Atrium Health

Atrium Health University City

Acute Care Beds

Certificate of Need

Application & Exhibits

October 15, 2019

Department of Health and Human Services

Division of Health Service Regulation

Healthcare Planning and Certificate of Need Section

Certificate of Need Application Fee Sheet

N.C. Gen. Stat. § 131E-182(c)

Office Use Only	
Project ID #:	________________
Date Received:	________________

Applicant(s) The Charlotte-Mecklenburg Hospital Authority d/b/a Atrium Health University City

Total Projected Capital Expenditure: $ 3,766,000

(1) If the Total Projected Capital Expenditure is less than or equal to $1,000,000, the application fee is **$5,000.00**

(2) If the Projected Capital Expenditure is more than $1,000,000, the application fee will is calculated as follows:

a	Total Projected Capital Expenditure	$	3,766,000
b	Subtract $1,000,000	$	(1,000,000)
c	Subtotal	$	2,766,000
d	Multiply the Subtotal by $0.003 and round to the nearest whole dollar	$	8,298
e	Add $5,000	$	5,000
f	Total Fee Due*	$	13,298

*Pursuant to N.C. Gen. Stat. § 131E-182(c), the maximum certificate of need application fee is **$50,000.00**

Make checks payable to:

Healthcare Planning and Certificate of Need Section, DHSR, DHHS

CERTIFICATION

The undersigned hereby certifies that the information included in this application and all exhibits is correct to the best of my knowledge and belief and that it is my intent to develop and offer the proposed new institutional health service(s) as described in the application.

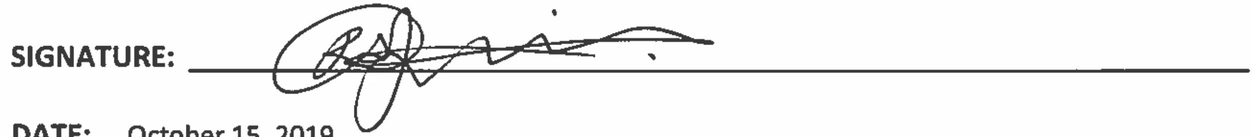
LEGAL NAME OF APPLICANT: The Charlotte-Mecklenburg Hospital Authority

ADDRESS OF APPLICANT: 1000 Blythe Boulevard, Charlotte, NC 28203

PRINTED NAME: Rasu B. Shrestha

TITLE: Executive Vice President and Chief Strategy Officer

SIGNATURE:



DATE: October 15, 2019

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All data in this document was produced by computer and may not add exactly due to computer rounding.

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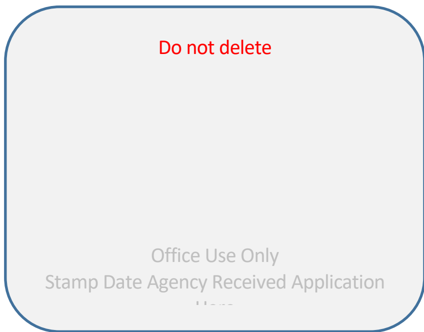
AVERY

Certificate of Need Application for

ACUTE CARE SERVICES AND MEDICAL EQUIPMENT



Project ID #: ______________________ FID #: ______________________

(Office Use Only) (Office Use Only)

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Exhibits – A through O		Include all supporting documents for Sections A-O in the corresponding Exhibits A-O, which should be labeled as shown in the following example. Exhibit A.2 would include all documents provided in response to Section A, Question 2. Exhibit C.1 would include all documents provided in response to Section C, Question 1.	

DEFINITIONS

These pages should be included in the application as submitted.

Applicant: When used in this application form, the term "applicant" means each person, as that term is defined in G.S. 131E-176(19), who will:

- Incur an obligation for a capital expenditure to develop or offer the proposed new institutional health service(s); or
- Offer or develop the proposed new institutional health service(s).

Campus: When used in this application form, the term "campus," which is defined in G.S. 131E-176(2c), means *"the adjacent grounds and buildings, or grounds and buildings not separated by more than a public right-of-way, of a health service facility and related health care entities."*

CMS: When used in this application form, the term "CMS" means the Centers for Medicare and Medicaid Services, a part of the U.S. Department of Health and Human Services.

Diagnostic Center: When used in this application form, the term "diagnostic center," which is defined in G.S. 131E-176(7a), means *"a freestanding facility, program, or provider, including but not limited to, physicians' offices, clinical laboratories, radiology centers, and mobile diagnostic programs, in which the total cost of all the medical diagnostic equipment utilized by the facility which cost ten thousand dollars ($10,000) or more exceeds five hundred thousand dollars ($500,000)."*

Entire Facility: When used in this application form, the term "entire facility" means all campuses on the hospital license.

Some questions ask for information regarding either the **entire facility** or **campus**. Determining whether to provide information for the entire facility or campus depends on the project. If the project involves the entire facility, the response should be for the entire facility. If the project involves just one campus, the response should be for just that campus. There are two exceptions. When answering **Section B, Questions 4 and 5**, the response should always be for the entire facility, not for a single campus.

Facility: When used in this application form, the term "facility" means either a hospital, long-term care hospital or a diagnostic center and generally means the facility where the new institutional health service will be developed or offered.

Fiscal Year (FY): When used in this application form, the term "fiscal year" means the 12-month period used by the applicant to report financial results. Examples of typical FYs are:

- January 1st to December 31st
- July 1st to June 30th
- October 1st to September 30th

Health Service Facility: When used in this application form, the term "health service facility" means either a hospital, long-term care hospital or a diagnostic center.

Health System: When used in this application form, the term “health system” has the same meaning as that term is defined in Chapter 6 in the State Medical Facilities Plan in effect at the time the review begins. The SMFP can be obtained at no cost on the Division’s website at: https://www2.ncdhhs.gov/dhsr/ncsmfp/index.html.

Hospital: When used in this application form, the term “hospital,” which is defined in G.S. 131E-176(13), means *“a public or private institution which is primarily engaged in providing to inpatients, by or under supervision of physicians, diagnostic services and therapeutic services for medical diagnosis, treatment, and care of injured, disabled, or sick persons, or rehabilitation services for the rehabilitation of injured, disabled, or sick persons. The term includes all facilities licensed pursuant to G.S. 131E-77 of the General Statutes, except long-term care hospitals.’*

Immediate Jeopardy: When used in this application form, the term “immediate jeopardy” which is defined in 42 CFR Part 489.3, means *“A situation in which the provider’s noncompliance with one or more requirements of participation has caused, or is likely to cause, serious injury, harm, impairment, or death to a resident.”*

Long-term Care Hospital: When used in this application form, the term “long-term care hospital” (**LTCH**), which is defined in G.S. 131E-176(14k), means *“a hospital that has been classified and designated as a long-term care hospital by the Centers for Medicare and Medicaid Services, Department of Health and Human Services, pursuant to 42 C.F.R. § 412.”*

Major Medical Equipment: When used in this application form, the term “major medical equipment,” which is defined in G.S. 131E-176(14o), means *“a single unit or single system of components with related functions which is used to provide medical and other health services and which costs more than seven hundred fifty thousand dollars ($750,000).”*

Medical Equipment: When used in this application form, the term “medical equipment” means equipment used to diagnose and treat patients, including the following:

- Cardiac catheterization equipment, Gamma knives, Heart-lung bypass machines, Linear accelerators, Lithotriptors, MRI scanners, PET scanners, or Simulators.
- Major medical equipment as that term is defined in G.S. 131E-176(14o).
- For Diagnostic Center Proposals, any diagnostic medical equipment costing $10,000 or more.

Medical Services: When used in this application form, the term “medical services” includes services typically provided by an acute care hospital such as: nursing, emergency; pharmacy; laboratory; radiology; physical, speech or occupational therapy; respiratory therapy, surgery, cardiac rehab, etc.

New institutional health service: When used in this application form, the term “new institutional health service,” which is defined in G.S. 131E-176(16), means:

“a. The construction, development, or other establishment of a new health service facility.
b. Except as otherwise provided in G.S. 131E-184(e), the obligation by any person of a capital expenditure exceeding two million dollars ($2,000,000) to develop or expand a health service or a health service facility, or which relates to the provision of a health service. The cost of any studies, surveys, designs, plans, working drawings, specifications, and other activities, including staff effort and consulting and other services, essential to the acquisition, improvement, expansion, or replacement of any plant or equipment with respect to which an expenditure is made shall be included in determining if the expenditure exceeds two million dollars ($2,000,000).
c. Any change in bed capacity as defined in G.S. 131E-176(5).

d. The offering of dialysis services … by or on behalf of a health service facility if those services were not offered within the previous 12 months by or on behalf of the facility.

e. A change in a project that was subject to certificate of need review and for which a certificate of need was issued, if the change is proposed during the development of the project or within one year after the project was completed. For purposes of this subdivision, a change in a project is a change of more than fifteen percent (15%) of the approved capital expenditure amount or the addition of a health service that is to be located in the facility, or portion thereof, that was constructed or developed in the project.

f. The development or offering of a health service as listed in this subdivision by or on behalf of any person:

- *1. Bone marrow transplantation services.*
- *2. Burn intensive care services.*
- *2a. Cardiac catheterization services, except cardiac catheterization services provided on equipment furnished by a person authorized to operate such equipment in North Carolina pursuant to either a certificate of need issued for mobile cardiac catheterization equipment or a settlement agreement executed by the Department for provision of cardiac catheterization services.*
- *3. Neonatal intensive care services.*
- *4. Open-heart surgery services.*
- *5. Solid organ transplantation services.*

f1. The acquisition by purchase, donation, lease, transfer, or comparable arrangement of any of the following equipment by or on behalf of any person:

- *1. Air ambulance.*[1]
- *2. Repealed.*
- *3. Cardiac catheterization equipment.*
- *4. Gamma knife.*
- *5. Heart-lung bypass machine.*
- *5a. Linear accelerator.*
- *6. Lithotriptor.*
- *7. Magnetic resonance imaging scanner.*
- *8. Positron emission tomography scanner.*
- *9. Simulator.*

g.to k. Repealed.

l. The purchase, lease, or acquisition of any health service facility, or portion thereof, or a controlling interest in the health service facility or portion thereof, if the health service facility was developed under a certificate of need issued pursuant to G.S. 131E-180 [Health Maintenance Organizations]*.*

m. Any conversion of nonhealth service facility beds to health service facility beds.

…

p. The acquisition by purchase, donation, lease, transfer, or comparable arrangement by any person of major medical equipment.

q. The relocation of a health service facility from one service area to another.

…

s. The furnishing of mobile medical equipment to any person to provide health services in North Carolina, which was not in use in North Carolina prior to the adoption of this provision, if such equipment would otherwise be subject to review in accordance with G.S. 131E-176(16)(f1.) or G.S. 131E-176(16)(p) if it had been acquired in North Carolina.

t. Repealed.

[1]Pursuant to an Order of Permanent Injunction issued by the United States District Court for the Eastern District of North Carolina Western Division on October 15, 2008, the North Carolina Department of Health and Human Services is prohibited from requiring that any person obtain a certificate of need before acquiring an air ambulance.

u. *The construction, development, establishment, increase in the number, or relocation of an operating room or gastrointestinal endoscopy room in a licensed health service facility, other than the relocation of an operating room or gastrointestinal endoscopy room within the same building or on the same grounds or to grounds not separated by more than a public right-of-way adjacent to the grounds where the operating room or gastrointestinal endoscopy room is currently located.*
v. *The change in designation, in a licensed health service facility, of an operating room to a gastrointestinal endoscopy room or change in designation of a gastrointestinal endoscopy room to an operating room that results in a different number of each type of room than is reflected on the health service facility's license in effect as of January 1, 2005."*

Operating Room: When used in this application form, the term "operating room" (OR) which is defined in G.S. 131E-176(18c), means "*a room used for the performance of surgical procedures requiring one or more incisions and that is required to comply with all applicable licensure codes and standards for an operating room."*

OR Need Methodology: When used in this application form, the term "OR Need Methodology" means the methodology for projecting operating room need as described in Chapter 6 in the State Medical Facilities Plan (SMFP) in effect on the date the review begins. The SMFP can be obtained at no cost on the Division's website at: https://www2.ncdhhs.gov/dhsr/ncsmfp/index.html.

Person: When used in this application form, the term "person," which is defined in G.S. 131E-176(19), means *"an individual, a trust or estate, a partnership, a corporation, including associations, joint stock companies, and insurance companies; the State, or a political subdivision or agency or instrumentality of the State."*

Related Entities: When used in this application form, the term "related entities" means persons that:
- Share the same parent corporation or holding company; or
- Are a subsidiary of the same parent corporation or holding company; or
- Are participants in a joint venture which provides the same or similar services proposed in this application.

Service Area: When used in this application form, the term "service area," which is defined in G.S.131E-176(24a), means *"the area of the State, as defined in the State Medical Facilities Plan* [SMFP] *or in rules adopted by the Department, which receives services from a health service facility."* If neither the SMFP nor the CON Rules define the service area, the service area is considered to be the same as the projected patient origin reported in Section C, Question 3.

Service Component: When used in this application form, the term "service component" means:

- Acute care beds (including ICU beds except neonatal and burn ICU beds), neonatal ICU beds, burn ICU beds, bone marrow transplant beds or solid organ transplant beds included in the project;
- Each type of medical equipment included in the project; or
- Services such as emergency, surgical, imaging, cardio-pulmonary, rehabilitative, laboratory or pharmacy included in the project.

State Medical Facilities Plan: When used in this application form, the term "State Medical Facilities Plan" (**SMFP**) means the SMFP in effect on the date the review begins. The SMFP can be obtained at no cost on the Division's website at: https://www2.ncdhhs.gov/dhsr/ncsmfp/index.html.

SECTION A - IDENTIFICATION

The application includes questions for up to two applicants. **See the definitions for who needs to be identified as an applicant.** If there are more than two applicants, copy all of Question A.1, change Applicant 1 to Applicant 3 where appropriate, and renumber Questions 3-7 in this Section as appropriate. Repeat this process if there are more than three applicants renumbering as necessary.

1. Applicant 1 **Business ID # ________________**
Office Use Only

(a) Provide the Legal Name (for corporations, LLCs, or partnerships, the name should match the name as authorized by the Secretary of State and should not include any "doing business as" names):

The Charlotte-Mecklenburg Hospital Authority 56-0529945
(Name) **(Federal Taxpayer ID #)**

(b) Is Applicant 1 an existing legal entity? **Yes** X **No** ___________

(c) If yes, provide supporting documentation in an Exhibit.

The Charlotte-Mecklenburg Hospital Authority (CMHA) is a North Carolina hospital authority body corporate and politic. Please see Exhibit A.1 for a copy of the organizing documents for CMHA.

(d) If no, explain the current status of Applicant 1.

Not applicable.

(e) Name of parent or holding company (if applicable): Not applicable.

2. Applicant 2 **Business ID # ________________**
Office Use Only

(a) Provide the Legal Name (for corporations, LLCs, or partnerships, the name should match the name as authorized by the Secretary of State and should not include any "doing business as" names):

Not applicable.
(Name) **(Federal Taxpayer ID #)**

(b) Is Applicant 2 an existing legal entity? **Yes** __________ **No** ___________

Not applicable.

(c) If yes, provide supporting documentation in an Exhibit.

Not applicable.

(d) **If no, explain the current status of Applicant 2.**

Not applicable.

(e) **Name of parent or holding company (if applicable):** Not applicable.

3. **Contact Individual: The one individual to whom all correspondence regarding this application shall be directed by the Agency. The individual must be able to provide clarifying or supplemental information regarding this application if requested by the Agency during the review. If a certificate of need is issued for the project, the certificate holder(s) may designate a different individual to be the contact individual to whom all correspondence related to progress reports will be directed by the Agency.**

Individual ID #: ____________________
Office Use Only

Name: Elizabeth Kirkman

Title: Assistant Vice President, Atrium Health Strategic Services Group

Mailing Address: 2709 Water Ridge Parkway, Suite 200 | Charlotte | 28217
Number and Street or PO Box | **City** | **ZIP Code**

Direct Telephone Number: 704.446.8475

Email Address (Required): elizabeth.kirkman@atriumhealth.org

4. **Project Description:**

(a) **Type of Facility:**
__X__ **Hospital**
_____ **Long-term Care Hospital (LTCH)**
_____ **Diagnostic Center**

(b) **Identify the essential elements of the project, including the types of services, number of beds or number and type of equipment involved. Following are examples of correct content and format:**

- **Add 50 acute care beds for a total of 250 acute care beds upon project completion;**
- **Relocate the facility to a new site in the same service area;**
- **Acquire a second MRI scanner;**
- **Develop a new campus (or facility) by relocating 50 acute care beds and 3 operating rooms to a new site in the same service area; or**
- **Cost overrun for Project ID #G-10000-12 (add 50 acute care beds).**

Add 16 acute care beds at CMHA d/b/a Atrium Health University City[2] for a total of 116 acute care beds upon project completion.

[2] CMHA also does business as Atrium Health, formerly known as Carolinas HealthCare System (CHS). Atrium Health University City was formerly known as Carolinas HealthCare System University.

(c) **What is the project's total proposed capital expenditure? $** 3,766,000

The total proposed capital expenditure should equal the total capital cost reported in <u>Form F.1a Capital Cost</u> or <u>Form F.1b Capital Cost for Cost Overrun or Change of Scope</u>, both of which can be found in Section Q.

The total proposed capital cost above equals the total capital cost reported in Form F.1a Capital Cost, included in Section Q.

(d) Check all of the following that apply to the proposed project:

X	In response to a need determination for acute care beds or medical equipment		Cardiac Catheterization Equipment
	New hospital*		Gamma Knife
	New campus of hospital*		Heart Lung Bypass Machine
	New diagnostic center		Linear Accelerator
	Replacement hospital* or diagnostic center		Lithotriptor
	Expansion of a hospital* or diagnostic center		Major Medical Equipment
	Renovation of a hospital* or diagnostic center		MRI Scanner
	Change of scope for previously approved project(s)		PET/CT Scanner
	Cost overrun for previously approved project(s)		Simulator
	Other (briefly describe)		CT Scanner

*Includes acute care hospitals and long-term care hospitals but not inpatient rehabilitation or psychiatric hospitals.

(e) If the proposal involves beds, complete the following table for the facility Identified in response to Section A, Question 5.

	Acute Care Beds	LTCH Beds
Number currently licensed	100	NA
Number Previously Approved, not yet Operational	NA	NA
Number to be Added as Part of this Project	16	NA
Number to be Deleted as Part of this Project	NA	NA
Total Number at Project Completion	116	NA

(f) **If the proposal involves medical equipment, complete the following table for the facility identified in response to Section A, Question 5. List only equipment that is included in the scope of the project as described in Section C, Question 1.**

Not applicable.

Type	# of Units			
	Existing	Approved	Proposed	Total

5. **Name of facility where the new institutional health service will be developed or offered (your response should be to subpart (a) or subpart (b) but not both):**

(a) **Existing Facility or Campus to be Expanded on the Same Site**:

Atrium Health University City
Current name of facility, which should be the name on the license.

8800 North Tryon St	Charlotte	Mecklenburg	28262
(Number & Street)	**(City)**	**(County)**	**(ZIP Code)**

County: Mecklenburg **FID #** 923516

License # H0255

Provide the last former name of the facility if applicable (this is needed in order to identify the correct facility in the Agency's database):

Carolinas HealthCare System University

If proposing a new name for an existing facility, provide the new name below and indicate that this is a name change for the existing facility.

Not applicable.

(b) **New or Replacement Facility or Campus to be Developed on a New Site**:

Not applicable.
(Proposed Name of Facility or Campus) **(County)**

Not applicable.
(Number & Street *) **(City)** **(ZIP Code)**

*** This must be the same as the site address provided in Section K, Question 4(a). Please be as specific as possible.**

6. Owner/operator:

(a) Does the applicant or will the applicant operate the facility?

Yes ___X___ **No**_______

If no, provide the name and address of the entity that operates or will operate the facility.

Not applicable.

(b) Does the applicant or will the applicant own the building where the facility will be located?

Yes ___X___ **No**_______

If no, provide the name and address of the owner of the building.

Not applicable.

(c) Does the owner of the building or will the owner of the building have any joint or common ownership with the applicant?

Yes _______ **No**_______

If yes, explain the relationship.

Not applicable.

7. (a) Hospital Proposals

(i) Identify all existing and approved hospitals located in North Carolina that are owned or operated by the applicant or a related entity by completing <u>Form A Facilities</u>, which is found in Section Q.

Please see Form A Facilities in Section Q for a list of all existing and approved hospital facilities located in North Carolina that are owned or operated by CMHA or a related entity.

(ii) If the applicant or a related entity does not currently own or operate any existing hospitals anywhere in North Carolina, describe the applicant's experience operating such facilities.

Not applicable.

(b) Long-term Care Hospital Proposals

(i) Identify all existing and approved long-term care hospitals located in North Carolina that are owned or operated by the applicant or a related entity by completing <u>Form A Facilities</u>, which is found in Section Q.

(ii) If the applicant or a related entity does not currently own or operate any existing LTCHs anywhere in North Carolina, describe the applicant's experience operating such facilities.

Not applicable. The proposed project does not involve a long-term care hospital.

(c) Diagnostic Center Proposals

(i) Identify all existing and approved diagnostic centers located in North Carolina that are owned or operated by the applicant or a related entity by completing Form A Facilities, which is found in Section Q.

(ii) If the applicant or a related entity does not currently own or operate any existing diagnostic centers anywhere in North Carolina, describe the applicant's experience operating such facilities.

Not applicable. The proposed project does not involve a diagnostic center.

SECTION B – “CRITERION (1)” – G.S. 131E-183(a)(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.”

1. (a) If the application is being submitted in response to a need determination in the State Medical Facilities Plan (SMFP), identify the need determination:

2019 SMFP, Chapter 5, Table 5B, page 50, Mecklenburg County, 76 beds.

Example: 2016 SMFP, Chapter 5, Table 5B, page 58, Orange County, 84 beds.

(b) If the application is being submitted in response to a need determination for acute care beds in Chapter 5 of the SMFP, document that the applicant meets all of the requirements of a “qualified applicant,” which are as follows:

(i) The hospital provides or will provide a 24-hour emergency department.

Atrium Health University City is an existing acute care hospital that operates a 24-hour emergency department.

(ii) The hospital provides or will provide inpatient medical services to both surgical and non-surgical patients.

Atrium Health University City is an existing acute care hospital that provides inpatient medical services to both surgical and non-surgical patients.

(iii) If proposing a new hospital, the hospital will provide 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) which are listed in Chapter 5 of the SMFP under Qualified Applicants.

Not applicable. The proposed project does not involve a new hospital.

2. Check each policy below, from Chapter 4 of the SMFP, which is applicable to the review:

	Policy AC-3	Exemption from Plan Provisions for Certain Academic Medical Center Teaching Hospital Projects
	Policy AC-4	Reconversion to Acute Care
	Policy AC-5	Replacement of Acute Care Bed Capacity
	Policy AC-6	Heart-Lung Bypass Machines for Emergency Coverage
	Policy TE-1	Conversion of Fixed PET Scanners to Mobile PET Scanners
	Policy TE-2	Intraoperative Magnetic Resonance Scanners
	Policy TE-3	Plan Exemption for Fixed Magnetic Resonance Imaging Scanners
X	Policy GEN-3	Basic Principles
X	Policy GEN-4	Energy Efficiency and Sustainability for Health Service Facilities

The language of each Policy follows in the same order as listed above. Following each policy are questions that must be answered if the policy is applicable to the review. If a policy is not applicable, after briefly stating why it is not applicable, the applicant may delete the language of the policy and the questions related to that policy. However, do not renumber any following questions.

Policy AC-3: Exemption from Plan Provisions for Certain Academic Medical Center Teaching Hospital Projects states:

"Projects for which certificates of need are sought by Academic Medical Center Teaching Hospitals may qualify for exemption from the need determinations of this document. The Healthcare Planning and Certificate of Need Section shall designate as an Academic Medical Center Teaching Hospital any facility whose application for such designation demonstrates the following characteristics of the hospital:

1. ***Serves as a primary teaching site for a school of medicine and at least one other health professional school, providing undergraduate, graduate and postgraduate education.***
2. ***Houses extensive basic medical science and clinical research programs, patients and equipment.***
3. ***Serves the treatment needs of patients from a broad geographic area through multiple medical specialties.***

[Note: The following paragraph is the second paragraph referenced in the questions that follow this policy.]

Exemption from the provisions of need determinations of the North Carolina State Medical Facilities Plan shall be granted to projects submitted by Academic Medical Center Teaching Hospitals designated prior to January 1, 1990 provided the projects are necessary to meet one of the following unique academic medical needs:

1. ***Necessary to complement a specified and approved expansion of the number or types of students, residents or faculty that are specifically required for an expansion of students or residents, as certified by the head of the relevant associated professional school; the applicant***

shall provide documentation that the project is consistent with any relevant standards, recommendations or guidance from specialty education accrediting bodies; or

2. *With respect to the acquisition of equipment, is necessary to accommodate the recruitment or retention of a full-time faculty member who will devote a majority of his or her time to the combined activities of teaching (including teaching within the clinical setting), research, administrative or other academic responsibilities within the academic medical center teaching hospital or medical school; or*

3. *Necessary to accommodate patients, staff or equipment for a specified and approved expansion of research activities, as certified by the head of the entity sponsoring the research; and including, to the extent applicable, documentation pertaining to grants, funding, accrediting or other requirements, and any proposed clinical application of the asset; or*

4. *Necessary to accommodate changes in requirements of specialty education accrediting bodies, as evidenced by copies of documents issued by such bodies.*

A project submitted by an Academic Medical Center Teaching Hospital under this policy that meets one of the above conditions shall demonstrate that the Academic Medical Center Teaching Hospital's teaching or research need for the proposed project cannot be achieved effectively at any non-Academic Medical Center Teaching Hospital provider which currently offers and has capacity within the service for which the exemption is requested and which is within 20 miles of the Academic Medical Center Teaching Hospital.

The Academic Medical Center Teaching Hospital shall include in its application an analysis of the cost, benefits and feasibility of engaging that provider in a collaborative effort that achieves the academic goals of the project as compared with the certificate of need application proposal. The Academic Medical Center Teaching Hospital shall also provide a summary of a discussion or documentation of its attempt to engage the provider in discussion regarding its analysis and conclusions.

The Academic Medical Center Teaching Hospital shall include in its application a discussion of any similar assets within 20 miles that are under the control of the applicant or the associated professional school and the feasibility of using those assets to meet the unique teaching or research needs of the Academic Medical Center Teaching Hospital.

For each of the first five years of operation the approved applicant shall submit to Certificate of Need a detailed description of how the project achieves the academic requirements of the appropriate section(s) of Policy AC-3, paragraph 2 [items 1 through 4] as proposed in the certificate of need application.

Applicants who are approved for Policy AC-3 projects after January 1, 2012 shall report those Policy AC-3 assets (including beds, operating rooms and equipment) on the appropriate annual license renewal application or registration form for the asset. The information to be reported for the Policy AC-3 assets shall include: (a) inventory or number of units of AC-3 Certificate of Need-approved assets (including all beds, operating rooms and equipment); (b) the annual volume of days, cases or procedures performed for the reporting year on the Policy AC-3 approved asset; and (c) the patient origin by county. Neither the assets under (a) above nor the utilization from (b) above shall be used in the annual State Medical Facilities Plan need determination formulas, but both the assets and the utilization will be available for informational purposes to users of the State Medical Facilities Plan.

This policy does not apply to a proposed project or the portion thereof that is based solely upon the inability of

the State Medical Facilities Plan methodology to accurately project need for the proposed service(s), due to documented differences in patient treatment times that are attributed to education or research components in the delivery of patient care or to differences in patient acuity or case mix that are related to the applicant's academic mission. However, the applicant may submit a petition pursuant to the State Medical Facilities Plan Petitions for Adjustments to Need Determinations process to meet that need or portion thereof.

Policy AC-3 projects are required to materially comply with representations made in the certificate of need application regarding academic based need. If an asset originally developed or acquired pursuant to Policy AC-3 is no longer used for research and/or teaching, the Academic Medical Center Teaching Hospital shall surrender the certificate of need."

Not applicable. The proposed project does not involve an exemption from plan provisions for an Academic Medical Center Teaching Hospital project.

3. (a) Document that the hospital was designated an Academic Medical Center Teaching Hospital by the Healthcare Planning and Certificate of Need Section prior to January 1, 1990.

Not applicable.

(b) Identify each unique academic medical need which qualifies for an exemption as listed in the second paragraph of the Policy (i.e., Subparagraphs 1-4) that is relevant to this proposal and provide the documentation required by each relevant Subparagraph.

Not applicable.

(c) Identify all non-Academic Medical Center Teaching hospitals located within 20 miles of the Academic Medical Center Teaching Hospital which currently offer and have capacity within the service(s) proposed in this application.

Not applicable.

(d) For each hospital identified in response to 3(c), document that the need for the project cannot be achieved effectively at that hospital.

Not applicable.

(e) For any hospital identified in response to 3(c) where the need for the project could be achieved effectively:

(i) Provide an analysis of the cost, benefits and feasibility of engaging in a collaborative effort with that hospital.

(ii) Document the attempts to discuss the analysis and conclusions with that provider.

Not applicable.

(f) **Identify any similar assets within the control of the applicant or the associated professional school located within 20 miles of the Academic Medical Center Teaching Hospital and discuss the feasibility of using those assets to meet the unique academic medical need.**

Not applicable.

(g) **For each of the first five years of operation, the applicant commits to providing a detailed description of how the project achieves the academic requirements of the appropriate section(s) of Policy AC-3, paragraph 2, as proposed in the certificate of need application.**

Yes _____

Not applicable.

(h) **The applicant commits to surrender the certificate of need if an asset originally developed or acquired pursuant to Policy AC-3 is no longer used for research and/or teaching.**

Yes _____

Not applicable.

Policy AC-4: Reconversion to Acute Care states:

"Facilities that have redistributed beds from acute care bed capacity to psychiatric, rehabilitation, nursing care, or long-term care hospital use, shall obtain a certificate of need to convert this capacity back to acute care. Applicants proposing to reconvert psychiatric, rehabilitation, nursing care, or long-term care hospital beds back to acute care beds shall demonstrate that the hospital's average annual utilization of licensed acute care beds as calculated using the most recent Truven Health Analytics Days of Care as provided to Healthcare Planning by The Cecil G. Sheps Center for Health Services Research at the University of North Carolina at Chapel Hill, is equal to or greater than the target occupancies shown below, but shall not be evaluated against the acute care bed need determinations shown in Chapter 5 of the North Carolina State Medical Facilities Plan. In determining utilization rates and average daily census, only acute care bed "days of care" are counted.

Facility Average Daily Census	***Target Occupancy of Licensed Acute Care Beds***
1 – 99	*66.7%*
100 – 200	*71.4%*
Greater than 200	*75.2%"*

Not applicable. The proposed project does not involve the reconversion of bed capacity to acute care.

4. **(a)** **Provide projected acute care bed days of care for the total number of licensed acute care beds on the hospital's license (including <u>all</u> acute care beds located on every campus) following completion of the project.**

Not applicable.

(b) Describe all assumptions and the methodology used to project acute care bed days of care in response to 4(a) and provide any supporting documentation in an Exhibit.

Not applicable.

Policy AC-5: Replacement of Acute Care Bed Capacity states:

"Proposals for either partial or total replacement of acute care beds (i.e., construction of new space for existing acute care beds) shall be evaluated against the utilization of the total number of acute care beds in the applicant's hospital in relation to utilization targets found below. For hospitals not designated by the Centers for Medicare & Medicaid Services as Critical Access Hospitals, in determining utilization of acute care beds, only acute care bed "days of care" shall be counted. For hospitals designated by the Centers for Medicare & Medicaid Services as Critical Access Hospitals, in determining utilization of acute care beds, only acute care bed "days of care" and swing bed days (i.e., nursing facility days of care) shall be counted in determining utilization of acute care beds. Any hospital proposing replacement of acute care beds must clearly demonstrate the need for maintaining the acute care bed capacity proposed within the application. Additionally, if the hospital is a Critical Access Hospital and swing bed days are proposed to be counted in determining utilization of acute care beds, the hospital shall also propose to remain a Critical Access Hospital and must demonstrate the need for maintaining the swing bed capacity proposed within the application. If the Critical Access Hospital does not propose to remain a Critical Access Hospital, only acute care bed "days of care" shall be counted in determining utilization of acute care beds and the hospital must clearly demonstrate the need for maintaining the acute care bed capacity proposed within the application.

Facility Average Daily Census	*Target Occupancy of Licensed Acute Care Beds*
1 – 99	*66.7%*
100 – 200	*71.4%*
Greater than 200	*75.2%"*

Note: This policy applies if the applicant proposes to construct new space to replace existing beds on any campus on the hospital license located in the service area.

Not applicable. The proposed project does not involve the replacement of acute care bed capacity.

5. (a) Hospitals <u>not</u> designated as Critical Access – Provide projected acute care bed days of care for the total number of licensed acute care beds on the hospital's license (including <u>all</u> acute care beds located on every campus) following completion of the project.

Not applicable.

(b) Critical Access Hospitals <u>only</u>

(i) Document that the hospital intends to remain designated as a critical access hospital.
(ii) Provide projected acute care bed days of care and swing bed days of care (i.e., nursing facility days of care) for the total number of licensed acute care beds on the hospital's license following completion of the project.
(iii) Document the need to maintain swing bed capacity.

Not applicable.

(c) Describe all assumptions and the methodology used to project acute care bed days of care in response to 5(a) or 5(b)(ii) and provide any supporting documentation in an Exhibit.

Not applicable.

Policy AC-6: Heart-Lung Bypass Machines for Emergency Coverage states:

"To protect cardiac surgery patients, who may require emergency procedures while scheduled procedures are under way, a need is determined for one additional heart-lung bypass machine whenever a hospital is operating an open heart surgery program with only one heart-lung bypass machine. The additional machine is to be used to assure appropriate coverage for emergencies and in no instance shall this machine be scheduled for use at the same time as the machine used to support scheduled open heart surgery procedures. A certificate of need application for a machine acquired in accordance with this provision shall be exempt from compliance with the performance standards set forth in 10A NCAC 14C .1703."

6. (a) Document that the hospital operates an open heart surgery program with only one heart-lung bypass machine.

Not applicable.

(b) Document that the proposed heart-lung bypass machine will not be scheduled for use at the same time as the existing heart-lung bypass machine.

Not applicable.

Policy TE-1: Conversion of Fixed Pet Scanners to Mobile Pet Scanners states:

"Facilities with an existing or approved fixed PET scanner may apply for a Certificate of Need (CON) to convert the existing or approved fixed PET scanner to a mobile PET scanner if the applicant(s) demonstrates in the CON application that the converted mobile PET scanner:

1. ***Shall continue to operate as a mobile PET scanner at the facility, including satellite campuses, where the fixed PET scanner is located or was approved to be located.***

2. ***Shall be moved at least weekly to provide services at two or more host facilities.***

3. ***Shall not serve any mobile host site that is not owned by the PET certificate holder or an entity related to the PET certificate holder such as a parent or subsidiary that is located in the county where any existing or approved fixed PET scanner is located, except as required by subpart (1).***

There will be one certificate of need application filing opportunity each calendar year.

Note: Applications proposing to convert a mobile PET scanner to fixed can only be filed in the July 1 Review Cycle.

Not applicable. The proposed project does not involve the conversion of a fixed PET scanner to a mobile PET scanner.

7. (a) **Document that the proposed mobile PET scanner will operate at the facility, including satellite campuses, where the fixed PET scanner is located or was approved to be located.**

Not applicable.

(b) **Document the proposed mobile PET scanner will be moved at least weekly to provide services at two or more host sites.**

Not applicable.

(c) **Document that the proposed mobile PET scanner will not serve at any host site not owned by the PET certificate holder or an entity related to the PET certificate holder such as a parent or subsidiary that is located in the county where any existing or approved fixed PET scanner is located, except as required by subpart (1) of this Policy.**

Not applicable.

Policy TE-2: Intraoperative Magnetic Resonance Scanners states:

"Qualified applicants may apply for an intraoperative Magnetic Resonance Scanner (iMRI) to be used in an operating room suite.

To qualify, the health service facility proposing to acquire the iMRI scanner shall demonstrate in its certificate of need application that it is a licensed acute care hospital which:

1. ***Performed at least 500 inpatient neurosurgical cases during the 12 months immediately preceding the submission of the application; and***
2. ***Has at least two neurosurgeons that perform intracranial surgeries currently on its Active Medical Staff; and***
3. ***Is located in a metropolitan statistical area as defined by the US Census Bureau with at least 350,000 residents.***

The iMRI scanner shall not be used for outpatients and may not be replaced with a conventional MRI scanner.

The performance standards in 10A NCAC 14C .2703 would not be applicable.

Intraoperative procedures and inpatient procedures performed on the iMRI shall be reported separately on the hospital license renewal application.

These scanners shall not be counted in the inventory of fixed MRI scanners; the procedures performed on the iMRI will not be used in calculating the need methodology and will be reported in a separate table in Chapter 9."

Not applicable. The proposed project does not involve an iMRI scanner.

8. (a) **Document that the health service facility is a licensed North Carolina acute care hospital.**

Not applicable.

(b) **Document the hospital performed at least 500 inpatient neurosurgical cases during the 12 months immediately preceding the submission of the application.**

Not applicable.

(c) **Document that there are at least two neurosurgeons that perform intracranial surgeries on the hospital's Active Medical Staff.**

Not applicable.

(d) **Document that the hospital is located in a metropolitan statistical area as defined by the US Census Bureau with at least 350,000 residents.**

Not applicable.

Policy TE-3: Plan Exemption for Fixed Magnetic Resonance Imaging Scanners states

"Qualified applicants may apply for a fixed magnetic resonance imaging scanner (MRI). To qualify, the health service facility proposing to acquire the fixed MRI scanner shall demonstrate in its certificate of need application that it is a licensed North Carolina acute care hospital with emergency care coverage 24 hours a day, seven days a week and that it does not currently have an existing or approved fixed MRI scanner as reflected in the inventory in the applicable State Medical Facilities Plan.

The applicant shall demonstrate that the proposed fixed MRI scanner will perform at least 850 weighted MRI procedures during the third full operating year.

The performance standards in 10A NCAC 14C .2703 would not be applicable.

The fixed MRI scanner must be located on the hospital's 'main campus' as defined in G.S. 131E-176(14n)."

Not applicable. The proposed project does not involve a plan exemption for fixed MRI scanners.

9. (a) **Document that the health service facility is a licensed North Carolina acute care hospital with emergency care coverage 24 hours a day, seven days a week.**

Not applicable.

(b) **Document that the hospital does not currently have an existing or approved fixed MRI scanner as reflected in the applicable State Medical Facilities Plan.**

Not applicable.

(c) **Document that the proposed fixed MRI scanner will be located on the hospital's "main campus" as that term is defined in G.S. 131E-176(14n).**

Not applicable.

(d) Document that the proposed fixed MRI scanner will perform at least 850 weighted MRI procedures during the third full operating year following completion of the project. Provide any supporting documentation in an Exhibit.

Not applicable.

Policy GEN-3: Basic Principles 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."

10. If the applicant is applying to develop or offer a new institutional health service based on a need determination in the SMFP:

(a) Document how the project will promote safety and quality in the delivery of the proposed services.

Atrium Health believes that the proposed project will promote safety and quality in the delivery of healthcare services. Atrium Health is known for providing high quality services and expects the proposed project to expand its acute care services capacity while bolstering its high quality reputation.

Atrium Health is dedicated to providing the highest quality care and is continually recognized locally and nationally for its commitment to delivering efficient, quality care. Each year, Atrium Health facilities are recognized by many of the top accrediting and ranking organizations in the industry. Awards and recognitions specific to Atrium Health University City include, but are not limited to, the following:

- Atrium Health University City was awarded an "A" Hospital Safety Grade from The Leapfrog Group in the fall of 2018, the spring of 2019, and fall of 2019.
- Healthgrades named Atrium Health University City one of America's 100 Best Hospitals for Stroke Care in 2017, 2018, and 2019, as well as for Critical Care in 2017 and 2018 and Critical Care Excellence in 2019.
- Atrium Health University City received the American Heart Association's Get With the Guidelines (GWTG) Stroke Gold Plus Achievement Award and was named to the GWTG Target: Stroke Honor Roll.
- Atrium Health University City has been named a recipient of the Hallmarks of a Healthy Workplace award.
- Atrium Health University City earned the first-ever Disease-Specific Care Certification by The Joint Commission for its inpatient prostate cancer care.

Atrium Health's commitment to providing quality care is further demonstrated by its Performance Improvement, Utilization, and Risk Management Plans included in Exhibits B.10-1 through B.10-

3. As the medical center continues to expand its acute care services, in both size and provision of services, these plans will continue to ensure that quality care is provided to all patients, including the services involved in this project.

The proposed project will serve to improve the quality of acute care services provided at Atrium Health University City. At present, Atrium Health University City provides exceptional services. However, acute care capacity constraints at Atrium Health University City have begun to hamper patient care as demand exceeds capacity. Please see Section C.4 for a detailed discussion of the need for additional acute care capacity at Atrium Health University City. The proposed project will allow Atrium Health University City to expand its acute care capacity, which in turn will allow Atrium Health University City to better meet patient needs and expectations – thus increasing overall quality and patient satisfaction.

(b) Document how the project will promote equitable access in the delivery of the proposed services.

The proposed project will improve access to acute care services in the service area. Atrium Health University City has been a high quality healthcare provider in the county for over 25 years. Atrium Health has long-promoted economic access to its services as it historically has provided services to all persons in need of medical care, regardless of race, sex, creed, age, national origin, handicap, or ability to pay as demonstrated in Atrium Health's Non-Discrimination policies provided in Exhibit B.10-4. The medical center will continue to serve this population as dictated by the mission of Atrium Health, which is the foundation for every action taken. The mission is simple, but unique: *To improve health, elevate hope, and advance healing – for all*. This includes the medically underserved. Atrium Health's commitment to this mission is borne out not just in words, but in service to patients. To demonstrate Atrium Health's level of commitment to the underserved populations of Mecklenburg County, Atrium Health analyzed acute care discharge data from Truven by payor and system for the first nine months of 2018, January through September.

2018 Acute Care Discharges Originating from Mecklenburg County by Provider

Provider	*Total Discharges*	*Percent of Total*
Atrium Health	37,498	58.2%
Novant Health	24,361	37.8%
All Others*	2,527	3.9%
Total	**64,386**	**100.0%**

Source: Truven.
*All Others includes all non-Mecklenburg County acute care service providers.

As shown above, Atrium Health's hospitals provided 58.2 percent of all acute care discharges originating from Mecklenburg County in 2018. The table below provides the percent of total discharges by payor for each provider over the same time period.

2018 Percent of Total Acute Care Discharges Originating from Mecklenburg County by Provider and Payor

Provider	*Percent of Total Commercial*	*Percent of Total Medicaid*	*Percent of Total Medicare*	*Percent of Total Self-Pay/Other*
Atrium Health	50.0%	66.8%	58.6%	69.5%
Novant Health	45.3%	30.9%	37.5%	25.1%
All Others*	4.7%	2.3%	3.9%	5.5%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Truven.
*All Others includes all non-Mecklenburg County acute care service providers.

As shown above, in 2018, 66.8 percent of all Medicaid inpatients from Mecklenburg County were treated at an Atrium Health facility, compared with Atrium Health's 58.2 percent share of all patients. In addition, 58.6 percent of Medicare and 69.5 percent of Self-Pay Mecklenburg County acute care discharges were treated at an Atrium Health facility. Atrium Health served more than twice as many Medicaid patients and nearly three times as many Self-Pay patients as Novant Health. This means while Atrium Health facilities served the majority of acute care discharges originating from Mecklenburg County in 2018, it served a disproportionately higher share of these underserved patients compared to Novant Health. Based on Atrium Health's demonstrated experience serving the underserved, it is clear that the proposed project will enhance access to these patients.

The Department of Health and Human Services has recognized the need to ensure access to healthcare in as equitable a manner as possible. As noted on page 2 of the *2019 SMFP*, "[t]*he SHCC assigns the highest priority to a methodology that favors providers delivering services to a patient population representative of all payer types in need of those services in the service area*." The proposed project seeks to address this principle and will improve access to acute care services in the service area by expanding the acute care capacity at Atrium Health University City. Atrium Health's total community benefit was more than $2 billion in CY 2018, primarily driven by financial assistance to uninsured patients, bad debt costs, and losses incurred by serving Medicare and Medicaid patients. During CY 2018, Atrium Health University City provided approximately $115 million in charity care and bad debt. Further, Atrium Health has made the recruitment and retention of bilingual staff members a priority at the medical center. Atrium Health provides financial incentives to employees who spend their time using a language skill and to employees who refer bilingual new hires. Please see Exhibit B.10-5 for Atrium Health's policy regarding patients who do not read or speak English. By increasing access for Atrium Health's acute care patients, the proposed project will enhance equitable access to hospital-based services in Mecklenburg County.

(c) Document how the project will maximize healthcare value for resources expended in the delivery of the proposed services.

The proposed application is indicative of Atrium Health's commitment to containing healthcare costs and maximizing healthcare benefit per dollar expended. As discussed in Section C.1, the addition of acute care beds as proposed in this application can be accomplished in a timely and resource-responsible manner as Atrium Health University City has the existing space necessary to accommodate the additional acute care beds without requiring new construction or extensive and cost-prohibitive renovations. As such, Atrium Health believes the additional acute care

capacity is being provided in such a way that will involve minimal cost while also creating additional capacity to care for the growing number of patients - maximizing healthcare value as promulgated in Policy GEN-3.

(d) Document how projected utilization incorporates the concepts of safety, quality, access, and maximum value for resources expended in meeting the need identified in the SMFP.

The utilization projected in the application, particularly in Section Q, Form C and the responses to the Criteria and Standards for Acute Care Beds, will incorporate concepts of safety, quality, access and maximum value by expanding Atrium Health University City's ability to continue demonstrating these concepts in the services it provides. The increased number of patients served, including the medically underserved, will have access to the safe, high quality acute care services provided at Atrium Health University City, and the proposed project will be developed in such a way as to maximize healthcare value.

Policy GEN-4: Energy Efficiency and Sustainability for Health Service Facilities 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 is required to submit a plan for 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."

11. If the proposed capital cost is $2 million or greater, provide a written statement describing the project's plan to assure improved:

(a) Energy efficiency, and
(b) Water conservation.

Atrium Health is committed to energy efficiency and sustainability that balances the need for healthcare services and environmental sustainability in the communities it serves.

Guiding Principles

1. Implement environmental sustainability to improve and reduce our environmental impact.
2. Integrate sustainable operational and facility best practices into existing and new facilities.

3. Encourage partners to engage in environmentally responsible practices.
4. Promote environmental sustainability in work, home, and community.
5. Deliver improved performance to provide a long term return on investment that supports our mission and values.

Atrium Health employs a Facility Management Group with experienced, highly trained and qualified architects, engineers, project managers, tradesmen and technicians, who design, construct, operate, and maintain Atrium Health facilities.

Atrium Health has demonstrated its commitment to a higher standard of excellence and will continue to do so relative to the proposed project. Atrium Health will work with experienced architects and engineers to develop this proposed project to ensure energy efficient systems are an inherent part of the proposed project to the degree appropriate with the proposed renovation. The design team has Energy Star, Leadership in Energy and Environmental Design (LEED) and Hospitals for a Healthy Environment Green Guide for HealthCare (GGHC) experience. Together the team seeks to deliver the following:

- Meet or exceed the requirements of the NC Building Code in effect when line drawings are submitted for review to the DHSR Construction Section.
- Use United States Green Building Council (USGBC) LEED guidelines and GGHC as appropriate to identify opportunities to improve efficiency and performance.
- Use EPA Energy Star for Hospitals rating system to compare performance across Atrium Health, North Carolina, and the United States for benchmarking performance following 12 months of operation.
- Use Atrium Health's Standard Control Sequences to maximize energy efficiency in the BAS and HVAC systems. When fully utilized, these sequences have proven to move Atrium Health acute care hospitals into the top 20 percent of energy efficient hospitals in the nation. Reducing energy consumption per square foot reduces water consumption used for cooling tower and boiler make-up.
- Select new plumbing fixtures to maximize water efficiency and life cycle benefits.
- Design new HVAC systems and select equipment that maximize water efficiency and life cycle benefits.

As a result of these efforts, Atrium Health was recently named a 2019 Energy Star Partner of the Year by the Environmental Protection Agency (EPA) for a second year in a row. This prestigious award is the highest level of recognition that a corporate energy management program can receive from the EPA. In the last decade, only seven other hospitals or healthcare systems have been named Energy Star Partner of the Year and only three other hospitals or healthcare systems have received this recognition two years in a row. Energy Star Partners must perform at a superior level of energy management and meet the following criteria:

- Demonstrate best practices across the organization,
- Prove organization-wide energy savings, and
- Participate actively and communicate the benefits of ENERGY STAR.

Note: Once a certificate of need is approved, if the proposed capital cost of the project is $5 million or greater, a condition will be imposed requiring the applicant to submit an Energy Efficiency and Sustainability Plan to the Agency's Construction Section that conforms to or exceeds energy efficiency and water conservation standards incorporated in the latest editions of the North Carolina State Building Codes and is consistent with the applicant's written statement in Section B, Question 11. The plan shall not adversely affect patient or resident health, safety or infection control.

SECTION C - "CRITERION (3)" and RULES: - G.S. 131E-183(a)(3) and G.S. 131E-183(b)

Criterion (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."*

Scope of the Project

1. Describe the scope of the project in detail. Your response should describe each service component.

For change of scope or cost overrun applications, skip to Section C, Question 13.

INTRODUCTION

Atrium Health is submitting four concurrent and complementary applications to meet the need identified in the *2019 SMFP* for 76 additional acute care beds to be located in Mecklenburg County. This application proposes to develop 16 additional acute care beds at Atrium Health University City; a second application submitted by Atrium Health Pineville proposes to develop 12 additional acute care beds; a third application submitted by CMC proposes to develop 18 additional acute care beds; and a fourth application submitted by Atrium Health University City proposes to develop 30 additional acute care beds at a new acute care hospital campus, Atrium Health Lake Norman. The following is a description of the components of the proposed project.

PROPOSED PROJECT

The additional 16 acute care beds proposed in this application, all of which will be general medical/surgical beds, will be developed on Levels 03 and 04 of the hospital. The following is a discussion of the proposed project.

Level 03

Five of the 16 additional acute care beds proposed in this application will be developed on Level 03 of the hospital. As shown on the line drawings in Exhibit C.1-1, adjacent to existing medical/surgical beds, Level 03 of Atrium Health University City includes five observation beds that will be converted to licensed acute care beds with implementation of the proposed project. These rooms currently meet all inpatient standards and acute care bed licensure requirements and, as such, can be quickly and easily converted into five medical/surgical beds in a cost effective manner.

Level 04

The remaining 11 acute care beds will be developed on Level 04 of the hospital. A portion of Level 04 of Atrium Health University City currently houses Carolinas ContinueCare Hospital at University, a 35-bed Long Term Acute Care (LTAC) unit that is owned and managed by a separate legal entity, ContinueCare, and not licensed as part of Atrium Health University City. ContinueCare leases space on Level 04 of Atrium Health University City for operation of the LTAC. Due to recent changes in reimbursement, LTAC facilities, including Carolinas ContinueCare Hospital at University, are experiencing declining utilization, prompting recent LTAC closures in North Carolina. As a result, Carolinas ContinueCare at University is in the process of downsizing and intends to de-license 18 of its 35 beds by January 2020. Once the 18 LTAC beds have

been de-licensed, ContinueCare will lease a smaller footprint on Level 04 of Atrium Health University City and a demising wall will be constructed to separate the remaining 17-bed LTAC from the adjacent space on Level 04. Please see Exhibit C.1-2 for relevant documentation. As shown on the Existing Level 04 Plan in the line drawings included in Exhibit C.1-1, the space adjacent to the remaining 17-bed LTAC will be renovated to house 14 observation rooms, an inpatient dialysis room with two dialysis stations, offices, and other support space. The space will be utilized in this way during the interim time period between the construction of the demising wall and the development of the project proposed in this application and is reflected as such on the existing line drawings for Level 04. With implementation of the proposed project, Atrium Health University City will no longer use the 14 observation beds and will reconfigure the space to accommodate 11 additional acute care beds, two of which will be upfitted for inpatient dialysis, as shown on the proposed line drawings included in Exhibit C.1-1.

SUMMARY

In summary, pursuant to the need identified for facilities in Mecklenburg County in the *2019 SMFP*, Atrium Health University City proposes to add much needed additional inpatient capacity by developing 16 additional acute care beds in existing, renovated space. Please see Section C.4 for the qualitative need for the proposed project and Form C Methodology and Assumptions for the quantitative need for the proposed project.

Patient Origin

2. Historical Patient Origin

(a) For each service component, provide the number of patients by county of residence or other geographic area who used that service component at the facility identified in Section A, Question 5 during the last full fiscal year (FY) by completing the table below.

Actual Patient Origin for Medical/Surgical Beds

County or other geographic area such as ZIP code	Last Full FY 01/01/2018 to 12/31/2018	
	Number of Days	% of Total
Mecklenburg	13,786	72.9%
Cabarrus	2,077	11.0%
Iredell	501	2.7%
Gaston	423	2.2%
Lincoln	345	1.8%
Union	236	1.2%
York, SC	144	0.8%
Other*	1,391	7.4%
Total	18,905	100.0%

*Other includes Alamance, Alexander, Alleghany, Anson, Brunswick, Buncombe, Buke, Caldwell, Carteret, Catawba, Cleveland, Columbus, Craven, Cumberland, Davidson, Davie, Durham, Forsyth, Franklin, Granville, Guilford, Haywood, Hertford, Hoke, Jackson, Johnston, Macon, Montgomery, Onslow, Pender, Randolph, Richmond, Robeson, Rockingham, Rowan, Rutherford, Scotland, Stanly, Surry, Wake, Watauga, Wayne, Wilkes, Yadkin, and Yancey county in North Carolina, as well as other states.

(b) If the proposal involves the entire facility or campus, provide the number of patients by county of residence or other geographic area who used the entire facility or campus during the last full fiscal year by completing the table below.

Actual Patient Origin for Entire Facility or Campus

County or other geographic area such as ZIP code	**Last Full FY** 01/01/2018 to 12/31/2018	
	Number of Patients	% of Total
Total		

Not applicable. The proposed project does not involve the entire facility or campus.

3. Projected Patient Origin

(a) For each service component, provide the number of patients by county of residence or other geographic area projected to utilize that service component at the facility identified in Section A, Question 5 during the first three full fiscal years by completing the table below.

Projected Patient Origin for Medical/Surgical Beds

County or other geographic area such as ZIP code	**1st Full FY** 01/01/2022 to 12/31/2022		**2nd Full FY** 01/01/2023 to 12/31/2023		**3rd Full FY** 01/01/2024 to 12/31/2024	
	Number of Days	% of Total	Number of Days	% of Total	Number of Days	% of Total
Mecklenburg	15,478	73.1%	15,337	72.6%	15,541	72.4%
Cabarrus	2,332	11.0%	2,415	11.4%	2,501	11.6%
Iredell	563	2.7%	522	2.5%	510	2.4%
Gaston	475	2.2%	492	2.3%	510	2.4%
Lincoln	387	1.8%	401	1.9%	415	1.9%
Union	211	1.0%	201	1.0%	191	0.9%
York, SC	162	0.8%	130	0.6%	134	0.6%
Other*	1,561	7.4%	1,617	7.7%	1,674	7.8%
Total	21,170	100.0%	21,114	100.0%	21,476	100.0%

*Other includes Alamance, Alexander, Alleghany, Anson, Brunswick, Buncombe, Buke, Caldwell, Carteret, Catawba, Cleveland, Columbus, Craven, Cumberland, Davidson, Davie, Durham, Forsyth, Franklin, Granville, Guilford, Haywood, Hertford, Hoke, Jackson, Johnston, Macon, Montgomery, Onslow, Pender, Randolph, Richmond, Robeson, Rockingham, Rowan, Rutherford, Scotland, Stanly, Surry, Wake, Watauga, Wayne, Wilkes, Yadkin, and Yancey county in North Carolina, as well as other states.

(b) If the proposal involves the entire facility or campus, provide the number of patients by county of residence or other geographic area projected to utilize the entire facility or campus during the first three full fiscal years by completing the table below.

Projected Patient Origin for Entire Facility or Campus

County or other geographic area such as ZIP code	**1st Full FY** mm/dd/yyyy to mm/dd/yyyy		**2nd Full FY** mm/dd/yyyy to mm/dd/yyyy		**3rd Full FY** mm/dd/yyyy to mm/dd/yyyy	
	Number of Patients	% of Total	Number of Patients	% of Total	Number of Patients	% of Total
Total						

Not applicable. The proposed project does not involve the entire facility or campus.

(c) Describe the assumptions and methodology used to project the number of patients by county or other geographic area of origin. Provide any supporting documentation in an Exhibit.

The proposed addition of 16 acute care beds to Atrium Health University City is not expected to have any impact on patient origin. However, as outlined in Form C, Atrium Health University City has projected a shift of medical/surgical volume to Piedmont Fort Mill Medical Center, Atrium Health Union County facilities, as well as Atrium Health Lake Norman, a concurrently filed application for a new hospital in Mecklenburg County. For additional detail regarding the proposed shifts, please refer to Form C Assumptions and Methodology.

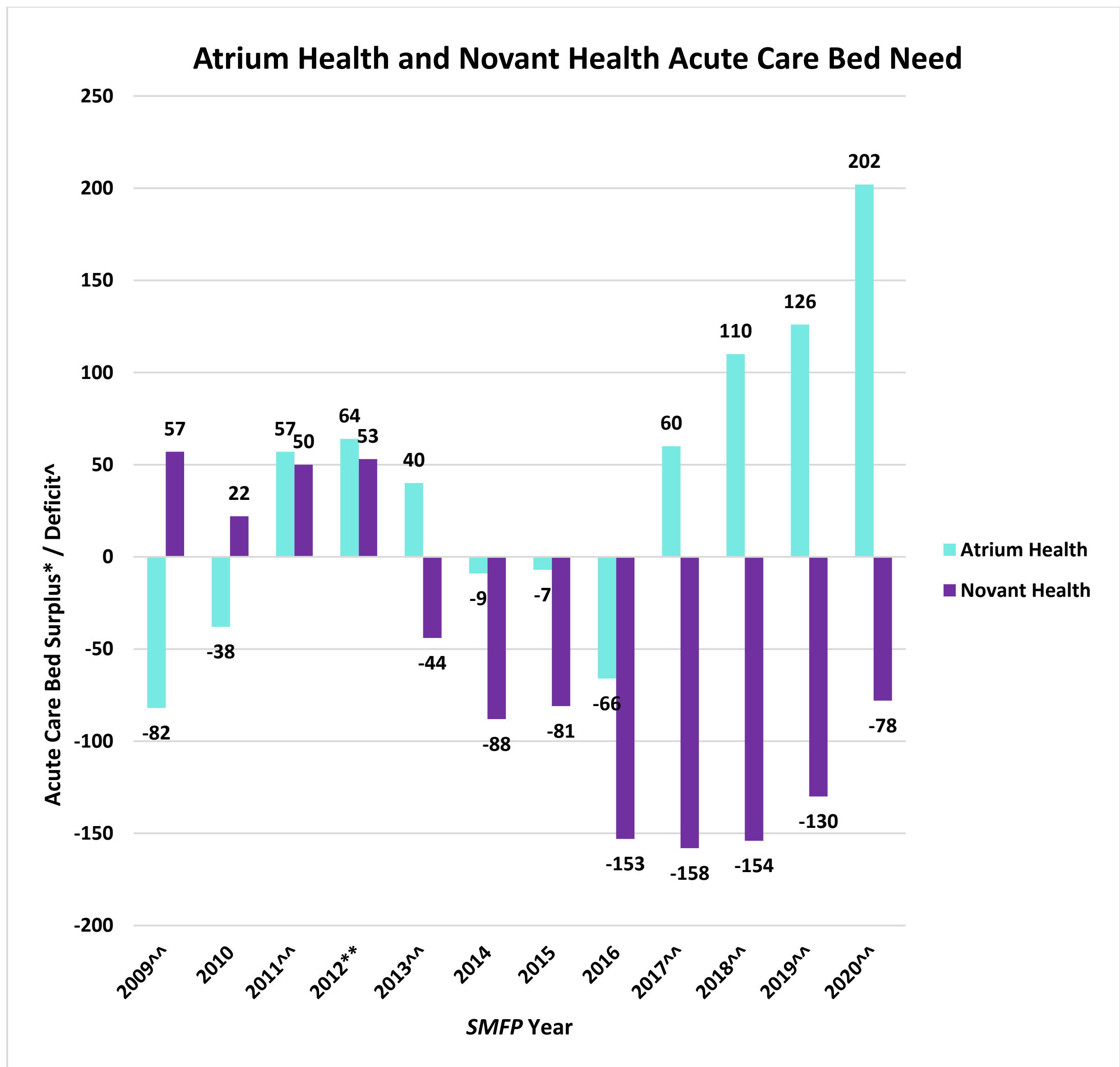
Atrium Health University City's projected patient origin for its medical/surgical beds is based on its existing patient origin, modified to account for projected shifts to Piedmont Fort Mill Medical Center, Atrium Health Union County facilities, and Atrium Health Lake Norman. Please note that Atrium Health University City assumed that all patients shifting to Piedmont Fort Mill Medical Center will originate from York County, all patients shifting to Atrium Health Union County facilities are assumed to originate from Union County, and patients shifting to Atrium Health Lake Norman are assumed to originate from Iredell and Mecklenburg counties.

Demonstration of Need

4. (a) Describe the need the patients projected to use each service component included in the project have for the service component.

HISTORY OF ACUTE CARE BED NEED IN MECKLENBURG COUNTY

Over the last decade, the *SMFP* has identified a need for additional acute care beds to be located in Mecklenburg County six times, including the need determination in the *2019 SMFP*. There are two providers of acute inpatient services in Mecklenburg County: Atrium Health and Novant Health. The chart below demonstrates bed surpluses and deficits in Mecklenburg County since 2009.

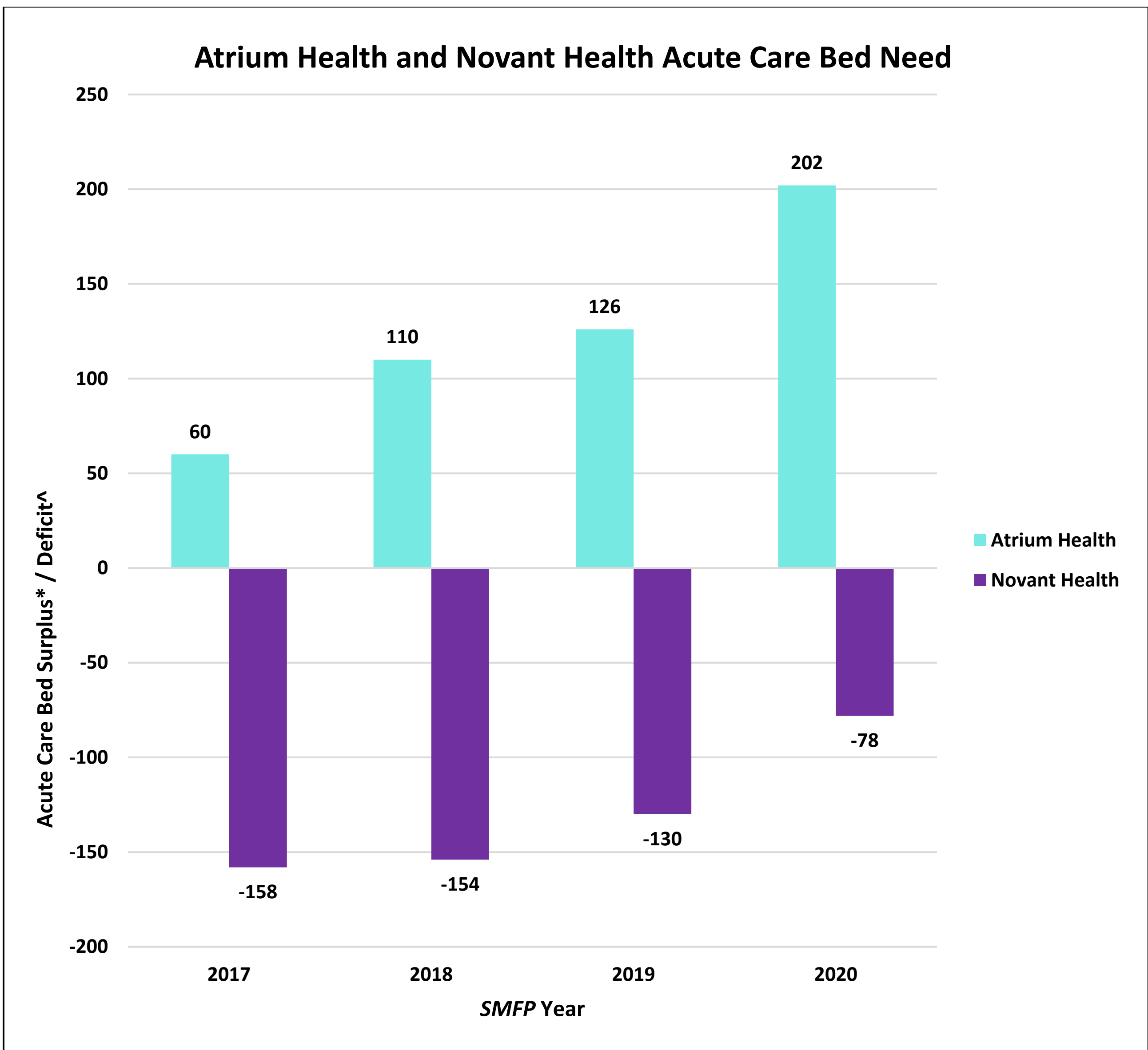


Source: *2009 – Proposed 2020 SMFP.*
*Shown as negative.
^Shown as positive
**As stated in a footnote to Table 5A in the *2012 SMFP*, "[t]he need determination in Mecklenburg County would have been 10 beds, which is not 10 percent of either of the two owners in Mecklenburg County. The Council voted to reduce the need determination to zero for 2012."
^^Need for additional acute care beds in Mecklenburg County generated in the *SMFP*.

Novant Health generated the need for all 30 beds in the county in the *2009 SMFP* and was awarded all 30 beds. Two years later, a need for 107 beds was generated in the *2011 SMFP*; the Agency awarded 57 beds to Atrium Health and 50 to Novant Health, the exact bed need generated by each provider in that year, as shown in the chart above. The next acute care bed need was generated in the *2013 SMFP* for 40 additional acute care beds, all of which were generated by Atrium Health hospitals in Mecklenburg County. In this instance, Atrium Health was approved to develop 34 acute care beds at Atrium Health Mercy and six beds at Atrium Health University City. Next, the *2017 SMFP* identified a need for 60 additional acute care beds in Mecklenburg County, and again, Atrium Health hospitals generated the need for all beds. The Agency awarded all of the beds to Atrium Health: 15 additional acute care beds at Atrium Health Pineville and 45

additional beds at CMC. Finally, the *2018 SMFP* identified a need for 50 additional beds and the Agency awarded Atrium Health Pineville 38 beds and Novant Health Huntersville Medical Center 12 beds, even though Novant Health generated a surplus of 154 beds in the *2018 SMFP.* The 2018 acute care bed need decision marks the first time in at least 11 years that the Agency awarded additional acute care beds to a Mecklenburg County provider that demonstrated a surplus of beds in the *SMFP*.

Narrowing the timeframe to each of the four most recent *SMFPs* (*2017, 2018, 2019*, and *Proposed 2020*) clearly shows that Atrium Health hospitals in Mecklenburg County have generated a need for additional acute care beds based on the increasing number of patients that choose Atrium Health for their care. Moreover, these needs have increased over time, even as Atrium Heath has developed additional capacity. Conversely, Novant Health, the only other acute inpatient provider in the county, has demonstrated a substantial surplus of acute care beds over this same time period. The chart below shows the surplus and deficits generated by Atrium Health and Novant Health from the *2017* to the *Proposed 2020 SMFP*, including the growth in Atrium Health's acute care bed deficit from 60 to 202 beds and Novant Health's consistent surpluses.



Source: *2017 – Proposed 2020 SMFP.*
*Shown as negative.
^Shown as positive

Today, each Atrium Health hospital in Mecklenburg County is in need of additional acute care beds based on high patient demand. According to the *Proposed 2020 SMFP,* Atrium Health hospitals have a need for the following number of additional beds: 163 beds at CMC, including Atrium Healthy Mercy; 15 beds at Atrium Health Pineville; and, 24 beds at Atrium Health University City. CMC, including Atrium Health Mercy, generated the single highest acute care bed deficit of all Mecklenburg County hospitals from the *2017* to *Proposed 2020 SMFP*. Further, the acute care bed need generated by CMC in the *2019* and *Proposed 2020 SMFP* is the largest in the state. Atrium Health University City demonstrated acute care bed deficits in each of the two most recent *SMFPs* (*2019* and *Proposed 2020 SMFP)* and its deficit in the *Proposed 2020 SMFP* is the largest, on a percentage basis, of any hospital in North Carolina in the last decade, as shown in Exhibit C.4-1. Finally, Atrium Health Pineville has shown bed deficits in each of the last five *SMFPs* (*2016* to *Proposed 2020 SMFP*) and has the second largest deficit in Mecklenburg County, after CMC, in the *2019 SMFP*. These deficits reflect the high (and increasing) utilization of Atrium

Health's acute care beds in the county. This significant patient demand has necessitated the submission of numerous requests for temporary expansion of CMC's and Atrium Health Pineville's licensed bed capacity. CMC has been on continuous temporary bed overflow for several years and Atrium Health Pineville has been since April 2018. Further, as demonstrated in Form C Methodology and Assumptions, Atrium Health University City is operating at high utilization levels and will need to request temporary bed overflow in the future if the increasing patient demand for its services continues.

The inadequate supply of acute care beds at Atrium Health hospitals in Mecklenburg County to meet the needs of patients that choose Atrium Health for their care negatively impacts several aspects of hospital operations. Due to the lack of available capacity, Atrium Health hospitals regularly house patients overnight in emergency departments before a bed is available for admission. These patients occupy emergency department rooms, which greatly reduces the efficiency and capacity of that department. According to internal data, patients that accessed any of Atrium Health's hospital-based emergency departments in Mecklenburg County in 2018 waited 30 minutes, on average, to see a provider, but waited almost six hours in the emergency department, on average, for admission to an acute care bed. Further, the lack of adequate acute care bed capacity at Atrium Health's hospitals forces patients in post-anesthesia care units (PACUs) following surgery to wait longer than necessary for a bed to become available. This backlog results in patients recovering from anesthesia in the operating room because there are no available beds in the PACU. As a result, operating room cases are delayed because the rooms are being used for recovering the patient instead of being turned around for the next case. These delays in providing patients with the appropriate care to improve their health results in delays in their recovery and return to normal life. As such, the lack of sufficient capacity creates a domino effect that negatively impacts patient care beyond inpatient bed units.

A growing deficit of beds is clear evidence that demand for Atrium Health hospital services in Mecklenburg County is increasing, and that Atrium Health needs the additional capacity as proposed in its concurrent and complementary applications; otherwise, capacity constraints will continue to negatively impact patient care.

OVERVIEW

Atrium Health is submitting four concurrent and complementary applications in response to the need identified in the *2019 SMFP* for 76 additional beds in Mecklenburg County. This application proposes to develop 16 additional acute care beds at Atrium Health University City. Atrium Health's concurrently filed applications propose to develop 18 at CMC, 12 at Atrium Health Pineville, and 30 beds at Atrium Health Lake Norman, a new hospital in the Lake Norman area. As noted in prior applications, Atrium Health's plans and subsequent CON applications represent the development of projects which respond to unmet needs as they are identified and prioritized. While each CON application must demonstrate need, each individual project cannot represent the complete and final solution to meeting all of Mecklenburg County's needs, as those needs continue to develop as the population grows and patients choose Atrium Health for their care. As illustrated by the conservative projection of bed utilization at CMC, Atrium Health Pineville, Atrium Health University City, and Atrium Health Lake Norman (see Form C), the additional acute care capacity proposed in these complementary applications alone is not sufficient to meet all the future bed need; however, these projects are necessary to begin alleviating capacity constraints at Atrium Health's existing facilities in Mecklenburg County and expand access to patients in the Lake Norman area.

The overall need for the proposed project is based on the need for additional acute care beds in Mecklenburg County as identified by the *2019 SMFP.* The specific need for the project proposed in this application is comprised of several factors including:

- The need for additional capacity at Atrium Health University City and
- The dynamic population growth in the region served by Mecklenburg County providers, including the growth in the population over age 65.

Each of these factors will be discussed in turn below. A detailed analysis of the quantitative need for the proposed project is discussed in the assumptions and methodology for Form C.

2019 SMFP ACUTE CARE BED NEED METHODOLOGY

As noted previously, the *2019 SMFP* identifies a need for 76 additional acute care beds to be located in Mecklenburg County based on application of the acute care bed need methodology. The acute care bed capacity within Mecklenburg County consists of seven existing and approved licensed facilities as identified below.

Mecklenburg County Acute Care Beds

	Licensed Acute Care Beds	***Adjustments for CONs***	***Current Bed Inventory***
Atrium Health Pineville	206	15	221
Atrium Health University City^	100	0	100
CMC/Atrium Health Mercy*	1,010	45	1,055
Atrium Health Total	**1,316**	**60**	**1,376**
Novant Health Huntersville Medical Center (NHHMC)	91	48	139
Novant Health Matthews Medical Center (NHMMC)	154	0	154
Novant Health Presbyterian Medical Center (NHPMC)	567	-48	519
Presbyterian Hospital Mint Hill (Novant Health Mint Hill Medical Center or NHMHMC)	0	50	50
Novant Health Total	**812**	**50**	**862**

Source: *2019 SMFP*.
^Atrium Health University City was formerly known as CHS University.
*Atrium Health Mercy, formerly known as CMC-Mercy, is licensed as part of Atrium Health and its beds are included as part of CMC in the *2019 SMFP.*

Of note, the *2019 SMFP* identifies 60 beds within the Atrium Health system as "Adjustments for CONs" for a previously approved CON to develop 45 additional acute care beds at CMC pursuant to Project ID # F-11362-17 and 15 additional acute care beds at Atrium Health Pineville pursuant to Project ID # F-11361-17. The 15 beds at Atrium Health Pineville and 45 beds at CMC are currently operational. Further, the *2019 SMFP* included a 50-bed placeholder for the 2018 acute care bed need determination.

The need for additional acute care beds in the *2019 SMFP* for Mecklenburg County was triggered by the utilization of Atrium Health facilities, as the Novant Health facilities demonstrate a surplus of beds. Facility utilization was determined based on Truven Health Analytics data for Federal Fiscal Year (FFY) 2017. Please see the table below for FFY 2017 acute care bed utilization data for Mecklenburg County facilities as reported in the *2019 SMFP*.

Mecklenburg County Facilities' Historical Acute Care Utilization

	Truven Health Analytics 2017 Acute Care Days
Atrium Health Pineville	64,405
Atrium Health University City	24,160
CMC/Atrium Health Mercy	307,039
Atrium Health Total	**395,604**
NHHMC	22,640
NHMMC	35,724
NHPMC	127,232
NHMHMC	0
Novant Health Total	**185,596**

Source: *2019 SMFP*.

To project acute care bed need in 2021, acute care days are multiplied by the "compounded growth factor" for each county which is determined based on the average annual percentage change in total days served in the county over the last five years. For a positive annual percentage change, the *2019 SMFP* adds 1 and this becomes the County Growth Rate Multiplier; this calculation is shown below based on FFY 2013 to 2017 acute care bed utilization for Mecklenburg County facilities.

Mecklenburg County Facilities' Historical Acute Care Utilization

	2013 Days	***2014 Days***	***2015 Days***	***2016 Days***	***2017 Days***	***CAGR***	***Average Annual Change***
Atrium Health Total Days	352,853	347,252	377,117	382,846	395,604	**2.9%**	
Novant Total Days	198,782	187,745	185,521	182,594	185,596	**-1.7%**	
County Total Days	**551,635**	**534,997**	**562,638**	**565,440**	**581,200**	**1.3%**	
Annual Change		**-3.0%**	**5.2%**	**0.5%**	**2.8%**		**1.36%**

Source: *2016* to *2019 SMFPs*.

Of note, Novant Health's total days declined from 2013 through 2016 and the system's total number of acute care bed days declined at a compounded rate of 1.7 percent from 2013 to 2017. As such, it has been Atrium Health's annual growth, over and above the declines at Novant Health facilities, that resulted in the positive 1.0136 County Growth Rate Multiplier in the *2019 SMFP*.

Projected 2021 acute care days are shown in the table below based on FFY 2017 acute care days for each facility multiplied by the County Growth Rate Multiplier compounded over four years. For each hospital, the projected midnight average daily census (ADC) in FFY 2021 is calculated by dividing the projected number of acute care days by 365 days.

Mecklenburg County Facilities' Projected Acute Care Utilization

	Truven Health Analytics 2017 Acute Care Days	*County Growth Rate Multiplier*	*4 Years Growth Using County Growth Rate (Projected 2021 Acute Care Days)*	*2021 Projected ADC*
Atrium Health Pineville	64,405	1.0136	67,978	186
Atrium Health University City	24,160	1.0136	25,500	70
CMC/Atrium Health Mercy	307,039	1.0136	324,072	888
Atrium Health Total	**395,604**		**417,550**	**1,144**
NHHMC	22,640	1.0136	23,896	65
NHMMC	35,724	1.0136	37,706	103
NHPMC	127,232	1.0136	134,290	368
NHMHMC	0	1.0136	0	0
Novant Health Total	**185,596**		**195,892**	**536**

Source: *2019 SMFP*.

Each hospital's projected FFY 2021 ADC is multiplied by the appropriate target occupancy factor below:

Target Occupancy Factors

ADC	*Occupancy Factor*
ADC less than 100	1.50
ADC 100 to 200	1.40
ADC >200 and <=400	1.33
ADC > 400	1.28

Source: *2019 SMFP*.

The resulting calculation is the number of beds needed at each facility in FFY 2021 after adjusting for target occupancy. The surplus or deficit of beds for each hospital is determined by subtracting the inventory of beds from the FFY 2021 beds needed as shown in the table below.

Mecklenburg County Facilities' Acute Care Bed Need/Surplus

	2021 Projected ADC	*2021 Beds Adjusted for Target Occupancy*	*Current Bed Inventory*	*Projected 2021 Deficit/ (Surplus)*
Atrium Health Pineville	186	261	221	40
Atrium Health University City	70	105	100	5
CMC/Atrium Health Mercy	888	1,136	1,055	81
Atrium Health Total	**1,144**	**1,502**	**1,376**	**126**
NHHMC	65	98	139	(41)
NHMMC	103	145	154	(9)
NHPMC	368	489	519	(30)
NHMHMC	0	0	50	(50)
Novant Health Total	**536**	**732**	**862**	**(130)**

Source: *2019 SMFP*.

As shown above, Atrium Health facilities demonstrate a combined deficit of 126 acute care beds based on projected deficits of 40 beds at Atrium Health Pineville, five beds at Atrium Health University City, and 81 beds at CMC/Atrium Health Mercy. By comparison, Novant Health's facilities each have a surplus of beds and collectively demonstrate a surplus of 130 beds. The acute care bed need methodology adjusts the 126-bed deficit generated by Atrium Health for a placeholder of 50 acute care beds that were awarded pursuant to the need determination in the *2018 SMFP*, resulting in a calculated deficit for Mecklenburg County facilities of 76 beds. The threshold for a need determination for additional acute care beds is a projected deficit of 20 or more beds, or a projected deficit which equals or exceeds 10 percent of the total bed inventory for hospitals under common ownership. As such, the projected deficit at Atrium Health facilities resulted in a need determination of 76 beds in Mecklenburg County in the *2019 SMFP.* It should be noted that, as demonstrated above, the 126-bed deficit is driven solely by Atrium Health facilities. As previously noted, Atrium Health Pineville was awarded 38 of the acute care beds in 2018 and Novant Health Huntersville Medical Center was awarded the remaining 12 despite its bed surplus. Therefore, adjusting the 126-bed Atrium Health driven deficit by the 50 total beds awarded in 2018 actually understates the Atrium Health deficit by 12 beds.

As noted previously, the *Proposed 2020 SMFP* shows a need for a total of 126 acute care beds at Atrium Health facilities in Mecklenburg County resulting from a total of 202 additional acute care beds needed at Atrium Health facilities by 2022 (less a placeholder for the 76 beds in the *2019 SMFP*), including a need for 163 beds at CMC/Atrium Health Mercy, 24 at Atrium Health University City, and 15 at Atrium Health Pineville.

In response to these capacity constraints, Atrium Health is constantly undertaking enormous efforts to keep pace with demand. While the State has recognized Atrium Health's need for additional capacity in recent years, it historically has underestimated the extent and growth of that need. Specifically, the *2016 SMFP* projected that Atrium Health's acute care hospitals in Mecklenburg County would provide 347,252 acute care bed days in FFY 2018; however, according to the *Proposed 2020 SMFP,* Atrium Health's hospitals actually provided 405,977 acute care days in FFY 2018: **an underestimation of 58,725 acute care days.** It would require at least 161 acute care hospital beds at 100 percent occupancy to support this difference between the projected

and actual number of acute care bed days (160.9 = 58,725 / 365). Further, the *2018 SMFP* projected that Atrium Health's acute care hospitals in Mecklenburg County would provide 397,918 acute care bed days in FFY 2021; however, as reflected in the *Proposed 2020 SMFP,* Atrium Health has already exceeded this projection in FFY 2018, three years prior. As demand continues to increase and Atrium Health's acute care bed deficit increases, it is clear that Atrium Health needs the additional capacity as proposed in its concurrent and complementary applications to meet the needs of patients that choose Atrium Health for their care.

Atrium Health Demonstrates Superior Need

Atrium Health demonstrates superior need among existing facilities for additional acute care bed capacity, as outlined in the analyses throughout Section C.4. Such an evaluation of need is necessary to determine the degree to which applicants that are existing facilities may have surplus capacity, as avoiding excess capacity is a foundational finding of the North Carolina CON statute. Findings of Fact 4 and 6 state:

> *4) "That the proliferation of unnecessary health service facilities results in costly duplication and underuse of facilities, with the availability of excess capacity leading to unnecessary use of expensive resources and overutilization of health care services."*
>
> *(6) "That excess capacity of health service facilities places an enormous economic burden on the public who pay for the construction and operation of these facilities as patients, health insurance subscribers, health plan contributors, and taxpayers."*
>
> See § 131E-175. Findings of Fact

As shown previously, Novant Health currently operates with excess capacity of acute care beds. As stated in the statute, excess capacity leads to unnecessary use of expensive resources, overutilization of healthcare services, and an economic burden on the public. By comparison, Atrium Health currently operates with the highest deficit of acute care bed capacity in the state.

Historically, the Agency has conducted such a comparative analysis of need. For example, in the 2013 Mecklenburg County Acute Care Bed Review, the Agency's comparative analysis included "Meeting the Need for Additional Acute Care Beds" as a comparative factor (see Exhibit C.4-2). This factor compared the projected bed deficit and surplus of each applicant as shown in the *2013 SMFP* and found the applicant with the greatest deficit to be more effective.

In contrast to the 2013 Mecklenburg County Acute Care Bed Review, however, recent Agency reviews have compared applicants' total capacity without considering whether the applicants' existing capacity demonstrates a deficit or surplus. For example, the Agency Findings for the 2018 Mecklenburg County Acute Care Bed and Operating Room Review included a "Competition" comparative factor in the analysis of both the acute care bed and operating room applications, which found any applicant with fewer beds or operating rooms more effective than applicants with a greater number of beds or operating rooms. However, the Agency did not include an evaluation of the degree to which the capacity of the applicants with existing facilities represented a surplus or deficit, as compared to need based on patient demand. Under the Agency's application of that "Competition" comparative factor for example, an existing provider with ten

acute care beds that served zero patients would be found to be a more effective alternative than another provider with fifty beds that served hundreds of patients and demonstrated a deficit of capacity. As such, the "Competition" comparative factor as applied is contrary to the purpose of the CON statute as discussed above. Consistent with the CON statute and its 2013 Mecklenburg County Acute Care Bed Review, Atrium Health believes that applicants that are existing facilities should be evaluated based on their existing capacity, and those with deficits of capacity found to be superior to those with surpluses.

Moreover, if acute care beds are awarded to systems that repeatedly demonstrate surpluses of acute care bed capacity, instead of those with a deficit, additional acute care beds will continue to be generated in Mecklenburg County. This dynamic was made apparent during the development of the *2020 SMFP.* In the first draft of Table 5A: Acute Care Bed Need Projections, published on May 7, 2019, Mecklenburg County showed an overall need for 114 additional acute care beds. At that time, Table 5A did not yet account for the acute care beds awarded from the *2018 SMFP.* On April 5, 2019, the Agency concluded its review of the 2018 acute care bed applications and, as noted previously, awarded 12 acute care beds to Novant Health Huntersville Medical Center and 38 acute care beds to Atrium Health Pineville. Following this decision, the Agency revised Table 5A which showed an <u>increased</u> need of 12 acute care beds, totaling 126 additional acute care beds needed in Mecklenburg County. Because the Agency awarded 12 acute care beds to a system with a surplus of acute care bed capacity (Novant Health), the acute care bed need in Mecklenburg County increased by 12 from the draft need. Said another way, each acute care bed awarded to Novant Health, or another provider with a surplus, increases the future number of beds calculated as needed in Mecklenburg County by the standard methodology. As such, if Atrium Health facilities are not awarded the additional acute care bed capacity they need, Mecklenburg County will continue to create additional acute care bed need determinations for the foreseeable future in an attempt to resolve the need generated by Atrium Health.

Atrium Health acknowledges that a provider that generates the need for additional capacity is not entitled to that need; it must submit an approvable application and demonstrate that it has the most effective alternative for the entire allocation. There may be circumstances in which an applicant demonstrates that their need is more significant or greater than the provider that generated the need. However, in this particular case, Atrium Health believes that it is not reasonable to award additional capacity to a provider that continues to demonstrate an existing surplus, while denying a provider with continued, existing deficits like Atrium Health, especially when the conflicting surpluses and deficits have continued for a period of years and the provider that generated the need has already surpassed the projected utilization that created the need.

If acute care beds continue to be awarded to existing systems with surpluses, not only will a need for acute care beds in Mecklenburg County be triggered every year in the foreseeable future, but also one of the foundational principles of the *SMFP* and CON process will be disregarded as beds are awarded based on factors other than the need of the population as determined by their choice of system or individual facility. Based on the foregoing analysis, it is clear that there is a need for additional acute care beds in Mecklenburg County and specifically at Atrium Health facilities.

Atrium Health Meets Need Demonstrated by the Population in the *SMFP*

The ongoing need for additional acute care bed capacity located in Mecklenburg County is driven not only by the residents of the county, but also by the population centers that surround Mecklenburg County in both North and South Carolina. According to patient origin data submitted on license renewal applications (LRAs), less than 60 percent of patients served by Mecklenburg County acute care bed providers originate from within the county. As shown in the table below, South Carolina patients comprise 13.1 percent of total acute care bed admissions provided by Mecklenburg County acute care providers followed by neighboring North Carolina counties.

Total Patient Origin for Mecklenburg County Acute Care Bed Providers

NC County/State of Origin	***Percent of Total***
Mecklenburg	57.6%
South Carolina	13.1%
Union	8.0%
All Others	4.4%
Gaston	1.0%
Cabarrus	2.9%
Iredell	1.8%
Lincoln	1.9%
Other States	2.0%
Cleveland	0.9%
Rowan	6.4%
Total	**100.0%**

Source: 2019 LRAs. See Exhibit C.4-3.

Simply put, without the demand for acute care services originating from outside of Mecklenburg County, there would not be a need for additional acute care bed capacity to be located in Mecklenburg County. In fact, there would be significant excess or underutilized capacity. As noted above and shown in the screenshot of Table 5A in the *2019 SMFP* below, providers in Mecklenburg County provided 581,200 total acute care days in FFY 2017.

A	B	C	D	E	F
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/ Previous Need	Truven Health Analytics 2017 Acute Care Days
Lincoln	H0225	Carolinas HealthCare System Lincoln	101	0	16,822
Lincoln Total			**101**	**0**	
Macon	H0034	Angel Medical Center	59	0	5,574
Macon	H0193	Highlands-Cashiers Hospital**	24	0	2,727
Macon Total			**83**	**0**	
Martin	H0078	Martin General Hospital	49	0	4,141
Martin Total			**49**	**0**	
McDowell	H0097	Mission Hospital McDowell	65	0	7,298
McDowell Total			**65**	**0**	
Mecklenburg		2018 Acute Care Bed Need Determination	0	50	
Mecklenburg	H0042	Carolinas HealthCare System Pineville	206	15	64,405
Mecklenburg	H0255	Carolinas HealthCare System University	100	0	24,160
Mecklenburg	H0071	Carolinas Medical Center	1,010	45	307,039
		Carolinas HealthCare System Total	1,316	60	395,604
Mecklenburg	H0282	Novant Health Huntersville Medical Center	91	48	22,640
Mecklenburg	H0270	Novant Health Matthews Medical Center	154	0	35,724
Mecklenburg	H0010	Novant Health Presbyterian Medical Center	567	-48	127,232
Mecklenburg		Presbyterian Hospital Mint Hill	0	50	
		Novant Health Total	812	50	185,596
Mecklenburg Total			**2,128**	**160**	

Source: Page 45, Table 5A, *2019 SMFP.*

Further, as shown above, an estimated 57.6 percent of that utilization originated from Mecklenburg County. Thus, Atrium Health estimates that Mecklenburg County residents accounted for 334,771 acute care days in FFY 2018 (334,771 = 581,200 x 57.6 percent). That volume could be served by 1,219 acute care beds, assuming a target occupancy of 75.2 percent (1,219 = (334,771 / 365) / 0.752). As shown previously, Mecklenburg County has 2,238 existing and approved licensed acute care beds. Thus, Mecklenburg County would have a surplus of 1,019 acute care beds (1,019 = 2,238 – 1,219) or nearly one-half of its existing capacity, <u>if not for the demand for acute care bed services originating from outside of the county</u>.

In the Agency Findings for the 2017 Mecklenburg County Acute Care Bed Review and the 2018 Mecklenburg County Bed and OR Review, the Agency's comparative analyses used a comparative factor, Service to Mecklenburg County Residents or Service to Residents of the Service Area. In those reviews, the Agency found applicants that projected to serve a higher <u>percentage</u> of Mecklenburg County residents to be more effective. Atrium Health believes that this comparative factor, as applied, would be inappropriate for a review of the proposed project. The need for acute care bed capacity in Mecklenburg County, and specifically, the need determination in the

2019 SMFP, is a result of the utilization of all patients that utilize the acute care beds located in Mecklenburg County. Mecklenburg County residents comprise less than 60 percent of that utilization, and there would be a large surplus of capacity if not for the demand for acute care bed services originating from outside the county.

Under these circumstances, it would not be appropriate to determine the comparative effectiveness of an applicant based on service to Mecklenburg County residents when the need as identified for the proposed additional acute care bed capacity is not based solely on Mecklenburg County patients. (Other methodologies in the *SMFP*, such as nursing facility beds, are based only on the population residing in the county; a factor for Service to Residents of the Service Area may be more appropriate in such a review, but that is not the case with acute care beds.) Rather, if anything, Atrium Health believes the Agency should recognize that the need for additional acute care bed capacity in Mecklenburg County is driven by residents across the region and evaluate an applicant's geographic reach in assessing the need for additional acute care bed capacity located in Mecklenburg County. The following table lists the Mecklenburg County acute care bed provider that provides the most acute care bed admissions to patients from each county in Health Service Area (HSA) III as well as from South Carolina.

Top Mecklenburg County Acute Care Bed Service Provider for Location of Patient Origin

	Top Provider
Mecklenburg	Atrium Health
South Carolina	Atrium Health
Union	Novant Health
Gaston	Atrium Health
Cabarrus	Atrium Health
Iredell	Novant Health
Lincoln	Atrium Health
Cleveland	Atrium Health
Rowan	Novant Health

Source: 2019 LRAs. See Exhibit C.4-3.

As shown above, Atrium Health's hospitals in Mecklenburg County provided more acute care admissions to patients in Mecklenburg County and to patients in four of the seven remaining HSA III counties as well as to South Carolina patients. These data highlight the extent of Atrium Health's geographic reach and its service to those patients that utilize Mecklenburg County's acute care bed capacity.

Furthermore, another important consideration is which Mecklenburg County acute care bed service provider supports the greatest number of underserved patients. As discussed in Section B.10, Atrium Health served 66.8 percent of Medicaid, 58.6 percent of Medicare, and 69.5 percent of Self-Pay acute care discharges originating from Mecklenburg County, compared with Atrium Health's 58.2 percent share of all patients. These data demonstrate that Atrium Health facilities serve a disproportionately high share of these underserved patients compared to Novant Health.

Based on the foregoing analyses, it is clear that there is a need for additional acute care capacity in Mecklenburg County, and that need is greatest at, and can be best served by, Atrium Health facilities.

NEED FOR ADDITIONAL CAPACITY AT ATRIUM HEALTH UNIVERSITY CITY

As discussed previously, the acute care bed need identified in the *2019 SMFP* was generated by the three Atrium Health hospitals in Mecklenburg County. Today, Atrium Health University City provides a wide range of healthcare services to patients from University City, Mint Hill, north Mecklenburg County, southwest Cabarrus County, and surrounding regions. For over 25 years, Atrium Health University City has been a growing facility, in response to increasing demand. As mentioned above, Atrium Health's bed deficit overall is growing but Atrium Health University City's bed deficit is growing at a particularly rapid rate. From CY 2016 to 2019, Atrium Health University City's inpatient days have grown 7.1 percent annually and now the facility operates at or above 75 percent occupancy, on average. This is the fastest annual growth rate of acute care days among Atrium Health's three hospitals in Mecklenburg County. Please note that Fiscal Years for Atrium Health University City are from January 1 to December 31 and are equivalent to Calendar Years (CYs). CY historical data is included below, in contrast to the FFY historical data included previously, in order to provide historical and projected fiscal year data for Atrium Health University City as requested by the CON application form.

Atrium Health University City Acute Care Bed Utilization

	CY16	***CY17***	***CY18***	***CY19****	***CAGR***
Days	22,511	24,788	27,358	27,660	7.1%
ADC	62	68	75	76	7.1%
Beds	100	100	100	100	0.0%
Occupancy	**61.7%**	**67.9%**	**75.0%**	**75.8%**	**7.1%**

Source: Atrium Health internal data used to prepare HLRAs.
*CY 2019 annualized based on January to July data.

Under the performance standards in the Criteria and Standards for Acute Care Beds, Atrium Health University City's target occupancy rate is 66.7 percent based on its ADC of less than 100 patients. As shown in the table above, Atrium Health University City was above this target occupancy rate in CY 2017 and its utilization and occupancy rates have continued to grow rapidly since that time.

Atrium Health is on pace to provide 426,567 days of care in 2019, more than 9,000 days higher than the 417,550 days projected by the *2019 SMFP* for FFY 2021. In addition, Atrium Health University City is on pace to provide 27,660 days of care in 2019, more than 2,000 days higher than the 25,500 days projected in the *2019 SMFP* for FFY 2021. In other words, Atrium Health, as a system, and Atrium Health University City, as a facility, grew more in two years than the *SMFP* projected it to grow in four years. Further, Atrium Health University City demonstrated acute care bed deficits in each of the two most recent *SMFPs* (*2019* and *Proposed 2020 SMFP)* and its deficit in the *Proposed 2020* is the largest, on a percentage basis, of any hospital in North Carolina in the last decade, as shown in the previously referenced Exhibit C.4-1. In the *Proposed 2020 SMFP*, Atrium Health University City has the second highest projected bed deficit among all Mecklenburg County hospitals, behind CMC. Moreover, as shown in the table below, Atrium Health hospitals' total bed need based on actual CY 2019 patient days, 160 beds, exceeds the bed deficit projected in the *2019 SMFP* for FFY 2021.

CY 2019 Atrium Health Mecklenburg County Acute Care Bed Utilization

	*Acute Care Days**	*Beds*	*ADC*	*Occupancy*	*Beds Needed at Target Occupancy*	*CY19 Bed Deficit/ (Surplus)*
CMC/Atrium Health Mercy	326,910	1,055	896	84.9%	1,146	91
Atrium Health Pineville	71,997	221	197	89.3%	276	55
Atrium Health University City	**27,660**	**100**	**76**	**75.8%**	**114**	**14**
Atrium Health Total	**426,567**	**1,376**	**1,169**	**84.9%**	**1,536**	**160**

Source: Atrium Health internal data used to prepare HLRAs.
*CY 2019 annualized based on January to July data.

These data show that Atrium Health University City's current utilization level nearly supports the need for the proposed 16 additional acute care beds today. As shown below, assuming Atrium Health University City's bed inventory was increased by the proposed 16 beds, its CY 2019 occupancy rate is only 1.4 percentage points below the target occupancy rate of 66.7 percent in the performance standards for acute care beds.

Atrium Health University City Acute Care Bed Utilization Assuming 16 Proposed Beds

	CY16	*CY17*	*CY18*	*CY19**
Days	22,511	24,788	27,358	27,660
ADC	62	68	75	76
Current Beds + 16 Proposed	116	116	116	116
Occupancy with Additional 16 Beds	**53.2%**	**58.5%**	**64.6%**	**65.3%**

Source: Atrium Health internal data used to prepare HLRAs.
*CY 2019 annualized based on January to July data.

As demonstrated in Form C Methodology and Assumptions, Atrium Health University City is operating at high levels and if these beds are not developed, Atrium Health University City may have to go on temporary bed overflow to support the growing demand for its services.

Without adequate acute care capacity, wait times for patients will continue to increase and other operational efficiencies will arise and/or worsen. According to internal data, Atrium Health University City's emergency department served the highest number of visits in 2018 among all Atrium Health emergency departments including both hospital-based and freestanding locations. Due to the lack of available capacity, Atrium Health University City regularly houses patients overnight in its emergency department before a bed is available for admission. As noted above, these patients occupy emergency department rooms, which greatly reduces the efficiency and capacity of that department. Atrium Health tracks the amount of time it takes a patient to be admitted to an acute care bed from the emergency department, once it is determined a patient requires an inpatient admission. In 2018, according to internal data, patients that accessed Atrium Health University City's emergency department waited 37 minutes, on average, to see a provider; however, patients waited almost five and a half hours in the emergency department, on average, for admission to an acute care bed with some patients waiting up to 24 hours.

Further, Atrium Health University City expects its utilization to grow in the future due to many of the same factors that contributed to its historical growth. As noted below, the population of the surrounding region is expected to grow and age in future years and be among the fastest growing

areas in the Carolinas. Atrium Health University City's location along the Charlotte Area Transit System Light Rail, its close proximity to two interstates, and surface level parking all contribute to convenient access for patients. The continued development of services and the growth of the medical staff at Atrium Health University City, including the increasing physician presence in obstetrics/gynecology, oncology, and neurosurgery also is expected to result in utilization growth.

Given the analyses and factors discussed above, it is clear that Atrium Health University City demonstrates the need for the proposed 16 additional acute care beds.

GROWTH AND AGING OF REGION

Population growth in the surrounding region also plays an important role in the need to create additional acute care capacity. The region served by Mecklenburg County facilities includes Health Service Area III counties, as well as three counties from South Carolina— York, Lancaster, and Chester counties. As shown below, the entire region is projected to grow rapidly at 8.7 percent overall. As discussed later, the counties in this region are some of the fastest growing counties in the Carolinas.

Surrounding Region Growing Counties in NC and SC (Numerical & Percent Growth)

	2019	*2024*	*Population Change*	*Percent Change*
Lancaster County, SC	95,393	106,311	10,918	11.4%
York County, SC	276,365	306,285	29,920	10.8%
Union County, NC	241,053	266,348	25,295	10.5%
Mecklenburg County, NC	1,105,960	1,216,791	110,831	10.0%
Cabarrus County, NC	216,050	237,643	21,593	10.0%
Iredell County, NC	185,276	200,756	15,480	8.4%
Lincoln County, NC	87,755	93,602	5,847	6.7%
Gaston County, NC	228,556	240,576	12,020	5.3%
Rowan County, NC	146,811	150,973	4,162	2.8%
Cleveland County, NC	100,575	101,660	1,085	1.1%
Chester County, SC	33,024	32,784	-240	-0.7%
Total	**2,716,818**	**2,953,729**	**236,911**	**8.7%**

Source: Esri.

In particular, as shown below, some of the counties in the surrounding region are some of the fastest growing counties by numerical and percent growth in North and South Carolina. Mecklenburg, York, Union, and Cabarrus counties are among the 15 fastest growing counties in the two states. According to data from Esri, Mecklenburg County is projected to grow by over 110,000 people in the next five years and is the second fastest growing county in the Carolinas. In fact, the surrounding region, as shown above, is expected to grow by a total of 236,911 people in the next five years.

15 Fastest Growing Counties in NC and SC (Numerical Growth)

	2019	*2024*	*Population Change*
Wake County, NC	1,111,193	1,239,720	**128,527**
Mecklenburg County, NC	1,105,960	1,216,791	**110,831**
Horry County, SC	348,003	392,462	**44,459**
Greenville County, SC	520,932	560,313	**39,381**
Charleston County, SC	413,135	450,488	**37,353**
Durham County, NC	321,913	352,302	**30,389**
York County, SC	276,365	306,285	**29,920**
Berkeley County, SC	224,030	251,376	**27,346**
Guilford County, NC	530,813	556,236	**25,423**
Union County, NC	241,053	266,348	**25,295**
Lexington County, SC	302,234	325,719	**23,485**
Richland County, SC	422,068	445,410	**23,342**
Johnston County, NC	208,288	230,360	**22,072**
Cabarrus County, NC	216,050	237,643	**21,593**
Spartanburg County, SC	320,379	339,835	**19,456**

Source: Esri.

When analyzed by percent growth, as shown below, five counties within the region are expected to be among the 15 fastest growing counties in the Carolinas. Overall, the counties in the surrounding region are projected to grow by a total of 8.7 percent by 2024. Additionally, within South Carolina, Lancaster and York counties are in the top five fastest growing counties by percent change and are projected to grow at 11.4 and 10.8 percent, respectively.

15 Fastest Growing Counties in NC and SC (Percent Growth)

	2019	*2024*	*Population Change*	*Percent Change*
Brunswick County, NC	139,532	158,439	**18,907**	**13.6%**
Horry County, SC	348,003	392,462	**44,459**	**12.8%**
Berkeley County, SC	224,030	251,376	**27,346**	**12.2%**
Wake County, NC	1,111,193	1,239,720	**128,527**	**11.6%**
Lancaster County, SC	95,393	106,311	**10,918**	**11.4%**
York County, SC	276,365	306,285	**29,920**	**10.8%**
Johnston County, NC	208,288	230,360	**22,072**	**10.6%**
Union County, NC	241,053	266,348	**25,295**	**10.5%**
Jasper County, SC	29,762	32,803	**3,041**	**10.2%**
Pender County, NC	64,456	70,980	**6,524**	**10.1%**
Mecklenburg County, NC	1,105,960	1,216,791	**110,831**	**10.0%**
Cabarrus County, NC	216,050	237,643	**21,593**	**10.0%**
Chatham County, NC	76,966	84,401	**7,435**	**9.7%**
Dorchester County, SC	161,775	177,310	**15,535**	**9.6%**
Durham County, NC	321,913	352,302	**30,389**	**9.4%**

Source: Esri.

Aging Population in Region

As shown below, by 2024, Mecklenburg and York counties will be among the top 15 counties in the Carolinas with the greatest population growth of those age 65 years or older.

15 Fastest Aging Counties in NC and SC (Numerical Growth)

	2019 Population Age 65+	*2024 Population Age 65+*	*Population Change*
Wake County, NC	127,891	163,489	**35,598**
Mecklenburg County, NC	130,522	160,749	**30,227**
Horry County, SC	74,888	92,702	**17,814**
Greenville County, SC	83,502	100,573	**17,071**
Guilford County, NC	82,871	97,453	**14,582**
Charleston County, SC	67,827	82,129	**14,302**
Forsyth County, NC	63,515	75,061	**11,546**
Richland County, SC	55,861	66,888	**11,027**
Lexington County, SC	48,829	59,846	**11,017**
Brunswick County, NC	38,955	49,248	**10,293**
York County, SC	40,700	50,966	**10,266**
Spartanburg County, SC	54,656	64,887	**10,231**
Buncombe County, NC	54,329	64,559	**10,230**
Durham County, NC	41,981	51,357	**9,376**
Beaufort County, SC	47,971	56,484	**8,513**

Source: Esri.

In total, the region identified above is projected to add a total of 84,111 individuals to the population of those age 65 years or older. These data are significant because, typically, older residents utilize healthcare services at a higher rate than those who are younger. The growing number of residents in the surrounding region, particularly the aging cohort of the population, supports growing demand for acute care beds.

SUMMARY

In summary, the project proposed in this application is in response to the overall need for additional acute care beds to be located in Mecklenburg County. This need can best be met by the four concurrent and complementary applications submitted by Atrium Health given the need of its patients for additional acute care capacity. Given the increasing demand for Atrium Health University City acute care services, the capacity constraints that impact patient care when there is not adequate capacity, and the growing population of the region, Atrium Health University City clearly demonstrates the need for the proposed 16 additional acute care beds. To meet this current and increasing need, Atrium Health University City needs the 16 additional acute care beds as proposed in this application.

(b) Provide any supporting documentation for your response in an Exhibit.

Please see Exhibits C.4-1 through C.4-3.

5. If the proposal involves relocating any existing beds, services or equipment to a different campus within the same service area or relocating and replacing the entire facility to a different campus within the same service area:

- **(a) Explain why the beds, services or equipment need(s) to be relocated or replaced.**
- **(b) Explain why the proposed site was selected as compared to other sites in the service area.**
- **(c) Explain how the number of beds, type of services or equipment to be relocated was determined.**
- **(d) Provide any supporting documentation for your responses in an Exhibit.**

Not applicable. The proposed project does not involve relocating any existing beds, services, or equipment to a different campus within the same service area or the relocation and replacement of an entire facility to a different campus within the same service area.

6. Major Medical Equipment

- **(a) Provide the annual maximum capacity per unit for each type of major medical equipment proposed in this application.**
- **(b) Describe the assumptions and the methodology used to determine the annual maximum capacity for each type of major medical equipment proposed in this application.**

Not applicable. The proposed project does not involve major medical equipment.

7. Diagnostic Center Proposals

- **(a) Provide the annual maximum capacity per unit for each type of medical diagnostic equipment proposed in this application.**
- **(b) Describe the assumptions and the methodology used to determine the annual maximum capacity for each type of medical diagnostic equipment proposed in this application.**

Not applicable. The proposed project does not involve major medical equipment.

8. Mobile Medical Equipment – If the proposal involves the acquisition of mobile medical equipment:

- **(a) Identify each proposed host site by name, owner, type (e.g., hospital, physician office, diagnostic center, etc.) and physical location (i.e., street address, city and county).**
- **(b) Document the interest each host site has in potentially contracting with the applicant(s) for the proposed mobile services.**

Not applicable. The proposed project does not involve major medical equipment.

9. Operating Room Projects (i.e., for hospital projects that involve ORs in addition to other acute care services or equipment)

(a) Group Assignment for the Facility Identified in Response to Section A, Question 5. Your response should be to either subpart (i) or subpart (ii) but not to both.

(i) Existing Hospital to be Expanded:

Identify the Group Assignment as reported in Table 6A in the SMFP in effect at the time the review begins: ___________________

Are you proposing that the Group Assignment will change as a result of this project?

Yes ________________________ No ________________________

If you answered yes,

(A) Identify the new Group Assignment: ____________________

(B) Explain why the new Group Assignment is appropriate.

(C) Provide any supporting documentation in an Exhibit.

(ii) New or Replacement Hospital to be Developed on a New Site

Identify the proposed Group Assignment based on the table below: ______________________

Explain why that is the appropriate Group Assignment and provide any supporting documentation in an Exhibit.

Group	Facility Type
1	Academic Medical Center Teaching Hospital
2	Hospitals reporting more than 40,000 surgical hours
3	Hospitals reporting 15,000 to 40,000 surgical hours
4	Hospitals reporting less than 15,000 surgical hours

Not applicable. The proposed project does not involve any operating rooms.

(b) Standard Hours per OR per Year – Identify the Standard Hours per OR per year for the facility identified in response to Section A, Question 5 based on the Group Assignment identified in response to Question 9(a) and the following table: _________________.

Group	Hours per Day	Days per Year	Standard Hours per Operating Room per Year
1	10	260	1,950.0
2	10	260	1,950.0
3	9	260	1,755.0
4	8	250	1,500.0

Not applicable. The proposed project does not involve any operating rooms.

(c) Case Times – Your response should be to either subpart (i) <u>or</u> subpart (ii) but <u>not</u> to both.

(i) Existing Hospital to be Expanded – Identify the facility's Final Case Times as reported in Table 6B in the SMFP in effect at the time the review begins and <u>use those times to project estimated surgical hours in Form C</u>.

Final Inpatient Case Time: ___________________________________

Final Outpatient Case Time: ___________________________________

(ii) New or Replacement Hospital to be Developed on a New Site – Identify the Average Final Case Times from Step 5b of the OR Need Methodology in Chapter 6 of the SMFP in effect at the time the review begins for the group identified in response to Question 9(a)(ii) and <u>use those times to project estimated surgical hours in Form C</u>.

Average Final Inpatient Case Time: __________________________

Average Final Outpatient Case Time: __________________________

Not applicable. The proposed project does not involve any operating rooms.

(d) Health System

(i) Identify all licensed or approved health service facilities with ORs located in the same service area that are or would be part of the applicant's health system, as that term is defined in Chapter 6 of the SMFP in effect at the time the review begins.

(ii) For each facility identified in response to Question 9(d)(i), provide the number of existing and approved ORs by completing the following table.

Facility	# of Inpatient ORs (excluding dedicated C-Section ORs)	# of Dedicated C-Section ORs	# of Shared ORs	# of Dedicated Ambulatory ORs	Total # of ORs

(iii) For each facility identified in response to Question 9(d)(i), provide the facility's group assignment, standard hours per OR per year and final case times as reported in Chapter 6 of the SMFP in effect at the time the review begins by completing the following table. Use the facility's final case times as reported in Chapter 6 of the SMFP to project estimated surgical hours in Form C.

Facility	Group Assignment	Standard Hours per OR per Year	Case Times	
			Inpatient	Outpatient

Not applicable. The proposed project does not involve any operating rooms.

10. Complete Form C Utilization, which is found in Section Q, for each service component proposed in this application. If the proposal involves a hospital and it results in an increase in the # of ORs in the service area, complete a separate Form C Utilization for the OR service component for each facility in the applicant's health system, as that term is defined in Chapter 6 of the SMFP in effect at the time the review begins.

(a) Historical – Provide actual annual utilization data for one full fiscal year prior to the submission of the application. If a full year of utilization data is not available, annualize the utilization data since the service was first offered and explain how the utilization data was annualized.

(b) Interim – Provide projected annual utilization data for each full fiscal year from the last full fiscal year prior to submission of the application until the project is complete. One year of annualized data may be necessary to complete the form as requested and is permissible. If it is necessary to include one year of annualized utilization data, specify the number of months for which actual utilization data is available, provide the total actual utilization data for those months and

describe the method used to annualize the partial year of actual utilization data. Additional columns may be added to the spreadsheet for multiple interim years.

(c) **Projected – Provide projected annual utilization data for the first three full fiscal years after completion of the proposed project. A partial fiscal year of projected utilization data following completion of the project may be necessary and is permissible. If it is necessary to include a partial fiscal year of projected utilization data, specify the number of months included in the partial fiscal year. Then include three full fiscal years of projected annual utilization data.**

(d) **Provide the assumptions and the methodology used to project utilization. These should be done in Microsoft Word or similar software and placed in Section Q, immediately following the completed spreadsheet. The applicant has the burden to demonstrate in the application as submitted that projected utilization is based on reasonable and adequately supported assumptions. While Form C only requests one year of historical data, an applicant may need to provide more years of historical data in its assumptions and methodology in order to meet its burden.**

(e) **Provide any supporting documentation in an Exhibit.**

Please see Form C in Section Q for projected medical/surgical bed utilization for Atrium Health University City and Form C Assumptions and Methodology for the assumptions and methodology used to project Atrium Health University City's utilization as well as the acute care utilization for each facility in the Atrium Health system in Mecklenburg County. Please see Exhibit C.10 for supporting documentation.

Access

11. **Describe how each of the groups listed below will have access to the proposed services and provide the estimated percentage of total patients for each group during the third full fiscal year of operation following completion of the project.**

(a) **Low income persons**
(b) **Racial and ethnic minorities**
(c) **Women**
(d) **Handicapped persons**
(e) **The elderly**
(f) **Medicare beneficiaries**
(g) **Medicaid recipients**

Atrium Health University City provides services to all persons in need of medical care, regardless of race, color, religion, national origin, sex, age, disability, or source of payment. Please see Exhibit B.10-4 for Atrium Health's Non-Discrimination policies. As noted in Atrium Health's Non-Discrimination Policy Statement, "[n]*o individual shall be subject to discrimination or denied the benefits of the services, programs, or activities of the Carolinas HealthCare System*[3] *on the basis of race, color, religion, national origin, sex, age, disability or source of payment*." Atrium Health will continue to serve this population as dictated by the mission of Atrium Health, which is the foundation for every action taken. The mission is simple, but unique: *To improve health, elevate hope, and advance healing – for all*. This includes the medically underserved.

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[3] Carolinas HealthCare System (CHS) is now known as Atrium Health. Given the recency of the name change, some policies included with this application still bear the name "CHS" or "Carolinas HealthCare System."

In addition, as noted in Atrium Health's system-wide Hospital Coverage Assistance and Financial Assistance Policy, Exhibit L.4-1, "*CHS is committed to assisting patients obtain coverage from various programs as well as providing financial assistance (FA) to every person in need of medically necessary hospital inpatient, outpatient, or emergency treatment*." Patients lacking coverage receive financial counseling to determine eligibility for financial assistance. Patients who do not qualify for financial assistance will be offered an installment payment plan. Patients will receive the appropriate medical screening examination and any necessary stabilizing treatment for emergency medical conditions, regardless of ability to pay.

Atrium Health's total community benefit was more than $2 billion in CY 2018, primarily driven by financial assistance to uninsured patients, bad debt costs, and losses incurred by serving Medicare and Medicaid patients. During CY 2018, Atrium Health University City provided approximately $115 million in charity care and bad debt. Further, Atrium Health has made the recruitment and retention of bilingual staff members a priority at the medical center. Atrium Health provides financial incentives to employees who spend their time using a language skill and to employees who refer bilingual new hires. Please see Exhibit B.10-5 for Atrium Health's policy regarding patients who do not read or speak English.

The existing Atrium Health University City facility will continue to comply with the standards and provisions of the North Carolina State Building Code Volume 1-C Accessibility Code as well as the federal guidelines (Americans with Disabilities Act). As noted in the Individuals with Disabilities summary statement of Atrium Health's Non-Discrimination Policy, Exhibit B.10-4, all Atrium Health facilities will comply with regulations as described in the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 to reasonably accommodate individuals with disabilities.

The table below provides for each group the estimated percentage of total patients of the proposed service component during the third full fiscal year of operation following completion of the project, based on CY 2018 percentages for the patient population. Atrium Health does not maintain data that includes the number of low income persons or handicapped persons it serves. As such, Atrium Health does not have a reasonable basis to estimate the percentage of low income and handicapped patients to be served by the project; however, as noted above, neither low income nor handicapped persons are denied access to the proposed services.

Atrium Health University City Med/Surg Beds (Name of Facility)	**Third Full Fiscal Year**
	Percentage of Total Patients Served
Low income persons	
Racial and ethnic minorities	66.3%
Women	55.3%
Handicapped persons	
The elderly	38.3%
Medicare beneficiaries	45.9%
Medicaid recipients	12.8%

Rules - ***"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."***

12. (a) The Rules which may be applicable to proposals submitted on the Acute Care Services and Medical Equipment application form are listed below. Check each one that applies to this proposal.

	10A NCAC 14C .1400	Criteria and Standards for Neonatal Services
	10A NCAC 14C .1600	Criteria and Standards for Cardiac Catheterization Equipment and Cardiac Angioplasty Equipment
	10A NCAC 14C .1700	Criteria and Standards for Open-Heart Surgery Services and Heart-Lung Bypass Machines
	10A NCAC 14C .1900	Criteria and Standards for Radiation Therapy Equipment
	10A NCAC 14C .2300	Criteria and Standards for Computed Tomography Equipment
	10A NCAC 14C .2700	Criteria and Standards for Magnetic Resonance Imaging Scanner
	10A NCAC 14C .3700	Criteria and Standards for Positron Emission Tomography Scanner
X	10A NCAC 14C .3800	Criteria and Standards for Acute Care Beds

The following Rules <u>may</u> be applicable to the proposal <u>and</u> the Acute Care Services and Medical Equipment application form <u>is</u> the appropriate form to use; <u>however, check with the Agency before using this form if the Rules below apply to the proposal</u>.

	10A NCAC 14C .2100	Criteria and Standards for Surgical Services and Operating Rooms
	10A NCAC 14C .3900	Criteria and Standards for Gastrointestinal Endoscopy Procedure Rooms in Licensed Health Service Facilities

(b) <u>Document that the proposal is consistent with the applicable Rules.</u>
(c) Provide any supporting documentation in an Exhibit.

SECTION .3800 - CRITERIA AND STANDARDS FOR ACUTE CARE BEDS

10A NCAC 14C .3801 DEFINITIONS

The following definitions shall apply to all Rules in this Section:

(1) "Acute care beds" means acute care beds licensed by the Division of Health Service Regulation in accordance with standards in 10A NCAC 13B .6200, and located in hospitals licensed pursuant to G.S. 131E-79.

(2) "Average daily census" means the number of days of inpatient acute care provided in licensed acute care beds in a given year divided by 365 days.

(3) "Campus" shall have the same meaning as defined in G.S. 131E-176(2c).

(4) "Service Area" means the single or multi-county area as used in the development of the acute care bed need determination in the applicable State Medical Facilities Plan.

Atrium Health University City is submitting an application to develop 16 additional acute care beds in Mecklenburg County. This proposal was developed in accordance with the definitions as stated in 10A NCAC 14C .3801.

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.

Atrium Health University City's acute care bed service area is Mecklenburg County as defined in 10A NCAC 14C .3801. Atrium Health operates three, separately licensed acute care hospitals in Mecklenburg County, including Atrium Health Pineville, CMC/Atrium Health Mercy (two campuses on the same license), and Atrium Health University City. Atrium Health's Mecklenburg County facilities are reasonably projected to be at 81.7 percent occupancy in the third full fiscal year of the proposed project (January 1, 2024 to December 31, 2024), as shown in the assumptions and methodology in Form C Utilization in Section Q.

Atrium Health Projected Acute Care Bed Utilization

	PY 3
Atrium Health Lake Norman*	5,833
Atrium Health Pineville	74,753
Atrium Health University City	31,078
CMC**	280,820
Atrium Health Mercy**	51,732
Total Days	**444,216**
Total ADC	1,217
Total Beds (Existing + Proposed)	1,490
Occupancy	**81.7%**

*Atrium Health is filing a concurrent application for Atrium Health Lake Norman. Please see Form C Assumption and Methodology for further detail.

**Two campuses on same license.

(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

Please see Form C for further details regarding all assumptions and data used to develop the projections for Atrium Health's acute care facilities.

Change of Scope or Cost Overrun Applications Only

13. (a) Change of Scope

(i) Do the service components proposed in this application differ from those included in the previously approved application(s)?

Yes ____________ No ____________

If you answered yes:

- **Describe the differences in the service components proposed in this application as compared to the service components included in the previously approved application(s).**
- **Explain why each change is necessary and provide any supporting documentation in an Exhibit.**
- **Complete Section C, Questions 4-9 and 11 if the response to those questions would now be different from what was provided in the previously approved application(s).**

(ii) Is projected patient origin expected to differ from what was projected in the previously approved application(s)?

Yes ____________ No ____________

If you answered yes:

- **Complete Section C, Questions 2 and 3.**
- **Describe the differences in the projected patient origin in this application as compared to the projected patient origin in the previously approved application(s).**
- **Explain why projected patient origin has changed and provide any supporting documentation in an Exhibit.**

(iii) Is projected utilization expected to differ from what was projected in the previously approved application(s)?

Yes ____________ No ____________

If you answered yes, complete Section C, Question 10, Form C Utilization, which is found in Section Q, for each service component that differs from the service component(s) included in the previously approved application(s).

(iv) Are there any Rules that apply to this proposal that were not applicable to the previously approved application(s)?

Yes ____________ No ____________

If you answered yes:

- **Identify the Rules applicable to this application**
- **Document that the proposal is consistent with the Rules applicable to this application.**
- **Provide any supporting documentation in an Exhibit.**

Not applicable. The proposed project does not involve a change of scope.

(b) Cost Overrun

Will the capital cost now exceed 115% of the authorized capital cost for the previously approved applications(s)?
Yes ____________ No ____________
If you answered yes:

- **Complete Form F.1b Capital Cost for Cost Overrun or Change of Scope, which is found in Section Q.**
- **Explain why the capital cost is now expected to exceed 115% of the authorized capital cost for the previously approved application(s) and provide any supporting documentation in an Exhibit.**

Not applicable. The proposed project does not involve a cost overrun.

SECTION D - "CRITERION (3a)" - G.S. 131E-183(a)(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."

For change of scope or cost overrun applications, skip to Section D, Question 6.

1. Does the proposal in this application involve?

(a) Reducing the number of beds, services or equipment on an existing or approved campus?

Yes______________ **No** _______X_______

(b) Relocating beds, services or equipment to another facility or campus?

Yes______________ **No** _______X_______

(c) Eliminating beds, services or equipment on an existing or approved campus?

Yes______________ **No** ______X_______

2. If you answered yes to any subpart of Question D.1 above:

(a) Identify the beds, services or equipment that will be reduced, relocated to another facility/campus or eliminated.

Not applicable. The proposed project does not involve the reduction, relocation, or elimination of beds, services, or equipment.

(b) Explain how the needs of the patients currently utilizing the beds, services or equipment that will be reduced, relocated to another facility/campus or eliminated will continue to be met following completion of the project.

Not applicable. The proposed project does not involve the reduction, relocation, or elimination of beds, services, or equipment.

Historical and Projected Utilization
(for beds, services or equipment that will continue to be used at an existing or approved campus)

3. Operating Room Projects (i.e., for hospital proposals that involve eliminating, reducing or relocating ORs as one of the service components)

(a) Group Assignment

(i) <u>Existing Hospital that will Lose ORs as a Result of the Project</u>:
Identify the Group Assignment as reported in Table 6A in the SMFP in effect at the time the review begins: ___________________

Are you proposing that the Group Assignment will change as a result of this project?
Yes ________________ No ________________
If you answered yes,
(A) Identify the new Group Assignment: ___________________
(B) Explain why the new Group Assignment is appropriate.
(C) Provide any supporting documentation in an Exhibit.

(ii) <u>Approved Hospital that will Lose ORs as a Result of the Project</u>
Identify the proposed Group Assignment based on the table below: _____________________
Explain why that is the appropriate Group Assignment and provide any supporting documentation in an Exhibit.

(b) Standard Hours per OR per Year – Identify the Standard Hours per OR per year based on the Group Assignment identified in response to Question 3(a) and the following table: ________________.

(c) Case Times

(i) Existing Hospital that will Lose ORs as a Result of the Project – Identify the facility's Final Case Times as reported in Table 6B in the SMFP in effect at the time the review begins and <u>use those times to project estimated surgical hours in Form C</u>.
Final Inpatient Case Time: ________________________________
Final Outpatient Case Time: ________________________________

(ii) Approved Hospital that will Lose ORs as a Result of the Project - Identify the Average Final Case Times from Step 5b of the OR Need Methodology in Chapter 6 of the SMFP in effect at the time the review begins for the group identified in response to Question 3(a)(ii) and <u>use those times to project estimated surgical hours in Form C</u>.
Average Final Inpatient Case Time: ________________________
Average Final Outpatient Case Time: ________________________

Not applicable.

4. <u>Utilization of Beds, Services or Equipment that will Continue to be Used at an Existing or Approved Campus or Facility</u> – Complete <u>Form D Utilization</u>, which is found in Section Q. Complete a separate <u>Form D Utilization</u> for each facility that will lose beds, services or equipment as a result of the proposal.

(a) Historical – Provide actual annual utilization data for one full fiscal year prior to the submission of the application. If a full year of utilization data is not available, annualize the utilization data since the service was first offered and explain how the utilization data was annualized.

(b) Interim – Provide projected annual utilization data for each full fiscal year from the last full fiscal year prior to submission of the application until the project is complete. One year of annualized data may be necessary to complete the form as requested and is permissible. If it is necessary to include one year of annualized utilization data, specify the number of months for which actual utilization data is available, provide the total actual utilization data for those months and describe the method used to annualize the partial year of actual utilization data. Additional columns may be added to the spreadsheet for multiple interim years.

(c) Projected – Provide projected annual utilization data for the first full fiscal year after completion of the proposed project. A partial fiscal year of projected utilization data following completion of the project may be necessary and is permissible. If it is necessary to include a partial fiscal year of projected utilization data, specify the number of months included in the partial fiscal year. Then include one full fiscal year of annual utilization data.

(d) **Provide the assumptions and the methodology used to project utilization.** **These should be done in Microsoft Word or similar software and placed in Section Q, immediately following the completed spreadsheet.**

(e) **Provide any supporting documentation in an Exhibit.**

Not applicable. The proposed project does not involve the reduction, elimination or relocation of beds, equipment or services.

5. **If you answered yes to any subpart of Question D.1 above, describe the effect of the relocation, reduction or elimination of beds, services or equipment on each group listed below:**

(a) **Low income persons**
(b) **Racial and ethnic minorities**
(c) **Women**
(d) **Handicapped persons**
(e) **The elderly**
(f) **Medicare beneficiaries**
(g) **Medicaid recipients**

Not applicable. The proposed project does not involve the reduction, elimination or relocation of beds, equipment or services.

Change of Scope or Cost Overrun Applications Only

6. **If the information provided in response to Section D, Questions 1 through 5 would be different from what was in the previously approved application:**

(a) **Identify each change.**
(b) **Explain why each change is necessary.**
(c) **Provide any supporting documentation in an Exhibit.**

Not applicable. The proposed project does not involve a change of scope of cost overrun.

SECTION E - "CRITERION (4)" - G.S. 131E-183(a)(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."

1. Are there any alternative methods of meeting the needs for the proposed project?

Yes ____X______ **Respond to Question E.2**
No ____________ **Respond to Question E.3**

2. If you answered yes to Section E.1:

(a) Describe each alternative method of meeting the needs for the proposed project.

1. Maintain the status quo.
2. Develop a different number of beds at Atrium Health University City.
3. Develop the concurrently filed projects as proposed.

(b) For each alternative method not selected, explain how that alternative is more costly or less effective than the selected alternative.

MAINTAIN STATUS QUO

Under the status quo, Atrium Health University City would continue to operate with inefficiencies and the inability to place patients in beds. Patients may have to be redirected and endure long wait times in the emergency room while waiting for a bed. Additionally, by not developing more beds, Atrium Health University City would have very limited options to accommodate future growth in demand that will be driven by continued growth and aging of the population. Therefore, maintaining the status quo was not considered a practical alternative.

DEVELOP A DIFFERENT NUMBER OF BEDS AT ATRIUM HEALTH UNIVERSITY CITY

Atrium Health also considered developing a different number of beds at Atrium Health University City. However, developing fewer than 16 acute care beds would not meet the need for additional capacity for future growth and would therefore be less effective. The proposed application is indicative of Atrium Health's commitment to containing healthcare costs and maximizing healthcare benefit per dollar expended. As discussed in Section C.1, the development of the additional acute care beds as proposed in this application can be accomplished in a timely and resource-responsible manner as Atrium Health University City has the existing space necessary to accommodate the additional acute care beds without requiring new construction or extensive and cost-prohibitive renovations. In addition, developing more than 16 beds at Atrium Health University City would prevent the proposed development of additional capacity at CMC, Atrium Health Pineville, and the proposed new hospital in the Lake Norman area, Atrium Health Lake Norman. The combination of projects submitted by Atrium Health seeks to balance the overwhelming need across Atrium Health Mecklenburg County facilities, by recognizing the need to increase acute care capacity at each existing facility as well as the need to develop hospital-based services in the Lake Norman area. Given the factors discussed, Atrium Health believes developing a different number of acute care beds at Atrium Health University City to be a less effective alternative.

DEVELOP THE CONCURRENTLY FILED PROJECTS AS PROPOSED

Atrium Health maintains that the most reasonable, cost-effective, and timely option for meeting the need identified in the *2019 SMFP* is to submit the four concurrent and complementary applications for acute care beds. This application proposes to develop 16 additional acute care beds at Atrium Health University City. Atrium Health's concurrently filed applications propose to develop 18 additional acute care beds at CMC, 12 at Atrium Health Pineville, and 30 beds at Atrium Health Lake Norman, a new hospital in the Lake Norman area. As noted in prior applications, Atrium Health's plans and subsequent CON applications represent the development of projects which respond to unmet needs as they are identified and prioritized. While each CON application must demonstrate need, each individual project cannot represent the complete and final solution to meeting all of Mecklenburg County needs, as those needs continue to develop as the population grows. As illustrated by the conservative projection of bed utilization at CMC, Atrium Health Pineville, Atrium Health University City, and Atrium Health Lake Norman (see Form C), the additional acute care capacity proposed in these complementary applications, alone, is not sufficient to meet all the future bed need; however, they are necessary to begin alleviating capacity constraints at Atrium Health's existing facilities in Mecklenburg County.

(c) Provide any supporting documentation in an Exhibit.

Not applicable.

3. If you answered no to Section E.1:

(a) Explain why there is no alternative method of meeting the need for the project.

(b) Provide any supporting documentation in an Exhibit.

Not applicable.

SECTION F - "CRITERION (5)" - G.S. 131E-183(a)(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."

For change of scope or cost overrun applications, skip to Section F, Question 5.

Capital Cost and Availability of Funds for the Capital Cost

1. (a) Complete Form F.1a Capital Cost.

The form is found in Section Q.
Different or additional line items or columns may be added, as necessary.

Please see Form F.1a Capital Cost in Section Q.

(b) Provide the assumptions used to project the capital cost. These should be placed in Section Q, immediately following the completed Form F.1a Capital Cost. These should be done in Word or similar software and placed in Section Q, immediately following the completed spreadsheet to which they relate.

Please see Section Q, immediately following Form F.1a Capital Cost, for the assumptions used to project the capital cost.

(c) Provide any supporting documentation in an Exhibit.

Please see Exhibit F.1 for a certified capital cost estimate letter.

2. (a) Sources of Financing for the Capital Cost – Complete the following table.

Different or additional line items or columns may be added, as necessary.
Identify each applicant, by name, in the first row of the table.

Sources of Capital Cost Financing

Type	CMHA (Name of Applicant 1)	Not Applicable. (Name of Applicant 2)	Total
Loans	$	$	$
Accumulated reserves or OE *	$ 3,766,000	$	$ 3,766,000
Bonds	$	$	$
Other (Specify)	$	$	$
Total Financing **	$ 3,766,000	$	$ 3,766,000

*** OE = Owner's Equity**
**** Total financing should equal line 14 on Form F.1a Capital Cost.**

Please note that Atrium Health expects to fund the project with accumulated reserves, but has conservatively included financing costs in the event that the project is funded with bond financing.

(b) Loans – If financing any portion of the capital cost with a loan, document that the prospective lending institution(s) would consider financing the proposed project. The documentation for each loan should be provided in an Exhibit and should include the:

- **Proposed borrower**
  - **Note: if the borrower is not the applicant, document that the borrower is willing to commit the proceeds of the loan for the capital cost of the project.**
- **Purpose of the loan**
- **Proposed interest rate**
- **Proposed term (period of the loan)**
- **Proposed amount of the loan**
- **Amortization schedule**

Not applicable.

(c) Accumulated Reserves or Owner's Equity – If financing any portion of the capital cost with accumulated reserves or owner's equity:

(i) Identify each legal entity that will provide accumulated reserves or owner's equity for any portion of the capital cost of the project.

The proposed project will be funded with accumulated reserves of CMHA d/b/a Atrium Health. Please note that Atrium Health expects to fund the project with accumulated reserves, but has conservatively included financing costs in the event that the project is funded with bond financing.

(ii) Document that each legal entity is willing to commit accumulated reserves or owner's equity for the capital cost of the project.

Please see Exhibit F.2-1 for a letter from Anthony DeFurio, Chief Financial Officer of Atrium Health, documenting the availability of accumulated reserves for this project.

(iii) For each legal entity identified in response to Section F.2(a), document that the accumulated reserves or owner's equity that will be used to finance the capital cost are reasonably likely to be available when needed.

Please see Exhibit F.2-2 for the most recent audited financial statements for CMHA d/b/a Atrium Health, the source of funds for the proposed project. Please refer to the line items "Cash and cash equivalents" and "Other assets: limited as to use," which indicate sufficient reserves available for the proposed project.

(d) Other Forms of Financing – If financing any portion of the capital cost through bonds or some other form of financing:

(i) Describe the source of the financing.
(ii) Document that the source of the financing is reasonably likely to make the funds available for the project.

Not applicable.

<u>Working Capital and Availability of Funds for Working Capital</u>

3. (a) Start-up expenses

(i) Estimated start-up period: _______
(# of days / weeks / months after project is completed before offering the services proposed in this application)

(ii) Total estimated start-up expenses: $ _______________

(iii) Describe the types of expenses included (e.g., hiring staff, training staff, acquiring inventory, power, water, etc.)

Not applicable. The proposed project does not involve a new service, and therefore will not result in any start-up expenses.

(b) Initial operating expenses

(i) Estimated initial operating period: _______
(# of months from the time the facility begins offering the services proposed in this application until cash in-flow exceeds cash out-flow)

(ii) Total estimated operating expenses during initial operating period: $____________

Not applicable. The proposed project does not involve a new service, and therefore will not result in any initial operating expenses.

(c) Total working capital $ ___________________

Should equal the sum of the start-up expenses [F.3(a)(ii)] and initial operating expenses [F.3(b)(ii)].

Not applicable.

(d) Provide the assumptions and methodology used to project:

- **Start-up expenses**
- **Initial operating expenses**

Not applicable.

(e) Sources of Financing for Working Capital

(i) Complete the following table.

Sources of Financing for Working Capital		Amount
(a)	Loans	$
(b)	Cash or Cash Equivalents, Accumulated Reserves or Owner's Equity	$
(c)	Lines of credit	$
(d)	Bonds	$
(e)	**Total ***	$

* Total sources of financing for working capital should equal the amount listed in Question F.3(c) above.

Not applicable.

(f) Loans – If financing any portion of the working capital with a loan, document that the prospective lending institution(s) would consider financing the working capital. The documentation for each loan should be provided in an Exhibit and should include the:

- **Proposed borrower**
  - **Note: if the borrower is <u>not</u> the applicant, document that the borrower is willing to commit the proceeds of the loan for the capital cost of the project.**
- **Purpose of the loan(s)**
- **Proposed interest rate(s)**
- **Proposed term (period of the loan(s))**
- **Proposed amount of the loan(s)**
- **Amortization schedule**

Not applicable.

(g) Cash or Cash Equivalents, Accumulated Reserves or Owner's Equity – If financing any portion of the working capital with cash or cash equivalents, accumulated reserves or owner's equity:

- **Identify each legal entity that will provide cash or cash equivalents, accumulated reserves or owner's equity for any portion of the working capital.**

- **Document that each legal entity is willing to commit cash or cash equivalents, accumulated reserves or owner's equity for the working capital.**

- **For each legal entity identified in response to Section F.2(a), document that the cash or cash equivalents, accumulated reserves or owner's equity that will be used to finance the working capital are reasonably likely to be available when needed.**

Not applicable.

(h) Other Forms of Financing – If financing any portion of the working capital through a line of credit, bonds or some other form of financing:

- **Describe the source of the financing.**

- **Document that the source of the financing is reasonably likely to make the funds available for the working capital.**

Not applicable.

<u>**Financial Feasibility – Availability of Funds for Operating Needs and Projected Costs and Charges**</u>

4. (a) Complete a separate <u>Form F.2 Revenues</u> and <u>Form F.3 Operating Costs</u>, which are found in Section Q, for:

- **The entire health service facility (diagnostic centers, new hospitals or LTCHS and existing hospitals if necessary to demonstrate financial feasibility)**
- **Each service component (not diagnostic centers)**

For historical revenues and operating expenses, identify who provided the information and what the source was for the information.

> **Example:** ***"The CFO provided the data which was obtained from audited financial statements for the fiscal years ending 12/31/XX and 12/31/XY, a copy of which is provided in Exhibit F.3."***

For projected revenues and operating expenses, provide the assumptions and methodology used for each line item.

> **Example:** ***"Medical supplies (Line 35) averaged $5.50 per procedure during the last full fiscal year and it is assumed that this amount will increase 2.5% per year. The inflation rate is based on ___________________________."***

This information should be placed in Section Q, immediately following the completed form to which they relate. They may be in either Word or Excel.

Please see Forms F.2, F.3, and associated assumptions in Section Q.

(b) Professional Fees

Will the facility identified in Section A, Question 5, bill the patient for any professional fees such as interpretation of radiological studies by a Radiologist or review of specimens by a pathologist?

Yes______________ **No** ____X_______

If you answered yes to Question 4(b), include the professional fees (include both the revenues and the expenses) as separate line items in Forms F.3 and F.4. Each type of professional fee should be on its own separate line and should not be combined with other professional fees. For example, professional fees for interpretation of radiological studies should be on one line and not combined with professional fees for review of specimens by a pathologist.

Atrium Health University City does not bill patients for professional fees. Professional fees are billed separately by the physicians and practices. Any other professional expense for Atrium Health University City, which does not have corresponding professional fee revenue, is included in Independent Contractors expense on Form F.3.

Provide the assumptions and methodology used to calculate professional fees.

Not applicable.

Change of Scope or Cost Overrun Applications Only

5. (a) Will the capital cost be different from the previously approved application?

Yes ____________________ **No** ________________________

If you answered yes:

- **Complete Form F.1b Capital Cost for Cost Overrun or Change of Scope, which is found in Section Q.**
- **Identify each change.**
- **Explain why each change is necessary.**
- **Provide any supporting documentation in an Exhibit.**
- **Provide a new response to Section F, Question 2.**

(b) Will the working capital cost be different from the previously approved application?

Yes ____________________ **No** ________________________

If you answered yes:

- **Identify each change.**
- **Explain why each change is necessary.**
- **Provide any supporting documentation in an Exhibit.**
- **Provide a new response to Section F, Question 3.**

(c) Will the revenues and operating costs be different from the previously approved application?

Yes ____________________ **No** ________________________

If you answered yes:

- **Identify each change.**
- **Explain why each change is necessary.**
- **Provide any supporting documentation in an Exhibit.**

- **Provide a new response to Section F, Question 4.**

Not applicable. The proposed project does not involve a change of scope or cost overrun.

SECTION G - “CRITERION (6)” - G.S. 131E-183(a)(6)

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

For change of scope or cost overrun applications, skip to Section G, Question 4.

1. Identify all existing and approved facilities that provide the same service components proposed in this application and are located in the proposed service area.

Please see Exhibit G.1 for Table 5A of the *Proposed 2020 SMFP* which includes all existing and approved facilities with acute care beds in Mecklenburg County.

2. If available from a public source such as the SMFP or license renewal application forms on file with the Division of Health Service Regulation, for each existing facility identified in response to Question G.1, provide the total annual utilization for each service component proposed in this application during the last full fiscal year prior to submission of the application.

Please see Exhibit G.1 for Table 5A of the *Proposed 2020 SMFP* which includes all existing and approved facilities with acute care beds in Mecklenburg County.

3. (a) Explain why the proposed project will not result in an unnecessary duplication of the existing or approved facilities that provide the same service components proposed in this application and are located in the proposed service area.

The *2019 SMFP* includes a need determination for 76 additional acute care beds in Mecklenburg County. In particular, Table 5A identifies the total system-wide need for Atrium Health (shown as Carolinas HealthCare System) as 126 acute care beds. Thus, even with the approval of all four concurrent applications, Mecklenburg County facilities, specifically Atrium Health, are expected to continue to have a deficit of acute care beds. To meet the identified need, Atrium Health is submitting four concurrent and complementary applications, including the 16 proposed acute care beds at Atrium Health University City. As described in Section C.4, Atrium Health University City’s acute care bed utilization has already reached its capacity and is projected to continue to grow necessitating the proposed 16 additional acute care beds to meet the needs of its patients.

(b) Provide any supporting documentation for your response in an Exhibit.

Please Exhibit G.1.

Change of Scope or Cost Overrun Applications only

4. If any of the proposed service components in this application are different from the service components proposed in the previously approved application:

(a) Identify each new service component included in this proposal.
(b) Provide a response to Section G, Questions 1 through 3 for each new service component proposed in this application.

Not applicable. The proposed project does not involve a change of scope or cost overrun.

SECTION H - "CRITERION (7)" - G.S. 131E-183(a)(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."

For change of scope or cost overrun applications, skip to Section H, Question 4.

1. Staffing – Complete a separate Form H Staffing, which can be found in Section Q, for:

- **The entire health service facility (diagnostic centers and new hospitals or LTCHs)**
- **Each service component proposed in this application**

For each staff position, which includes employees, contract employees and temporary employees, provide the average annual salary for one full-time equivalent (FTE) position (2,080 hours per year per FTE).

For current staffing, identify the position types and the number of FTEs as of a specific date as close as possible to the date the application is expected to be submitted.

For projected staffing, provide the assumptions and methodology used to project:

- **The type of positions included.**
- **The number of FTE positions for each type.**
- **The average annual salary for each position type.**

The assumptions and methodology used should be done in Microsoft Word or similar software and placed in Section Q, immediately following the completed spreadsheet to which they relate.

Please see Form H and assumptions in Section Q.

2. Staff Recruitment – Describe the methods used or to be used by the facility identified in response to Section A, Question 5 to recruit or fill vacant or new positions.

Atrium Health's human resources department utilizes several media outlets for recruitment including print, online, and radio. In addition, interactive advertising approaches such as social networking sites, search engine optimization, and e-postcards also are used. Atrium Health University City participates in school career fairs, professional job fairs, and offers co-worker referral bonuses. Hard-to-fill positions and strategic initiatives are reviewed annually and supporting recruitment plans are created.

Atrium Health has two schools of nursing within the System:

- Cabarrus College of Health Sciences, and
- Carolinas College of Health Sciences at CMC.

As a result, Atrium Health University City has less difficulty recruiting nursing staff. In addition, Atrium Health has a lengthy set of procedures for recruiting nursing and non-nursing staff. Some of these procedures include:

- Employee referral bonuses;
- Hospital website job postings;
- Career fairs;
- Providing facilities as a host sites for professional clinical training programs; and,
- Advertising in professional journals and job posting websites.

3. Staff Training – Describe the training programs and continuing education programs currently in place or to be used in the facility identified in response to Section A, Question 5.

All clinical and administrative staff of Atrium Health University City are required to meet multiple performance standards and competency levels. In particular, nursing staff is required to complete needs assessments during orientation and annually on "Competency Day." Nurse managers identify learning needs and schedule in-services to address them. All staff document their education on an Education Profile Record. Finally, monthly staff meetings provide updates on various topics, including new policies or service excellence.

Change of Scope or Cost Overrun Applications Only

4. If the information provided in response to Section H, Question 1 would be different from what was in the previously approved application:

(a) Identify each change.
(b) Explain why each change is necessary.
(c) Provide any supporting documentation in an Exhibit.
(d) Complete Form H Staffing. See Question 1 for the instructions.

Not applicable. The proposed project does not involve change of scope or cost overrun.

SECTION I - "CRITERION (8)" - G.S. 131E-183(a)(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."

For change of scope or cost overrun applications, skip to Section I, Question 4.

1. Ancillary and Support Services

(a) Identify the necessary ancillary and support services for each service component proposed in this application.

Atrium Health University City currently has all ancillary and support services in place necessary to support hospital operations. These existing ancillary and support services will also support the 16 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 Atrium Health University City's 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 Atrium Health University City upon completion of the proposed project.

(b) Explain how each ancillary and support service is or will be made available and provide any supporting documentation in an Exhibit.

Please see Exhibit I.1 for a letter from Bill Leonard, President of Atrium Health University City, attesting to the availability of the above ancillary and support services.

2. Coordination with Existing Health Care System

(a) Existing Facilities – Describe the facility's existing and proposed relationships with other local health care and social service providers and provide any supporting documentation in an Exhibit.

As an existing healthcare facility in the area, Atrium Health University City has established relationships with area healthcare providers. Atrium Health University City's relationships with other local healthcare and social service providers are well established and will continue following completion of the proposed project. Please see Exhibit I.2 for letters of support from physicians received to date. Additional letters may be submitted through the public comment period.

(b) New Facilities – Describe the efforts made by the applicant(s) to develop relationships with other local health care and social service providers and provide any supporting documentation in an Exhibit.

Not applicable.

3. **Physicians**

(a) **Hospitals and LTCHs**

(i) **How many physicians currently admit or refer patients for the service components proposed in this application?**

Atrium Health University City currently has an active medical staff of 1,395 members.

(ii) **How many physicians are expected to admit or refer patients for the service components proposed in this application?**

Atrium Health University City anticipates that each of its current medical staff members will remain in good standing and will continue to utilize Atrium Health University City following completion of the proposed project.

(iii) **Identify the current medical director(s) for the service components proposed in this application.**

Dr. Vineet Goel serves as the Chief Medical Officer for Atrium Health University City and has endorsed the proposed project. Please see Exhibit I.3 for a letter of support from Dr. Goel.

(iv) **Identify the proposed medical director(s) for the service components proposed in this application.**

Dr. Vineet Goel serves as the Chief Medical Officer for Atrium Health University City and is expected to continue in this role following completion of the project.

(v) **Describe any physician recruitment plans for the service components proposed in this application.**

Physician recruitment is not required to support the proposed project as these services are already adequately supported by Atrium Health University City's existing physicians.

(vi) **Provide any supporting documentation in an Exhibit.**

Not applicable.

(b) **Diagnostic Centers**

(i) **How many physicians currently refer patients for the service components proposed in this application?**

(ii) **How many physicians are expected to refer patients for the service components proposed in this application?**

Not applicable.

Change of Scope or Cost Overrun Applications Only

4. **If the information provided in response to Section I, Questions 1 through 3 would be different from what was in the previously approved application:**

   (a) Identify each change.
   (b) Explain why each change is necessary.
   (c) Provide any supporting documentation in an Exhibit.

   Not applicable. The proposed project does not involve change of scope or cost overrun.

SECTION J - "CRITERION (9)" - G.S. 131E-183(a)(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."

1. What portion of the project's services does the applicant propose to be provided to individuals not residing in the Health Service Area (HSA) in which the project is located or in adjacent HSAs?

Based on its projected patient origin, only 0.4 percent of the proposed medical/surgical discharges are projected to be provided to patients that do not reside in the HSA in which the proposed project is located or in adjacent HSAs in North Carolina. This calculation does not include patients in other states, as they do not reside in a North Carolina HSA. Martha Frisone, Chief of the Healthcare Planning and Certificate of Need Section, Division of Health Services Regulation, has stated that areas of other states that are adjacent to the HSA are not considered outside the service area in which the project is located as contemplated by Criterion 9.

2. If a substantial portion of the facility's services will be provided to individuals not residing in the HSA in which the project is located or in adjacent HSAs, document the special needs and circumstances that warrant service to these individuals.

Not applicable. As noted above, approximately 0.4 percent of the medical/surgical discharges are projected to be provided to patients not residing in the HSA in which the project is located or in adjacent HSAs. Please note that this calculation does not include patients in other states, as they do not reside in a North Carolina HSA. The majority of those patients not residing in the HSA in which the project is located or in adjacent HSAs originate from areas in South Carolina that are included in the federally designated Metropolitan Statistical Area (MSA) in and around Charlotte and that have historically been served by physicians who have privileges at Atrium Health University City. Martha Frisone, Chief of the Healthcare Planning and Certificate of Need Section, Division of Health Services Regulation, has stated that areas of other states that are adjacent to the HSA are not considered outside the service area in which the project is located as contemplated by Criterion 9.

Please note that the ongoing need for additional acute care bed capacity located in Mecklenburg County is driven not only by the residents of the county, but also by the population centers that surround Mecklenburg County in both North and South Carolina. According to patient origin data submitted on LRAs and shown in Exhibit C.4-3, less than 60 percent of patients served by Mecklenburg County acute care providers originate from within the county, and South Carolina patients comprise 13.1 percent of total acute care bed admissions provided by Mecklenburg County acute care providers. As noted in Section C.4, without the demand for acute care services originating from outside of Mecklenburg County, there would not be a need for additional acute care bed capacity to be located in Mecklenburg County. In fact, there would be significant excess or underutilized capacity.

Note: Criterion (9) applies only if a "substantial portion" of the patients expected to utilize the facility reside in a "health service area" (i.e., HSA) that is not adjacent to the HSA where the facility is located. The following table identifies the non-adjacent HSAs for each HSA.

HSA	Non-adjacent HSAs
I	IV, V and VI
II	VI
III	IV and VI
IV	I and III
V	I
VI	I, II and III

"Substantial portion" is not defined in the CON Law but some of the synonyms for "substantial" are big, considerable, large and sizable. Thus, it would have to be a relatively large percentage of the total number of patients projected to be served in order to be considered a "substantial portion."

SECTION K - "CRITERION (12)" - G.S. 131E-183(a)(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."

For change of scope or cost overrun applications, skip to Section K, Question 5.

1. Does the project involve construction of new space? **Yes** ____________ **No** ____X_____

(a) **If yes, provide the total number of square feet to be constructed:** Not applicable.

(b) **Provide legible line drawings (no larger than 11" x 17") that identify all new construction in an Exhibit. The use of each room or space should be labeled.**

Not applicable.

2. Does the project involve renovation of existing space? **Yes** _____X______ **No** __________

(a) **If yes, provide the total number of square feet to be renovated:** ____________________ 7,509

(b) **Provide legible line drawings (no larger than 11" x 17") that identify all existing spaces to be renovated in an Exhibit. Include drawings that show the "before" and "after" renovation. The use of each room or space should be labeled.**

Please see the previously referenced Exhibit C.1-1 for project line drawings.

3. (a) Explain how the cost, design and means of construction (including renovating space) represents the most reasonable alternative for the proposal and provide any supporting documentation in an Exhibit.

Atrium Health believes that the proposed project is indicative of its commitment to containing healthcare costs, even though the addition of 16 new acute care beds necessitates the expenditure of capital costs to renovate space for their development. As discussed in Section C.4, the additional 16 acute care beds will be accomplished in a resource-responsible manner as Atrium Health University City will develop the beds on Levels 03 and 04 of existing space, some of it only requiring minor changes. While the project does involve renovation costs, Atrium Health University City believes the additional acute care capacity to care for a growing number of patients can be developed at a more moderate cost than if the project were all new construction.

(b) Explain why the project will not unduly increase the costs to the applicant of providing the proposed services or the costs and charges to the public for the proposed services and provide any supporting documentation in an Exhibit.

Atrium Health believes the proposed construction costs are necessary to ensure the proposed project can be developed, providing access to essential acute care services for patients at Atrium Health University City. Through its conservative fiscal management, Atrium Health has set aside excess revenues from previous years to enable it to pay for projects such as the one proposed in this application, without necessitating an increase in costs or charges to pay for the project. Even if the proposed project is eventually funded with debt, Atrium Health is well-able to service the debt without increasing costs or charges to the public. Please see the previously referenced Exhibit F.2-2 for audited financial statements.

(c) Identify any applicable energy saving features incorporated into the construction / renovation plans and provide any supporting documentation in an Exhibit.

Atrium Health is committed to energy efficiency and sustainability that balances the need for healthcare services and environmental sustainability in the communities it serves.

<u>Guiding Principles</u>

1. Implement environmental sustainability to improve and reduce our environmental impact.
2. Integrate sustainable operational and facility best practices into existing and new facilities.
3. Encourage partners to engage in environmentally responsible practices.
4. Promote environmental sustainability in work, home and community.
5. Deliver improved performance to provide a long term return on investment that supports our mission and values.

Atrium Health employs a Facility Management Group with experienced, highly trained and qualified architects, engineers, project managers, tradesmen and technicians, who design, construct, operate and maintain Atrium Health facilities.

Atrium Health University City has demonstrated its commitment to a higher standard of excellence and will continue to do so relative to the proposed project. Atrium Health University City will work with experienced architects and engineers to develop this proposed project to ensure energy efficient systems are an inherent part of the proposed project to the degree appropriate with the proposed renovations. The design team has Energy Star, Leadership in Energy and Environmental Design (LEED) and Hospitals for a Healthy Environment Green Guide for HealthCare (GGHC) experience. Together the team seeks to deliver the following:

- Meet or exceed the requirements of the NC Building Code in effect when line drawings are submitted for review to the DHSR Construction Section.
- Use United States Green Building Council (USGBC) LEED guidelines and GGHC as appropriate to identify opportunities to improve efficiency and performance.
- Use EPA Energy Star for Hospitals rating system to compare performance across Atrium Health, North Carolina, and the United States for benchmarking performance following 12 months of operation.

- Use Atrium Health's Standard Control Sequences to maximize energy efficiency in the BAS and HVAC systems. When fully utilized, these sequences have proven to move Atrium Health acute care hospitals into the top 20 percent of energy efficient hospitals in the nation. Reducing energy consumption per square foot reduces water consumption used for cooling tower and boiler make-up.
- Select new plumbing fixtures to maximize water efficiency and life cycle benefits.
- Design new HVAC systems and select equipment that maximize water efficiency and life cycle benefits.

As a result of these efforts, Atrium Health was recently named a 2019 Energy Star Partner of the Year by the Environmental Protection Agency (EPA) for a second year in a row. This prestigious award is the highest level of recognition that a corporate energy management program can receive from the EPA. In the last decade, only seven other hospitals or healthcare systems have been named Energy Star Partner of the Year and only three other hospitals or healthcare systems have received this recognition two years in a row. Energy Star Partners must perform at a superior level of energy management and meet the following criteria:

- Demonstrate best practices across the organization,
- Prove organization-wide energy savings, and
- Participate actively and communicate the benefits of ENERGY STAR.

New Facilities and Relocations of Facilities or Beds to a new Campus

G.S. 131E-181(a) states:
"A certificate of need shall be valid only for the defined scope, physical location, and person named in the application." **(Emphasis added)**

Thus, assuming a certificate of need is issued for this project, it will be valid only for the physical location of the proposed site as described below.

4. Proposed Site

(a) Address

8800 North Tryon St
Street Address (be as specific as possible)

Charlotte	NC	28262
City	**State**	**ZIP Code**

(b) Ownership

- **Identify the legal entity that currently holds fee simple title to the proposed site (this is usually available on the county's website).**
- **If the applicant is not the current owner in fee simple, provide documentation that the site is available for acquisition by purchase, lease, donation or other comparable arrangement.**

Not applicable. The proposed project does not involve a new site.

(c) Zoning and Special Use Permits

- **Describe the current zoning at the proposed site and provide any supporting documentation in an Exhibit.**
- **If the proposed primary site will require rezoning, describe how the applicant anticipates having it rezoned and provide any supporting documentation in an Exhibit.**
- **If the proposed site will require a special use permit, describe how the applicant anticipates obtaining the special use permit and provide any supporting documentation in an Exhibit.**

Not applicable. The proposed project does not involve a new site.

(d) Water – Describe how water will be provided at the proposed site and include any supporting documentation in an Exhibit.

Not applicable. The proposed project does not involve a new site.

(e) Sewer and Waste Disposal – Describe how sewer and waste disposal services will be provided at the proposed site and include any supporting documentation in an Exhibit.

Not applicable. The proposed project does not involve a new site.

(f) Power – Describe how power will be provided at the proposed site and include any supporting documentation in an Exhibit.

Not applicable. The proposed project does not involve a new site.

Change of Scope or Cost Overrun Applications Only

5. If the information provided in response to Section K, Questions 1 through 4 would be different from what was in the previously approved application:

(a) Identify each change.
(b) Explain why each change is necessary.
(c) Provide any supporting documentation in an Exhibit.

Not applicable. The proposed project does not involve a change of scope or cost overrun.

SECTION L - "CRITERION (13)" - G.S. 131E-183(a)(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;***
(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) ***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***
(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."***

For change of scope or cost overrun applications, skip to Section L, Question 6.

1. **(a)** **Comparison with the Percentages of the Population of the Service Area – Complete the following table below for an existing facility to be expanded and each facility from which beds, services or equipment will be relocated.**

Atrium Health University City (Name of Facility)	Last Full Fiscal Year	
	Percentage of Total Patients Served	Percentage of the Population of the Service Area *
Female	62.4%	51.9%
Male	37.6%	48.1%
Unknown		
64 and Younger	75.6%	88.8%
65 and Older	24.4%	11.2%
American Indian	1.4%	0.8%
Asian	4.4%	6.4%
Black or African-American	44.4%	32.9%
Native Hawaiian or Pacific Islander	0.1%	0.1%
White or Caucasian	32.8%	57.5%
Other Race	5.4%	2.4%
Declined / Unavailable	11.5%	

* The percentages can be found online using the United States Census Bureau's QuickFacts which is at: https://www.census.gov/quickfacts/fact/table/US/PST045218. Just enter in the name of the county.

The table above shows percentages of underserved populations served at Atrium Health University City. It does not show the percentage of the population in the service area in need of the services offered at the facility. Specifically, the available population data by age, race and gender does not include information on the number of elderly, minorities, women or handicapped persons that need health services provided at the facility. For example, the elderly utilize health services at a higher rate than the younger population; thus, the percentage of elderly patients Atrium Health University City is higher than the percentage of the population.

(b) Complete the following table for an existing facility to be expanded and **each facility from which beds, services or equipment will be relocated**.

Last Full Fiscal Year before Submission of Application
(01 / 01 / 2018 to 12 / 31 / 2018)

Payor Source	Atrium Health University City (Entire Facility)	Med/Surg Beds (Service Component)
Self-Pay	18.5%	9.4%
Charity Care^		
Medicare*	22.0%	50.0%
Medicaid*	21.1%	15.9%
Insurance*	34.7%	21.3%
Workers Compensation^^		
TRICARE^^		
Other (Other Govt, Worker's Comp)	3.7%	3.4%
Total	100.0%	100.0%

Source: Atrium Health internal data.
*Including any managed care plans.
^ Atrium Health's internal data does not include Charity Care as a payor source for patients. Patients in any payor category can and do receive charity care. Please see Form F.2 for charity care projections.
^^Workers Compensation and TRICARE are included in the Other payor category.

2. Answer the following questions for an existing facility to be expanded and each facility from which beds, services or equipment will be relocated.

(a) Is the facility obligated under any applicable federal regulations to provide uncompensated care, community service, or access by minorities and handicapped persons?

Yes__________ **No** ___X___

(b) If you answered yes in response to Question L.2(a), describe how the facility has fulfilled or is fulfilling its requirement.

Atrium Health University City has had no obligations to provide a specific uncompensated care amount, community service, or access to care by medically underserved, minorities, or handicapped persons. However, as previously stated, Atrium Health University City provides and will continue to

provide services to all persons in need of medical care, regardless of race, color, religion, national origin, sex, age, disability, or source of payment.

(c) Identify each patient civil rights equal access complaint filed against the existing facility and/or any similar facilities owned by a related entity in North Carolina in the last five years.

Not applicable. No complaints regarding civil rights equal access have been filed against any affiliated entity of Atrium Health University City in the last five years.

(d) Describe the current status of each complaint identified in response to Question L.2(c).

Not applicable.

3. Projected Payor Sources during the Third Full Fiscal Year of Operation following Completion of the Project.

(a) Complete the following table for the entire facility or campus and each service component involved in the proposal. Additional columns may be added as necessary or the payor source for each service component may be provided in a separate table.

Third Full Fiscal Year
(01 / 01 / 2024 to 12 / 31 / 2024)

Payor Source	Atrium Health University City (Entire Facility)	Med/Surg Beds (Service Component)
Self-Pay	18.5%	9.4%
Charity Care^		
Medicare*	22.0%	50.0%
Medicaid*	21.1%	15.9%
Insurance*	34.7%	21.3%
Workers Compensation^^		
TRICARE^^		
Other (Other Govt, Worker's Comp)	3.7%	3.4%
Total	100.0%	100.0%

*Including any managed care plans.
^ Atrium Health's internal data does not include Charity Care as a payor source for patients. Patients in any payor category can and do receive charity care. Please see Form F.2 for charity care projections.
^^Workers Compensation and TRICARE are included in the Other payor category.

(b) Provide the assumptions and methodology used to project each payor source.

Atrium Health University City does not expect that the proposed project will change payor mix. While Atrium Health University City expects payor mix shifts in the coming years, there remains considerable uncertainty given healthcare reform, Medicaid expansion, and other policy initiatives as to how much shift will occur (in NC) and from what payor categories to others. Furthermore, those changes will occur with or without the development of the proposed project. Therefore, until there is greater clarity to guide reasonable assumptions, Atrium Health University City has assumed for purposes of these application projections that the payor mix will be consistent with the CY 2018 payor mix.

4. **Charity or Reduced Cost Care**

(a) **Describe how the facility determines or will determine which patients qualify for charity or reduced cost care.**

Please see Exhibit L.4-1 for Atrium Health's financial policies. As noted in Atrium Health's policy, patients are treated regardless of their ability to pay for the requested services. Therefore, no payment is required prior to any treatment provided. However, payment is requested for services rendered. The patient's payment, or lack of, will in no way affect the care received. A Financial Counselor will complete a financial evaluation on each patient who does not have medical insurance, to determine eligibility for financial assistance. As noted in Atrium Health's Hospital Coverage Assistance and Financial Assistance Policy, Exhibit L.4-1, Atrium Health offers financial assistance to medically indigent patients who are uninsured or who are underinsured due to a health insurance policy that pays a minimal benefit. Medical indigence is determined using the most current Federal Poverty Guidelines as the basis, including patient income and asset information to support the decision. Patients who are not eligible for any third party coverage or Atrium Health financial assistance and who are unwilling or unable to pay, may become eligible for Atrium Health's extended payment arrangements.

Patients will receive the appropriate medical screening examination and any necessary stabilizing treatment for emergency medical conditions, regardless of ability to pay. Please see Exhibit L.4-2 for a copy of Atrium Health's EMTALA Compliance, including Patient Transfers Policy.

(b) **Provide a copy of the facility's existing or proposed charity care or reduced cost policies.**

Please see Exhibit L.4-1 for Atrium Health's financial policies including Atrium Health's Hospital Coverage Assistance and Financial Assistance Policy as well as its Patient Financial Services Billing and Collections Policy.

5. **Indicate the means by which a person will have access to the facility's services (e.g., physician referral, self-admission, etc.).**

Persons have access to services at Atrium Health University City through referrals from physicians who have admitting privileges at the medical center. Patients of Atrium Health University City also are admitted through the emergency department.

Change of Scope or Cost Overrun Applications Only

6. **If the information provided in response to Section L, Questions 1 through 5 would be different from what was in the previously approved application:**

(a) **Identify each change.**
(b) **Explain why each change is necessary.**
(c) **Provide any supporting documentation in an Exhibit.**

Not applicable. The proposed project does not involve change of scope or cost overrun.

SECTION M - "CRITERION (14)" - G.S. 131E-183(a)(14)

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

For change of scope or cost overrun applications, skip to Section M, Question 3.

1. Describe the extent to which health professional training programs in the area have or will have access to the facility for health professional training purposes.

Atrium Health has extensive, existing relationships with health professional training programs. Atrium Health has established relationships with programs including Central Piedmont Community College, Queens University of Charlotte, University of North Carolina at Charlotte, Gardner-Webb University, and Presbyterian School of Nursing.

Atrium Health also has a contractual agreement with the University of North Carolina at Chapel Hill to manage the Charlotte Area Health Education Center (AHEC). Charlotte AHEC coordinates various educational programs and produces continuing medical education programming for employees of Atrium Health and other healthcare providers in an eight-county region. This agreement also deems Atrium Health facilities as clinical rotation training sites for several physician extender programs including Duke University, UNC at Chapel Hill, and Wake Forest Baptist Medical Center.

Atrium Health, along with Cabarrus College of Health Sciences and Carolinas College of Health Sciences, provides educational environments for more than 1,000 residents, medical, physician extender, nursing, radiology, and other allied health professional students annually. Carolinas College of Health Sciences awards associate degrees in nursing and radiologic technology, a diploma in surgical technology, and clinical education certificates in medical technology and phlebotomy, as well as a nurse's aide program. The Center for Pre-Hospital Medicine is a regional EMT-paramedic program. The curriculum, designed to last approximately 15 months, is provided in affiliation with Central Piedmont Community College and Mecklenburg Emergency Medical Services Agency. The Clinical Pastoral Education Program is the only hospital-based pastoral education program in Charlotte that is accredited by the Association for Clinical Pastoral Education. It provides interfaith professional training for clergy and lay people. Atrium Health and the University of North Carolina at Charlotte offer a collaborative program for registered nurses to obtain a Master's degree and professional nurse anesthetist training (CRNA program). All of these health professionals use the facilities of Atrium Health to meet their clinical training requirements.

Each of the programs listed above will continue to have access to clinical training opportunities at Atrium Health facilities following the proposed project, including the services to be provided at Atrium Health University City, as appropriate.

2. Document the efforts made by the applicant to establish relationships with these training programs.

Not applicable. Established relationships are already in place.

Change of Scope or Cost Overrun Applications Only

3. If the information provided in response to Section M, Questions 1 or 2 would be different from what was in the previously approved application:

- **(a) Identify each change.**
- **(b) Explain why each change is necessary.**
- **(c) Provide any supporting documentation in an Exhibit.**

Not applicable. The proposed project does not involve change of scope or cost overrun.

SECTION N - "CRITERION (18a)" - G.S. 131E-183(a)(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."

For change of scope or cost overrun applications, skip to Section N, Question 4.

1. Explain the expected effects of the proposed project on competition in the proposed service area.

The proposed project is expected to enhance competition in the service area by promoting cost effectiveness, quality, and access to acute care services.

2. Discuss how the proposal will have a positive impact on:

(a) Cost effectiveness of the proposed services;

The proposed application is indicative of Atrium Health's commitment to containing healthcare costs and maximizing healthcare benefit per dollar expended. As discussed in Section C.1, the addition of acute care beds as proposed in this application can be accomplished in a timely and resource-responsible manner as Atrium Health University City has the existing space necessary to accommodate the additional acute care beds without requiring new construction or extensive and cost-prohibitive renovations. As such, Atrium Health believes the additional acute care capacity is being provided in such a way that will involve minimal cost while also creating additional capacity to care for the growing number of patients - maximizing healthcare value as promulgated in Policy GEN-3.

(b) Quality of the proposed services; and

Atrium Health believes that the proposed project will promote safety and quality in the delivery of healthcare services. Atrium Health is known for providing high quality services and expects the proposed project to expand its acute care services capacity while bolstering its high quality reputation.

Atrium Health is dedicated to providing the highest quality care and is continually recognized locally and nationally for its commitment to delivering efficient, quality care. Each year, Atrium Health facilities are recognized by many of the top accrediting and ranking organizations in the industry. Awards and recognitions specific to Atrium Health University City include, but are not limited to, the following:

- Atrium Health University City was awarded an "A" Hospital Safety Grade from The Leapfrog Group in the fall of 2018, spring of 2019, and fall of 2019.

- Healthgrades named Atrium Health University City one of America's 100 Best Hospitals for Stroke Care in 2017, 2018, and 2019, as well as for Critical Care in 2017 and 2018 and Critical Care Excellence in 2019.
- Atrium Health University City received the American Heart Association's Get With the Guidelines (GWTG) Stroke Gold Plus Achievement Award and was named to the GWTG Target: Stroke Honor Roll.
- Atrium Health University City has been named a recipient of the Hallmarks of a Healthy Workplace award.
- Atrium Health University City earned the first-ever Disease-Specific Care Certification by The Joint Commission for its inpatient prostate cancer care.

Atrium Health's commitment to providing quality care is further demonstrated by its Performance Improvement, Utilization, and Risk Management Plans included in Exhibits B.10-1 through B.10-3. As the medical center continues to expand its acute care services, in both size and provision of services, these plans will continue to ensure that quality care is provided to all patients, including the services involved in this project.

The proposed project will serve to improve the quality of acute care services provided at Atrium Health University City. At present, Atrium Health University City provides exceptional services. However, acute care capacity constraints at Atrium Health University City have begun to hamper patient care as demand exceeds capacity. Please see Section C.4 for a detailed discussion of the need for additional acute care capacity at Atrium Health University City. The proposed project will allow Atrium Health University City to expand its acute care capacity, which in turn will allow Atrium Health University City to better meet patient needs and expectations – thus increasing overall quality and patient satisfaction.

(c) Access by medically underserved groups to the proposed services.

The proposed project will improve access to acute care services in the service area. Atrium Health University City has been a high quality healthcare provider in the county for over 25 years. Atrium Health has long-promoted economic access to its services as it historically has provided services to all persons in need of medical care, regardless of race, sex, creed, age, national origin, handicap, or ability to pay as demonstrated in Atrium Health's Non-Discrimination policies provided in Exhibit B.10-4. The medical center will continue to serve this population as dictated by the mission of Atrium Health, which is the foundation for every action taken. The mission is simple, but unique: *To improve health, elevate hope, and advance healing – for all*. This includes the medically underserved. Atrium Health's commitment to this mission is borne out not just in words, but in service to patients. To demonstrate Atrium Health's level of commitment to the underserved populations of Mecklenburg County, Atrium Health analyzed acute care discharge data from Truven by payor and system for the first nine months of 2018, January through September.

2018 Acute Care Discharges Originating from Mecklenburg County by Provider

Provider	*Total Discharges*	*Percent of Total*
Atrium Health	37,498	58.2%
Novant Health	24,361	37.8%
All Others*	2,527	3.9%
Total	**64,386**	**100.0%**

Source: Truven.
*All Others includes all non-Mecklenburg County acute care service providers.

As shown above, Atrium Health's hospitals provided 58.2 percent of all acute care discharges originating from Mecklenburg County in 2018. The table below provides the percent of total discharges by payor for each provider over the same time period.

2018 Percent of Total Acute Care Discharges Originating from Mecklenburg County by Provider and Payor

Provider	*Percent of Total Commercial*	*Percent of Total Medicaid*	*Percent of Total Medicare*	*Percent of Total Self-Pay/Other*
Atrium Health	50.0%	66.8%	58.6%	69.5%
Novant Health	45.3%	30.9%	37.5%	25.1%
All Others*	4.7%	2.3%	3.9%	5.5%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Truven.
*All Others includes all non-Mecklenburg County acute care service providers.

As shown above, in 2018, 66.8 percent of all Medicaid inpatients from Mecklenburg County were treated at an Atrium Health facility, compared with Atrium Health's 58.2 percent share of all patients. In addition, 58.6 percent of Medicare and 69.5 percent of Self-Pay Mecklenburg County acute care discharges were treated at an Atrium Health facility. Atrium Health served more than twice as many Medicaid patients and nearly three times as many Self-Pay patients as Novant Health. This means while Atrium Health facilities served the majority of acute care discharges originating from Mecklenburg County in 2018, it served a disproportionately higher share of these underserved patients compared to Novant Health. Based on Atrium Health's demonstrated experience serving the underserved, it is clear that the proposed project will enhance access to these patients.

The Department of Health and Human Services has recognized the need to ensure access to healthcare in as equitable a manner as possible. As noted on page 2 of the *2019 SMFP*, "[t]*he SHCC assigns the highest priority to a methodology that favors providers delivering services to a patient population representative of all payer types in need of those services in the service area*." The proposed project seeks to address this principle and will improve access to acute care services in the service area by expanding the acute care capacity at Atrium Health University City. Atrium Health's total community benefit was more than $2 billion in CY 2018, primarily driven by financial assistance to uninsured patients, bad debt costs, and losses incurred by serving Medicare and

Medicaid patients. During CY 2018, Atrium Health University City provided approximately $115 million in charity care and bad debt. Further, Atrium Health has made the recruitment and retention of bilingual staff members a priority at the medical center. Atrium Health provides financial incentives to employees who spend their time using a language skill and to employees who refer bilingual new hires. Please see Exhibit B.10-5 for Atrium Health's policy regarding patients who do not read or speak English. By increasing access for Atrium Health's acute care patients, the proposed project will enhance equitable access to hospital-based services in Mecklenburg County.

3. For projects where competition between providers will not have a favorable impact on cost effectiveness, quality, and access to the proposed services, explain why the proposed project is a service on which competition will not have a favorable impact.

Not applicable.

Change of Scope or Cost Overrun Applications Only

4. If the information provided in response to Section N, Questions 1 through 3 would be different from what was in the previously approved application:

(a) Identify each change.
(b) Explain why each change is necessary.
(c) Provide any supporting documentation in an Exhibit.

Not applicable. The proposed project does not involve a change of scope or cost overrun.

SECTION O - "CRITERION (20)" - G.S. 131E-183(a)(20)

"An applicant already involved in the provision of health services shall provide evidence that quality care has been provided in the past."

1. Describe the methods used or to be used by the facility identified in response to Section A, Question 5 to ensure and maintain quality of care.

The proposed project is motivated, in part, by the need to continue to provide high quality, efficient services. Atrium Health always strives to provide quality care; as such, Atrium Health has in place performance improvement, utilization and risk management programs, and policies as discussed below.

A Quality Assessment and Performance Improvement Plan, Exhibit B.10-1, is in place to systematically monitor and evaluate patient care and clinical performance. This program is an ongoing, repetitive process involving medical and administrative staff and board members. As noted in its Quality Assessment and Performance Improvement Plan, Atrium Health's overall strategies for maintaining quality include:

- Providing the highest quality patient care;
- Maintaining and protecting the continuing financial viability of the System;
- Identifying, planning, and responding to new and emerging healthcare needs within the mission and capabilities of the System;
- Providing excellent care and service in the most pleasant and caring environment possible for patients and their family members;
- Communicating to the public the goals, needs, and achievements of the System and its impact on the community;
- Providing an organizational structure that will facilitate the achievement of present strategies and provide maximum flexibility for future changes;
- Attracting, engaging, and retaining the highest quality healthcare professionals and creating an environment where team members feel respected and are supported in a manner that enables them to perform to their fullest potential; and,
- Maintaining strong and continuous contact with other leaders and leading institutions in the healthcare field.

In addition, as stated in the Quality Assessment and Performance Improvement Plan, the goals include:

- Aligning with System goals and initiatives;
- Measuring and improving the satisfaction and quality of services provided;
- Identifying and improving systems and processes related to patient care, safety, and clinical processes;
- Creating effective systems to measure, assess, and improve the processes and outcomes associated with patient care; and
- Improving the overall understanding of continuous quality improvement tools and techniques within the organization.

Another tool for monitoring care is Atrium Health's Utilization Management Plan, included in Exhibit B.10-2. The purpose of the Utilization Management Plan is to address the operational procedures that will be followed with respect to the review of all patients. The objectives of the plan include:

- Reviewing hospital inpatient admissions and observation stays, regardless of payor source, by examination of the patient's complete medical record in an effort to ensure efficient use of the healthcare services provided;
- Conducting initial and concurrent medical record reviews to determine the medical necessity of the hospital stay and ensure the appropriate level of care is provided;
- Initiating and monitoring any revisions in policies and procedures based on the Utilization Management Plan's scope and objectives and recommendations of the Utilization Review Committee; and,
- Carrying out professional and therapeutic service reviews to ensure availability, timeliness of delivery, and medical necessity.

Finally, Atrium Health's Risk Management Plan, included in Exhibit B.10-3, states, "[t]*he purpose of the Corporate Risk Management program is to prevent and reduce the risk of injury to patients, visitors, employees and medical staff members and to protect the organization's financial resources*." A few of the overall objectives of the Risk Management Plan include:

- Providing for quality patient care in a safe environment;
- Minimizing the frequency and severity of incidents by identifying and correcting situations in a timely manner and promptly investigating, reporting, and ensuring implementation of a plan of corrective action;
- Providing appropriate safety training to personnel in order to avoid preventable injuries;
- Assisting with coordinating activities on compliance with local, state, and federal safety regulations; and,
- Integrating risk management activities with performance improvement activities.

As demonstrated in the goals and objectives of the Quality Assessment and Performance Improvement Plan, the Utilization Management Plan, and the Risk Management Plan, Atrium Health University City has methods in place to ensure that quality care is provided to all patients. These plans will continue to guide the services provided by the hospital, including services involved in this project. Please see Exhibits B.10-1 through B.10-3 for a copy of these plans.

2. If the proposal involves adding beds, services or equipment to an existing facility:

(a) Document that the facility currently meets all licensure requirements (if applicable).

Please see the previously referenced Exhibit I.1 for a letter from Bill Leonard, President of Atrium Health University City, documenting that Atrium Health University City currently meets all licensure requirements.

(b) If the facility is certified for participation in the Medicare or Medicaid programs, document that it currently meets all requirements for certification.

Please see the previously referenced Exhibit I.1 for a letter from Bill Leonard, President of Atrium Health University City, documenting that Atrium Health University City is certified for participation in the Medicare and Medicaid programs and that it currently meets all requirements for certification.

(c) If the facility is accredited, identify the accrediting body and document that the accreditation is current.

Please see the previously referenced Exhibit I.1 for a letter from Bill Leonard, President of Atrium Health University City, documenting that Atrium Health University City currently accredited by The Joint Commission.

3. All Applicants

(a) Document that the facilities identified in response to Section A, Question 7, <u>Form A Facilities</u>, have provided quality care during the 18 months immediately preceding submission of the application (18 month look-back period).

Each of the facilities identified in Form A Facilities has continually maintained all relevant licensure, certification, and accreditation as discussed below, for the 18 months preceding the submission of this application.

(**b) Of the facilities identified in response to Section A, Question 7, <u>Form A Facilities</u>, identify each facility that was found by the Division of Health Service Regulation or CMS to have had any incidents resulting in a finding of immediate jeopardy during the 18 month look-back period.**

Include only those facilities that did not challenge the determination, or if the determination was challenged, the determination was subsequently upheld.

Atrium Health Cleveland[4]

On September 12, 2018, Atrium Health Cleveland received notification that CMS determined, based on a survey visit completed by DHSR surveyors on August 23, 2018 that Atrium Health Cleveland was not in substantial compliance with federal certification requirements. The September 12, 2018 letter indicated that Atrium Health Cleveland no longer met the requirements for participation as a provider of services in the Medicare program, and that its Medicare provider agreement with the Department of Health and Human Services would be terminated effective October 5, 2018. Atrium Health timely submitted an acceptable plan of correction. A follow-up survey visit was completed by DHSR on October 4, 2018, at which time all findings associated with the September 12, 2018 termination notice were cleared, the termination notice was rescinded, and the hospital's good standing in the Medicare and Medicaid programs was restored as documented in the CMS correspondence included in Exhibit O.3.

No other facility identified in response to Section A, Question 7 was found by the Division of Health Service Regulation or CMS to have any incidents resulting in a finding of immediate jeopardy during the 18 month look-back period.

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[4] At the time of the CMS correspondence referenced in this response, Atrium Health Cleveland was known as Carolinas HealthCare System Cleveland.

(c) For each facility identified in response to Section O, Question 3(b), briefly summarize each incident that resulted in a finding of immediate jeopardy and indicate the number of patients, if any, affected by each incident.

Please see the response to O.3.(b) above.

(d) For each facility identified in response to Section O, Question 3(b), state whether or not the facility is now back in compliance. If the facility is not back in compliance as of the date this application will be submitted, estimate when it will be back in compliance.

Please see the response to O.3.(b) above.

SECTION P - PROPOSED TIMETABLE

The proposed timetable determines:

- **The period of time during which the project must be developed.**
- **The times at which the Agency will request the progress reports.**

Therefore, the dates provided in Section P should reflect the date each milestone is anticipated to be completed. Please note:

- **Dates must be provided in the following format: mm/dd/yyyy**
- **A date must be provided for #14 Services Offered**
- **Use only the milestones listed below**
- **Do not change the descriptions**
- **Do not add other milestones**
- **Do not change the order in which the milestones appear**

Assume for the purposes of projecting milestone completion dates that the date of the decision will be 150 days from the first date of the review and that the certificate of need will be issued 35 days from the projected decision date. Projected milestone completion dates should be calculated from the 1st date the certificate may be issued.

1st Day of Review Cycle (this is always the 1st Day of the Month):	11/01/2019
150 Days from 1st Day of Review (Projected Decision Date):	03/30/2020
35 Days from Projected Decision Date (1st date certificate may be issued):	05/04/2020

	Milestones	**Date (mm/dd/yyyy)**
1.	**Financing Obtained**	N/A
2.	**Drawings Completed**	07/06/2020
3.	**Land Acquired**	N/A
4.	**Construction / Renovation Contract(s) Executed**	08/03/2020
5.	**25% of Construction / Renovation Completed (25% of the cost is in place)**	09/14/2020
6.	**50% of Construction / Renovation Completed**	11/02/2020
7.	**75% of Construction / Renovation Completed**	12/14/2020
8.	**Construction / Renovation Completed**	02/08/2021
9.	**Equipment Ordered**	06/01/2020
10.	**Equipment Installed**	02/22/2021
11.	**Equipment Operational**	03/01/2021
12.	**Building / Space Occupied**	04/01/2021
13.	**Licensure Obtained**	04/01/2021
14.	**Services Offered (required)**	04/01/2021
15.	**Medicare and / or Medicaid Certification Obtained**	04/01/2021
16.	**Facility or Service Accredited**	04/01/2021
17.	**Final Annual Report Due***	07/01/2024

***Assuming the proposal is approved, the following condition will be imposed:**

No later than three months after the last day of each of the first three full years of operation following initiation of the services authorized by this certificate of need, the applicant shall submit, on the form provided by the Healthcare Planning and Certificate of Need Section, an annual report containing the:

- **a. Payor mix for the services authorized in this certificate of need.**
- **b. Utilization of the services authorized in this certificate of need.**
- **c. Revenues and operating costs for the services authorized in this certificate of need.**
- **d. Average gross revenue per unit of service.**
- **e. Average net revenue per unit of service.**
- **f. Average operating cost per unit of service.**

Form A Facilities						
County	Name of Facility	# of Beds[a]	Type of Equipment	# of Units of Equipment	Owned by the Applicant(s)? (Yes/No) *	Name of Related Entity
Anson	Atrium Health Anson	15	NA	NA	Yes	
Burke	Carolinas HealthCare System Blue Ridge (Morganton)[b]	293	NA	NA	No	Blue Ridge HealthCare Hospitals, Inc.
Burke	Carolinas HealthCare System Blue Ridge (Valdese)[b]	c	NA	NA	No	Blue Ridge HealthCare Hospitals, Inc.
Cabarrus	Atrium Health Cabarrus	447	NA	NA	Yes	
Cabarrus	Atrium Health Harrisburg, a facility of Atrium Health Cabarrus	NA	NA	NA	Yes	
Cabarrus	Atrium Health Kannapolis, a facility of Atrium Health Cabarrus	NA	NA	NA	Yes	
Cabarrus	Carolinas Rehabilitation-NorthEast	NA	NA	NA	Yes	
Cleveland	Atrium Health Cleveland	288	NA	NA	Yes	
Cleveland	Atrium Health Kings Mountain, a facility of Atrium Health Cleveland	d	NA	NA	Yes	
Columbus	Columbus Regional Healthcare System[b]	154	NA	NA	No	Columbus Regional Healthcare System
Davidson	Atrium Health Behavioral Health (Davidson)	NA	NA	NA	Yes	
Gaston	Carolinas Rehabilitation-Mount Holly	NA	NA	NA	Yes	
Lincoln	Atrium Health Lincoln	101	NA	NA	Yes	
Mecklenburg	Carolinas Medical Center	1,055	NA	NA	Yes	
Mecklenburg	Atrium Health Mercy, a facility of Carolinas Medical Center	e	NA	NA	Yes	
Mecklenburg	Atrium Health Behavioral Health (Charlotte)	NA	NA	NA	Yes	
Mecklenburg	Levine Children's Hospital	e	NA	NA	Yes	
Mecklenburg	Atrium Health SouthPark Emergency Department, a facility of Carolinas Medical Center	NA	NA	NA	Yes	
Mecklenburg	Atrium Health Pineville	259	NA	NA	Yes	
Mecklenburg	Atrium Health Steele Creek Emergency Department, a facility of Atrium Health Pineville	NA	NA	NA	Yes	
Mecklenburg	Atrium Health University City	100	NA	NA	Yes	

Form A Facilities						
County	Name of Facility	# of Beds[a]	Type of Equipment	# of Units of Equipment	Owned by the Applicant(s)? (Yes/No) *	Name of Related Entity
Mecklenburg	Atrium Health Huntersville Emergency Department, a facility of Atrium Health University City	NA	NA	NA	Yes	
Mecklenburg	Atrium Health Mountain Island Emergency Department, a facility of Atrium Health University City[f]	NA	NA	NA	Yes	
Mecklenburg	Carolinas Rehabilitation	NA	NA	NA	Yes	
Polk	St. Luke's Hospital[b]	25	NA	NA	No	St. Luke's Hospital, Inc.
Randolph	Randolph Hospital[b]	145	NA	NA	No	Randolph Hospital, Inc.
Scotland	Scotland Memorial Hospital[b]	97	NA	NA	No	Scotland Memorial Hospital Inc.
Stanly	Atrium Health Stanly	97	NA	NA	Yes	
Union	Atrium Health Union	182	NA	NA	Yes	
Union	Atrium Health Waxhaw Emergency Department, a facility of Atrium Health Union	NA	NA	NA	Yes	
Union	Atrium Health Union West[f]	g	NA	NA	Yes	

* If the answer is N, provide the name of the related entity that does own the facility

a Based on existing and approved licensed acute care beds as reported in Proposed 2020 SMFP. Facilities without licensed acute care beds are listed as Not Applicable (NA).

b Facility is managed by Atrium Health.

c Licensed as part of Carolinas HealthCare System Blue Ridge (Morganton).

d Licensed as part of Atrium Health Cleveland.

e Licensed as part of Carolinas Medical Center.

f Approved, but not yet operational.

g To be licensed as part of Atrium Health Union.

Form C Utilization for Each Service Component Proposed in the Application Criterion (3)	Prior Full Fiscal Year From: 01/01/2018 To: 12/31/2018	Interim* Full Fiscal Year From: 01/01/2019 To: 12/31/2019	Interim* Full Fiscal Year From: 01/01/2020 To: 12/31/2020	Interim* Full Fiscal Year From: 01/01/2021 To: 12/31/2021	1st Full Fiscal Year From: 01/01/2022 To: 12/31/2022	2nd Full Fiscal Year From: 01/01/2023 To: 12/31/2023	3rd Full Fiscal Year From: 01/01/2024 To: 12/31/2024
Med/Surg Beds							
# of Beds	59	59	64	75	75	75	75
# of Admissions	4,964	5,077	5,193	5,375	5,559	5,544	5,639
# of Patient Days	18,905	19,334	19,775	20,470	21,170	21,114	21,476
Observation Beds (Unlicensed)							
# of Beds							
# of Patients							
Average Length of Stay							
Laboratory							
Physical Therapy							
Speech Therapy							
Occupational Therapy							
Respiratory Therapy							
CT Scanner (see Tab C)							
# of Units							
# of Scans							
# of HECT Units							
MRI Scanner (see Tab C)							
# of Units							
# of Procedures							
# of Weighted Procedures							
Fixed X-ray (inclu'g fluro)							
# of Units							
# of Procedures							
Mammography							
# of Units							
# of Procedures							

Form C Utilization for Each Service Component Proposed in the Application Criterion (3)	Prior Full Fiscal Year From: 01/01/2018 To: 12/31/2018	Interim* Full Fiscal Year From: 01/01/2019 To: 12/31/2019	Interim* Full Fiscal Year From: 01/01/2020 To: 12/31/2020	Interim* Full Fiscal Year From: 01/01/2021 To: 12/31/2021	1st Full Fiscal Year From: 01/01/2022 To: 12/31/2022	2nd Full Fiscal Year From: 01/01/2023 To: 12/31/2023	3rd Full Fiscal Year From: 01/01/2024 To: 12/31/2024
Ultrasound # of Units # of Procedures							
Nuclear Medicine # of Units # of Procedures							
Cardiac Cath Equipment (see Tab C) # of Units # of Diagnostic Procedures # of Therapeutic Procedures # of Diagnostic Equivalent Procedures							
Linear Accelerators (see Tab C) # of Units # of ESTV Treatments							
PET Scanners # of Units # of Procedures							
Other Medical Equipment (Specify) # of Units # of Procedures							
Other Medical Equipment (Specify) # of Units # of Procedures							
Emergency Department # of Treatment Rooms # of Visits							

Form C Utilization for Each Service Component Proposed in the Application Criterion (3)	Prior Full Fiscal Year From: 01/01/2018 To: 12/31/2018	Interim* Full Fiscal Year From: 01/01/2019 To: 12/31/2019	Interim* Full Fiscal Year From: 01/01/2020 To: 12/31/2020	Interim* Full Fiscal Year From: 01/01/2021 To: 12/31/2021	1st Full Fiscal Year From: 01/01/2022 To: 12/31/2022	2nd Full Fiscal Year From: 01/01/2023 To: 12/31/2023	3rd Full Fiscal Year From: 01/01/2024 To: 12/31/2024
GI Endoscopy Rooms							
# of Rooms							
# of Inpatient GI Endoscopy Procedures							
# of Outpatient GI Endoscopy Procedures							
Total GI Endoscopy Procedures							
Total GI Endoscopy Procedures / (1,500 x # of Rooms)							
Operating Rooms							
# of Rooms							
Open Heart ORs							
Dedicated C-Section ORs							
Other Dedicated Inpatient ORs							
Shared ORs							
Dedicated Ambulatory ORs							
Total # of ORs							
# of Excluded ORs							
Adjusted Planning Inventory (1)							
# of Surgical Cases							
# of C-Sections Performed in Dedicated C-Section ORs							
# of Inpatient Surgical Cases (exclude C-Sections done in a dedicated C-Section OR)							
# of Outpatient Surgical Cases							
Total # of Surgical Cases (exclude C-Sections done in a dedicated C-Section OR)							
Case Times (from Section C, Question 9(c) or 9(d))							
Inpatient							
Outpatient							
Surgical Hours							
Inpatient (2)							
Outpatient (3)							
Total Surgical Hours							
# of ORs Needed							
Group Assignment (4)							
Standard Hours per OR per Year (5)							
Total Surgical Hours / Standard Hours per OR per Year							

Form C Utilization for Each Service Component Proposed in the Application Criterion (3)	Prior Full Fiscal Year From: 01/01/2018 To: 12/31/2018	Interim* Full Fiscal Year From: 01/01/2019 To: 12/31/2019	Interim* Full Fiscal Year From: 01/01/2020 To: 12/31/2020	Interim* Full Fiscal Year From: 01/01/2021 To: 12/31/2021	1st Full Fiscal Year From: 01/01/2022 To: 12/31/2022	2nd Full Fiscal Year From: 01/01/2023 To: 12/31/2023	3rd Full Fiscal Year From: 01/01/2024 To: 12/31/2024
Procedure Rooms							
# of Rooms							
Total # of Procedures							

*** IF THERE IS MORE THAN 1 INTERIM YEAR, ADD 1 ADDITIONAL COLUMN FOR EACH ADDITIONAL INTERIM YEAR**

(1) Total # of ORs - # of Excluded ORs

(2) Inpatient Cases (exclude C-Sections performed in dedicated C-Section ORs) X Inpatient Case Time

(3) Outpatient Cases X Outpatient Case Time

(4) From Section C, Question 9(a)

(5) From Section C, Question 9(b)

Form C Utilization – Assumptions and Methodology

The following assumptions and methodologies include utilization projections for all of Atrium Health's existing and proposed acute care facilities in Mecklenburg County including:

- Atrium Health Pineville[1];
- Atrium Health University City[2];
- Carolinas Medical Center (CMC)[3];
- Atrium Health Mercy[4]; and,
- Atrium Health Lake Norman.

These assumptions and methodologies incorporate, as appropriate, previously approved Atrium Health CON applications in the Charlotte area for which there was or is expected to be a shift in acute care volume to other facilities, including:

- 2015 Atrium Health Mercy Acute Care Bed Cost Overrun Application (Project ID # F-11091-15)
- 2016 Atrium Health Mercy Operating Room Renovation (Project ID # F-11268-16)

Further, these assumptions and methodologies, particularly with regard to the shift of utilization among facilities, are consistent with the most recent previously approved Atrium Health CON applications regarding acute care beds:

- 2017 Atrium Health Pineville Acute Care Beds (Project ID # F-11361-17)
- 2017 CMC Acute Care Beds (Project ID # F-11362-17)
- 2018 Atrium Health Pineville Acute Care Beds (Project ID # F-11622-18)
- 2018 Atrium Health Union West (Project ID # F-11618-18)
- 2019 Atrium Health Mercy Change of Scope/Cost Overrun (Project ID # F-11696-19)

Each facility's methodology uses a common approach to projecting future utilization including:

- Determine actual historical compound annual growth rate (CAGR) for each facility;
- Project future patient days using an assumed baseline CAGR for each facility;
- Apply future expected shifts to or from other acute care facilities; and,
- Determine future acute care days by facility incorporating any shifts to or from other acute care facilities.

ATRIUM HEALTH ACUTE CARE UTILIZATION

Projected total acute care and medical/surgical patient days and discharges at each facility were determined using the following methodology:

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[1] Atrium Health Pineville was previously known as Carolinas HealthCare System Pineville.

[2] Atrium Health University City was previously known as Carolinas HealthCare System University.

[3] CMC and Atrium Health Mercy, which was previously known as CMC-Mercy, operate on the same license on two separate campuses. Projected utilization is provided for each campus.

[4] Ibid.

Step	Description
Determine actual historical CAGR for each facility	
1	Examine Atrium Health *Historical Acute Care Utilization* by facility.
Project future patient days using an assumed baseline CAGR for each facility	
2	Determine the *Projected Acute Care Days Prior to Shifts* by facility by applying projected growth rates to historical patient days.
Apply future expected shifts to or from other acute care facilities	
3	Determine the projected *Shift of Acute Care Days to Piedmont Fort Mill Medical Center.*
4	Determine the projected *Shift of Acute Care Days to Union County.*
5	Determine the projected *Shift of Acute Care Days to Atrium Health Lake Norman and Total Projected Acute Care Utilization.*
Determine future acute care days by facility incorporating shifts to or from other acute care facilities	
6	Determine *Atrium Health Pineville Total Projected Acute Care Utilization after Shifts.*
7	Determine *Atrium Health University City Total Projected Acute Care Utilization after Shifts.*
8	Determine *CMC Total Projected Acute Care Utilization after Shifts.*
9	Determine *Atrium Health Mercy Total Projected Acute Utilization after Shifts.*
10	Determine *Atrium Health Total Projected Acute Care Utilization after Shifts.*

Each step is described below in detail.

Determine actual historical CAGR for each facility

1. Historical Acute Care Utilization

Atrium Health is submitting four concurrent and complementary applications in response to the need identified in the *2019 SMFP* for 76 additional beds in Mecklenburg County. Atrium Health's concurrently filed applications propose to develop 18 additional acute care beds at CMC, 12 at Atrium Health Pineville, 16 at Atrium Health University City, and 30 at Atrium Health Lake Norman, a new hospital in the Lake Norman area. Atrium Health's facilities in Mecklenburg County have experienced significant historical growth in acute care days, as shown below. Please note that Fiscal Years for Atrium Health are from January 1 to December 31 and are equivalent to Calendar Years (CYs). CY historical data is included below to provide historical and projected fiscal year data for Atrium Health facilities as requested by the CON application form.

Atrium Health Mecklenburg County Facilities Historical Utilization

	CY16	*CY17*	*CY18*	*CY19**	*CAGR*
Atrium Health Pineville	61,095	65,193	68,174	71,997	5.63%
Atrium Health University City	22,511	24,788	27,358	27,660	7.11%
CMC	264,900	267,955	269,866	281,338	2.03%
Atrium Health Mercy	38,935	41,664	45,128	45,572	5.39%
Total Days	**387,441**	**399,600**	**410,526**	**426,567**	**3.26%**
Total ADC	1,061	1,095	1,125	1,169	
Total Beds	1,316	1,316	1,376	1,376	
Occupancy	**80.7%**	**83.2%**	**81.7%**	**84.9%**	

Source: Atrium Health internal data.
*CY 2019 acute care bed utilization annualized based on January to July data.

As shown above, Atrium Health's acute care days increased 3.26 percent annually from CY 2016 to 2019. Utilization at Atrium Health's facilities during this period of time increased by over 39,000 acute care days.

Please note that Atrium Health's acute care utilization in both CY 2018 and 2019 is more than sufficient to exceed the performance standard promulgated in 10A NCAC 14C .3803(a) for additional acute care beds. Specifically, even if Atrium Health were to maintain those utilization levels through the end of the third project year of the proposed projects, it would still have a utilization rate of at least 75.2 percent of its existing, approved, and proposed acute care beds as shown in the table below. Said another way, historical utilization in CY 2018 and 2019 is sufficient to demonstrate need for the proposed 76 beds, without any additional growth.

Atrium Health Mecklenburg County Facilities Historical Utilization

	CY18	*CY19**
Total Days	410,526	426,567
Total ADC	**1,125**	**1,169**
Existing Beds	1,376	1,376
Previously Approved Beds for Atrium Health Pineville (Project ID # F-11621-18)	38	38
Proposed Beds	76	76
Total Existing, Approved, and Proposed Beds	**1,490**	**1,490**
Occupancy	**75.5%**	**78.4%**

Source: Atrium Health internal data.
*CY 2019 acute care bed utilization annualized based on January to July data.

In the 2018 Mecklenburg County Operating Room and Acute Care Bed Review, the Agency found this level of historical utilization in relation to Atrium Health's proposed project to be supportive of conformity with Criterion 3.

Project future patient days using an assumed baseline CAGR for each facility

2. *Projected Acute Care Days Prior to Shifts*

To project future acute care days for each Atrium Health facility, Atrium Health is assuming acute care days at each facility will increase equivalent to one-half each facility's respective historical CAGR, as shown in the table below.

Assumed Projected Growth Rates

	CY2016 to 2019 CAGR	*Projected CAGR*
Atrium Health Pineville	5.63%	2.81%
Atrium Health University City	7.11%	3.55%
CMC	2.03%	1.01%
Atrium Health Mercy	5.39%	2.69%

Please note that Atrium Health believes these projected growth rates account for the following factors:

- Projected population growth and aging in Mecklenburg County and related increasing demand for inpatient services.
- Historical and projected growth in inpatient demand at Atrium Health facilities.
- Historical and projected shifts of patients and services as well as management of capacity between Atrium Health facilities.

Based on these factors, Atrium Health believes the assumed growth rates for its existing facilities are reasonable and supported.

The third project year of operation for Atrium Health Lake Norman, the proposed new hospital, is CY 2025; thus, acute care days at Atrium Health's facilities are projected though CY 2025 to account for the future shift of days to Atrium Health Lake Norman from other Atrium Health facilities through the proposed new hospital's third project year.

Atrium Health Mecklenburg County Facilities Projected Baseline Utilization

	CY20	*CY21*	*CY22*	*CY23*	*CY24*	*CY25*	*CAGR*
Atrium Health Pineville	74,022	76,104	78,244	80,445	82,708	85,034	2.81%
Atrium Health University City	28,643	29,661	30,715	31,806	32,937	34,107	3.55%
CMC	284,190	287,070	289,980	292,919	295,888	298,887	1.01%
Atrium Health Mercy	46,800	48,060	49,355	50,684	52,049	53,451	2.69%
Total Days	**433,654**	**440,895**	**448,294**	**455,855**	**463,582**	**471,479**	**1.69%**

The projected acute care days in the table above represent the baseline number of days for each Atrium Health facility prior to any shift to or from other acute care facilities. Steps 6 through 10 below

will result in the total acute care days for Atrium Health Pineville, Atrium Health University City, CMC, and Atrium Health Mercy.

Apply future expected shift to or from other acute care facilities

3. Shift of Acute Care Days to Piedmont Fort Mill Medical Center

In September 2011, Atrium Health was approved by the South Carolina Department of Health and Environmental Control to develop a new acute care hospital in Fort Mill, South Carolina. The decision to approve that hospital was appealed, an administrative law judge reversed the original decision, and subsequent appeals by Atrium Health were unsuccessful. Atrium Health's legal pursuit of the development of CMC-Fort Mill has ended. As of the submission of Atrium Health's four concurrent and complementary acute care bed applications, Atrium Health believes it is reasonable to expect that Piedmont Medical Center, its opposition in the legal matter, will develop Piedmont Fort Mill Medical Center, a 100-bed hospital in Fort Mill. However, it remains uncertain at what point Piedmont Fort Mill Medical Center will be developed and what impact it will have on Atrium Health facilities. The Piedmont Fort Mill Medical Center application was submitted nearly nine years ago, and Atrium Health still disputes the reasonableness of its projections. Nonetheless, out of an abundance of caution, Atrium Health has conservatively included a potential impact of Piedmont Fort Mill Medical Center in these utilization projections.

To evaluate the potential impact of Piedmont Fort Mill Medical Center, Atrium Health first considered its analysis of the potential impact of its previously proposed CMC-Fort Mill on Atrium Health facilities. The table below provides Atrium Health's previously projected shift of patient days assuming that Atrium Health would develop CMC-Fort Mill, which would serve York County patients currently seeking care at Atrium Health facilities. For purposes of these projections, Atrium Health assumes these shifts would begin in CY 2023, the assumed start date for a new hospital in Fort Mill.

Proposed Shifts of Acute Care Days Originally to CMC-Fort Mill

	CY23	*CY24*	*CY25*
Atrium Health Pineville	-7,276	-7,482	-7,693
Atrium Health University City	-85	-88	-90
CMC	-5,257	-5,403	-5,553
Atrium Health Mercy	-946	-973	-1,000
Total Days to Shift	**-13,565**	**-13,945**	**-14,336**

Source: CMC-Fort Mill application and Project ID #s F-10215-13, F-10221-13, F-11361-17, F-11362-17, and F-11622-18.

While it is possible that none of these patients would be served by Piedmont Fort Mill Medical Center, Atrium Health believes it is conservative to assume that a portion would shift from Atrium Health facilities. Atrium Health believes it is reasonable to assume that a York County patient who has a scheduled inpatient admission and is cared for by a physician who admits patients at Atrium Health facilities would continue to be served by Atrium Health facilities. However, patients who are admitted through the emergency room may be more likely to shift their site of care to a new hospital closer to home. The following table provides the CY 2018 ratio of emergency department admissions to total admissions by facility.

CY 2018 Ratio of ED Admissions to Total Admissions

	CY18
Atrium Health Pineville	66.7%
Atrium Health University City	65.1%
CMC	43.5%
Atrium Health Mercy	69.7%

Source: Atrium Health internal data.

Atrium Health assumes that a portion of the acute care days that were previously projected to shift to CMC-Fort Mill will shift to Piedmont Fort Mill Medical Center – the portion representing the emergency department admissions, as shown in the table below. For example, Atrium Health assumes 66.7 percent of the total acute care days projected to shift from Atrium Health Pineville to CMC-Fort Mill will shift to Piedmont Fort Mill Medical Center.

Adjusted Shifts of Acute Care Days to Piedmont Fort Mill Medical Center by Facility of Origin

	CY23	*CY24*	*CY25*
Atrium Health Pineville	-4,857	-4,994	-5,134
Atrium Health University City	-56	-57	-59
CMC	-2,284	-2,348	-2,413
Atrium Health Mercy	-659	-678	-697
Adjusted Total Days to Shift	**-7,856**	**-8,076**	**-8,303**

Please note that while projections involving a shift of patients to Piedmont Fort Mill Medical Center are speculative, they are conservative in nature as utilization at Atrium Health facilities would be higher without the shift.

4. Shift of Acute Care Days to Union County

As it has referenced in previously approved applications, for more than a decade Atrium Health has undertaken steps to improve utilization at its underutilized facilities and/or relocate underutilized beds to other facilities, while at the same time shifting appropriate inpatient volume, especially from CMC, to its community hospitals. As another step in this evolution, Atrium Health is executing service development and physician distribution strategies in Union County to allow the shift of appropriate Union County patients currently seeking care in Mecklenburg County to remain closer to home in Union County for care. This shift began in CY 2019 and will accelerate in the following years. Atrium Health is also developing Atrium Health Union West, a second hospital campus in Union County as part of this strategy. To be most conservative in this application, Atrium Health has assumed the planned shift to Atrium Health Union hospitals will occur as noted in the table below, which is consistent with Atrium Health Pineville's 2018 bed application (Project ID F-11622-18) and the approved Atrium Health Union West application (Project ID # F-11618-18).

Acute Care Days Proposed to Shift to Atrium Health Union by Facility of Origin

	CY20	CY21	CY22	CY23	CY24
Atrium Health Pineville	-528	-806	-1,639	-2,224	-2,829
Atrium Health University City	-25	-39	-79	-107	-136
CMC	-1,260	-1,923	-3,913	-5,308	-6,752
Atrium Health Mercy	-293	-448	-911	-1,237	-1,573
Total Days to Shift	**-2,106**	**-3,215**	**-6,542**	**-8,876**	**-11,289**

Source: Project IDs F-11622-18 and F-11618-18.

To project future days to shift to Union County through CY 2025, Atrium Health assumes that the projected acute care days in the table above will grow at a rate equivalent to the projected growth of the population of Union County assumed in the Atrium Health Union West application, or 1.75 percent, as shown below.

Projected Acute Care Days to Shift to Atrium Health Union by Facility of Origin

	CY20	CY21	CY22	CY23	CY24	CY25	CAGR
Atrium Health Pineville	-528	-806	-1,639	-2,224	-2,829	-2,879	1.75%
Atrium Health University City	-25	-39	-79	-107	-136	-138	1.75%
CMC	-1,260	-1,923	-3,913	-5,308	-6,752	-6,870	1.75%
Atrium Health Mercy	-293	-448	-911	-1,237	-1,573	-1,600	1.75%
Total Days	**-2,106**	**-3,215**	**-6,542**	**-8,876**	**-11,289**	**-11,487**	

As shown above, Atrium Health projects 11,487 acute care days will shift from Atrium Health facilities in Mecklenburg County to Atrium Health Union facilities in CY 2025.

5. Shift of Acute Care Days to Atrium Health Lake Norman and Total Projected Acute Care Utilization

As another step in the evolution of its acute care services in Mecklenburg County, Atrium Health is addressing the lack of Atrium Health hospital-based services in the Lake Norman area. As demonstrated in Section C.4 of the concurrently filed Atrium Health Lake Norman hospital application, Atrium Health has established a comprehensive framework of healthcare services in the Lake Norman area but has yet to develop inpatient services. Atrium Health Lake Norman will bridge the gap of Atrium Health hospital-based services in the Lake Norman area and will serve to provide a convenient, cost-effective, and efficient point of care to patients closer to home. Atrium Health proposes to develop 30 acute care beds at Atrium Health Lake Norman alongside other acute care community hospital services. Atrium Health is conservatively assuming to serve only a portion of inpatients from the Lake Norman area that historically have accessed an Atrium Health facility in Mecklenburg County. This shift is expected to begin in CY 2023 with the opening of the hospital and increase in the following years. Atrium Health has assumed the planned shift to Atrium Health Lake Norman will occur as noted in the tables below and detailed in Exhibit C.10.

Projected Acute Care Days to Shift to Atrium Health Lake Norman by Facility of Origin

	CY23	*CY24*	*CY25*
Atrium Health Pineville	-87	-132	-180
Atrium Health University City	-1,089	-1,665	-2,264
CMC	-1,999	-3,058	-4,158
Atrium Health Mercy	-640	-978	-1,328
Atrium Health Lake Norman Total Days	**-3,814**	**-5,833**	**-7,930**

As shown above, Atrium Health is projecting 7,930 acute care days to shift to Atrium Health Lake Norman in CY 2025. Based on these projected days, Atrium Health Lake Norman's 30 acute care beds will achieve 72.4 percent occupancy percent occupancy in CY 2025, its third project year.

Atrium Health Lake Norman Projected Acute Care Days

	CY23	*CY24*	*CY25*
Total Discharges	1,031	1,577	2,144
Total Days	3,814	5,833	7,930
Total ADC	10.5	16.0	21.7
Total Beds	30	30	30
Occupancy	**34.8%**	**53.3%**	**72.4%**

Determine future acute care days by facility incorporating shifts to or from other acute care facilities

6. Atrium Health Pineville Total Projected Acute Care Utilization after Shifts

As mentioned above, Atrium Health proposes to develop 12 additional acute care beds at Atrium Health Pineville. Additionally, Atrium Health Pineville was previously approved to develop 38 additional acute care beds which will be developed at the same time as the proposed 12 beds for a total of 50 beds. To determine Atrium Health Pineville's final projected total patient days, Atrium Health combined the results of Steps 2 through 5, as shown below.

Atrium Health Pineville Projected Acute Care Days

	CY20	*CY21*	*CY22*	*CY23*	*CY24**	*CY25*	*CAGR*
Baseline Days	74,022	76,104	78,244	80,445	82,708	85,034	2.81%
Shift to Fort Mill				-4,857	-4,994	-5,134	
Shift to Union County Hospitals	-528	-806	-1,639	-2,224	-2,829	-2,879	1.75%
Shift to Lake Norman Hospital				-87	-132	-180	
Total Days	**73,494**	**75,298**	**76,605**	**73,278**	**74,753**	**76,841**	
Total ADC	201.4	206.3	209.9	200.8	204.8	210.5	
Total Beds	221	221	271	271	271	271	
Occupancy	**91.1%**	**93.3%**	**77.4%**	**74.1%**	**75.6%**	**77.7%**	

*Third full fiscal year of currently proposed Atrium Health Pineville Beds project.

As shown above, Atrium Health Pineville will achieve 75.6 percent occupancy in CY 2024, the third project year, and 77.7 percent occupancy in CY 2025, after accounting for the projected shifts of acute care days to other facilities.

To project the total number of medical/surgical days at Atrium Health Pineville, Atrium Health analyzed the ratio of medical/surgical days to total acute care days at Atrium Health Pineville in CY 2018, as shown below.

CY 2018 Atrium Health Pineville Medical/Surgical Days as a Percent of Total Acute Care Days

	CY18
Medical/Surgical Days	52,230
Total Acute Care Days	68,174
Medical/Surgical Days as % of Total Acute Care Days	76.6%

Source: Atrium Health internal data.

As shown above, Atrium Health Pineville medical/surgical days represented 76.6 percent of the total acute care days in CY 2018. In order to project the number of medical/surgical days, Atrium Health conservatively assumes that the ratio of medical/surgical days to total acute care days will remain constant and has applied this CY 2018 ratio to projected total acute care days to derive projected medical/surgical days, as shown in the table below.

Atrium Health Pineville Projected Medical/Surgical Days

	CY20	*CY21*	*CY22*	*CY23*	*CY24*	*CY25*
Projected Acute Care Days	73,494	75,298	76,605	73,278	74,753	76,841
Assumed % Medical/Surgical	76.6%	76.6%	76.6%	76.6%	76.6%	76.6%
Projected Medical/Surgical Days	56,306	57,688	58,689	56,140	57,270	58,870

As shown above, Atrium Health projects Atrium Health Pineville will provide 57,270 medical/surgical days in CY 2024.

To calculate projected discharges, Atrium Health assumed that Atrium Health Pineville's average length of stay (ALOS) will be equivalent to 4.03 days for its total acute care beds and 3.86 days for its medical/surgical beds based on its CY 2018 experience. Based on these assumptions, Atrium Health projects the following discharges for Atrium Health Pineville.

Atrium Health Pineville Acute Care Bed Utilization

	CY20	*CY21*	*CY22*	*CY23*	*CY24*	*CY25*
Total Acute Care Days	73,494	75,298	76,605	73,278	74,753	76,841
ALOS	4.03	4.03	4.03	4.03	4.03	4.03
Total Discharges	18,234	18,682	19,006	18,180	18,546	19,064

Atrium Health Pineville Medical/Surgical Bed Utilization

	CY20	*CY21*	*CY22*	*CY23*	*CY24*	*CY25*
Medical/Surgical Days	56,306	57,688	58,689	56,140	57,270	58,870
ALOS	3.86	3.86	3.86	3.86	3.86	3.86
Medical/Surgical Discharges	14,574	14,932	15,191	14,531	14,824	15,238

7. Atrium Health University City Total Projected Acute Care Utilization after Shifts

As mentioned above, Atrium Health proposes to develop 16 additional acute care beds at Atrium Health University City. To determine Atrium Health University City's final projected total patient days, Atrium Health combined the results of Steps 2 through 5, as shown below.

Atrium Health University City Projected Acute Care Days

	CY20	*CY21*	*CY22*	*CY23*	*CY24**	*CY25*	*CAGR*
Baseline Days	28,643	29,661	30,715	31,806	32,937	34,107	3.55%
Shift to Fort Mill				-56	-57	-59	
Shift to Union County Hospitals	-25	-39	-79	-107	-136	-138	
Shift to Atrium Health Lake Norman				-1,089	-1,665	-2,264	
Total Days	**28,618**	**29,622**	**30,636**	**30,555**	**31,078**	**31,646**	
Total ADC	78.4	81.2	83.9	83.7	85.1	86.7	
Total Beds^	105	116	116	116	116	116	
Occupancy	**74.7%**	**70.0%**	**72.4%**	**72.2%**	**73.4%**	**74.7%**	

*Third full fiscal year of currently proposed Atrium Health University City Beds project.
^Based on the phased development of the proposed 16 beds, five beds will be operational in CY 2020 and the remainder will be operational in CY 2021.

As shown above, Atrium Health University City will achieve 73.4 percent occupancy in CY 2024, the third project year, and 74.7 percent occupancy in CY 2025, after accounting for the projected shifts of acute care days to other facilities.

To project the total number of medical/surgical days at Atrium Health University City, Atrium Health analyzed the ratio of medical/surgical days to total acute care days at Atrium Health University City in CY 2018, as shown below.

CY 2018 Atrium Health University City Medical/Surgical Days as a Percent of Total Acute Care Days

	CY18
Medical/Surgical Days	18,905
Total Acute Care Days	27,358
Medical/Surgical Days as % of Total Acute Care Days	69.1%

Source: Atrium Health internal data.

As shown above, Atrium Health University City medical/surgical days represented 69.1 percent of the total acute care days in CY 2018. In order to project the number of medical/surgical days, Atrium Health conservatively assumes that the ratio of medical/surgical days to total acute care days will remain constant and has applied this CY 2018 ratio to total acute care days to derive projected medical/surgical days, as shown in the table below.

Atrium Health University City Projected Medical/Surgical Days

	CY20	*CY21*	*CY22*	*CY23*	*CY24*	*CY25*
Projected Acute Care Days	28,618	29,622	30,636	30,555	31,078	31,646
Assumed % Medical/Surgical	69.1%	69.1%	69.1%	69.1%	69.1%	69.1%
Projected Medical/Surgical Days	19,775	20,470	21,170	21,114	21,476	21,868

As shown above, Atrium Health projects Atrium Health University City will provide 21,476 medical/surgical days in CY 2024.

In order to calculate projected discharges, Atrium Health assumed that Atrium Health University City's average length of stay (ALOS) will be equivalent to 3.93 days for its total acute care beds and 3.81 days for its medical/surgical beds based on its CY 2018 experience. Based on these assumptions, Atrium Health projects the following discharges for Atrium Health University City.

Atrium Health University City Acute Care Bed Utilization

	CY20	*CY21*	*CY22*	*CY23*	*CY24*	*CY25*
Total Acute Care Days	28,618	29,622	30,636	30,555	31,078	31,646
ALOS	3.93	3.93	3.93	3.93	3.93	3.93
Total Discharges	7,289	7,545	7,803	7,782	7,915	8,060

Atrium Health University City Medical/Surgical Bed Utilization

	CY20	*CY21*	*CY22*	*CY23*	*CY24*	*CY25*
Medical/Surgical Days	19,775	20,470	21,170	21,114	21,476	21,868
ALOS	3.81	3.81	3.81	3.81	3.81	3.81
Medical/Surgical Discharges	5,193	5,375	5,559	5,544	5,639	5,742

8. ***CMC Total Projected Acute Care Utilization after Shifts***

As mentioned above, Atrium Health proposes to develop 18 additional acute care beds at CMC. In addition to the shifts identified above, CMC also will shift acute care days to Atrium Health Mercy related to a previously approved project currently under development. Specifically, in 2016, Atrium Health Mercy was approved to renovate its surgical services and relocate one operating room from CMC (Project ID # F-11268-16). As noted in that application, several shifts in inpatient and outpatient operating room cases are expected to impact CMC's future utilization as part of Atrium Health's commitment to efficiently utilize its resources across its facilities. The future shift of days associated with surgery patients from CMC to Atrium Health Mercy is shown in the table below, which is consistent with the utilization projections in multiple previously approved applications.

CMC Shifts to Atrium Health Mercy Inpatient Surgery

	CY20	***CY21***	***CY22***	***CY23***	***CY24***	***CY25***
Total Days to be Shifted from CMC to Atrium Health Mercy	-2,911	-2,911	-2,911	-2,911	-2,911	-2,911

Source: Project ID #s F-11268-16, F-11361-17, F-11362-17, and F-11622-18.

To determine CMC's final projected total patient days, Atrium Health combined the results of Steps 2 through 5 and the shift of days from CMC to Atrium Health Mercy, as shown below.

CMC Projected Acute Care Days

	CY20	***CY21***	***CY22***	***CY23***	***CY24****	***CY25***
Baseline Days	284,190	287,070	289,980	292,919	295,888	298,887
Shift to Fort Mill	0	0	0	-2,284	-2,348	-2,413
Shift to Union County Hospitals	-1,260	-1,923	-3,913	-5,308	-6,752	-6,870
Shift to Atrium Health Lake Norman				-1,999	-3,058	-4,158
Shift to Mercy IP Surgery	-2,911	-2,911	-2,911	-2,911	-2,911	-2,911
Total Days	**280,019**	**282,237**	**283,156**	**280,416**	**280,820**	**282,536**
Total ADC	767.2	773.3	775.8	768.3	769.4	774.1
Total Beds	859	859	877	877	877	877
Occupancy	**89.3%**	**90.0%**	**88.5%**	**87.6%**	**87.7%**	**88.3%**

*Third full fiscal year of currently proposed CMC Beds project.

As shown above, CMC will achieve 87.7 percent occupancy in CY 2024, the third project year, and 88.3 percent occupancy in CY 2025, after accounting for the projected shifts of acute care days to other facilities.

In order to project the total number of medical/surgical days at CMC, Atrium Health analyzed the ratio of medical/surgical days to total acute care days at CMC in CY 2018, as shown below.

CY 2018 CMC Medical/Surgical Days as a Percent of Total Acute Care Days

	CY18
Medical/Surgical Days	106,291
Total Acute Care Days	269,866
Medical/Surgical Days as % of Total Acute Care Days	39.4%

Source: Atrium Health internal data.

As shown above, CMC medical/surgical days represented 39.4 percent of the total acute care days in CY 2018. In order to project the number of medical/surgical days, Atrium Health conservatively assumes that the ratio of medical/surgical days to total acute care days will remain constant and has applied this CY 2018 ratio to total acute care days to derive projected medical/surgical days, as shown in the table below.

CMC Projected Medical/Surgical Days

	CY20	*CY21*	*CY22*	*CY23*	*CY24*	*CY25*
Projected Acute Care Days	280,019	282,237	283,156	280,416	280,820	282,536
Assumed % Medical/Surgical	39.4%	39.4%	39.4%	39.4%	39.4%	39.4%
Projected Medical/Surgical Days	110,290	111,163	111,526	110,446	110,605	111,281

As shown above, Atrium Health projects CMC will provide 111,281 medical/surgical days in CY 2025.

In order to calculate projected discharges, Atrium Health assumed that CMC's ALOS will be equivalent to 6.10 days for its total acute care beds and 5.13 days for its medical/surgical beds based on its CY 2018 experience. Based on these assumptions, Atrium Health projects the following discharges for CMC.

CMC Acute Care Bed Utilization

	CY20	*CY21*	*CY22*	*CY23*	*CY24*	*CY25*
Total Acute Care Days	280,019	282,237	283,156	280,416	280,820	282,536
ALOS	6.10	6.10	6.10	6.10	6.10	6.10
Total Discharges	45,896	46,260	46,410	45,961	46,027	46,309

CMC Medical/Surgical Bed Utilization

	CY20	*CY21*	*CY22*	*CY23*	*CY24*	*CY25*
Medical/Surgical Days	110,290	111,163	111,526	110,446	110,605	111,281
ALOS	5.13	5.13	5.13	5.13	5.13	5.13
Medical/Surgical Discharges	21,501	21,671	21,741	21,531	21,562	21,694

9. *Atrium Health Mercy Total Projected Acute Care Utilization after Shifts*

To determine Atrium Health Mercy's final projected total patient days, Atrium Health combined the results of Steps 2 through 5 as well as Step 8, as shown below.

Atrium Health Mercy Projected Acute Care Days

	CY20	CY21	CY22	CY23	CY24	CY25	CAGR
Baseline Days	46,800	48,060	49,355	50,684	52,049	53,451	2.7%
Shift to Fort Mill				-659	-678	-697	
Shift to Union County Hospitals	-293	-448	-911	-1,237	-1,573	-1,600	
Shift to Atrium Health Lake Norman				-640	-978	-1,328	
Shift from CMC IP Surgery	2,911	2,911	2,911	2,911	2,911	2,911	
Total Days	**49,417**	**50,523**	**51,354**	**51,059**	**51,732**	**52,737**	
Total ADC	135.4	138.4	140.7	139.9	141.7	144.5	
Total Beds	196	196	196	196	196	196	
Occupancy	**69.1%**	**70.6%**	**71.8%**	**71.4%**	**72.3%**	**73.7%**	

As shown above, Atrium Health Mercy will achieve 72.3 percent occupancy and 73.7 percent occupancy in CY 2024 and 2025, the third project years of Atrium Health's concurrently proposed projects, after accounting for the projected shifts of acute care days to other facilities.

10. *Atrium Health Total Projected Acute Care Days after Shifts*

The following tables summarize the historical and projected utilization for Atrium Health's acute care facilities in Mecklenburg County based the combined results of the steps above, as shown below.

Atrium Health Mecklenburg County Facilities Historical Utilization

	CY16	CY17	CY18	CY19*	CAGR^
Atrium Health Pineville	61,095	65,193	68,174	71,997	5.63%
Atrium Health University City	22,511	24,788	27,358	27,660	7.11%
CMC	264,900	267,955	269,866	281,338	2.03%
Atrium Health Mercy	38,935	41,664	45,128	45,572	5.39%
Total Days	**387,441**	**399,600**	**410,526**	**426,567**	**3.26%**
Total ADC	1,061	1,095	1,125	1,169	
Total Beds	1,316	1,316	1,376	1,376	
Occupancy	**80.7%**	**83.2%**	**81.7%**	**84.9%**	

Source: Atrium Health internal data.
*CY 2019 acute care bed utilization annualized based on January to July data.

Atrium Health Mecklenburg County Facilities Projected Utilization

	CY20	*CY21*	*CY22*	*CY23*	*CY24*	*CY25*	*CAGR*
Atrium Health Lake Norman				3,814	5,833	7,930	**NA**
Atrium Health Pineville	73,494	75,298	76,605	73,278	74,753	76,841	**0.9%**
Atrium Health University City	28,618	29,622	30,636	30,555	31,078	31,646	**2.0%**
CMC	280,019	282,237	283,156	280,416	280,820	282,536	**0.2%**
Atrium Health Mercy	49,417	50,523	51,354	51,059	51,732	52,737	**1.3%**
Total Acute Care Days	**431,548**	**437,680**	**441,751**	**439,123**	**444,216**	**451,689**	**0.9%**
Total ADC	1,182	1,199	1,210	1,203	1,217	1,238	
Total Beds	1,381	1,392	1,460	1,490	1,490	1,490	
Occupancy	**85.6%**	**86.1%**	**82.9%**	**80.7%**	**81.7%**	**83.1%**	

As shown above, Atrium Health's total acute care utilization has grown 3.26 percent annually from CY 2016 to 2019 and, by contrast, is conservatively projected to grow 0.9 percent annually through CY 2025. Similarly, all of Atrium Health's existing facilities are expected to grow more conservatively from CY 2020 to 2025 than they historically have from CY 2016 to 2019. Thus, Atrium Health's total acute care utilization methodologies and assumptions are conservative and reasonable based on historical experience.

Under the performance standards in the Criteria and Standards for Acute Care Beds, Atrium Health's target occupancy rate is 75.2 percent based on its ADC of greater than 200 patients. As shown in the table above, Atrium Health's facilities combined will exceed this target occupancy throughout the projection period as previously approved beds and the 76 beds proposed in Atrium Health's four concurrent and complementary applications become operational.

Atrium Health also is aware of the approved development of Novant Health Ballantyne Medical Center (NH Ballantyne) with 36 acute care beds to be relocated from Novant Health Presbyterian Medical Center. Atrium Health does not expect the development of NH Ballantyne to impact Atrium Health's conformity with the Criteria and Standards for Acute Care Beds. Specifically, in order to meet the 75.2 percent target occupancy rate of its existing, approved, and proposed 1,490 acute care beds, Atrium Health must provide 408,975 days (408,975 days = 1,490 beds x 365 days x 75.2 percent). As shown above, in CY 2020, Atrium Health projects to provide 431,548 acute care days, which exceeds the number of days needed to meet the target occupancy rate by 22,573 days or an ADC of 62 patients, and its utilization is expected to grow over time. Thus, even assuming NH Ballantyne only impacted Atrium Health hospitals and was 100 percent occupied, Atrium Health's facilities in Mecklenburg County would still exceed the target occupancy rate of 75.2 percent for its existing, approved, and proposed beds.

Form F.1a Capital Cost	Column B	Column C	Column D
	Applicant 1: CMHA	Applicant 2:______________	Total
			Column B + Column C
Building Purchase Price[a]	$0		$0
Purchase Price of Land[a]	$0		$0
Closing Costs[a]	$0		$0
Site Preparation[a]	$0		$0
Construction/Renovation Contract(s)[b]	$2,103,000		$2,103,000
Landscaping[a]	$0		$0
Architect / Engineering Fees[c]	$352,000		$352,000
Medical Equipment[d]	$577,350		$577,350
Non Medical Equipment[e]	$34,700		$34,700
Furniture[f]	$80,000		$80,000
Consultant Fees (specify)[g]	$100,000		$100,000
Financing Costs[h]	$15,492		$15,492
Interest during Construction[i]	$81,395		$81,395
Other (specify)[j]	$422,063		$422,063
Total Capital Cost	$3,766,000	$0	$3,766,000

Form F.1a Assumptions

- **a** Not applicable.
- **b** Construction costs are based on the experience of the project architect with similar projects.
- **c** Architect and engineering costs are based on the experience of the project architect with similar projects.
- **d** Medical equipment costs are based on vendor estimates and the experience of Atrium Health with similar projects.
- **e** Non-medical equipment costs are based on vendor estimates and the experience of Atrium Health with similar projects.
- **f** Furniture costs are based on vendor estimates and the experience of Atrium Health with similar projects.
- **g** Consultant fees include CON fees and legal fees, and are based on the experience of Atrium Health with similar projects.
- **h** Atrium Health expects to fund the project with accumulated reserves, but has conservatively included financing costs in the event that the project is funded with bond financing. Financing costs are based on the experience of Atrium considering expected future interest rates.
- **i** Atrium Health expects to fund the project with accumulated reserves, but has conservatively included interest during construction in the event that the project is funded with bond financing. Interest during construction costs are based on the experience of Atrium considering expected future interest rates.
- **j** Other costs include IS, security, and internal allocation, and are based on the experience of Atrium Health with similar projects.

Form F.2 Revenues and Net Income Atrium Health University City Med/Surg Beds Criterion (5) Complete a separate Form F.2 for the entire facility and each service component	Prior Full FY From: 01/01/2018 To: 12/31/2018	Interim* Full FY From: 01/01/2019 To: 12/31/2019	Interim* Full FY From: 01/01/2020 To: 12/31/2020	Interim* Full FY From: 01/01/2021 To: 12/31/2021	1st Full FY From: 01/01/2022 To: 12/31/2022	2nd Full FY From: 01/01/2023 To: 12/31/2023	3rd Full FY From: 01/01/2024 To: 12/31/2024
Patient Services Gross Revenue[a]							
Self Pay	$5,422,812	$5,712,160	$6,017,926	$6,416,039	$6,834,729	$7,021,079	$7,355,585
Insurance *	$12,198,699	$12,849,593	$13,537,419	$14,432,978	$15,374,829	$15,794,027	$16,546,502
Medicare *	$28,716,731	$30,248,987	$31,868,186	$33,976,406	$36,193,600	$37,180,425	$38,951,812
Medicaid *	$9,098,448	$9,583,920	$10,096,937	$10,764,894	$11,467,377	$11,780,038	$12,341,274
Other (Workers Comp, TRICARE)	$1,959,989	$2,064,569	$2,175,084	$2,318,975	$2,470,304	$2,537,658	$2,658,559
Total Patient Services Gross Revenue	$57,396,679	$60,459,229	$63,695,552	$67,909,293	$72,340,840	$74,313,226	$77,853,731
Other Revenue (1)[b]							
Total Gross Revenue (2)	$57,396,679	$60,459,229	$63,695,552	$67,909,293	$72,340,840	$74,313,226	$77,853,731
Adjustments to Revenue							
Charity Care[c]	$5,388,839	$5,676,375	$5,980,226	$6,375,844	$6,791,912	$6,977,094	$7,309,504
Bad Debt[d]	$2,905,351	$3,060,374	$3,224,192	$3,437,487	$3,661,807	$3,761,646	$3,940,862
Contractual Adjustments[c]	$34,237,643	$36,064,482	$37,994,978	$40,508,513	$43,151,971	$44,328,518	$46,440,461
Total Adjustments to Revenue	$42,531,833	$44,801,231	$47,199,396	$50,321,844	$53,605,689	$55,067,259	$57,690,828
Total Net Revenue (3)	$14,864,846	$15,657,998	$16,496,156	$17,587,449	$18,735,150	$19,245,968	$20,162,903
Total Operating Costs (from Form F.3)	$12,492,775	$13,157,425	$13,986,791	$15,153,387	$16,114,173	$16,543,219	$17,311,276
Net Income (4)	$2,372,071	$2,500,574	$2,509,365	$2,434,062	$2,620,978	$2,702,749	$2,851,627

*** IF THERE IS MORE THAN 1 INTERIM YEAR, ADD 1 ADDITIONAL COLUMN FOR EACH ADDITIONAL INTERIM YEAR**

* Including any managed care plans

(1) Identify each type of revenue included on this line and explain how the dollar amount for each type was determined.

(2) Total Gross Revenue = Total Patient Services Gross Revenue + Other Revenue

(3) Total Net Revenue = Total Gross Revenue - Total Adjustments to Revenue

(4) Net Income = Total Net Revenue - Total Operating Costs

Form F.3 Operating Costs Atrium Health University City Med/Surg Beds Criterion (5) Complete a separate Form F.3 for the entire facility and each service component	Prior Full FY From: 01/01/2018 To: 12/31/2018	Interim* Full FY From: 01/01/2019 To: 12/31/2019	Interim* Full FY From: 01/01/2020 To: 12/31/2020	Interim* Full FY From: 01/01/2021 To: 12/31/2021	1st Full FY From: 01/01/2022 To: 12/31/2022	2nd Full FY From: 01/01/2023 To: 12/31/2023	3rd Full FY From: 01/01/2024 To: 12/31/2024
Salaries (from Form H Staffing)[a]	$8,486,469	$8,939,671	$9,418,367	$10,040,627	$10,696,519	$10,987,995	$11,511,664
Taxes and Benefits[b]	$2,265,887	$2,386,892	$2,514,704	$2,680,848	$2,855,971	$2,933,795	$3,073,614
Independent Contractors (1) incl. in Other Operating							
Medical Supplies[c]	$380,636	$400,946	$422,408	$450,352	$479,741	$492,821	$516,300
Other Supplies[c]	$109,814	$115,673	$121,865	$129,927	$138,406	$142,180	$148,953
Dietary (2) incl. in Other Supplies and Intercompany							
Housekeeping/Laundry (2) incl. in Other Supplies and Intercompany							
Equipment Maintenance incl. in Other Operating							
Building & Grounds Maintenance (2) incl. in Intercompany							
Utilities incl. in Other Operating							
Insurance incl. in Intercompany							
Professional Fees[d]							
Interest Expense[e]			$60,256	$180,768	$180,768	$180,768	$180,768
Rental Expense incl. in Other Operating							
Property and Other Taxes (except Income) incl. in Intercompany							
Depreciation - Buildings[f]	$32,409	$33,381	$68,538	$137,879	$138,942	$140,036	$141,163
Depreciation - Equipment[g]	$71,250	$73,388	$108,544	$176,722	$179,057	$181,463	$183,941
Other Expenses (Other Operating)[h]	$403,067	$424,574	$447,301	$476,892	$508,012	$521,863	$546,726
Other Expenses (Intercompany)[i]	$743,242	$782,900	$824,808	$879,372	$936,758	$962,298	$1,008,145
Other Expenses (specify)							
Total Expenses	$12,492,775	$13,157,425	$13,986,791	$15,153,387	$16,114,173	$16,543,219	$17,311,276

*** IF THERE IS MORE THAN 1 INTERIM YEAR, ADD 1 ADDITIONAL COLUMN FOR EACH ADDITIONAL INTERIM YEAR**

(1) Include only the cost of independent contractors on this line. Employees should be included in the Salaries line.

(2) Do not include salaries on this line. Salaries should be included in the Salaries line.

Atrium Health's Financial Planning department provided the data used to develop Forms F.2 and F.3 which were obtained from internal reporting systems that include cost center performance reports and encounter-level patient data for Atrium Health University City's medical/surgical beds through the fiscal year ending 12/31/2018. Please note that Forms F.2 and F.3 only include direct medical/surgical beds service charges and expenses and does not include ICU bed services or ancillary services such as lab or radiology which generate additional revenue and expenses.

The projected financial statements assume 3.0 percent annual inflation based on expected annual inflation.

Form F.2 Assumptions

a Patient Services Gross Revenue is based on CY 2018 payor mix and average charge for the service through the project years. Percent of total days is based on CY 2018 payor mix for the service. While Atrium Health expects payor mix shifts in the coming years, there remains considerable uncertainty given healthcare reform, Medicaid expansion, and other policy initiatives as to how much shift will occur (in NC) and from what payor categories to others. Furthermore, those changes will occur with or without the development of the proposed project. Therefore, until greater clarity to guide reasonable assumptions, Atrium Health has assumed for the purposes of these projections that the payor mix will be consistent with the historical payor mix.

b Not applicable.

c Contractual Adjustments are the difference between gross and net revenue for the service. Charity care is the difference between gross and net revenue for self pay. Contractual adjustments by payor are based on CY 2018 experience for the service.

d Bad debt is based on Atrium Health University City's CY 2018 percentage of total gross revenue. The application of facility-wide bad debt experience to a specific service is conservative as it reflects the entire experience of the facility, but may not be specifically reflective of that service's payor mix.

Form F.3 Assumptions

a	Please see Form H for the proposed staffing chart. Total Salaries is based on projected FTE values and current salaries, inflated 3.0 percent annually.
b	Payroll Taxes and Benefits expense is based on Atrium Health system-wide CY 2018 experience for non-executive/non-physician employees at 26.7 percent of Salaries and Wages applied to projected Salaries and Wages, assuming that this percentage will remain constant through project year three.
c	Medical Supplies and Other Supplies are based on CY 2018 experience for the service, converted to a per day expense, inflated 3.0 percent annually, and multiplied by projected volume. Other supplies includes office, dietary, and housekeeping/laundry supplies expense.
d	Atrium Health University City does not bill patients for professional fees for the service. Professional fees are billed separately by the physicians and practices.
e	Atrium Health expects to fund the project with accumulated reserves, but has conservatively included interest expense in the event that the project is funded with bond financing. Interest expense is based on the project cost, assuming 4.8 percent interest based on Atrium Health's weighted average cost of capital. To remain conservative, the interest expense associated with the entire project has been included beginning in September 2020, after the completion of Phase I of the proposed project.
f	Depreciation - Building includes CY 2018 building depreciation for the existing service, inflated 3.0 percent annually. To remain conservative, the building depreciation expense associated with the entire project has been included beginning in September 2020, after the completion of Phase I of the proposed project and is calculated using the straight line method of depreciation over a useful life of 30 years.
g	Depreciation - Equipment includes CY 2018 equipment depreciation for the existing service, inflated 3.0 percent annually. To remain conservative, the equipment depreciation expense associated with the entire project has been included beginning in September 2020, after the completion of Phase I of the proposed project and is calculated using the straight line method of depreciation over a useful life of seven years.
h	Other Operating expenses are based on CY 2018 experience for the service, converted to a per day expense, inflated 3.0 percent annually, and multiplied by projected volume. The inflation rate is based on expected annual inflation. Other Operating expense includes independent contractors equipment maintenance, utilities, equipment rental, seminars and education, as well as other direct operating expenses.
i	Intercompany Expense is assumed to be 5.0 percent of net patient revenue based on the Atrium Health CY 2018 experience. Intercompany expense includes dietary, housekeeping/laundry, buildings & ground maintenance, insurance, taxes, registration, scheduling, billing, courier services, intercompany work orders, corporate overhead, and all other costs necessary to provide the proposed service.

Form H Staffing Criterion (7) Include employees, contract employees and temporary employees but not independent contractors[a]	Current Staff As of 12/31/2018			Projected Staff								
				First Full Fiscal Year-CY 2022			Second Full Fiscal Year-CY 2023			Third Full Fiscal Year-CY 2024		
	# of FTEs[b]	Average Annual Salary per 1 FTE**	Total Salary *[c]	# of FTEs[b]	Average Annual Salary per 1 FTE**	Total Salary *[c]	# of FTEs[b]	Average Annual Salary per 1 FTE**	Total Salary *[c]	# of FTEs[b]	Average Annual Salary per 1 FTE**	Total Salary *[c]
	B	C	D=B*C	E	F	G=E*F	H	I	J=H*I	K	L	M=K*L
CRNAs												
Nurse Practioners												
Registered Nurses	75.12	$76,556	$5,750,907	84.12	$86,165	$7,248,179	83.90	$88,750	$7,446,100	85.34	$91,412	$7,801,116
Licensed Practical Nurses												
Surgical Technicians												
Aides/Orderlies	9.81	$30,738	$301,536	10.99	$34,595	$380,204	10.96	$35,633	$390,541	11.14	$36,702	$408,864
Clerical Staff	0.88	$41,117	$36,183	0.99	$46,278	$45,815	0.98	$47,666	$46,713	1.00	$49,096	$49,096
Anesthesiologists												
Pathologists												
Laboratory Technicians												
Radiologists												
Radiology Technologists												
Pharmacists												
Pharmacy Technicians												
Physical Therapists												
Physical Therapy Assistant												
Physical Therapy Technician												
Speech Therapists												
Occupational Therapists												
Respiratory Therapists												
Respiratory Therapy Technicians												
Dieticians												
Cooks												
Dietary Aides												
Social Workers												
Medical Records												
Laundry & Linen												
Housekeeping												
Central Sterile Supply												
Bio-medical Engineering												
Materials Management												
Maintenance/Engineering												
Administrator	3.02	$112,501	$339,752	3.38	$126,620.49	$427,977	3.37	$130,419.10	$439,512	3.43	$134,331.67	$460,758
Director of Nursing												
Chief Financial Officer												
Business Office												
Other (Technician)	33.40	$34,933	$1,166,765	37.40	$39,317.49	$1,470,474	37.30	$40,497.02	$1,510,539	37.94	$41,711.93	$1,582,551
Other (Temp Help)	6.90	$129,178	$891,326	7.73	$145,390.62	$1,123,869	7.71	$149,752.34	$1,154,591	7.84	$154,244.91	$1,209,280
Other (Specify)												
Total	**129.13**		**$8,486,469**	**144.61**		**$10,696,519**	**144.22**		**$10,987,995**	**146.69**		**$11,511,664**

*Exclusive of taxes and benefits

State the percentage of total salary projected for taxes and benefits: ___26.7______%

Form H Assumptions

- **a** Types of positions are projected based on the existing positions for the service.
- **b** Number of FTEs projected for each position type reflects historical staffing pattern and expected changes in utilization.
- **c** Annual salary per FTE and position type are projected based on the current salary per FTE and position type, inflated 3.0 percent annually through the third project year. The inflation rate is based on expected annual inflation.