hospitals at Chapel Hill shall develop no more than nine additional acute care beds at UNC Hospitals Chapel Hill Campus for a total of no more than 798 acute care beds on that campus. This project and Project ID #J-11338-17 (add 32 acute care beds at UNC Hospitals Hillsborough Campus for a total of no more than 133) would bring the total number of acute care beds for UNC

Hospitals to 931 beds, upon completion of both projects and previously approved Project ID #J-11163-16 and Project ID #J-11164-16.

- 4. University of North Carolina Hospitals at Chapel Hill shall develop and implement an energy efficiency and sustainability plan for the project that conforms to or exceeds energy efficiency and water conservation standards incorporated in the latest editions of the North Carolina State Building Codes.
- 5. Prior to issuance of the certificate of need, University of North Carolina Hospitals at Chapel Hill shall acknowledge acceptance of and agree to comply with all conditions stated herein in writing to the Certificate of Need Section.
- (5) Financial and operational projections for the project shall demonstrate the availability of funds for capital and operating needs as well as the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services by the person proposing the service.

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The applicant proposes to develop nine additional acute care beds at UNC Main for a total of 798 licensed acute care beds at UNC Main upon project completion. The project involves locating the proposed nine new beds, along with five more beds made available through the conversion of five double occupancy rooms to single-occupancy rooms in renovated space on 4 West. It also involves the relocation of respiratory services from 4 West to renovated existing space vacated by the relocation of central supply and distribution services.

Capital and Working Capital Costs

In Section Q, Form F.1a, the applicant states that the total capital cost of the project will be \$9,731,257, as shown in the table below.

Project Capital Cost

Construction / Renovation	\$5,242,326
Medical Equipment	\$1,246,996
Furniture	\$559,425
Architect & Engineering Fees	\$786,349
IT Costs	\$112,000
Contingency	\$1,784,161
Total Capital Cost	\$9,731,257

Exhibit F.1 contains a March 22, 2017 cost estimate by a licensed architect, verifying the projected costs as shown above.

In Section F.3, pages 63-64, the applicant states there will be no start-up or initial operating expenses associated with the proposed project.

Availability of Funds

In Section F.2, page 62, the applicant states that the project will be funded through UNC Hospitals' accumulated reserves. Exhibit F.2-1 contains an April 17, 2017 letter signed by the Executive Vice President and CFO for UNC Hospitals, which states:

"The total capital expenditure for this project is estimated to be \$9,731,257. There are no start-up costs related to this project.

UNC Hospitals will fund the capital cost from existing accumulated cash reserves. This expenditure will not impact any other capital projects currently underway or planned for at this time. For verification of the availability of these funds and our ability to finance these projects internally, please refer to the "Cash and Cash Equivalents" line item in the audited financial statements included with this Certificate of Need application."

Exhibit F.2-2 contains the audited financial statements for UNC Hospitals for the year ending June 30, 2016. As of June 30, 2016, UNC Hospitals had \$190,080,877 in cash and cash equivalents and \$1,311,716,613 in net assets. The applicant adequately demonstrates the availability of sufficient funds for the capital needs of the project.

Financial Feasibility

The information provided by the applicant in Section Q, Form F.4 shows that UNC Main's medical/surgical services expenses will exceed revenues in each of the first three fiscal years following completion of the proposed project, as shown below.

UNC Main Medical/Surgical Services	PY1 FY2021	PY2 FY2022	PY3 FY 2023
Projected # of Patient Days	93,649	94,087	94,476
Projected Average Charge	\$2,613.51	\$2,691.91	\$2,772.64
Gross Patient Revenue	\$244,751,990	\$253,272,125	\$261,948,865
Deductions from Gross Patient Revenue	\$152,265,485	\$157,566,044	\$162,964,031
Net Patient Revenue	\$92,486,505	\$95,706,081	\$98,984,834
Total Expenses	\$120,850,999	\$124,996,549	\$129,218,752
Net Income Fiscal Year	(\$28,364,493)	(\$29,290,469)	(\$30,233,918)

Totals may not sum due to rounding

However, Form F.3, the Statement of Revenue and Expenses for UNC Hospital's entire facility shows that revenue exceeds expenses in each of the first three fiscal years following completion of the proposed project, as shown below.

UNC Hospitals Facility-Wide	PY1 FY2021	PY2 FY2022	PY3 FY 2023
Gross Patient Revenue	\$4,946,726,742	\$5,282,119,762	\$5,640,252,764
Deductions from Gross Patient Revenue	\$2,918,714,359	\$3,116,606,111	\$3,327,915,122
Net Patient Revenue	\$2,028,012,383	\$2,165,513,651	\$2,312,337,642
Other Operating Revenue	\$39,801,640	\$39,801,640	\$39,801,640
Total Expenses	\$1,783,546,598	\$1,902,706,050	\$2,028,529,946
Net Income Fiscal Year	\$284,267,426	\$302,609,241	\$323,609,336

Totals may not sum due to rounding

The applicant projects that facility-wide revenues will exceed operating expenses in each of the first three years of the project for UNC Hospitals. The assumptions used by the applicant in preparation of the pro forma financial statements (included in Section Q) are reasonable including projected utilization, costs and charges. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference. The applicant adequately demonstrates that the financial feasibility of the proposal is based upon reasonable projections of costs and charges.

Conclusion

In summary, the applicant adequately demonstrates that sufficient funds will be available for the capital and operating needs of the project. Furthermore, the applicant adequately demonstrates that the financial feasibility of the proposal is based upon reasonable projections of costs and charges. Therefore, the application is conforming to this criterion.

(6) The applicant shall demonstrate that the proposed project will not result in unnecessary duplication of existing or approved health service capabilities or facilities.

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On page 39, the 2017 SMFP defines the service area for acute care services as the planning area in which the bed is located. "An acute care bed's service area is the acute care bed planning area in which the bed is located. The acute care bed planning areas are the single and multicounty groupings shown in Figure 5.1." Figure 5.1 on page 42 of the SMFP shows Orange County as a single county acute care bed planning area. UNC Hospitals is located in Orange County. Thus, the service area for this facility consists of Orange County. Facilities may also serve residents of counties not included in their service area.

The 2017 SMFP identifies a need determination for 41 additional acute care inpatient beds in the Orange County service area. UNC Hospitals is the only provider of acute care hospital services located in Orange County. UNC Hospitals proposes to add 41 acute care beds for a total of 931 facility-wide acute care beds upon completion of this project (add nine beds at UNC Main), concurrently filed application, Project ID #J-11338-17 (add 32 beds at UNC Hillsborough), and previously approved Project ID #J-11163-16 (add 29 beds at UNC Hillsborough) and Project ID #J-11164-16 (add 55 beds at UNC Main). The applicant does not propose to develop more acute care beds than are determined to be needed in the service area. The applicant adequately demonstrates the need the population proposed to be served has for the nine additional acute care beds at UNC Main. The discussions regarding analysis of need, including projected utilization, and access, found in Criteria (3) and (4), respectively, are incorporated herein by reference.

Therefore, the applicant adequately demonstrates the project would not result in unnecessary duplication of existing or approved acute care services in the Orange County service area. Consequently, the application is conforming to this criterion.

(7) The applicant shall show evidence of the availability of resources, including health manpower and management personnel, for the provision of the services proposed to be provided.

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In Section Q, Form H, the table and the assumptions show the projected incremental staff that a 15-bed N-S M/S acute care unit will require upon project completion. The following table summarizes the projected staffing for the second full fiscal year following the completion of the project.

Proposed Staffing UNC Main 15-bed Non-Specialty Medical /Surgical Acute Care Bed Unit FY2022

	Total # of FTE Position	Average Annual Salary	Total Projected Salary
Patient Services Manager III	1.0	\$ 114,123	\$114,123
Clinical Nurse IV	1.0	\$ 93,434	\$93,434
Clinical Nurse II	20.4	\$ 70,366	\$1,435,466
Clinical Support Tech II	13.6	\$ 37,441	\$509,198
Totals	36.0		\$ 2,152,220

Totals may not sum due to rounding

As illustrated in the table above, the applicant projects 36.0 full-time equivalent (FTE) positions in FY2022, the second full fiscal year following completion of the proposed project. In Section H.3, page 71, the applicant states that the project will not involve the addition of any new

positions because the staff positions for the services are already in place, as the services are operational.

In Section H.2, pages 70-71, the applicant provides UNC's recruitment and staff retention plans. In Section H.4, pages 71-72, the applicant states Dr. Tony Lindsey is the Chief Medical Officer for UNC Hospitals and Dr. Ronald Falk and Dr. Melinda Kibbe serve as Chair of the Department of Medicine and Chair of the Department of Surgery, respectively, for UNC Main. See Exhibit H.4 for copies of physician letters of support.

As discussed above, the applicant has projected staffing for a 15-bed N-S M/S unit; however, the proposed project will create only a 14-bed N-S M/S unit, as the applicant states in Section C.1, pages 31-32:

"In summary, UNC Hospitals proposes to develop nine additional acute care beds in response to the need determination in the 2017 SMFP, and to convert five existing double occupancy rooms to single occupancy rooms. Please see Exhibit C.1 for existing and proposed line drawings of 4 West and the ground floor space included in this project."

The applicant has included staffing for more beds than will be created; therefore, the applicant demonstrates the availability of adequate health manpower and management personnel to provide the proposed services, and therefore, the application is conforming to this criterion.

(8) The applicant shall demonstrate that the provider of the proposed services will make available, or otherwise make arrangements for, the provision of the necessary ancillary and support services. The applicant shall also demonstrate that the proposed service will be coordinated with the existing health care system.

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The applicant states that UNC Hospitals currently provides acute care inpatient services and has the necessary ancillary and support services currently available. In Section I.1 (a), page 73, the applicant states:

"UNC Hospitals currently has all ancillary and support services in place necessary to support hospital operations. These existing ancillary and support services will also support the nine additional beds to be developed as proposed in this application. Patients that are admitted to the proposed beds may require the use of any of UNC Hospitals' existing ancillary and support services, including laboratory, radiology, pharmacy, housekeeping, maintenance, and administration, among others. Ancillary and support services will continue to be provided at the min campus upon completion of the proposed project."

Exhibit I.1 contains a letter from the President of UNC Hospitals attesting to the availability of the necessary ancillary and support services.

In Section I.2, page 73, the applicant states that UNC Hospitals has established relationships with area healthcare and social service providers. The applicant further states that the relationships will continue following completion of the proposed project. Exhibit I.2 contains letters of support from area healthcare providers.

The applicant adequately demonstrates the availability of the necessary ancillary and support services and that the proposed services will be coordinated with the existing health care system. Therefore, the application is conforming to this criterion.

(9) An applicant proposing to provide a substantial portion of the project's services to individuals not residing in the health service area in which the project is located, or in adjacent health service areas, shall document the special needs and circumstances that warrant service to these individuals.

NA

- (10) When applicable, the applicant shall show that the special needs of health maintenance organizations will be fulfilled by the project. Specifically, the applicant shall show that the project accommodates: (a) The needs of enrolled members and reasonably anticipated new members of the HMO for the health service to be provided by the organization; and (b) The availability of new health services from non-HMO providers or other HMOs in a reasonable and cost-effective manner which is consistent with the basic method of operation of the HMO. In assessing the availability of these health services from these providers, the applicant shall consider only whether the services from these providers:
 - (i) would be available under a contract of at least 5 years duration;
 - (ii) would be available and conveniently accessible through physicians and other health professionals associated with the HMO;
 - (iii) would cost no more than if the services were provided by the HMO; and
 - (iv) would be available in a manner which is administratively feasible to the HMO.

NA

- (11) Repealed effective July 1, 1987.
- (12) Applications involving construction shall demonstrate that the cost, design, and means of construction proposed represent the most reasonable alternative, and that the construction project will not unduly increase the costs of providing health services by the person proposing the construction project or the costs and charges to the public of providing health services by other persons, and that applicable energy saving features have been incorporated into the construction plans.

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In Section K.1, page 76, the applicant states that the proposed project does not involve construction of new space. As the applicant discusses in Section C.1, pages 31-32, the proposed nine additional beds will be developed by renovating existing space on 4 West currently used to house observation beds and respiratory services. Respiratory services will move to the ground floor and will also require some renovation, but the applicant states that the required renovation represents a much more cost effective alternative for developing additional acute care beds at UNC Main than would new construction. Exhibit F.1 contains a certified estimate projecting renovation and miscellaneous costs totaling \$9,731,257, which corresponds to the capital cost projections provided by the applicant in Section Q, Form F.1a. In Section K.4(c), pages 77-78, the applicant describes the methods that will be used by the facility to maintain efficient energy operations and contain the costs of utilities. discussion regarding costs and charges found in Criterion (5) is incorporated herein by reference. The applicant adequately demonstrates that the proposed cost, design and means of construction represent the most reasonable alternative, and that the construction cost will not unduly increase costs and charges for health services. Therefore, the application is conforming to this criterion.

- (13) The applicant shall demonstrate the contribution of the proposed service in meeting the health-related needs of the elderly and of members of medically underserved groups, such as medically indigent or low income persons, Medicaid and Medicare recipients, racial and ethnic minorities, women, and handicapped persons, which have traditionally experienced difficulties in obtaining equal access to the proposed services, particularly those needs identified in the State Health Plan as deserving of priority. For the purpose of determining the extent to which the proposed service will be accessible, the applicant shall show:
 - (a) The extent to which medically underserved populations currently use the applicant's existing services in comparison to the percentage of the population in the applicant's service area which is medically underserved;

C

In Section L.1(b), page 83, the applicant reports the following payor mix for UNC Hospitals' entire facility and UNC Main's N-S M/S acute care inpatient services for FY2016, as illustrated in the table below:

Last Full FY 7/1/15-6/30/16 Inpatient Days as a Percent of Total Utilization

Payor Source	Entire Facility	UNC Main N-S M/S AC Services	
Self-Pay / Indigent / Charity	5.9%	6.8%	
Medicare	33.3%	48.4%	
Medicaid	28.5%	17.5%	
Commercial Insurance/ Managed Care	27.3%	23.1%	
Other (Other Gov't)	4.9%	4.2%	
Total	100.0%	100.0%	

Totals may not sum due to rounding

As shown in the table above, the applicant states that 17.5% of its N-S M/S acute care services were reimbursed by Medicaid and 48.4% were reimbursed by Medicare during FY2016.

In Section L.2(b), pages 83-84, the applicant states:

"As North Carolina's only state-owned comprehensive, full service hospital-based program, UNC Hospitals has the obligation to accept any North Carolina citizen requiring medically necessary treatment. No North Carolina citizen is presently denied access to non-elective care because of race, sex, creed, age, handicap, financial status or lack of medical insurance.

The proposed project will be designed in accordance with the latest State of North Carolina and Federal guidelines for handicapped accessibility. The project incorporates all applicable provisions of the Americans with Disabilities Act."

The applicant further states that UNC Hospitals has traditionally provided services to a wide variety of patient groups, as shown on page 84 and in the following table providing utilization percentages for UNC Hospitals as a whole and the medical/surgical acute care inpatient service in FY2016.

	Low	Racial & Ethnic			Other
	Income	Minorities	Women	Elderly	Underserved
UNC Hospitals Total	16.14%	36.2%	58.7%	26.4%	9.23%
Medical/Surgical Inpatients	27.89%	38.3%	46.3%	33.2%	5.42%

Low Income = Medicaid and ½ of Medicaid Pending; Other Underserved = Self Pay and ½ of Medicaid Pending. "Low income" is based on Federal poverty guidelines as outlined in the Patient Financial Assistance Policy contained in Exhibit C.10. "Elderly" is defined as patients age 65 and over.

The United States Census Bureau provides demographic data for North Carolina and all counties in North Carolina. The following table contains relevant demographic statistics for the applicant's service area.

Percent of Population							
County	% Racial % Persons % < Age 65 % < Age 65 with a without Health Poverty** Disability Insurance**						
	2014 Estimate	2014 Estimate	2014 Estimate	2010-2014	2010-2014	2014 Estimate	
Orange	11%	52%	30%	14%	6%	15%	
Statewide	15%	51%	36%	17%	10%	15%	

http://www.census.gov/quickfacts/table

Latest Data as of 12/22/15

However, a direct comparison to the applicant's current payor mix would be of little value. The population data by age, race or gender does not include information on the number of elderly, minorities, women or handicapped persons utilizing health services.

The applicant demonstrates that it currently provides adequate access to medically underserved populations. Therefore, the application is conforming to this criterion.

(b) Its past performance in meeting its obligation, if any, under any applicable regulations requiring provision of uncompensated care, community service, or access by minorities and handicapped persons to programs receiving federal assistance, including the existence of any civil rights access complaints against the applicant;

C

Recipients of Hill-Burton funds were required to provide uncompensated care, community service and access by minorities and handicapped persons. In Section L.2(b), page 83, the applicant states:

"UNC Hospitals has long since satisfied its "free care" obligation under the Hill-Burton Act. Charity care provided by UNC Hospitals for Fiscal Year 2016 is estimated to be \$245 million. UNC Hospitals provides care to all persons based only on their need for care, and without regard to minority status or handicap/disability."

See Exhibits B.10-5 and C.10 for copies of the applicant's Assuring Access at UNC Health Care and Financial Assistance policies, respectively.

^{*}Excludes "White alone" who are "not Hispanic or Latino"

^{**&}quot;This geographic level of poverty and health estimates are not comparable to other geographic levels of these estimates. Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable...The vintage year (e.g., V2015) refers to the final year of the series (2010 thru 2015). Different vintage years of estimates are not comparable."

In Section L.2(c), page 84, the applicant states that it has not been notified of any civil rights equal access complaints being filed against the hospital and/or any facilities or services owned by the hospital within the past five years. Therefore, the application is conforming to this criterion.

(c) That the elderly and the medically underserved groups identified in this subdivision will be served by the applicant's proposed services and the extent to which each of these groups is expected to utilize the proposed services; and

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In Section L.3(a), page 85, the applicant provides the projected payor mix for the entire facility, and UNC Main's N-S M/S acute care services for PY2, FY2022 (July 1, 2021 – June 30, 2022), the second full fiscal year following completion of the project, as illustrated in the table below:

Projected FY2022 Payor Mix Inpatient Days as a Percent of Total Utilization

Payor Source	Entire Facility	UNC Main N-S M/S AC Services				
Self-Pay / Indigent / Charity	5.9%	6.8%				
Medicare	33.3%	48.4%				
Medicaid	28.5%	17.5%				
Commercial Insurance/ Managed Care	27.3%	23.1%				
Other (Other Gov't)	4.9%	4.2%				
Total	100.0%	100.0%				

Totals may not sum due to rounding

On page 85, the applicant states:

"UNC Hospitals does not expect that the proposed project will change payor mix. Thus, UNC Hospitals assumed payor mix will remain consistent with its historical payor mix through the third project year."

The applicant adequately demonstrates the extent to which medically underserved populations will have access to the proposed services. Therefore, the application is conforming to this criterion.

(d) That the applicant offers a range of means by which a person will have access to its services. Examples of a range of means are outpatient services, admission by house staff, and admission by personal physicians.

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In Section L.5, page 86, the applicant describes the range of means by which a person will have access to its services, including by physician referral. The applicant adequately demonstrates that the facility will offer a range of means by which patients will have access to the proposed services. The information provided in Section L.5 is reasonable and credible and supports a finding of conformity to this criterion.

(14) The applicant shall demonstrate that the proposed health services accommodate the clinical needs of health professional training programs in the area, as applicable.

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In Section M.1, pages 87-89, the applicant states that UNC Hospitals serves as a clinical site for a broad range of healthcare disciplines including medical, dental, public health, pharmacy, and nursing students, as well as others. The applicant also states that the inpatient medical/surgical units work with the UNC School of Nursing through the Clinical Partners Program to provide a clinical rotation for nursing students. Clinical rotations are also offered to students at Durham Technical College, Rockingham Community College, UNC Eshelman School of Pharmacy, and UNC Department of Allied Health Sciences. The applicant further states that the proposed project will be available as a clinical site for training programs and UNC Hospitals' medical and surgical programs will continue to serve as a training site with the addition of the proposed acute care beds. The information provided in Section M.1 is reasonable and credible and supports a finding of conformity to this criterion.

- (15) Repealed effective July 1, 1987.
- (16) Repealed effective July 1, 1987.
- (17) Repealed effective July 1, 1987.
- (18) Repealed effective July 1, 1987.
- (18a) The applicant shall demonstrate the expected effects of the proposed services on competition in the proposed service area, including how any enhanced competition will have a positive impact upon the cost effectiveness, quality, and access to the services proposed; and in the case of applications for services where competition between providers will not have a favorable impact on cost-effectiveness, quality, and access to the services proposed, the applicant shall demonstrate that its application is for a service on which competition will not have a favorable impact.

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On page 39, the 2017 SMFP defines the service area for acute care services as the planning area in which the bed is located. "An acute care bed's service area is the acute care bed planning area in which the bed is located. The acute care bed planning areas are the single

and multicounty groupings shown in Figure 5.1." Figure 5.1 on page 42 of the SMFP shows Orange County as a single county acute care bed planning area. UNC Hospitals is located in Orange County. Thus, the service area for this facility consists of Orange County. Facilities may also serve residents of counties not included in their service area.

The 2017 SMFP identifies a need determination for 41 additional acute care inpatient beds in the Orange County service area. UNC Hospitals is the only provider of acute care hospital services located in Orange County. UNC Hospitals proposes to add 41 acute care beds for a total of 931 facility-wide acute care beds upon completion of this project (add nine beds at UNC Main), concurrently filed application, Project ID #J-11338-17 (add 32 beds at UNC Hillsborough), and previously approved Project ID #J-11163-16 (add 29 beds at UNC Hillsborough) and Project ID #J-11164-16 (add 55 beds at UNC Main). The applicant does not propose to develop more acute care beds than are determined to be needed in the service area. The applicant adequately demonstrates the need the population proposed to be served has for the nine additional acute care beds at UNC Main. The discussions regarding analysis of need, including projected utilization, and access, found in Criteria (3) and (4), respectively, are incorporated herein by reference.

In Section N, pages 90-92, the applicant discusses how any enhanced competition in the service area will promote cost-effectiveness, quality and access to the proposed services. The applicant states:

"UNC Hospitals believes that the proposed project may foster some competition in the proposed service area, particularly as the only provider of acute care services in the service area. However, the proposed project is not specifically being developed to foster competition per se, but rather to enhance the provision of timely, quality patient care and to assist UNC Hospitals in meeting its four-fold mission of patient care, teaching, research, and community service. UNC Hospitals maintains that the development of additional acute care capacity in Orange County will promote cost-effectiveness, quality, and access to services in the proposed service area and will thus be in compliance with the spirit and legislative intent of the Certificate of Need Law."

See also Sections B, C, E, F and H where the applicant discusses the impact of the project on cost-effectiveness, quality and access.

The information in the application is reasonable and credible and adequately demonstrates that any enhanced competition in the service area includes a positive impact on cost-effectiveness, quality and access to the proposed services. This determination is based on the information in the application and the following analysis:

The applicant adequately demonstrates the need to add nine acute care beds at UNC
 Main and that the project is a cost-effective alternative. The discussions regarding

analysis of need and alternatives found in Criteria (3) and (4), respectively, are incorporated herein by reference.

- The applicant adequately demonstrates that UNC Hospitals has and will continue to provide quality services. The discussions regarding quality found in Criteria (1) and (20) are incorporated herein by reference.
- The applicant adequately demonstrates UNC Hospitals will continue to provide adequate access to medically underserved populations. The discussions regarding access found in Criteria (1), (3) and (13) are incorporated herein by reference.

The application is conforming to this criterion.

- (19) Repealed effective July 1, 1987.
- (20) An applicant already involved in the provision of health services shall provide evidence that quality care has been provided in the past.

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In Section O.1, page 94, the applicant describes the methods used by UNC Hospitals to insure and maintain quality care, including its Performance Improvement Program and each department's own Quality Assurance program. Exhibit B.10 contains copies of UNC Hospitals' Performance Improvement Program, Utilization Management Review Plan and Risk Management Program.

In Section O.2, page 94, the applicant documents that UNC Hospitals meets all licensure requirements, is certified for participation in the Medicare and Medicaid programs and currently meets all requirements for certification, and is accredited by The Joint Commission.

In Section O.3(a), pages 94-95, the applicant states that in addition to the UNC Hospitals, other entities under the UNC Health Care System include UNC REX Healthcare, Chatham Hospital, High Point Regional Health, Caldwell Memorial Hospital, and the UNC Physicians Network (formerly TPN). The applicant states that the UNC Health Care System also has partial ownership of Johnston Health Services Corporation, which oversees Johnston Health's hospital operations, and manages Pardee Hospital, Nash Health Care, Wayne Memorial Hospital, and UNC Lenoir Health Care. In Section O.3(c), page 95, the applicant further states:

"None of the facilities identified in response to Section O, Question 3(a) was determined by the Division of Health Service Regulation or the Centers for Medicare and Medicaid Services to have operated out of compliance with any Medical Conditions of Participation during the 18 month look-back period.

... None of the facilities in response to Section O, Question 3(a) had any deficiencies."

After reviewing and considering information provided by the applicant and by the Acute and Home Care Licensure and Certification Section and considering the quality of care provided at all nine facilities, the applicant provided sufficient evidence that quality care has been provided in the past and adequately demonstrated that there is no pattern of substandard quality of care. Therefore, the application is conforming to this criterion.

- (21) Repealed effective July 1, 1987.
- (b) The Department is authorized to adopt rules for the review of particular types of applications that will be used in addition to those criteria outlined in subsection (a) of this section and may vary according to the purpose for which a particular review is being conducted or the type of health service reviewed. No such rule adopted by the Department shall require an academic medical center teaching hospital, as defined by the State Medical Facilities Plan, to demonstrate that any facility or service at another hospital is being appropriately utilized in order for that academic medical center teaching hospital to be approved for the issuance of a certificate of need to develop any similar facility or service.

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The application submitted by University of North Carolina Hospitals at Chapel Hill is conforming with all applicable Criteria and Standards for Acute Care Beds as promulgated in 10A NCAC 14C .3800. The specific criteria are discussed below.

SECTION .3800 - CRITERIA AND STANDARDS FOR ACUTE CARE BEDS

10A NCAC 14C .3803 PERFORMANCE STANDARDS

- (a) An applicant proposing to develop new acute care beds shall demonstrate that the projected average daily census (ADC) of the total number of licensed acute care beds proposed to be licensed within the service area, under common ownership with the applicant, divided by the total number of those licensed acute care beds is reasonably projected to be at least 66.7 percent when the projected ADC is less than 100 patients, 71.4 percent when the projected ADC is 100 to 200 patients, and 75.2 percent when the projected ADC is greater than 200 patients, in the third operating year following completion of the proposed project or in the year for which the need determination is identified in the State Medical Facilities Plan, whichever is later.
- -C- In Section C.11, page 54, and Section Q, Form-C Assumptions and Methodology, Page 14, the applicant projects that the utilization rate for UNC Hospitals' acute care beds in the Orange County service area will be 81.3% in the third Project Year (PY3 =

FY2023 = July 1, 2022 – June 30, 2023) following completion of the proposed project, using average daily census to calculate occupancy.

Projected UNC Hospitals Acute Care Bed Utilization Orange County Service Area PY3: July 1, 2022 – June 30, 2023

Facility	Patient Days	ADC	AC Beds	Occupancy
UNC Hospitals Main Campus	242,316	664	798	-
UNC Hospitals Hillsborough Campus	34,102	93	133	-
UNC Hospitals Orange County Total	276,417	757	931	81.3%

As the table above shows, UNC Hospitals' total utilization at the end of the proposed project's third operating year is above the required 75.2% occupancy rate required in the performance standard, 10A NCAC 14C .3803(a).

- (b) An applicant proposing to develop new acute care beds shall provide all assumptions and data used to develop the projections required in this rule and demonstrate that they support the projected inpatient utilization and average daily census.
- -C- See Section C.4, pages 40-49, for the applicant's discussion of need and Section Q, Form C and Form C-Assumptions and Methodology, pages 1-14, for the applicant's assumptions, methodology, and data used to project utilization. The data support the projected utilization and average daily census. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference.