ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

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

Decision Date: November 27, 2017
Findings Date: December 4, 2017

Project Analyst: Julie Halatek
Co-Signer: Fatimah Wilson

COMPETITIVE REVIEW

Project ID #:	F-11361-17
Facility:	Carolinas HealthCare System Pineville (CHS Pineville)
FID #:	110878
County:	Mecklenburg
Applicant:	Mercy Hospital, Inc. (Mercy)
Project:	Develop 15 additional acute care beds for a total of 221 acute care beds

Project ID #:	F-11362-17
Facility:	Carolinas Medical Center (CMC)
FID #:	943070
County:	Mecklenburg
Applicant:	The Charlotte-Mecklenburg Hospital Authority (CHMA)
Project:	Develop 45 additional acute care beds for a total of 1,055 acute care beds

Project ID #:	F-11366-17
Facility:	Novant Health Presbyterian Medical Center (NHPMC)
FID #:	943501
County:	Mecklenburg
Applicant:	The Presbyterian Hospital (Novant)
Project:	Develop 18 additional acute beds for a total of 524 acute care beds upon completion of this project; companion Project ID #F-11367-17 (add 21 Level IV NICU beds); Project ID #F-7648-06 (develop a new hospital by relocating 50 beds from NHPMC); Project ID #F-8765-11 (relocate Charlotte Orthopedic Hospital and add 50 beds pursuant to a need determination); and Project ID #F-11110-15 (relocate 48 beds to Huntersville Medical Center)

Project ID #:	F-11367-17
Facility:	Novant Health Presbyterian Medical Center (NHPMC)
FID #:	943501
County:	Mecklenburg
Applicant:	The Presbyterian Hospital (Novant)

Project: Develop 21 additional Level IV neonatal intensive care unit (NICU) beds for a total of 524 licensed acute care beds upon completion of this project; companion Project ID #F-11366-17 (add 18 acute care beds); Project ID #F-7648-06 (develop a new hospital by relocating 50 beds from NHPMC); Project ID #F-8765-11 (relocate Charlotte Orthopedic Hospital and add 50 beds pursuant to a need determination); and Project ID #F-11110-15 (relocate 48 beds to Huntersville Medical Center)

REVIEW CRITERIA FOR NEW INSTITUTIONAL HEALTH SERVICES

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

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

NC – Novant (both)
C – All Other Applications

The 2017 State Medical Facilities Plan (SMFP) includes a need methodology for determining the need for additional acute care beds in North Carolina. Application of the need methodology in the 2017 SMFP identified a need for 60 additional acute care beds in Mecklenburg County. Four applications were submitted to the Certificate of Need Section, each proposing to develop new acute care beds in Mecklenburg County, with a combined total proposed development of 99 acute care beds. However, pursuant to the need determination, only 60 acute care beds may be approved in this review for Mecklenburg County. See the Summary following the Comparative Analysis for the decision.

Need Determination

Page 41 of the 2017 SMFP states:

> *"Any qualified applicant may apply for a certificate of need to acquire the needed acute care beds. A person is a qualified applicant if he or she proposes to operate the additional acute care beds in a hospital that will provide:*
> *(1) a 24-hour emergency services department,*
> *(2) inpatient medical services to both surgical and non-surgical patients, and*
> *(3) if proposing a new licensed hospital, medical and surgical services on a daily basis within at least five of the major diagnostic categories as recognized by the Centers for Medicare and Medicaid services (CMS), as follows: … [as listed on page 41 of the 2017 SFMP]."*

Mercy Hospital, Inc. **[Mercy]** does not propose to develop more acute care beds at Carolinas HealthCare System Pineville **[CHS Pineville]** than are determined to be needed in the

Mecklenburg County Service Area. In Section B.1, page 17, the applicant states that CHS Pineville currently operates a 24-hour emergency department and provides inpatient medical services to both surgical and non-surgical patients. The applicant is not proposing a new hospital or new service. Thus, CHS Pineville is a qualified applicant and the proposal is consistent with the need determination in the 2017 SMFP for acute care beds in Mecklenburg County.

The Charlotte-Mecklenburg Hospital Authority **[CMHA]** does not propose to develop more acute care beds at Carolinas Medical Center **[CMC]** than are determined to be needed in the Mecklenburg County Service Area. In Section B.1, page 17, the applicant states that CMC currently operates a 24-hour emergency department and provides inpatient medical services to both surgical and non-surgical patients. The applicant is not proposing a new hospital or new service. Thus, CMC is a qualified applicant and the proposal is consistent with the need determination in the 2017 SMFP for acute care beds in Mecklenburg County.

The Presbyterian Hospital **[Novant]** does not propose to develop more acute care beds at Novant Health Presbyterian Medical Center **[NHPMC]** than are determined to be needed in the Mecklenburg County Service Area. In both applications from Novant, in Section B.1, page 9, the applicant states that NHPMC currently operates a 24-hour emergency department and provides inpatient medical services to both surgical and non-surgical patients. The applicant is not proposing a new hospital or new service. Thus, NHPMC is a qualified applicant and the proposal is consistent with the need determination in the 2017 SMFP for acute care beds in Mecklenburg County.

Policies

Two policies from the 2017 SMFP are applicable to this review: Policy GEN-3: Basic Principles and Policy GEN-4: Energy Efficiency and Sustainability for Health Service Facilities.

Policy GEN-3: Basic Principles, on page 33 of the 2017 SMFP, 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."*

Mercy addresses Policy GEN-3 as follows:

Promote Safety and Quality

In Section B.10(a), pages 27-28, the applicant discusses patient safety and quality of care, stating that it believes the proposed project will promote the provision of quality health care services and that it is committed to providing the highest quality care. The applicant provides a list of certain awards it has received for safety and quality on page 28.

Exhibit B.10 contains copies of the applicant's Quality Assessment and Performance Improvement Plan for 2017; Utilization Management Plan; Corporate Risk Management Plan; Non-Discrimination Policies; and its policy with regard to individuals who do not speak English.

The information provided by the applicant is reasonable and adequately supports the determination that the applicant's proposal would promote safety and quality care.

Promote Equitable Access

In Section B.10(b), pages 28-29, the applicant discusses how the proposed project will promote equitable access. The applicant states:

> *"CHS Pineville is the only tertiary hospital in the southern Charlotte region. CHS long-promoted* [sic] *economic access to its services as CHS has historically 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 CHS's Non-Discrimination policies provided in Exhibit B.10. The medical center will continue to serve this population as dictated by the mission of CHS, 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."*

In Section L.1, page 85, the applicant provides the following data to demonstrate the care provided to certain historically medically underserved populations in CY 2016, as shown in the table below.

Medically Underserved Patients – CHS Pineville – CY 2016		
	% Served @ CHS Pineville	**% in Mecklenburg County**
Women	57.9%	51.5%
Patients 65 and older	25.6%	10.7%
Racial Minorities	36.9%	47.4%

Sources: CHS internal data, 2016 ESRI population data

In Section L.4, page 88, the applicant discusses charity care, stating that CHS Pineville treats all patients regardless of their ability to pay, and states that payment, or lack thereof, will in no way affect the care given to patients. In Section B.10(b), page 29, the applicant states that CHS Pineville provided charity care and wrote off bad debt during CY 2016 in the amount of $138 million. The applicant provides its financial policies in Exhibits L.4-1 and 2. The applicant provides CHS Pineville's current policies on access to services in Exhibit B.10.

The information provided by the applicant is reasonable and adequately supports the determination that the applicant's proposal would promote equitable access.

Maximize Healthcare Value

In Section B.10(c), page 29, the applicant states that it believes the project will maximize healthcare value because it contains healthcare costs and maximizes healthcare benefit per dollar expended. The applicant states that the addition of these acute care beds can be accomplished quickly and resourcefully because CHS Pineville has the existing space necessary to house the new acute care beds without requiring new construction or extensive renovations. The applicant states that because the project can be developed within three months and at a cost of approximately $1.1 million, it is providing additional acute care capacity at minimal cost while also maximizing healthcare value.

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

In summary, the application is consistent with the need determination in the 2017 SMFP and Policy GEN-3. Consequently, the application is conforming to this criterion.

CMHA addresses Policy GEN-3 as follows:

Promote Safety and Quality

In Section B.10(a), pages 27-28, the applicant discusses patient safety and quality of care, stating that it believes the proposed project will promote the provision of quality health care services and that it is committed to providing the highest quality care. The applicant provides a list of certain awards it has received for safety and quality on page 28.

Exhibit B.10 contains copies of the applicant's Quality Assessment and Performance Improvement Plan for 2017; Utilization Management Plan; Corporate Risk Management Plan; Non-Discrimination Policies; and its policy with regard to individuals who do not speak English.

The information provided by the applicant is reasonable and adequately supports the determination that the applicant's proposal would promote safety and quality care.

Promote Equitable Access

In Section B.10(b), pages 28-29, the applicant discusses how the proposed project will promote equitable access. The applicant states:

"CMC is a regional and national leader in specialized medical services, including heart, cancer, organ transplant, brain, spine, orthopedics, clinical research, and trauma care. Levine Children's Hospital, located on the campus of CMC, is the largest children's hospital between Washington, DC and Atlanta. Thus, significant access to the many specialty services only offered by CMC is critical for patients in the region. CHS has long-promoted economic access to its services as CHS has historically 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 the medical center's admissions policies provided in Exhibit B.10. The medical center will continue to serve this population as dictated by the mission of CHS, 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."

In Section L.1, page 89, the applicant provides the following data to demonstrate the care provided to certain historically medically underserved populations in CY 2016, as shown in the table below.

Medically Underserved Patients – CMC – CY 2016		
	% Served @ CMC	**% in Mecklenburg County**
Women	59.5%	51.5%
Patients 65 and older	19.6%	10.7%
Racial Minorities	56.0%	47.4%

Sources: CHS internal data, 2016 ESRI population data

In Section L.4, page 92, the applicant discusses charity care, stating that CMC treats all patients regardless of their ability to pay, and states that payment, or lack thereof, will in no way affect the care given to patients. In Section B.10(b), page 29, the applicant states that CMC provided charity care and wrote off bad debt during CY 2016 in the amount of $413 million. The applicant provides its financial policies in Exhibits L.4-1 and 2. The applicant provides CMC's current policies on access to services in Exhibit B.10.

The information provided by the applicant is reasonable and adequately supports the determination that the applicant's proposal would promote equitable access.

Maximize Healthcare Value

In Section B.10(c), page 29, the applicant states that it believes the project will maximize healthcare value because it contains healthcare costs and maximizes healthcare benefit per dollar expended. The applicant states that the addition of these acute care beds can be accomplished quickly and resourcefully because CMC has the existing space necessary to house the new acute care beds without requiring new construction or extensive renovations. The applicant states that because the project can be developed within three months and at a cost of approximately $1.2 million, it is providing additional acute care capacity at minimal cost while also maximizing healthcare value.

The information provided by the applicant is reasonable and adequately supports the determination that the applicant's proposal would maximize healthcare value and that the

applicant's projected volumes incorporate the concepts of quality, equitable access, and maximum value for resources expended in meeting the need identified in the 2017 SMFP. Therefore, the application is conforming to Policy GEN-3.

In summary, the application is consistent with the need determination in the 2017 SMFP and Policy GEN-3. Consequently, the application is conforming to this criterion.

Novant (F-11366-17) addresses Policy GEN-3 in Project I.D. #F-11366-17 as follows:

Promote Safety and Quality

In Section B.10(a), pages 12-16, the applicant discusses patient safety and quality of care, providing examples of the ways it incorporates safety techniques and quality improvements into the care it provides. The applicant provides a list of recognitions it has received for safety and quality on page 15.

Exhibit B-10 contains copies of the applicant's First Do No Harm Patient Safety Policy; Safety Management Plan; NHPMC Clinical Improvement and Patient Safety Plan; NHPMC Hospital Plan for Care Delivery; Infection Protection Plan; Utilization Review Plan; and Corporate Risk Management Plan.

The information provided by the applicant is reasonable and adequately supports the determination that the applicant's proposal would promote safety and quality care.

Promote Equitable Access

In Section B.10(b), pages 16-18, the applicant discusses how the proposed project will promote equitable access. The applicant states:

> *"Novant Health Presbyterian Medical Center will provide services to all persons regardless of race, sex, age, religion, creed, disability, national origin or ability to pay. ... The Patient Non-Discrimination Policy states:*
>
> *'Novant Health does not exclude, deny benefits to, or otherwise discriminate against patients, students, or visitors on the basis of race; color; religion; national origin; culture; language; physical or mental disability; genetic information; age; sex, including pregnancy, childbirth or related medical conditions; marital status; sexual orientation; gender identity or expression; socioeconomic status; or source of payment in admission to, participation in, or receipt of the services and benefits of any of its programs and other activities, whether carried out by Novant Health directly or through a contractor or other entity with whom Novant Health arranges to carry out its programs or activities. This information is communicated to patients in the "Patient Bill of Rights."'*
>
> *Services are available to all persons including: (a) low income persons, (b) racial and ethnic minorities, (c) women, (d) handicapped persons, (e) elderly, and (f) other*

underserved persons, including the medically indigent referred by their attending physicians. …"

In Section L.1, page 80, the applicant provides the following data to demonstrate the care provided to certain historically medically underserved populations in CY 2016, as shown in the table below.

Medically Underserved Patients – NHPMC – CY 2016		
	% Served @ NHPMC	**% in Mecklenburg County**
Women	60.9%	51.4%
Patients 65 and older	23.5%	10.6%
Racial Minorities	53.2%	42.0%

Sources: Trendstar data, NC OSBM

In Section L.4, pages 83-85, the applicant discusses charity care, stating that NHPMC treats all patients regardless of their ability to pay, and states that payment, or lack thereof, will in no way affect the care given to patients. In Section B.10(b), page 16, the applicant states that NHPMC's eligibility for charity care allows patients with annual household incomes of up to 300% of the Federal Poverty Level to receive charity care through NHPMC. The applicant provides its financial and access to services policies in Exhibit C-10.

The information provided by the applicant is reasonable and adequately supports the determination that the applicant's proposal would promote equitable access.

Maximize Healthcare Value

In Section B.10(c), pages 18-19, the applicant describes how it maximizes healthcare value for resources expended. The applicant describes its Population Health Management approach, which it states encourages wellness, preventive care, and management of existing conditions, while at the same time lowering the overall cost of care. The applicant states that it has been recognized nationally in an industry publication as a healthcare system with strong finances.

However, the applicant does not adequately demonstrate how its projected volumes incorporate the concept of maximum value for resources expended. The applicant does not adequately demonstrate the need to add 18 additional acute care beds to its facility in Mecklenburg County. Therefore, the applicant fails to adequately demonstrate how the proposed project will maximize healthcare value for resources expended in meeting the need identified in the 2017 SMFP. The discussion regarding analysis of need, including projected utilization, found in Criterion (3) is incorporated herein by reference. Therefore, the application is not consistent with Policy GEN-3.

Novant (F-11367-17) addresses Policy GEN-3 in Project I.D. #F-11367-17 as follows:

Promote Safety and Quality

In Section B.10(a), pages 12-16, the applicant discusses patient safety and quality of care, providing examples of the ways it incorporates safety techniques and quality improvements into

the care it provides. The applicant provides a list of recognitions it has received for safety and quality on page 15.

Exhibit B-10 contains copies of the applicant's First Do No Harm Patient Safety Policy; Safety Management Plan; Prevention and Management of Neonatal Group B Streptococcus Infection Plan; Cardiopulmonary Monitoring: Pediatric/Neonatal Areas Plan; Neonatal Abstinence Syndrome Plan; and Hemby Intensive Care Nursery Scope of Service/Care Plan.

The information provided by the applicant is reasonable and adequately supports the determination that the applicant's proposal would promote safety and quality care.

Promote Equitable Access

In Section B.10(b), pages 16-18, the applicant discusses how the proposed project will promote equitable access. The applicant states:

> *"Novant Health Presbyterian Medical Center will provide services to all persons regardless of race, sex, age, religion, creed, disability, national origin or ability to pay. … The Patient Non-Discrimination Policy states:*
>
> *'Novant Health does not exclude, deny benefits to, or otherwise discriminate against patients, students, or visitors on the basis of race; color; religion; national origin; culture; language; physical or mental disability; genetic information; age; sex, including pregnancy, childbirth or related medical conditions; marital status; sexual orientation; gender identity or expression; socioeconomic status; or source of payment in admission to, participation in, or receipt of the services and benefits of any of its programs and other activities, whether carried out by Novant Health directly or through a contractor or other entity with whom Novant Health arranges to carry out its programs or activities. This information is communicated to patients in the "Patient Bill of Rights."'*
>
> *Services are available to all persons including: (a) low income persons, (b) racial and ethnic minorities, (c) women, (d) handicapped persons, (e) elderly, and (f) other underserved persons, including the medically indigent referred by their attending physicians. …"*

In Section L.1, page 73, the applicant provides the following data to demonstrate the care provided to certain historically medically underserved populations in CY 2016, as shown in the table below.

Medically Underserved Patients – NHPMC – CY 2016		
	% Served @ NHPMC	**% in Mecklenburg County**
Women	60.9%	51.4%
Patients 65 and older	23.5%	10.6%
Racial Minorities	53.2%	42.0%

Sources: Trendstar data, NC OSBM

In Section L.4, pages 76-78, the applicant discusses charity care, stating that NHPMC treats all patients regardless of their ability to pay, and states that payment, or lack thereof, will in no way affect the care given to patients. In Section B.10(b), page 17, the applicant states that NHPMC's eligibility for charity care allows patients with annual household incomes of up to 300% of the Federal Poverty Level to receive charity care through NHPMC. The applicant provides its financial and access to services policies in Exhibit C-10.

The information provided by the applicant is reasonable and adequately supports the determination that the applicant's proposal would promote equitable access.

Maximize Healthcare Value

In Section B.10(c), pages 19-20, the applicant describes how it maximizes healthcare value for resources expended. The applicant describes its Population Health Management approach, which it states encourages wellness, preventive care, and management of existing conditions, while at the same time lowering the overall cost of care. The applicant states that it has been recognized nationally in an industry publication as a healthcare system with strong finances.

However, the applicant does not adequately demonstrate how its projected volumes incorporate the concept of maximum value for resources expended. The applicant does not adequately demonstrate the need to add 21 additional neonatal intensive care unit (NICU) beds to its facility in Mecklenburg County. Therefore, the applicant fails to adequately demonstrate how the proposed project will maximize healthcare value for resources expended in meeting the need identified in the 2017 SMFP. The discussion regarding analysis of need, including projected utilization, found in Criterion (3) is incorporated herein by reference. Therefore, the application is not consistent with Policy GEN-3.

Policy GEN-4, on page 33 of the 2017 SMFP, 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 of energy efficiency and water conservation that conforms to the rules, codes and standards implemented by the*

Construction Section of the Division of Health Service Regulation. The plan must be consistent with the applicant's representation in the written statement as described in paragraph one of Policy GEN-4. The plan shall not adversely affect patient or resident health, safety or infection control."

Mercy's proposed capital cost is not greater than $2 million. Therefore, Policy GEN-4 does not apply to its application.

CMHA's proposed capital cost is not greater than $2 million. Therefore, Policy GEN-4 does not apply to its application.

Novant's (F-11366-17) proposed capital cost is greater than $2 million. In Section B.10(d), pages 20-21, the applicant provides a written statement describing plans to develop the project in accordance with the provisions in Policy GEN-4 and to include energy-efficient and water conservation features. Therefore, the application is conforming to Policy GEN-4.

Novant's (F-11367-17) proposed capital cost is greater than $2 million. In Section B.10(d), pages 20-22, the applicant provides a written statement describing plans to develop the project in accordance with the provisions in Policy GEN-4 and to include energy-efficient and water conservation features. Therefore, the application is conforming to Policy GEN-4.

Conclusion

In summary, **Mercy** and **CMHA** adequately demonstrate that each proposal to add additional acute care beds is consistent with the 2017 Acute Care Bed Need Determination and Policy GEN-3. Policy GEN-4 is not applicable to either **Mercy** or **CMHA** because the proposed capital costs for both projects is less than $2 million. Therefore, the two applications are conforming to this criterion. **Novant** adequately demonstrates that its two proposals are consistent with the 2017 Acute Care Bed Need Determination and Policy GEN-4. However, it does not adequately demonstrate that its two proposals are consistent with Policy GEN-3 because it fails to adequately demonstrate how each of its proposed projects will maximize healthcare value for resources expended in meeting the need identified in the 2017 SMFP. Therefore, the two **Novant** applications are nonconforming to this criterion.

(2) Repealed effective July 1, 1987.

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

NC – Novant (both)
C – All Other Applications

Mercy proposes to develop 15 additional acute care beds for a total of 221 licensed acute care beds upon project completion. All 15 acute care beds will be medical/surgical (M/S) beds. Mercy and CHS Pineville are affiliated with The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas HealthCare System (CHCS), which owns and operates three other hospitals in Mecklenburg County – Carolinas Medical Center (CMC), Carolinas Medical Center – Mercy (CMC-Mercy), and Carolinas HealthCare System – University (CHS University). CMC and CMC-Mercy are on separate campuses but are licensed together under CMC's license. CMC has filed a concurrent application, Project I.D. #F-11362-17, to add 45 new acute care beds pursuant to the same need determination in Mecklenburg County. Pursuant to 10A NCAC 14C .3803, the Performance Standards under the Criteria and Standards for Acute Care Beds, the applicant provides projected utilization for CMC, CMC-Mercy, and CHS University as part of this application.

Patient Origin

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

In Section C.2(a), page 33, the applicant identifies the patient origin for CHS Pineville M/S acute care beds during CY 2016, as shown in the table below.

CHS Pineville M/S Beds – Historical Patient Origin – CY 2016		
County	**Number of Discharges**	**% of Total**
Mecklenburg	5,448	44.2%
York (SC)	3,496	28.4%
Lancaster (SC)	1,264	10.3%
Union	747	6.1%
Gaston	212	1.7%
Other*	1,153	9.4%
Total	**12,320**	**100.0%**

*See page 33 for a list of the counties that had patients treated in CHS Pineville's M/S acute care beds.

As illustrated in the above table, residents of Mecklenburg, Union, and Gaston counties in North Carolina as well as York and Lancaster counties in South Carolina represent approximately 91 percent of CHS Pineville's M/S acute care bed discharges. The table on page 33 of the application shows that CHS Pineville provided inpatient acute care services to patients from 54 additional counties across North Carolina as well as patients from other states.

In Section C.3(a), page 34, the applicant provides the projected patient origin for M/S acute care beds for the first three years following completion of the proposed project, as shown in the table below.

CHS Pineville M/S Beds – Projected Patient Origin – CYs 2019-2021						
County	**CY 2019**		**CY 2020**		**CY 2021**	
	# Discharges	**% of Total**	**# Discharges**	**% of Total**	**# Discharges**	**% of Total**
Mecklenburg	6,106	44.2%	6,391	48.6%	6,689	48.5%
York (SC)	3,919	28.4%	2,795	21.3%	2,945	21.4%
Lancaster (SC)	1,417	10.3%	1,483	11.3%	1,552	11.3%
Union	837	6.1%	876	6.7%	917	6.7%
Gaston	238	1.7%	249	1.9%	260	1.9%
Other*	1,292	9.4%	1,353	10.3%	1,416	10.3%
Total	**13,809**	**100.0%**	**13,147**	**100.0%**	**13,778**	**100.0%**

*See page 34 for a list of the counties that are projected to have patients treated in CHS Pineville's M/S acute care beds.

The applicant states that the proposed project is not expected to change acute care patient origin; however, the applicant states it projected a shift in M/S acute care bed volume to CHS Fort Mill for the second and third operating year (CYs 2020 and 2021), which is why the patient origin is not consistent across all three operating years. The applicant's assumptions and methodology for projected patient origin can be found in Section Q, Form C, and are discussed in more detail below.

The applicant adequately identifies the population it proposes to serve.

Analysis of Need

In Section C.4, pages 35-49, the applicant discusses the need for the project. The applicant states that the need for the project is based on the following three factors:

- SMFP Acute Care Need Methodology (pages 36-41)
- Need for Additional Capacity at CHS Pineville (pages 41-46)
- Growth and Aging of Mecklenburg County and Southern Charlotte Population (pages 46-48)

The applicant discusses the above factors beginning on page 36 of the application, as summarized below.

2017 SMFP Acute Care Need Methodology

In Section C.4, pages 36-41, the applicant discusses the need for additional acute care beds in the 2017 SMFP and how a need is triggered by the utilization of the total number of existing and approved acute care beds within a given service area. The applicant states that the FFY 2015 utilization data from Truven Health Analytics is used to project the acute care bed need for FFY 2019, using the Mecklenburg County growth rate multiplier of 1.0039, based on total Mecklenburg County annual percentage of change in days of care, as shown in the table below (reproduced from information on page 38).

Mecklenburg County Acute Care Bed Utilization						
	2011 Days	**2012 Days**	**2013 Days**	**2014 Days**	**2015 Days**	**Average Annual Change**
Mecklenburg	554,968	544,924	551,635	534,997	562,638	
Annual Change	--	-1.8%	1.2%	-3.0%	5.2%	0.39%

Source: 2017 SMFP

The applicant states on pages 38-39 that the projected 2019 acute care days are obtained by multiplying FFY 2015 acute care days for each facility multiplied by the County Growth Rate Multiplier compounded over four years. The Average Daily Census (ADC) is then obtained by dividing the total number of patient days at a facility by 365. The projected 2019 acute care days and ADC for the applicant's facilities are listed in the table below.

Mecklenburg County Acute Care Bed Utilization CMC/CHS Related Entities – ADC Calculations				
Facility	**2015 Days**	**Growth Rate Multiplier**	**Projected 2019 Days**	**2019 Projected ADC**
CHS Pineville	57,157	1.0039	58,054	159
CHS University	22,793	1.0039	23,151	63
CMC/CMC-Mercy	297,167	1.0039	301,830	827
CHS Total	**377,117**		**383,035**	**1,049**

Source: 2017 SMFP

Per the methodology in the 2017 SMFP, the ADC is then multiplied by the appropriate target occupancy factor (1.50 for ADC < 100, 1.40 for ADC 100 to 200, and 1.28 for ADC > 400) to determine the projected bed need. Subtracting the existing and approved beds from the projected need results in the need determination for an additional 60 beds in Mecklenburg County, as shown in the table below.

Mecklenburg County Acute Care Bed Utilization CMC/CHS Related Entities – Projected 2019 Bed Deficit/(Surplus)					
Facility	**2019 Projected ADC**	**ADC Target Occupancy Factor**	**Projected 2019 Beds Needed**	**Current Bed Inventory**	**Projected 2019 Deficit/(Surplus)**
CHS Pineville	159	1.40	223	206	17
CHS University	63	1.50	95	100	(5)
CMC/CMC-Mercy	827	1.28	1,058	1,010	48
CHS Total	**1,049**		**1,376**	**1,316**	**60**

Source: 2017 SMFP

On pages 40-41, the applicant states that a need determination for acute care beds is triggered when there is a projected deficit of 20 or more beds. The applicant states that the deficit of beds at CHS Pineville, along with the deficit at CMC/CMC-Mercy, is entirely responsible for the need determination for 60 acute care beds in Mecklenburg County. Per the 2017 SMFP, the only two hospitals in Mecklenburg County with deficits of acute care beds are CHS Pineville and CMC/CMC-Mercy. The applicant also states that Table 5A in the Proposed 2018 SMFP notes a deficit of 96 beds at its facilities in Mecklenburg County – 36 more than

identified in the 2017 SMFP – and states that the deficit may end up higher due to an information systems change that may have resulted in underreporting of patient days to Truven.

Need for Additional Capacity at CHS Pineville

On pages 41-42, the applicant states:

> *"CHS Pineville was opened in 1987 as Mercy Hospital South, then owned by Sisters of Mercy. At the time the hospital opened, the Pineville area had only experienced modest population growth; however from 1990 to 2007, CHS Pineville's service area grew by more than 250,000 people. Thus, while CHS Pineville's original facility is not extremely old, it was built to serve a substantially smaller service area population. ... In addition to this growth, CHS Pineville's transition into the larger CHS system has provided an environment for the facility to grow along with its service area. ...* [The applicant] *sought to create sufficient capacity and tertiary services and to develop the only tertiary hospital in the southern Charlotte region in order to improve access to acute care services in this highly populated and rapidly growing area.*
>
> *... From CY 2013 to 2016, CHS Pineville has grown 5.8 percent annually and now operates at above 81 percent occupancy. ..."*

On page 42, the applicant provides CY 2013 through CY 2016 acute care bed utilization at CHS Pineville, as shown in the table below.

CHS Pineville Acute Care Bed Utilization CY 2013 - 2016					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR***
Days	51,572	55,981	57,815	61,095	5.8%
Beds	206	206	206	206	0.0%
ADC	141	153	158	167	5.8%
Occupancy	**68.6%**	**74.5%**	**76.9%**	**81.3%**	**5.8%**

Source: CHS internal data
*Compound Annual Growth Rate

The applicant states on page 42 that the target occupancy rate, based on the Criteria and Standards for Acute Care Beds, is 71.4 percent based on an ADC between 100 and 200, and that it has exceeded that target occupancy rate since CY 2014. The applicant further states that it has the second highest current bed deficit in the county.

On pages 42-43, the applicant states that the bed need in the 2017 SMFP was generated by applying the County Growth Rate Multiplier to FFY 2015 acute care days in order to project the projected FFY 2019 acute care days. The applicant states that the 2017 SMFP projected 383,035 acute care days for FFY 2019 based on FFY 2015 acute care days. The applicant further states that actual CY 2016 acute care days at CHS facilities totaled 387,441, and states that CHS collectively increased acute care days more in one year than the SMFP projected those days would increase over four years. The applicant also states that while the 2017 SMFP projected that CHS Pineville would have 58,054 acute care days in FFY 2019, based on its FFY 2015 utilization, CHS Pineville actually had 61,095 acute care days in CY 2016. The

applicant states that even if it had the 15 beds it proposes to add in this application during CYs 2015 and 2016, it still would have exceeded the target occupancy rate of 71.4 percent in both CYs 2015 and 2016.

On page 44, the applicant states:

> *"CHS Pineville's CY 2016 occupancy rate is 81 percent based on its average midnight census over the course of a year. During the year, there are periods of higher census related to seasonal patterns for inpatient admissions. In addition, inpatient volume is higher Monday to Friday than on the weekends. As shown in the chart* [on page 44] *demonstrating CHS Pineville's midnight census for each day in CY 2016, there were many periods over the course of the year when CHS Pineville's occupancy rate was higher than 81 percent.*
>
> *The chart* [on page 44] *shows the variation in midnight census that contributes to the capacity constraints experienced at 81 percent average occupancy. The chart doesn't show additional fluctuations within each day as newly admitted patients and patients waiting to be discharged overlap resulting in an even higher census than is present in the facility at midnight."*

The applicant states on page 45 that during the first four months of 2017, it transferred 431 patients to another facility due to lack of beds, which does not include transfers to specialty beds for services not provided at CHS Pineville. The applicant states that due to a lack of available capacity, it often houses patients overnight in the emergency department while waiting for an available bed, which greatly reduces the efficiency and capacity of the emergency department. The applicant further states that it expects its utilization to continue to grow in future years due to many of the same factors responsible for its historical growth, such as increases in population, its status as the only tertiary care facility in southern Charlotte, and the projected growth of medical staff due to planned recruitment of new physicians.

<u>Growth and Aging of Mecklenburg County and Southern Charlotte Population</u>

On page 46, the applicant states that data from the North Carolina Office of State Budget and Management (NC OSBM) shows that Mecklenburg County is the fastest growing county in NC based on numerical population growth and the second fastest growing county in NC based on percentage growth. The applicant provides supporting data from NC OSBM in Exhibit C.4-2. The applicant states on page 48 that along with the overall population growth, Mecklenburg County's population over the age of 65 will continue growing, and provides data from NC OSBM in Exhibit C.4-3 to demonstrate that Mecklenburg County will have the second highest number of residents over 65 out of all counties in NC. The applicant also states that growth in the Mecklenburg County population over age 65 will grow 21.4 percent between 2016 and 2020.

The applicant states on page 48 that its area of patient origin, which the applicant defines in Exhibit C.4-4 as 30 ZIP codes in North and South Carolina, has grown at a Compound Annual Growth Rate (CAGR) of more than 2.4 percent annually, and is projected to grow at a 1.9

percent CAGR during the next five years. See Exhibit C.4-4 for data supporting these statements.

Projected Utilization

In Section Q, the applicant provides a table showing a summary of its Form C utilization, both historical and projected, as shown below.

CHS Pineville M/S Beds – Historical and Projected Utilization – FY 2014 – 2021								
	Prior	**Prior**	**Last**	**Interim**	**Interim**	**First CY**	**Second CY**	**Third CY**
	CY 2014	**CY 2015**	**CY 2016**	**CY 2017**	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
# Beds	132	132	132	132	147	147	147	147
# Discharges	11,262	11,574	12,320	12,607	13,194	13,809	13,147	13,778
# Patient Days	41,212	42,453	46,327	47,406	49,615	51,926	49,436	51,811

The applicant's fiscal years are the same as calendar years, and it projects that the first three operating years of the project will be CYs 2019-2021. The applicant provides its assumptions and methodology for projecting CHS Pineville, CMC (with its concurrently filed application, Project I.D. #F-11362-17), CMC-Mercy, and CHS University acute care bed utilization in Section Q, Form C – Assumptions and Methodology, pages 1-29.

CHS Pineville

1. Examine Historical Acute Care Utilization

In Section Q, page 2, the applicant states that CHS Pineville currently has a total of 206 acute care beds – 132 M/S beds and 74 ICU and maternity beds. The applicant provides historical utilization for both its overall acute care bed utilization as well as its M/S bed utilization as shown in the tables below.

CHS Pineville – Historical Acute Care Bed Utilization (Total)					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
Days	51,572	55,981	57,815	61,095	5.8%
ADC	141	153	158	167	5.8%
Beds	206	206	206	206	--
Occupancy	68.6%	74.5%	76.9%	81.3%	5.8%

Source: CHS internal data

CHS Pineville – Historical Acute Care Bed Utilization (M/S)					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
Days	35,462	41,212	42,453	46,327	9.3%
ADC	97	113	116	127	9.3%
Beds	132	132	132	132	--
Occupancy	73.6%	85.5%	88.1%	96.2%	9.3%

Source: CHS internal data

The applicant states in Section Q, page 3, that because of capacity constraints due to the M/S beds operating at or above 96 percent, its future utilization growth will be more limited until it can increase capacity. The applicant states that because of the high utilization, it projects that the next year's utilization will increase at one-fourth the historical CAGR (1.45 percent for total acute care days and 2.33 percent for M/S days) and then in future years, as capacity becomes available, utilization will increase at one-half the historical CAGR (2.91 percent for total acute care days and 4.66 percent for M/S days).

2. Projected Acute Care Patient Days (Prior to Shifts)

In Section Q, page 4, the applicant provides the projected utilization through CY 2021 for both total acute care days and for M/S days, as shown in the table below.

CHS Pineville – Projected Acute Care Bed Utilization
Total Days and M/S Days

	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Total Days	61,983	63,783	65,637	67,544	69,506
Growth Rate	1.45%	2.91%	2.91%	2.91%	2.91%
M/S Days	47,406	49,615	51,926	54,345	56,877
Growth Rate	2.33%	4.66%	4.66%	4.66%	4.66%

3. Shift of Patient Days from CHS Pineville to CHS Fort Mill

On page 4, the applicant states that CHCS was approved to develop CHS Fort Mill, a new acute care hospital in South Carolina, in 2011; however, litigation is ongoing and there is uncertainty around timing for any end to the litigation as well as for any development of CHS Fort Mill. The applicant states that it accounted for a shift in patients to a future CHS Fort Mill in previously approved acute care bed applications (Project I.D. #s F-10215-13 and F-10221-13), and it projects a shift in patients to CHS Fort Mill as part of this application as well. The applicant states that the patient shift is consistent with the methodology that was approved by the South Carolina Department of Health and Environmental Control as well as consistent with previously approved acute care bed applications. The applicant further states that it did not project separately a shift in the number of M/S patient days, but it did project separately the shift in number of obstetrics patient days, so it assumes that the difference between the projected obstetrics patient days shift and the total patient days shift represents the M/S and ICU patient days shift. In Section Q, page 5, the applicant states that in CY 2016, 87.1 percent of the combined patient days for both M/S beds and ICU beds were M/S patient days, so it applies that information to its calculations in order to determine the number of M/S patient days shifting from CHS Pineville to CHS Fort Mill. The applicant provides its calculations as shown in the table below.

Shift in Patient Days from CHS Pineville to CHS Fort Mill		
	CY 2020	**CY 2021**
Total Acute Care Days	-7,276	-7,482
Projected Obstetrics Days	-1,639	-1,664
Assumed M/S and ICU Days	-5,637	-5,818
CY 2016 % M/S Days	87.1%	87.1%
Projected M/S Days	**-4,909**	**-5,067**

4. Projected Acute Care Patient Days

In Section Q, page 5, the applicant states that it subtracted the volume being shifted to CHS Fort Mill from its projected utilization of both total acute care bed days and M/S bed days to obtain its final projected patient days, as shown in the tables below.

CHS Pineville – Projected Acute Care Bed Utilization (Total)					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Days	61,983	63,783	65,637	67,544	69,506
Patient Shift to CHS Fort Mill	0	0	0	-7,276	-7,482
Final Projected Days	61,983	63,783	65,637	60,267	62,024
ADC	170	175	180	165	170
Beds	206	221	221	221	221
Occupancy	82.4%	79.1%	81.4%	74.7%	76.9%

CHS Pineville – Projected Acute Care Bed Utilization (M/S)					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Days	47,406	49,615	51,926	54,345	56,877
Patient Shift to CHS Fort Mill	0	0	0	-4,909	-5,067
Final Projected Days	47,406	49,615	51,926	49,436	51,811
ADC	130	136	142	135	142
Beds	132	147	147	147	147
Occupancy	98.4%	92.5%	96.8%	92.1%	96.6%

5. Projected Acute Care Discharges

In Section Q, page 6, the applicant states it projected its total discharges by assuming that its ALOS would be consistent with its CY 2016 ALOS for total acute care beds and M/S beds, which was 3.96 and 3.76, respectively. The applicant provides its calculations to project discharges as shown in the tables below.

CHS Pineville – Projected Discharges (Total)					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Days	61,983	63,783	65,637	60,267	62,024
ALOS	3.96	3.96	3.96	3.96	3.96
Discharges	15,659	16,114	16,582	15,226	15,670

CHS Pineville – Projected Discharges (M/S)					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
M/S Days	47,406	49,615	51,926	49,436	51,811
ALOS	3.76	3.76	3.76	3.76	3.76
Discharges	12,607	13,194	13,809	13,147	13,778

6. Project Year Utilization

In Section Q, page 6, the applicant states that Project Year (PY) 1 will begin on April 1, 2018. Thus, the applicant's first three project years are as follows:
PY 1 = April 1, 2018 – March 31, 2019
PY 2 = April 1, 2019 – March 31, 2020
PY 3 = April 1, 2020 – March 31, 2021

The applicant states that it calculated its PY 3 utilization in order to be responsive to the Criteria and Standards for Acute Care Beds found in 10A NCAC 14C .3803. The applicant states that because it provided its projected utilization in calendar years, it converted its data into PY 3 format by using the following formula:

PY 3 = CY 2020 X (9 months / 12 months) + CY 2021 X (3 months / 12 months)

The applicant projects the following for its PY 3 utilization:

CHS Pineville PY 3 Utilization	
Total Acute Care Days	60,707
ADC	166
Total Beds	221
Occupancy	75.3%

CMC

CMC filed a concurrent application, Project I.D. #F-11362-17, to develop 29 additional adult M/S beds and 16 additional pediatric M/S beds for a total of 45 additional acute care beds. The applicant states that currently, CMC has 321 adult M/S beds, 80 pediatric M/S beds, and 413 other beds (see Section Q, page 7, for a listing of the other bed types). If Project I.D. #F-11362-17 is approved, CMC will have 350 adult M/S beds, 96 pediatric M/S beds, and 413 other beds for a total of 859 acute care beds. Please see the section of these findings relating to Project I.D. #F-11362-17 for a more in-depth discussion of the assumptions and methodology used for CMC's projected utilization (pages 41-49).

While CMC and CMC-Mercy are licensed together on a single hospital license, the applicant treats CMC and CMC-Mercy as separate entities for the purposes of projecting utilization.

1. Historical Acute Care Utilization

In Section Q, page 8, the applicant provides CMC's total acute care bed utilization and M/S bed utilization for CYs 2013-2016, as shown in the tables below.

CMC – Historical Acute Care Bed Utilization (Total)					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
Days	243,813	250,881	265,408	264,900	2.8%
ADC	668	687	727	726	2.8%
Beds	814	814	814	814	--
Occupancy	82.1%	84.4%	89.3%	89.2%	2.8%

Source: CHS internal data

CMC – Historical Acute Care Bed Utilization (M/S)					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
Days	96,836	103,818	109,814	104,915	2.7%
ADC	265	284	301	287	2.7%
Beds	321	321	321	321	--
Occupancy	82.6%	88.6%	93.7%	89.5%	2.7%

Source: CHS internal data

In Section Q, pages 7-10, the applicant states that CMC has made various efforts to shift patient services to CMC-Mercy and Carolinas ContinueCare Hospital at University (CCCHU) as appropriate, beginning in CY 2015, and that those efforts have resulted in the flattening of the growth rate of CMC. The applicant calculates what it believes the historical growth rate of CMC-Mercy would have been prior to patient shift by using the projections it made in Project I.D. #F-10215-13 (add 34 beds to CMC-Mercy). The applicant then adds any excess patient days above the projected growth rate of CMC-Mercy, along with any patient days shifted from CMC-Mercy to CCCHU, back to the actual patient days at CMC. The applicant also estimates the number of patient days shifted from CMC to CCCHU and adds those patient days back to the actual patient days at CMC. The applicant states it uses these calculations because it believes this is a more accurate representation of the true historical growth rate generated by CMC. For a more in-depth discussion of assumptions and methodologies, please see the discussion under the section of these findings relating to the CMC application, Project I.D. #F-11362-17 (pages 42-44). The applicant's calculations are shown in the table below.

CMC – Calculation of Historical Total Acute Care Bed Adjusted Growth Rate					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
CMC-Mercy Actual Days*	--	30,690	34,789	38,935	--
CMC-Mercy F-10215-13 Projected 1.7% Increase	--	30,690	31,212	31,742	--
Difference	--	0	3,577	7,193	--
Patient Days Shifted from CMC-Mercy to CCCHU	--	0	0	125	--
Patient Days shifted from CMC to CCCHU	--	0	0	1,208	--
CMC Actual Total Patient Days*	243,813	250,881	265,408	264,900	2.8%
Adjusted Days	**243,813**	**250,881**	**268,985**	**273,426**	**3.9%**

***Source:** CHS Internal Data

The applicant provides similar calculations for determining growth rate of M/S beds at CMC. It states that 92.5 percent of patient days shifted from CMC-Mercy are M/S bed patient days. The applicant further states that 91.5 percent of patient days shifted from CCCHU are M/S bed patient days. The applicant's calculations for M/S patient days are shown in the table below.

CMC – Calculation of Historical M/S Bed Adjusted Growth Rate					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
CMC-Mercy Actual Days*	--	30,690	34,789	38,935	--
CMC-Mercy F-10215-13 Projected 1.7% Increase	--	30,690	31,212	31,742	--
Difference	--	0	3,577	7,193	--
Patient Days Shifted from CMC-Mercy to CCCHU	--	0	0	125	--
Total Patient Days Shifted	--	0	3,577	7,318	--
M/S Patient Days (92.5% of Total Days)	--	0	3,309	6,769	--
Patient Days shifted from CMC to CCCHU	--	0	0	1,208	--
M/S Patient Days (91.5% of Total Days)	--	0	0	1,105	--
CMC Actual M/S Patient Days*	96,836	103,818	109,814	104,915	2.7%
Adjusted Days	**96,836**	**103,818**	**113,123**	**112,789**	**5.2%**

***Source:** CHS Internal Data

In Section Q, page 11, the applicant provides CMC's pediatric M/S bed historical utilization, as shown in the table below.

CMC – Historical Pediatric M/S Bed Utilization					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
Days	24,164	22,268	24,434	24,509	0.5%
ADC	66	61	67	67	0.5%
Beds	80	80	80	80	--
Occupancy	82.8%	76.3%	83.7%	83.9%	0.5%

Source: CHS internal data

2. Project Acute Care Days Prior to Shifts

In Section Q, page 12, the applicant states that it projects future growth will happen at one-half the historic CAGR (after adjusted for shifts in patient days). The applicant states that total acute care patient days will grow at a rate of 1.95 percent (one half of 3.89 percent), adult M/S patient days will grow at a rate of 2.61 percent (one half of 5.21 percent), and pediatric M/S patient days will grow at a rate of 0.24 percent (one half of 0.47 percent). For a more in-depth discussion of assumptions and methodologies, please see the discussion under the section of these findings relating to the CMC application, Project I.D. #F-11362-17 (page 44).

The applicant then projects CMC acute care bed patient days for all three categories through CY 2021, using the growth rates discussed above, as demonstrated in the table below.

CMC – Projected Acute Care Bed Patient Days					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Acute Care Days	270,059	275,318	280,680	286,146	291,718
Growth Rate	1.95%	1.95%	1.95%	1.95%	1.95%
Adult M/S Days	107,651	110,457	113,337	116,293	119,325
Growth Rate	2.61%	2.61%	2.61%	2.61%	2.61%
Pediatric M/S Days	24,567	24,625	24,684	24,742	24,801
Growth Rate	0.24%	0.24%	0.24%	0.24%	0.24%

3. Shift of Patient Days from CMC to CMC-Mercy

In Section Q, pages 12-14, the applicant discusses the basis for its projected shift in patient days from CMC to CMC-Mercy. Please see the section of these findings relating to the CMC application, Project I.D. #F-11362-17, for a more in-depth discussion of its assumptions and methodologies (pages 44-45). The applicant provides the projected number of patient days to be shifted from CMC to CMC-Mercy during the interim and first three calendar years following project completion as shown in the table below.

CMC – Projected Shift in Patient Days to CMC-Mercy					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Previously Approved Shifts – F-10215-13	-14,043	-19,014	--	--	--
Days Already Shifted (CY 2016 per Step 1)	7,318	7,318	--	--	--
Remaining Total Days to be Shifted	-6,725	-11,696	-11,924	-12,156	-12,393
Growth Rate	--	--	1.95%	1.95%	1.95%
Adult M/S Bed Patient Days (92.5% of total)	-6,221	-10,819	-11,030	-11,244	-11,463
Previously Approved Shifts – F-10268-16	--	-2,913	-2,913	-2,913	-2,913
Adult M/S Bed Patient Days (88.9% of total)	--	-2,589	-2,589	-2,589	-2,589
Total Patient Days to be Shifted	**-6,725**	**-14,609**	**-14,837**	**-15,069**	**-15,306**
M/S Patient Days to be Shifted	**-6,221**	**-13,408**	**-13,619**	**-13,833**	**-14,502**

4. Shift of Patient Days from CMC to CCCHU

In Section Q, page 14, the applicant discusses the basis for its projected shift in patient days from CMC to CCCHU as part of Project I.D. #F-10217-13 and future years. Please see the section of these findings relating to the CMC application, Project I.D. #F-11362-17, for a more in-depth discussion of its assumptions and methodologies (pages 45-46). The applicant provides the projected number of patient days to be shifted from CMC to CCCHU during the interim and first three calendar years following project completion as shown in the table below.

CMC – Projected Shift in Patient Days to CCCHU					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Previously Approved Shifts – F-10217-13	-1,927	-2,056	--	--	--
Days Already Shifted (CY 2016 per Step 1)	1,208	1,208	--	--	--
Remaining Total Days to be Shifted	-720	-848	-848	-848	-848
Adult M/S Bed Patient Days (91.5% of total)	-658	-776	-776	-776	-776

5. Shift of Patient Days from CMC to CHS University

In Section Q, page 15, the applicant discusses the basis for its projected shift in patient days from CMC to CHS University as part of Project I.D. #F-10221-13 and future years. Please see the section of these findings relating to the CMC application, Project I.D. #F-11362-17, for a more in-depth discussion of its assumptions and methodologies (page 46). The applicant provides the projected number of patient days to be shifted from CMC to CHS University during the interim and first three calendar years following project completion as shown in the table below.

CMC – Projected Shift in Patient Days to CHS University					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Previously Approved Shifts – F-10221-13	-647	-1,313	-2,000	-2,709	-2,761
Growth Rate	--	--	--	--	1.95%
Adult M/S Bed Patient Days (92.5% of total)	-598	-1,215	-1,850	-2,505	-2,554

6. Shift of Patient Days from CMC to CHS Fort Mill

In Section Q, pages 15-16, the applicant discusses the basis for its projected shift in patient days from CMC to CHS Fort Mill in South Carolina, pending the outcome of litigation. Please see the section of these findings relating to the CMC application, Project I.D. #F-11362-17, for a more in-depth discussion of its assumptions and methodologies (pages 46-47). The applicant provides the projected number of patient days to be shifted from CMC to CHS Fort Mill during the second and third calendar years following project completion as shown in the table below.

CMC – Projected Shift in Patient Days to CHS Fort Mill		
	CY 2020	**CY 2021**
Total Acute Care Days	-5,257	-5,403
Obstetrics Days (projected in SC application)	-454	-454
Assumed Adult M/S and ICU Days	-4,802	-4,948
Adult M/S Bed Patient Days (91.8% of total)	-4,408	-4,542

7. Projected Acute Care Patient Days

In Section Q, pages 16-17, the applicant provides CMC's projected utilization for both total acute care bed patient days and adult M/S bed patient days. The applicant states that this step is the result of combining steps 2-6. The applicant provides the projected utilization for CMC during the interim and first three calendar years following project completion as shown in the tables below.

CMC – Projected Acute Care Bed Utilization (Total)					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Total Acute Care Days (Step 2)	270,059	275,318	280,680	286,146	291,718
M/S Shift to CMC-Mercy (Step 3)	-6,725	-14,609	-14,837	-15,069	-15,306
Shift to CCCHU (Step 4)	-720	-848	-848	-848	-848
Shift to CHS University (Step 5)	-647	-1,313	-2,000	-2,709	-2,761
Shift to CHS Fort Mill (Step 6)	0	0	0	-5,257	-5,403
Final Projected Patient Days	261,968	258,547	262,994	262,263	267,400
ADC	718	708	721	719	733
Beds	814	859	859	859	859
Occupancy	88.2%	82.5%	83.9%	83.6%	85.3%

CMC – Projected Acute Care Bed Utilization (Adult M/S)					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Total Acute Care Days (Step 2)	107,651	110,457	113,337	116,293	119,325
M/S Shift to CMC-Mercy (Step 3)	-6,221	-13,408	-13,619	-13,833	-14,502
Shift to CCCHU (Step 4)	-658	-776	-776	-776	-776
Shift to CHS University (Step 5)	-598	-1,215	-1,850	-2,505	-2,554
Shift to CHS Fort Mill (Step 6)	0	0	0	-4,408	-4,542
Final Projected Patient Days	100,173	95,059	97,093	94,770	97,400
ADC	274	260	266	260	267
Beds	321	350	350	350	350
Occupancy	85.5%	74.4%	76.0%	74.2%	76.2%

In Section Q, pages 17-18, the applicant states that CMC's pediatric M/S beds are not affected by the shifts above, and provides the projected pediatric M/S utilization during the interim and first three calendar years following project completion, based on its projected growth rate of 0.24 percent, as shown in the table below.

CMC – Projected Pediatric M/S Patient Days					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Pediatric M/S Days	24,567	24,625	24,684	24,742	24,801
ADC	67	67	68	68	68
Beds	80	96	96	96	96
Occupancy	84.1%	70.3%	70.4%	70.6%	70.8%

8. Projected Acute Care Discharges

In Section Q, page 18, the applicant provides the CMC total acute care bed, adult M/S bed, and pediatric M/S bed projected discharges during the interim and first three calendar years following project completion. The applicant states that it used CMC's CY 2016 experience to project the appropriate ALOS for each of the categories shown in the tables below.

CMC – Projected Total Acute Care Discharges					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Total Acute Care Days	261,968	258,547	262,994	262,263	267,400
ALOS	5.80	5.80	5.80	5.80	5.80
Total Discharges	45,161	44,572	45,338	45,212	46,098

CMC – Projected Adult M/S Discharges					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Total Adult M/S Days	100,173	95,059	97,093	94,770	97,400
ALOS	4.48	4.48	4.48	4.48	4.48
Total Discharges	22,371	21,229	21,683	21,164	21,752

CMC – Projected Pediatric M/S Discharges					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Total Pediatric M/S Days	24,567	24,625	24,684	24,742	24,801
ALOS	4.19	4.19	4.19	4.19	4.19
Total Discharges	5,865	5,879	5,893	5,907	5,921

9. Project Year Utilization

In Section Q, pages 18-19, the applicant states that Project Year (PY) 1 will begin on April 1, 2018. Thus, CMC's first three project years are as follows:

PY 1 = April 1, 2018 – March 31, 2019
PY 2 = April 1, 2019 – March 31, 2020
PY 3 = April 1, 2020 – March 31, 2021

The applicant states that it calculated its PY 3 utilization in order to be responsive to the Criteria and Standards for Acute Care Beds found in 10A NCAC 14C .3803. The applicant states that because it provided CMC's projected utilization in calendar years, it converted CMC's data into PY 3 format by using the following formula:

PY 3 = CY 2020 X (9 months / 12 months) + CY 2021 X (3 months / 12 months)

The applicant projects the following for CMC's PY 3 utilization:

CMC PY 3 Utilization	
Total Acute Care Days	263,547
ADC	722
Total Beds	859
Occupancy	84.1%

CMC-Mercy

The applicant provides projected utilization for CMC-Mercy as part of this application to be responsive to the Criteria and Standards for Acute Care Beds found in 10A NCAC 14C .3803. While CMC and CMC-Mercy are licensed together on a single hospital license, the applicant

treats CMC and CMC-Mercy as separate entities for the purposes of projecting utilization. The applicant states in Section Q, page 20, that projections at CMC-Mercy are only for total acute care days since individual service lines at CMC-Mercy are not affected by either the CHS Pineville or the CMC application.

1. Historical Acute Care Utilization

In Section Q, page 20, the applicant provides CMC-Mercy's total acute care bed utilization for CYs 2013-2016, as shown in the table below.

CMC-Mercy – Historical Acute Care Bed Utilization					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
Days	30,502	30,690	34,789	38,935	8.5%
ADC	84	84	95	107	8.5%
Beds	162	162	162	196	--
Occupancy	51.6%	51.9%	58.8%	54.4%	1.8%

Source: CHS internal data

The applicant states that CMC-Mercy's total acute care days have increased as a result of strategies to shift utilization from CMC to CMC-Mercy that began in CY 2015. The applicant also states that as part of Project I.D. #F-10215-13, CMC-Mercy added 34 acute care beds.

In Section Q, page 21, the applicant projects CMC-Mercy's total acute care bed utilization minus the shifts in patients from CMC and including patient days that were shifted to CCCHU to obtain what it states is the baseline utilization for CMC-Mercy, as shown in the table below.

CMC-Mercy – Calculation of Historical Total Acute Care Bed Baseline Growth Rate					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
CMC-Mercy Actual Days*	30,502	30,690	34,789	38,935	8.5%
Patient Days Shifted from CMC to CMC-Mercy	0	0	-3,577	-7,318	--
Patient Days Shifted from CMC-Mercy to CCCHU	0	0	0	125	--
Baseline Days	**30,502**	**30,690**	**31,212**	**31,742**	**1.3%**

***Source:** CHS Internal Data

The applicant states in Section Q, page 21, that in order to be conservative, it will project future growth at a rate of one half of the CAGR for the baseline growth rate (0.67 percent).

2. Project Acute Care Patient Days Prior to Shift

In Section Q, page 21, the applicant projects the growth of CMC-Mercy total acute care bed days, using a projected growth rate of 0.67 percent, as shown in the table below.

CMC-Mercy – Projected Acute Care Bed Utilization					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Patient Days	39,195	39,458	39,722	39,987	40,255
Growth Rate	0.67%	0.67%	0.67%	0.67%	0.67%

3. Shift of Patient Days from CMC to CMC-Mercy

In Section Q, page 13, the applicant describes the projections it used as part of Project I.D. #F-10215-13 to project the future shift in patient days from CMC to CMC-Mercy. It states that it continues to believe the projections are reasonable, and so it includes those projections in its calculations in this application. The applicant also states that it projected any additional increases in utilization beyond the end of the projections for Project I.D. #F-10215-13 by using the same 1.95 percent growth rate it projected CMC's baseline patient days would grow.

In Section Q, page 21, the applicant provides its projections for the shift in patient days from CMC to CMC-Mercy that it discussed in Section Q, page 13, which are shown in the table below.

Projected Shift of Patient Days from CMC to CMC-Mercy					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
General Medicine Days to Shift	6,725	11,696	11,924	12,156	12,393
General Surgery Days to Shift	0	2,913	2,913	2,913	2,913
Total Days to Shift	6,725	14,609	14,837	15,069	15,306

4. Shift of Patient Days from CMC-Mercy to CCCHU

In Section Q, page 22, the applicant states that as part of the application for Project I.D. #F-10217-13, to develop CCCHU, CMC-Mercy projected a shift in patient days from CMC-Mercy to CCCHU in the second and third project years. The applicant provides those projections and reduces them by the number of patient days that have already shifted. The applicant projects that beyond the scope of Project I.D. #F-10217-13, patient days to be shifted will remain constant because CCCHU was projected to reach target occupancy during its third project year and will have limited ability to grow. The applicant's projections are provided in the table below.

Projected Shift of Patient Days from CMC-Mercy to CCCHU					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Previously Projected Days	-200	-213	--	--	--
Days Already Shifted	-125	-125	--	--	--
Days Remaining to be Shifted	-75	-88	-88	-88	-88

5. Shift of Patient Days from CMC-Mercy to CHS Fort Mill

In Section Q, page 4, the applicant states that CHCS was approved to develop CHS Fort Mill, a new acute care hospital in South Carolina, in 2011; however, litigation is ongoing and there is uncertainty around timing for any end to the litigation as well as for any development of CHS Fort Mill. In Section Q, page 22, the applicant states that it accounted for a shift in patients from CMC-Mercy to a future CHS Fort Mill in previously approved acute care bed applications (Project I.D. #s F-10215-13 and F-10221-13), and it projects a shift in patients from CMC-Mercy to CHS Fort Mill as part of this application as well. The applicant states that the patient shift is consistent with the methodology that was approved by the South Carolina Department

of Health and Environmental Control as well as consistent with previously approved acute care bed applications. The applicant projects that the shift, if it occurred, would take place beginning in CY 2020, and would shift 946 days and 973 days in CYs 2020 and 2021, respectively.

6. Project Acute Care Patient Days

In Section Q, page 23, the applicant provides CMC-Mercy's projected utilization for total acute care bed patient days. The applicant states that this step is the result of combining steps 2-5. The applicant provides the projected utilization for CMC-Mercy during the interim and first three calendar years following project completion as shown in the table below.

CMC-Mercy – Projected Acute Care Bed Utilization					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Acute Care Days (Step 2)	39,195	39,458	39,722	39,987	40,255
M/S Shift from CMC (Step 3)	6,725	14,609	14,837	15,069	15,306
Shift to CCCHU (Step 4)	-75	-88	-88	-88	-88
Shift to CHS Fort Mill (Step 5)	0	0	0	-946	-973
Final Projected Patient Days	45,846	53,979	54,471	54,023	54,500
ADC	126	148	149	148	149
Beds	196	196	196	196	196
Occupancy	64.1%	75.5%	76.1%	75.5%	76.2%

7. Project Year Utilization

In Section Q, page 23, the applicant states that Project Year (PY) 1 will begin on April 1, 2018. Thus, the first three project years applicable to CMC-Mercy are as follows:

PY 1 = April 1, 2018 – March 31, 2019
PY 2 = April 1, 2019 – March 31, 2020
PY 3 = April 1, 2020 – March 31, 2021

The applicant states that it calculated its PY 3 utilization in order to be responsive to the Criteria and Standards for Acute Care Beds found in 10A NCAC 14C .3803. The applicant states that because it provided CMC-Mercy's projected utilization in calendar years, it converted CMC-Mercy's data into PY 3 format by using the following formula:

PY 3 = CY 2020 X (9 months / 12 months) + CY 2021 X (3 months / 12 months)

The applicant projects the following for CMC-Mercy's PY 3 utilization:

CMC-Mercy PY 3 Utilization	
Total Acute Care Days	54,142
ADC	148
Total Beds	196
Occupancy	75.7%

CHS University

The applicant provides projected utilization for CHS University as part of this application to be responsive to the Criteria and Standards for Acute Care Beds found in 10A NCAC 14C .3803. The applicant states in Section Q, page 24, that projections at CHS University are only for total acute care days since individual service lines at CHS University are not affected by either the CHS Pineville or the CMC application.

1. Historical Acute Care Utilization

In Section Q, page 24, the applicant provides CHS University's total acute care bed utilization for CYs 2013-2016, as shown in the table below.

CHS University – Historical Acute Care Bed Utilization					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
Days	21,071	21,782	22,173	22,511	2.2%
ADC	58	60	61	62	2.2%
Beds	94	94	100	100	--
Occupancy	61.4%	63.5%	60.7%	61.7%	0.1%

Source: CHS internal data

The applicant also states that as part of Project I.D. #F-10221-13, CHS University added six acute care beds. CCCHU is a separate entity but physically located at CHS University.

In Section Q, pages 24-25, the applicant next calculates CHS University's total acute care bed utilization, including shifts in patient days to CCCHU as part of Project I.D. #F-10217-13, to obtain what it states is the baseline utilization for CHS University, as shown in the table below.

CHS University – Calculation of Historical Acute Care Bed Baseline Growth Rate					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
CHS University Actual Days*	21,071	21,782	22,173	22,511	2.2%
Patient Days Shifted to CCCHU	0	0	0	209	--
Baseline Days	**21,071**	**21,782**	**22,173**	**22,720**	**2.5%**

***Source:** CHS Internal Data

The applicant states in Section Q, page 25, that in order to be conservative, it will project future growth at a rate of one half of the CAGR for the baseline growth rate (one half of 2.54 percent = 1.27 percent).

2. Project Acute Care Patient Days Prior to Shift

In Section Q, page 25, the applicant projects the growth of CHS University's total acute care bed days, using a projected growth rate of 1.27 percent, as shown in the table below.

CHS University – Projected Acute Care Bed Utilization					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Patient Days	22,797	23,087	23,381	23,678	23,980
Growth Rate	1.27%	1.27%	1.27%	1.27%	1.27%

3. Shift of Patient Days from CMC to CHS University

In Section Q, page 15, the applicant describes the projections it used as part of Project I.D. #F-10221-13 to project the future shift in patient days from CMC to CHS University. It states that it continues to believe the projections are reasonable, and so it includes those projections in its calculations in this application. The applicant also states that it projected any additional increases in utilization beyond the end of the projections for Project I.D. #F-10221-13 by using the same 1.95 percent growth rate it projected CMC's baseline patient days would grow.

In Section Q, page 25, the applicant provides its projections for the shift in patient days from CMC to CHS University that it discussed in Section Q, page 13, which are shown in the table below.

Projected Shift of Patient Days from CMC to CHS University					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Total Days to Shift	647	1,313	2,000	2,709	2,761

4. Shift of Patient Days from CHS University to CCCHU

In Section Q, pages 25-26, the applicant states that as part of the application for Project I.D. #F-10217-13, to develop CCCHU, CHS University projected a shift in patient days from CHS University to CCCHU in the second and third project years. The applicant provides those projections and reduces them by the number of patient days that have already shifted. The applicant projects that beyond the scope of Project I.D. #F-10217-13, patient days to be shifted will remain constant because CCCHU was projected to reach target occupancy during its third project year and will have limited ability to grow. The applicant's projections are provided in the table below.

Projected Shift of Patient Days from CHS University to CCCHU					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Previously Projected Days	-334	-356	--	--	--
Days Already Shifted	-209	-209	--	--	--
Days Remaining to be Shifted	-125	-147	-147	-147	-147

5. Shift of Patient Days from CHS University to CHS Fort Mill

In Section Q, page 4, the applicant states that CHCS was approved to develop CHS Fort Mill, a new acute care hospital in South Carolina, in 2011; however, litigation is ongoing and there is uncertainty around timing for any end to the litigation as well as for any development of CHS Fort Mill. In Section Q, page 26, the applicant states that it accounted for a shift in patients from CHS University to a future CHS Fort Mill in previously approved acute care bed

applications (Project I.D. #s F-10215-13 and F-10221-13), and it projects a shift in patients from CHS University to CHS Fort Mill as part of this application as well. The applicant states that the patient shift is consistent with the methodology that was approved by the South Carolina Department of Health and Environmental Control as well as consistent with previously approved acute care bed applications. The applicant projects that the shift, if it occurred, would take place beginning in CY 2020, and would shift 85 days and 88 days in CYs 2020 and 2021, respectively.

6. Project Acute Care Patient Days

In Section Q, pages 26-27, the applicant provides CHS University's projected utilization for total acute care bed patient days. The applicant states that this step is the result of combining steps 2-5. The applicant provides the projected utilization for CHS University during the interim and first three calendar years following project completion as shown in the table below.

CHS University – Projected Acute Care Bed Utilization					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Acute Care Days (Step 2)	22,797	23,087	23,381	23,678	23,980
Shift from CMC (Step 3)	647	1,313	2,000	2,709	2,761
Shift to CCCHU (Step 4)	-125	-147	-147	-147	-147
Shift to CHS Fort Mill (Step 5)	0	0	0	-85	-88
Final Projected Patient Days	23,319	24,254	25,234	26,155	26,506
ADC	64	66	69	72	73
Beds	100	100	100	100	100
Occupancy	63.9%	66.4%	69.1%	71.7%	72.6%

7. Project Year Utilization

In Section Q, page 27, the applicant states that Project Year (PY) 1 will begin on April 1, 2018. Thus, the first three project years applicable to CHC University are as follows:

PY 1 = April 1, 2018 – March 31, 2019
PY 2 = April 1, 2019 – March 31, 2020
PY 3 = April 1, 2020 – March 31, 2021

The applicant states that it calculated its PY 3 utilization in order to be responsive to the Criteria and Standards for Acute Care Beds found in 10A NCAC 14C .3803. The applicant states that because it provided CHS University's projected utilization in calendar years, it converted CHS University's data into PY 3 format by using the following formula:

PY 3 = CY 2020 X (9 months / 12 months) + CY 2021 X (3 months / 12 months)

The applicant projects the following for CHS University's PY 3 utilization:

CHS University PY 3 Utilization	
Total Acute Care Days	26,242
ADC	72
Total Beds	100
Occupancy	71.9%

CHCS Acute Care Bed Utilization Summary

In Section Q, page 28, the applicant provides both the historical utilization summary and the projected utilization summary for CHS Pineville, CMC, CMC-Mercy, and CHS University, as shown in the tables below.

CHCS – Historical Acute Care Bed Utilization					
	CY 2013	CY 2014	CY 2015	CY 2016	CAGR
CHS Pineville	51,572	55,981	57,815	61,095	5.8%
CMC	243,813	250,881	265,408	264,900	2.8%
CMC-Mercy	30,502	30,690	34,789	38,935	8.5%
CHS University	21,071	21,782	22,173	22,511	2.2%
Total Days	346,958	359,334	380,185	387,441	3.7%
ADC	951	984	1,042	1,061	3.7%
Beds	1,276	1,276	1,282	1,316	--
Occupancy	74.5%	77.2%	81.2%	80.7%	2.7%

CHCS – Projected Acute Care Bed Utilization						
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CAGR
CHS Pineville	61,983	63,783	65,637	60,267	62,024	0.3%
CMC	261,968	258,547	262,994	262,263	267,400	0.2%
CMC-Mercy	45,846	53,979	54,471	54,023	54,500	7.0%
CHS University	23,319	24,254	25,234	26,155	26,506	3.3%
Total Days	393,115	400,563	408,336	402,707	410,431	1.2%
ADC	1,077	1,097	1,119	1,103	1,124	1.2%
Beds	1,316	1,376	1,376	1,376	1,376	--
Occupancy	81.8%	79.8%	81.3%	80.2%	81.7%	0.3%

In Section Q, the applicant provides the calculated Project Year 3 utilization for all related facilities, as shown in the table below.

CHCS Mecklenburg County Utilization CY 2021			
	# Beds	ADC	% Occupancy
CMC	859	722	84.1%
CMC-Mercy	196	148	75.7%
CHS Pineville	221	166	75.3%
CHS University	100	72	71.9%
Total CHCS	**1,376**	**1,108**	**80.5%**

As the table above shows, the applicant and all related CHCS facilities in Mecklenburg County have a total utilization at the end of the proposed project's third operating year that is above the required 75.2 percent occupancy rate required in the performance standard found in 10A NCAC 14C .3803(a).

Projected utilization is based on reasonable and adequately supported assumptions, summarized as follows:

- Historical growth rates as the basis of projected growth rates;
- Historical shifts in patient population due to strategic decisions by entities affiliated with the applicant;
- Projected shifts in patient population based on historical shifts in patient population; and
- Projected utilization from previously submitted applications approved by the Agency.

Based on review of: 1) the information provided by the applicant in Section C.4, pages 35-49, C.11(b), pages 53-54, Section Q, pages 1-29, and referenced exhibits; 2) comments received during the first 30 days of the review cycle; and 3) the applicant's response to the comments received at the public hearing, the applicant adequately documents the need for the project for the reasons discussed above.

Access

In Section C.10, pages 51-52, the applicant discusses how the proposed project will promote equitable access. The applicant states:

> *"As noted in CHS'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 on the basis of race, color, religion, national origin, sex, age, disability or source of payment.'*
>
> *In addition, as noted in CHS's system-wide Hospital Coverage Assistance and Financial Assistance Policy, Exhibit L.4, '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.'"*

In Section B.10(b), page 29, the applicant states that during CY 2016, CHS Pineville provided charity care and wrote off bad debt in the amount of approximately $138 million, as well as prioritizing the recruitment and retention of bilingual staff members.

In Section L.1, page 85, the applicant provides the following information on the percentage of patients served by CHS Pineville, based on CY 2016 data.

Medically Underserved Patients – CHS Pineville – CY 2016		
	% Served @ CHS Pineville	% in Mecklenburg County
Women	57.9%	51.5%
Patients 65 and older	25.6%	10.7%
Racial Minorities	36.9%	47.4%

Sources: CHS internal data, 2016 ESRI population data

In Section L.4, page 88, the applicant discusses charity care, stating that CHS Pineville treats patients regardless of their ability to pay and payment or lack thereof has no effect on the care given to patients. The applicant discusses the various policies in place to assist the medically indigent. Exhibit L.4 contains the applicant's Hospital Coverage Assistance and Financial Assistance Policy. Exhibit B.10 contains the Hospital's current policies on access to services. In Section Q, Form F.3, the applicant shows that CHS Pineville will provide approximately $40,937,000 and $44,505,000 in charity care in project years one and two, respectively; and write off approximately $130,420,000 and $141,896,000 in bad debt in project years one and two, respectively. In Section L.3(a), page 87, the applicant projects that in project years one and two, respectively, 63.5 percent of M/S patients to be served and 52.9 percent of all patients to be served will be Medicare or Medicaid recipients.

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

Conclusion

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

CMHA proposes to develop 45 additional acute care beds for a total of 1,055 licensed acute care beds upon project completion. 29 of the additional acute care beds will be adult medical/surgical (M/S) beds and 16 of the additional acute care beds will be pediatric M/S beds.

CHCS, the owner and operator of CMC, owns and operates three other hospitals in Mecklenburg County – Carolinas HealthCare System – Pineville (CHS Pineville), Carolinas Medical Center – Mercy (CMC-Mercy), and Carolinas HealthCare System – University (CHS University). CMC and CMC-Mercy are on separate campuses but are licensed together under CMC's license. CHS Pineville has filed a concurrent application, Project I.D. #F-11361-17, to add 15 new acute care beds pursuant to the same need determination in Mecklenburg County. Pursuant to 10A NCAC 14C .3803, the Performance Standards under the Criteria and Standards for Acute Care Beds, the applicant provides projected utilization for CHS Pineville, CMC-Mercy, and CHS University as part of this application.

Patient Origin

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

In Section C.2(a), pages 34-35, the applicant identifies the patient origin for CMC pediatric M/S and adult M/S acute care beds during CY 2016, as shown in the tables below.

CMC Pediatric M/S Beds – Historical Patient Origin – CY 2016		
County	**Number of Patients**	**% of Total**
Mecklenburg	2,386	40.8%
York (SC)	540	9.2%
Gaston	415	7.1%
Union	372	6.4%
Cabarrus	258	4.4%
Cleveland	200	3.4%
Iredell	130	2.2%
Lancaster (SC)	129	2.2%
Lincoln	121	2.1%
Other*	1,300	22.2%
Total	**5,851**	**100.0%**

*See page 34 for a list of the counties that had patients treated in CMC's pediatric M/S acute care beds.

CMC Adult M/S Beds – Historical Patient Origin – CY 2016		
County	**Number of Patients**	**% of Total**
Mecklenburg	9,815	41.9%
Gaston	1,453	6.2%
York (SC)	1,137	4.9%
Union	1,095	4.7%
Cleveland	951	4.1%
Lincoln	704	3.0%
Cabarrus	614	2.6%
Lancaster (SC)	609	2.6%
Iredell	467	2.0%
Other*	6,585	28.1%
Total	**23,430**	**100.0%**

*See page 35 for a list of the counties that had patients treated in CMC's adult M/S acute care beds.

As illustrated in the above tables, residents of Mecklenburg, Union, Gaston, Cabarrus, Cleveland, Iredell, and Lincoln counties in North Carolina as well as York and Lancaster counties in South Carolina represent the majority percent of CMC's M/S acute care bed days of care. The tables on pages 34-35 of the application shows that CMC provided inpatient acute

care services to patients from 69 additional counties across North Carolina as well as patients from other states.

In C.3(a), pages 36-37, the applicant provides the projected patient origin for pediatric and adult M/S acute care beds for the first three years following completion of the proposed project, as shown in the tables below.

CMC Pediatric M/S Beds – Projected Patient Origin – CYs 2019-2021						
County	**CY 2019**		**CY 2020**		**CY 2021**	
	# Patients	**% of Total**	**# Patients**	**% of Total**	**# Patients**	**% of Total**
Mecklenburg	2,403	40.8%	2,409	40.8%	2,414	40.8%
Gaston	544	9.2%	545	9.2%	546	9.2%
York (SC)	418	7.1%	419	7.1%	420	7.1%
Union	375	6.4%	376	6.4%	376	6.4%
Cleveland	260	4.4%	260	4.4%	261	4.4%
Lincoln	201	3.4%	202	3.4%	202	3.4%
Cabarrus	131	2.2%	131	2.2%	132	2.2%
Lancaster (SC)	130	2.2%	130	2.2%	131	2.2%
Iredell	122	2.1%	122	2.1%	122	2.1%
Other*	1,309	22.2%	1,312	22.2%	1,315	22.2%
Total	**5,893**	**100.0%**	**5,907**	**100.0%**	**5,921**	**100.0%**

*See page 36 for a list of the counties that are projected to have patients treated in CMC's M/S acute care beds.

CMC Adult M/S Beds – Projected Patient Origin – CYs 2019-2021						
County	**CY 2019**		**CY 2020**		**CY 2021**	
	# Patients	**% of Total**	**# Patients**	**% of Total**	**# Patients**	**% of Total**
Mecklenburg	9,083	41.9%	9,278	43.8%	9,537	43.8%
Gaston	1,345	6.2%	1,374	6.5%	1,412	6.5%
York (SC)	1,052	4.9%	90	0.4%	90	0.4%
Union	1,013	4.7%	1,035	4.9%	1,064	4.9%
Cleveland	880	4.1%	899	4.2%	924	4.2%
Lincoln	652	3.0%	666	3.1%	684	3.1%
Cabarrus	568	2.6%	580	2.7%	597	2.7%
Lancaster (SC)	564	2.6%	576	2.7%	592	2.7%
Iredell	432	2.0%	441	2.1%	454	2.1%
Other*	6,094	28.1%	6,225	29.4%	6,398	29.4%
Total	**21,683**	**100.0%**	**21,164**	**100.0%**	**21,752**	**100.0%**

*See page 37 for a list of the counties that are projected to have patients treated in CMC's M/S acute care beds.

The applicant states that the proposed project is not expected to change acute care patient origin; however, the applicant states it projected a shift in adult M/S acute care bed volume to CHS Fort Mill for the second and third operating year (CYs 2020 and 2021), which is why the patient origin is not consistent across all three operating years. The applicant's assumptions and methodology for projected patient origin can be found in Section Q, Form C, and are discussed in more detail below.

The applicant adequately identifies the population it proposes to serve.

Analysis of Need

In Section C.4, pages 38-54, the applicant discusses the need for the project. The applicant states that the need for the project is based on the following three factors:

- SMFP Acute Care Need Methodology (pages 39-45)
- Need for Additional Capacity at CMC (pages 45-52)
- Growth and Aging of the Mecklenburg County Population (pages 52-54)

The applicant discusses the above factors beginning on page 39 of the application, as summarized below.

2017 SMFP Acute Care Need Methodology

In Section C.4, pages 39-45, the applicant discusses the need for additional acute care beds in the 2017 SMFP and how a need is triggered by the utilization of the total number of existing and approved acute care beds within a given service area. The applicant states that the FFY 2015 utilization data from Truven Health Analytics is used to project the acute care bed need for FFY 2019, using the Mecklenburg County growth rate multiplier of 1.0039, based on total Mecklenburg County annual percentage of change in days of care, as shown in the table below (reproduced from information on page 41).

Mecklenburg County Acute Care Bed Utilization						
	2011 Days	**2012 Days**	**2013 Days**	**2014 Days**	**2015 Days**	**Average Annual Change**
Mecklenburg	554,968	544,924	551,635	534,997	562,638	
Annual Change	--	-1.8%	1.2%	-3.0%	5.2%	0.39%

Source: 2017 SMFP

The applicant states on pages 41-42 that the projected 2019 acute care days are obtained by multiplying FFY 2015 acute care days for each facility multiplied by the County Growth Rate Multiplier compounded over four years. The ADC is then obtained by dividing the total number of patient days at a facility by 365. The projected 2019 acute care days and ADC for the applicant's facilities are listed in the table below.

Mecklenburg County Acute Care Bed Utilization CMC/CHS Related Entities – ADC Calculations				
Facility	**2015 Days**	**Growth Rate Multiplier**	**Projected 2019 Days**	**2019 Projected ADC**
CMC	57,157	1.0039	58,054	159
CHS University	22,793	1.0039	23,151	63
CMC/CMC-Mercy	297,167	1.0039	301,830	827
CHS Total	**377,117**		**383,035**	**1,049**

Source: 2017 SMFP

Per the methodology in the 2017 SMFP, the ADC is then multiplied by the appropriate target occupancy factor (1.50 for ADC < 100, 1.40 for ADC 100 to 200, and 1.28 for ADC > 400) to

determine the projected bed need. Subtracting the existing and approved beds from the projected need results in the need determination for an additional 60 beds in Mecklenburg County, as shown in the table below (produced with information from pages 42-43).

Mecklenburg County Acute Care Bed Utilization CMC/CHS Related Entities – Projected 2019 Bed Deficit/(Surplus)					
Facility	**2019 Projected ADC**	**ADC Target Occupancy Factor**	**Projected 2019 Beds Needed**	**Current Bed Inventory**	**Projected 2019 Deficit/(Surplus)**
CMC	159	1.40	223	206	17
CHS University	63	1.50	95	100	(5)
CMC/CMC-Mercy	827	1.28	1,058	1,010	48
CHS Total	**1,049**		**1,376**	**1,316**	**60**

Source: 2017 SMFP

On pages 43-44, the applicant states that a need determination for acute care beds is triggered when there is a projected deficit of 20 or more beds. The applicant states that the deficit of beds at CMC, along with the deficit at CHS Pineville, is entirely responsible for the need determination for 60 acute care beds in Mecklenburg County. Per the 2017 SMFP, the only two hospitals in Mecklenburg County with deficits of acute care beds are CHS Pineville and CMC/CMC-Mercy. The applicant also states that Table 5A in the Proposed 2018 SMFP notes a deficit of 96 beds at its facilities in Mecklenburg County – 36 more than identified in the 2017 SMFP – and states that the deficit may end up higher due to an information systems change that may have resulted in underreporting of patient days to Truven.

Need for Additional Capacity at CMC

In Section C, page 45, the applicant states that it is the only provider of quaternary care in Mecklenburg County and the surrounding region. The applicant states:

> *"CHS has developed strategies over many years to manage utilization at CMC. CHS shifted resources and patients from CMC and CMC-Mercy to CHS Pineville… More recently, CHS has sought to decompress capacity at CMC by adding beds at, and shifting patients to, CMC-Mercy and CHS University. This shift has been produced by a nexus of tactics including engagement with referring and attending physicians, direct transfers from CMC and CHS SouthPark's emergency departments to CMC-Mercy based on clinical protocols, and an emphasis within CHS's Physician Connection Line service on guiding appropriate patients to CMC-Mercy. Similarly, the recent development of Long Term Acute Care Hospital (LTCH) services at Carolinas ContinueCare Hospital at University (Project ID # F-10217-13) has allowed for the shift of appropriate patients from CMC to a LTCH setting. … Despite these initiatives, CMC's acute care bed utilization has grown 2.8 percent annually since CY 2013, and the facility has operated at close to 90 percent occupancy on average for the past two years…"*

On page 46, the applicant provides CY 2013 through CY 2016 acute care bed utilization at CMC, as shown in the table below.

CMC Acute Care Bed Utilization CY 2013 - 2016					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
Days	243,813	250,881	265,408	264,900	2.8%
Beds	814	814	814	814	0.0%
ADC	668	687	727	726	2.8%
Occupancy	**82.1%**	**84.4%**	**89.3%**	**89.2%**	**2.8%**

Source: CHS internal data

The applicant states on page 46 that the target occupancy rate, based on the Criteria and Standards for Acute Care Beds, is 75.2 percent based on an ADC of 200 or greater, and that it has exceeded that target occupancy rate since CY 2013. The applicant further states that it has the highest current bed deficit in the county.

On pages 46-47, the applicant states that the bed need in the 2017 SMFP was generated by applying the County Growth Rate Multiplier to FFY 2015 acute care days in order to project the projected FFY 2019 acute care days. The applicant states that the 2017 SMFP projected 383,035 acute care days for FFY 2019 based on FFY 2015 acute care days. The applicant further states that actual CY 2016 acute care days at CHS facilities totaled 387,441, and states that CHS collectively increased acute care days more in one year than the SMFP projected those days would increase over four years. The applicant states that even if it had the 45 beds it proposes to add in this application during CYs 2013-2016, it still would have exceeded the target occupancy rate of 75.4 percent during all four years.

On pages 47-48, the applicant states:

> *"CMC's occupancy rate of 89 percent is based on its average midnight census over the course of a full year. During the year, there are periods of higher census related to seasonal patterns for inpatient admissions. In addition, inpatient volume is higher Monday to Friday than on weekends. As shown in the chart* [on page 48] *demonstrating CMC's CY 2016 daily midnight census, there were many periods over the course of the year when CMC's occupancy rate was higher than 89 percent.*
>
> *The chart* [on page 48] *shows the variation in midnight census that contributes to the capacity constraints experienced at 89 percent average occupancy. The chart doesn't show additional fluctuations within each day as newly admitted patients and patients waiting to be discharged overlap resulting in an even higher census than is present in the facility at midnight."* (emphasis in original)

The applicant states on page 50 that because it is a quaternary academic medical center, trauma center, and a provider of specialty care for different diseases, the capacity constraints create challenges due to the many specialty bed units that exist. The applicant states that the specialty bed units have specially trained clinical staff, contain specific equipment relating to the needs of the specialty unit, allow physicians to spend time managing patient care rather than traveling back and forth between units, and allow patients and families to share common experiences. The applicant further states that additional challenges exist, such as the inability to place ICU patients in a general M/S bed or the inability to place adults in pediatric beds or neonatal ICU beds.

The applicant states on page 51 that due to a lack of available capacity, it often houses patients overnight in the emergency department while waiting for an available bed, which greatly reduces the efficiency and capacity of the emergency department. The applicant states that during CY 2016, Levine's Children Hospital (CMC's inpatient pediatric hospital) had 176 hours of diversion status, during which they were unable to accept patients, and patients had to be diverted to other facilities, and the remainder of CMC had 108 hours of diversion status in CY 2016. The applicant further states that it expects its utilization to continue to grow in future years due to many of the same factors responsible for its historical growth, such as increases in population, its status as the only quaternary care facility in Mecklenburg County, and the projected growth of medical staff due to planned recruitment of new physicians.

Growth and Aging of Mecklenburg County Population

On page 52, the applicant states that data from the North Carolina Office of State Budget and Management (NC OSBM) shows that Mecklenburg County is the fastest growing county in NC based on numerical population growth and the second fastest growing county in NC based on percentage growth. The applicant provides supporting data from NC OSBM in Exhibit C.4-2. The applicant states on page 54 that along with the overall population growth, Mecklenburg County's population over the age of 65 will continue growing, and provides data from NC OSBM in Exhibit C.4-3 to demonstrate that Mecklenburg County will have the second highest number of residents over 65 out of all counties in NC. The applicant also states that growth in the Mecklenburg County population over age 65 will grow 21.4 percent between 2016 and 2020.

Projected Utilization

In Section Q, the applicant provides a table showing a summary of its Form C utilization, both historical and projected, as shown below.

CMC M/S Beds – Historical and Projected Utilization – FY 2014 – 2021								
	Prior	**Prior**	**Last**	**Interim**	**Interim**	**First CY**	**Second CY**	**Third CY**
	CY 2014	**CY 2015**	**CY 2016**	**CY 2017**	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Adult M/S Beds								
# Beds	321	321	321	321	321	350	350	350
# Discharges	22,516	22,548	23,430	22,371	21,229	21,683	21,164	21,752
# Patient Days	103,818	109,814	104,915	100,173	95,059	97,093	94,770	97,400
Pediatric M/S Beds								
# Beds	80	80	80	80	80	96	96	96
# Discharges	5,824	6,061	5,851	5,865	5,879	5,893	5,907	5,921
# Patient Days	22,268	24,434	24,509	24,567	24,625	24,684	24,742	24,801

The applicant's fiscal years are the same as calendar years, and it projects that the first three operating years of the project will be CYs 2019-2021. The applicant provides its assumptions and methodology for projecting CMC, CHS Pineville (with its concurrently filed application, Project I.D. #F-11361-17), CMC-Mercy, and CHS University acute care bed utilization in Section Q, Form C – Assumptions and Methodology, pages 1-29.

While CMC and CMC-Mercy are licensed together on a single hospital license, the applicant treats CMC and CMC-Mercy as separate entities for the purposes of projecting utilization.

CMC

1. Historical Acute Care Utilization

In Section Q, pages 2-3, the applicant states that its adult and pediatric M/S beds in particular have historically operated at higher than target occupancy rates. The applicant states that it has sought to lower utilization by adding beds at and shifting patients to CMC-Mercy, using several different strategies to do so, such as engaging with referring and attending physicians and emphasizing within its Physician Connection Line service the guidance of appropriate patients to CMC-Mercy. The applicant states that despite these attempts, utilization has grown at close to three percent annually since CY 2013, and the beds have operated at or above 90 percent during the last two calendar years. The applicant states that CMC can only manage its high occupancy rates by using temporary bed overflow status, which allows it to temporarily increase its licensed bed capacity when utilization is highest.

In Section Q, page 3, the applicant provides its historical total acute care bed utilization and adult M/S bed utilization as shown in the tables below.

CMC – Historical Acute Care Bed Utilization (Total)					
	CY 2013	CY 2014	CY 2015	CY 2016	CAGR
Days	243,813	250,881	265,408	264,900	2.8%
ADC	668	687	727	726	2.8%
Beds	814	814	814	814	--
Occupancy	82.1%	84.4%	89.3%	89.2%	2.8%

Source: CHS internal data

CMC – Historical Acute Care Bed Utilization (M/S)					
	CY 2013	CY 2014	CY 2015	CY 2016	CAGR
Days	96,836	103,818	109,814	104,915	2.7%
ADC	265	284	301	287	2.7%
Beds	321	321	321	321	--
Occupancy	82.6%	88.6%	93.7%	89.5%	2.7%

Source: CHS internal data

In Section Q, page 3, the applicant states that it begins its projections by quantifying the impact of historical shifts in patients from CMC to CMC-Mercy and CCCHU by adding days it believes were shifted to other facilities back to CMC to determine historical growth rate without shifts to other facilities.

In Section Q, pages 3-5, the applicant states that growth at CMC-Mercy has been in the double digits during CYs 2015 and 2016. The applicant calculates what it believes the historical growth rate of CMC-Mercy would have been prior to patient shift by using the projections it made in Project I.D. #F-10215-13 (add 34 beds to CMC-Mercy). The applicant then adds any excess patient days above the projected growth rate of CMC-Mercy back to CMC.

The applicant also states that as part of Project I.D. #F-10217-13, to develop CCCHU, it projected a shift in 125 patient days from CMC-Mercy to CCCHU during CY 2016, and that this was accurate based on its experience. The applicant adds those 125 days back to CMC's utilization for purposes of accurately calculating historic growth generated by CMC.
In Section Q, page 5, the applicant states that CMC has shifted utilization to CCCHU in addition to shifts by CMC-Mercy. The applicant estimates the number of patient days shifted from CMC to CCCHU and adds those patient days back to the actual patient days at CMC. The applicant states that from its experience, which is consistent with projections it made as part of Project I.D. #F-10217-13, it shifted 1,208 patient days from CMC to CCCHU in CY 2016.

The applicant's calculations, reverting historic utilization shifts in patient days from CMC to CMC-Mercy, CMC to CCCHU, and CMC-Mercy to CCCHU, are shown in the table below.

CMC – Calculation of Historical Total Acute Care Bed Adjusted Growth Rate					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
CMC-Mercy Actual Days*	--	30,690	34,789	38,935	--
CMC-Mercy F-10215-13 Projected 1.7% Increase	--	30,690	31,212	31,742	--
Difference	--	0	3,577	7,193	--
Patient Days Shifted from CMC-Mercy to CCCHU	--	0	0	125	--
Patient Days shifted from CMC to CCCHU	--	0	0	1,208	--
CMC Actual Total Patient Days*	243,813	250,881	265,408	264,900	2.8%
Adjusted Days	**243,813**	**250,881**	**268,985**	**273,426**	**3.9%**

***Source:** CHS Internal Data

In Section Q, pages 4-5, the applicant states that 92.5 percent of patient days shifted to CMC-Mercy are M/S bed patient days. The applicant further states that 91.5 percent of patient days shifted to CCCHU are M/S bed patient days. The applicant's calculations for M/S patient days are shown in the table below.

CMC – Calculation of Historical M/S Bed Adjusted Growth Rate					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
CMC-Mercy Actual Days*	--	30,690	34,789	38,935	--
CMC-Mercy F-10215-13 Projected 1.7% Increase	--	30,690	31,212	31,742	--
Difference	--	0	3,577	7,193	--
Patient Days Shifted from CMC-Mercy to CCCHU	--	0	0	125	--
Total Patient Days Shifted	--	0	3,577	7,318	--
M/S Patient Days (92.5% of Total Days)	--	0	3,309	6,769	--
Patient Days shifted from CMC to CCCHU	--	0	0	1,208	--
M/S Patient Days (91.5% of Total Days)	--	0	0	1,105	--
CMC Actual M/S Patient Days*	96,836	103,818	109,814	104,915	2.7%
Adjusted M/S Days	**96,836**	**103,818**	**113,123**	**112,789**	**5.2%**

***Source:** CHS Internal Data

In Section Q, pages 5-6, the applicant states that while utilization of pediatric M/S beds has not been impacted by shifts to other providers, utilization has been restricted by the high occupancy at which the pediatric M/S beds operate. The applicant provides CMC's pediatric M/S bed historical utilization, as shown in the table below.

CMC – Historical Pediatric M/S Bed Utilization					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
Days	24,164	22,268	24,434	24,509	0.5%
ADC	66	61	67	67	0.5%
Beds	80	80	80	80	--
Occupancy	82.8%	76.3%	83.7%	83.9%	0.5%

Source: CHS internal data

2. Project Acute Care Days Prior to Shifts

In Section Q, pages 6-7, the applicant states that it projects future growth will happen at one-half the historic CAGR (after adjusted for shifts in patient days). The applicant states that total acute care patient days will grow at a rate of 1.95 percent (one half of 3.89 percent), adult M/S patient days will grow at a rate of 2.61 percent (one half of 5.21 percent), and pediatric M/S patient days will grow at a rate of 0.24 percent (one half of 0.47 percent).

The applicant states that these projections are reasonable because they reflect the growth that CMC would have generated if it hadn't been attempting to shift utilization to other facilities. The applicant also states that it believes its future growth will parallel that of its historic growth, because of the projected growth of Mecklenburg County (discussed more in-depth above) as well as its planned recruitment of more physicians. The applicant further states that it is attempting to expand its pediatric bone marrow therapy transplant program, which will involve the recruitment of even more physicians as well as increase utilization of its pediatric M/S beds.

The applicant then projects CMC acute care bed patient days for all three categories through CY 2021, using the growth rates discussed above, as demonstrated in the table below.

CMC – Projected Acute Care Bed Patient Days					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Acute Care Days	270,059	275,318	280,680	286,146	291,718
Growth Rate	1.95%	1.95%	1.95%	1.95%	1.95%
Adult M/S Days	107,651	110,457	113,337	116,293	119,325
Growth Rate	2.61%	2.61%	2.61%	2.61%	2.61%
Pediatric M/S Days	24,567	24,625	24,684	24,742	24,801
Growth Rate	0.24%	0.24%	0.24%	0.24%	0.24%

3. Shift of Patient Days from CMC to CMC-Mercy

In Section Q, pages 7-8, the applicant discusses the basis for its projected shift in patient days from CMC to CMC-Mercy. The applicant states that it projected as part of Project I.D. #F-10215-13 that 14,043 patients would shift from CMC to CMC-Mercy during the third operating year of the project and 19,014 patients would shift from CMC to CMC-Mercy during the fourth operating year of the project. The applicant states that it still believes these projections are reasonable. The applicant states that patient days had already shifted to CMC-Mercy from CMC during CY 2016, and it assumes that the patient days that will shift from CMC to CMC-Mercy during CYs 2017 and 2018 will be as historically projected minus the

patient days which have already shifted in CY 2016. The applicant then projects that after the end of the projections from Project I.D. #F-10215-13, during the first three calendar years following completion of this project, the number of patient days that will shift from CMC to CMC-Mercy will increase at a rate of 1.95 percent annually, in order to be consistent with its previous projections. The applicant further states that 92.5 percent of the total patient days to be shifted from CMC to CMC-Mercy will be as a result of adult M/S bed utilization.

The applicant provides the projected number of patient days to be shifted from CMC to CMC-Mercy during the interim and first three calendar years following project completion as shown in the table below.

CMC – Projected Shift in Patient Days to CMC-Mercy					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Previously Approved Shifts – F-10215-13	-14,043	-19,014	--	--	--
Days Already Shifted (CY 2016 per Step 1)	7,318	7,318	--	--	--
Remaining Total Days to be Shifted	-6,725	-11,696	-11,924	-12,156	-12,393
Growth Rate	--	--	1.95%	1.95%	1.95%
Adult M/S Bed Patient Days (92.5% of total)	-6,221	-10,819	-11,030	-11,244	-11,463

In Section Q, pages 8-9, the applicant states that as part of Project I.D. #F-11268-16 (relocate one OR from CMC to CMC-Mercy/expand and renovate surgical services space at CMC-Mercy), it projected a shift in general surgery days from CMC to CMC-Mercy totaling 2,913 every year. The applicant states that of those patient days shifted, 88.9 are attributable to utilization of adult M/S beds. The applicant provides the projections for patient days to be shifted as part of Project I.D. #F-11268-16 as shown in the table below, which also includes the previous projections to demonstrate the total number of patient days projected to switch from CMC to CMC-Mercy during the interim and first three calendar years following project completion.

CMC – Projected Shift in Patient Days to CMC-Mercy					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Previously Approved Shifts – F-10215-13	-14,043	-19,014	--	--	--
Days Already Shifted (CY 2016 per Step 1)	7,318	7,318	--	--	--
Remaining Total Days to be Shifted	-6,725	-11,696	-11,924	-12,156	-12,393
Growth Rate	--	--	1.95%	1.95%	1.95%
Adult M/S Bed Patient Days (92.5% of total)	-6,221	-10,819	-11,030	-11,244	-11,463
Previously Approved Shifts – F-10268-16	--	-2,913	-2,913	-2,913	-2,913
Adult M/S Bed Patient Days (88.9% of total)	--	-2,589	-2,589	-2,589	-2,589
Total Patient Days to be Shifted	**-6,725**	**-14,609**	**-14,837**	**-15,069**	**-15,306**
M/S Patient Days to be Shifted	**-6,221**	**-13,408**	**-13,619**	**-13,833**	**-14,502**

4. Shift of Patient Days from CMC to CCCHU

In Section Q, page 9, the applicant discusses the basis for its projected shift in patient days from CMC to CCCHU. The applicant states that it projected as part of Project I.D. #F-10217-13 that 1,927 patients would shift from CMC to CCCHU during the second operating year of the project and 2,056 patients would shift from CMC to CCCHU during the third operating

year of the project. The applicant states that it still believes these projections are reasonable. The applicant states that patient days had already shifted to CCCHU from CMC during CY 2016, and it assumes that the patient days that will shift from CMC to CCCHU during CYs 2017 and 2018 will be as historically projected minus the patient days which have already shifted in CY 2016. The applicant then projects that after the end of the projections from Project I.D. #F-10217-13, during the first three calendar years following completion of this project, the number of patient days that will shift from CMC to CCCHU will stay the same as in CY 2018, because CCCHU was projected to be near capacity at the end of the third project year, and any further growth will be minimal. The applicant further states that 91.5 percent of the total patient days to be shifted from CMC to CCCHU will be as a result of adult M/S bed utilization. The projections are illustrated in the table below.

CMC – Projected Shift in Patient Days to CCCHU					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Previously Approved Shifts – F-10217-13	-1,927	-2,056	--	--	--
Days Already Shifted (CY 2016 per Step 1)	1,208	1,208	--	--	--
Remaining Total Days to be Shifted	-720	-848	-848	-848	-848
Adult M/S Bed Patient Days (91.5% of total)	-658	-776	-776	-776	-776

5. Shift of Patient Days from CMC to CHS University

In Section Q, page 10, the applicant discusses the basis for its projected shift in patient days from CMC to CHS University. The applicant states that it projected as part of Project I.D. #F-10221-13 (add six beds) that patients would shift from CMC to CHS University, but that prior to the submission of this application, appropriate physician leadership was not in place to effect the shift. The applicant states that it now has the necessary physician leadership in place and believes the projections it made in Project I.D. #F-10221-13 are reasonable and will begin during CY 2017. The applicant then projects that after the end of the projections from Project I.D. #F-10221-13, during the third calendar year following completion of this project, the number of patient days that will shift from CMC to CHS University will increase at a rate of 1.95 percent annually, in order to be consistent with its previous projections. The applicant further states that 92.5 percent of the total patient days to be shifted from CMC to CHS University will be as a result of adult M/S bed utilization. The projections are illustrated in the table below.

CMC – Projected Shift in Patient Days to CHS University					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Previously Approved Shifts – F-10221-13	-647	-1,313	-2,000	-2,709	-2,761
Growth Rate	--	--	--	--	1.95%
Adult M/S Bed Patient Days (92.5% of total)	-598	-1,215	-1,850	-2,505	-2,554

6. Shift of Patient Days from CMC to CHS Fort Mill

In Section Q, pages 10-11, the applicant states that CHCS was approved to develop CHS Fort Mill, a new acute care hospital in South Carolina, in 2011; however, litigation is ongoing and there is uncertainty around timing for any end to the litigation as well as for any development

of CHS Fort Mill. The applicant states that it accounted for a shift in patients to a future CHS Fort Mill in previously approved acute care bed applications (Project I.D. #s F-10215-13 and F-10221-13), and it projects a shift in patients to CHS Fort Mill as part of this application as well. The applicant states that the patient shift is consistent with the methodology that was approved by the South Carolina Department of Health and Environmental Control as well as consistent with previously approved acute care bed applications. The applicant further states that it did not project separately a shift in the number of M/S patient days, but it did project separately the shift in number of obstetrics patient days, so it assumes that the difference between the projected obstetrics patient days shift and the total patient days shift represents the M/S and ICU patient days shift. In Section Q, page 11, the applicant states that in CY 2016, 91.8 percent of the combined patient days for both M/S beds and ICU beds were M/S patient days, so it applies that information to its calculations in order to determine the number of M/S patient days shifting from CMC to CHS Fort Mill. The applicant provides its projections as shown in the table below.

CMC – Projected Shift in Patient Days to CHS Fort Mill		
	CY 2020	**CY 2021**
Total Acute Care Days	-5,257	-5,403
Obstetrics Days (projected in SC application)	-454	-454
Assumed Adult M/S and ICU Days	-4,802	-4,948
Adult M/S Bed Patient Days (91.8% of total)	-4,408	-4,542

7. Projected Acute Care Patient Days

In Section Q, page 12, the applicant provides CMC's projected utilization for both total acute care bed patient days and adult M/S bed patient days. The applicant states that this step is the result of combining steps 2-6. The applicant provides the projected utilization for CMC during the interim and first three calendar years following project completion as shown in the tables below.

CMC – Projected Acute Care Bed Utilization (Total)					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Acute Care Days (Step 2)	270,059	275,318	280,680	286,146	291,718
M/S Shift to CMC-Mercy (Step 3)	-6,725	-14,609	-14,837	-15,069	-15,306
Shift to CCCHU (Step 4)	-720	-848	-848	-848	-848
Shift to CHS University (Step 5)	-647	-1,313	-2,000	-2,709	-2,761
Shift to CHS Fort Mill (Step 6)	0	0	0	-5,257	-5,403
Final Projected Patient Days	261,968	258,547	262,994	262,263	267,400
ADC	718	708	721	719	733
Beds	814	859	859	859	859
Occupancy	88.2%	82.5%	83.9%	83.6%	85.3%

CMC – Projected Acute Care Bed Utilization (Adult M/S)					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Acute Care Days (Step 2)	107,651	110,457	113,337	116,293	119,325
M/S Shift to CMC-Mercy (Step 3)	-6,221	-13,408	-13,619	-13,833	-14,502
Shift to CCCHU (Step 4)	-658	-776	-776	-776	-776
Shift to CHS University (Step 5)	-598	-1,215	-1,850	-2,505	-2,554
Shift to CHS Fort Mill (Step 6)	0	0	0	-4,408	-4,542
Final Projected Patient Days	100,173	95,059	97,093	94,770	97,400
ADC	274	260	266	260	267
Beds	321	350	350	350	350
Occupancy	85.5%	74.4%	76.0%	74.2%	76.2%

In Section Q, pages 12-13, the applicant states that CMC's pediatric M/S beds are not affected by the shifts above, and provides the projected pediatric M/S utilization during the interim and first three calendar years following project completion, based on its projected growth rate of 0.24 percent, as shown in the table below.

CMC – Projected Pediatric M/S Patient Days					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Pediatric M/S Days	24,567	24,625	24,684	24,742	24,801
ADC	67	67	68	68	68
Beds	80	96	96	96	96
Occupancy	84.1%	70.3%	70.4%	70.6%	70.8%

8. Projected Acute Care Discharges

In Section Q, page 13, the applicant provides the CMC total acute care bed, adult M/S bed, and pediatric M/S bed projected discharges during the interim and first three calendar years following project completion. The applicant states that it used CMC's CY 2016 experience to project the appropriate ALOS for each of the categories shown in the tables below.

CMC – Projected Total Acute Care Discharges					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Acute Care Days	261,968	258,547	262,994	262,263	267,400
ALOS	5.80	5.80	5.80	5.80	5.80
Total Discharges	45,161	44,572	45,338	45,212	46,098

CMC – Projected Adult M/S Discharges					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Adult M/S Days	100,173	95,059	97,093	94,770	97,400
ALOS	4.48	4.48	4.48	4.48	4.48
Total Discharges	22,371	21,229	21,683	21,164	21,752

CMC – Projected Pediatric M/S Discharges					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Pediatric M/S Days	24,567	24,625	24,684	24,742	24,801
ALOS	4.19	4.19	4.19	4.19	4.19
Total Discharges	5,865	5,879	5,893	5,907	5,921

9. Project Year Utilization

In Section Q, pages 13-14, the applicant states that Project Year (PY) 1 will begin on April 1, 2018. Thus, CMC's first three project years are as follows:

PY 1 = April 1, 2018 – March 31, 2019
PY 2 = April 1, 2019 – March 31, 2020
PY 3 = April 1, 2020 – March 31, 2021

The applicant states that it calculated its PY 3 utilization in order to be responsive to the Criteria and Standards for Acute Care Beds found in 10A NCAC 14C .3803. The applicant states that because it provided CMC's projected utilization in calendar years, it converted CMC's data into PY 3 format by using the following formula:

PY 3 = CY 2020 X (9 months / 12 months) + CY 2021 X (3 months / 12 months)

The applicant projects the following for CMC's PY 3 utilization:

CMC PY 3 Utilization	
Total Acute Care Days	263,547
ADC	722
Total Beds	859
Occupancy	84.1%

CHS Pineville

CHS Pineville filed a concurrent application, Project I.D. #F-11361-17, to develop 15 additional acute care beds. The applicant states that CHS Pineville currently has 206 acute care beds. If Project I.D. #F-11361-17 is approved, CHS Pineville will have a total of 221 acute care beds. Please see the section of these findings relating to Project I.D. #F-11361-17 for a more in-depth discussion of the assumptions and methodology used for CHS Pineville's projected utilization (pages 17-20).

1. Examine Historical Acute Care Utilization

In Section Q, pages 15-16, the applicant states that CHS Pineville currently has a total of 206 acute care beds. The applicant provides historical utilization for both its overall acute care bed utilization as well as its M/S bed utilization as shown in the tables below.

CHS Pineville – Historical Acute Care Bed Utilization (Total)					
	CY 2013	CY 2014	CY 2015	CY 2016	CAGR
Days	51,572	55,981	57,815	61,095	5.8%
ADC	141	153	158	167	5.8%
Beds	206	206	206	206	--
Occupancy	68.6%	74.5%	76.9%	81.3%	5.8%

Source: CHS internal data

CHS Pineville – Historical Acute Care Bed Utilization (M/S)					
	CY 2013	CY 2014	CY 2015	CY 2016	CAGR
Days	35,462	41,212	42,453	46,327	9.3%
ADC	97	113	116	127	9.3%
Beds	132	132	132	132	--
Occupancy	73.6%	85.5%	88.1%	96.2%	9.3%

Source: CHS internal data

The applicant states in Section Q, page 16, that because of capacity constraints due to the M/S beds operating at or above 96 percent, its future utilization growth will be more limited until it can increase capacity. The applicant states that because of the high utilization, it projects that the next year's utilization will increase at one-fourth the historical CAGR (1.45 percent for total acute care days and 2.33 percent for M/S days) and then in future years, as capacity becomes available, utilization will increase at one-half the historical CAGR (2.91 percent for total acute care days and 4.66 percent for M/S days).

2. Projected Acute Care Patient Days (Prior to Shifts)

In Section Q, pages 16-17, the applicant provides the projected utilization through CY 2021 for both total acute care days and for M/S days, as shown in the table below.

CHS Pineville – Projected Acute Care Bed Utilization Total Days and M/S Days					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Total Days	61,983	63,783	65,637	67,544	69,506
Growth Rate	1.45%	2.91%	2.91%	2.91%	2.91%
M/S Days	47,406	49,615	51,926	54,345	56,877
Growth Rate	2.33%	4.66%	4.66%	4.66%	4.66%

3. Shift of Patient Days from CHS Pineville to CHS Fort Mill

In Section Q, pages 17-18, the applicant discusses the basis for its projected shift in patient days from CHS Pineville to CHS Fort Mill. Please see the section of these findings relating to CHS Pineville, Project I.D. #F-11361-17, for a more in-depth discussion of its assumptions and methodologies (pages 18-19). The applicant provides the projected number of patient days to be shifted from CHS Pineville to CHS Fort Mill during the interim and first three calendar years following project completion as shown in the table below.

Shift in Patient Days from CHS Pineville to CHS Fort Mill		
	CY 2020	**CY 2021**
Total Acute Care Days	-7,276	-7,482
Projected Obstetrics Days	-1,639	-1,664
Assumed M/S and ICU Days	-5,637	-5,818
CY 2016 % M/S Days	87.1%	87.1%
Projected M/S Days	**-4,909**	**-5,067**

4. Projected Acute Care Patient Days

In Section Q, page 18, the applicant states that it subtracted the volume being shifted to CHS Fort Mill from its projected utilization of both total acute care bed days and M/S bed days to obtain its final projected patient days, as shown in the tables below.

CHS Pineville – Projected Acute Care Bed Utilization (Total)					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Days	61,983	63,783	65,637	67,544	69,506
Patient Shift to CHS Fort Mill	0	0	0	-7,276	-7,482
Final Projected Days	61,983	63,783	65,637	60,267	62,024
ADC	170	175	180	165	170
Beds	206	221	221	221	221
Occupancy	82.4%	79.1%	81.4%	74.7%	76.9%

CHS Pineville – Projected Acute Care Bed Utilization (M/S)					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Days	47,406	49,615	51,926	54,345	56,877
Patient Shift to CHS Fort Mill	0	0	0	-4,909	-5,067
Final Projected Days	47,406	49,615	51,926	49,436	51,811
ADC	130	136	142	135	142
Beds	132	147	147	147	147
Occupancy	98.4%	92.5%	96.8%	92.1%	96.6%

5. Projected Acute Care Discharges

In Section Q, pages 18-19, the applicant states it projected its total discharges by assuming that its ALOS would be consistent with its CY 2016 ALOS for total acute care beds and M/S beds, which was 3.96 and 3.76, respectively. The applicant provides its calculations to project discharges as shown in the tables below.

CHS Pineville – Projected Discharges (Total)					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Days	61,983	63,783	65,637	60,267	62,024
ALOS	3.96	3.96	3.96	3.96	3.96
Discharges	15,659	16,114	16,582	15,226	15,670

CHS Pineville – Projected Discharges (M/S)					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
M/S Days	47,406	49,615	51,926	49,436	51,811
ALOS	3.76	3.76	3.76	3.76	3.76
Discharges	12,607	13,194	13,809	13,147	13,778

6. Project Year Utilization

In Section Q, page 19, the applicant states that Project Year (PY) 1 will begin on April 1, 2018. Thus, the applicant's first three project years are as follows:

PY 1 = April 1, 2018 – March 31, 2019
PY 2 = April 1, 2019 – March 31, 2020
PY 3 = April 1, 2020 – March 31, 2021

The applicant states that it calculated its PY 3 utilization in order to be responsive to the Criteria and Standards for Acute Care Beds found in 10A NCAC 14C .3803. The applicant states that because it provided its projected utilization in calendar years, it converted its data into PY 3 format by using the following formula:

PY 3 = CY 2020 X (9 months / 12 months) + CY 2021 X (3 months / 12 months)

The applicant projects the following for its PY 3 utilization:

CHS Pineville PY 3 Utilization	
Total Acute Care Days	60,707
ADC	166
Total Beds	221
Occupancy	75.3%

CMC-Mercy

The applicant provides projected utilization for CMC-Mercy as part of this application to be responsive to the Criteria and Standards for Acute Care Beds found in 10A NCAC 14C .3803. While CMC and CMC-Mercy are licensed together on a single hospital license, the applicant treats CMC and CMC-Mercy as separate entities for the purposes of projecting utilization. The applicant states in Section Q, page 20, that projections at CMC-Mercy are only for total acute care days since individual service lines at CMC-Mercy are not affected by either the CMC or the CHS Pineville application.

1. Historical Acute Care Utilization

In Section Q, page 20, the applicant provides CMC-Mercy's total acute care bed utilization for CYs 2013-2016, as shown in the table below.

CMC-Mercy – Historical Acute Care Bed Utilization					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
Days	30,502	30,690	34,789	38,935	8.5%
ADC	84	84	95	107	8.5%
Beds	162	162	162	196	--
Occupancy	51.6%	51.9%	58.8%	54.4%	1.8%

Source: CHS internal data

The applicant states that CMC-Mercy's total acute care days have increased as a result of strategies to shift utilization from CMC to CMC-Mercy that began in CY 2015. The applicant also states that as part of Project I.D. #F-10215-13, CMC-Mercy added 34 acute care beds.

In Section Q, page 21, the applicant projects CMC-Mercy's total acute care bed utilization minus the shifts in patients from CMC and including patient days that were shifted to CCCHU to obtain what it states is the baseline utilization for CMC-Mercy, as shown in the table below.

CMC-Mercy – Calculation of Historical Total Acute Care Bed Baseline Growth Rate					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
CMC-Mercy Actual Days*	30,502	30,690	34,789	38,935	8.5%
Patient Days Shifted from CMC to CMC-Mercy	0	0	-3,577	-7,318	--
Patient Days Shifted from CMC-Mercy to CCCHU	0	0	0	125	--
Baseline Days	**30,502**	**30,690**	**31,212**	**31,742**	**1.3%**

***Source:** CHS Internal Data

The applicant states in Section Q, page 21, that in order to be conservative, it will project future growth at a rate of one half of the CAGR for the baseline growth rate (0.67 percent).

2. Project Acute Care Patient Days Prior to Shift

In Section Q, page 21, the applicant projects the growth of CMC-Mercy total acute care bed days, using a projected growth rate of 0.67 percent, as shown in the table below.

CMC-Mercy – Projected Acute Care Bed Utilization					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Patient Days	39,195	39,458	39,722	39,987	40,255
Growth Rate	0.67%	0.67%	0.67%	0.67%	0.67%

3. Shift of Patient Days from CMC to CMC-Mercy

In Section Q, pages 7-8, the applicant describes the projections it used as part of Project I.D. #F-10215-13 to project the future shift in patient days from CMC to CMC-Mercy. It states that it continues to believe the projections are reasonable, and so it includes those projections in its calculations in this application. The applicant also states that it projected any additional increases in utilization beyond the end of the projections for Project I.D. #F-10215-13 by using the same 1.95 percent growth rate it projected CMC's baseline patient days would grow.

In Section Q, page 21, the applicant provides its projections for the shift in patient days from CMC to CMC-Mercy that it discussed in Section Q, pages 7-8, which are shown in the table below.

Projected Shift of Patient Days from CMC to CMC-Mercy					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
General Medicine Days to Shift	6,725	11,696	11,924	12,156	12,393
General Surgery Days to Shift	0	2,913	2,913	2,913	2,913
Total Days to Shift	6,725	14,609	14,837	15,069	15,306

4. Shift of Patient Days from CMC-Mercy to CCCHU

In Section Q, page 22, the applicant states that as part of the application for Project I.D. #F-10217-13, to develop CCCHU, CMC-Mercy projected a shift in patient days from CMC-Mercy to CCCHU in the second and third project years. The applicant provides those projections and reduces them by the number of patient days that have already shifted. The applicant projects that beyond the scope of Project I.D. #F-10217-13, patient days to be shifted will remain constant because CCCHU was projected to reach target occupancy during its third project year and will have limited ability to grow. The applicant's projections are provided in the table below.

Projected Shift of Patient Days from CMC-Mercy to CCCHU					
	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021
Previously Projected Days	-200	-213	--	--	--
Days Already Shifted	-125	-125	--	--	--
Days Remaining to be Shifted	-75	-88	-88	-88	-88

5. Shift of Patient Days from CMC-Mercy to CHS Fort Mill

In Section Q, pages 10-11, the applicant states that CHCS was approved to develop CHS Fort Mill, a new acute care hospital in South Carolina, in 2011; however, litigation is ongoing and there is uncertainty around timing for any end to the litigation as well as for any development of CHS Fort Mill. In Section Q, page 22, the applicant states that it accounted for a shift in patients from CMC-Mercy to a future CHS Fort Mill in previously approved acute care bed applications (Project I.D. #s F-10215-13 and F-10221-13), and it projects a shift in patients from CMC-Mercy to CHS Fort Mill as part of this application as well. The applicant states that the patient shift is consistent with the methodology that was approved by the South Carolina Department of Health and Environmental Control as well as consistent with previously approved acute care bed applications. The applicant projects that the shift, if it occurred, would take place beginning in CY 2020, and would shift 946 days and 973 days in CYs 2020 and 2021, respectively.

6. Project Acute Care Patient Days

In Section Q, pages 22-23, the applicant provides CMC-Mercy's projected utilization for total acute care bed patient days. The applicant states that this step is the result of combining steps

2-5. The applicant provides the projected utilization for CMC-Mercy during the interim and first three calendar years following project completion as shown in the table below.

CMC-Mercy – Projected Acute Care Bed Utilization					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Acute Care Days (Step 2)	39,195	39,458	39,722	39,987	40,255
M/S Shift from CMC (Step 3)	6,725	14,609	14,837	15,069	15,306
Shift to CCCHU (Step 4)	-75	-88	-88	-88	-88
Shift to CHS Fort Mill (Step 5)	0	0	0	-946	-973
Final Projected Patient Days	45,846	53,979	54,471	54,023	54,500
ADC	126	148	149	148	149
Beds	196	196	196	196	196
Occupancy	64.1%	75.5%	76.1%	75.5%	76.2%

7. Project Year Utilization

In Section Q, page 23, the applicant states that Project Year (PY) 1 will begin on April 1, 2018. Thus, the first three project years applicable to CMC-Mercy are as follows:

PY 1 = April 1, 2018 – March 31, 2019
PY 2 = April 1, 2019 – March 31, 2020
PY 3 = April 1, 2020 – March 31, 2021

The applicant states that it calculated its PY 3 utilization in order to be responsive to the Criteria and Standards for Acute Care Beds found in 10A NCAC 14C .3803. The applicant states that because it provided CMC-Mercy's projected utilization in calendar years, it converted CMC-Mercy's data into PY 3 format by using the following formula:

PY 3 = CY 2020 X (9 months / 12 months) + CY 2021 X (3 months / 12 months)

The applicant projects the following for CMC-Mercy's PY 3 utilization:

CMC-Mercy PY 3 Utilization	
Total Acute Care Days	54,142
ADC	148
Total Beds	196
Occupancy	75.7%

CHS University

The applicant provides projected utilization for CHS University as part of this application to be responsive to the Criteria and Standards for Acute Care Beds found in 10A NCAC 14C .3803. The applicant states in Section Q, page 24, that projections at CHS University are only for total acute care days since individual service lines at CHS University are not affected by either the CMC or the CHS Pineville application.

1. Historical Acute Care Utilization

In Section Q, page 24, the applicant provides CHS University's total acute care bed utilization for CYs 2013-2016, as shown in the table below.

CHS University – Historical Acute Care Bed Utilization					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
Days	21,071	21,782	22,173	22,511	2.2%
ADC	58	60	61	62	2.2%
Beds	94	94	100	100	--
Occupancy	61.4%	63.5%	60.7%	61.7%	0.1%

Source: CHS internal data

The applicant also states that as part of Project I.D. #F-10221-13, CHS University added six acute care beds. CCCHU is a separate entity but physically located at CHS University.

In Section Q, pages 24-25, the applicant next calculates CHS University's total acute care bed utilization, including shifts in patient days to CCCHU as part of Project I.D. #F-10217-13, to obtain what it states is the baseline utilization for CHS University, as shown in the table below.

CHS University – Calculation of Historical Acute Care Bed Baseline Growth Rate					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
CHS University Actual Days*	21,071	21,782	22,173	22,511	2.2%
Patient Days Shifted to CCCHU	0	0	0	209	--
Baseline Days	**21,071**	**21,782**	**22,173**	**22,720**	**2.5%**

***Source:** CHS Internal Data

The applicant states in Section Q, page 25, that in order to be conservative, it will project future growth at a rate of one half of the CAGR for the baseline growth rate (one half of 2.54 percent = 1.27 percent).

2. Project Acute Care Patient Days Prior to Shift

In Section Q, page 25, the applicant projects the growth of CHS University's total acute care bed days, using a projected growth rate of 1.27 percent, as shown in the table below.

CHS University – Projected Acute Care Bed Utilization					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Patient Days	22,797	23,087	23,381	23,678	23,980
Growth Rate	1.27%	1.27%	1.27%	1.27%	1.27%

3. Shift of Patient Days from CMC to CHS University

In Section Q, page 10, the applicant describes the projections it used as part of Project I.D. #F-10221-13 to project the future shift in patient days from CMC to CHS University. It states that it continues to believe the projections are reasonable, and so it includes those projections in its calculations in this application. The applicant also states that it projected any additional

increases in utilization beyond the end of the projections for Project I.D. #F-10221-13 by using the same 1.95 percent growth rate it projected CMC's baseline patient days would grow.

In Section Q, page 25, the applicant provides its projections for the shift in patient days from CMC to CHS University that it discussed in Section Q, page 10, which are shown in the table below.

Projected Shift of Patient Days from CMC to CMC-Mercy					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Days to Shift	647	1,313	2,000	2,709	2,761

4. Shift of Patient Days from CHS University to CCCHU

In Section Q, pages 25-26, the applicant states that as part of the application for Project I.D. #F-10217-13, to develop CCCHU, CHS University projected a shift in patient days from CHS University to CCCHU in the second and third project years. The applicant provides those projections and reduces them by the number of patient days that have already shifted. The applicant projects that beyond the scope of Project I.D. #F-10217-13, patient days to be shifted will remain constant because CCCHU was projected to reach target occupancy during its third project year and will have limited ability to grow. The applicant's projections are provided in the table below.

Projected Shift of Patient Days from CHS University to CCCHU					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Previously Projected Days	-334	-356	--	--	--
Days Already Shifted	-209	-209	--	--	--
Days Remaining to be Shifted	-125	-147	-147	-147	-147

5. Shift of Patient Days from CHS University to CHS Fort Mill

In Section Q, pages 10-11, the applicant states that CHCS was approved to develop CHS Fort Mill, a new acute care hospital in South Carolina, in 2011; however, litigation is ongoing and there is uncertainty around timing for any end to the litigation as well as for any development of CHS Fort Mill. In Section Q, page 26, the applicant states that it accounted for a shift in patients from CHS University to a future CHS Fort Mill in previously approved acute care bed applications (Project I.D. #s F-10215-13 and F-10221-13), and it projects a shift in patients from CHS University to CHS Fort Mill as part of this application as well. The applicant states that the patient shift is consistent with the methodology that was approved by the South Carolina Department of Health and Environmental Control as well as consistent with previously approved acute care bed applications. The applicant projects that the shift, if it occurred, would take place beginning in CY 2020, and would shift 85 days and 88 days in CYs 2020 and 2021, respectively.

6. Project Acute Care Patient Days

In Section Q, pages 26-27, the applicant provides CHS University's projected utilization for total acute care bed patient days. The applicant states that this step is the result of combining steps 2-5. The applicant provides the projected utilization for CHS University during the interim and first three calendar years following project completion as shown in the table below.

CHS University – Projected Acute Care Bed Utilization					
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**
Total Acute Care Days (Step 2)	22,797	23,087	23,381	23,678	23,980
Shift from CMC (Step 3)	647	1,313	2,000	2,709	2,761
Shift to CCCHU (Step 4)	-125	-147	-147	-147	-147
Shift to CHS Fort Mill (Step 5)	0	0	0	-85	-88
Final Projected Patient Days	23,319	24,254	25,234	26,155	26,506
ADC	64	66	69	72	73
Beds	100	100	100	100	100
Occupancy	63.9%	66.4%	69.1%	71.7%	72.6%

7. Project Year Utilization

In Section Q, page 27, the applicant states that Project Year (PY) 1 will begin on April 1, 2018. Thus, the first three project years applicable to CHC University are as follows:

PY 1 = April 1, 2018 – March 31, 2019
PY 2 = April 1, 2019 – March 31, 2020
PY 3 = April 1, 2020 – March 31, 2021

The applicant states that it calculated its PY 3 utilization in order to be responsive to the Criteria and Standards for Acute Care Beds found in 10A NCAC 14C .3803. The applicant states that because it provided CHS University's projected utilization in calendar years, it converted CHS University's data into PY 3 format by using the following formula:

PY 3 = CY 2020 X (9 months / 12 months) + CY 2021 X (3 months / 12 months)

The applicant projects the following for CHS University's PY 3 utilization:

CHS University PY 3 Utilization	
Total Acute Care Days	26,242
ADC	72
Total Beds	100
Occupancy	71.9%

CHCS Acute Care Bed Utilization Summary

In Section Q, page 28, the applicant provides both the historical utilization summary and the projected utilization summary for CMC, CHS Pineville, CMC-Mercy, and CHS University, as shown in the tables below.

CHCS – Historical Acute Care Bed Utilization					
	CY 2013	**CY 2014**	**CY 2015**	**CY 2016**	**CAGR**
CMC	243,813	250,881	265,408	264,900	2.8%
CHS Pineville	51,572	55,981	57,815	61,095	5.8%
CMC-Mercy	30,502	30,690	34,789	38,935	8.5%
CHS University	21,071	21,782	22,173	22,511	2.2%
Total Days	346,958	359,334	380,185	387,441	3.7%
ADC	951	984	1,042	1,061	3.7%
Beds	1,276	1,276	1,282	1,316	--
Occupancy	74.5%	77.2%	81.2%	80.7%	2.7%

CHCS – Projected Acute Care Bed Utilization						
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**	**CAGR**
CMC	261,968	258,547	262,994	262,263	267,400	0.2%
CHS Pineville	61,983	63,783	65,637	60,267	62,024	0.3%
CMC-Mercy	45,846	53,979	54,471	54,023	54,500	7.0%
CHS University	23,319	24,254	25,234	26,155	26,506	3.3%
Total Days	393,115	400,563	408,336	402,707	410,431	1.2%
ADC	1,077	1,097	1,119	1,103	1,124	1.2%
Beds	1,316	1,376	1,376	1,376	1,376	--
Occupancy	81.8%	79.8%	81.3%	80.2%	81.7%	0.3%

In Section Q, the applicant provides the calculated Project Year 3 utilization for all related facilities, as shown in the table below.

CHCS Mecklenburg County Utilization CY 2021			
	# Beds	**ADC**	**% Occupancy**
CMC	859	722	84.1%
CMC-Mercy	196	148	75.7%
CHS Pineville	221	166	75.3%
CHS University	100	72	71.9%
Total CHCS	**1,376**	**1,108**	**80.5%**

As the table above shows, the applicant and all related CHCS facilities in Mecklenburg County have a total utilization at the end of the proposed project's third operating year that is above the required 75.2 percent occupancy rate required in the performance standard found in 10A NCAC 14C .3803(a).

Projected utilization is based on reasonable and adequately supported assumptions, summarized as follows:

- Historical growth rates as the basis of projected growth rates;
- Historical shifts in patient population due to strategic decisions by the applicant;
- Projected shifts in patient population based on historical shifts in patient population; and
- Projected utilization from previously submitted applications approved by the Agency.

Based on review of: 1) the information provided by the applicant in Section C.4, pages 38-54, C.11(b), pages 59-60, Section Q, pages 1-29, and referenced exhibits; 2) comments received during the first 30 days of the review cycle; and 3) the applicant's response to the comments received at the public hearing, the applicant adequately documents the need for the project for the reasons discussed above.

Access

In Section C.10, page 57, the applicant discusses how the proposed project will promote equitable access. The applicant states:

> *"As noted in CHS'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 on the basis of race, color, religion, national origin, sex, age, disability or source of payment.'*
>
> *In addition, as noted in CHS's system-wide Hospital Coverage Assistance and Financial Assistance Policy, Exhibit L.4, '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.'"*

In Section B.10(b), page 29, the applicant states that during CY 2016, CMC provided charity care and wrote off bad debt in the amount of approximately $413 million, as well as prioritizing the recruitment and retention of bilingual staff members.

In Section L.1, page 89, the applicant provides the following information on the percentage of patients served by CMC, based on CY 2016 data.

Medically Underserved Patients – CMC – CY 2016		
	% Served @ CMC	**% in Mecklenburg County**
Women	59.5%	51.5%
Patients 65 and older	19.6%	10.7%
Racial Minorities	56.0%	47.4%

Sources: CHS internal data, 2016 ESRI population data

In Section L.4, page 92, the applicant discusses charity care, stating that CMC treats patients regardless of their ability to pay and payment or lack thereof has no effect on the care given to patients. The applicant discusses the various policies in place to assist the medically indigent. Exhibit L.4 contains the applicant's Hospital Coverage Assistance and Financial Assistance Policy. Exhibit B.10 contains the Hospital's current policies on access to services.

In Section Q, Form F.3, the applicant shows that CMC will provide approximately $135,882,000 and $161,967,000 in charity care in project years one and two, respectively; and write off approximately $372,067,000 and $380,983,000 in bad debt in project years one and two, respectively. In Section L.3(a), page 91, the applicant projects that in project years one and two, respectively, 61.7 percent of pediatric M/S patients to be served, 62.8 percent of adult

M/S patients to be served, and 56.8 percent of all patients to be served will be Medicare or Medicaid recipients.

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

Conclusion

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

Novant (F-11366-17) proposes to develop 18 additional acute care beds at NHPMC for a total of 524 licensed acute care beds upon completion of this project; concurrently filed Project I.D. #F-11367-17 (add 21 additional Level IV NICU beds); Project ID #F-7648-06 (develop a new hospital by relocating 50 beds from NHPMC); Project ID #F-8765-11 (relocate Charlotte Orthopedic Hospital and add 50 beds pursuant to a need determination); and Project ID #F-11110-15 (relocate 48 beds to Huntersville Medical Center).

The Presbyterian Hospital is affiliated with Novant Health, Inc. (Novant Health), which owns and operates two other hospitals in Mecklenburg County – Novant Health Matthews Medical Center (NHMMC), Novant Health Huntersville Medical Center (NHHMC) – and one hospital under development, Novant Health Mint Hill Medical Center (NHMHMC). Novant Health Charlotte Orthopedic Hospital (NHCOH) is a separate entity for purposes of operations, but is located adjacent to NHPMC and is licensed as part of NHPMC. Novant has filed a concurrent application, Project I.D. #F-11367-17, to add 21 new Level IV NICU beds pursuant to the same need determination in Mecklenburg County. Pursuant to 10A NCAC 14C .3803, the Performance Standards under the Criteria and Standards for Acute Care Beds, the applicant provides projected utilization for NHCOH, NHHMC, NHMMC, and NHMHMC as part of this application.

Patient Origin

On page 39, the 2017 SMFP defines the service area for acute care bed services as the planning area in which the bed is located. *"An acute care bed's service area is the acute care bed planning area in which the bed is located. The acute care bed planning areas are the single and multicounty groupings shown in Figure 5.1."* Figure 5.1 on page 42 of the 2017 SMFP shows Mecklenburg County as a single county acute care bed planning area. NHPMC is located in Mecklenburg County. Thus, the service area for this facility consists of Mecklenburg County. Facilities may also serve residents of counties not included in their service area.
In Section C.2(a), page 23, the applicant identifies the patient origin for NHPMC acute care beds during FFY 2016, as shown in the table below.

NHPMC Acute Care Beds – Historical Patient Origin – FFY 2016		
County	**# of Patient Days**	**% of Total**
Mecklenburg	66,405	73.5%
Union	5,529	6.1%
Gaston	3,963	4.4%
York (SC)	3,337	3.7%
Cabarrus	1,888	2.1%
Iredell	1,248	1.4%
Lancaster (SC)	1,364	1.5%
Rowan	845	0.9%
Lincoln	827	0.9%
Stanly	424	0.5%
Cleveland	383	0.4%
Catawba	294	0.3%
All Other	3,847	4.3%
Total	**90,354**	**100.0%**

Source: LRAs, Trendstar data
Note: Excludes NICU, ICU beds, and NHCOH

As illustrated in the above table, residents of Mecklenburg, Union, Gaston, and Cabarrus counties in North Carolina as well as York County in South Carolina represent approximately 90 percent of NHPMC's acute care bed days of care.

In C.3(a), page 24, the applicant provides the projected patient origin for acute care beds for the first three years following completion of the proposed project, as shown in the table below.

NHPMC Acute Care Beds – Projected Patient Origin – Project Years 1-3						
County	**Project Year 1 – CY 2020**		**Project Year 2 – CY 2021**		**Project Year 3 – CY 2022**	
	# Patient Days	**% of Total**	**# Patient Days**	**% of Total**	**# Patient Days**	**% of Total**
Mecklenburg	81,567	73.5%	83,099	73.5%	84,432	73.5%
Union	6,792	6.1%	6,919	6.1%	7,030	6.1%
Gaston	4,868	4.4%	4,959	4.4%	5,039	4.4%
York (SC)	4,099	3.7%	4,176	3.7%	4,243	3.7%
Cabarrus	2,318	2.1%	2,362	2.1%	2,400	2.1%
Iredell	1,533	1.4%	1,562	1.4%	1,587	1.4%
Lancaster (SC)	1,676	1.5%	1,707	1.5%	1,735	1.5%
Rowan	1,037	0.9%	1,057	0.9%	1,074	0.9%
Lincoln	1,016	0.9%	1,036	0.9%	1,052	0.9%
Stanly	521	0.5%	531	0.5%	539	0.5%
Cleveland	470	0.4%	479	0.4%	487	0.4%
Catawba	361	0.3%	368	0.3%	374	0.3%
All Other	4,725	4.3%	4,814	4.3%	4,891	4.3%
Total	**110,985**	**100.0%**	**113,069**	**100.0%**	**114,884**	**100.0%**

Note: Excludes NHCOH

The applicant states on page 25 that the projected patient origin is based on the historic patient origin for FFY 2016. The applicant's assumptions and methodology are discussed in more detail below.

The applicant adequately identifies the population it proposes to serve.

Analysis of Need

In Section C.4, pages 26-41, the applicant discusses the need for the project. The applicant states that the need for the project is based on the following four factors:

- NHPMC Historical Utilization (pages 26-28)
- Physician Expansion at NHPMC and in the Greater Charlotte Market (pages 28-30)
- Program Development and Growth by Specialty at NHPMC (pages 30-39)
- Transfer of Beds from NHPMC to Community Hospitals (pages 39-41)

The applicant states on page 26 that the need for 60 additional acute care beds in Mecklenburg County provides a solution to developing new beds after recent growth in tertiary services at NHPMC. The applicant discusses the above factors beginning on page 26 of the application, as summarized below.

NHPMC Historical Utilization

In Section C.4, page 26, the applicant states that between FFY 2015 and FFY 2016, patient days grew for the first time in several years, and that year to date FFY 2017 growth has been at a "more significant" rate. The applicant provides its historical patient days as shown in the table below.

NHPMC Historical Utilization – Total Days – FFY 2013-2017					
	FFY 2013	**FFY 2014**	**FFY 2015**	**FFY 2016**	**FFY 2017***
Patient Days	136,547	123,119	117,769	118,637	126,510**
Annual Change	--	-9.8%	-4.3% [-4.5%]	0.7%	6.3% [6.6%]

Source: SMFP, Trendstar data
Note: the Project Analyst's calculations are in brackets.
*Annualized
**Annualized based on an October 2016 – March 2017 total of 63,255 patient days

On pages 26-27, the applicant states that the shift of inpatient surgical procedures to outpatient surgery, improved surgical technology, the expanded use of hospitalists and intensivists for inpatients, and changes in payor requirements have all impacted the number of patient days from 2013 to 2015. The applicant states:

> *"Recognizing the progress made in transitioning inpatient care to lower cost outpatient services and decreasing average length of stay over the last several years, the leadership of NHPMC and the Novant Health* [greater Charlotte market] *recognized the need to expand its focus. In 2015, Novant Health reaffirmed its commitment to acute and ambulatory care at the community level, dedicating resources to the expansion of services and recruitment of primary, specialty and sub-specialty physicians at NHPMC and in the* [greater Charlotte market]. *As a result, inpatient utilization at NHPMC has increased."*

The applicant states that utilization of all beds at NHPMC between April 2015 – March 2016 and April 2016 – March 2017 grew from 115,648 patient days to 123,216 patient days – an increase of 6.5 percent.

On page 28, the applicant states that historical utilization of acute beds also showed a small increase between FFY 2015 and FFY 2016 along with a more significant increase between FFY 2016 and year to date FFY 2017. The applicant provides the historical utilization of its acute care beds as shown in the table below.

NHPMC Historical Utilization – Acute Care Days – FFY 2013-2017					
	FFY 2013	**FFY 2014**	**FFY 2015**	**FFY 2016**	**FFY 2017***
Patient Days	110,649	100,120	90,318	90,354	98,484
Licensed Beds**	453	445	420	420	409
Annual Change	--	-9.51%	-9.79%	0.04%	9.00%
Utilization Rate	66.9%	61.6%	58.8%	58.8%	66.0%

Source: LRAs
Note: excludes NICU and other ICU beds
*Annualized
**Reflects shifts in licensed capacity to NHMMC and NHHMC

The applicant states that this increase in utilization is the result of program development and ongoing physician recruitment.

Physician Expansion at NHPMC and in the Greater Charlotte Market

In Section C.4, pages 28-29, the applicant states that it has expanded the physician staff at NHPMC by 240 new physicians since January 2014. For a listing of physician growth by specialty, please see the table on pages 28-29. The applicant states on page 30 that it has added 270 physicians and 226 advanced practice clinicians to the Novant Health Medical Group in the greater Charlotte market since January 2014. The applicant states that this level of physician growth is responsible for an increase in inpatient admissions and patient days from 2016 to 2017.

Program Development and Growth by Specialty at NHPMC

In Section C.4, pages 30-39, the applicant provides information about the growth in utilization, increases in patient encounters, and growth of physician staff in specific selected programs offered at NHPMC. The information provided is summarized below.

Neurosciences

On pages 30-32, the applicant states that utilization of neurosciences services is up 17.0 percent during the first three months of 2017; medical and surgical spine facility case volume is up 2.0 percent at all Novant facilities in the greater Charlotte market; and total physician encounters in neurosciences services year to date are up 27.9 percent compared to the same period in 2016. The applicant states that it has had a net growth of 26 neurosciences medical staff members at NHPMC since January 2014 and anticipates adding four more in the coming months. The

applicant states that it will shortly become the only provider in HSA III with the Joint Commission's Advanced Certification for Comprehensive Stroke Centers, which it expects to increase referrals and emergency department visits due to changing emergency medical services protocols as a result of the new designation.

However, the applicant states on page 30: *"*[The utilization increase and case volume increase] *includes inpatient and outpatient services at all Novant Health facilities in the* [greater Charlotte market]*…"* The applicant does not specify what part of the increases are specific to the facility at issue in this application.

Oncology Services

On pages 32-33, the applicant states that utilization of oncology services is up 8.9 percent during the first three months of 2017 and that total physician encounters in oncology services year to date are up 40.1 percent compared to the same period in 2016. The applicant states that it has had a net growth of 11 oncology medical staff members at NHPMC since January 2014 and anticipates adding five more in the coming months. The applicant states that the increase in utilization is due to increases in medical staff, development of new programs, and expansion of existing programs.

However, the applicant states on page 32: *"*[The utilization increase] *includes inpatient and outpatient services at all Novant Health facilities in the* [greater Charlotte market]*…"* The applicant does not specify what part of the increases are specific to the facility at issue in this application.

Heart and Vascular Institute

On pages 33-34, the applicant states that utilization of services associated with the Heart and Vascular Institute (HVI) is up 5.9 percent during the first three months of 2017 and that total physician encounters for HVI services year to date are up 7.6 percent compared to the same period in 2016. The applicant states that it has had a net growth of 11 HVI medical staff members at NHPMC since January 2014 and anticipates adding three more in the coming months. The applicant states that due to an increase in the utilization of cardiology services at NHMMC, there have been additional referrals to NHPMC, and that cardiac surgery at NHPMC year to date is up 17.5 percent compared to the same period in 2016.

However, the applicant states on page 33: *"*[The utilization increase] *includes a wide variety of cardiac and vascular services at all Novant Health facilities in the* [greater Charlotte market]*…"* The applicant does not specify what part of the increases are specific to the facility at issue in this application.

Women's Services

On pages 34-36, the applicant states that utilization of women's services is up 1.4 percent during the first three months of 2017 and that total physician encounters for obstetrics and gynecology services year to date are up 3.1 percent compared to the same period in 2016. The

applicant states it has had a net growth of 10 women's services medical staff members at NHPMC since January 2014 and is actively recruiting additional medical staff. The applicant states that collaborations with specialty providers result in increased referrals to NHPMC and that referrals from one specialty provider alone have more than doubled so far in 2017. The applicant also states that Novant's Maternal-Fetal Medicine group, which has four locations in the greater Charlotte market, results in referrals for pregnancy complications and high-risk pregnancies to the NICU at NHPMC.

However, the applicant states on page 34: *"*[The utilization increase] *includes inpatient and outpatient services at all Novant Health facilities in the* [greater Charlotte market]*..."* The applicant does not specify what part of the increases are specific to the facility at issue in this application.

Pediatrics

On pages 36-37, the applicant states that utilization of pediatric services at NHPMC is up 30 percent during the last eight months and that utilization of the pediatric intensive care unit is up 50 percent during the same eight month period. The applicant states that it has had a net growth of 17 pediatric medical staff members at NHPMC since January 2014. The applicant states on page 37 that the growth in pediatric medical staff is due in part to an increase in medical practice locations in the greater Charlotte market which then refer patients to NHPMC. The applicant states that it is working to expand pediatric programs at NHPMC, including development of a pediatric residency program, an affiliation with St. Jude's Children's Hospital (pediatric oncology), and becoming a Federally Designated Hemophilia Treatment Center, which will be the only one in HSA III.

Surgical and Trauma Services

On pages 38-39, the applicant states that utilization of surgical and trauma services is up very slightly during the first three months of 2017 and that total physician encounters for surgical services year to date are up 2.9 percent compared to the same period in 2016. The applicant states that it has had a net growth of 20 surgical and trauma medical staff members at NHPMC since January 2014 and is actively recruiting more medical staff.

However, the applicant states on page 38: *"*[The utilization increase] *includes inpatient and outpatient services at all Novant Health facilities in the* [greater Charlotte market]*."* The applicant does not specify what part of the increases are specific to the facility at issue in this application.

Intensive Care Specialists

On page 39, the applicant states that its team of intensivists results in the availability of 24/7 coverage for specialty patients and states that when it added a neuro-intensivist to its staff, there was a resulting increase in stroke inpatient admissions.

While the applicant does not provide exact data with regard to how much the previous subcategories of physician and service growth areas increased utilization at NHPMC, it is reasonable to believe that growth in utilization in the greater Charlotte market as a whole does include growth at NHPMC.

Transfer of Beds from NHPMC to Community Hospitals

In Section C.4, page 39, the applicant states that it established NHHMC and NHMMC to meet the need for community care. The applicant states that NHMHMC, approved in 2006, is under development and will be complete by January 2020 (the applicant states on page 54 and elsewhere in the application that the facility will be initially in operation by October 2018). On page 40, the applicant provides information on which beds are being transferred to which facilities in Mecklenburg County. In recent years the applicant has had numerous changes to bed capacity as a result of approved projects and administrative decisions. A summary of recent projects and decisions with associated changes in bed capacity is shown in the table below.

NHPMC – Summary of Changes to Bed Capacity					
Project/Event	**Description**	**Outcome**	**Beds at COH**	**Beds at PMC**	**Combined License**
Start – Prior to Combined License			**64**	**539**	**--**
#F-7648-06 (projected Oct. 2018)	Develop NHMHMC	Relocate 50 beds to NHMHMC	64 – 50 = 14		
#F-8765-11 (projected Oct. 2017)	COH replacement hospital with 50 new beds (2011 SMFP)	Add 50 beds to COH	14 + 50 = 64		
License Combined 3/22/2014 per Condition #5 of Project I.D. #F-8765-11					
Start of Combined License			64	539	603
#F-10213-13 (completed Jan. 2017)	Relocate 20 beds from PMC to MMC	Relocate 20 beds from PMC	64	539 – 20 = 519	603 – 20 = 583
#F-10214-13 (completed Sept. 2015)	Relocate 16 beds from PMC to HMC	Relocate 16 beds from PMC	64	519 – 16 = 503	583 – 16 = 567
Material Compliance #F-8765-11 (completed)	Decrease beds at COH from 64 to 32	COH beds decrease by 32; 32 beds remain in PMC inventory	64 – 32 = 32	503 + 32 = 535	567 (no net change)
#F-11110-15 (projected 2019)	Relocate 48 beds from PMC to HMC	Relocate 48 beds from PMC	32	535 – 48 = 487	567 – 48 = 519
Material Compliance #F-7648-06 (projected Oct. 2018)	Develop/relocate 36 MHMC beds instead of 50 MHMC beds	Add 14 beds to PMC	32	487 + 14 = 501	519 + 14 = 533
Material Compliance #F-8765-11 (projected Oct. 2017)	Relocate 16 beds from PMC to COH	Add 16 beds to COH and remove 16 beds from PMC	32 + 16 = 48	501 – 16 = 485	533 (no net change)
Final Bed Count (after all projects completed)			**48**	**485**	**533**

Sources: Application for Project I.D. #F-11366-17; email from Barbara Freedy to Gloria Hale 2/21/2017

On page 40, the applicant states that it currently has 514 licensed beds at NHPMC (due to the partial completion of projects referenced in the table above). The applicant states that once all projects are complete in 2019, the applicant will have 485 acute care beds, which is 29 fewer beds than the applicant currently operates. The applicant states that when the 93 ICU beds are

subtracted from the general acute care bed total, it will have only 391 general acute care beds to address the expanding services under development. (The applicant's most recent License Renewal Application [LRA] states there are 392 non-ICU beds. This discrepancy causes no change in the outcome of these findings.)

Projected Utilization

In Section Q, page 103, the applicant provides a table showing its historical and projected utilization for acute care patient days, as shown below.

NHPMC Acute Care Beds – Historical and Projected Utilization – FY 2014 – 2022									
	Prior	**Prior**	**Last**	**Interim**	**Interim**	**Interim**	**First PY**	**Second PY**	**Third PY**
	CY 2014	**CY 2015**	**CY 2016**	**CY 2017**	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**	**CY 2022**
General Acute Care Beds									
# Beds	445	420	420	409	425	439	409	409	409
# Discharges	21,760	19,871	19,863	21,349	22,469	23,136	23,687	24,131	24,519
# Patient Days	97,408	90,688	93,069	100,034	105,281	108,403	110,985	113,069	114,884
Total Acute Care Beds (including ICU and NICU beds)									
# Beds	539	514	514	503	519	533	524	524	524
# Discharges	25,150	23,392	23,350	25,178	26,508	27,346	28,041	28,619	29,101
# Patient Days	121,216	118,834	120,163	128,589	134,747	138,695	142,009	145,357	148,209

The applicant's project years are the same as calendar years, and it projects that the first three operating years of the project will be CYs 2020-2022. The applicant provides its assumptions and methodology for projecting future utilization at NHPMC in Section C.4, pages 41-44. In Section C.11(b), pages 49-54, the applicant provides its assumptions and methodology for projecting utilization for NHPMC NICU beds (with its concurrently filed application, Project I.D. #F-11367-17) and at NHHMC, NHMMC, NHCOH, and NHMHMC pursuant to 10A NCAC 14C .3803. Corresponding tables are found in Section Q, pages 108-113, and Exhibit C-4.

1. <u>Determine Baseline General Acute Care Patient Days at NHPMC</u>

In Section C.4, page 41, the applicant states that historical acute care days were calculated by subtracting patient days from the NICU and other ICUs from the total patient days at NHPMC. The applicant provides the data shown in the LRAs for the three most recent fiscal years as shown in the table below.

NHPMC – Historical Acute Care Bed Utilization			
	FFY 2014	**FFY 2015**	**FFY 2016**
Licensed General Acute Care Beds	445	420	420
General Acute Care Patient Days	100,120	90,318	90,354
Percent Change	--	-9.8%	0.04%

Source: LRAs

The applicant states that the table showed positive growth in FFY 2016 for the first time in the previous three years, but states that the most recent data provided in that table is more than six months old and does not reflect changes currently occurring at NHPMC. The applicant states that it compared data from the SMFP, taken from information provided in LRAs, to data from its own Trendstar financial data system. The applicant states that the comparison showed, on average, less than a 0.5 percent difference between the Trendstar data and the SMFP data, so the applicant believes using more current Trendstar data is reasonable and consistent with other data. See Exhibit C-4, Part 1, Table 14 for the applicant's comparison between SMFP data and Trendstar data.

On page 42, the applicant provides Trendstar data for the 12 month period between April and March for the three most recent periods, as shown in the table below.

NHPMC – Historical Acute Care Bed Utilization
April – March Timeframe

	Apr-Mar 2015	Apr-Mar 2016	Apr-Mar 2017
Total Days	121,218	115,648	123,216
Annual Growth Rate	--	--	6.5%
NICU & Other ICU Days	24,387	27,556	27,832
General Acute Care Patient Days	96,831	88,092	95,384
Annual Growth Rate	--	--	8.3%

Source: LRAs

2. Determine Reasonable Growth Rate for General Acute Care Days at NHPMC

In Section C.4, page 42, the applicant states that general acute care days and total acute care days increased 8.3 percent and 6.5 percent, respectively, during the time period from April 2016 through March 2017. On page 42, the applicant states:

> *"As discussed previously, inpatient utilization is increasing at NHPMC for a wide variety of reasons. With few exceptions, physician recruitment and program development at NHPMC and in the* [greater Charlotte market] *since 2015 has resulted in significant increases in service line utilization at NHPMC. NHPMC has committed time and resources to continue building a comprehensive health care system to prepare for transitioning to a population based provider system in the future. It is reasonable to assume that growth will continue but not at 8% annually.*
>
> *NHPMC projected future general acute care patient days using the total inpatient day growth rate of 6.5%, rather than the general acute care growth rate of 8.3% in the next year. Annual growth was decreased one percent annually to further project general patient days in the future."*

3. Calculate General Acute Care Days at NHPMC

In Section C.4, page 42, the applicant states that it projected general acute care patient days at NHPMC by using the patient days determined in Step 1 and the annual growth rates determined in Step 2. The applicant states that it also reduced the number of days to account for the impact

of the opening of NHMHMC. See Section Q, page 111, (as well as Exhibit C-4, Part 1, Table 8) for the applicant's projections regarding utilization at NHMHMC.

The applicant's projections for general acute care days at NHPMC on page 43, along with its projections for NHMHMC utilization found in Section Q, page 111, are shown in the tables below.

Patients Shifting from NHPMC to NHMHMC					
	CY 2019*	**CY 2020**	**CY 2021**	**CY 2022**	**CY 2023****
Patient Days	2,632	3,948	5,264	5,264	5,264
	4/2018 – 3/2019	**4/2019 – 3/2020**	**4/2020 – 3/2021**	**4/2021 – 3/2022**	**4/2022 – 3/2023**
Patient Days	658	2,961	4,277	5,264	5,264

*October – December 2019 only
**The applicant appears to have made a typo in the application and lists CY 2022 twice in the table on page 43.

Projected General Acute Care Days – NHPMC – 2016 – 2023							
	4/2016 – 3/2017 (Actual)	**4/2017 – 3/2018**	**4/2018 – 3/2019**	**4/2019 – 3/2020**	**4/2020 – 3/2021**	**4/2021 – 3/2022**	**4/2022 – 3/2023**
Patient Days	95,384	101,584	107,171	111,994	115,914	118,811	120,594
% Growth	--	6.5%	5.5%	4.5%	3.5%	2.5%	1.5%
NHMHMC Days	--	--	-658	-2,961	-4,277	-5,264	-5,264
Adjusted Patient Days	95,384	101,584	106,513	109,033	111,636	113,547	115,329
Converted to CY					**PY 1 2020**	**PY 2 2021**	**PY 3 2022**
Patient Days					110,985	113,069	114,884

The applicant also notes that its projections are different from the ones made as part of Project I.D. #F-7648-06 (to develop NHMHMC) but does not explain what is different or why the projections have changed. Nonetheless, it is reasonable for the applicant to project a shift in patients from NHPMC to NHMHMC, and the Agency found such a shift to be reasonable as part of Project I.D. #F-7648-06.

4. Calculate General Acute Care Bed Need at NHPMC

In Section C.4, page 44, the applicant projects the number of beds it will need during the first three project years by utilizing its projected patient days and projected ADC to calculate the number of beds it needs in order to be utilized at the performance standard of 75.2 percent as required in 10A NCAC 14C .3803(a). The applicant's projections along with calculations of utilization are shown in the table below.

NHPMC – Projected Acute Care Bed Utilization (Total)			
	PY 1 2020	**PY 2 2021**	**PY 3 2022**
Patient Days	110,985	113,069	114,884
ADC	304.1	309.8	314.7
Beds (prior to 2020)	391	391	391
Utilization	77.8%	79.2%	80.5%
Projected Bed Need at 75.2%	404	412	419
Additional Bed Need	13	21	28

Utilization of other Novant Facilities

In Section C.11(b), pages 49-54, the applicant provides its assumptions and methodology for projecting utilization at other Novant facilities in Mecklenburg County pursuant to 10A NCAC 14C .3803. Corresponding tables are found in Section Q, pages 108-113, and Exhibit C-4.

NHPMC – NICU Beds

The applicant submitted a concurrent application, Project I.D. #F-10367-17, proposing to add 21 Level IV NICU beds to its existing NICU wing. Please see the section of this criterion relating to Project I.D. #F-11367-17 for a more in-depth discussion of its assumptions and methodologies. In Section Q, page 108 (see also Exhibit C-4, Part 1, Table 4), the applicant provides its projections for NICU utilization for the first three calendar years following project completion as shown in the table below.

Projected NICU Days – NHPMC – 2019 – 2023					
	Jan-Oct 2019	**10/19 – 9/20**	**10/20 – 9/21**	**10/21 – 9/22**	**10/22 – 9/23**
Admissions	459	613	644	676	692
ALOS	28.77	28.77	28.77	28.77	28.77
Patient Days	13,196	17,637	18,535	19,456	19,899
ADC		48.32	50.78	53.30	54.52
Projected Utilization		85.0%	85.0%	85.0%	85.0%
Bed Need		57	60	63	64
Proposed Inventory		59	59	59	59
Actual Utilization		81.9%	86.1%	90.3%	92.4%
Converted to CY		**CY 2019**	**CY 2020**	**CY 2021**	**CY 2022**
Patient Days		17,605	17,862	18,765	19,567
Admissions			621	652	680
ALOS			28.77	28.77	28.77

NHHMC

In Section Q, page 109 (see also Exhibit C-4, Part 1, Table 5), the applicant provides the historical utilization and projected utilization at NHHMC for the first three years following project completion at NHPMC, as shown in the table below.

NHHMC – Historical and Projected Utilization – 2014-2022 (F-11110-15)									
	8/14-7/15	**8/15-7/16**	**8/16-7/17**	**8/17-7/18**	**8/18-7/19**	**8/19-7/20**	**8/20-7/21**	**8/21-7/22**	**8/22-7/23**
Total Cases	6,754	7,096	7,455	7,833	8,230	8,646	9,084	9,544	10,028
2011-15 AAG*	5.06%	5.06%	5.06%	5.06%	5.06%	5.06%	5.06%	5.06%	5.06%
2011-15 ALOS		3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Projected Days	24,090	25,647	26,945	28,310	29,744	31,250	32,833	34,495	36,242
ADC	66.0	70.3	73.8	77.6	81.5	85.6	90.0	94.5	99.3
Beds	91	91	91	91	91	91	91	91	91
Utilization	72.5%	77.2%	81.1%	85.2%	89.5%	94.1%	98.8%	103.9%	109.1%
Convert to NHHMC Project Years						**PY1 7/19-6/20**	**PY2 7/20-6/21**	**PY3 7/21-6/22**	**PY4 7/22-6/23**
Projected Days						31,125	32,701	34,357	36,097
ADC						85.0	89.6	94.1	98.9
Target Utilization						66.7%	66.7%	66.7%	66.7%
Bed Need						127.5	134.3	141.1	148.3
Beds						91	91	91	91
Surplus/Deficit						36.5	43.3	50.1	57.3
Convert to NHPMC Project Years							**PY1 2020**	**PY2 2021**	**PY3 2022**
Projected Days							31,913	33,529	35,227
ADC							87.4	91.9	96.5
Target Utilization							66.7%	66.7%	66.7%
Beds							139	139	139
Utilization							62.9%	66.1%	69.4%

Source: Project I.D. #F-11110-15 application
*AAG = Average Annual Growth

On page 109, the applicant states that the source of the data in this table is the CON application for Project I.D. #F-11110-15. On page 53, the applicant states that utilization at NHHMC decreased slightly due to new Medicare regulations regarding the timing of when a patient was considered to be an inpatient. The applicant states that as a result, inpatient days decreased slightly and observation days increased slightly. The applicant states that despite the previous decrease in patient days, NHHMC has experienced a 9.6 percent increase in patient days during the first six months of FFY 2017, and thus it believes its original projections as part of Project I.D. #F-11110-15 are still relevant, especially given that the Huntersville area is one of the fastest growing regions in the state.

The applicant provides projections for NHMHMC which show a shift in patient days from NHHMC. The Project Analyst did not see any information to indicate that the patient days projected to be transferred from NHHMC were subtracted from the projections for NHHMC above. However, the Project Analyst calculated the difference in utilization using the data provided by the applicant and subtracted the projected shift in patient days to NHMHMC from NHHMC, and the difference is irrelevant as to the outcome of these findings.

NHMHMC

In Section Q, page 110 (see also Exhibit C-4, Part 1, Table 6), the applicant provides information demonstrating the impact of subsequent administrative decisions on the original scope of Project I.D. #F-7648-06 (to develop NHMHMC), as well as corresponding changes

in projections. On June 30, 2016, the Agency issued a letter determining that Novant's proposed changes to Project I.D. #F-7648-06 – relocating only 36 beds instead of 50 beds to establish NHMHMC and relocating the additional 14 beds at a future time – was in material compliance with representations made in its initial application. The corresponding changes in projection with the reduction of beds from 50 to 36 are shown in the table below.

NHMHMC Projected Patient Days F-7648-06 & Admin. Decisions			
PY 3	**F-7648-06**	**Adjusted Current**	**% Decrease**
Total Projected Patient Days	13,753	9,902	28%
NHPMC Shift Patient Days	8,757	6,305	28%
Other Market Shift Patient Days	3,621	2,607	28%
Other Inmigration (10%)	1,375	990	28%
ADC	38	27	28%
Beds	50	36	28%
Projected Utilization	75.4%	75.4%	

In Section Q, page 110 (see also Exhibit C-4, Part 1, Table 7), the applicant provides a table originally provided as part of Project I.D. #F-7648-06 which shows the projected impact analysis on the source of patient days for the new facility. In Section Q, page 111 (see also Exhibit C-4, Part 1, Table 8), the applicant provides updated projections showing the shift in patient days from other Novant facilities following the reduction in beds from 50 to 36 as part of the material compliance determination discussed above. The current projections are shown in the table below.

NHMHMC Revised Projections – Patient Days Impact						
	% Total Patient Days	**CY 2019* (Oct-Dec only)**	**CY 2020**	**CY 2021**	**CY 2022**	**CY 2023**
NHMHMC (Projected 2018)		4,951	7,427	9,902	9,902	9,902
Volume from NHPMC	53.2%	2,632	3,948	5,264	5,264	5,264
Volume From NHCOH	1.8%	91	137	183	183	183
Volume From NHMMC	12.2%	603	905	1,206	1,206	1,206
Volume from NHHMC	0.7%	35	52	70	70	70
NHMHMC Project Years		**4/18-3/19**	**4/19-3/20**	**4/20-3/21**	**4/21-3/22**	**4/22-3/23**
Volume from NHPMC		658	2,961	4,277	5,264	5,264
Volume From NHCOH		23	103	148	183	183
Volume From NHMMC		151	678	980	1,206	1,206
Volume from NHHMC		9	39	57	70	70

*NHMHMC is currently projected to be operational in 2018.

On pages 110-111, the applicant states that the source of the data in this table is the CON application for Project I.D. #F-7648-06 and subsequent material compliance determination approvals. On page 54, the applicant states that it used its original projections for Project I.D. #F-7648-06 and decreased them by 28 percent to correspond with a 28 percent decrease in the number of beds that will initially be in operation at NHMHMC.

NHMMC

In Section Q, page 112 (see also Exhibit C-4, Part 1, Table 9), the applicant provides historical utilization and the projected utilization from Project I.D. #F-10213-13, as well as projected utilization at NHMMC for the first three years following project completion at NHPMC, as shown in the tables below.

NHMMC – Historical/Projected Utilization – 2009-2016 (F-10213-13)									
	CY 2009	**CY 2010**	**CY 2011**	**CY 2012**	**CY 2013 (est.)**	**CY 2014**	**CY 2015**	**CY 2016**	**CY 2016 (actual)**
Patient Days	33,031	33,340	31,861	30,200	30,445	35,968	37,000	37,540	38,041
ADC	90.5	91.3	87.3	82.7	83.4	98.5	101.4	102.8	
ALOS	4.06	3.83	4.02	3.81	3.96	3.77	3.78	3.78	
Beds	102	102	114	117	117	134	134	134	
Utilization	88.7%	89.6%	76.6%	70.7%	71.3%	73.5%	75.6%	76.8%	

Source: Project I.D. #F-10213-13 application

NHMMC – Projected Utilization – 2017-2022 (F-10213-13)						
	CY 2017	**CY 2018**	**CY 2019**	**CY 2020**	**CY 2021**	**CY 2022***
Patient Days	39,193	40,329	40,925	41,528	42,139	42,139
Impact of NHMHMC			835	1,169	1,670	1,670
Adjusted Patient Days	39,193	40,329	40,090	40,359	40,470	40,470
ADC	107.4	110.5	109.8	110.6	110.9	110.9
ALOS	3.80	3.81	3.82	3.83	3.84	3.84
Beds	154	154	154	154	154	154
Utilization	69.7%	71.7%	71.3%	71.8%	72.0%	72.0%

*The table on page 112 has identical information that repeats twice for CY 2021 which appears to be a typo.

On page 112, the applicant states that the source of the data in this table is the CON application for Project I.D. #F-10213-13 and Trendstar data. On pages 53-54, the applicant states that it compared actual utilization from CY 2016 to the projected utilization in Project I.D. #F-10213-13 and found that actual utilization had been higher than projected. The applicant states that it believes these projections are therefore reasonable. The applicant further states that while adjusting patient days to include the impact of any shift in patient days from NHMMC to NHMHMC, it used the originally projected numbers as part of Project I.D. #F-7648-06 instead of the lower ones it projects with this application. The applicant states that the use of the higher numbers makes its projections more conservative.

NHCOH

In Section Q, page 113 (see also Exhibit C-4, Part 1, Tables 10-11), the applicant provides historical utilization and the projected utilization from Project I.D. #F-8765-11, as well as projected utilization at NHCOH for the first three years following project completion at NHPMC, as shown in the tables below.

NHCOH – Historical Utilization – 2012-2017					
	4/12-3/13	**4/13-3/14**	**4/14-3/15**	**4/15-3/16**	**4/16-3/17**
Patient Days	10,282	8,606	8,470	8,590	9,315
Growth Rate				1.4%	8.4%

Source: Trendstar data

NHCOH – Historical/Projected Utilization – 2016-2023 (F-10213-13/Trendstar Data)									
	4/16-3/17	**Growth**	**4/17-3/18**	**Growth**	**4/18-3/19**	**4/19-3/20**	**4/20-3/21**	**4/21-3/22**	**4/22-3/23**
Patient Days	9,315	6.3%	9,905	4.2%	10,323	10,758	11,212	11,685	12,179
Adjusted for Shift to NHMHMC					10,300	10,656	11,064	11,503	11,966
ADC	25.5		27.1		28.2	29.2	30.3	31.5	32.9
Beds	48		48		48	48	48	48	48
Utilization	53.2%		56.5%		58.8%	60.8%	63.2%	65.7%	68.5%
Convert to NHPMC Project Years							**PY 1 2020**	**PY 2 2021**	**PY 3 2022**
Patient Days							10,962	11,393	11,873
ADC							30.0	31.2	32.5
Beds							48	48	48
Utilization							62.6%	65.0%	67.8%

Source: Project I.D. #F-10213-13 application, Trendstar data

On page 113, the applicant states that the source of the data in this table is the CON application for Project I.D. #F-8765-11 and Trendstar Data. On pages 52-53, the applicant states that it reviewed its previous projections as part of Project I.D. #F-8765-11 and revised the projections based on historical utilization as well as the slightly lower bed capacity it will develop after recent administrative decisions (48 beds instead of 50 as proposed in Project I.D. #F-8765-11). The applicant states that utilization during the last six months has increased at a rate of 8.4 percent, and orthopedic patient encounters in the overall greater Charlotte market are up by more than 20 percent compared with the last year. The applicant states that it projected growth at three-fourths the rate it experienced during the last six months for the first year of projections and then at one-half the growth rate it experienced during the last six months for the remaining years of projections. The applicant further states that its projections are 23 percent lower for the third project year than they were in the original Project I.D. #F-8765-11, and states that this makes its projections more conservative.

Novant Acute Care Bed Utilization Summary

In Section Q, pages 106-113, the applicant provides projected utilization for all related facilities during PY3, as shown in the table below.

Novant Mecklenburg County Utilization CY 2022			
	# Beds	**ADC**	**% Occupancy**
NHPMC	524	406.1	77.5%
NHCOH	48	32.5	67.7%
NHMHMC	36	27.1	75.3%
NHHMC	139	96.5	69.4%
NHMMC	154	110.9	72.0%
Total Novant	**901**	**673.1**	**74.7%**

Projected utilization is based on reasonable and adequately supported assumptions, summarized as follows:

- Historical growth rates as the basis of projected growth rates;
- Projected increases in area population with corresponding increases in the utilization of certain services;
- Projected shifts in patient population based on historical shifts in patient population; and
- Projected utilization from previously submitted applications approved by the Agency.

However, the applicant does not adequately demonstrate the need to add 18 acute care beds to NHPMC, as explained in the following discussion. The Criteria and Standards for Acute Care Beds, promulgated in 10A NCAC 14C .3800, require the applicant to demonstrate the following in 10A NCAC 14C .3803(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."* (emphasis added)

As demonstrated in the table above, taken from the applicant's projections provided in the application, the projected total ADC of all facilities under common ownership divided by the total number of projected licensed acute care beds is not at least 75.2 percent by the end of the third operating year following project completion.

Therefore, the applicant does not adequately demonstrate that the projected ADC of the total number of licensed acute care beds under common ownership, divided by the projected total of acute care beds under common ownership, is reasonably projected to at least 75.2 percent during the third operating year following project completion as required by 10A NCAC 14C .3803(a).

Based on review of: 1) the information provided by the applicant in Section C.4, pages 41-44, C.11(b), pages 49-54, Section Q, pages 108-113, and referenced exhibits; 2) comments received during the first 30 days of the review cycle; and 3) the applicant's response to the comments received at the public hearing, the applicant does not adequately document the need for the proposed project for the reasons discussed above.

Access

In Section C.10, pages 46-48, the applicant discusses how the proposed project will promote equitable access. The applicant states:

> *"Novant Health Presbyterian Medical Center will provide services to all persons regardless of race, sex, age, religion, creed, disability, national origin or ability to pay. … The Patient Non-Discrimination Policy states:*
>
> *'Novant Health does not exclude, deny benefits to, or otherwise discriminate against patients, students, or visitors on the basis of race; color; religion; national origin; culture; language; physical or mental disability; genetic information; age; sex, including pregnancy, childbirth or related medical conditions; marital status; sexual orientation; gender identity or expression; socioeconomic status; or source of payment in admission to, participation in, or receipt of the services and benefits of any of its programs and other activities, whether carried out by Novant Health directly or through a contractor or other entity with whom Novant Health arranges to carry out its programs or activities. This information is communicated to patients in the "Patient Bill of Rights."'*
>
> *Services are available to all persons including: (a) low income persons, (b) racial and ethnic minorities, (c) women, (d) handicapped persons, (e) elderly, and (f) other underserved persons, including the medically indigent referred by their attending physicians. …"*

In Section L.1, page 80, the applicant provides the following data to demonstrate the care provided to certain historically medically underserved populations in CY 2016, as shown in the table below.

Medically Underserved Patients – NHPMC – CY 2016		
	% Served @ NHPMC	**% in Mecklenburg County**
Women	60.9%	51.4%
Patients 65 and older	23.5%	10.6%
Racial Minorities	53.2%	42.0%

Sources: Trendstar data, NC OSBM

In Section L.4, pages 83-85, the applicant discusses charity care, stating that NHPMC treats all patients regardless of their ability to pay, and states that payment, or lack thereof, will in no way affect the care given to patients. In Section B.10(b), page 16, the applicant states that NHPMC's eligibility for charity care allows patients with annual household incomes of up to

300% of the Federal Poverty Level to receive charity care through NHPMC. The applicant provides its financial and access to services policies in Exhibit C-10.

In Section Q, Form F.3, page 125, the applicant shows that NHPMC will provide approximately $123,055,114 and $132,456,525 in charity care in project years one and two, respectively; and write off approximately $25,266,801 and $27,197,184 in bad debt in project years one and two, respectively. In Section L.3(a), page 82, the applicant projects that in project years one and two, respectively, 61.4 percent of general acute care inpatient days and 56.51 percent of all inpatient days will be paid for at least in part by Medicare and/or Medicaid.

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

Conclusion

In summary, the applicant adequately identifies the population to be served and demonstrates the extent to which all residents, including underserved groups, will have access to the proposed services. However, the applicant does not adequately demonstrate the need to add 18 additional acute care beds to its facility in Mecklenburg County. Therefore, the application is nonconforming to this criterion.

Novant (F-11367-17) proposes to develop 21 additional Level IV NICU beds at NHPMC for a total of 524 licensed acute care beds upon completion of this project; concurrently filed Project I.D. #F-11366-17 (add 18 additional acute care beds); Project ID #F-7648-06 (develop a new hospital by relocating 50 beds from NHPMC); Project ID #F-8765-11 (relocate Charlotte Orthopedic Hospital and add 50 beds pursuant to a need determination); and Project ID #F-11110-15 (relocate 48 beds to Huntersville Medical Center).

The Presbyterian Hospital is affiliated with Novant Health, Inc. (Novant Health), which owns and operates two other hospitals in Mecklenburg County – Novant Health Matthews Medical Center (NHMMC), Novant Health Huntersville Medical Center (NHHMC) – and one hospital under development, Novant Health Mint Hill Medical Center (NHMHMC). Novant Health Charlotte Orthopedic Hospital (NHCOH) is a separate entity for purposes of operations, but is located adjacent to NHPMC and is licensed as part of NHPMC. Novant has filed a concurrent application, Project I.D. #F-11366-17, to add 18 new acute care beds pursuant to the same need determination in Mecklenburg County.

Patient Origin

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

In Section C.2(a), page 23, the applicant identifies the patient origin for NHPMC NICU beds during FFY 2016, as shown in the table below.

NHPMC NICU Beds – Historical Patient Origin – FFY 2016		
County	**# of Patient Days**	**% of Total**
Mecklenburg	368	64.4%
Union	38	6.7%
Gaston	31	5.4%
Rowan	28	4.9%
Iredell	21	3.7%
Cabarrus	11	1.9%
Lincoln	4	0.7%
Stanly	1	0.2%
Catawba	6	1.1%
Rutherford	5	0.9%
South Carolina	37	6.5%
All Other	21	3.7%
Total	**571**	**100.0%**

Source: Trendstar data

As illustrated in the above table, residents of Mecklenburg, Union, Gaston, Rowan, Iredell, Cabarrus, and Catawba counties represent approximately 88 percent of NHPMC's NICU bed days of care.

In C.3(a), page 24, the applicant provides the projected patient origin for NICU beds for the first three operating years following completion of the proposed project, as shown in the table below.

NHPMC NICU Beds – Projected Patient Origin – Project Years 1-3						
County	**Project Year 1 FFY 2020**		**Project Year 2 FFY 2021**		**Project Year 3 FFY 2022**	
	# Patient Days	**% of Total**	**# Patient Days**	**% of Total**	**# Patient Days**	**% of Total**
Mecklenburg	407	66.3%	427	66.3%	449	66.3%
Union	32	5.3%	34	5.3%	36	5.3%
Gaston	32	5.2%	33	5.2%	35	5.2%
Cabarrus	30	4.9%	32	4.9%	33	4.9%
Iredell	20	3.3%	21	3.3%	22	3.3%
Rowan	15	2.4%	16	2.4%	16	2.4%
Lincoln	7	1.2%	8	1.2%	8	1.2%
Stanly	2	0.3%	2	0.3%	2	0.3%
Catawba	7	1.2%	8	1.2%	8	1.2%
Rutherford	4	0.6%	4	0.6%	4	0.6%
South Carolina	33	5.4%	35	5.4%	36	5.4%
All Other	24	4.0%	26	4.0%	27	4.0%
Total	**613**	**100.0%**	**644**	**100.0%**	**676**	**100.0%**

The applicant states on page 25 that the projected patient origin is based on average of FFY 2016 and FFY 2017 year to date patient origin percentages. The applicant's assumptions and methodology regarding projected utilization are discussed in more detail below.

The applicant adequately identifies the population it proposes to serve.

Analysis of Need

In Section C.4, pages 26-35, the applicant discusses the need for the project. The applicant states that the need for the project is based on the following seven factors:

- Need in the 2017 SMFP for Additional Acute Care Beds (pages 26-27)
- Increases in Technology in NICU Services at NHPMC (pages 27-28)
- Increased Pediatric Specialists at NHPMC (pages 28-30)
- NHPMC Neonatal Intensive Care Historical Utilization (pages 30-32)
- Increase in Births in Mecklenburg County (pages 32-33)
- Referrals from Community Hospitals (page 34)
- Community Support (pages 34-35)

The applicant discusses the above factors beginning on page 26 of the application, as summarized below.

Need in the 2017 SMFP for Additional Acute Care Beds

In Section C.4, pages 26-27, the applicant states that the need for additional acute care beds provides a timely solution for developing additional NICU beds. On page 26, the applicant states:

> *"NHPMC began providing neonatal intensive care services during the 1970s. The NICU has grown from seven beds, to twelve beds, to sixteen beds and in 2005 the unit expanded to its current 38 bed capacity. Although the unit is licensed presently for 38 NICU beds, average daily census (ADC) has exceeded 38 for many years. Neonatologists and staff have managed this excess number of babies by overcrowding in the existing space (putting more than 38 babies in a 38-bed unit when necessary) until the past few years when admissions and ADC became so nigh that the 'overcrowding' technique was failing. At that time NHPMC created emergency space for NICU expansion in other unoccupied areas of the hospital."*

The applicant states on page 27 that adding 21 NICU beds will resolve the issues of overcrowding and utilization of emergency space.

Increases in Technology in NICU Services at NHPMC

In Section C.4, pages 27-28, the applicant describes advances in technology that have driven higher utilization of the NICU beds. On page 27, the applicant states that a journal study has documented that due to advances in medicine, babies born prematurely and with abnormally low birth weights today have increasing chances of survival. The applicant also cites a medical article which shows that hospital infection control contributes to improvements in outcomes for premature babies, and states that NICUs like the one at NHPMC have trained staff and dedicated equipment that helps to reduce infections and improve outcomes.

On pages 27-28, the applicant discusses the surgical needs of babies born with conditions that need corrective surgery. The applicant states that it has the latest technology and equipment necessary for diagnostic capabilities and that it has expanded the number of pediatric specialists and sub-specialists. The applicant states that the increased number of pediatric specialists able to provide care for newborns needing corrective surgery is one of the reasons utilization at the NICU has increased.

Increased Pediatric Specialists at NHPMC

In Section C.4, pages 28-30, the applicant discusses the effect of adding pediatric and maternal-fetal specialists to NHPMC. The applicant states on page 28 that total physician encounters in pediatrics in the greater Charlotte market at Novant facilities have increased 4.5 percent year to date as compared to the same time frame in the prior year and total physician encounters for women's services have increased 3.1 percent year to date as compared to the same time frame in the prior year.

On pages 29-30, the applicant states that the number of patients seen in the NICU at NHPMC has increased 7.0 percent during the first three months of 2017 as compared to the same time period in 2016, and also states that the number of patients has increased 5.9 percent year to date for FFY 2017. The applicant states during the last four years it has added a net total of 33 new pediatric physicians at NHPMC and that the additional physicians are the reason for the increase in utilization. The applicant further states that it has added ten additional OB/GYNs to the staff of NHPMC.

NHPMC Neonatal Intensive Care Historical Utilization

In Section C.4, pages 30-32, the applicant discusses the increase in patient days in the NICU at NHPMC. The applicant states that utilization has increased dramatically since 2014 due to technological advances in neonatal care which allow for more surgical services for newborns that require corrective surgery but which also increase the average length of stay in the NICU. On page 30, the applicant provides historical utilization of the NICU at NHPMC, as shown in the table below.

NHPMC NICU Historical Utilization – FFY 2014-2017

	FFY 2014	FFY 2015	FFY 2016	FFY 2017*
NICU Cases	579	652	571	610
ALOS	23.2	24.7	29.2	28.2
NICU Patient Days	13,447	16,116	16,687	17,180
Annual Growth	--	19.8%	3.5%	3.0%

Source: LRAs, Trendstar data
*Estimated

The total number of NICU cases at NHPMC declined from FFY 2015 to FFY 2016. However, the number of patient days increased from FFY 2015 to FFY 2016. Additionally, on page 31, the statewide numbers for NICU cases similarly declined from FFY 2015 to FFY 2016, and there was a corresponding increase in patient days statewide from FFY 2015 to FFY 2016.

On page 31, the applicant projects how many additional NICU beds its utilization would support if beds are utilized at 80 percent of capacity, as shown in the table below.

NHPMC NICU Historical Utilization – FFY 2014-2017				
	FFY 2014	**FFY 2015**	**FFY 2016**	**FFY 2017***
ADC	36.8	44.2	45.6	47.1
Beds Needed @ 80%	46	55	57	59
Current Capacity	38	38	38	38
Additional Beds Needed	8	17	19	21

Source: LRAs, Trendstar data
*Estimated based on partial FFY 2017 data

The applicant states on page 31 that the trend of increasing NICU average lengths of stay is not unique to NHPMC and provides data for North Carolina, HSA III, and Mecklenburg County showing that the average length of stay for each aggregate group has consistently increased between 2013 and 2016.

On pages 31-32, the applicant states that it has four offices around the region which serve maternal and fetal health and which refer patients to NHPMC's NICU. The applicant states that it also works with a federally qualified health center, Charlotte Community Health Clinic, to accept high-risk patients, as well as working with other community providers to receive patients that need high-risk services. The applicant states that its community outreach contributes to the increase in growth of services including in the NHPMC NICU.

Increase in Births in Mecklenburg County

In Section C.4, pages 32-33, the applicant states that births have been increasing faster than the childbearing population has been increasing in Mecklenburg County, as shown in the table below.

Mecklenburg County Births 2013-2015			
	2013	**2014**	**2015**
Births	13,820	14,409	14,851
Increase in Births	--	4.3%	3.1%
Women Age 16-44	220,836	223,267	226,911
Increase in Population	--	1.1%	1.6%

Sources: Truven, NC Center for Health Statistics

The applicant states on page 32 that the childbearing population has grown at half the rate of the increase of births or less during the last three years that data is available.

On page 33, the applicant provides information about the total number of births, the percentage of births that are admitted to the NICU, and information about NHPMC's NICU admissions. The applicant states that a higher percentage of births at NHPMC are admitted to the NICU than the average for HSA III or for Mecklenburg County, as shown in the tables below.

Births Admitted to NICU Level Care – 2013-2016					
	2013	**2014**	**2015**	**2016**	**Average**
HSA III					
Total Births	25,533	26,512	27,200		
NICU Admissions	2,293	2,294	2,545	2,457	
% of Total Births	9.0%	8.7%	9.4%		9.00%
Mecklenburg County					
Total Births	13,820	14,409	14,851		
NICU Admissions	1,322	1,263	1,397	1,342	
% of Total Births	9.6%	8.8%	9.4%		9.25%

Sources: Truven, NC Center for Health Statistics

NHPMC NICU Internal Admissions – 2014-2016					
Year	**Births**	**% Admitted**	**# Admitted**	**Total Cases**	**% of Total**
2014	5,021	10.6%	532	579	91.9%
2015	5,089	11.2%	570	652	87.4%
2016	4,995	10.3%	514	571	90.1%

Source: LRAs, NICU data

On page 33, the applicant states that the higher percent of in-house admissions at NHPMC is due to expanded outreach of maternal and fetal medicine programs at NHPMC, which results in many high-risk mothers being referred to NHPMC during pregnancy and ultimately delivering the babies at NHPMC. The applicant states that the increasing number of Mecklenburg County births and high internal admissions to the NICU at NHPMC supports the need for additional NICU beds.

Referrals From Community Hospitals

In Section C.4, page 34, the applicant lists nine hospitals that it has received NICU referrals from in the last several years. The applicant states that in-migration from outside of Mecklenburg County in the NHPMC NICU was around 35 percent for FFY 2016. The applicant states that many patients are referred to NHPMC during pregnancy but that 10 percent of NICU admissions are directly transferred to the NHPMC NICU from other hospitals at birth.

The applicant states it has the support of maternal-fetal, neonatal, and pediatric physicians in Mecklenburg County as well as from referral sources beyond Mecklenburg County. Exhibit H-4 contains letters signed by 25 physicians outside of Mecklenburg County expressing support for the proposed project.

Community Support

In Section C.4, pages 34-35, the applicant states that it partners with many community organizations devoted to maternal and child health and provides a partial list of groups it partners with on page 35. Exhibit I-2 contains 14 letters from groups identifying themselves as community partners of the NHPMC NICU expressing support for the proposed project.

The applicant also states that due to its operating procedures, which encourage families to visit, obtain information about their infants, and that assists with the transition from hospital to home, the staff and physicians at NHPMC's NICU often become like family. The applicant states that it holds an annual family reunion for former patients and families. Exhibit C-4 contains 102 letters of support from individuals identifying themselves as relatives of a NICU baby and expressing support for the proposed project.

Projected Utilization

In Section Q, the applicant provides a table showing its historical and projected utilization for NICU and total acute care patient days, as shown below.

NHPMC NICU & Total Acute Care Beds – Historical and Projected Utilization – 2014 – 2022									
	Prior	**Prior**	**Last**	**Interim**	**Interim**	**Interim**	**First PY**	**Second PY**	**Third PY**
	CY 2014	**CY 2015**	**CY 2016**	**CY 2017**	**CY 2018**	**1/19-9/19**	**FFY 2020**	**FFY 2021**	**FFY 2022**
NICU Beds									
# Beds	38	38	38	38	38	38	59	59	59
# Discharges	586	651	578	579	603	459	613	644	676
# Patient Days	13,573	17,524	16,838	17,099	17,353	13,196	17,637	18,535	19,456
Total Acute Care Beds									
# Beds	539	514	514	503	519	533	524	524	524
# Discharges	25,150	23,392	23,350	25,108	26,363	20,509	27,862	28,475	28,984
# Patient Days	121,216	118,834	120,163	128,589	134,747	104,013	141,020	144,516	147,586

The applicant's project years are FFYs 2020-2022. The applicant provides its assumptions and methodology for projecting future utilization at NHPMC in Section C.4, pages 36-41. The assumptions and methodology assume approval of the applicant's concurrently filed application, Project I.D. #F-11366-17 (add 18 additional acute care beds).

1. Determine Mecklenburg County Birth Rate for Use in NICU Projections

In Section C.4, page 36, the applicant states that it reviewed historical births and population data for Mecklenburg County (from Truven and the NC Center for Health Statistics) to determine the birth rate per thousand people. The applicant states it defined women of childbearing age as women ages 16-44. The applicant provides its data and calculations on page 36 as shown in the table below.

Mecklenburg County Births 2013-2015			
	2013	**2014**	**2015**
Births	13,820	14,409	14,851
Increase in Births	--	4.3%	3.1%
Women Age 16-44	220,836	223,267	226,911
Increase in Population	--	1.1%	1.6%
Birth Rate	62.58	64.54	65.45

Sources: Truven, NC Center for Health Statistics

The applicant states that it used the 2015 birth rate of 65.45 births per thousand people in its projections for future utilization. The Project Analyst reviewed the same sources of data used by the applicants and determined that while the birth rate for the state as a whole declined during the same time period, the birth rate for HSA III increased as did the birth rate for Mecklenburg County. See the Working Papers for the Project Analyst's review of the data. Therefore, it is reasonable to use the most recently available birth rate for Mecklenburg County in future projections.

2. Calculate Future Mecklenburg County Births Admitted to NICU

In Section C.4, pages 36-37, the applicant states that it obtained projected population data for women ages 16-44 from the North Carolina Office of State Budget and Management (NC OSBM). The applicant states that the project will be operational by October 1, 2019, so it projected the number of births beginning in 2019. The applicant applies its projected birth rate from Step 1 to the projected population data from NC OSBM to project future Mecklenburg County births, as shown in the table below.

Mecklenburg County Projected Births 2019-2022				
	2019	**2020**	**2021**	**2022**
Women aged 16-44	239,765	243,012	246,490	250,054
Birth Rate	65.45	65.45	65.45	65.45
Births	15,692	15,905	16,132	16,366

Sources: NC OSBM, Truven, NC Center for Health Statistics

The applicant states on page 37 that it next determined the number of Mecklenburg County NICU admissions by comparing the total number of births to the total number of NICU admissions for historical years 2013-2015. The applicant then applies the percentage of births admitted to NICU to the projected number of births during years 2019-2022, as shown in the tables below.

Mecklenburg County NICU Admissions 2013-2015				
	2013	**2014**	**2015**	**Average**
Total Births	13,820	14,409	14,851	
NICU Admissions	1,322	1,263	1,397	
% of Total Births	9.6%	8.8%	9.4%	9.25%

Sources: Truven, NC Center for Health Statistics

Mecklenburg County Projected NICU Admissions 2019-2022				
	2019	**2020**	**2021**	**2022**
Births	15,692	15,905	16,132	16,366
% Admitted to NICU – Average	9.25%	9.25%	9.25%	9.25%
Expected NICU Admissions	1,451	1,470	1,491	1,513

3. Determine NHPMC NICU Market Share of Mecklenburg County Births Admitted to NICU

In Section C.4, pages 37-38, the applicant states that despite the NHPMC NICU being highly utilized for many years, increases in the average length of stay and the lack of capacity at NHPMC's NICU have resulted in fluctuations in the number of NICU admissions, as well as a slight decrease in NHPMC NICU market share. The applicant provides its historical admissions and corresponding market share as shown in the table below.

Mecklenburg County Historical NICU Admissions CYs 2013-2016				
	2013	**2014**	**2015**	**2016**
County NICU Admissions	1,322	1,263	1,397	1,342
Annual Change		-4.5%	10.6%	-3.9%
NHPMC County Admissions	382	382	418	362
Annual Change		0.0%	9.4%	-13.4%
NHPMC Market Share	28.9%	30.2%	29.9%	27.0%

Sources: Trendstar, NC OSBM, Truven, NC Center for Health Statistics

The applicant states on page 38 that because it believes the decrease in market share is related to the lack of capacity, it projects that the market share for NHPMC will increase to 30 percent by the third project year, bringing it back to the level it was in 2014.

4. Determine Mecklenburg County Admissions to NHPMC NICU

In Section C.4, page 38, the applicant states that it used the projected number of Mecklenburg County births it calculated in Step 2 and applied the projected market share it calculated in Step 3 to determine the number of NICU admissions from Mecklenburg County during its first three project years, as shown in the table below.

Mecklenburg County Projected NICU Admissions CYs 2019-2022				
	2019	**2020**	**2021**	**2022**
County Births	15,692	15,905	16,132	16,366
% Admitted to NICU – Average	9.25%	9.25%	9.25%	9.25%
Expected County NICU Admissions	1,451	1,470	1,491	1,513
NHPMC NICU County Market Share	27.0%	28.0%	29.0%	30.0%
NHPMC NICU County Admissions	391	412	433	454

Sources: NC OSBM, Truven, NC Center for Health Statistics, Trendstar data

5. Determine the Total Number of Admissions to the NHPMC NICU

In Section C.4, pages 38-39, the applicant states that it calculated the percentage of in-migration it would experience based on the average of FFY 2016 and FFY 2017 year to date in-migration it has experienced. The applicant then projects the total number of NICU admissions by calculating the additional admissions it will have from other counties based on the percentage of in-migration it calculated. The applicant's projections and calculations are shown in the table below.

Total Projected NICU Admissions CYs 2019-2022				
	2019	**2020**	**2021**	**2022**
County Births	15,692	15,905	16,132	16,366
% Admitted to NICU – Average	9.25%	9.25%	9.25%	9.25%
Expected County NICU Admissions	1,451	1,470	1,491	1,513
NHPMC NICU County Market Share	27.0%	28.0%	29.0%	30.0%
NHPMC NICU County Admissions	391	412	433	454
% Admissions from Other Counties	34%	34%	34%	34%
Non-County NICU Admissions	199	209	220	230
Total NHPMC NICU Admissions	590	621	653	684

6. Calculate Future Patient Days for NHPMC NICU

In Section C.4, pages 39-40, the applicant states that it analyzed the average length of stay for both Mecklenburg County admissions and in-migration admissions to project future patient days, as shown in the table below.

NHPMC NICU Historical ALOS						
FFY	**2014**	**2015**	**2016**	**2017**	**4yr Avg**	**2016/YTD 2017 Avg**
Total ALOS	23.2	24.7	29.2	28.2	26.3	28.7
Mecklenburg County ALOS	20.1	22.9	27.5	24.1	23.6	25.8
All Other Counties ALOS	29.3	28.6	32.4	36.9	31.8	34.6

Source: Trendstar data

The applicant states on page 40 that it used the ALOS derived from the average of FFY 2016 and FFY 2017 year to date and then projected future patient days by applying the ALOS to the projected admissions from Step 5. The applicant's projections and calculations are shown in the table below.

Total Projected NICU Patient Days CYs 2019-2022				
	2019	**2020**	**2021**	**2022**
NHPMC NICU County Admissions	391	412	433	454
NHPMC NICU County ALOS	25.8	25.8	25.8	25.8
NHPMC NICU County Patient Days	10,092	10,617	11,154	11,705
Non-County NICU Admissions	199	209	220	230
Non-County NICU ALOS	34.6	34.6	34.6	34.6
Non-County NICU Patient Days	6,883	7,241	7,607	7,983
Total NHPMC NICU Patient Days	16,974	17,858	18,761	19,688

7. Convert to Project Years and Future Utilization of New NICU Beds

In Section C.4, pages 40-41, the applicant states that it converted the projections it made from calendar years to federal fiscal years, since it projects completion of the project and for the new beds to be operational by October 1, 2019. The applicant's calculations and projections are shown in the table below.

NHPMC NICU Projected Total Patient Days PYs 1-3			
	FFY 2020	**FFY 2021**	**FFY 2022**
Admissions	613	644	676
Patient Days	17,637	18,535	19,456
ADC	48.32	50.78	53.30
Current NICU Beds	38	38	38
New NICU Beds	21	21	21
Proposed NICU Beds	59	59	59
Utilization	81.9%	86.1%	90.3%

The applicant states on page 41 that it could justify adding more than 21 beds, based on the 75 percent utilization threshold in the NICU Criteria and Standards planning target, but that because it wants to add the new NICU beds into the same area as the existing beds and still keep all women's services adjacent to the NICU beds, it can only develop 21 additional beds at this time and still accomplish the goal of keeping services together.

Historical Utilization of NHPMC NICU Beds

In Section C.11(b), page 47, the applicant provides its historical utilization of NICU beds during the 12 months immediately preceding the submission of the application pursuant to 10A NCAC 14C .1403. The applicant's historical utilization is shown in the table below.

NHPMC NICU Historical Utilization			
	FFY 2016	**10/16-3/17**	**FFY 2017***
NICU Patient Days	16,687	8,590	17,180
Number of Beds	38	38	38
Utilization	120.3%	123.9%	123.9%

Sources: LRAs, Trendstar data
*Estimated

Projected utilization is based on reasonable and adequately supported assumptions, summarized as follows:

- Historical growth rates as the basis of projected growth rates;
- Projected increases in area population with corresponding increases in the utilization of certain services;
- Projected shifts in patient population based on historical shifts in patient population; and
- Projected utilization from previously submitted applications approved by the Agency.

However, the applicant does not adequately demonstrate the need to add 21 NICU beds to NHPMC, as explained in the following discussion.

In Section A.6, page 6, the applicant states, in response to a question asking the applicant to briefly identify the essential elements of the project, that this application's brief project description is *"Add 21 new Level IV Neonatal Intensive Care Unit beds based on a need determination in the **2017 SMFP Chapter 5** for 60 new **acute beds** in Mecklenburg County"* (emphasis added). Chapter 5 of the 2017 SMFP is entitled "Acute Care Hospital Beds." The

applicant also filed a concurrent application, pursuant to the same need determination, for 18 general acute care beds (Project I.D. #F-11366-17). The applicant states the same thing or a close variation of the quote above in numerous places in its application. In Section B.1, page 9, the applicant states that it is filing this application in response to a need determination found in Table 5B, Chapter 5, of the 2017 SMFP. Table 5B, on page 52 of the 2017 SMFP, is entitled "Table 5B: Acute Care Bed Need Determination."

The Criteria and Standards for Acute Care Beds, promulgated in 10A NCAC 14C .3800, require the applicant to demonstrate the following in 10A NCAC 14C .3803(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."* (emphasis added)

The applicant was aware, not only from the sources of information it relied upon but also based on its own words in this application as submitted, that it was applying for new acute care beds as part of this application. The applicant failed to respond as required to the Criteria and Standards for Acute Care Beds in the application as submitted.

The applicant did respond to the Criteria and Standards for Acute Care Beds in its concurrently filed application, Project I.D. #F-11366-17 (add 18 acute care beds); however, those projections cannot be used to fulfill the requirements of the Rule because the two projects have different types of operating years. Project I.D. #F-11366-17 uses calendar years as its project years or operating years; the applicant uses federal fiscal years as its project years or operating years in this application. Because the types of project years or operating years are not the same, the projections would not be the same, and thus the projections provided by the applicant in Project I.D. #F-11366-17 cannot be used to fulfill the requirements of this Rule.

Moreover, even if the projections in Project I.D. #F-11366-17 could be used to fulfill the requirements of the Rule in the current application, the applicant would still not demonstrate the need to add 21 additional NICU beds. The operating years for Project I.D. #F-11366-17 are calendar years and the applicant's operating years in this application are federal fiscal years, and the first three operating years for Project I.D. #F-11366-17 end approximately three months later than the first three operating years for this project. As discussed in the section of these findings related to Project I.D. #F-11366-17, the application as submitted, which projects utilization three months further than the current application, does not project that the total ADC of all facilities under common ownership divided by the total number of projected licensed acute care beds is at least 75.2 percent by the end of the third operating year following project completion, as required by 10A NCAC 14C .3803(a).

Based on review of: 1) the information provided by the applicant in Section C.4, pages 25-41, Section C.11(b), page 47, Section Q, and referenced exhibits; 2) comments received during the first 30 days of the review cycle; and 3) the applicant's response to the comments received at the public hearing, the applicant does not adequately document the need for the project for the reasons discussed above.

Access

In Section C.10, pages 43-45, the applicant discusses how the proposed project will promote equitable access. The applicant states:

> *"Novant Health Presbyterian Medical Center will provide services to all persons regardless of race, sex, age, religion, creed, disability, national origin or ability to pay, including the medically indigent, the uninsured, and the under insured. … The Patient Non-Discrimination Policy states:*
>
> *'Novant Health does not exclude, deny benefits to, or otherwise discriminate against patients, students, or visitors on the basis of race; color; religion; national origin; culture; language; physical or mental disability; genetic information; age; sex, including pregnancy, childbirth or related medical conditions; marital status; sexual orientation; gender identity or expression; socioeconomic status; or source of payment in admission to, participation in, or receipt of the services and benefits of any of its programs and other activities, whether carried out by Novant Health directly or through a contractor or other entity with whom Novant Health arranges to carry out its programs or activities. This information is communicated to patients in the "Patient Bill of Rights."'*
>
> *Services are available to all persons including: (a) low income persons, (b) racial and ethnic minorities, (c) women, (d) handicapped persons, (e) elderly, and (f) other underserved persons, including the medically indigent referred by their attending physicians. …"*

In Section L.1, page 73, the applicant provides the following data to demonstrate the care provided to certain historically medically underserved populations in CY 2016, as shown in the table below.

Medically Underserved Patients – NHPMC – CY 2016		
	% Served @ NHPMC	**% in Mecklenburg County**
Women	60.9%	51.4%
Patients 65 and older	23.5%	10.6%
Racial Minorities	53.2%	42.0%

Sources: Trendstar data, NC OSBM

In Section L.4, pages 76-78, the applicant discusses charity care, stating that NHPMC treats all patients regardless of their ability to pay, and states that payment, or lack thereof, will in no way affect the care given to patients. In Section B.10(b), page 17, the applicant states that NHPMC's eligibility for charity care allows patients with annual household incomes of up to

300% of the Federal Poverty Level to receive charity care through NHPMC. The applicant provides its financial and access to services policies in Exhibit C-10.

In Section Q, Form F.3, the applicant shows that NHPMC will provide approximately $123,055,114 and $132,456,525 in charity care in project years one and two, respectively; and write off approximately $25,266,801 and $27,197,184 in bad debt in project years one and two, respectively. In Section L.3(a), page 75, the applicant projects that in project years one and two, respectively, 49.85 percent of NICU inpatient days and 56.51 percent of all inpatient days will be paid for at least in part by Medicare and/or Medicaid.

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

Conclusion

In summary, the applicant adequately identifies the population to be served and demonstrates the extent to which all residents, including underserved groups, will have access to the proposed services. However, the applicant does not adequately demonstrate the need to add 21 additional NICU beds to its facility in Mecklenburg County. Therefore, the application is nonconforming to this criterion.

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

NA – All Applications

None of the applicants propose to reduce a service, eliminate a service, or relocate a facility or service. Therefore, Criterion (3a) is not applicable to this review.

(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.

NC – Novant (both)
C – All Other Applications

Mercy. In Section E.2, pages 60-61, the applicant describes the alternatives considered, which include the following:

1. Maintain the Status Quo – CHS Pineville considered maintaining the status quo; however, the applicant concluded this option would force CHS Pineville to continue to operate with inefficiencies and the frequent inability to place patients in the most appropriate beds. The applicant also says that patients would continue to endure long wait times in the emergency

room while waiting for a bed. Furthermore, the applicant states that without investing in additional beds, CHS Pineville would have limited options to accommodate future population growth and population aging. Therefore, the applicant did not consider maintaining the status quo as a practical alternative.

2. Develop Beds in New Construction – the applicant evaluated this alternative; however, the applicant states that strategic facilities master planning is underway with all CHCS campuses in Mecklenburg County, and as such any new construction would take longer to develop. Therefore, the applicant decided this was not the most effective alternative at this time.

3. Add Beds to Other CHCS Campuses – the applicant considered developing beds at CMC-Mercy or CHS University, rather than at CHS Pineville and CMC, but determined that CMC-Mercy and CHS University have sufficient capacity, and both recently developed additional capacity after projects resulting from a need determination in the 2013 SMFP. Therefore, the applicant decided this was not the most effective alternative at this time.

4. Develop the Concurrently Filed Projects as Proposed – The applicant states on page 59 that CHS Pineville's application for 15 beds, concurrently filed with an application for 45 additional beds at CMC, is the most effective alternative to meet the identified need for 60 additional acute care beds in Mecklenburg County. The applicant states that the beds can be developed in existing space and in a timely manner to reduce costs and address immediate needs at the facilities.

The applicant states that the project as proposed is the most reasonable and cost-effective alternative for meeting the identified need for additional beds in Mecklenburg County and at CHS Pineville. Furthermore, the application is conforming to all other statutory and regulatory review criteria, and thus, is approvable. A project that cannot be approved cannot be an effective alternative.

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

CMHA. In Section E.2, pages 65-66, the applicant describes the alternatives considered, which include the following:

1. Maintain the Status Quo – CMC considered maintaining the status quo; however, the applicant concluded this option would force CMC to continue to operate with inefficiencies and the frequent inability to place patients in the most appropriate beds. The applicant also says that patients would continue to endure long wait times in the emergency room while waiting for a bed. Furthermore, the applicant states that without investing in additional beds, CMC would have limited options to accommodate future population growth and population aging. Therefore, the applicant did not consider maintaining the status quo as a practical alternative.

2. Develop Beds in New Construction – the applicant evaluated this alternative; however, the applicant states that strategic facilities master planning is underway with all CHCS campuses in Mecklenburg County, and as such any new construction would take longer to develop. The applicant also states that due to the density, size, and age of the CMC campus, new construction takes careful planning and takes longer to develop. Therefore, the applicant decided this was not the most effective alternative at this time.

3. Add Beds to Other CHCS Campuses – the applicant considered developing beds at CMC-Mercy or CHS University, rather than at CMC and CHS Pineville, but determined that CMC-Mercy and CHS University have sufficient capacity, and both recently developed additional capacity after projects resulting from a need determination in the 2013 SMFP. Therefore, the applicant decided this was not the most effective alternative at this time.

4. Develop the Concurrently Filed Projects as Proposed – The applicant states on page 66 that CMC's application for 45 beds, concurrently filed with an application for 15 additional beds at CHS Pineville, is the most effective alternative to meet the identified need for 60 additional acute care beds in Mecklenburg County. The applicant states that the beds can be developed in existing space and in a timely manner to reduce costs and address immediate needs at the facilities.

The applicant states that the project as proposed is the most reasonable and cost-effective alternative for meeting the identified need for additional beds in Mecklenburg County and at CMC. Furthermore, the application is conforming to all other statutory and regulatory review criteria, and thus, is approvable. A project that cannot be approved cannot be an effective alternative.

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

Novant (F-11366-17). In Section E.2, pages 57-58, the applicant describes the alternatives considered, which include the following:

1. Maintain the Status Quo – Novant considered maintaining the status quo; however, it states that total acute care bed capacity at NHPMC is decreasing to 485 beds by 2019, and the number of non-ICU general acute care beds will decrease from 420 to 391. The applicant also states that inpatient utilization has increased at NHPMC during the last two years and projects further growth due to physician recruitment and development of programs and initiatives. Therefore, the applicant did not consider maintaining the status quo as a practical alternative.

2. Relocate Fewer Beds to Community Hospitals – the applicant evaluated this alternative; however, the applicant states that the relocation of the beds is supported by current and projected growth and states that the Agency reviewed the projects and approved them. The applicant further states that the projects are under development. Therefore, the applicant decided this was not the most effective alternative at this time.

3. Apply for More Than 18 Acute Care Beds – the applicant considered submitting an application for more than 18 acute care beds; however, the applicant states this would require the construction of a new bed tower and result in much higher costs for project development. Therefore, the applicants rejected this alternative as not effective.

4. Develop the Concurrently Filed Projects as Proposed – The applicant states on page 58 that NHPMC's application for 18 additional acute care beds is the most effective alternative to meet the identified need.

The applicant states that the project as proposed is the most reasonable and cost-effective alternative for meeting the identified need for additional beds in Mecklenburg County and at NHPMC. However, the application is not conforming to all other statutory and regulatory review criteria, and thus, is not approvable. See Criteria (1), (3), (6), and (18a). A project that cannot be approved cannot be an effective alternative.

In summary, the applicant does not adequately demonstrate that the proposal is the least costly or most effective alternative to meet the identified need. Therefore, the application is not conforming to this criterion.

Novant (F-11367-17). In Section E.2, page 52, the applicant describes the alternatives considered, which include the following:

1. Maintain the Status Quo – TPH considered maintaining the status quo; however, it states that inpatient utilization has increased at NHPMC. Therefore, the applicant did not consider maintaining the status quo as a practical alternative.

2. Convert Existing Acute Care Beds Into NICU Beds – The applicant considered converting existing acute care beds into NICU beds, but states that with the increases in utilization between April 2016 and March 2017, there is no excess bed capacity available to convert to NICU beds. Therefore, the applicant did not consider converting existing acute care beds into NICU beds as a practical alternative.

3. Develop the Concurrently Filed Projects as Proposed – The applicant states on page 52 that NHPMC's application for 21 additional NICU beds is the most effective alternative to meet the identified need.

The applicant states that the project as proposed is the most reasonable and cost-effective alternative for meeting the identified need for additional beds in Mecklenburg County and at NHPMC. However, the application is not conforming to all other statutory and regulatory review criteria, and thus, is not approvable. See Criteria (1), (3), (6), and (18a). A project that cannot be approved cannot be an effective alternative.

In summary, the applicant does not adequately demonstrate that the proposal is the least costly or most effective alternative to meet the identified need. Therefore, the application is not conforming to this criterion.

(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.

C – All Applications

Mercy. The applicant proposes to develop 15 additional acute care beds at CHS Pineville for a total of 221 licensed acute care beds upon project completion.

Capital and Working Capital Costs

In Section Q, Form F.1a, the applicant states that the total capital cost of the project will be $1,115,000, as shown in the table below.

CHS Pineville – Capital Expenditure	
Item	**Cost**
Construction/Renovation Contract	$300,000
Architect/Engineering Fees	$50,000
Medical Equipment	$476,386
Furniture	$75,000
Consultant Fees	$100,000
Other/Contingency	$113,614
Total	**$1,115,000**

Exhibit F.1 contains a May 23, 2017 construction cost estimate by a licensed architect, which confirms the amount for the construction/renovation contract listed.

In Section F.3, pages 64-65, the applicant states there will be no start-up or initial operating expenses associated with the proposed project because it does not involve a new service.

Availability of Funds

In Section F.2, page 63, the applicant states that the project will be funded through CHCS's accumulated reserves. Exhibit F.2-1 contains a June 15, 2017 letter signed by the Executive Vice President and Chief Financial Officer for CHCS, verifying the availability of funding for the project and committing $1,115,000 of accumulated reserves to fund the project.

Exhibit F.2-2 contains the audited financial statements for CHCS for the year ending December 31, 2015. As of December 31, 2015, CHCS had $173,812,000 in cash and cash equivalents and $3,648,789,000 in net assets. The applicant adequately demonstrates the availability of sufficient funds for the capital needs of the project.

Financial Feasibility

The applicant provided pro forma financial statements for the first three full fiscal years of operation following completion of the project. In the pro forma financial statement for CHS

Pineville M/S acute care beds (Form F.4), the applicant projects that operating expenses will exceed revenues in the first three operating years of the project, as shown in the table below.

CHS Pineville M/S Acute Care Beds – OYs 1-3			
	CY 2019	**CY 2020**	**CY 2021**
Total Patient Discharges	13,809	13,147	13,778
Total Gross Revenues (Charges)	$147,232,845	$144,376,920	$155,851,819
Total Net Revenue	$29,195,665	$27,931,039	$29,389,506
Average Net Revenue per Patient	$2,114	$2,125	$2,133
Total Operating Expenses (Costs)	$38,256,060	$37,997,524	$40,512,862
Average Operating Expense per Patient	$2,769	$2,890	$2,940
Net Income/(Loss)	**($9,060,395)**	**($10,066,485)**	**($11,123,356)**

However, in the pro forma financial statement for CHS Pineville (Form F.3), the applicant projects that revenues for the entire facility will exceed operating expenses in the first three operating years of the project, as shown in the table below.

CHS Pineville Entire Facility – OYs 1-3			
	CY 2019	**CY 2020**	**CY 2021**
Total Gross Revenues (Charges)	$1,748,255,000	$1,864,601,000	$1,956,476,000
Total Net Revenue	$458,234,000	$477,363,000	$489,488,000
Total Operating Expenses (Costs)	$343,987,000	$363,499,000	$381,195,000
Net Income/(Loss)	**$114,247,000**	**$113,865,000**	**$108,293,000**

The assumptions used by the applicant in preparation of the pro forma financial statements are reasonable, including projected utilization, costs, and charges. See Section Q of the application for the assumptions used regarding costs and charges. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference. The applicant adequately demonstrates sufficient funds for the operating needs of the proposal and that the financial feasibility of the proposal is based upon reasonable projections of costs and charges.

Conclusion

In summary, the applicant adequately demonstrates the financial feasibility of the project is based upon reasonable and adequately supported assumptions regarding projected utilization, revenues (charges), and operating costs. Therefore, the application is conforming to this criterion.

CMHA. The applicant proposes to develop 45 additional acute care beds for a total of 1,055 licensed acute care beds upon project completion. 29 of the additional acute care beds will be adult M/S beds and 16 of the additional acute care beds will be pediatric M/S beds.

Capital and Working Capital Costs

In Section Q, Form F.1a, the applicant states that the total capital cost of the project will be $1,200,000, as shown in the table below.

CMC – Capital Expenditure	
Item	**Cost**
Construction/Renovation Contract	$120,000
Architect/Engineering Fees	$20,000
Medical Equipment	$585,000
Furniture	$165,000
Consultant Fees	$100,000
Other/Contingency	$210,000
Total	**$1,200,000**

Exhibit F.1 contains a May 26, 2017 construction cost estimate by a licensed architect, which confirms the amount for the construction/renovation contract listed.

In Section F.3, pages 69-70, the applicant states there will be no start-up or initial operating expenses associated with the proposed project because it does not involve a new service.

Availability of Funds

In Section F.2, page 68, the applicant states that the project will be funded through CHCS's accumulated reserves. Exhibit F.2-1 contains a June 15, 2017 letter signed by the Executive Vice President and Chief Financial Officer for CHCS, verifying the availability of funding for the project and committing $1,200,000 of accumulated reserves to fund the project.

Exhibit F.2-2 contains the audited financial statements for CHCS for the year ending December 31, 2015. As of December 31, 2015, CHCS had $173,812,000 in cash and cash equivalents and $3,648,789,000 in net assets. The applicant adequately demonstrates the availability of sufficient funds for the capital needs of the project.

Financial Feasibility

The applicant provided pro forma financial statements for the first three full fiscal years of operation following completion of the project. In the pro forma financial statements for CMC M/S adult and pediatric acute care beds (Form F.4), the applicant projects that operating expenses will exceed revenues in the first three operating years of the project, as shown in the table below.

CMC Adult M/S Acute Care Beds – OYs 1-3			
	CY 2019	**CY 2020**	**CY 2021**
Total Patient Discharges	21,683	21,164	21,752
Total Gross Revenues (Charges)	$246,685,994	$248,008,247	$262,538,727
Total Net Revenue	$57,027,149	$56,489,750	$58,867,179
Average Net Revenue per Patient	$2,630	$2,669	$2,706
Total Operating Expenses (Costs)	$83,843,168	$84,874,591	$89,146,616
Average Operating Expense per Patient	$3,867	$4,010	$4,098
Net Income/(Loss)	**($26,816,019)**	**($28,384,841)**	**($30,279,437)**

CMC Pediatric M/S Acute Care Beds – OYs 1-3			
	CY 2019	**CY 2020**	**CY 2021**
Total Patient Discharges	5,893	5,907	5,921
Total Gross Revenues (Charges)	$65,590,320	$67,718,030	$69,914,761
Total Net Revenue	$21,810,192	$22,037,130	$22,239,416
Average Net Revenue per Patient	$3,701	$3,731	$3,756
Total Operating Expenses (Costs)	$25,472,193	$26,283,009	$27,119,704
Average Operating Expense per Patient	$4,322	$4,449	$4,580
Net Income/(Loss)	**($3,662,001)**	**($4,245,879)**	**($4,880,288)**

However, in the pro forma financial statement for CMC (Form F.3), the applicant projects that revenues for the entire facility will exceed operating expenses in the first three operating years of the project, as shown in the table below.

CMC Entire Facility – OYs 1-3			
	CY 2019	**CY 2020**	**CY 2021**
Total Gross Revenues (Charges)	$6,934,667,000	$7,277,453,000	$7,595,061,000
Total Net Revenue	$2,101,783,000	$2,147,056,000	$2,179,758,000
Total Operating Expenses (Costs)	$1,784,777,000	$1,861,407,000	$1,930,345,000
Net Income/(Loss)	**$317,006,000**	**$285,650,000**	**$249,414,000**

The assumptions used by the applicant in preparation of the pro forma financial statements are reasonable, including projected utilization, costs, and charges. See Section Q of the application for the assumptions used regarding costs and charges. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference. The applicant adequately demonstrates sufficient funds for the operating needs of the proposal and that the financial feasibility of the proposal is based upon reasonable projections of costs and charges.

Conclusion

In summary, the applicant adequately demonstrates the financial feasibility of the project is based upon reasonable and adequately supported assumptions regarding projected utilization, revenues (charges), and operating costs. Therefore, the application is conforming to this criterion.

Novant (F-11366-17). The applicant proposes to develop 18 additional acute care beds at NHPMC for a total of 524 licensed acute care beds upon completion of this project; concurrently filed Project I.D. #F-11367-17 (add 21 additional Level IV NICU beds); Project ID #F-7648-06 (develop a new hospital by relocating 50 beds from NHPMC); Project ID #F-8765-11 (relocate Charlotte Orthopedic Hospital and add 50 beds pursuant to a need determination); and Project ID #F-11110-15 (relocate 48 beds to Huntersville Medical Center).

Capital and Working Capital Costs

In Section Q, Form F.1a, the applicant states that the total capital cost of the project will be $5,342,343, as shown in the table below.

NHPMC – Capital Expenditure	
Item	**Cost**
Construction/Renovation Contract	$3,118,864
Architect/Engineering Fees	$380,000
Equipment	$410,709
Furniture	$330,842
Consultant Fees	$38,500
Other/Contingency	$1,063,428
Total	**$5,342,343**

Exhibit F-1 contains a May 19, 2017 construction cost estimate by a licensed architect, which confirms the amount for the construction/renovation contract listed.

In Section F.3, pages 62-63, the applicant states there will be no start-up or initial operating expenses associated with the proposed project because it currently offers the services it is proposing to expand.

Availability of Funds

In Section F.2, page 61, the applicant states that the project will be funded through Novant Health's accumulated reserves. Exhibit F-2 contains a May 26, 2017 letter signed by the Senior Vice President of Finance for Novant Health, verifying the availability of funding for the project and committing $5,342,343 of accumulated reserves to fund the project.

Exhibit F-2 also contains the audited financial statements for Novant Health for the years ending December 31, 2016 and 2015. As of December 31, 2016, Novant Health had $260,988,000 in cash and cash equivalents and $3,448,337,000 in net assets. The applicant adequately demonstrates the availability of sufficient funds for the capital needs of the project.

Financial Feasibility

The applicant provided pro forma financial statements for the first three full fiscal years of operation following completion of the project. In the pro forma financial statement for NHPMC non-NICU acute care beds (Form F.4), the applicant projects that revenues will exceed operating expenses in the first three operating years of the project, as shown in the table below.

NHPMC non-NICU Acute Care Beds – OYs 1-3			
	CY 2020	**CY 2021**	**CY 2022**
Total Patient Days	124,147	126,592	128,642
Total Gross Revenues (Charges)	$1,109,668,511	$1,154,153,216	$1,196,300,158
Total Net Revenue	$350,399,282	$364,446,188	$377,754,899
Average Net Revenue per Patient Day	$2,822	$2,879	$2,936
Total Operating Expenses (Costs)	$336,560,525	$350,562,560	$364,319,909
Average Operating Expense per Patient Day	$2,711	$2,769	$2,832
Net Income/(Loss)	**$13,838,758**	**$13,883,628**	**$13,434,990**

The assumptions used by the applicant in preparation of the pro forma financial statements are reasonable, including projected utilization, costs, and charges. See Section Q of the application for the assumptions used regarding costs and charges. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference. The applicant adequately demonstrates sufficient funds for the operating needs of the proposal and that the financial feasibility of the proposal is based upon reasonable projections of costs and charges.

Conclusion

In summary, the applicant adequately demonstrates the financial feasibility of the project is based upon reasonable and adequately supported assumptions regarding projected utilization, revenues (charges) and operating costs. Therefore, the application is conforming to this criterion.

Novant (F-11367-17). The applicant proposes to develop 21 additional Level IV NICU beds at NHPMC for a total of 524 licensed acute care beds upon completion of this project; concurrently filed Project I.D. #F-11366-17 (add 18 additional acute care beds); Project ID #F-7648-06 (develop a new hospital by relocating 50 beds from NHPMC); Project ID #F-8765-11 (relocate Charlotte Orthopedic Hospital and add 50 beds pursuant to a need determination); and Project ID #F-11110-15 (relocate 48 beds to Huntersville Medical Center).

Capital and Working Capital Costs

In Section Q, Form F.1a, the applicant states that the total capital cost of the project will be $8,911,311, as shown in the table below.

NHPMC – Capital Expenditure	
Item	**Cost**
Construction/Renovation Contract	$4,330,985
Architect/Engineering Fees	$440,500
Equipment	$2,247,561
Furniture	$263,881
Consultant Fees	$29,415
Other/Contingency	$1,598,969
Total	**$8,911,311**

Exhibit F-1 contains a May 24, 2017 construction cost estimate by a licensed architect, which confirms the amount for the construction/renovation contract listed.

In Section F.3, pages 56-57, the applicant states there will be no start-up or initial operating expenses associated with the proposed project because it currently offers the services it is proposing to expand.

Availability of Funds

In Section F.2, page 54, the applicant states that the project will be funded through Novant Health's accumulated reserves. Exhibit F-2 contains a May 26, 2017 letter signed by the Senior Vice President of Finance for Novant Health, verifying the availability of funding for the

project and committing $8,911,311 of accumulated reserves to fund the project.

Exhibit F-2 also contains the audited financial statements for Novant Health for the years ending December 31, 2016 and 2015. As of December 31, 2016, Novant Health had $260,988,000 in cash and cash equivalents and $3,448,337,000 in net assets. The applicant adequately demonstrates the availability of sufficient funds for the capital needs of the project.

Financial Feasibility

The applicant provided pro forma financial statements for the first three full fiscal years of operation following completion of the project. In the pro forma financial statement for NHPMC NICU beds (Form F.4), the applicant projects that revenues will exceed operating expenses in the first three operating years of the project, as shown in the table below.

NHPMC NICU Beds – OYs 1-3			
	FFY 2020	**FFY 2021**	**FFY 2022**
Total Patient Days	17,637	18,535	19,456
Total Gross Revenues (Charges)	$66,516,853	$71,301,677	$76,341,534
Total Net Revenue	$26,276,893	$28,167,095	$30,158,046
Average Net Revenue per Patient Day	$1,490	$1,520	$1,550
Total Operating Expenses (Costs)	$16,724,930	$17,534,728	$18,303,788
Average Operating Expense per Patient Day	$948	$946	$941
Net Income/(Loss)	**$9,551,964**	**$10,632,368**	**$11,854,259**

The assumptions used by the applicant in preparation of the pro forma financial statements are reasonable, including projected utilization, costs, and charges. See Section Q of the application for the assumptions used regarding costs and charges. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference. The applicant adequately demonstrates sufficient funds for the operating needs of the proposal and that the financial feasibility of the proposal is based upon reasonable projections of costs and charges.

Conclusion

In summary, the applicant adequately demonstrates the financial feasibility of the project is based upon reasonable and adequately supported assumptions regarding projected utilization, revenues (charges) and operating costs. Therefore, the application is conforming to this criterion.

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

NC – Novant (both)
C – All Other Applications

On page 39, the 2017 SMFP defines the service area for acute care bed services as the planning area in which the bed is located. *"An acute care bed's service area is the acute care bed planning area in which the bed is located. The acute care bed planning areas are the single and multicounty groupings shown in Figure 5.1."* Figure 5.1 on page 42 of the 2017 SMFP

shows Mecklenburg County as a single county acute care bed planning area. All facilities in this review are located in Mecklenburg County. Thus, in this review, the service area consists of Mecklenburg County. Facilities may also serve residents of counties not included in their service area.

As of the date of this decision, there are nine existing and approved acute care hospitals owned by two providers (CHCS and Novant) in the Mecklenburg County Service Area, as illustrated in the following table.

Acute Care Hospitals – Mecklenburg County	
Facility	**Existing/Approved Beds**
CHS Pineville	206
CHS University	100
CMC	814
CMC-Mercy*	196
CHCS Total	**1,316**
Novant Health Huntersville Medical Center	91 (+48)
Novant Health Matthews Medical Center	143 (+11)
Novant Health Presbyterian Medical Center	514 (-29)
Novant Health Charlotte Orthopedic Hospital**	64 (-16)
Novant Health Mint Hill Medical Center***	50 (-14)
Novant Total	**862**
Mecklenburg County Total	**2,178**

Source: Table 5A, 2017 SMFP; applications under review
Note: Numbers in parentheses reflect changes in bed inventory approved as part of CON applications or through administrative decisions by the Agency.
*CMC-Mercy, while a separate location, is licensed as part of CMC.
**NHCOH, while a separate location, is licensed as part of NHPMC.
***This facility is not yet licensed but is under development.

The 2017 SMFP identifies a need determination for 60 additional acute care inpatient beds in the Mecklenburg County service area. Two facilities, CHS Pineville and CMC/CMC-Mercy, have a projected deficit of beds based on the acute care bed need methodology in the 2017 SMFP. All other facilities in Mecklenburg County have a projected surplus of beds.

Mercy proposes to add 15 acute care beds for a total of 221 acute care beds upon completion of this project as well as a concurrently filed application to add 45 acute care beds to CMC for a total of 1,055 acute care beds upon project completion. The applicant does not propose to develop more acute care beds than are determined to be needed in the service area. The applicant adequately demonstrates the need the population proposed to be served has for the 15 additional acute care beds at CHS Pineville. The discussion regarding analysis of need, including projected utilization and access found in Criterion (3) is incorporated herein by reference. Additionally, the 2017 SMFP shows that CHS Pineville has a deficit of 17 beds.

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

CHMA proposes to add 45 acute care beds for a total of 1,055 acute care beds upon completion of this project as well as a concurrently filed application to add 15 acute care beds to CHS Pineville for a total of 221 acute care beds upon project completion. The applicant does not propose to develop more acute care beds than are determined to be needed in the service area. The applicant adequately demonstrates the need the population proposed to be served has for the 45 additional acute care beds at CMC. The discussion regarding analysis of need, including projected utilization and access found in Criterion (3) is incorporated herein by reference. Additionally, the 2017 SMFP shows that CMC/CMC-Mercy has a deficit of 48 beds.

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

Novant (F-11366-17) proposes to add 18 acute care beds to NHPMC for a total of 524 acute care beds upon completion of this project; concurrently filed Project I.D. #F-11367-17 (add 21 additional Level IV NICU beds); Project ID #F-7648-06 (develop a new hospital by relocating 50 beds from NHPMC); Project ID #F-8765-11 (relocate Charlotte Orthopedic Hospital and add 50 beds pursuant to a need determination); and Project ID #F-11110-15 (relocate 48 beds to Huntersville Medical Center). The applicant does not propose to develop more acute care beds than are determined to be needed in the service area.

However, the applicant's projected utilization during the third operating year does not meet the required threshold of 75.2 percent for applicants with a combined ADC of greater than 200 as required by 10A NCAC 14C .3803(a). The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference. The applicant does not adequately demonstrate that the 18 additional acute care beds it proposes to develop at NHPMC are needed in addition to the existing and approved acute care beds in Mecklenburg County, given the applicant's inability to demonstrate that it would meet required performance standards.

The applicant does not adequately demonstrate that the proposal would not result in an unnecessary duplication of existing or approved acute care bed services in Mecklenburg County. Therefore, the application is nonconforming to this criterion.

Novant (F-11367-17) proposes to add 21 NICU beds to NHPMC for a total of 524 acute care beds upon completion of this project; concurrently filed Project I.D. #F-11366-17 (add 18 additional acute care beds); Project ID #F-7648-06 (develop a new hospital by relocating 50 beds from NHPMC); Project ID #F-8765-11 (relocate Charlotte Orthopedic Hospital and add 50 beds pursuant to a need determination); and Project ID #F-11110-15 (relocate 48 beds to Huntersville Medical Center). The applicant does not propose to develop more acute care beds than are determined to be needed in the service area.

However, the applicant does not provide projections for all acute care beds under common ownership, and therefore projected utilization during the third operating year does not meet the required threshold of 75.2 percent for applicants with a combined ADC of greater than 200 as required by 10A NCAC 14C .3803(a). The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference. The applicant does not adequately

demonstrate that the 21 additional NICU beds it proposes to develop at NHPMC are needed in addition to the existing and approved acute care beds in Mecklenburg County, given the applicant's inability to demonstrate that it would meet required performance standards.

The applicant does not adequately demonstrate that the proposal would not result in an unnecessary duplication of existing or approved acute care bed services in Mecklenburg County. Therefore, the application is nonconforming to this criterion.

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

C – All Applications

Mercy. In Section Q, Form H, the applicant provides the projected staffing for CHS Pineville's M/S acute care bed services during the third full calendar year following project completion, as illustrated in the table below.

CHS Pineville Projected Staff – CY 2021			
Position*	**# of FTEs**	**Average Salary**	**Total Salary****
Registered Nurse	218.93	$76,048	$16,649,231 [$16,649,189]
Aides & Attendants	18.60	$31,981	$594,793 [$594,847]
Supervisory	4.48	$126,987	$569,492 [$568,902]
Technician	72.19	$34,547	$2,494,005 [$2,493,948]
Clerical & Secretarial	0.66	$50,340	$33,216 [$33,224]
Unit Secretary	10.85	$40,075	$434,744 [$434,814]
Temporary Help	6.50	$123,048	$799,529 [$799,812]
Total	332.21		$21,575,011 [$21,574,736]

*The applicant states that this table includes employees, contract employees, and temporary employees.
**The Project Analyst's calculations are in brackets.

As illustrated in the table above, the applicant projects 332.21 full-time equivalent (FTE) positions in CY 2021, the third full calendar year following completion of the proposed project. The correct calculation for total salary expense based on the projected FTE positions and proposed average annual salary for CY 2021 is $21,574,736; $275 less than the applicant projects in its table in Form H. However, because the applicant in effect over-projects the annual cost of salaries in CY 2021 in Form F.3, the difference is immaterial.

In Section H.2, page 73, the applicant provides CHS Pineville's recruitment and staff retention plans. In Section H.4, page 74, the applicant states Dr. Saju Joy serves as the Chief Medical Officer for CHS Pineville. Exhibit H.4 contains a June 15, 2017 letter from Dr. Joy, documenting his willingness to continue to serve in this role and stating his support for the project. The applicant demonstrates the availability of adequate health manpower and management personnel to provide the proposed services. Therefore, the application is conforming to this criterion.

CMHA. In Section Q, Form H, the applicant provides the projected staffing for CMC's adult and pediatric M/S acute care bed services during the third full calendar year following project completion, as illustrated in the tables below.

CMC Projected Staff – Adult M/S Beds – CY 2021			
Position*	**# of FTEs**	**Average Salary**	**Total Salary****
Registered Nurse	446.09	$79,527	$35,476,415 [$35,476,199]
Licensed Practical Nurse	3.53	$60,274	$212,636 [$212,767]
Aides and Attendants	50.70	$34,708	$1,759,647 [$1,795,696]
Supervisory	12.04	$118,993	$1,432,802 [$1,432,676]
Technician	179.03	$38,893	$6,962,973 [$6,963,014]
Clerical & Secretarial	6.69	$49,747	$332,984 [$332,807]
Unit Secretary	0.21	$55,811	$11,917 [$11,720]
Temporary Help	2.31	$143,985	$332,843 [$332,605]
Total	700.61		$46,522,217 [$46,557,484]

*The applicant states that this table includes employees, contract employees, and temporary employees.
**The Project Analyst's calculations are in brackets.

CMC Projected Staff – Pediatric M/S Beds – CY 2021			
Position*	**# of FTEs**	**Average Salary**	**Total Salary****
Registered Nurse	147.80	$78,646	$11,623,655 [$11,623,879]
Aides and Attendants	16.20	$32,154	$520,912 [$520,895]
Supervisory	2.97	$112,125	$333,569 [$333,011]
Technician	55.29	$37,153	$2,054,175 [$2,054,189]
Clerical & Secretarial	1.43	$43,386	$61,903 [$62,042]
Unit Secretary	3.44	$45,845	$157,727 [$157,707]
Temporary Help	1.04	$154,123	$160,635 [$160,288]
Total	228.17		$14,912,576 [$14,912,011]

*The applicant states that this table includes employees, contract employees, and temporary employees.
**The Project Analyst's calculations are in brackets.

As illustrated in the table above, the applicant projects 700.61 full-time equivalent (FTE) positions for adult M/S beds and 228.17 FTE positions for pediatric M/S beds in CY 2021, the third full calendar year following completion of the proposed project. The correct calculation for total salary expense combined based on the projected FTE positions and proposed average annual salary for CY 2021 is $61,469,495; $34,702 more than the applicant projects in its tables in Form H. However, because CMC as a whole is projected to have a profit of $249 million in CY 2021 in Form F.3, the difference is immaterial.

In Section H.2, page 77, the applicant provides CMC's recruitment and staff retention plans. In Section H.4, page 78, the applicant states Dr. Gary Little serves as the Chief Medical Officer for CMC. Exhibit H.4 contains a June 15, 2017 letter from Dr. Little, documenting his willingness to continue to serve in this role and stating his support for the project. The applicant demonstrates the availability of adequate health manpower and management personnel to provide the proposed services. Therefore, the application is conforming to this criterion.

Novant (F-11366-17). In Section Q, Form H, the applicant provides the projected staffing for NHPMC's acute care bed services during the third full calendar year following project completion, as illustrated in the table below.

NHPMC Projected Staff – CY 2022			
Position*	**# of FTEs**	**Average Salary**	**Total Salary****
Certified Nursing Assistant	196.59	$32,315	$6,352,963 [$6,352,806]
Clinical Unit Leader	25.71	$102,930	$2,646,761 [$2,646,330]
Medical Unit Receptionist	56.61	$31,119	$1,761,679 [$1,761,647]
Nurse Manager	9.07	$124,474	$1,129,177 [$1,128,979]
Registered Nurses	357.79	$76,599	$27,406,324 [$27,406,356]
Total	645.78		$39,296,904 [$39,296,118]

*The applicant states that this table includes employees, contract employees, and temporary employees.
**The Project Analyst's calculations are in brackets.

As illustrated in the table above, the applicant projects 645.78 full-time equivalent (FTE) positions in CY 2022, the third full calendar year following completion of the proposed project. The correct calculation for total salary expense based on the projected FTE positions and proposed average annual salary for CY 2022 is $39,296,118; $786 less than the applicant projects in its table in Form H. However, because the applicant in effect over-projects the annual cost of salaries, the difference is immaterial.

In Section H.2, pages 68-69, the applicant provides NHPMC's recruitment and staff retention plans. In Section H.4, page 71, the applicant states that Dr. Daniel Watson serves as the Chief Medical Officer for NHPMC. Exhibit H-4 contains a June 6, 2017 letter from Dr. Watson, stating his support for the project. The applicant demonstrates the availability of adequate health manpower and management personnel to provide the proposed services. Therefore, the application is conforming to this criterion.

Novant (F-11367-17). In Section Q, Form H, the applicant provides the projected staffing for NHPMC's NICU bed services during the third full calendar year following project completion, as illustrated in the table below.

NHPMC Projected Staff – FFY 2022			
Position*	**# of FTEs**	**Average Salary**	**Total Salary****
Nurse Manager	1.5	$124,474	$186,711
Certified Nursing Assistant I	13.2	$32,315	$426,563 [$426,558]
Formula Room Assistant	3.0	$28,275	$86,714 [$84,825]
Medical Unit Receptionist	2.5	$31,119	$77,796 [$77,798]
Registered Nurse	95.5	$76,599	$7,315,246 [$7,315,205]
Clinical Unit Leader	6.0	$102,930	$617,583 [$617,580]
Total	121.7		$8,710,073 [$8,708,677]

*The applicant states that this table includes employees, contract employees, and temporary employees.
**The Project Analyst's calculations are in brackets.

As illustrated in the table above, the applicant projects 121.7 full-time equivalent (FTE) positions in FFY 2022, the third operating year following completion of the proposed project. The correct calculation for total salary expense based on the projected FTE positions and proposed average annual salary for FFY 2022 is $8,708,677; $1,396 less than the applicant projects in its table in Form H. However, because the applicant in effect over-projects the annual cost of salaries, the difference is immaterial.

In Section H.2, pages 61-62, the applicant provides NHPMC's recruitment and staff retention plans. In Section H.4, page 64, the applicant states that Dr. Larry Brady serves as the Medical Director for the NHPMC NICU. Exhibit H-4 contains a June 5, 2017 letter from Dr. Brady, stating his support for the project and expressing his intention to remain as Medical Director. The applicant demonstrates the availability of adequate health manpower and management personnel to provide the proposed services. Therefore, the application is conforming to this criterion.

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

C – All Applications

Mercy currently provides acute care inpatient services. CHS Pineville has the necessary ancillary and support services currently available. In Section I.1(a), page 76, the applicant states:

> *"CHS Pineville currently has all ancillary and support services in place necessary to support hospital operations. These existing ancillary and support services will also support the 15 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 CHS Pineville'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 CHS Pineville upon completion of the proposed project."*

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

In Section I.2, page 76, the applicant states that CHS Pineville has established relationships with area healthcare and social service providers. The applicant further states that the relationships will continue following completion of the proposed project. Exhibit I.2 contains letters of support from area healthcare providers.

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

CMHA currently provides acute care inpatient services. CMC has the necessary ancillary and support services currently available. In Section I.1(a), page 80, the applicant states:

> *"CMC currently has all ancillary and support services in place necessary to support hospital operations. These existing ancillary and support services will also support the 45 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 CMC'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 CMC upon completion of the proposed project."*

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

In Section I.2, page 80, the applicant states that CMC has established relationships with area healthcare and social service providers. The applicant further states that the relationships will continue following completion of the proposed project. Exhibit I.2 contains letters of support from area healthcare providers.

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

Novant (F-11366-17) currently provides acute care inpatient services. NHPMC has the necessary ancillary and support services currently available. In Section I.1(a), page 72, the applicant states:

> *"All necessary ancillary and support services for acute care services are provided as referenced…. In addition, included in Exhibit I-1 is a letter from NHPMC leadership documenting support for the project and assurance that all necessary anciallary and support services will continue to be provided when the additional acute care beds are operational."*

Exhibit I-1 contains a June 15, 2017 letter from the Vice President for Professional and Support Services at NHPMC attesting to the availability of the necessary ancillary and support services.

In Section I.2, pages 73-74, the applicant states that NHPMC has established relationships with area healthcare and social service providers and provides a list of the area healthcare and social service providers it has existing and established relationships with. Exhibit I-1 contains letters of support from area healthcare providers.

The applicant adequately demonstrates the availability of the necessary ancillary and support services and that the proposed services will be coordinated with the existing health care system.

Therefore, the application is conforming to this criterion.

Novant (F-11367-17) currently provides NICU services. NHPMC has the necessary ancillary and support services currently available. In Section I.1(b), page 66, the applicant states:

> *"The above ancillary and support services exist at NHPMC today since there is currently a 38-bed NICU in operation. See Exhibit I-1 for a letter signed by the Nurse Manager for the Hemby Neonatal Intensive Care Unit at NHPMC indicating that the above ancillary and support services are currently provided today to neonates and will continue to be provided to neonates and infants in the future in the expanded Hemby Neonatal Intensive Care Unit."*

Exhibit I-1 contains a May 26, 2017 letter from the Nurse Manager of the NHPMC NICU attesting to the availability of the necessary ancillary and support services.

In Section I.2, page 67, the applicant states that NHPMC has established relationships with area healthcare and social service providers and provides a list of the area healthcare and social service providers it has existing and established relationships with. Exhibit I-2 contains letters of support from area healthcare and social service providers.

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

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

NA – All Applications

CHS Pineville is located approximately two miles from the South Carolina state line. There is an existing hospital in each of the two South Carolina counties that has a population represented in CHS Pineville's patient origin. Both of the South Carolina hospitals are community hospitals while CHS Pineville is a tertiary care hospital.

None of the applicants project to provide the proposed services to a substantial number of persons residing in Health Service Areas (HSAs) that are not adjacent to the HSA in which the services will be offered. Furthermore, none of the applicants project to provide the proposed services to a substantial number of persons residing in other states that are not adjacent to the North Carolina county in which the services will be offered.

(10) When applicable, the applicant shall show that the special needs of health maintenance organizations will be fulfilled by the project. Specifically, the applicant shall show that the project accommodates: (a) The needs of enrolled members and reasonably anticipated new members of the HMO for the health service to be provided by the organization; and (b) The availability of new health services from non-HMO providers or other HMOs in a reasonable and cost-effective manner which is consistent with the basic method of operation of the HMO.

In assessing the availability of these health services from these providers, the applicant shall consider only whether the services from these providers:

(i) would be available under a contract of at least 5 years duration;
(ii) would be available and conveniently accessible through physicians and other health professionals associated with the HMO;
(iii) would cost no more than if the services were provided by the HMO; and
(iv) would be available in a manner which is administratively feasible to the HMO.

NA – All Applications

None of the applicants have historically served members of HMOs as evidenced by the historical payor mixes provided by each of the applicants in Section L.7 of their respective applications. Additionally, each applicant provides its projected payor mix for the applicable facility in Section L.1 of each application, and none of the projected payor mixes in any of the applications include HMOs. Therefore, Criterion 10 is not applicable to this review.

(11) Repealed effective July 1, 1987.

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

C – All Applications

Mercy. In Section K.1, page 79, the applicant states that the proposed project does not involve construction of new space. In Section C.1, pages 31-32, the applicant states the proposed 15 additional beds will be located in space previously vacated as part of Project I.D. #F-7979-07 and will require only minor modifications to the previously approved design in order to operationalize the rooms for licensed acute care beds. Exhibit F.1 contains a certified estimate projecting renovation and miscellaneous costs totaling $300,000, which corresponds to the capital cost projections provided by the applicant in Section Q, Form F.1a. In Section K.4(c), pages 80-81, the applicant describes the methods that will be used by the facility to maintain efficient energy operations and contain the costs of utilities. The discussion regarding costs and charges found in Criterion (5) is incorporated herein by reference. The applicant adequately demonstrates that the proposed cost, design, and means of construction represent the most reasonable alternative, and that the construction cost will not unduly increase costs and charges for health services. Therefore, the application is conforming to this criterion.

CMHA. In Section K.1, page 83, the applicant states that the proposed project does not involve construction of new space. In Section C.1, page 32, the applicant states the proposed 45 additional beds will be located in space currently used for temporary overflow beds and will require only minor modifications to the previously approved design in order to operationalize the rooms for licensed acute care beds. Exhibit F.1 contains a certified estimate projecting

renovation and miscellaneous costs totaling $120,000, which corresponds to the capital cost projections provided by the applicant in Section Q, Form F.1a. In Section K.4(c), pages 84-85, the applicant describes the methods that will be used by the facility to maintain efficient energy operations and contain the costs of utilities. The discussion regarding costs and charges found in Criterion (5) is incorporated herein by reference. The applicant adequately demonstrates that the proposed cost, design, and means of construction represent the most reasonable alternative, and that the construction cost will not unduly increase costs and charges for health services. Therefore, the application is conforming to this criterion.

Novant (F-11366-17). In Section K.1, page 76, the applicant states that the proposed project does not involve construction of new space. In Section K.2, page 76, the applicant states the proposed 18 additional beds will be located in 14,720 square feet of renovations on the third, fourth, fifth, and sixth floors of the B-Wing of NHPMC. Exhibit F-1 contains a certified estimate projecting renovation and miscellaneous costs totaling $3,118,864, which corresponds to the capital cost projections provided by the applicant in Section Q, Form F.1a. In Section K.4(c), page 77, the applicant describes the methods that will be used by the facility to maintain efficient energy operations and contain the costs of utilities. The discussion regarding costs and charges found in Criterion (5) is incorporated herein by reference. The applicant adequately demonstrates that the proposed cost, design, and means of construction represent the most reasonable alternative, and that the construction cost will not unduly increase costs and charges for health services. Therefore, the application is conforming to this criterion.

Novant (F-11367-17). In Section K.1, page 69, the applicant states that the proposed project does not involve construction of new space. In Section K.2, pages 69-70, the applicant states the proposed 21 additional NICU beds will be located in 8,680 square feet of renovations on the seventh floor of NHPMC. Exhibit F-1 contains a certified estimate projecting renovation and miscellaneous costs totaling $4,330,985, which corresponds to the capital cost projections provided by the applicant in Section Q, Form F.1a. In Section K.4(c), page 70, the applicant describes the methods that will be used by the facility to maintain efficient energy operations and contain the costs of utilities. The discussion regarding costs and charges found in Criterion (5) is incorporated herein by reference. The applicant adequately demonstrates that the proposed cost, design, and means of construction represent the most reasonable alternative, and that the construction cost will not unduly increase costs and charges for health services. Therefore, the application is conforming to this criterion.

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

(a) The extent to which medically underserved populations currently use the applicant's existing services in comparison to the percentage of the population in the applicant's service area which is medically underserved;

C – All Applications

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

Percent of Population						
County	**% 65+**	**% Female**	**% Racial & Ethnic Minority***	**% Persons in Poverty****	**% < Age 65 with a Disability**	**% < Age 65 w/o Health Insurance****
	2016 Estimate	**2016 Estimate**	**2016 Estimate**	**2015 Estimate**	**2011-2015**	**2015 Estimate**
Mecklenburg	11%	52%	52%	14%	6%	13%
Statewide	16%	51%	37%	16%	10%	13%

Source: http://www.census.gov/quickfacts/table Latest Data 7/1/16 as of 8/22/17
*Excludes *"White alone"* who are *"not Hispanic or Latino"*
***"This geographic level of poverty and health estimates are not comparable to other geographic levels of these estimates. Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable…The vintage year (e.g., V2016) refers to the final year of the series (2010 thru 2016). Different vintage years of estimates are not comparable."*

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

Mercy. In Section L.1(b), page 86, the applicant reports the following payor mix for CHS Pineville's entire facility and M/S bed services for CY 2016, as illustrated in the table below.

CHS Pineville – Historical Payor Mix – CY 2016		
Payor Source	**Facility Total (IP & OP)**	**M/S Beds**
Medicare	42.2%	57.6%
Medicaid	10.7%	5.9%
Commercial/Managed Care	40.4%	29.0%
Other*	1.1%	1.3%
Self Pay	5.6%	6.3%
Total	100.0%	100.0%

*The applicant states that this category includes worker's compensation and other payors.

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

CMHA. In Section L.1(b), page 90, the applicant reports the following payor mix for CMC's entire facility and M/S bed services for CY 2016, as illustrated in the table below.

CMC – Historical Payor Mix – CY 2016			
Payor Source	**Facility Total (IP & OP)**	**Adult M/S Beds**	**Pediatric M/S Beds**
Medicare	27.5%	49.3%	0.3%
Medicaid	29.3%	13.5%	61.4%
Commercial/Managed Care	34.0%	26.9%	34.9%
Other*	2.1%	2.6%	1.5%
Self-Pay	7.0%	7.7%	1.9%
Total	100.0%	100.0%	100.0%

*The applicant states that this category includes worker's compensation and other payors.

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

Novant (F-11366-17). In Section L.1(b), page 81, the applicant reports the following payor mix for NHPMC's entire facility (inpatient services) and general acute care bed patient days for CY 2016, as illustrated in the table below.

NHPMC – Historical Payor Mix – CY 2016		
Payor Source	**Facility Total (IP)**	**Gen. Acute Care Beds**
Self-Pay/Charity Care	3.72%	4.1%
Medicare*	33.94%	43.5%
Medicaid*	22.57%	17.9%
Commercial/Managed Care*	34.89%	32.3%
Other**	4.88%	2.1%
Total	100.00%	100.0%

*The applicant states these categories include any relevant managed care plans.
**The applicant states that "other" includes workers compensation, other government payors, and other unspecified payors.

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

Novant (F-11367-17). In Section L.1(b), page 74, the applicant reports the following payor mix for NHPMC's entire facility (inpatient services) and NICU patient days for CY 2016, as illustrated in the table below.

NHPMC – Historical Payor Mix – CY 2016		
Payor Source	**Facility Total (IP)**	**NICU Beds**
Self-Pay/Charity Care	3.72%	0.17%
Medicare*	33.94%	0.00%
Medicaid*	22.57%	49.85%
Commercial/Managed Care*	34.89%	47.88%
Workers Compensation	0.05%	0.00%
Other	4.83%	2.10%
Total	100.00%	100.00%

*The applicant states these categories include any relevant managed care plans.

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

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

C – All Applications

Mercy. Recipients of Hill-Burton funds were required to provide uncompensated care, community service, and access by minorities and handicapped persons. In Section L.2(b), page 86, the applicant states:

> *"CHS Pineville has had no obligations to provide a specific uncompensated care amount, community service, or access to care by medically underserved, minorities, or handicapped persons during the last three years. However, as stated earlier, CHS Pineville 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."*

Exhibit L.4 contains copies of the applicant's financial policies.

In Section L.2, page 87, the applicant states that it has not been notified of any civil rights equal access complaints being filed against the hospital or any facilities or services owned by the hospital within the past five years. Therefore, the application is conforming to this criterion.

CMHA. Recipients of Hill-Burton funds were required to provide uncompensated care, community service, and access by minorities and handicapped persons. In Section L.2(b), page 90, the applicant states:

> *"CMC has had no obligations to provide a specific uncompensated care amount, community service, or access to care by medically underserved, minorities, or handicapped persons during the last three years. However, as stated earlier, CMC 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."*

Exhibit L.4 contains copies of the applicant's financial policies.

In Section L.2, page 91, the applicant states that it has not been notified of any civil rights equal access complaints being filed against the hospital or any facilities or services owned by the hospital within the past five years. Therefore, the application is conforming to this criterion.

Novant (F-11366-17). Recipients of Hill-Burton funds were required to provide uncompensated care, community service, and access by minorities and handicapped persons. In Section L.2(a), page 81, the applicant states:

> *"Novant Health's hospitals (NHFMC and NHPMC) fulfilled their Hill-Burton obligations long ago. NHFMC fulfilled its Hill-Burton obligations in 1991. At that time, the obligation for the remainder of the 20-year term to expire in 1993 was $144,343. NHFMC had contributed $236,289 in excess of the required amount and subsequently satisfied all obligations under 42 CFR 124, Subpart F. As required by the former Hill-Burton program, the NHPMC has far exceeded its requirements for delivering uncompensated care pursuant to that program and its regulations. The quota was exceeded as of 1982. NHFMC, NHPMC and all Novant Health facilities in North Carolina continue to comply with the community service obligation and there is no denial, restriction, or limitation of access to minorities or handicapped persons.*
> *Since completing its Hill-Burton obligations, Novant Health's acute care hospitals)* [sic] *have continued their commitment to provide care to all persons, regardless of their ability to pay."*

Exhibit C-10 contains copies of the applicant's financial policies.

In Section L.2, page 82, the applicant states that it has not been notified of any civil rights equal access complaints being filed against the hospital or any facilities or services owned by the hospital within the past five years. Therefore, the application is conforming to this criterion.

Novant (F-11367-17). Recipients of Hill-Burton funds were required to provide uncompensated care, community service, and access by minorities and handicapped persons. In Section L.2(a), page 74, the applicant states:

> *"Novant Health's hospitals (NHFMC and NHPMC) fulfilled their Hill-Burton obligations long ago. NHFMC fulfilled its Hill-Burton obligations in 1991. At that time, the obligation for the remainder of the 20-year term to expire in 1993 was $144,343. NHFMC had contributed $236,289 in excess of the required amount and subsequently satisfied all obligations under 42 CFR 124, Subpart F. As required by the former Hill-Burton program, the NHPMC has far exceeded its requirements for delivering uncompensated care pursuant to that program and its regulations. The quota was exceeded as of 1982. NHFMC, NHPMC and all Novant Health facilities in North Carolina continue to comply with the community service obligation and there is no denial, restriction, or limitation of access to minorities or handicapped persons.*
>
> *Since completing its Hill-Burton obligations, Novant Health's acute care hospitals)* [sic] *have continued their commitment to provide care to all persons, regardless of their ability to pay."*

Exhibit C-10 contains copies of the applicant's financial policies.

In Section L.2, page 75, the applicant states that it has not been notified of any civil rights equal access complaints being filed against the hospital or any facilities or services owned by the hospital within the past five years. Therefore, the application is conforming to this criterion.

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

C – All Applications

Mercy. In Section L.3(a), page 87, the applicant projects the following payor mix for CHS Pineville's entire facility and M/S bed services for CY 2020, the second full fiscal year following project completion, as illustrated in the table below.

CHS Pineville – Projected Payor Mix – CY 2020		
Payor Source	**Facility Total (IP & OP)**	**M/S Beds**
Medicare	42.2%	57.6%
Medicaid	10.7%	5.9%
Commercial/Managed Care	40.4%	29.0%
Other*	1.1%	1.3%
Self Pay	5.6%	6.3%
Total	100.0%	100.0%

*The applicant states that this category includes worker's compensation and other payors.

On page 87, the applicant states:

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

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

CMHA. In Section L.3(a), page 91, the applicant projects the following payor mix for CMC's entire facility and M/S bed services for CY 2020, the second full fiscal year following project completion, as illustrated in the table below.

CMC – Projected Payor Mix – CY 2020			
Payor Source	**Facility Total (IP & OP)**	**Adult M/S Beds**	**Pediatric M/S Beds**
Medicare	27.5%	49.3%	0.3%
Medicaid	29.3%	13.5%	61.4%
Commercial/Managed Care	34.0%	26.9%	34.9%
Other*	2.1%	2.6%	1.5%
Self-Pay	7.0%	7.7%	1.9%
Total	100.0%	100.0%	100.0%

*The applicant states that this category includes worker's compensation and other payors.

On page 91, the applicant states:

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

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

Novant (F-11366-17). In Section L.3(a), page 82, the applicant projects the following payor mix for NHPMC's entire facility (inpatient) and general acute care bed patient days for CY 2021, the second full fiscal year following project completion, as illustrated in the table below.

NHPMC – Projected Payor Mix – CY 2021		
Payor Source	**Facility Total (IP)**	**Gen. Acute Care Beds**
Self-Pay/Charity Care	3.72%	4.1%
Medicare*	33.94%	43.5%
Medicaid*	22.57%	17.9%
Commercial/Managed Care*	34.89%	32.3%
Other**	4.88%	2.1%
Total	100.00%	100.0%

*The applicant states these categories include any relevant managed care plans.
**The applicant states that "other" includes workers compensation, other government payors, and other unspecified payors.

On page 82, the applicant states:

> *"Future payor mix for the NHPMC overall and for NHPMC general acute care inpatient units is based upon historical payor mix."*

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

Novant (F-11367-17). In Section L.3(a), page 75, the applicant projects the following payor mix for NHPMC's entire facility (inpatient) and general acute care bed patient days

for FFY 2021, the second full fiscal year following project completion, as illustrated in the table below.

NHPMC – Projected Payor Mix – FFY 2021		
Payor Source	**Facility Total (IP)**	**NICU Beds**
Self-Pay/Charity Care	3.72%	0.17%
Medicare*	33.94%	0.00%
Medicaid*	22.57%	49.85%
Commercial/Managed Care*	34.89%	47.88%
Workers Compensation	0.05%	0.00%
Other	4.83%	2.10%
Total	100.00%	100.00%

*The applicant states these categories include any relevant managed care plans.

On page 75, the applicant states that projected payor mix is expected to be consistent with historic payor mix.

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

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

C – All Applications

Mercy. In Section L.5, page 88, the applicant describes the range of means by which a person will have access to its services, including by physician referral and the emergency department. The applicant adequately demonstrates that the facility will offer a range of means by which patients will have access to the proposed services. Therefore, the application is conforming to this criterion.

CMHA. In Section L.5, page 92, the applicant describes the range of means by which a person will have access to its services, including by physician referral and the emergency department. The applicant adequately demonstrates that the facility will offer a range of means by which patients will have access to the proposed services. Therefore, the application is conforming to this criterion.

Novant (F-11366-17). In Section L.5, pages 85-86, the applicant describes the range of means by which a person will have access to its services, including by physician referral and the emergency department. The applicant adequately demonstrates that the facility will offer a range of means by which patients will have access to the proposed services. Therefore, the application is conforming to this criterion.

Novant (F-11367-17). In Section L.5, pages 78-79, the applicant describes the range of means by which a person will have access to its services, including by physician

referral. The applicant adequately demonstrates that the facility will offer a range of means by which patients will have access to the proposed services. Therefore, the application is conforming to this criterion.

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

C – All Applications

Mercy. In Section M.1, page 90, the applicant states that CHS Pineville serves as a clinical site for a broad range of healthcare disciplines including medical, physician extender, radiology, and nursing students, as well as others. The applicant states that clinical rotations are offered to students at Central Piedmont Community College, Queens University of Charlotte, University of North Carolina at Charlotte, Gardner-Webb University, Presbyterian School of Nursing, and several other medical education programs. The applicant further states that CHS Pineville will continue to serve as a training site with the addition of the proposed acute care beds. Therefore, the application is conforming to this criterion.

CMHA. In Section M.1, pages 94-95, the applicant states that CMC serves as a clinical site for a broad range of healthcare disciplines including medical, physician extender, radiology, and nursing students, as well as others. The applicant states that clinical rotations are offered to students at Central Piedmont Community College, Queens University of Charlotte, University of North Carolina at Charlotte, Gardner-Webb University, Presbyterian School of Nursing, and several other medical education programs. The applicant further states that CMC will continue to serve as a training site with the addition of the proposed acute care beds. Therefore, the application is conforming to this criterion.

Novant (F-11366-17). In Section M, page 87, the applicant states that NHPMC serves as a clinical site for a broad range of healthcare disciplines, including a new Family Medicine Residency program, as well as others. The applicant states that clinical rotations are offered to students at Appalachian State University, Cabarrus College of Health Science, Medical University of South Carolina, NC State University, Duke University, and several other medical education programs. The applicant further states that NHPMC will continue to serve as a training site with the addition of the proposed acute care beds. Therefore, the application is conforming to this criterion.

Novant (F-11367-17). In Section M, pages 80-81, the applicant states that NHPMC serves as a clinical site for a broad range of healthcare disciplines, including a new Family Medicine Residency program, as well as others. The applicant states that clinical rotations are offered to students at Appalachian State University, Cabarrus College of Health Science, Medical University of South Carolina, NC State University, Duke University, and several other medical education programs. The applicant further states that NHPMC will continue to serve as a training site with the addition of the proposed acute care beds. Therefore, the application is conforming to this criterion.

(15) Repealed effective July 1, 1987.

(16) Repealed effective July 1, 1987.
(17) Repealed effective July 1, 1987.
(18) Repealed effective July 1, 1987.

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

NC – Novant (both)
C – All Other Applications

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

As of the date of this decision, there are nine existing and approved acute care hospitals owned by two providers (CHCS and Novant) in the Mecklenburg County Service Area, as illustrated in the following table.

Acute Care Hospitals – Mecklenburg County		
Facility	**Existing/Approved Beds***	**2017 SMFP Surplus/(Deficit)**
CHS Pineville	206	(17)
CHS University	100	5
CMC	814	(48)
CMC-Mercy**	196	
CHCS Total	**1,316**	**(60)**
Novant Health Huntersville Medical Center	91 (+48)	43
Novant Health Matthews Medical Center	143 (+11)	8
Novant Health Presbyterian Medical Center	514 (-29)	57
Novant Health Charlotte Orthopedic Hospital***	64 (-16)	
Novant Health Mint Hill Medical Center****	50 (-14)	50
Novant Total	**862**	**158**
Mecklenburg County Total	**2,178**	**(60)**

Source: Table 5A, 2017 SMFP; applications under review
***Note:** Numbers in parentheses in Existing/Approved Beds reflect changes in bed inventory approved as part of CON applications or through administrative decisions by the Agency.
**CMC-Mercy, while a separate location, is licensed as part of CMC.
***NHCOH, while a separate location, is licensed as part of NHPMC.
****This facility is not yet licensed but is under development.

The 2017 SMFP identifies a need determination for 60 additional acute care inpatient beds in the Mecklenburg County service area. Two facilities, CHS Pineville and CMC/CMC-Mercy, have a projected deficit of beds based on the acute care bed need methodology in the 2017 SMFP. All other facilities in Mecklenburg County have a projected surplus of beds.

Mercy is proposing to add 15 acute care beds for a total of 221 acute care beds. Mercy's parent company, CHCS, operates 1,316 existing and approved acute care beds in the Mecklenburg County service area. In Section N, pages 92-93, the applicant discusses how any enhanced competition in the service area will promote cost-effectiveness, quality, and access to the proposed services. The applicant states:

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

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

The applicant discusses how any enhanced competition in the service area, including how the proposed project will have a positive impact on cost-effectiveness, quality, and access to the proposed services. The information in the application is reasonable and adequately supported. This determination is based on a review of:

- The information in the application, including any exhibits.
- Information that was publicly available during the review.
- Written comments.
- Remarks made at the public hearing.
- Responses to comments.

The application is conforming to this criterion.

CMHA is proposing to add 45 acute care beds for a total of 1,055 acute care beds. CMHA's parent company, CHCS, operates 1,316 existing and approved acute care beds in the Mecklenburg County service area. In Section N, pages 96-98, the applicant discusses how any enhanced competition in the service area will promote cost-effectiveness, quality, and access to the proposed services. The applicant states:

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

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

The applicant discusses how any enhanced competition in the service area, including how the proposed project will have a positive impact on cost-effectiveness, quality, and access to the proposed services. The information in the application is reasonable and adequately supported. This determination is based on a review of:

- The information in the application, including any exhibits.
- Information that was publicly available during the review.
- Written comments.
- Remarks made at the public hearing.
- Responses to comments.

The application is conforming to this criterion.

Novant (F-11366-17) is proposing to add 18 acute care beds for a total of 524 beds. Novant's parent company, Novant Health, operates 862 existing and approved acute care beds in the Mecklenburg County service area. In Section N, pages 89-95, the applicant discusses how any enhanced competition in the service area will promote cost-effectiveness, quality, and access to the proposed services. The applicant states on page 89:

> *"Mecklenburg County currently has a healthy competitive market in place. However, acute care bed distribution between the systems remains unbalanced. One health system has nearly twice as many acute care beds. Adding acute care beds at NHPMC will result in continued growth for NHPMC and will allow continued competition in the market, providing choice for residents of Mecklenburg and surrounding counties.*
>
> *This application is in response to an identified need for additional acute care beds in Mecklenburg County and will not result in an unnecessary duplication of acute care services in the service area. In addition, the proposed expansion of NHPMC is to meet the needs of residents in Mecklenburg County and surrounding areas that depend on Novant Health for neonatal services which will further enhance competition in Mecklenburg County and surrounding areas."*

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

The applicant discusses how any enhanced competition in the service area, including how the proposed project will have a positive impact on quality and access to the proposed services. The information in the application is reasonable and adequately supported. This determination is based on a review of:

- The information in the application, including any exhibits.
- Information that was publicly available during the review.
- Written comments.
- Remarks made at the public hearing.
- Responses to comments.

However, the applicant does not adequately demonstrate how any enhanced competition in the service area includes a positive impact on the cost-effectiveness of the proposed services. This determination is based on the information in the application and the following analysis:

- The applicant does not adequately demonstrates the need to add 18 acute care beds at NHPMC and that the project is a cost-effective alternative. The discussions regarding analysis of need, including projected utilization, and alternatives found in Criteria (3) and (4), respectively, are incorporated herein by reference. A project that cannot demonstrate the need for the services proposed cannot be a cost-effective alternative.

Therefore, the application is not conforming to this criterion.

Novant (F-11367-17) is proposing to add 21 Level IV NICU beds for a total of 524 beds. Novant's parent company, Novant Health, operates 862 existing and approved acute care beds in the Mecklenburg County service area. In Section N, pages 82-83, the applicant discusses how any enhanced competition in the service area will promote cost-effectiveness, quality, and access to the proposed services. The applicant states on page 82:

> *"Novant Health Presbyterian Medical Center currently operates the Hemby Neonatal Intensive Care Unit at NHPMC with 38 Level IV NICU beds. Those 38 beds are at 100% occupancy on a regular basis. NHPMC is seeking to expand its Level IV NICU beds by adding 21 new Neonatal Intensive Care beds in space at NHPMC contiguous to where the 38-bed Intensive Care Nursery is currently located on the 7th floor at NHPMC. The expansion would allow NHPMC to operate 59 Level IV NICU beds. Likewise, Carolinas Medical Center operates a Neonatal Intensive Care Unit with 53 Level IV NICU beds, and during FFY 2016 their average daily census for Level IV NICU beds was at 82% on average, well above the target occupancy for NICU Level IV beds identified by the CON Criteria and Standards for Neonatal Services. Thus, it would seem that there is a market need for more Level IV NICU bed capacity to care for some of the region's most fragile patients."*

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

The applicant discusses how any enhanced competition in the service area, including how the proposed project will have a positive impact on quality and access to the proposed services. The information in the application is reasonable and adequately supported. This determination is based on a review of:

- The information in the application, including any exhibits.
- Information that was publicly available during the review.
- Written comments.
- Remarks made at the public hearing.
- Responses to comments.

However, the applicant does not adequately demonstrate how any enhanced competition in the service area includes a positive impact on the cost-effectiveness of the proposed services. This determination is based on the information in the application and the following analysis:

- The applicant does not adequately demonstrates the need to add 18 acute care beds at NHPMC and that the project is a cost-effective alternative. The discussions regarding analysis of need, including projected utilization, and alternatives found in Criteria (3) and (4), respectively, are incorporated herein by reference. A project that cannot demonstrate the need for the services proposed cannot be a cost-effective alternative.

Therefore, the application is not conforming to this criterion.

(19) Repealed effective July 1, 1987.

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

C – All Applications

Mercy. In Section O.1, pages 95-96, the applicant describes the methods used by CHS Pineville to ensure and maintain quality care. Exhibit B.10 contains copies of CHS Pineville's Quality Assessment and Performance Improvement Plan, Utilization Management Plan, and Risk Management Plan. In Section O.2, page 97, the applicant states that CHS Pineville meets all licensure requirements, is certified for participation in the Medicare and Medicaid programs and currently meets all requirements for certification, and is accredited by The Joint Commission. Exhibit I.1 contains a letter from the President of CHS Pineville stating that CHS Pineville meets all relevant licensure requirements. Exhibit O.3 contains a list of all healthcare facilities owned, managed, or leased by CHCS in North Carolina. In Section O.3(b), page 97, the applicant states:

> *"Each of the facilities identified in response to Section O, Question 3(a) has continually maintained all relevant licensure, certification, and accreditation for the 18 months preceding the submission of this application…"*

The applicant goes on to state in Section O.3, page 98, that:

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

The applicant owns or operates 24 hospitals in North Carolina. According to the files in the Acute and Home Care Licensure and Certification Section, DHSR, during the 18 months immediately preceding the submittal of the application through the date of the decision, six facilities were found to be out of compliance with one or more Medicare conditions of participation. At this time, 22 facilities are in compliance with all Medicare conditions of participation. Two facilities, CMC and Moses Cone Memorial Hospital, are out of compliance

due to potential EMTALA violations and are waiting for decisions from the Centers for Medicare and Medicaid Services. After reviewing and considering information provided by the applicant and by the Acute and Home Care Licensure and Certification Section and considering the quality of care provided at all 24 facilities, the applicant provided sufficient evidence that quality care has been provided in the past. Therefore, the application is conforming to this criterion.

CMHA. In Section O.1, pages 100-101, the applicant describes the methods used by CMC to ensure and maintain quality care. Exhibit B.10 contains copies of CMC's Quality Assessment and Performance Improvement Plan, Utilization Management Plan, and Risk Management Plan. In Section O.2, page 102, the applicant states that CMC meets all licensure requirements, is certified for participation in the Medicare and Medicaid programs and currently meets all requirements for certification, and is accredited by The Joint Commission. Exhibit I.1 contains a letter from the President of CMC stating that CMC meets all relevant licensure requirements. Exhibit O.3 contains a list of all healthcare facilities owned, managed, or leased by CHCS in North Carolina. In Section O.3(b), page 102, the applicant states:

> *"Each of the facilities identified in response to Section O, Question 3(a) has continually maintained all relevant licensure, certification, and accreditation for the 18 months preceding the submission of this application…"*

The applicant goes on to state in Section O.3, page 103, that:

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

The applicant owns or operates 24 hospitals in North Carolina. According to the files in the Acute and Home Care Licensure and Certification Section, DHSR, during the 18 months immediately preceding the submittal of the application through the date of the decision, six facilities were found to be out of compliance with one or more Medicare conditions of participation. At this time, 22 facilities are in compliance with all Medicare conditions of participation. Two facilities, CMC and Moses Cone Memorial Hospital, are out of compliance due to potential EMTALA violations and are waiting for decisions from the Centers for Medicare and Medicaid Services. After reviewing and considering information provided by the applicant and by the Acute and Home Care Licensure and Certification Section and considering the quality of care provided at all 24 facilities, the applicant provided sufficient evidence that quality care has been provided in the past. Therefore, the application is conforming to this criterion.

Novant (F-11366-17). In Section O.1, page 97, the applicant describes the methods used by NHPMC to ensure and maintain quality care. Exhibit O-1 contains copies of NHPMC's

Hospital Plan for Care Delivery, Continuous Improvement Plan, Infection Prevention Program, and Risk Management Program. In Section O.2, page 98, the applicant states that NHPMC meets all licensure requirements, is certified for participation in the Medicare and Medicaid programs and currently meets all requirements for certification, and is accredited by The Joint Commission. Exhibit O-2 contains a copy of the CMS certification letter and the Joint Commission accreditation letter. In Section O.3(a), page 98, the applicant lists all similar health care facilities located in North Carolina that it owns or operates. In Section O.3(b), page 99, the applicant states:

> *"…the applicant described numerous Novant Health and NHPMC methods, plans, and processes used by the applicant facility (Novant Health Presbyterian Medical Center) and other Novant Health owned and managed hospitals to ensure and maintain quality of care.*
> *…*
>
> *In addition, the Novant Health hospitals listed in the response to Question O.3(a) have maintained their status as licensed North Carolina acute care hospitals and as hospitals accredited by The Joint Commission. These are indicators of quality of care."*

In Section O.3(c), pages 99-100, the applicant states that during the 18-month lookback period, Novant Health Thomasville Medical Center operated out of compliance with Medicare Conditions of Participation. The applicant states that Novant Health Thomasville Medical Center is now back in compliance. Exhibit O-3 contains a letter dated September 28, 2016 from CMS Office of Clinical Standards & Quality, documenting that as of that date Novant Health Thomasville Medical Center was back in compliance.

The applicant owns or operates 16 hospitals in North Carolina. According to the files in the Acute and Home Care Licensure and Certification Section, DHSR, during the 18 months immediately preceding the submittal of the application through the date of the decision, five facilities were found to be out of compliance with one or more Medicare conditions of participation. At this time, 13 facilities are in compliance with all Medicare conditions of participation. Three facilities – NHHMC, Novant Health Forsyth Medical Center, and Novant Health Brunswick Medical Center – are out of compliance due to potential EMTALA violations and are waiting for decisions from the Centers for Medicare and Medicaid Services. After reviewing and considering information provided by the applicant and by the Acute and Home Care Licensure and Certification Section and considering the quality of care provided at all 16 facilities, the applicant provided sufficient evidence that quality care has been provided in the past. Therefore, the application is conforming to this criterion.

Novant (F-11367-17). In Section O.1, page 84, the applicant describes the methods used by NHPMC to ensure and maintain quality care. Exhibit O-1 contains copies of NHPMC's Hospital Plan for Care Delivery, NHPMC's Clinical Improvement and Patient Safety Plan, Infection Prevention Program, and Corporate Risk Management plan. In Section O.2, page 85, the applicant states that NHPMC meets all licensure requirements, is certified for participation in the Medicare and Medicaid programs and currently meets all requirements for certification, and is accredited by The Joint Commission. Exhibit O-2 contains a copy of the CMS

certification letter and the Joint Commission accreditation letter. In Section O.3(a), page 85, the applicant lists all similar health care facilities located in North Carolina that it owns or operates. In Section O.3(b), page 86, the applicant states:

> *"…the applicant described numerous Novant Health and NHPMC methods, plans, and processes used by the applicant facility (Novant Health Presbyterian Medical Center) and other Novant Health owned and managed hospitals to ensure and maintain quality of care.*
>
> *…*
>
> *In addition, the Novant Health hospitals listed in the response to Question O.3(a) have maintained their status as licensed North Carolina acute care hospitals and as hospitals accredited by The Joint Commission. These are indicators of quality of care."*

In Section O.3(c), pages 86-87, the applicant states that during the 18-month lookback period, Novant Health Thomasville Medical Center operated out of compliance with Medicare Conditions of Participation. The applicant states that Novant Health Thomasville Medical Center is now back in compliance. Exhibit O-3 contains a letter dated September 28, 2016 from CMS Office of Clinical Standards & Quality, documenting that as of that date Novant Health Thomasville Medical Center was back in compliance.

The applicant owns or operates 16 hospitals in North Carolina. According to the files in the Acute and Home Care Licensure and Certification Section, DHSR, during the 18 months immediately preceding the submittal of the application through the date of the decision, five facilities were found to be out of compliance with one or more Medicare conditions of participation. At this time, 13 facilities are in compliance with all Medicare conditions of participation. Three facilities – NHHMC, Novant Health Forsyth Medical Center, and Novant Health Brunswick Medical Center – are out of compliance due to potential EMTALA violations and are waiting for decisions from the Centers for Medicare and Medicaid Services. After reviewing and considering information provided by the applicant and by the Acute and Home Care Licensure and Certification Section and considering the quality of care provided at all 16 facilities, the applicant provided sufficient evidence that quality care has been provided in the past. Therefore, the application is conforming to this criterion.

(21) Repealed effective July 1, 1987.

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

NC – Novant (both)
C – All Other Applications

The applications submitted by **Mercy** and **CMHA** are conforming with all applicable Criteria and Standards. The applications submitted by **Novant (both)** are not conforming with all applicable Criteria and Standards. The relevant rules for this review are the Criteria and Standards for Neonatal Services as promulgated in 10A NCAC 14C .1400 and the Criteria and Standards for Acute Care Beds as promulgated in 10A NCAC 14C .3800. The specific criteria are discussed below.

SECTION .1400 – CRITERIA AND STANDARDS FOR NEONATAL SERVICES

10A NCAC 14C .1403 PERFORMANCE STANDARDS

(a) An applicant shall demonstrate that the proposed project is capable of meeting the following standards:

(1) if an applicant is proposing to increase the total number of neonatal beds (i.e., the sum of Level II, Level III and Level IV beds), the overall average annual occupancy of the combined number of existing Level II, Level III and Level IV beds in the facility is at least 75 percent, over the 12 months immediately preceding the submittal of the proposal;

-NA- **Mercy, CMHA,** and **Novant (F-11366-17).** None of these applicants propose to develop neonatal beds.

-C- **Novant (F-11367-17).** In Section C.11(b), page 47, the applicant documents that its historical utilization of NICU beds during the 12 months immediately preceding the submission of the application was at least 75 percent. The applicant's historical utilization is shown in the table below.

NHPMC NICU Historical Utilization			
	FFY 2016	**10/16-3/17**	**FFY 2017***
NICU Patient Days	16,687	8,590	17,180
Number of Beds	38	38	38
Utilization	120.3%	123.9%	123.9%

*Estimated

(2) if an applicant is proposing to increase the total number of neonatal beds (i.e., the sum of Level II, Level III and Level IV beds), the projected overall average annual occupancy of the combined number of Level II, Level III and Level IV beds proposed to be operated during the third year of operation of the proposed project shall be at least 75 percent; and

-NA- **Mercy, CMHA,** and **Novant (F-11366-17).** None of these applicants propose to develop neonatal beds.

-C- **Novant (F-11367-17).** In Section C.4, page 40, the applicant documents that the projected overall average annual occupancy of all Level IV NICU beds is at least 75 percent. The applicant's calculations and projections are shown in the table below.

NHPMC NICU Projected Total Patient Days PYs 1-3			
	FFY 2020	**FFY 2021**	**FFY 2022**
Admissions	613	644	676
Patient Days	17,637	18,535	19,456
ADC	48.32	50.78	53.30
Current NICU Beds	38	38	38
New NICU Beds	21	21	21
Proposed NICU Beds	59	59	59
Utilization	81.9%	86.1%	90.3%

(3) The applicant shall document the assumptions and provide data supporting the methodology used for each projection in this rule.

-NA- **Mercy, CMHA,** and **Novant (F-11366-17).** None of these applicants propose to develop neonatal beds.

-C- **Novant (F-11367-17).** See Section C.4, pages 36-41; Section C.11, page 47; Section Q, Form C – Utilization; and Section Q, Form C – Assumptions and Methodology for the applicant's assumptions, methodology, and data used to project utilization. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference.

(b) If an applicant proposes to develop a new Level III or Level IV service, the applicant shall document that an unmet need exists in the applicant's defined neonatal service area, unless the State Medical Facilities Plan includes a need determination for neonatal beds in the service area. The need for Level III and Level IV beds shall be computed for the applicant's neonatal service area by:

(1) identifying the annual number of live births occurring at all hospitals within the proposed neonatal service area, using the latest available data compiled by the State Center for Health Statistics;

(2) identifying the low birth weight rate (percent of live births below 2,500 grams) for the births identified in (1) of this Paragraph, using the latest available data compiled by the State Center for Health Statistics;

(3) dividing the low birth weight rate identified in (2) of this Paragraph by .08 and subsequently multiplying the resulting quotient by four; and

(4) determining the need for Level III and Level IV beds in the proposed neonatal service area as the product of:

(A) the product derived in (3) of this Paragraph, and

(B) the quotient resulting from the division of the number of live births in the initial year of the determination identified in (1) of this Paragraph by the number 1000.

-NA- **Mercy, CMHA,** and **Novant (F-11366-17).** None of these applicants propose to develop neonatal beds.

-NA- **Novant (F-11367-17).** The applicant currently operates a Level IV NICU and does not propose to operate a new Level III or Level IV service.

SECTION .3800 - CRITERIA AND STANDARDS FOR ACUTE CARE BEDS

10A NCAC 14C .3803 PERFORMANCE STANDARDS

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

-C- **Mercy.** In Section Q, the applicant states that the projected utilization of the total number of licensed acute care beds under common ownership with the applicant, as calculated by the average daily census, will exceed 75.2 percent in the third operating year following project completion, as shown in the table below.

CHCS Mecklenburg County Utilization CY 2021			
	# Beds	**ADC**	**% Occupancy**
CMC	859	722	84.1%
CMC-Mercy	196	148	75.7%
CHS Pineville	221	166	75.3%
CHS University	100	72	71.9%
Total CHCS	**1,376**	**1,108**	**80.5%**

-C- **CMHA.** In Section Q, the applicant states that the projected utilization of the total number of licensed acute care beds under common ownership with the applicant, as calculated by the average daily census, will exceed 75.2 percent in the third operating year following project completion, as shown in the table below.

CHCS Mecklenburg County Utilization CY 2021			
	# Beds	**ADC**	**% Occupancy**
CMC	859	722	84.1%
CMC-Mercy	196	148	75.7%
CHS Pineville	221	166	75.3%
CHS University	100	72	71.9%
Total CHCS	**1,376**	**1,108**	**80.5%**

-NC- **Novant (F-11366-17).** In Section Q, pages 106-113, the applicant documents that the projected utilization of the total number of licensed acute care beds under common ownership with the applicant, as calculated by the average daily census, will be 74.7 percent in the third operating year following project completion, as shown in the table below.

Novant Mecklenburg County Utilization CY 2022			
	# Beds	**ADC**	**% Occupancy**
NHPMC	524	406.1	77.5%
NHCOH	48	32.5	67.7%
NHMHMC	36	27.1	75.3%
NHHMC	139	96.5	69.4%
NHMMC	154	110.9	72.0%
Total Novant	**901**	**673.1**	**74.7%**

The applicant does not document that the projected utilization of the total number of licensed acute care beds under common ownership with the applicant, as calculated by the average daily census, will be at least 75.2 percent in the third operating year following project completion. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference. Therefore, the application is not conforming to this Rule.

-NC- **Novant (F-11367-17).** The applicant does not provide any projections about any other licensed acute care beds under common ownership with the applicant. Moreover, the applicant fails to demonstrate in its concurrently filed application, Project I.D. #F-11366-17 (add 18 additional acute care beds), that the projected utilization of the total number of licensed acute care beds under common ownership with the applicant, as calculated by the average daily census, will be at least 75.2 percent in the third operating year following project completion. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference. Therefore, the application is not conforming to this Rule.

(b) An applicant proposing to develop new acute care beds shall provide all assumptions and data used to develop the projections required in this rule and demonstrate that they support the projected inpatient utilization and average daily census.

-C- **Mercy.** See Section C.4, pages 35-49, for the applicant's discussion of need; Section Q, Form C – Utilization; and Form C – Assumptions and Methodology, pages 1-29, for the applicant's assumptions, methodology, and data used to project utilization. The data support the projected utilization and average daily census. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference.

-C- **CMHA.** See Section C.4, pages 38-54, for the applicant's discussion of need; Section Q, Form C – Utilization; and Form C – Assumptions and Methodology, pages 1-29, for the applicant's assumptions, methodology, and data used to project utilization. The data

support the projected utilization and average daily census. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference.

-C- **Novant (F-11366-17).** See Section C.4, pages 41-44; Section C.11(b), pages 49-54; Section Q, Form C – Utilization; and Form C – Assumptions and Methodology, pages 106-113, for the applicant's assumptions, methodology, and data used to project utilization. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference.

-C- **Novant (F-11367-17).** See Section C.4, pages 41-44; Section Q, Form C – Utilization; and Form C – Assumptions and Methodology, for the applicant's assumptions, methodology, and data used to project utilization. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference.

COMPARATIVE ANALYSIS

Pursuant to N.C. Gen. Stat. § 131E-183(a)(1) and the 2017 SMFP, no more than 60 new acute care beds may be approved for Mecklenburg County in this review. Because there are four applications requesting a total of 99 new acute care beds in Mecklenburg County, all four applications cannot be approved. Therefore, after considering all of the information in each application and reviewing each application individually against all applicable statutory and regulatory review criteria, the Project Analyst also conducted a comparative analysis of the proposals. For the reasons set forth below and in the remainder of the findings, the applications submitted by Mercy and by CMHA are approved and the other two applications are disapproved.

Conformity with Review Criteria

Mercy and CMHA adequately demonstrate that their proposals are conforming to all applicable statutory and regulatory review criteria. However, Novant did not adequately demonstrate that either of its two proposals were conforming to Criteria (1), (3), (4), (6), and (18a). Therefore, the applications submitted by Mercy and CMHA are more effective alternatives with regard to conformity with review criteria.

Geographic Accessibility (Location within Mecklenburg County)

The 2017 SMFP identifies a need for 60 acute care beds for Mecklenburg County. The following table identifies the location of the existing and approved acute care beds in Mecklenburg County.

Location of Existing/Approved Acute Care Beds – Mecklenburg County			
Facility	**Existing/(Approved) Beds**	**Location Within Mecklenburg County**	**City/Town**
CMC-Mercy	196 (+34)	Downtown	Charlotte
CMC	814	Downtown	Charlotte
NHPMC	514 (-29)	Downtown	Charlotte
NHCOH	64 (-16)	Downtown	Charlotte
CHS University	100	East	Charlotte
NHMHMC	50 (-14)	East	Mint Hill
NHHMC	91 (+48)	North	Huntersville
CHS Pineville	206	South	Pineville
NHMMC	143 (+11)	South	Matthews

The following table identifies the proposed location of the acute care beds, and total number of beds at the facility following project completion, for each of the applications in this review.

Location of Proposed Acute Care Beds – Mecklenburg County			
Facility	**Proposed Beds**	**Location Within Mecklenburg County**	**City/Town**
CHS Pineville	221	South	Pineville
CMC	859	Downtown	Charlotte
NHPMC	524	Downtown	Charlotte

As shown above, all three applicants propose to locate the new acute care beds at existing acute care hospitals. Mercy proposes to locate the new acute care beds in Pineville, in southern Mecklenburg County. CMHA proposes to locate the new acute care beds in downtown Charlotte. Novant proposes to locate the new acute care beds in downtown Charlotte.

All four applications propose to develop new acute care beds in Mecklenburg County. All four applications provide explanations as to why each particular facility needs the additional acute care beds. However, due to significant differences in the reasons provided in each of the four applications, it is not possible to make conclusive comparisons with regard to geographic accessibility. Thus, this comparative factor may be of little value.

Access by Underserved Groups

Projected Charity Care

The following table shows each applicant's projected charity care to be provided in the second operating year for each applicant and the percentage of total net revenue. Generally, the application proposing to provide the highest percentage of charity care is the more effective alternative with regard to this comparative factor.

Charity Care as Percentage of Net Revenue		
Applicant	**Charity Care**	**% of Net Revenue**
CHS Pineville	$44,505,000	9.4%
CMC	$161,967,000	7.9%
NHPMC (both applications)	$132,456,535	13.7%

Source: Form F.3, all applications

As shown in the table above, Novant projects the highest charity care as a percent of net revenue to be provided to patients. However, neither Novant application adequately demonstrates the need to add additional acute care beds in Mecklenburg County and therefore neither can be approved. The discussion regarding need and projected utilization found in Criterion (3) is incorporated herein by reference. Therefore, the application submitted by Mercy is the most effective alternative with regard to projected charity care amounts.

Projected Access by Medicare Patients

For each applicant in this review, the following table compares the percentage of Medicare patients as a percentage of total patients during the second operating year following project completion. Generally, the application proposing the highest percentage of Medicare patients is the more effective alternative with regard to this comparative factor. Due to significant differences in the types of services provided by the applicants which make up the payor mixes, it is not possible to make conclusive comparisons based on the service level payor mixes. Thus, the applications are compared by payor mix for the total facility. The applications are listed in the table below in decreasing order of effectiveness based on the percentage of Medicare patients projected to be served.

Percent of Medicare Patients – Operating Year 2		
Rank	**Applicant**	**% Medicare Patients Total Facility**
1	CHS Pineville	42.2%
2	NHPMC (F-11366-17)	33.9%
3	NHPMC (F-11367-17)	33.9%
4	CMC	27.5%

Source: Section L.3(a) (all applications)

As shown in the table above, CHS Pineville projects to serve the highest percentage of Medicare patients in Operating Year 2. The application submitted by Mercy is the most effective alternative with regard to projected access by Medicare recipients.

Projected Access by Medicaid Patients

For each applicant in this review, the following table compares the percentage of Medicaid patients as a percentage of total patients during the second operating year following project completion. Generally, the application proposing the highest percentage of Medicaid patients is the more effective alternative with regard to this comparative factor. Due to significant differences in the types of services provided by the applicants which make up the payor mixes, it is not possible to make conclusive comparisons based on the service level payor mixes. Thus, the applications are compared by payor mix for the total facility. The applications are listed in the table below in decreasing order of effectiveness based on the percentage of Medicaid patients projected to be served.

Percent of Medicaid Patients – Operating Year 2		
Rank	**Applicant**	**% Medicaid Patients Total Facility**
1	CMC	29.3%
2	NHPMC (F-11366-17)	22.6%
3	NHPMC (F-11367-17)	22.6%
4	CHS Pineville	10.7%

Source: Section L.3(a) (all applications)

As shown in the table above, CMC projects to serve the highest percentage of Medicaid patients in Operating Year 2. The application submitted by CMHA is the most effective alternative with regard to projected access by Medicaid recipients.

Service to Mecklenburg County Residents

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

is the more effective alternative with regard to this comparative factor. The facilities are listed in the table below in decreasing order of effectiveness.

Percent of Mecklenburg County Residents Operating Year 2			
Rank	**Applicant**	**% of Mecklenburg County Residents**	
1	NHPMC (F-11366-17)		73.5%
2	NHPMC (F-11367-17)		66.4%
3	CHS Pineville		44.2%
4	CMC*	(p) 40.8%	(a) 41.9%

Source: Section C.3(a) (all applications)
***Note:** CMC's application includes two services – pediatric acute care beds (40.8%) and adult acute care beds (41.9%).

CHS Pineville is located two miles from the border with South Carolina. As shown in the table above, Novant (Project I.D. #F-11366-17) projects to serve the highest percentage of Mecklenburg County residents during Project Year 2. However, in Project I.D. #F-11366-17, Novant did not adequately demonstrate the need to add additional acute care beds in Mecklenburg County and therefore cannot be approved. The discussion regarding need and projected utilization found in Criterion (3) is incorporated herein by reference. The application submitted by Novant (Project I.D. #F-11367-17) projects to serve the second highest percentage of Mecklenburg County residents during Project Year 2. However, in Project I.D. #F-11367-17, Novant did not adequately demonstrate the need to add additional acute care beds in Mecklenburg County and therefore cannot be approved. The discussion regarding need and projected utilization found in Criterion (3) is incorporated herein by reference. Therefore, Mercy is the most effective alternative with regard to projected service to Mecklenburg County residents.

Average Net Patient Revenue

Average net revenue per patient day or per discharge in Project Year 2 was calculated by dividing projected net revenue by the projected number of patient days or patient discharges from applicant's pro forma financial statements (Form F.4), as shown in the table below.

Average Net Patient Revenue per Patient Day or per Patient Discharge – OY 2			
Application	**Total # of Patient Days/Discharges**	**Net Patient Revenue**	**Average Net Patient Revenue per Patient Day/Discharge**
F-11361-17 (CHS Pineville)	13,147	$27,931,039	$2,125
F-11362-17 (CMC – Adults)	21,164	$56,489,750	$2,669
F-11362-17 (CMC – Peds)	5,907	$22,037,130	$3,731
F-11366-17 (NHPMC – Adults)	126,592	$364,446,188	$2,879
F-11366-17 (NHPMC – NICU)	18,535	$28,167,095	$1,520

The applications submitted by Mercy and CMHA project the number of patient discharges by service in Form F.4, and the applications submitted by Novant project the number of patient days by service in Form F.4. Due to significant differences in the types of data provided by the applicants, it is not possible to make conclusive comparisons with regard to average net patient revenue. Thus, this comparative factor may be of little value.

Average Total Operating Cost

Average operating cost per patient day or per discharge in Project Year 2 was calculated by dividing projected total operating cost by the projected number of patient days or patient discharges from applicant's pro forma financial statements (Form F.4), as shown in the table below.

Average Total Operating Cost per Patient Day or per Patient Discharge – OY 2			
Application	**Total # of Patient Days/Discharges**	**Total Operating Cost**	**Average Total Operating Cost per Patient Day/Discharge**
F-11361-17 (CHS Pineville)	13,147	$37,997,524	$2,890
F-11362-17 (CMC – Adults)	21,164	$84,874,591	$4,010
F-11362-17 (CMC – Peds)	5,907	$26,283,009	$4,449
F-11366-17 (NHPMC – Adults)	126,592	$350,562,560	$2,769
F-11366-17 (NHPMC – NICU)	18,535	$17,534,728	$946

The applications submitted by Mercy and CMHA project the number of patient discharges by service in Form F.4, and the applications submitted by Novant project the number of patient days by service in Form F.4. Due to significant differences in the types of data provided by the applicants, it is not possible to make conclusive comparisons with regard to average total operating cost. Thus, this comparative factor may be of little value.

SUMMARY

For the comparative analysis factors listed below, the information was inconclusive as to which application was the most effective:

- Geographic Accessibility (Location within Mecklenburg County)
- Average Net Revenue
- Average Total Cost

For each of the comparative analysis factors listed below, the application submitted by Mercy was determined to be the more effective alternative:

- Projected Charity Care
- Access by Medicare Patients
- Service to Mecklenburg County Residents

For the comparative analysis factor listed below, the application submitted by CMHA was determined to be the more effective alternative:

- Access by Medicaid Patients

For the comparative analysis factors listed below, the applications submitted by Mercy and CMHA were determined to be more effective alternatives than the applications submitted by Novant:

- Conformity with Review Criteria

The following table lists the comparative factors and states which applicant is the most effective alternative with regard to that particular comparative factor. Note: the comparative factors are listed in the same order they are discussed in the Comparative Analysis, which should not be construed to indicate an order of importance.

Comparative Factor	CHS Pineville	CMC	NHPMC (F-11366-17)	NHPMC (F-11367-17)
Conformity with Review Criteria	**Yes**	**Yes**	No	No
Geographic Accessibility (Located within Mecklenburg County)	Inconclusive	Inconclusive	Inconclusive	Inconclusive
Projected Charity Care	**Most Effective**	Less Effective	Less Effective	Less Effective
Projected Access by Medicare Patients	**Most Effective**	Less Effective	Less Effective	Less Effective
Projected Access by Medicaid Patients	Less Effective	**Most Effective**	Less Effective	Less Effective
Service to Mecklenburg County Residents	**Most Effective**	Less Effective	Less Effective	Less Effective
Average Net Revenue	Inconclusive	Inconclusive	Inconclusive	Inconclusive
Average Operating Cost	Inconclusive	Inconclusive	Inconclusive	Inconclusive

CONCLUSION

All of the applications are individually conforming to the need determination in the 2017 SMFP for 60 additional acute care beds Mecklenburg County. However, N.C. Gen. Stat. § 131E-183(a)(1) states that the need determination in the SMFP is the determinative limit on the number of acute care beds

that can be approved by the Healthcare Planning and Certificate of Need Section (Agency). The Agency determined that the applications submitted by Mercy and CMHA are the most effective alternatives proposed in this review for the development of 60 additional acute care beds in Mecklenburg County and are approved, as conditioned below. The approval of any other application would result in the approval of acute care beds in excess of the need determination in the 2017 SMFP. Additionally, the approval of Novant's two applications would leave 21 beds [60 - (18 + 21) = 21]. Mercy applied for 15 beds and demonstrated a need for all 15 beds. CMHA applied for 45 beds and demonstrated a need for all 45 beds. Moreover, both Novant applications did not conform to all statutory criteria and thus cannot be approved. The Novant applications are determined to be less effective alternatives and are denied.

The application submitted by Mercy is approved subject to the following conditions:

1. **Mercy Hospital, Inc. shall materially comply with all representations made in the certificate of need application.**

2. **Mercy Hospital, Inc. shall develop 15 additional acute care beds.**

3. **Upon completion of the project, Carolinas HealthCare System Pineville shall be licensed for no more than 221 acute care beds.**

4. **Mercy Hospital, Inc. shall not acquire as part of this project any equipment that is not included in the project's proposed capital expenditures in Section F of the application and that would otherwise require a certificate of need.**

5. **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, Mercy Hospital, Inc. 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.**

6. **Mercy Hospital, Inc. shall acknowledge acceptance of and agree to comply with all conditions stated herein to the Agency in writing prior to issuance of the certificate of need.**

The application submitted by CMHA is approved subject to the following conditions:

1. **The Charlotte-Mecklenburg Hospital Authority shall materially comply with all representations made in the certificate of need application.**

2. **The Charlotte-Mecklenburg Hospital Authority shall develop 45 additional acute care beds.**

3. Upon completion of the project, Carolinas Medical Center shall be licensed for no more than 1,055 acute care beds.

4. The Charlotte-Mecklenburg Hospital Authority shall not acquire as part of this project any equipment that is not included in the project's proposed capital expenditures in Section F of the application and that would otherwise require a certificate of need.

5. 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 Charlotte-Mecklenburg Hospital Authority 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.

6. The Charlotte-Mecklenburg Hospital Authority shall acknowledge acceptance of and agree to comply with all conditions stated herein to the Agency in writing prior to issuance of the certificate of need.