ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

FINDINGS

	C = Conforming $CA = Conditional$
	NC = Nonconforming
	NA = Not Applicable
Decision Date: Findings Date:	June 27, 2016 June 27, 2016
Project Analyst: Team Leader:	Celia C. Inman Lisa Pittman
Project ID #:	J-11163-16
Facility:	University of North Carolina Hospitals-Hillsborough
FID #:	090274
County:	Orange
Applicant:	University of North Carolina Hospitals at Chapel Hill
Project:	Develop 29 additional acute care beds on the Hillsborough campus for a total of 101 acute beds on that campus and 890 on the hospital license, relocate the 30 inpatient rehabilitation beds from the Chapel Hill campus and offer inpatient dialysis services on the Hillsborough campus

REVIEW CRITERIA FOR NEW INSTITUTIONAL HEALTH SERVICES

G.S. 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 29 additional acute care beds at UNC Hospitals Hillsborough Campus (Hillsborough Campus), for a total of 101 licensed acute care beds on Hillsborough Campus upon project completion.

This application is also proposing to relocate 30 inpatient rehabilitation beds from the Chapel Hill campus (Main Campus), add 32 unlicensed observation beds and expand inpatient dialysis services to Hillsborough Campus. The proposed project also involves additions to

parking, central energy, and other infrastructure required to support the proposed hospital expansion.

Hillsborough Campus, offering a broad spectrum of hospital services, including a 24-hour emergency department, is currently licensed for 72 acute care beds, 68 pursuant to Project ID #J-8830-09 and four pursuant to Project ID #J-11034-15.

Need Determination

The 2016 State Medical Facilities Plan (SMFP) includes an Acute Care Bed Need Determination for 84 additional acute care beds in the Orange County Service Area. The 2016 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 pages 46-47 of the 2016 SFMP]."

The applicant submitted two concurrent and complementary applications in response to the need identified in the 2016 SMFP for 84 additional beds in Orange County. This application (Project ID # J-11163-16) proposes to develop 29 additional acute care beds at UNC Hospitals Hillsborough Campus for a total of 101 acute care beds upon project completion. The concurrently filed application (Project ID #J-11164-16) proposes to develop 55 additional acute care beds on UNC Hospitals Chapel Hill Campus, located at 101 Manning Drive, Chapel Hill, NC, for a total of 789 acute care beds on the Main Campus. Upon completion of both projects, UNC Hospitals will be licensed for a total of 890 acute care beds.

The applicant does not propose to develop more acute care beds than are determined to be needed in the Orange County Service Area. UNC Hospitals currently operates a 24-hour emergency services department. The applicant describes its inpatient medical and surgical services on pages 24-27 of the application. UNC Hospitals adequately demonstrates that it 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 2016 SMFP for acute care beds in Orange County.

Policies

Policy GEN-3: BASIC PRINCIPLES, on page 39 of the 2016 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 III.2, pages 78-81. On page 78, the applicant states:

"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."

Promote Safety and Quality

In Section III.2, pages 78-79, 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."

Exhibits 7, 8, 9 and 14 contain UNC Health Care policies on performance improvement, utilization management, risk management and competency assessment policies, respectively. The applicant also discusses UNC Hospital's quality awards and designations on pages 79-80.

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

Promote Equitable Access

In Section III.2, pages 80-81, 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 VI.2."

In Section VI.2, page 125, the applicant states that UNC Hospitals traditionally provides services to a wide variety of patient groups and provides the following supporting FY2015 data.

	Low	Racial & Ethnic			Other
	Income	Minorities	Women	Elderly	Underserved
UNC Hospitals Total	16.2%	36.3%	58.4%	24.0%	9.3%
Medical/Surgical Inpatients	21.0%	39.1%	49.3%	27.9%	6.5%
Inpatient Rehabilitation	26.2%	45.9%	43.3%	29.5%	4.0%

Low Income = Medicaid and $\frac{1}{2}$ of Medicaid Pending; Other Underserved = Self Pay and $\frac{1}{2}$ of Medicaid Pending. "Low income" is based on Federal poverty guidelines as outlined in the Patient Financial Assistance Policy contained in Exhibit 19. "Elderly" is defined as patients age 65 and over.

In Section III.2, page 80, the applicant references Exhibit 15 and its "Assuring Access at UNC *Health Care*" document, which outlines the 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 VI.8, pages 128-129, the applicant discusses charity care and bad debt, stating that UNC Hospitals' service will provide more than \$287,000,000 and \$308,000,000 in charity care in the first two full fiscal years following project completion, respectively; and approximately \$140,000,000 and \$150,000,000 in bad debt in in the first two fiscal years, respectively. The applicant further states:

"Charity care is defined in accordance with UNC Hospitals' Patient Financial Assistance Policy based upon the guarantor's ability to pay. The guarantor's ability to pay is determined after a financial statement is obtained with the required verification documentation and assigned a credit rating. Provision for bad debts represents services for which individuals have refused to make payment even though they have the financial ability to pay. These are incurred on uninsured (self pay) patients and on portions of the copayments and deductibles that are the patient's liability under

commercial indemnity insurance policies. See Exhibit 19 for the Patient Financial Assistance Policy."

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

Maximize Healthcare Value

In Section III.2, pages 81-83, 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 project will provide additional capacity to meet the continued need at UNC Hospitals' Main Campus and Hillsborough Campus 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 ensures 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.

The applicant adequately demonstrates that the proposal will maximize healthcare value. The applicant also adequately demonstrates how its projected volumes incorporate the concepts of quality, equitable access and maximum value for resources expended in meeting the need identified in the 2016 SMFP. Therefore the application is conforming to Policy GEN-3.

Policy GEN-4: ENERGY EFFICIENCY AND SUSTAINABILITY FOR HEALTH SERVICE FACILITIES, on pages 39-40 of the 2016 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, the Certificate of Need Section 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 III.2, pages 81-83, 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 North Carolina State Building Codes. The Plan shall not adversely affect patient or resident health, safety or infection control."

UNC Hospitals proposes to add 29 additional acute care beds to Hillsborough Campus. The addition of the beds will require the addition of 81,006 square feet and the renovation of another 10,027 square feet in the existing 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 7 in Criterion (4).

Conclusion

In summary, the applicant adequately demonstrates that the proposal to add acute care beds is consistent with the 2016 Acute Care Bed Need Determination, Policy GEN-3 and Policy GEN-4. Therefore, the application is conforming to this criterion, subject to Condition (7) 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.

С

UNC Hospitals proposes to develop 29 additional general acute care beds at UNC Hospitals Hillsborough Campus. Eleven of the 29 additional acute care beds will be developed within the previously approved 15-bed observation unit (Project ID #J-8330-09) which now houses four general acute care beds (Project ID #J-11034-15) and 11 observation beds. The remaining 18 additional acute care beds will be developed as general medical/surgical beds on Level 3 in a newly constructed bed wing. The new four-story bed wing will also house the 30 existing inpatient rehabilitation beds to be relocated from Main Campus, 12 on Level 1 and 18 on Level 2; 32 unlicensed observation beds, seven alongside the 18 proposed medical/surgical acute care beds on Level 3 and 25 in an observation unit on Level 4; a six-station inpatient dialysis unit on Level 1; and necessary support space. In support of the bed expansion and new four-story bed wing, the following additions and expansions are being made to the existing infrastructure:

- Central Plant for the new bed wing to include a new chiller, cooling tower, boiler, generator and associated support;
- New electrical ductbank for the new bed wing;
- Addition of 145 parking stalls; and
- Construction of a new helipad.

Population to be Served

On page 48, the 2016 SMFP defines the service area for acute care services by county (or multicounty service area for counties without a hospital). 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 III.4(a), pages 84-87, the applicant identifies the facility-wide UNC Hospitals patient origin during FY2015. Pages 88-92 identify non-specialty medical/surgical and inpatient rehabilitation patient origin. As North Carolina's only state-owned, tertiary care referral center, UNC Hospitals provides care to residents residing in counties throughout North Carolina with Orange County residents receiving the highest percentage of that care. The tables below summarize the historical percentage of patient origin for UNC Hospitals facility-wide services, non-specialty medical/surgical, and inpatient rehabilitation services, based on the applicant's information as reported on pages 84-92 of the application.

County of Residence	Facility-wide Services	Medical/Surgical Services
Orange	17.3%	12.9%
Wake	13.1%	11.7%
Alamance	8.5%	7.1%
Durham	7.1%	5.4%
Chatham	6.9%	6.3%
Cumberland	5.6%	7.2%
Lee	3.5%	3.8%
Harnett	2.8%	3.1%
Robeson	2.2%	2.9%
Johnston	2.1%	2.3%
Guilford	1.9%	2.1%
Other NC Counties	26.7%	32.6%
Total NC	97.7%	97.4%
Other US	2.3%	2.6%
International	>0.1%	>0.1%
Total	100.0%	100.0%

Totals may not sum due to rounding.

Other NC Counties includes patients from NC counties as listed on pages 84-91.

County of Residence	Inpatient Rehabilitation
Orange	12.7%
Wake	10.8%
Alamance	10.0%
Cumberland	9.2%
Chatham	5.8%
Lee	5.6%
Durham	4.1%
Robeson	4.1%
Moore	4.0%
Harnett	3.5%
Johnston	2.6%
New Hanover	2.0%
Other NC Counties	23.7%
Total NC	98.1%
Other US Total	1.9%
Total	100.0%

Totals may not sum due to rounding.

Other NC Counties includes patients from NC counties as listed on pages 91-92.

As illustrated in the above tables, Orange, Wake, Alamance, Durham, Chatham, Cumberland, Lee, Harnett, Robeson, Johnston, and Guilford counties represent approximately 71% of the facility-wide services patient origin at UNC Hospitals and approximately 64.8% of its non-specialty medical/surgical services. Orange, Wake, Alamance, Cumberland, Chatham, Lee, Durham, Robeson, Moore, Harnett, Johnston, and New Hanover counties represent approximately 74% of UNC's inpatient rehabilitation patient origin.

The tables on pages 84-92 illustrate that UNC Hospitals treats patients from all over North Carolina and from outside the State. In Section III.5(a), page 93, the applicant states:

"The 2016 SMFP identifies UNC Hospitals as a part of the Orange County acute care bed service area, as used in the development of the acute care bed need determination. The remainder of UNC Hospitals' service area includes every other county in North Carolina and a small percentage of patients from other states and countries. During most fiscal years, UNC Hospitals admits acute care patients form all 100 North Carolina counties."

In Section III.5(c), pages 93-97, the applicant provides the projected patient origin for nonspecialty medical/surgical inpatient services, as a percent of discharges, for the first two years

following completion of the proposed project. The table below illustrates the 11 North Carolina counties projected to have patient origin of at least two percent of the total non-specialty medical/surgical patient origin, with 12.9%, the highest percentage originating in Orange County, and 11.7% originating in Wake County.

Non-specially medical/surgical services						
County of Residence	Percent Patient Origin					
Orange	12.9%					
Wake	11.7%					
Cumberland	7.2%					
Alamance	7.1%					
Chatham	6.3%					
Durham	5.4%					
Lee	3.8%					
Harnett	3.1%					
Robeson	2.9%					
Johnston	2.3%					
Guilford	2.1%					
Total Top 11 Counties	64.8%					
Other NC Counties	32.7%					
Out of State	2.6%					
International	<0.1%					
Total	100.0%					

Non-specialty Medical/Surgical Services

Totals may not sum due to rounding.

On pages 97-98, the applicant provides the projected patient origin for inpatient rehabilitation services, as a percent of discharges, for the first two years following completion of the proposed project. The table below illustrates the 12 North Carolina counties projected to have patient origin of at least two percent of the total inpatient rehabilitation patient origin, with 12.7%, the highest percentage originating in Orange County, and 10.8% originating in Wake County.

County of Residence	Percent Patient Origin
Orange	12.7%
Wake	10.8%
Alamance	10.0%
Cumberland	9.2%
Chatham	5.8%
Lee	5.6%
Durham	4.1%
Robeson	4.1%
Moore	4.0%
Harnett	3.5%
Johnston	2.6%
New Hanover	2.0%
Total Top 12 Counties	74.4%
Other NC Counties	23.7%
Out of State	1.9%
Total	100.0%

Inpatient Rehabilitation Services

Totals may not sum due to rounding.

As illustrated in the tables above, the applicant projects a large percentage of its medical/surgical inpatients and inpatient rehabilitation patients will originate from thirteen North Carolina counties. Another 33% of its total medical/surgical discharges and 24% of its inpatient rehabilitation patients will originate from other North Carolina counties, as listed on pages 93-98.

The applicant states that the proposed project is not expected to have any impact on UNC Hospitals' acute care or inpatient rehabilitation patient origin; therefore, patient origin for the proposed project will remain consistent with its FY 2015 UNC Hospitals patient origin.

The applicant adequately identifies the population it proposes to serve.

Analysis of Need

In Section III.1, pages 45-46, 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 2016 SMFP;

- The continued need for additional capacity at UNC Hospitals' main campus and the decompression of the main campus through the relocation of inpatient rehabilitation services and the development of inpatient dialysis at the Hillsborough campus; and
- The projected population growth in Orange County."

The applicant discusses the above factors on pages 46-60 of the application, as summarized below.

2016 SMFP Identified Need for Additional Acute Care Beds

In Section III.1, pages 46-49, the applicant discusses the need for additional acute care beds in the 2016 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 2014 utilization data from Truven Health Analytics is used to project the average daily census (ADC) for 2018, using the Orange County growth rate multiplier of 1.0334, based on UNC Hospitals' annual percentage of change in days of care over the last five federal fiscal years, as shown in the table below.

	2014 Acute	Growth Rate	2018 Projected	2018 Projected
	Days of Care	Multiplier	Acute Care Days	ADC
UNC Hospitals	221,528	1.0334	252,640	692

The 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 84 beds, as shown in the table below.

	2018 Projected	Occupancy	Projected 2018	Existing and	Need
	ADC	Factor	Bed Need	Approved Beds	Determination
UNC Hospitals	692	1.28	886	802	84

The applicant states (pages 47-48) that the 2016 SMFP acute care bed need projection (Table 5A) does not include four burn ICU beds previously approved to be developed by UNC Hospitals (Project ID #J-8836-12). As a result, the 2016 SMFP understates UNC Hospitals' acute care bed inventory and overstates the county need by four beds. The four bed difference does not impact this review.

On pages 48-49, the applicant states that since 2010, four need determinations for Orange County have been identified: 36 beds in 2010, 27 beds in 2012, 46 beds in 2015 and now 84 additional acute care beds in the 2016 SMFP. UNC Hospitals received approval to develop the 36 bed (Project ID #J-8501-10), the 27 bed (Project ID #J-8812-12), and the 46 bed (Project ID #J-11032-15 and #J-11034-15) 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 Hospital's Continued Need for Additional Capacity

Acute Care Services

On page 49, 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 84 beds between 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.

On page 51, the applicant states:

"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 2016 SMFP for facilities with an average daily census (ADC) greater than 400."

The applicant discusses the development of UNC Hospitals Hillsborough Campus as a means to reduce crowded conditions at the main campus, and its delay in development because of an appeal. Hillsborough Campus 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.

Inpatient Rehabilitation Services

The applicant states that the primary need for the relocation of the inpatient rehabilitation beds and related services from Main Campus to Hillsborough Campus is to free up physical space at Main Campus for the development of general acute care bed capacity. The applicant further states, "UNC Hospitals Main Campus simply does not have room to grow given its highly congested site." The proposed relocation of 30 inpatient rehabilitation beds and related services will vacate physical space that will be used to develop 45 additional general acute care beds. Hillsborough Campus' support services for inpatient rehab are already available and will not have to be duplicated to accommodate the proposed relocation. Thus, the applicant states that the relocation of inpatient rehabilitation beds and equipment, along with the development of therapy space, will allow the services to be provided at Hillsborough Campus without compromising the level of clinical care.

Observation Beds

After the completion of the addition of four acute care beds (Project ID #J-11034-15) and this proposed project, all 15 of the existing unlicensed observation beds at Hillsborough Campus will be converted to licensed acute care beds. The applicant states that the availability of observation beds is an important component of hospital operations, because they help reduce the unnecessary placement of observation patients in licensed beds, thus increasing the availability of licensed beds for patients whose condition requires inpatient care. Therefore, the applicant proposes to develop a total of 32 new unlicensed observation beds, which will result in a ratio of 0.3 unlicensed observation beds for every licensed general acute care bed which is comparable to the previously approved applications (Project ID #J-8330-09 and Project ID #J-11034-15). The applicant further states that UNC expects greater demand for observation beds as Hillsborough Campus grows and adds additional services.

Inpatient Dialysis Services

Inpatient dialysis service is not typically the reason that a patient is admitted to a hospital. Most end stage renal disease (ESRD) patients receive dialysis service as an outpatient. However, when an ESRD patient requires inpatient acute care involving a length of stay of more than one day, the patient will need to be dialyzed while in the hospital. Hillsborough Campus does not currently provide dialysis services; therefore, Hillsborough Campus cannot admit inpatients for any condition, even if the service is provided at Hillsborough Campus and the patient prefers to receive care there, if the patient requires dialysis services. As a result, any UNC Hospitals inpatient requiring dialysis must be admitted to Main Campus. This barrier limits the flexibility of UNC Hospitals to fully utilize Hillsborough Campus. The applicant states that with the development of inpatient dialysis services, Hillsborough Campus can effectively admit any inpatients who could otherwise be admitted to that campus, despite their need for dialysis services, which will enhance Hillsborough Campus' ability to relieve capacity constraints at Main Campus.

Infrastructure Additions and Expansions

In Section III, page 55, the applicant states that the additions and expansions to the existing infrastructure at Hillsborough Campus are necessary to support the growth and expansion of services associated with the proposed project. The proposed expansion of the central plant, new electrical ductwork, parking, and helipad will ensure the expanded Hillsborough Campus can operate efficiently and effectively.

Population Growth

In Section III.1, pages 58-60, 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 17th fastest growing county in North Carolina based on numerical growth and the 20th fastest growing county based on percentage growth (Exhibit 11). The NC OSBM projects Orange County's population to grow by 12.1% between 2010 and 2020 (Exhibit 12), adding over 16,000 people within the decade. The applicant further states on page 59, that the need for medical services in Orange County will be greater as the population continues to age, "because, typically, older residents utilize healthcare services at a higher rate than those who are younger". 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 approximately 10 percent in 2010 (Exhibit 13). Further, between 2010 and 2020, Orange County's population over the age of 65 is projected to grow by 72.4 percent.

Projected Utilization UNC Hospitals Hillsborough Campus

Acute Care Services

Hillsborough Campus began offering inpatient services in September 2015. UNC Hospitals operates on a July 1 to June 30 fiscal year (FY). The proposed project is expected to begin operation in phases, with the final component of the proposed project to begin operation on October 1, 2020, thus, Project Year One (PY1) of this proposed project begins October 1, 2020, the second quarter of UNC Hospitals' FY 2021, and runs through September 30, 2021. Project Year Two begins October 1, 2021, the second quarter of FY 2022, and Project Year Three will begin in the second quarter of FY 2023 (October 1, 2022) and run through September 30, 2023.

Project ID #J-11164-16, the concurrently filed application to add 55 acute care beds on UNC's Main Campus has project years that run from July 1, 2022 to June 30, 2025.

The following table provides the applicant's fiscal year projections (page 64) through FY2024 for UNC Hospitals Hillsborough Campus non-specialty medical/surgical beds based on the number of days that beds will be operational at that time.

Fiscal Year Projection of UNC Hospitals Hillsborough Campus 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
Hillsborough C	Campus Non	-specialty Me	edical/Surgic	al Bed Utiliz	ation			
Bed Days*	19,710	23,725	23,725	23,790	28,639	30,295	30,295	30,378
# Beds	54	65	65	65	78	83	83	83
Discharges	3,456	3,522	3,610	3,661	3,716	3,876	3,919	3,962
Patient Days	13,826	14,130	14,624	15,122	15,651	15,825	16,001	16,178
% Occupancy	70.1%	59.6%	61.6%	63.6%	54.6%	52.2%	52.8%	53.3%
Hillsborough C	Campus Tota	al Acute Care	Bed Utilizat	tion				
Bed Days*	26,280	30,295	30,295	30,378	35,209	36,865	36,865	36,966
# Beds	72	83	83	83	96	101	101	101
Discharges	2,978	3,038	3,211	3,312	3,423	3,447	3,472	3,497
Patient Days	18,661	19,038	20,121	20,756	21,449	21,603	21,759	21,915
% Occupancy	71.0%	62.8%	66.4%	68.3%	60.9%	58.6%	59.0%	59.3%

*Bed Days = available bed days

Assumptions:

- The non-specialty medical/surgical service component will operate 65 (54 + 11) beds from July 1, 2020 through September 31, 2020 (92 days) and 83 beds from October 1, 2020 through June 30, 2021 (273 days). Likewise, the total acute care component will operate 83 beds from July 1, 2020 through September 31, 2020 (92 days) and 101 beds from October 1, 2020 through June 30, 2021 (273 day).
- Hillsborough Campus will be gaining additional bed capacity beginning in FY2018, but the patient day and discharge projections for FY2017 through FY2021 are based solely on the utilization associated with the 54-bed / 72-bed complements approved in Project ID #J-11034-15.
- Upon completion of the proposed project, the non-specialty medical/surgical bed at Hillsborough Campus will increase from 54 to 83 beds and the total acute care bed complement will increase from 72 beds to 101 beds.
- Beginning in FY2021, non-specialty medical/surgical patient days are projected using the 1.1% Orange County annual population growth rate. Total acute care patient day projections are grown by 0.7%, based on the historical growth experienced at UNC's Main Campus, as described on page 73 of this application and in Section III.1(b) of the concurrently filed application for 55 beds (Project ID #J-11164-16).
- Average length of stay (ALOS) is 4.1 days based on the projected ALOS in the previously approved Project ID #J-11034-15.

The applicant converts the fiscal year projections shown above to the proposed project years, beginning October 1, 2020, using the following approach:

PY1 (October 1, 2020 – September 30, 2021) = 0.75 x FY 2021 + 0.25 x FY 2022 PY2 (October 1, 2021 – September 30, 2022) = 0.75 x FY 2022 + 0.25 x FY 2023 PY3 (October 1, 2022 – September 30, 2023) = 0.75 x FY 2023 + 0.25 x FY 2024

The applicant provides the tables on page 70 and 75, projecting bed days and occupancy rates by project years for Hillsborough Campus non-specialty medical/surgical beds and total acute care beds, respectively, as summarized below.

	PY1 10/20-9/21	PY2 10/21-9/22	PY3 10/22-9/23				
UNC Hospitals Hillsborough Campus Medical/Surgical							
Bed Days	29,053	30,295	30,316				
# Beds	80	83	83				
Discharges	3,756	3,886	3,930				
Patient Days	15,694	15,869	16,045				
% Occupancy	54.0%	52.4%	52.9%				
UNC Hospitals Hi	llsborough Ca	ampus Acute C	Care Totals				
Bed Days	35,623	36,865	36,890				
# Beds	98	101	101				
Discharges	3,429	3,454	3,479				
Patient Days	21,487	21,642	21,798				
% Occupancy	60.3%	58.7%	59.1%				

Inpatient Rehabilitation Services

Currently, inpatient rehabilitation services are provided at Main Campus. The proposed project includes the relocation of the 30 existing inpatient rehab beds from Main Campus to Hillsborough Campus. On page 65, the applicant provides a table showing the historical utilization for the service, which demonstrates patient days declined 2.4% from FY2012 to annualized FY2016. The applicant provides projected inpatient rehabilitation utilization on page 66, as summarized through FY2024, in the following table.

	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	
	7/16-6/17	7/17-6/18	7/18-6/19	7/19-6/20	7/20-6/21	7/21-6/22	7/22-6/23	7/23-6/24	
UNC Main Car	UNC Main Campus Inpatient Rehabilitation								
Bed Days	10,950	10,950	10,950	10,980	2,760	-	-	-	
# Beds	30	30	30	30	8	-	-	-	
Discharges	536	536	536	536	135	-	-	-	
Patient Days	8,304	8,304	8,304	8,304	2,093	-	-	-	
% Occupancy	75.8%	75.8%	75.8%	75.6%	75.8%				
UNC Hillsboro	ugh Campu	s Inpatient H	Rehabilitatio	n					
Bed Days	-	-	-	-	8,190	10,950	10,950	10,980	
# Beds	-	-	-	-	22	30	30	30	
Discharges	-	-	-	-	401	536	536	536	
Patient Days	-	-	-	-	6,211	8,304	8,304	8,304	
% Occupancy					75.8%	75.8%	75.8%	75.6%	
UNC Hospitals	Total Inpat	tient Rehabil	itation						
Bed Days	10,950	10,950	10,950	10,980	10,950	10,950	10,950	10,980	
# Beds	30	30	30	30	30	30	30	30	
Discharges	536	536	536	536	536	536	536	536	
Patient Days	8,304	8,304	8,304	8,304	8,304	8,304	8,304	8,304	
% Occupancy	75.8%	75.8%	75.8%	75.6%	75.8%	75.8%	75.8%	75.6%	

Assumptions:

- Utilization will remain constant from FY2016 through FY2025, though relocation of the beds to new, less crowded space is likely to increase utilization in the future.
- The relocated beds will be operational October 1, 2020, resulting in the same project years as outlined above in the acute care bed projection section.

On page 70, as shown below, the applicant provides the projected inpatient rehabilitation utilization table, by project year, using the same conversion of years assumptions outlined in the acute care projection section above.

	PY1 10/20-9/21	PY2 10/21-9/22	PY3 10/22-9/23
Bed Days	8,880	10,950	10,958
# Beds	24	30	30
Discharges	435	536	536
Patient Days	6,734	8,304	8,304
% Occupancy	75.8%	75.8%	75.8%

UNC Hospitals Hillsborough Campus Inpatient Rehabilitation

As the table above shows, the applicant projects occupancy at 75.8% for each project year. The applicant states (page 66) that UNC Hospitals believes the utilization to be reasonable and conservative because the relocation will allow for more post-acute services to be offered at Hillsborough Campus and will promote the coordination of care between the inpatient and outpatient rehabilitations services offered by UNC Hospitals.

Observation Beds

Hillsborough Campus was originally approved (Project ID #J-8330-09) to develop an unlicensed 15-bed observation unit. Project ID #J-11034-15 approved the conversion of four of those observation beds to licensed acute care beds; therefore Hillsborough Campus currently operates 11 unlicensed observation beds. This project proposes to convert the remaining 11 observation beds to licensed acute care beds and develop 32 new unlicensed observation beds. Seven of the 32 observation beds will be located alongside the 18 proposed additional medical/surgical beds on Level 3 of the new bed wing while a new 25-bed unlicensed observation unit will occupy Level 4. The applicant bases the number of observation beds needed on the ratio of unlicensed observation beds to total general acute care beds approved in its previous two projects, Project ID #J-8330-09 and Project ID #J-11034-15, which was a ratio of 0.2:1 in both projects. The applicant states that UNC Hospitals is projecting a ratio of 0.3:1 for this project because:

"UNC Hospitals expects a greater demand for observation beds as the Hillsborough campus grows and adds additional services. As such, UNC Hospitals believes its proposal to develop 32 unlicensed observation beds is reasonable and necessary."

Inpatient Dialysis Services

In Section III.1, pages 68-69, the applicant projects the need for inpatient dialysis at Hillsborough Campus assuming the ratio of total dialysis treatments to total non-specialty medical/surgical patient days at Main Campus for the last two fiscal years: one dialysis treatment for every 13.9 non-specialty medical/surgical patient days. The following table

applies the ratio to the Project Year 3 projected non-specialty medical/surgical patient days at Hillsborough Campus.

Projected Inpatien	t Dialysis
	PY3
Med/Surg Patient Days	16,045
Ratio	13.9
Dialysis Treatments	1,155

Projected	Inpatient	Dialysis

On page 69, the applicant states that inpatient dialysis is not intended to offer services to the same patients on an ongoing basis, as outpatient dialysis is; instead, it is necessary that the service have sufficient capacity to ensure that patients receiving dialysis can be admitted for inpatient acute care. Therefore, the applicant states that the 3.2 patients per station per week capacity definition is not applicable. In addition, the applicant states that staffing of shifts will be adjusted to meet the daily needs; thus, the capacity will change based on the needs of inpatients each day. The applicant states:

"Given the critical nature and significant variability in utilization of dialysis services, UNC Hospitals believes that the development of six bays will ensure that it has the necessary capacity for days of higher utilization as well as the ability to operate only one shift when the census of patients needing dialysis is lower."

Projected Utilization UNC Hospitals (Hillsborough Campus and Main Campus)

In Section III, beginning on page 71, the applicant discusses occupancy rates for UNC Hospitals Main and Hillsborough Campuses, stating that UNC Hospitals 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."

	Hillsborough Campus			Chapel Hill Main Campus			Total UNC Hospitals Facility-wide		
	PYI	PY2	PY3	PYI	PY2	PY3	PYI PY2 PY3		
Bed Days	35,623	36,865	36,890	277,735	286,605	288,182	313,358	323,470	325,072
# Beds	98	101	101	761	785	789	859	886	890
Patient Days	21,487	21,642	21,798	226,260	227,889	229,531	247,747	249,531	251,329
% Occupancy	60.3%	58.7%	59.1%	81.5%	79.5%	79.6%	79.06%	77.14%	77.31%

Projected UNC Hospitals Acute Care Inpatient Utilization PY3 = October 1, 2022 through September 30, 2023

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)*.

Projected utilization is based on reasonable and adequately supported assumptions which are provided in Section III, pages 60-76.

The applicant adequately demonstrates the need to develop 29 additional acute care beds, 32 unlicensed observation beds and inpatient dialysis, along with the expansion of infrastructure, on Hillsborough Campus. The applicant states that the proposed project will maximize efficiency for patients at both UNC Hospitals campuses.

Access

In Section III.2, pages 80-81, 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 VI.2"

The applicant further states that the document "Assuring Access at UNC Health Care" found in Exhibit 15, 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 VI.2, pages 124-125, the applicant states that UNC Hospitals has traditionally provided services to a wide variety of patient groups and provides the following table, based on FY 2015 data.

		Racial & Ethnic			Other
	Low Income	Minorities	Women	Elderly	Underserved
UNC Hospitals Total	16.2%	36.3%	58.4%	24.0%	9.3%
Med/Surg Inpatients	21.0%	39.1%	49.3%	27.9%	6.5%
Inpatient Rehabilitation	26.2%	45.9%	43.3%	29.5%	4.0%

Low Income = Medicaid and $\frac{1}{2}$ of Medicaid Pending; Other Underserved = Self Pay and $\frac{1}{2}$ of Medicaid Pending. "Low income" is based on Federal poverty guidelines as outlined in the Patient Financial Assistance Policy contained in Exhibit 19. "Elderly" is defined as patients age 65 and over.

In Section VI.8, page 129, the applicant discusses charity care and bad debt, stating that UNC Hospitals will provide more than \$280,000,000 and \$308,000,000 in charity care in project years one and two, respectively; and approximately and \$140,000,000 and \$150,000,000 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, adequately demonstrates the need the population to be served has for the proposed project and demonstrates 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.

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The applicant proposes to relocate its inpatient rehabilitation service from Main Campus to Hillsborough Campus, including 30 licensed beds, as well as related therapy and support services. On page 102 of the application, the applicant states that the relocation is required because additional physical space is needed at UNC Hospitals Main Campus for the development of acute care bed capacity, stating:

"The relocation will allow for more post-acute services to be offered at the Hillsborough campus and will promote the coordination of care between the inpatient and outpatient rehabilitations services offered by UNC Hospitals, consistent with the prior relocation of outpatient rehabilitation service from the main campus to the

former Border's Books ... in Chapel Hill. As, such, UNC Hospitals' rehabilitation physicians and staff are already working off the main campus, and the currently proposed relocation will further decrease the need to access the main campus."

The applicant states that inpatient rehabilitation is a distinct, post-acute service and UNC Hospitals' acute care patients who require inpatient rehabilitation services currently must be discharged from an acute care bed, transported and admitted to the inpatient rehabilitation unit. Relocation of the rehab beds from Main Campus to Hillsborough Campus will mean additional travel for Main Campus patients, while reducing the travel for Hillsborough Campus patients needing inpatient rehabilitation. Furthermore, UNC Hospitals serves as a regional referral center for inpatient rehabilitation services, with a significant number of its patients admitted from other locations around the state. The applicant states that the non-UNC Hospitals referrals will benefit from the greater convenience of Hillsborough Campus, which is less congested than Main Campus, yet located nearby. The applicant further states that the convenience of Hillsborough Campus will also be beneficial to family members and friends who visit during a patient's inpatient rehabilitation stay, which can be several weeks long.

The applicant adequately demonstrates the needs of the population currently served at Main Campus will be adequately met by the proposed project without affecting 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. Therefore, the application is conforming to this criterion.

(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 III.3, pages 83-84, the applicant describes several 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 says 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 treatments due to lack of appropriate bed availability. Furthermore, the applicant states this option does not respond to the increased future acute care demand generated by population growth and is therefore not the most effective alternative.
- 2) Build a New Bed Tower on Main Campus the applicant evaluated this alternative and future master facility plans do include a new bed tower on Main Campus; 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 84 that UNC Hospitals' concurrently filed applications for 29 additional beds on Hillsborough Campus and 55 beds on Main Campus is the most effective alternative to meet the identified need for 84 additional acute care beds in Orange County. The applicant states that the proposals are cost-effective because the cost to develop new space at Hillsborough, including the space to accommodate the relocated inpatient rehabilitation beds, dialysis and observation space is less than the cost to develop new space on Main Campus, given its complexity. In addition, the applicant states that the proposed on Main Campus. The applicant states that the project as proposed is the most reasonable and cost-effective for meeting the identified need for additional beds in Orange County and the identified UNC Hospitals' needs.

The applicant adequately demonstrates that developing 29 additional acute care beds, 32 unlicensed observation beds and dialysis services on Hillsborough Campus, along with relocating 30 inpatient rehabilitation beds from Main Campus to Hillsborough Campus, 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 its 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 VIII 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 29 additional acute care beds at UNC Hospitals Hillsborough Campus for a total of no more than 101 acute care beds, including 18 ICU beds, on that campus. This project and Project ID #J-11164-16 (add 55 acute care beds at UNC Hospitals Chapel Hill Campus for a total of no more than 789) would bring the total number of acute care beds for UNC Hospitals to 890 beds, upon completion of both projects.

- 4. University of North Carolina Hospitals at Chapel Hill shall develop no more than six inpatient dialysis stations at UNC Hospitals Hillsborough Campus, including any isolation stations.
- 5. University of North Carolina Hospitals at Chapel Hill shall develop no more than 32 unlicensed observation beds at UNC Hospitals Hillsborough Campus.
- 6. University of North Carolina Hospitals at Chapel Hill shall relocate 30 inpatient rehabilitation beds and related services from UNC Hospitals Chapel Hill Campus to UNC Hospital Hillsborough Campus.
- 7. 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.
- 8. 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.

С

In Section VIII.1, pages 148-149, the applicant states that the total capital cost of the project will be \$76.8 million, as shown in the table below.

Project Capital C	ost
Construction / Labor Costs	\$52,435,167
Furniture/Equipment	\$5,874,520
Landscaping	\$214,731
Architect & Engineering Fees	\$7,645,139
Contingency and IT Costs	\$10,720,000
Total Capital Cost	\$76,889,557

Project Capita	l Cost
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In Section IX, page 154, the applicant states there will be no start-up or initial operating expenses associated with the proposed project. In Section VIII.3, page 149, the applicant states that the project will be funded through UNC Hospitals' accumulated reserves. Exhibit 22 contains an April 15, 2016 letter signed by the President for UNC Hospitals, which states:

"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 23 of the application contains the audited financial statements for UNC Hospitals for the year ending June 30, 2015. As of June 30, 2015, UNC Hospitals had \$125,863,753 in cash and cash equivalents and \$1,223,645,247 in net assets. The applicant adequately demonstrates the availability of sufficient funds for the capital needs of the project.

The information provided by the applicant in Form C shows that UNC Hospitals' facility-wide medical/surgical expenses will exceed revenues in the first three fiscal years following completion of the proposed project, as shown below.

UNC Hospitals Medical/Surgical Services	FY2022	FY 2023	FY 2024
Projected # of Patient Days	125,016	126,913	128,840
Projected Average Charge	2,598	2,676	2,756
Gross Patient Revenue	\$ 324,738,347	\$ 339,557,040	\$ 355,052,777
Deductions from Gross Patient Revenue	\$ 185,093,701	\$ 193,540,030	\$ 202,372,258
Net Patient Revenue	\$ 139,644,646	\$ 146,017,011	\$ 152,680,519
Total Expenses	\$ 161,332,900	\$ 168,824,786	\$ 175,522,332
Net Income Fiscal Year	\$ (21,688,254)	\$ (22,807,775)	\$ (22,841,813)

Furthermore, Form C for the inpatient rehabilitation services also shows expenses will exceed revenues in the first three fiscal years following completion of the proposed project, as shown below.

UNC Hospitals Inpatient Rehabilitation Services	FY2022	FY 2023	FY 2024
Projected # of Patient Days	8,304	8,304	8,304
Projected Average Charge	1,924	1,982	2,042
Gross Patient Revenue	\$ 15,980,654	\$ 16,460,074	\$ 16,953,876
Deductions from Gross Patient Revenue	\$ 8,596,765	\$ 8,854,668	\$ 9,120,308
Net Patient Revenue	\$ 7,383,889	\$ 7,605,406	\$ 7,833,568
Total Expenses	\$ 11,319,980	\$ 11,610,668	\$ 11,910,077
Net Income Fiscal Year	\$ (3,936,091)	\$ (4,005,263)	\$ (4,076,510)

However, Form B, 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	FY2022	FY 2023	FY 2024
Gross Patient Revenue	\$5,401,190,230	\$5,789,119,051	\$6,204,910,021
Deductions from Gross Patient Revenue	\$3,595,603,814	\$3,911,056,740	\$4,254,326,193
Net Patient Revenue	\$1,805,586,416	\$1,878,062,311	\$1,950,583,829
Other Operating Revenue	\$35,614,214	\$35,614,214	\$35,614,214
Total Expenses	\$342,468,742	\$1,432,753,354	\$1,467,730,853
Net Income Fiscal Year	\$1,498,731,888	\$480,923,170	\$518,467,190

The assumptions used by the applicant in preparation of the pro forma financial statements 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.

In summary, the applicant adequately demonstrates the availability of funds for the capital needs of the proposal and 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 48, the 2016 SMFP defines the service area for acute care services by county (or multicounty service area for counties without a hospital). 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 2016 SMFP identifies a need determination for 84 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 84 acute care beds for a total of 890 facility-wide acute care beds upon completion of this project (add 29 beds on the UNC Hospitals Hillsborough Campus) and the concurrently filed application, Project ID #J-11164-16 (add 55 beds on the UNC Hospitals Chapel Hill Campus). 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 29 additional acute care beds at UNC Hospitals Hillsborough Campus, the 30 relocated inpatient rehabilitation beds, the development of inpatient dialysis services and the expansion of support infrastructure. 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 VII.1(b), pages 137-138, the applicant provides the projected staffing for UNC Hospitals Hillsborough Campus' proposed project components during the second full fiscal year following the completion of the project, as illustrated in the table below.

Proposed Staffing FY2023

F Y 2025	
	Total # of FTE Position
2 Diagnostic Tower (15 Non-specialty M	
Patient Services Manager III	1.0
Clinical Nurse IV	1.0
Clinical Nurse II	10.0
Clinical Support Tech/Nursing Assistant	5.0
Third Floor New Bed Wing (18 Med/Su	
Observation Beds)	8 2 0 0 0 0 0 0 0 0 0 0
,	
Patient Services Manager III	1.0
Clinical Nurse IV	1.0
Clinical Nurse II	13.0
Clinical Support Tech II	7.8
Nursing Assistant II	6.2
Inpatient Rehabilitation Beds (30 Beds)	
Nurse Manager	1.0
Clinical Nurse IV	2.0
Clinical Nurse III	3.6
Clinical Nurse II	21.6
Nursing Assistant II	9.5
Nursing Assistant I	5.3
Clinical Support Tech II	7.3
Clinical Support Tech I	1.2
HUC	3.0
Fourth Floor New Bed Wing (25 Observation	on Beds)
Patient Services Manager III	1.0
Clinical Nurse IV	1.0
Clinical Nurse II	17.0
Clinical Support Tech II	5.0
Nursing Assistant II	4.0
First Floor New Bed Wing (6 Dialysis Bays)
Registered Nurses	3.0
Charge RN	0.5
Biomed Technician	
Clinical Support	0.2
Total FTE Positions	132.2

As illustrated in the table above, the applicant projects 132.2 full-time equivalent (FTE) positions in FY2023, the second full fiscal year following completion of the proposed project. Furthermore, in Section VII.3(a), pages 138-139, the applicant states:

"Because UNC Hospitals currently provides each of the services in the proposed project, the <u>positions</u> [emphasis in original] that result from this project will not be new. That is, UNC Hospitals currently employs staff in each of these positions. No new positions (i.e. types of FTEs) will result from the proposed project; however, UNC Hospitals does intend to hire incremental staff to support the additional acute care capacity."

In Section VII.6 (a) and (b), pages 140-141, the applicant provides UNC's recruitment and staff retention plans. In Section VII.8 (a), page 142, the applicant states Dr. B. Anthony Lindsey is the Chief Medical Officer for UNC Hospitals. See Exhibit 18 for a copy of Dr. Lindsey's letter of support. On pages 143-144, the applicant provides the number of UNC Hospitals' active medical staff by specialty. 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.

С

The applicant currently provides acute care inpatient, inpatient rehabilitation and inpatient dialysis services. UNC Hospitals has the necessary ancillary and support services currently available. In Section II.2 (b), page 36, the applicant states:

"UNC Hospitals Hillsborough Campus currently has all ancillary and support services in place necessary to support hospital operations. These existing ancillary and support services will also support the 29 additional beds to be developed as proposed in this application as well as the 30 inpatient rehabilitation beds to be relocated from UNC Hospitals Main Campus."

The applicant discusses the services to be offered at UNC Hospitals Hillsborough Campus in Section II.1 on pages 30-35. See Exhibit 4 of the application for a copy of a letter from Dr. Brian P. Goldstein, Executive Vice President and Chief Operating Officer of UNC Hospitals, attesting to the availability of ancillary and support services. Exhibit 28 contains letters of support from physicians for the proposed project. 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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The applicant proposes to develop the proposed project in a combination of existing and newly constructed space located on the Hillsborough Campus. The application estimates 81,006 square feet of new construction and 10,027 square feet of renovated space. Exhibit 27 contains a certified estimate which includes site preparation costs and construction costs will total \$52,435,167, with total capital costs of \$76,889,557, which corresponds to the capital cost projections provided by the applicant in Section VIII, pages 148-149. In Section XI.7,

pages 164-165, the applicant describes the methods that will be used by the facility to maintain efficient energy operations and contain the costs of utilities. The discussion regarding costs and charges found in Criterion (5) is incorporated herein by reference. The applicants adequately demonstrate 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 healthrelated 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;

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In Section VI.12 and VI.13, pages 132-133, the applicant provides the payor mix during FY 2015 for UNC Hospitals' entire facility and UNC Hospitals' Medical/Surgical and Inpatient Rehabilitation services, as illustrated in the table below:

	7 2015(7/1/14-6/30 <u>s as a Percent of T</u>	,	
	Entire Facility	Medical/ Surgical	Inpatient Rehabilitation
Self-Pay / Indigent / Charity	6.0%	6.5%	4.0%
Medicare/Medicare Managed Care	34.3%	41.4%	38.3%
Medicaid	21.9%	21.0%	26.2%
Commercial Insurance	21.5%	0.6%	1.2%
Managed Care	9.2%	25.3%	24.3%
Other (Other Gov't)	7.1%	5.2%	6.1%
Total	100.0%	100.0%	100.0%

UNC Hospitals
FY 2015(7/1/14-6/30/15)
Inpatient Days as a Percent of Total Utilization

In Section VI.2, page 124, the applicant states:

"As North Carolina's only state-owned comprehensive, full service hospitalbased 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 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	% 65+	% Female	% Racial and Ethnic Minority*	% Persons in Poverty**	% < Age 65 with a Disability	% < Age 65 without Health 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

*Excludes "White alone" who are "not Hispanic or Latino"

**"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."

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;

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Recipients of Hill-Burton funds were required to provide uncompensated care, community service and access by minorities and handicapped persons. In Section VI.11, page 131, 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 2015 is estimated to be \$176 million (12.7 percent of Net Revenue). 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 19 and 20 for copies of the applicant's Financial Assistance and Admission policies, respectively.

In Section VI.10 (a), page 131, 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 VI.14 (a) and (b) and VI.15 (a) and (b), pages 133-134, the applicant provides the projected payor mix for the entire facility, medical/surgical services, and inpatient rehabilitation services for UNC Hospitals FY2023 (July 1, 2022 – June 30, 2023), the second full fiscal year following completion of the project, as illustrated in the table below:

	Entire Facility	Non-specialty Medical/Surgical	Inpatient Rehabilitation
Self-Pay / Indigent / Charity	6.0%	6.5%	4.0%
Medicare/Medicare Managed Care	34.3%	41.4%	38.3%
Medicaid	21.9%	21.0%	26.2%
Commercial Insurance	21.5%	0.6%	1.2%
Managed Care	9.2%	25.3%	24.3%
Other (Other Gov't)	7.1%	5.2%	6.1%
Total	100.0%	100.0%	100.0%

UNC Hospitals Projected FY 2023 Payor Mix Inpatient Days as a Percent of Total Utilization

Totals may not sum due to rounding.

On page 134, the applicant states that its projected payor mix is not expected to change from its historical mix.

The applicant adequately demonstrates that medically underserved populations will have adequate 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 VI.9, page 130, the applicant describes the range of means by which a person will have access to its services. The information provided 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 V.1(b), page 111, the applicant states that UNC Hospitals is associated with several health professional training programs. The applicant also 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 V.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 48, the 2016 SMFP defines the service area for acute care services by county (or multicounty service area for counties without a hospital). 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 applicant operates the only state-owned academic medical center in North Carolina and is the only acute care hospital located in the Orange County service area. UNC Hospitals serves patients originating from all 100 counties in North Carolina. The applicant proposes to add 29 additional acute care beds for a total of 101 at UNC Hospitals Hillsborough Campus.

In Section V.7, pages 119-122, 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 be in compliance with the spirit and legislative intent of the Certificate of Need Law."

See also Sections II, III, V, VI and VII 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 29 acute care beds, relocate inpatient rehabilitation services, and develop inpatient dialysis 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) 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 I.12, page 17, the applicant states that in addition to the UNC Hospitals, it currently owns, leases, or manages eight other hospitals in North Carolina. According to the files in the Acute and Home Care Licensure and Certification Section, DHSR, incidents occurred at three of the nine facilities within the eighteen months immediately preceding submission of the application through the date of this decision related to quality of care. As of the date of this decision, the problems had been corrected. 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 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 II.8, pages 42-43, the applicant projects that the utilization rate for all UNC Hospitals' acute care beds in the Orange County service area will be 77.4% in the third Project Year (PY3: October 1, 2022 – September 30, 2023) following completion of the proposed project, using average daily census (ADC) to calculate occupancy.

Combined Total Acute Care Beds	Patient Days	ADC	AC Beds	Occupancy
UNC Hospitals Main Campus	229,531	628.9	789	-
UNC Hospitals Hillsborough Campus	21,798	59.7	101	-
UNC Hospitals Orange County Total	251,329	688.6	890	77.4%

Projected UNC Hospitals Acute Care Bed Utilization for the Service Area

In Section III, beginning on page 71, the applicant discusses occupancy rates for UNC Hospitals' Main and Hillsborough Campuses, stating that UNC Hospitals 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). In Section III, page 75, the applicant provides tables showing projected total acute care utilization for UNC Hospitals, using patient days as a percentage of available bed days to calculate occupancy, as summarized below.

	Hillsborough Campus		Chapel Hill Main Campus			Total UNC Hospitals Facility-wide			
	PYI	PY2	PY3	PYI	PY2	PY3	PYI	PY2	PY3
Bed Days	35,623	36,865	36,890	277,735	286,605	288,182	313,358	323,470	325,072
# Beds	98	101	101	761	785	789	859	886	890
Patient Days	21,487	21,642	21,798	226,260	227,889	229,531	247,747	249,531	251,329
% Occupancy	60.3%	58.7%	59.1%	81.5%	79.5%	79.6%	79.06%	77.14%	77.3%

Projected UNC Hospitals Acute Care Bed Utilization October 1, 2020 through September 30, 2023

Totals may not sum due to rounding

The occupancy rate as calculated by the applicant with the two different methods arrives at an occupancy rate within one tenth of a percentage point of one another, which can be explained by rounding and by 2024 being a Leap Year. Projected utilization is based on reasonable and adequately supported assumptions. The application is conforming with this rule requiring a projected occupancy rate above the required 75.2 rate.

(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 III.1, pages 60-75, for the applicant's assumptions 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.