Competitive Comments on Mecklenburg County Acute Care Bed and Operating Room Applications

submitted by

The Charlotte-Mecklenburg Hospital Authority d/b/a Atrium Health, Mercy Hospital, Inc., and Waveco, LLC d/b/a Carolina Center for Specialty Surgery

In accordance with N.C. GEN. STAT. § 131E-185(a1)(1), The Charlotte-Mecklenburg Hospital Authority[1] d/b/a Atrium Health, Mercy Hospital, Inc.[2], and Waveco, LLC d/b/a Carolina Center for Specialty Surgery (CCSS) (collectively referred to hereafter as Atrium Health and CCSS) submit the following comments related to competing applications to develop additional acute care beds and additional operating rooms in Mecklenburg County to meet the needs identified in the *2018 State Medical Facilities Plan* (*SMFP*). Atrium Health and CCSS's comments include "*discussion and argument regarding whether, in light of the material contained in the application and other relevant factual material, the application complies with the relevant review criteria, plans and standards*." *See* N.C. GEN. STAT. § 131E-185(a1)(1)(c). In order to facilitate the Agency's ease in reviewing the comments, Atrium Health and CCSS have organized their discussion by issue, specifically noting the general CON statutory review criteria and specific regulatory criteria and standards creating the non-conformity relative to each issue, as they relate to the following applications:

- **Novant Health Huntersville Medical Center (Novant), Add 12 Acute Care Beds and One Operating Room, Project ID # F-11624-18**

- **Metrolina Vascular Access Care, LLC and Fresenius Vascular Care Charlotte (Metrolina), Develop a New Single Specialty Ambulatory Surgery Center with One Operating Room and One Procedure Room, Project ID # J-11612-18**

Atrium Health and CCSS's detailed comments include general comments as well as application-specific comment and a comparative analysis related to:

- **Carolinas HealthCare System Pineville (CHS Pineville), Add 50 Acute Care Beds, Project ID # F-11622-18**

- **CHS Pineville, Add One Operating Room, Project ID # F-11621-18**

- **Carolinas Medical Center (CMC), Add Four Operating Rooms, Project ID # F-11620-18**

- **Carolina Center for Specialty Surgery, Add One Operating Room, Project ID # F-11619-18**

Based on the following comments, it is clear that both the Novant and Metrolina applications should be denied.

---

[1] Carolinas Medical Center ("CMC") is an operating division of The Charlotte-Mecklenburg Hospital Authority.

[2] As explained in CHS Pineville's 50-Bed application and Operating Room application, effective on or about January 1, 2019, both Mercy Hospital, Inc. (Applicant 1) and Mercy Health Services, Inc. (Applicant 2) will merge into their ultimate parent, The Charlotte-Mecklenburg Hospital Authority, at which point Mercy Hospital, Inc. and Mercy Health Services, Inc. will cease to exist; as such, The Charlotte-Mecklenburg Hospital Authority is included in both applications as Applicant 3.

GENERAL COMMENTS

The *2018 SMFP* identifies a need for 50 additional acute care beds and six additional operating rooms in Mecklenburg County based on the utilization of Atrium Health facilities, as Novant Health and other facilities demonstrate a surplus of beds and operating rooms.

Acute Care Beds

The acute care bed capacity of Mecklenburg County consists of seven existing facilities as identified below.

Mecklenburg County Acute Care Beds

	Licensed Acute Care Beds	***Adjustments for CONs***	***Current Bed Inventory***
2017 Acute Care Bed Need Determination	0	60	
CHS Pineville	206		206
CHS University	100		100
CMC/CMC-Mercy*	976	34	1,010
Atrium Health Total	**1,282**	**34**	**1,316**
Novant Health Huntersville Medical Center (NHHMC)	91	48	139
Novant Health Matthews Medical Center (NHMMC)	143	11	154
Novant Health Presbyterian Medical Center (NHPMC)	578	-59	519
Presbyterian Hospital Mint Hill (Novant Health Mint Hill Medical Center or NHMHMC)**	0	50	50
Novant Health Total	**812**	**50**	**862**

Source: *2018 SMFP*.
*CMC-Mercy is licensed as part of CMC and its beds are included as part of CMC in the *2018 SMFP.*
**According to the Novant application, NHMHMC opened on October 1, 2018 with 36 beds.

Of note, the *2018 SMFP* identifies 34 beds within the Atrium Health system as "Adjustments for CONs" for a previously approved CON to develop 34 additional acute care beds at CMC-Mercy pursuant to Project ID # F-10215-13. The identified 34 beds became operational in October 2016. Further, the *2018 SMFP* includes a 60-bed placeholder for the 2017 acute care bed need determination. Subsequent to the development of the *2018 SMFP*, certificates were issued to CHS Pineville and CMC for the development of 15 and 45 beds, respectfully, pursuant to the 2017 acute care bed need determination. The 15 beds at CHS Pineville and 45 beds at CMC became operational in October 2018. As such, all of Atrium Health's acute care beds were operational at the beginning of the review of this application.

As shown below, Novant Health's total days have declined in each of the last four years for a compound annual growth rate (CAGR) of negative 2.4 percent, and it currently operates at 58.0 percent of its total bed capacity in Mecklenburg County. By comparison, Atrium Health's total days have increased 2.7 percent annually and its beds operate at 79.7 occupancy of its total bed capacity in the county.

Mecklenburg County Acute Care Bed Utilization

	FFY 2012	*FFY 2013*	*FFY 2014*	*FFY 2015*	*FFY 2016*	*12-16 CAGR*
Novant Health Days	200,835	198,782	187,745	185,521	182,594	**-2.4%**
ADC	550	545	514	508	500	
Beds	862	862	862	862	862	
Occupancy	**63.8%**	**63.2%**	**59.7%**	**59.0%**	**58.0%**	
Atrium Health Days	344,089	352,854	347,252	377,117	382,846	**2.7%**
ADC	943	967	951	1,033	1,049	
Beds*	1,276	1,316	1,316	1,316	1,316	
Occupancy	**73.9%**	**73.5%**	**72.3%**	**78.5%**	**79.7%**	

Source: *2014* to *2018 SMFPs*.
*Atrium Health developed 40 additional acute care beds during this time period.

As noted in the CHS Pineville application, that facility operates today well above target occupancy rates, which demonstrates the need for the proposed additional acute care beds. As shown below, assuming CHS Pineville's bed inventory was increased by the proposed 50 beds and including the 15 beds awarded pursuant to the *2017 SMFP* need determination, its CY 2018 occupancy rate is only 2.4 percentage points below the target occupancy rate of 71.4 percent in the performance standards for acute care beds.

CHS Pineville Acute Care Bed Utilization Assuming 50 Proposed Beds

	CY15	*CY16*	*CY17*	*CY18**
Days	57,815	61,095	65,193	68,295
ADC	158	167	179	187
Current Beds + 50 Proposed	271	271	271	271
Occupancy with Additional 50 Beds	**58.3%**	**61.6%**	**65.9%**	**69.0%**

Source: Atrium Health internal data used to prepare HLRAs.
*CY 2018 annualized based on January to June data

Said another way, CHS Pineville needs the proposed 50 additional beds <u>today</u> in order to operate at more reasonable occupancy rates.

By contrast, NHHMC has historically operated below target occupancy rates and fails to demonstrate the need for its proposed additional capacity. As shown below, assuming NHHMC's bed inventory increased by its previously approved 48 beds and the proposed 12 beds, its occupancy rate in the last three years[3] would never have exceeded its historical target occupancy rate of 66.7 percent as defined in the performance standards for acute care beds. In fact, NHHMC would never have exceeded 47 percent occupancy of its proposed beds.

[3] Per the baseline three years of data provided in the Novant application, CY 2016, 2017, and 2018 annualized.

NHHMC Acute Care Bed Utilization
Assuming Approved and Proposed Beds

	CY16 per CON	*CY17 per CON*	*CY18 per CON*
NHHMC Days	21,165	23,312	25,634
ADC	58	64	70
Current Beds + Approved + Proposed Beds	151	151	151
Occupancy	**38.4%**	**42.3%**	**46.5%**

Source: Novant Application. See page 148 for Table NHHMC.4.

This low utilization is reflected in the *2018 SMFP* which shows that NHHMC has the largest surplus of beds of any operational Novant facility (which is similarly true in the draft of Table 5A prepared for the *2019 SMFP)*:

Novant Mecklenburg County Acute Care Bed Need/Surplus

	2020 Projected ADC	*2020 Beds Adjusted for Target Occupancy*	*Current Bed Inventory*	*Projected 2020 Deficit/ (Surplus)*
NHHMC	61	91	139	(48)
NHMMC	103	144	154	(10)
NHPMC	355	473	519	(46)
NHMHMC	0	0	50	(50)
Novant Health Total	**519**	**708**	**862**	**(154)**

Source: *2018 SMFP*.

Of note, Novant Health's facilities each have a surplus of beds and collectively demonstrate a surplus of 154 beds, including 50 beds[4] that were originally approved for NHMHMC in 2007, 36 of which appear to have opened just the week prior to this application submission. As such, Novant has 14 beds undeveloped beds in Mecklenburg County.

Despite its undeveloped capacity, its surplus of capacity across the system, and the low occupancy rates at its facilities, Novant argues, unreasonably, that it needs additional capacity. In order to justify its project, Novant provides unsupported growth assumptions to project future utilization. While the application-specific comments below provide detailed discussions of the unreasonableness of Novant Health's assumptions, the table below provides an overall comparison of the historical and projected utilization provided by Novant and Atrium Health. As the table demonstrates and as previously noted, while Novant's total days have declined in each of the last four years for a CAGR of negative 2.4 percent

[4] On July 2, 2007, Novant received a CON to relocate 50 beds from Novant Health Charlotte Orthopaedic Hospital (NHCOH), which is now licensed as part of NHPMC, to develop NHMHMC pursuant to Project ID # F-7648-06. Subsequently, Novant was approved in 2012 to develop 50 additional acute care beds at NHCOH, under Project ID # F-8765-11. As such, the 50 undeveloped beds are assigned to NHMHMC's inventory in the *2018 SMFP*, a facility for which Novant was approved in 2007 to develop with 50 beds.

(or a decline of 9.1 percent overall), it projects utilization to grow 5.3 percent annually over the seven years until 2023 (or a total of 43 percent in seven years).

Mecklenburg County Acute Care Bed Utilization

	FFY 2012	*FFY 2013*	*FFY 2014*	*FFY 2015*	*FFY 2016*	*Actual 12-16 CAGR*	*CY 23 Projected*	*Proj. 16-23 CAGR*
Novant Days	200,835	198,782	187,745	185,521	182,594	**-2.4%**	262,318	**5.3%**
ADC	550	545	514	508	500		719	
Beds	862	862	862	862	862		874	
Occupancy	**63.8%**	**63.2%**	**59.7%**	**59.0%**	**58.0%**		**82.2%**	
Atrium Health Days	344,089	352,854	347,252	377,117	382,846	**2.7%**	433,159	**1.8%**
ADC	943	967	951	1,033	1,049		1,187	
Beds	1,276	1,316	1,316	1,316	1,316		1,426	
Occupancy	**73.9%**	**73.5%**	**72.3%**	**78.5%**	**79.7%**		**83.2%**	

Source: *2014* to *2018 SMFPs*. Novant page 46. CHS Pineville Form C Methodology and Assumptions, page 24.

By contrast, Atrium Health's total days have increased 2.7 percent annually and are conservatively projected to grow only 1.8 percent annually through 2023, resulting in 83.2 percent occupancy. Simply put, whereas Atrium Health's utilization projections are reasonable and conservative relative to its historic experience, Novant's are unreasonable and unsupported.

As discussed in detail below in the specific comments, even if Novant were to achieve its unreasonable and unsupported projections, NHHMC's beds are projected to operate at only 67.9 percent (see page 146 of Novant's application), below the target occupancy rate of 71.4 percent for that facility and well below Atrium Health's current occupancy rates. As such, Novant has failed to demonstrate the need for additional acute care beds.

Operating Rooms

The *2018 SMFP* identifies a need for six additional operating rooms in Mecklenburg County based on application of the operating room need methodology. Following extensive deliberation and input from providers and interested parties, the State Health Coordinating Council adopted a new operating room (OR) methodology to address deficiencies of the prior methodology and to more appropriately determine the need for operating rooms, particularly in larger metropolitan areas. This resulted in multiple need determinations across the state, the largest of which was in Mecklenburg County. Although the actual need calculated was a deficit of 17 ORs (16.65 rounds to 17 under the methodology rounding rules), the methodology capped the maximum allocation to six ORs for 2018.

The operating room capacity of Mecklenburg County consists of 17 existing and approved licensed facilities as identified in the table below. While the OR methodology in the *2018 SMFP* is rather complex, one of the primary changes from previous years is that a need determination is generated when any single system shows a deficit of at least two operating rooms, despite any surpluses at other systems in the service area. In this way, the OR methodology in the *SMFP* is now similar to the methodology for acute care beds. Projected surgical hours in 2020 are based on FFY 2016 surgical hours for each facility

multiplied by the Growth Factor compounded over four years. The resulting calculation is the number of operating rooms needed at each facility in FFY 2020 after adjusting for planning inventory. The surplus or deficit of operating rooms for each facility is determined by subtracting the inventory of ORs from the FFY 2020 ORs needed. The sum of the deficits from all systems is the need determination for the service area, except as capped, as noted above. The table below shows the final calculations in the *SMFP* methodology, including the projected surgical hours, ORs needed, OR inventory and net deficit or surplus by facility and system.

Mecklenburg County Operating Room Need/Surplus

	Projected Surgical Hours for 2020	***Projected Surgical ORs Required in 2020***	***Adjusted Planning Inventory***	***Projected OR Deficit/ Surplus (Surplus shows as a "-")***
CHS Huntersville Surgery Center	0	0.00	1	-1.00
CCSS	2,780	2.12	2	0.12
CHS Pineville	17,503	9.97	10	-0.03
CMC/CMC-Mercy	139,557	71.57	55	16.57
CHS University	11,988	7.99	7	0.99
Atrium Health System Total		***91.65***	***75***	***16.65***
Randolph Surgery Center	0	0.00	6	-6.00
Charlotte Surgery Center	9,753	7.43	6	1.43
Charlotte Surgery Center Total		***7.43***	***12***	***-4.57***
Presbyterian Hospital Mint Hill	0	0.00	4	-4.00
SouthPark Surgery Center	11,778	8.97	6	2.97
Novant Health Ballantyne Outpatient Surgery	1,401	1.07	2	-0.93
Novant Health Huntersville Outpatient Surgery	2,563	1.95	2	-0.05
Matthews Surgery Center	2,843	2.17	2	0.17
Novant Health Presbyterian Medical Center	66,984	34.35	36	-1.65
Novant Health Matthews Medical Center	9,020	6.01	6	0.01
Novant Health Huntersville Medical Center	8,933	5.96	6	-0.04
Novant Health Total		***60.48***	***64***	***-3.52***
Mallard Creek Surgery Center**	5,392	0.00	2	-2.00
Carolinas Center for Ambulatory Dentistry**				

Source: *2018 SMFP*.

**Demonstration projects not included in the calculation of need

The need for operating rooms in the *2018 SMFP* for Mecklenburg County was triggered by the utilization of Atrium Health facilities, as all other systems and facilities demonstrated a surplus of operating rooms. Atrium Health facilities demonstrate a combined deficit of almost 17 operating rooms. In fact, other than a negligible surplus at CHS Pineville, all of Atrium Health's facilities are at capacity or have a deficit of operating rooms. Please note that the surplus shown for CHS Huntersville Surgery Center is offset by the deficit at CHS University, as CHS Huntersville Surgery Center's surgical hours were historically attributed to CHS University pending the completion of its CON project to convert to a freestanding ASC. By

comparison, Novant's facilities collectively demonstrate a surplus of almost four operating rooms including a surplus at NHHMC.

Finally, the Healthcare Planning and Certificate of Need Section has prepared a draft of the operating room need projections (Tables 6A and 6B) for the *2019 SMFP* as part of the development of that Plan. Table 6B shows a need for a total of 16.74 operating rooms at Atrium Health facilities in Mecklenburg County, which is then adjusted for the placeholder for the ORs allocated in the *2018 SMFP*, resulting in a net service area need of 11 ORs.

Based on the foregoing analyses, it is clear that there is a need for additional operating room capacity in Mecklenburg County and specifically at Atrium Health facilities.

NOVANT HEALTH HUNTERSVILLE MEDICAL CENTER, ADD 12 ACUTE CARE BEDS AND ONE OPERATING ROOM

Novant's application to add 12 acute care beds and one operating room should not be approved as proposed. Novant's application contains numerous errors, overstatements, and inconsistencies as well as insufficient responses to the Certificate of Need application form. The information in the application as submitted is insufficient to make a determination of conformity with the statutory review criteria and specific regulatory criteria and standards. Atrium Health and CCSS have grouped the errors, overstatements, inconsistencies, and insufficiencies by issue, each of which contributes to Novant's non-conformity:

(1) Significant overstatement of acute care utilization including data in the application that is more than 11,000 days higher than what Novant has previously publicly reported.
(2) Issues with NHHMC patient origin including surgical case volume that is over 160 percent higher than what Novant reports in the remainder of its application.
(3) Issues with utilization at NHHMC including a projected acute care bed occupancy rate that is below the target occupancy rate for the facility.
(4) Issues with utilization at NHBMC including a failure to account for the lack of ICU services and an erroneous calculation of the impact of the facility on existing providers.
(5) Issues with operating room utilization including an unreasonable assumption that all of its cases and locations will grow equally when its historical experience clearly suggests that will not be the case.
(6) Issues with financial statements including numerous inconsistencies and errors with regard to inflation of charges and payor mix.

Each of the issues listed above is discussed in turn below. Please note that relative to each issue, Atrium Health and CCSS have identified the statutory review criteria and specific regulatory criteria and standards creating the non-conformity.

<u>Significant overstatement of acute care utilization</u>

Novant's application significantly overstates the historical utilization of Novant Health's acute care beds in Mecklenburg County. Because this historical utilization is the basis for projected acute care days at each facility, Novant's projected acute care days in total are also overstated.

As shown below, Novant's application provides Calendar Year (CY) 2016 acute care bed utilization data for Novant Health facilities in Mecklenburg County that exceeds the Federal Fiscal Year (FFY) 2016 data reported on its Hospital License Renewal Applications and Table 5A of the *2018 SMFP* (per Truven) by more than 11,500 patient days, or 6.3 to 7.1 percent.

Overstatement of Novant Health's 2016 Acute Care Days

	CY16 per CON	*FFY16 per SMFP*	*Difference between CON and SMFP*	*% Difference between CON and SMFP*	*FFY16 per HLRA*	*Difference between CON and HLRA*	*% Difference between CON and HLRA*
NHHMC	21,165	21,355	-190	-0.9%	21,731	-566	-2.6%
NHPMC	136,605	125,144	11,461	9.2%	123,643	12,962	10.5%
NHMMC	36,401	36,095	306	0.8%	35,857	544	1.5%
Total	**194,171**	**182,594**	**11,577**	**6.3%**	**181,231**	**12,940**	**7.1%**

Source: NHHMC application: page 104 for NHHMC days, page 109 for NHPMC days, and page 173 for NHMMC days. 2017 HLRA. Table 5A of the *2018 SMFP.*

Similarly, Novant's application provides CY 2017 acute care bed utilization data that exceeds FFY 2017 data from its HLRAs and Table 5A of the *2019 SMFP*[5] by more than 11,000 patient days, or 5.9 to 7.2 percent.

Overstatement of Novant Health's 2017 Acute Care Days

	CY17 per CON	*FFY17 per SMFP*	*Difference between CON and SMFP*	*% Difference between CON and SMFP*	*FFY17 per HLRA*	*Difference between CON and HLRA*	*% Difference between CON and SMFP*
NHHMC	23,312	22,640	672	3.0%	24,172	-860	-3.6%
NHPMC	136,639	127,232	9,407	7.4%	124,695	11,944	9.6%
NHMMC	36,668	35,724	944	2.6%	34,614	2,054	5.9%
Total	**196,619**	**185,596**	**11,023**	**5.9%**	**183,481**	**13,138**	**7.2%**

Source: NHHMC application: page 104 for NHHMC days, page 109 for NHPMC days, and page 173 for NHMMC days. 2018 HLRA. Table 5A of the *2019 SMFP.*

[5] Per the Truven data in the September 11, 2018 draft of Table 5A prepared for the *2019 SMFP* as shown in Attachment 1. Note, Novant's acute care utilization data in this version of Table 5A is equivalent to the *Proposed 2019 SMFP*.

The majority of the overstatement is reported at NHPMC. Specifically, Novant reports in its NHHMC application that NHPMC's days of care are 9.2 to 10.5 percent higher in 2016 and 7.4 to 9.6 percent higher in 2017.

Overstatement of NHPMC Acute Care Days

	Difference between CON and SMFP	***Difference between CON and HLRA***
2016 Difference	11,461	12,962
2016 % Difference	9.2%	10.5%
2017 Difference	9,407	11,944
2017 % Difference	7.4%	9.6%

Source: NHHMC application, page 109 for NHPMC days. 2017 and 2018 HLRA. Table 5A of the *2018* and *2019 SMFP.*

While some difference is expected between CY and FFY data due to the different time periods, the data above, which include a comparison of two consecutive years of data and demonstrate a difference in excess of 11,000 total days in each year, is clear evidence of Novant's overstatement. As of the submission of these comments, there is no source for publicly reported 2018 data to compare to Novant's stated year-to-date 2018 data. However, it is reasonable to presume that Novant has also overstated its 2018 data.

As noted above, the historical data are used as the basis for projecting future acute care days at Novant's hospitals in Mecklenburg County. Further, the historical data are also used to calculate the historical CAGRs at each facility, which in turn are assumed to be each facility's projected growth rate. Thus, an overstatement of historical days of care could also result in an overstatement of historical CAGRs. As such, the overstatement of baseline utilization could result in multiple errors when projected forward both in terms of the calculation of the historical growth rate which is used by Novant as its projected growth rate and the compounding growth of the overstated days. As such, it impossible to fully quantify the impact of Novant's error. There is not enough correct information in the application for the Agency to determine the reasonableness of Novant's projected growth rate, but publicly reported data in the SMFP indicates that Novant's system acute care utilization has declined 2.4 percent annually historically (see page 5 of these comments). Given the degree of this overstatement, it is impossible to determine that NHHMC's application is conforming with the statutory review criteria or the acute care bed performance standards.

Novant's application fails to provide other information related to this issue as well. On page 42 of its application, Novant provides its response to Section C.10, Form C Utilization. Section C.10 states "*Complete Form C Utilization*" including "*Historical – Provide actual annual utilization for three full fiscal years prior to submission of the application*" (emphasis added). As its application was submitted on October 15, 2018 and its fiscal year has a January to December timeframe, Novant should have provided 2015, 2016, and 2017 actual annual utilization. However, Novant's application does not include 2015 actual utilization data for its service components. Similarly, Section C.10 states "*Interim-Provide projected annual utilization data for each full fiscal year from the last full fiscal year prior to submission of the application until the project is complete. One year of annualized data may be necessary to complete the form as requested and is permissible. If it is necessary to include one year of annualized utilization data, specify the number of months for which actual utilization data is available, provide the total actual*

utilization data for those months and describe the method used to annualize the partial year of actual utilization data" (emphasis added). However, Novant's application fails to include the total actual utilization data for the seven months of 2018 that it annualized. Novant's application repeatedly misrepresents the data it has provided, stating myriad times that it has provided and analyzed three full fiscal years of data (pages 125, 126, and 127) as the basis for key utilization assumptions. Novant's failure to include 2015 and actual year-to-date 2018 acute care bed and operating room utilization data, despite clear instructions in the CON form to provide, and its misrepresentation of the data it did provide undermines the ability of the Agency to determine the reasonableness of Novant's assumptions.

More significantly, Novant incorrectly projects acute care bed utilization at NHPMC and NHMMC in future years. Specifically, on page 140, Novant states that it "*assumed projected NHPMC and NHMMC Acute Care Discharges will continue to grow at their historical CAGRs for CY 2016 – CY 2018, annualized*." Novant calculates that NHPMC's and NHMMC's historical CAGRs are 2.6 and 6.1 percent respectively, in Table System.1 on pages 173 and 174, as reproduced below.

Section Q, Form C: Table System.1
Novant Health Mecklenburg County Health System
Historical Acute Care Cases and Patient Days

Acute Care Cases [1]	CY 2016	CY 2017	CY 2018 Annualized [2]	2016 - 2018 CAGR and ALOS	Projected Growth Rate Assumption
NHPMC	25,488	25,316	26,815	2.6%	2.6%
NHMMC	9,455	9,941	10,646	6.1%	6.1%
Acute Care Patient Days [1]	**CY 2016**	**CY 2017**	**CY 2018 Annualized [2]**		
NHPMC	136,605	136,639	149,549	4.6%	
NHMMC	36,401	36,688	38,484	2.8%	
Acute Care Patient Days	**CY 2016**	**CY 2017**	**CY 2018 Annualized [2]**	**Average Length of Stay**	**Projected ALOS Assumption**
NHPMC	5.4	5.4	5.6	5.4	5.4
NHMMC	3.8	3.7	3.6	3.7	3.7

*[1] Trendstar Internal Data. CY 2018 Annualized as [Jan - July)/7]*12*
*[2] CY 2018 Annualized as [Jan - July)/7]*12*

Then, Novant projects NHPMC and NHMMC cases forward on Table System.2 on page 175 (reproduced below), but it erroneously projects that the cases will grow faster than the calculated historical growth rates in several years.

Section Q, Form C: Table System.2
Novant Health Mecklenburg County Health System
Projected Acute Care Cases and Patient Days Before Adjustments for Hospitals

Acute Care	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	CY 2024	CY 2025
NH System Unadjusted Cases							
NHHMC	8,089	8,736	9,435	10,190	11,005	11,885	12,836
NHPMC	27,512	28,227	28,961	29,714	30,487	32,926	35,560
NHMMC	11,295	11,984	12,715	13,491	14,314	15,459	16,695
NH System	46,896	48,947	51,111	53,395	55,805	60,270	65,091
NH System Unadjusted Days							
NHHMC	27,502	29,702	32,079	34,645	37,416	40,410	43,643
NHPMC	148,565	152,428	156,391	160,457	164,629	177,799	192,023
NHMMC	41,792	44,341	47,046	49,916	52,961	57,198	61,773
NH System	217,859	226,471	235,515	245,018	255,006	275,407	297,439
Impact on NHPMC (For Form C)							
NHBMC Cases [1]					1,790	2,237	2,710
NHPMC Cases (Impact) [2]					251	313	379
NHPMC Days [3]					1,353	1,691	2,049
NHPMC with NHBMC(Acute Care)							
NHPMC Cases	27,512	28,227	28,961	29,714	30,236	32,613	35,180
NHPMC Days	148,565	152,428	156,391	160,457	163,276	176,108	189,974

[1] Table NHBMC.6
[2] Table NHBMC.9
[3] Table System.1

Specifically, NHPMC cases and days are projected to grow 8.0 percent annually beginning in CY 2023, well above Novant's stated assumed growth of 2.6 percent for that facility.

Overstatement of NHPMC's Projected Acute Care Case and Days

	CY 2019	***CY 2020***	***CY 2021***	***CY 2022***	***CY 2023***	***CY 2024***	***CY 2025***
NHPMC Cases	27,512	28,227	28,961	29,714	30,487	32,926	35,560
Annual Growth	NA	2.6%	2.6%	2.6%	2.6%	**8.0%**	**8.0%**
NHPMC Days	148,565	152,428	156,391	160,457	164,629	177,799	192,023
Annual Growth	NA	2.6%	2.6%	2.6%	2.6%	**8.0%**	**8.0%**

Source: NHHMC application, page 175.

Similarly, NHMMC cases and days are projected to grow 8.0 percent annually beginning in CY 2023, above Novant's stated assumed growth rate of 6.1 percent for that facility.

Overstatement of NHMMC's Projected Acute Care Cases and Days

	CY 2019	***CY 2020***	***CY 2021***	***CY 2022***	***CY 2023***	***CY 2024***	***CY 2025***
NHMMC Cases	11,295	11,984	12,715	13,491	14,314	15,459	16,695
Annual Growth	NA	6.1%	6.1%	6.1%	6.1%	**8.0%**	**8.0%**
NHMMC Days	41,792	44,341	47,046	49,916	52,961	57,198	61,773
Annual Growth	NA	6.1%	6.1%	6.1%	6.1%	**8.0%**	**8.0%**

Because of Novant's erroneous growth rate calculations, it incorrectly projects an increase in days of care at NHPMC and NHMMC by a total of 20,875 days in CY 2025, as shown below.

Corrected NHMMC and NHPMC Acute Care Days

	CY 2023	*CY 2024*	*CY 2025*
NHPMC Days per CON	164,629	177,799	192,023
NHPMC Days Corrected	164,629	168,909	173,301
NHMMC Days per CON	52,961	57,198	61,773
NHMMC Days Corrected	52,961	56,192	59,620
NHPMC + NHMMC Days per CON	217,590	234,997	253,796
NHPMC + NHMMC Days Corrected	217,590	225,101	232,921
Difference	**0**	**9,896**	**20,875**

Of note, this correction accounts only for the error in the growth rate assumption in CY 2023; it does not account for the overstatement of NHPMC and NHMMC's historical days of care (CY 2016 and 2017) as noted previously.

Notably, Novant fails to provide a summary table of the final projected utilization for all of its hospitals in Mecklenburg County. On page 140, Novant states that "[t]*he resulting Y3 occupancy for all Novant Health hospitals in Mecklenburg County is shown in Table System.3. The occupancy percentage of 82.2% meets the performance standards"* (emphasis added). But, Novant's application does not provide a Table System.3 anywhere in its application. Table System.2 is on page 175 and Table System.4 is on page 176. There is no Table System.3. Without this table, it is impossible to determine Novant's projected acute care utilization for all of its hospitals in Mecklenburg County.

Based on the discussion above, it is clear that projected utilization of Novant's acute care beds in Mecklenburg County is erroneous, unreasonable, and unsupported. As such, the NHHMC application is non-conforming with Criteria 1, 3, 4, 5, 6, 18a, and the performance standards in the acute care bed rules (10A NCAC 14C .3803).

Issues with NHHMC Patient Origin

On pages 27 and 28 of its application, Novant provides historical CY 2017 patient origin for "Acute Care Inpatient Services", "NICU Services", "Inpatient Surgical Services", and "Outpatient Surgical Services." However, for each of these services, Novant's reported utilization in the patient origin tables contradicts the utilization reported in the remainder of the application. Specifically:

- Novant reports 3,852 inpatient surgical cases in CY 2017 in its patient origin table, but only 1,352 inpatient surgical cases on Form C Utilization-NHHMC on page 104, a difference of 185 percent.
- Novant reports 9,863 outpatient surgical cases in CY 2017 in its patient origin table, but only 3,748 outpatient surgical cases on Form C-Utilization-NHHMC on page 104, a difference of 163 percent.
- Novant reports 6,766 as the total number of NHHMC patients for acute care inpatient services in CY 2017 in its patient origin table. However, Novant reports 6,867 acute care cases for CY 2017 NHHMC on Table NHHMC.1 on page 145.
- Novant reports 149 total NHHMC NICU patients in CY 2017 in its patient origin table, but 154 NICU patients in that same year on Table NHHMC.7 on page 151.

Based on the discussion above, it is clear that Novant has failed to identify the population it proposes to serve. As such, the NHHMC application is non-conforming with Criteria 1, 3, 4, 5, 6, and 18a.

Issues with Utilization at NHHMC

Novant's projected utilization methodology for NHHMC contains issues and errors throughout.

As noted previously, Novant has overstated its total historical acute care days in 2016 and 2017 and it is reasonable to assume that its 2018 data are also overstated. Based on the differences between NHHMC's stated days of care in 2016 and 2017 with publicly reported data, it is impossible to determine whether its 2018 days of care are similarly different as there is no source as of the date of the submission of these comments for publicly reported 2018 data to compare to Novant's stated year-to-date 2018 data. Thus, it is impossible to determine whether NHHMC's baseline 2018 acute care utilization data and historical CAGRs are reasonable. As these data are essential to NHHMC's projected utilization, it impossible to determine if Novant's projected utilization for NHHMC is reasonable.

Similarly, Novant's failure to include 2015 and actual year-to-date 2018 data, despite clear instructions in the CON form to provide, and its misrepresentation of the data it did provide undermines the ability of the Agency to determine the reasonableness of Novant's assumptions. As shown below, NHHMC's publicly reported data since 2015 shows an overall decline in acute care days:

NHHMC Acute Care Days

	FFY15	*FFY16*	*FFY17*	*CAGR*
NHHMC Days	23,080	21,355	22,640	**-1.0%**

Source: Truven data from *2017* to *2019 SMFPs*.

By contrast, Novant projects that NHHMC's acute care days will grow 8.0 percent annually for seven straight years, from CY 2018 to 2025 (see page 125 of the Novant application). Given the decline in utilization based on three years full years of publicly reported historical data and Novant's failure to provide three full fiscal years of historical data in its application that supports the reasonableness of its assumption, Novant's projected utilization at NHHMC is unsupported.

Even assuming NHHMC's projected utilization is reasonable, Novant fails to demonstrate the need for the additional beds at NHHMC as that facility is not projected to achieve its target occupancy rate. As shown in Table NHHMC.2 on page 146, reproduced below, NHHMC's average daily census (ADC) is projected to be 102.5 patients in CY 2023, its third project year.

Section Q, Form C: Table NHHMC.2
Novant Health Huntersville Medical Center
Projected Acute Care Cases and Patient Days

			PY1	PY2	PY3		
Acute Care	**CY 2019**	**CY 2020**	**CY 2021**	**CY 2022**	**CY 2023**	**CY 2024**	**CY 2025**
Admissions [1]	8,089	8,736	9,435	10,190	11,005	11,885	12,836
ALOS [2]	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Patient Days	27,502	29,702	32,079	34,645	37,416	40,410	43,643
Days in Period	365	366	365	365	365	366	365
ADC	75.3	81.2	87.9	94.9	102.5	110.4	119.6
Beds	139	139	151	151	151	151	151
Occupancy	54.2%	58.4%	58.2%	62.9%	67.9%	73.1%	79.2%

[1] Table NHHMC.1, Assumed 8.0% Annual Growth Rate
[2] Table NHHMC.1, Assumed 3 Year Average ALOS = 3.4

According to the *2018 SMFP* and the performance standards for acute care beds (at 10A NCAC 14C .3803), the target occupancy rate for facilities with an ADC of 100 to 200 patients is 71.4 percent. As shown above, NHHMC's projected occupancy rate in its third project year is only 67.9 percent. As such, NHHMC fails to demonstrate the need for its proposed project.

On page 126, when discussing NHHMC's projected ICU utilization, Novant states that "[p]*rojected occupancy of the six beds in CY2023 is 89.7, which meets the performance standard of 66.7% occupancy. See Table NHHMC.4"* (emphasis added). However, Table NHHMC.4, reproduced below from page 148, states that NHHMC will operate eight ICU beds. As such, Novant provides contradictory information about the number of ICU beds it will operate.

Section Q, Form C: Table NHHMC.4
Novant Health Huntersville Medical Center
Projected ICU Days of Care

			PY1	PY2	PY3		
OB	**CY 2019**	**CY 2020**	**CY 2021**	**CY 2022**	**CY 2023**	**CY 2024**	**CY 2025**
Acute Days of Care [1]	27,502	29,702	32,079	34,645	37,416	40,410	43,643
ICU Days of Care [2]	1,925	2,079	2,246	2,425	2,619	2,829	3,055
ADC	5	6	6	7	7	8	8
ICU Beds	8	8	8	8	8	8	8
ICU Occupancy	65.9%	71.0%	76.9%	83.1%	89.7%	96.6%	104.6%

[1] Table NHHMC.2
[2] Table NHHMC.3, ICU as a % of Acute = 7.0%

Similarly, discussing NHHMC's projected NICU utilization on page 127, Novant states that "[p]*rojected occupancy of the six beds in CY2023 is 95.2%, which meets the performance standard of 66.7% occupancy. See Table NHHMC.8*" (emphasis added). However, Table NHHMC.8, reproduced below from page 152, states that NHHMC will operate four NICU beds. As such, Novant provides contradictory information about the number of NICU beds it will operate.

Section Q, Form C: Table NHHMC.8
Novant Health Huntersville Medical Center
Projected NICU Cases and Days of Care

			PY1	PY2	PY3		
NICU Admissions	**CY 2019**	**CY 2020**	**CY 2021**	**CY 2022**	**CY 2023**	**CY 2024**	**CY 2025**
OB Admissions [1]	1,961	2,118	2,287	2,470	2,667	2,881	3,111
NICU Admissions [2]	165	178	192	207	224	242	261
ALOS [3]	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Patient Days	1,021	1,103	1,191	1,286	1,389	1,500	1,620
Days in Period	365	366	365	365	365	366	365
ADC	2.8	3.0	3.3	3.5	3.8	4.1	4.4
Beds	4	4	4	4	4	4	4
Occupancy	69.9%	75.3%	81.6%	88.1%	95.2%	102.5%	111.0%

[1] Table NHHMC.6
[1] Table NHHMC.7, Assume NICU % of OB = 8.4%
[2] Table NHHMC.7, Assume 3-Year Average ALOS = 6.2

In discussing its projected NICU utilization, Novant states "[t]*he projected occupancy for NICU is high. NICU beds are licensed acute care beds. If needed, NHHMC can designate more acute care beds as NICU beds. As long as NICU guidelines are met, approval for the conversion is granted through written notification to the Acute and Home Care Licensure and Certification Section of North Carolina' s Department of Health and Human Services*" (page 127). As shown above, Novant projects over 100 percent utilization of those beds in CY 2024 and 2025. This level of utilization is unreasonable given the specialized design and nature of NICU beds. Specifically, it is not reasonable to place NICU patients in the same physical space as another acute care bed. These patients must be cared for in a NICU bed. While Novant can designate more beds via a change in licensure, it must have specialized physical capacity to accommodate these patients. Given the facility and unit requirements, the development of additional NICU beds is likely to require a capital expense that is not insignificant. As Novant has stated that it may add NICU beds given its projected utilization, it appears as though the proposed project has failed to include all necessary capital expense, specifically any capital expense associated with the development of additional NICU beds. Alternatively, Novant's projected utilization of over 100 percent capacity is unreasonable as it simply will not have NICU capacity to serve its projected patient days. As such, the projected utilization for NHHMC is unreasonable.

Based on the discussion above, it is clear that projected utilization of NHHMC's acute care beds is unreasonable and unsupported. As such, the NHHMC application is non-conforming with Criteria 3, 4, 5, 6, 18a, and the performance standards in the acute care bed rules (10A NCAC 14C .3803).

Issues with Utilization at Novant Health Ballantyne Medical Center

Beginning on page 129 of its NHHMC application, Novant provides its utilization methodology for Novant Health Ballantyne Medical Center (NHBMC), a concurrently proposed new acute care hospital in Mecklenburg County.[6] Pursuant to the performance standards for acute care beds and operating rooms, Novant must demonstrate that all of its beds and operating rooms are appropriately utilized, including those at the proposed NHBMC. As discussed below, the NHHMC application's utilization projections for NHBMC are unreasonable and error-filled, rendering the NHHMC application non-conforming with Criteria 1, 3, 4, 5, 6, 18a, and the performance standards in the acute care bed rules (10A NCAC 14C .3803).

[6] The references to the NHBMC application are exclusively obtained from the references to that application in the NHHMC application.

The NHHMC application states on page 129 that NHBMC will have general medical/surgical and obstetrics beds. Notably, NHBMC will not offer ICU services. Given the nature of ICU services and the specialized design of ICU beds, NHBMC cannot serve ICU patients in general or obstetrics beds or redesignate other beds to serve ICU patients. As such, NHBMC will not be able to serve these patients and its acute care services will be restricted. However, the NHHMC application's utilization projections for NHBMC fail to make any adjustment for the lack of ICU capability and capacity. On page 131, the NHHMC application states that its analyses of the NHBMC inpatient market "*are limited to patients in Diagnosis Related Groups with weights less than 2.0. This limitation approximates services NHBMC can offer during its initial years.*" However, it is clear that this limitation does not account for the lack of ICU services at NHBMC, nor does it appropriately limit those patients that would require other services that would not be offered at NHBMC. As shown below, an analysis of patients in Diagnosis Related Groups with weights less than 2.0 in NHBMC's service area in CY 2017 (consistent with the NHHMC application's analysis) reveals that the NHHMC application has approximated the services at NHBMC with a patient pool that includes thoracic surgery, electrophysiology, interventional cardiology, carotid procedures, peripheral vascular, trauma surgery, brain procedures, peripheral and cranial diseases, advanced care neonates, minor care newborns, general pediatrics, and pediatric subspecialties. In total, these services account for 15 percent of market discharges with a weight less than 2.0.

NHBMC Market Discharges with Weight Less Than 2.0

Program	*Service*	*Clinical Service*	*Patients*
Cardiovascular	Cardiothoracic Surgery	Thoracic Surgery	33
Cardiovascular	Invasive Cardiology	Electrophysiology	16
Cardiovascular	Invasive Cardiology	Interventional Cardiology	20
Cardiovascular	Medical Cardiology	Cardiac Events and Symptoms	609
Cardiovascular	Medical Cardiology	CHF	548
Cardiovascular	Medical Cardiology	Circulatory Disorders	388
Cardiovascular	Vascular Services	Amputation Circulatory	4
Cardiovascular	Vascular Services	Carotid Procedures	43
Cardiovascular	Vascular Services	Peripheral Vascular	116
General Surgery	Gen Surgery Trauma and Trach	Trauma Surgery	122
General Surgery	General Surgery	Bariatric	63
General Surgery	General Surgery	Colorectal Lower GI	99
General Surgery	General Surgery	Hernia Surgery	39
General Surgery	General Surgery	Miscellaneous Surgery	94
General Surgery	General Surgery	Routine General Surgery	174
General Surgery	General Surgery	Surgical Hepatobiliary Pancreatic	4
General Surgery	General Surgery	Upper Other GI	40
Medicine	Medicine	Dermatology	205
Medicine	Medicine	Endocrinology	495
Medicine	Medicine	Gastroenterology	1,067
Medicine	Medicine	Infectious Disease	899
Medicine	Medicine	Kidney and Urinary Tract	718
Medicine	Medicine	Medical EENT	71

Program	*Service*	*Clinical Service*	*Patients*
Medicine	Medicine	Medical Hepatobiliary Pancreatic	274
Medicine	Medicine	Other General Medicine	353
Medicine	Medicine	Pulmonology	1,520
Medicine	Medicine	Rheumatology	38
Neurosciences	Neurology	Degenerative Disorders	154
Neurosciences	Neurology	Multiple Sclerosis	18
Neurosciences	Neurology	Nervous System Infection	16
Neurosciences	Neurology	Other Neurology	206
Neurosciences	Neurology	Seizure Epilepsy	110
Neurosciences	Neurology	Stroke and TIA	432
Neurosciences	Neurosurgery	Brain Procedures	17
Neurosciences	Neurosurgery	Peripheral and Cranial Diseases	5
Neurosciences	Spine	Medical Spine	83
Neurosciences	Spine	Surgical Spine	38
Newborns and Neonates	Advanced Care Neonate	Advanced Care Neonate	39
Newborns and Neonates	Normal and Minor Care Newborns	Minor Care Newborn	870
Oncology	Benign Hem	Hematology	196
Oncology	Cancer Therapy	Chemo wo Leukemia	42
Oncology	Hem Malignancies	Lymphomas and Leukemias	39
Oncology	Solid Tumor	Breast Cancer	15
Oncology	Solid Tumor	GI and Liver Cancer	60
Oncology	Solid Tumor	Gynecologic Oncology	18
Oncology	Solid Tumor	Kidney and Urinary Tract Cancer	25
Oncology	Solid Tumor	Lung Cancer	43
Oncology	Solid Tumor	Male Reproductive Cancer	3
Oncology	Solid Tumor	Other Cancer Sites	86
Orthopedics	General Medical Orthopedics	General Medical Orthopedics	162
Orthopedics	Hand Arm and Wrist	Hand and Wrist	1
Orthopedics	Hand Arm and Wrist	Shoulder Elbow and Arm	9
Orthopedics	Hip Knee and Ankle Replacement	Foot and Ankle	4
Orthopedics	Hip Knee and Ankle Replacement	Hip and Knee Other	46
Orthopedics	Medical Ortho Trauma	Medical Ortho Trauma	68
Orthopedics	Orthopedic Sports Medicine	General Sports Medicine	21
Orthopedics	Other Surgical Orthopedics	Lower Extremity Other	32
Orthopedics	Other Surgical Orthopedics	Other Surgical Orthopedics	16
Other Surgery	Other Surgery	EENT	23
Other Surgery	Other Surgery	Oral and Maxillofacial Surgery	10
Other Surgery	Other Surgery	Urology	138
Pediatrics	General Pediatrics	General Pediatrics	202

Program	*Service*	*Clinical Service*	*Patients*
Pediatrics	Pediatric Subspecialties	Cardiology	8
Pediatrics	Pediatric Subspecialties	Cardiothoracic Surgery	4
Pediatrics	Pediatric Subspecialties	Endocrinology	40
Pediatrics	Pediatric Subspecialties	General Surgery	31
Pediatrics	Pediatric Subspecialties	GI and Liver	49
Pediatrics	Pediatric Subspecialties	Hematology Oncology	29
Pediatrics	Pediatric Subspecialties	Infectious Disease	21
Pediatrics	Pediatric Subspecialties	Invasive Cardiology	1
Pediatrics	Pediatric Subspecialties	Nephrology	15
Pediatrics	Pediatric Subspecialties	Neurology	67
Pediatrics	Pediatric Subspecialties	Neurosurgery	1
Pediatrics	Pediatric Subspecialties	Orthopedics	25
Pediatrics	Pediatric Subspecialties	Other Surgery	6
Pediatrics	Pediatric Subspecialties	Spine	4
Pediatrics	Pediatric Subspecialties	Trauma	28
Pediatrics	Pediatric Subspecialties	Urology Surgery	2
Undefined	Undefined	Undefined	27
Women's Health	Gynecology	Medical Gynecology	24
Women's Health	Gynecology	Surgical Gynecology	131

Source: CY 2017 Truven data for assumed NHBMC service area ZIP codes.

The NHHMC application provides no discussion of why it would be appropriate to assume that NHBMC could care for these patients. For some services like electrophysiology, interventional cardiology, or advanced care neonates, it is clear that NHBMC cannot as it does not propose EP or cardiac catheterization equipment or NICU beds. For others, like general or subspecialty pediatric services, it is reasonable to assume that NHBMC, as a small 36-bed facility, would not have pediatric medical coverage to serve these patients. Note, beyond the market data analysis above, the NHHMC application's projections for NHBMC also make clear that NHBMC is assumed to serve pediatric patients based on its inclusion of Age 0-14 historical and projected acute care patients in its utilization projections (see Tables NHBMC.1 through 3 on pages 153-158). Finally, some of the remaining DRGs would also include patients who would require ICU services.

On page 133, the NHHMC application states the projected average length of stay (ALOS) for NHBMC "*is based on the experience at NHHMC and NHMMC in CY 2017.*" Both NHHMC and NHMMC serve patients with weights of 2.0 or greater and serve ICU patients, who have significantly longer lengths of stay than non-ICU patients. The NHHMC application fails to demonstrate the reasonableness of using the ALOS from its facilities that serve a broader range of patients as the basis for NHBMC.

Specifically, the NHHMC application assumes that NHBMC's ALOS for med/surg patients will be 3.9 days. As a comparison, the ALOS for Wake Forest Baptist Davie Medical Center and Cape Fear Valley Hoke Hospital is shown below. These facilities currently operate only med/surg beds according to their 2018 HLRAs and both serve as small satellite hospitals as part of larger health care systems.

ALOS Analysis

	Davie Medical Center	*Cape Fear Hoke*
Discharges	644	1,155
Days	1,139	3,002
ALOS	**1.77**	**2.60**

Source: 2018 HLRAs.

As shown above, both Wake Forest Baptist Davie Medical Center and Cape Fear Valley Hoke Hospital have significantly lower lengths of stay for their patients, which do not include ICU patients. These data suggest that the NHHMC application's assumed ALOS for NHBMC based on NHHMC and NHMMC is unreasonable and significantly overstated.

Similarly, the NHHMC application assumes that inpatient and outpatient surgical utilization at NHBMC will be consistent with the experience of NHHMC and NHMMC. Again, the NHHMC application fails to demonstrate the reasonableness of using the experience of NHHMC and NHMMC, both of which serve patients with weights of 2.0 or greater and ICU patients, as the basis for operating room utilization at NHBMC.

On page 131, the NHHMC application discusses its market share assumptions for NHBMC and states that its projected shared for each ZIP code was based on six factors including "*the percentage of Novant Health's existing market share expected to shift to NHBMC*" and "*the market share the Applicant expect* [sic] *NHBMC to take from competing facilities.*" Later, the NHHMC application states that it assumes "*an increase of 10% in market share for all services*" in ZIP code 28277, the proposed location of NHBMC, and 5.0 percent market share increases in each of the other NHBMC service area ZIP codes (page 132). The NHHMC application states that "[t]*he competing facilities from which NHBMC is most likely to shift physicians and patients are Atrium Main* [CMC]*, Atrium Pineville* [CHS Pineville]*, Atrium Union County* [CHS Union], *and TENET Rock Hill"* (emphasis added). The NHHMC application provides no justification for its ability to shift physicians or patients from Atrium Health facilities.

Based on these assumptions, the NHHMC application projects the following discharges by ZIP code in Table NHBMC.5, excerpted below from page 161.

Section Q, Form C: Table NHBMC.5
Novant Health Ballantyne Service Area Projected IP Cases

Obstetric Services

Zip Code	NH w/o BMC	System Shift	Market Share Increase	2025 BMC	2025 NH
28134 (Pineville)	34%	40%	5%	19%	39%
28173 (Waxhaw)	57%	50%	5%	33%	62%
28226 (Charlotte)	44%	20%	5%	14%	49%
28277 (Charlotte)	48%	60%	10%	39%	58%
29707 (Fort Mill)	45%	50%	5%	27%	50%
29720 (Lancaster)	9%	60%	5%	10%	14%
Total	38%				

NHBMC Obstetrics

2023	2024	2025
23	28	33
113	140	167
44	53	63
195	238	282
85	104	125
49	60	71
508	624	742
70%	85%	100%

Medical/Surgical Services

Zip Code	NH w/o BMC	System Shift	Market Share Increase	2025 BMC	2025 NH
28134 (Pineville)	14%	35%	5%	10%	19%
28173 (Waxhaw)	30%	45%	5%	19%	35%
28226 (Charlotte)	25%	15%	5%	9%	30%
28277 (Charlotte)	26%	55%	10%	25%	36%
29707 (Fort Mill)	10%	45%	5%	10%	15%
29720 (Lancaster)	3%	55%	5%	6%	8%
Total	15%				

NHBMC Med/Surg

2023	2024	2025
47	59	71
240	304	374
114	143	172
392	497	611
101	128	156
208	259	313
1,102	1,389	1,697
70%	85%	100%

However, it is clear from an analysis of the proposed service area's geography and the experience of other providers, that the NHHMC application's projections for NHBMC are unreasonable. As shown below, the NHHMC application projects that NHBMC will serve more med/surg patients from this service area than Novant's entire system does currently.

Med/Surg Discharges

	Novant Health System Total, CY17	*NHBMC CY25*	*NHBMC as % of Novant Total*
28134 (Pineville)	79	71	89.9%
28173 (Waxhaw)	421	374	88.8%
28226 (Charlotte)	407	172	42.3%
28277 (Charlotte)	459	611	133.1%
29707 (Fort Mill)	117	156	133.3%
29720 (Lancaster)	100	313	313.0%
Total	**1,583**	**1,697**	**107.2%**

Source: Novant application pages 159 and 161.

While the NHHMC application projects that NHBMC will serve, in total, 107 percent of its historical volume from the service area, it unreasonably projects that NHBMC will serve 313 percent of its historical volume

from 29720 (Lancaster). Lancaster is the farthest ZIP code from the proposed NHBMC, it has the largest geographic area, and its areas of greater population density are centered around the city of Lancaster, which is more than 30 minutes from NHBMC's proposed location. By contrast, the NHHMC application projects that NHBMC will serve 156 med/surg patients from 29707 Fort Mill, the entirety of which is closer to NHBMC than the Lancaster ZIP code. As shown in the historical market data presented in Table NHBMC.4 of the NHHMC application, excerpted below from page 159, no existing Mecklenburg County hospital serves more than twice as many patients from Lancaster as from Fort Mill. Note: "CHS Other" below is likely to include Carolinas HealthCare System Union, in Union County, which is much closer to areas of the Lancaster ZIP code than NHBMC.

Med/Surg: Total (Novant Health)

Zip Code	NHMMC	NHPMC	NH Other	NH System	CHS Pineville	CHS Main	CHS Other	CHS System	Other System	Total
28134 (Pineville)	28	47	4	79	354	101	14	469	8	556
28173 (Waxhaw)	261	151	9	421	243	264	405	912	52	1,385
28226 (Charlotte)	143	255	9	407	643	479	42	1,164	54	1,625
28277 (Charlotte)	255	188	16	459	776	389	59	1,224	56	1,739
29707 (Fort Mill)	42	74	1	117	627	206	87	920	116	1,153
29720 (Lancaster)	27	71	2	100	337	358	237	932	2,841	3,873
Total	756	786	41	1,583	2,980	1,797	844	5,621	3,127	10,331

Given this data, the NHHMC application's projections are unreasonable.

While the NHHMC application states that NHBMC's projected volume will be based on 5.0 to 10.0 percent market share increases in the ZIP codes within its service area, it erroneously calculates the impact the proposed facility will have on other facilities. For example, in NHBMC's home ZIP code of 28277 (Charlotte), the NHHMC application states that Novant has a historical market share of 48 percent of obstetric services, that it will shift 60 percent of Novant historical system share or 29 percent market share (29 percent = 48 percent historical share x 60 percent shift) to NHBMC and that NHBMC will also experience a market share increase of 10 percentage points for a total projected market share of 39 percent (29 percent shifted share + 10 percentage point increase). Thus, for NHBMC obstetrics in this ZIP code, 74 percent of its patients are expected to shift from other Novant facilities (74 percent = 29 percent shifted share / 39 percent total market share) and 26 percent of its patients are expected to shift from other providers. However, the NHHMC application's calculations regarding NHBMC's impact on other providers are entirely incorrect. As shown in the first column of Table NHBMC.9, excerpted from page 167 of the NHHMC application below, NHBMC is projected to serve 282 obstetrics discharges from ZIP code 28277 and only 134 or 47.5 percent of those are patients are assumed to be shifted from the Novant Health system (see numbers circled in red below), not 74 percent as calculated based on the market share assumptions.

Section Q, Form C: Table NHBMC.9
Novant Health Ballantyne Service Area Projected Impact CY 2025, PY 3

OB: Females 15-44 IP Cases w/ NHBMC

Zip Code	NHBMC	NHMMC	NHPMC	NH Other	NH System	CHS Pineville	CHS Main	CHS Other	CHS System	Other System
28134 (Pineville)	33	(3)	(8)	(0)	(12)	(11)	(10)	(0)	(22)	(0)
28173 (Waxhaw)	167	(63)	(32)	-	(95)	(21)	(28)	(20)	(69)	(3)
28226 (Charlotte)	[illegible]	(8)	(20)	(0)	[illegible]	(10)	(24)	(1)	(34)	(1)
28277 (Charlotte)	282	(59)	(75)	-	(134)	(77)	(68)	(2)	(146)	(2)
29707 (Fort Mill)	125	(28)	(28)	-	(56)	(38)	(20)	(3)	(60)	(9)
29720 (Lancaster)	71	(3)	(3)	-	(6)	(8)	(3)	(2)	(13)	(53)
Total	742	(164)	(166)	(0)	(330)	(164)	(153)	(28)	(345)	(67)
Patient Days [1]	1,855	(410)	(415)	(1)	(826)	(410)	(383)	(69)	(862)	(167)

This error is true for the entirety of the NHHMC application's calculations of the impact of NHBMC on other providers. In total based on this error, the NHHMC application understated NHBMC's impact on other Novant Health facilities by over 2,600 days as shown in the calculations below. Similarly, the NHHMC application overstated NHBMC's impact on non-Novant facilities.

Corrected Impact of NHBMC on Novant Health Facilities

	NHBMC Discharges PY3	*NH w/o BMC*	*Novant System Shift*	*Market Share Increase*	*2025 BMC Share*	*NH Shift as % of NHBMC Patients*	*NHBMC Impact on Other Novant Facilities*
	A	B	C	D	E= B x C + D	F = (B x C) ÷ E	G = A x F
Obstetrics							
28134 (Pineville)	33	34%	40%	5%	19%	73%	24
28173 (Waxhaw)	167	57%	50%	5%	33%	85%	142
28226 (Charlotte)	63	44%	20%	5%	14%	64%	40
28277 (Charlotte)	282	48%	60%	10%	39%	74%	209
29707 (Fort Mill)	125	45%	50%	5%	27%	82%	102
29720 (Lancaster)	71	9%	60%	5%	10%	51%	36
Total	**741**						**554**
Total Days at 2.5 Day ALOS							**1,384**
Med/Surg							
28134 (Pineville)	71	14%	35%	5%	10%	49%	35
28173 (Waxhaw)	374	30%	45%	5%	19%	73%	273
28226 (Charlotte)	172	25%	15%	5%	9%	43%	74
28277 (Charlotte)	611	26%	55%	10%	24%	59%	360
29707 (Fort Mill)	156	10%	45%	5%	10%	47%	74
29720 (Lancaster)	313	3%	55%	5%	7%	25%	78
Total	**1,697**						**893**
Total Days at 3.9 Day ALOS							**3,482**
Total Novant Shifted Days (Obstetrics + Med/Surg)							**4,866**
Erroneous Calculated Impact per Novant CON							**2,199**
Understated Impact on Novant Facilities							**2,667**

The NHHMC application does not provide enough information to determine how many discharges and days will be shifted from each Novant facility to NHBMC under a corrected impact analysis. Specifically, it is unclear if the impact of NHBMC would be less weighted towards NHPMC, which serves higher acuity patients and a broader range of service lines than the proposed NHBMC, than NHMMC or other Novant facilities. Thus, it is impossible to determine the corrected days of care for each of Novant's other facilities. As such, Novant's projections for its other facilities are erroneous, unreasonable, and unsupported, and it is not possible to determine the NHHMC application's conformity with Criterion 3 or the performance standards for acute care beds.

Similarly, there is not enough information in the application to determine the degree to which the NHHMC application has overstated the impact of NHBMC on non-Novant facilities through a corrected impact analysis. This includes the impact on CHS Pineville. The NHHMC application states on page 134 that "[o]*ther than Novant Health facilities, the existing hospital NHBMC will impact most is Atrium Pineville ("Pineville")* [CHS Pineville]*"* and proceeds to provide its analysis of CHS Pineville's projected utilization in future years. After providing its assumptions and referring to its calculations, the NHHMC application concludes by stating that "*NHBMC will reduce Pineville's acute care discharges by 718 in CY2025 . . . This translates to a reduction of 2,821 patient days in CY2025 . . . With this reduction Pineville would still have 83% occupancy of its 221 licensed beds and be well above its target occupancy of 77%* [sic]" (page 136). Thus, even using its incorrect and overstated calculations for the impact of NHBMC on CHS Pineville, the NHHMC application concludes that CHS Pineville would operate above its target occupancy rate for its existing and approved beds and thus, would demonstrate the need for additional beds, as CHS Pineville proposes. <u>As such, Novant's own NHHMC application supports the need for additional beds at CHS Pineville</u>.

CHS Pineville's recent historical utilization as shown in its beds application exceeded the utilization projected in in its approved (and implemented) 2017 CON for 15 additional acute care beds (see page 50 of CHS Pineville's bed application). Notably, the NHHMC application uses CHS Pineville's projections from its 2017 application in its analysis of CHS Pineville's future utilization. Using more recent data and projecting forward based on historical growth, CHS Pineville determined that its acute care utilization would be as follows in CY 2024, its third project year:

CHS Pineville Acute Care Bed Utilization

	PY 3
Total Acute Care Days	79,525
ADC	218
Total Beds (Existing + 50 Proposed)	271
Occupancy	**80.4%**

Source: CHS Pineville Beds application, Form C Methodology and Assumptions page 7.

Even assuming the NHHMC application's overstated projected impact of NHBMC on CHS Pineville of 2,821 days (based on Novant's market share assumptions the impact on CHS Pineville would be less, thus increasing the occupancy rate), CHS Pineville would have an occupancy rate of 77.5 percent, above its target occupancy rate of 75.2 percent (77.5 percent = [79,525 projected days – 2,821 day reduction assumed by Novant for NHBMC] ÷ 365 days ÷ 271 beds). Thus, the NHHMC application supports the need for 50 additional acute care beds at CHS Pineville, as proposed.

Based on the discussion above, it is clear that projected utilization of NHBMC as well as other Novant acute care beds in Mecklenburg County is erroneous, unreasonable, and unsupported. As such, the NHHMC application is non-conforming with Criteria 1, 3, 4, 5, 6, 18a, and the performance standards in the acute care bed rules (10A NCAC 14C .3803).

Issues with Operating Room Utilization

On pages 140-141 of its application, Novant provides its system-wide operating room utilization methodology and notes that "[t]*he Novant Health CAGR for all surgical services is 2.7 percent*." This historical growth rate of 2.7 percent is used as the central assumption for all projected operating room cases within the Novant Health system in Mecklenburg County. As Novant states on page 141, "*the CAGR for total surgical growth rate* [sic] *across all Surgical Locations from 2016-2018 will continue during the projection period as new operating rooms are placed in service, as recently recruited surgeons become fully productive, and as Novant Health recruits additional surgeons"* (pave 141). However, this 2.7 percent CAGR has not been experienced equally across Novant Health's Mecklenburg County facilities or services.

Table System.4 from page 176, reproduced below, shows Novant Health's historical operating room utilization in Mecklenburg County.

Section Q, Form C: Table System.4
NH System Historical Data for Mecklenburg County Surgical Facilities

Surgical Location	2016	2017	2018A
# of Inpatient Surgical Cases[(1)]			
NHPMC License SubTotal	8,166	8,117	8,439
NH Matthews	1,392	1,542	1,503
NH Huntersville	1,261	1,352	1,452
NH Mint Hill			
NH Health System	10,819	11,011	11,395
NH Health System CAGR 2016 - 2018	2.6%		
# of Outpatient Surgical Cases			
NHPMC License SubTotal	21,754	21,947	22,718
NH Matthews	4,204	4,078	4,047
NH Huntersville	3,494	3,748	3,660
NH Mint Hill			0
NH SouthPark Surgery Center	10,467	10,852	11,417
NH Ballantyne Outpatient Surgery	856	937	897
NH Huntersville Outpatient Surgery	2,259	2,553	3,029
NH Matthews Surgery Center	2,034	1,906	1,786
NH Health System	45,068	46,021	47,554
NH Health System CAGR 2016 - 2018	2.7%		
# of Total Surgical Cases			
NH Health System	55,887	57,032	58,949
NH Health System CAGR 2016 - 2018	2.7%		

*Source: Trendstar Internal Data. CY 2018 Annualized as [Jan - July)/7]*12*
(1) Excludes C-Sections done in a dedicated C-Section OR. Includes OHS.

As noted above, Novant failed to provide 2015 and actual year-to-date 2018 operating room utilization data, despite clear instructions in the CON form to provide. This failure undermines the ability of the Agency to determine the reasonableness of Novant's assumptions.

The table below demonstrates the change in surgical cases at each physical location within the Novant Health system, based on the data provided in Table System.4.

Novant Health System Historical Operating Room Utilization

	2016	*2018 Annualized*	*CAGR 2016-2018*	*Change 2016-2018*	*% of Total Change 2016-2018*
NHHMC IP	1,261	1,452	7.3%	191	6.2%
NHHMC OP	3,494	3,660	2.3%	166	5.4%
NHHMC Total	**4,755**	**5,112**	**3.7%**	**357**	**11.7%**
NHPMC IP	8,166	8,439	1.7%	273	8.9%
NHPMC OP	21,754	22,718	2.2%	964	31.5%
NHPMC Total	**29,920**	**31,157**	**2.0%**	**1,237**	**40.4%**
NHMMC IP	1,392	1,503	3.9%	111	3.6%
NHMMC OP	4,204	4,047	-1.9%	-157	-5.1%
NHMMC Total	**5,596**	**5,550**	**-0.4%**	**-46**	**-1.5%**
SouthPark Surgery Center	**10,467**	**11,417**	**4.4%**	**950**	**31.0%**
NH Ballantyne OP Center	**856**	**897**	**2.4%**	**41**	**1.3%**
NH Huntersville OP Surgery Center	**2,259**	**3,029**	**15.8%**	**770**	**25.2%**
NH Matthews OP Surgery Center	**2,034**	**1,786**	**-6.3%**	**-248**	**-8.1%**
Novant Health Total	**55,887**	**58,948**	**2.7%**	**3,061**	**100.0%**

Source: Table System.4 page 176.

As shown above, while NHHMC's total operating room cases have grown at a higher rate than its system-wide CAGR, Novant's two largest surgical facilities, NHPMC and NHMMC, have grown less than the system-wide CAGR or declined. Similarly, its ASCs have grown at rates both well above and below the system-wide CAGR. Novant unreasonably assumes that all of its cases and locations will grow equally when its historical experience clearly suggests that will not be the case. In particular, by applying the system-wide growth rate to NHPMC which has the highest volumes and longest surgical case times, Novant has overstated the growth in utilization at that facility and for its system in total.

As noted previously, Novant unreasonably assumes in the NHHMC application that inpatient and outpatient surgical utilization at NHBMC will be consistent with the experience of NHHMC and NHMMC. In doing so, Novant fails to demonstrate the reasonableness of using the experience of NHHMC and NHMMC, both of which serve patients with weights of 2.0 or greater and ICU patients, as the basis for operating room utilization at NHBMC. In an attempt to demonstrate the impact of NHBMC's operating rooms on other facilities, Novant provides Table NHBMC.8b in the NHHMC application and states that "[f]*or inpatient cases, the Applicant assumed surgical cases at NHPMC and NHMMC would be impacted by the same percentage as for the impact of inpatient acute care cases"* (page 141). However, as noted above, Novant's calculation of the impact of NHBMC on inpatient acute care cases is incorrect and

understates the impact on other Novant facilities. As such, the operating room utilization projections for NHPMC and NHMMC are also incorrect as they rely on this flawed analysis.

Additionally, Novant misstates the impact of NHMHMC on its other facilities. On page 138, Novant states that "*NHMHMC opened October 1, 2018*" and Table NHMHMC.3 on page 172 shows that volume will be shifted from other Novant facilities to NHMHMC beginning in CY 2019. However, Table System.7 on page 181, reproduced below, erroneously assumes that the shift from NHHMC to NHMHMC will not occur until 2021, more than two years after the new facility opens. Please see the errors circled in red below.

Section Q, Form C: Table System.7
Novant Health System Mecklenburg County OR Need

Novant Health Huntersville Medical Center	Growth Rate	2016	2017	Base Year 2018	2019	2020	NHHMC PY 1 2021	NHHMC PY 2 2022	NHHMC PY 3 NHBMC PY 1 2023
Inpatient Surgical Cases [1]	2.7%	1,261	1,352	1,452	1,491	1,531	1,573	1,615	1,659
Less MHMC Impact [3]							5	5	5
Adjusted Inpatient Surgical Cases		1,261	1,352	1,452	1,491	1,531	1,568	1,611	1,654
Inpatient Case Time [2]		131.3	131.3	131.3	131.3	131.3	131.3	131.3	131.3
Inpatient Surgical Hours		2,759	2,959	3,177	3,263	3,351	3,432	3,524	3,620
Outpatient Surgical Cases [1]	2.7%	3,494	3,748	3,660	3,759	3,860	3,965	4,072	4,182
Less MHMC Impact [3]							35	36	37
Adjusted Outpatient Surgical Cases		3,494	3,748	3,660	3,759	3,860	3,929	4,035	4,144
Outpatient Case Time [2]		93.1	93.1	93.1	93.1	93.1	93.1	93.1	93.1
Outpatient Surgical Hours		5,422	5,816	5,679	5,832	5,990	6,097	6,262	6,431
Total Surgical Hours		8,181	8,774	8,857	9,096	9,341	9,529	9,786	10,050
Standard Operating Hours (Group 4)		1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
ORs Needed		5.5	5.8	5.9	6.1	6.2	6.4	6.5	6.7
Licensed / Approved ORs		5.0	5.0	5.0	6.0	6.0	6.0	6.0	6.0
Deficit / Surplus		0.5	0.8	0.9	0.1	0.2	0.4	0.5	0.7

*Source: Trendstar data, CY2016 - CY 2018 July, CY 2018 Annualized as [Jan - July)/7]*12*
[1] Based on 3 Year average Novant Health System Mecklenburg County growth rate shown in Table System.4
[2] 2018 SMFP
[3] Table NHMHMC.3
Health System Deficit/Surplus (Surplus shows as a "-"))

Finally, Novant provides contradictory information regarding the number of operating rooms and surgical cases at NHPMC throughout its application. On Form C Utilization NHPMC as shown in the excerpt below from page 109, Novant projects that NHPMC's inpatient and outpatient surgical cases will decline dramatically from 2023 to 2024 without reason, which is contradicted in other sections of the application. In the same table, Novant states that NHPMC will have 37 operating rooms (excluding dedicated C-Section rooms) in CYs 2019 to 2023 and seven operating rooms in CYs 2024 and 2025.

Form C Utilization - NHPMC	Prior Full Fiscal Year	Prior Full Fiscal Year	Prior Full Fiscal Year*	Interim Full Fiscal Year	Interim Full Fiscal Year	1st Full Fiscal Year	2nd Full Fiscal Year	3rd Full Fiscal Year	4th Full Fiscal Year	5th Full Fiscal Year
for Each Service Component Proposed in the Application	From (01/01/2016)	From (01/01/2017)	From (01/01/2018)	From (01/01/2019)	From (01/01/2020)	From (01/01/2021)	From (01/01/2022)	From (01/01/2023)	From (01/01/2024)	From (01/01/2025)
Criterion (3)	To (12/31/2016)	To (12/31/2017)	To (12/31/2018)	To (12/31/2019)	To (12/31/2020)	To (12/31/2021)	To (12/31/2022)	To (12/31/2023)	To (12/31/2024)	To (12/31/2025)
General Acute Care Beds										
# of Beds	595	595	595	533	533	533	533	497	497	497
# of Patient Days	136,605	136,639	149,549	148,565	152,428	156,391	160,457	163,276	176,108	189,974
Operating Rooms										
# of Rooms										
Open Heart ORs	3	3	3	3	3	3	3	3	0	0
Dedicated C-Section ORs	3	3	3	3	3	3	3	3	1	1
Other Dedicated Inpatient ORs	0	0	0	0	0	0	0	0	0	0
Shared ORs	33	33	24	23	23	23	23	23	7	7
Dedicated Ambulatory ORs	6	6	11	11	11	11	11	11		
Total # of ORs	45	45	41	40	40	40	40	40	8	8
# of Surgical Cases										
# of C-Sections Performed in Dedicated C-Section ORs										
# of Inpatient Surgical Cases (exclude C-Sections done in a dedicated C-Section OR)	8,166	8,117	8,439	8,420	8,593	8,770	9,007	9,211	1,704	1,750
# of Outpatient Surgical Cases	21,754	21,947	22,718	22,847	23,361	23,887	24,532	25,195	4,294	4,410
Total # of Surgical Cases (exclude C-Sections done in a dedicated C-Section OR)	29,920	30,064	31,157	31,267	31,954	32,658	33,539	34,405	5,998	6,160

However, on page 186 (as well as page 41), Novant states that NHPMC has 34 operating rooms in its analysis of the need for additional operating rooms at NHPMC which is the basis for its demonstration of conformity with the operating room performance standard excerpted below.

Section Q, Form C: Table System.7 Continued
Novant Health System Mecklenburg County OR Need

Novant Health Prebyterian Medical Center	Growth Rate	2016	2017	Base Year 2018	2019	2020	NHHMC PY 1 2021	NHHMC PY 2 2022	NHHMC PY 3 NHBMC PY 1 2023
Inpatient Surgical Cases [1]	2.7%	8,166	8,117	8,439	8,667	8,901	9,142	9,388	9,642
Less MHMC Impact [3]					248	308	371	381	392
Less NHBOS Impact [4]									40
Adjusted Inpatient Surgical Cases		8,166	8,117	8,439	8,420	8,593	8,770	9,007	9,211
Inpatient Case Time [2]		181.8	181.8	181.8	181.8	181.8	181.8	181.8	181.8
Inpatient Surgical Hours		24,743	24,595	25,571	25,512	26,037	26,574	27,292	27,908
Outpatient Surgical Cases [1]	2.7%	21,754	21,947	22,718	23,331	23,961	24,608	25,272	25,955
Less MHMC Impact [3]					484	600	721	740	760
Plus Absorb NHBOS [4]									(412)
Adjusted Outpatient Surgical Cases		21,754	21,947	22,718	22,847	23,361	23,887	24,532	25,195
Outpatient Case Time [2]		108.4	108.4	108.4	108.4	108.4	108.4	108.4	108.4
Outpatient Surgical Hours		39,302	39,651	41,043	41,277	42,205	43,157	44,322	45,518
Total Surgical Hours		64,045	64,245	66,615	66,789	68,243	69,731	71,613	73,427
Standard Operating Hours (Group 2)		1,950	1,950	1,950	1,950	1,950	1,950	1,950	1,950
ORs Needed		32.8	32.9	34.2	34.3	35.0	35.8	36.7	37.7
Licensed / Approved ORs		34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
Deficit / Surplus		(1.2)	(1.1)	0.2	0.3	1.0	1.8	2.7	3.7

*Source: Trendstar data, CY2016 - CY 2018 July, CY 2018 Annualized as [Jan - July)/7]*12. Includes all hospital departments of NHPMC.*
[1] Based on 3 Year average Novant Health System Mecklenburg County growth rate shown in Table System.4
[2] 2018 SMFP
[3] Table NHMHMC.3
[4] Table NHBMC.8b
Health System Deficit/Surplus (Surplus shows as a "-")

Based on the discussion above, it is clear that projected utilization of Novant's operating rooms in Mecklenburg County is erroneous, unreasonable, and unsupported. As such, the NHHMC application is non-conforming with Criteria 1, 3, 4, 5, 6, 18a, and the performance standards in the operating room rules (10A NCAC 14C .2103).

Issues with Financial Statements

Similar to other areas of its application, Novant's financial statements have inconsistencies and errors throughout which make it impossible to determine the financial feasibility of its project.

On page 242, Novant provides its projected gross revenue statement for NHHMC's surgical services:

Form F.5 Gross Revenue Worksheet for Surgical Services							
	First Full Fiscal Year						
	From	1/1/2021	To	12/31/2021			
	% of Total	# of Patient Days, Cases or Procedures	times	Projected Average Charge	equals	Gross Revenue	
Self Pay	0.62%	34	times	$ 35,176.00	equals	$	1,196,000
Charity Care	1.85%	101	times	$ 35,545.00	equals	$	3,590,000
Medicare*	29.36%	1,601	times	$ 54,000.00	equals	$	86,454,000
Medicaid*	4.38%	239	times	$ 32,879.00	equals	$	7,858,000
Insurance*	60.45%	3,296	times	$ 30,827.00	equals	$	101,605,000
Workers Compensation	0.00%	-	times	$ -	equals	$	-
TRICARE	0.00%	-	times	$ -	equals	$	-
Other (Specify)	3.34%	182	times	$ 31,797.00	equals	$	5,787,000
Total	100.00%	5,453	times	$ 37,867.23	equals	$	206,490,000
	Second Full Fiscal Year						
	From	1/1/2022	To	12/31/2022			
	% of Total	# of Patient Days, Cases or Procedures	times	Projected Average Charge	equals	Gross Revenue	
Self Pay	0.61%	34	times	$ 36,882.35	equals	$	1,254,000
Charity Care	1.84%	103	times	$ 36,514.56	equals	$	3,761,000
Medicare*	29.36%	1,644	times	$ 55,083.33	equals	$	90,557,000
Medicaid*	4.39%	246	times	$ 33,467.48	equals	$	8,233,000
Insurance*	60.46%	3,386	times	$ 31,432.66	equals	$	106,431,000
Workers Compensation	0.00%	-	times	$ -	equals	$	-
TRICARE	0.00%	-	times	$ -	equals	$	-
Other (Specify)	3.34%	187	times	$ 32,411.76	equals	$	6,061,000
Total	100.00%	5,600	times	$ 38,624.46	equals	$	216,297,000
	Third Full Fiscal Year						
	From	1/1/2023	To	12/31/2023			
	% of Total	# of Patient Days, Cases or Procedures	times	Projected Average Charge	equals	Gross Revenue	
Self Pay	0.62%	36	times	$ 37,500.00	equals	$	1,350,000
Charity Care	1.85%	108	times	$ 37,518.52	equals	$	4,052,000
Medicare*	29.42%	1,719	times	$ 57,221.06	equals	$	98,363,000
Medicaid*	4.36%	255	times	$ 34,509.80	equals	$	8,800,000
Insurance*	60.41%	3,529	times	$ 32,197.79	equals	$	113,626,000
Workers Compensation	0.00%	-	times	$ -	equals	$	-
TRICARE	0.00%	-	times	$ -	equals	$	-
Other (Specify)	3.34%	195	times	$ 33,343.59	equals	$	6,502,000
Total	100.00%	5,842	times	$ 39,831.05	equals	$	232,693,000
**including any managed care plans*							

On page 226, Novant indicates that gross charges for NHHMC's operating rooms are assumed to increase 2.0 percent annually, which is consistent with the charge percent increase assumption for other services in its application. However, as shown below, the increase in projected average charge for surgical services varies by payor across the three project years, and increases, on average, by 3.1 percent from project year two to three.

Projected Increase in Surgical Services Charges

	Year 1	*Year 2*	*Yr 1 to Yr 2 % Increase*	*Year 3*	*Yr 2 to Yr 3 % Increase*
Self Pay	$35,176	$36,882	4.9%	$37,500	1.7%
Charity Care	$35,545	$36,155	1.7%	$37,519	3.8%
Medicare	$54,000	$55,083	2.0%	$57,221	3.9%
Medicaid	$32,879	$33,467	1.8%	$34,510	3.1%
Insurance	$30,827	$31,433	2.0%	$32,198	2.4%
Workers Compensation	$0	$0		$0	
TRICARE	$0	$0		$0	
Other (Specify)	$31,867	$32,412	1.7%	$33,344	2.9%
Total	**$37,867**	**$38,624**	**2.0%**	**$39,831**	**3.1%**

Source: Novant application page 242.

Novant provides no explanation for this seemingly haphazard increase in charges over time. Similarly, Novant projects differing increases in net revenue by payor class and on average for surgical services as shown on the Form F.6 for Surgical Services on page 256.

Projected Increase in Surgical Services Reimbursement

	Year 1	*Year 2*	*Yr 1 to Yr 2 % Increase*	*Year 3*	*Yr 2 to Yr 3 % Increase*
Self Pay	$4,441	$4,676	5.3%	$4,750	1.6%
Charity Care	$0	$0		$0	
Medicare	$8,884	$9,061	2.0%	$9,414	3.9%
Medicaid	$2,971	$3,028	1.9%	$3,118	2.9%
Insurance	$18,858	$19,228	2.0%	$19,696	2.4%
Workers Compensation	$0	$0		$0	
TRICARE	$0	$0		$0	
Other (Specify)	$6,409	$6,533	1.9%	$6,721	2.9%
Total	**$14,378**	**$14,666**	**2.0%**	**$15,058**	**2.7%**

Source: Novant application page 242.

Of note, Novant's projected charge and reimbursement by payor class differ across its services indicating that Novant will increase the charges for Self Pay or Charity Care patients at higher rates than for Commercial Insurance patients in some instances. Novant provides no explanation for why it would increase the cost to these underserved patients more than for other patients.

On page 211, Novant provides its payor mix for acute care beds as shown below and projects that Medicare and Medicaid revenue will comprise 4.0 percent and 41.0 percent, respectively, of total gross revenue.

Payor Mix - Gross Revenue-Acute Care Beds

	Project Year 1 12 Months From 1/01/2021 To 12/31/2021	Project Year 2 12 Months From 1/01/2022 To 1/01/2022	Project Year 3 12 Months From 1/01/2023 To 12/31/2023
Self Pay/ Indigent	1%	1%	1%
Medicare / Medicare Managed Care	4%	4%	4%
Medicaid	41%	41%	41%
Commercial Insurance	10%	10%	10%
Managed Care	40%	40%	40%
Other (Worker's Comp, Other Government)	4%	4%	4%
TOTAL	**100%**	**100%**	**100%**

However, this information significantly contradicts its Form F.4 and F.5 for acute care beds.

	F.4 Acute Care Beds Gross Revenue	***F.5 Acute Care Beds Gross Revenue***
Self Pay	1.2%	1.2%
Charity Care	3.7%	3.7%
Medicare	41.0%	41.0%
Medicaid	10.2%	10.2%
Insurance	39.7%	39.7%
Other (Specify)	4.1%	4.1%
Total	**100.0%**	**100.0%**

Source: Novant application pages 214 and 232.

Similarly, the payor mix for acute care patients is inconsistent between Forms F.5 and F.6, as shown in the excerpts below from pages 232 and 247.

Form F.5 Gross Revenue Worksheet for Acute Care Services							
	First Full Fiscal Year						
	From	1/1/2021	To	12/31/2021			
	% of Total	# of Patient Days, Cases or Procedures	times	Projected Average Charge	equals	Gross Revenue	
Self Pay	1.26%	82	times	$ 25,500.00	equals	$	2,091,000
Charity Care	3.76%	245	times	$ 25,604.00	equals	$	6,273,000
Medicare*	24.78%	1,615	times	$ 42,894.74	equals	$	69,275,000
Medicaid*	14.62%	953	times	$ 18,012.59	equals	$	17,166,000
Insurance*	50.75%	3,307	times	$ 20,282.00	equals	$	67,073,000
Workers Compensation	0.00%	-	times	$ -	equals	$	-
TRICARE	0.00%	-	times	$ -	equals	$	-
Other (Specify)	4.83%	315	times	$ 22,108.00	equals	$	6,964,000
Total	100.00%	6,517	times		equals	$	168,842,000

Form F.6 Net Revenue Worksheet for Acute Care Services							
	First Full Fiscal Year						
	From	1/1/2021	To	12/31/2021			
	% of Total	# of Patient Days, Cases or Procedures	times	Projected Average Reimbursement Rate	equals	Gross Revenue	
Self Pay	1.28%	82	times	$ 6,304.88	equals	$	517,000
Charity Care	3.80%	245	times	$ -	equals	$	-
Medicare (including any managed care plans)	24.75%	1,615	times	$ 12,990.09	equals	$	20,979,000
Medicaid (including any managed care plans)	14.85%	953	times	$ 2,821.62	equals	$	2,689,000
Insurance (including any managed care plans)	50.45%	3,307	times	$ 13,151.19	equals	$	43,491,000
Workers Compensation	0.00%	-	times	$ -	equals	$	-
TRICARE	0.00%	-	times	$ -	equals	$	-
Other (Specify)	4.87%	315	times	$ 5,288.89	equals	$	1,666,000
Total	100.00%	6,517	times	$ 10,640.17	equals	$	69,342,000

On page 221, Novant provides its NICU gross revenue payor mix which shows small changes over the three project years:

Payor Mix - Gross Revenue- NICU

	Project Year 1 From 1/01/2021 To 12/31/2021	Project Year 2 From 1/01/2022 To 1/01/2022	Project Year 3 From 1/01/2023 To 12/31/2023
Self Pay/ Indigent	0.67%	0.64%	0.64%
Charity	1.96%	1.92%	1.94%
Medicare / Medicare Managed Care	0.00%	0.00%	0.00%
Medicaid	23.99%	24.05%	24.03%
Commercial Insurance	71.42%	71.47%	71.45%
Other (Worker's Comp, Other Government)	1.96%	1.92%	1.94%
TOTAL	100.00%	100.00%	100.00%

However, Novant provides no explanation for its assumed changes and there does not appear to be a consistent trend.

Generally, the financial statements are mislabeled and misleading. Two identical sets of F.4 assumptions are labeled "Form F.4 Service Component Operating Room Income Statement" (pages 215 to 218 and pages 226 to 228) and there are no F.4 assumptions for ICU beds. On page 243 to 244, Novant provides assumptions for Form F.5 total hospital gross revenue but does not include such a Form F.5. The last

column in each of Novant's Forms F.6 is mislabeled as Gross Revenue when it is providing Net Revenue figures. Novant provides its total projected average charge on some of its Forms F.5 for some years, but not on other years or Forms F.5.

Given the above errors in its financial projections, the NHHMC application fails to demonstrate that the financial feasibility of the project is based on reasonable projections of costs and charges and should be found non-conforming with Criterion 5.

METROLINA

General Comments

Metrolina proposes to develop a newly licensed ASC with one operating room for the performance of vascular access procedures. In recent years, there have been multiple *SMFP* petitions regarding the need for such ASCs; all have been denied. There have been many reasons for the denials, some of which are mirrored in the comments on the application below. Of note, neither the petitioners nor Metrolina has chosen to adopt any of the approaches recommended by the Agency in its reports on the petitions. Atrium Health believes the Metrolina application should be denied, based on the reasons cited in the Agency's report on the petitions, as well as the specific issues outlined below.

Issue-Specific Comments

1. Metrolina fails to demonstrate a reasonable basis for or need for the project.

   The foundation of the need analysis in the application is the idea that the vascular access cases should be provided in a licensed ASC rather than a hospital because of improved access, lower costs and better outcomes. While it may be true that many patients with outpatient surgical needs that can be provided in a non-hospital setting benefit from access to an ambulatory surgical facility, the Metrolina application fails to demonstrate the need for its project based on these factors, for several reasons.

   On page 17, the application presents the plan for the facility to be located in an MOB with "*comprehensive services*," including "*dialysis services*," which it states will enable ESRD patients to receive many of the related services in one location. While the applicant may be related to Fresenius, it does not appear that it owns or controls any existing dialysis facilities in Mecklenburg County, nor does it demonstrate that any provider has applied to relocate stations to the MOB. Further, the patient origin projections and service area definition show that Metrolina expects patients to travel from up to several counties away, as far as Buncombe and Robeson counties, to access the proposed services. Given the need for dialysis treatment three times per week, the amount of time to be dialyzed during each treatment and the availability of outpatient dialysis service in each of the service area counties, it is simply unreasonable to believe that patients will travel to Metrolina for dialysis services, even if they are eventually approved for the MOB. While patients may have traveled in the past to the existing office-based facility, expecting the same percentage of them to do so for the same services but in a licensed setting has not been demonstrated.

   The application states on page 23 that there are no existing ASCs equipped to accommodate the proposed services. However, the application fails to demonstrate that the physicians that would use the Metrolina facility have had any barriers in attempting to access existing ASCs. Moreover, according to the application, the vast majority (more than 90 percent) of the proposed cases/procedures can be performed in procedure rooms. The application fails to document any attempts to obtain access to procedure rooms at existing ASCs, which might include the ability to use a procedure room dedicated to these cases.

   Based on these issues, the application should be found non-conforming with Criteria 1, 3, 4, 5, 6, 8 and 18a, as well as the performance standards at 10A NCAC 14C .2103.

2. <u>The application fails to provide reasonable and supported utilization projections.</u>

The application states that the utilization assumptions are based on the historical utilization at the existing Charlotte office-based center and the letters from physicians who would practice at the proposed ASC. According to the table on page 30, the Charlotte center performed 1,195 operating room-appropriate cases and 647 procedure room-appropriate cases in annualized FY 2018. The methodology then projects these cases to grow each year as a baseline volume with projected growth rates ranging from 3.5 percent to 5.5 percent, with additional assumptions for the new fistula creation cases.

The application presents the growth in cases and procedures as if they are conservative compared to historical growth rates; however, when examined in light of the letters from physicians who will actually be performing these cases, the projected growth is substantial and not supported by the assumptions in the application. It should also be noted that while the application states on page 32 that "further details on utilization assumptions" are in Section Q, Form C Assumptions, no additional information supporting the projected growth in cases performed by these physicians is included in that section. According to the support letters in Exhibit C-4.1, which are consistent with the totality of the physicians projected to utilize the facility in Section H.4.(a), those physicians performed only 803 OR-appropriate cases and 446 procedure room-appropriate cases historically. Thus, the application projects the number of cases and procedures performed by these physicians to increase by 105 percent and 76 percent, respectively, which is clearly not supported by any assumptions, including the annual growth rates used in the application. Even if the addition of 200 fistula creation cases is excluded, the utilization projections are unreasonable, as shown in the tables below.

Physician	*Historical OR Cases*	*Historical Procedure Room Cases*	*Total*
Donald Berling, MD	288	103	391
Jason Burgess, MD	80	42	122
Verachai Lohavichan, MD	192	118	310
Paul Orland, MD	73	34	107
Thomas Smarz, Jr., MD	170	149	319
Total	**803**	**446**	**1,249**

Source: Metrolina Application, Exhibit C-4.1, pages 120-124

When compared with the projected utilization in the application, the actual projected growth rate in cases performed by these physicians is unreasonable and unsupported, as shown below.

Total Historical Cases	*Total Projected Cases-Year 3 (excluding new fistula creation cases)*	*Total Projected Case Growth*	*Total Projected Percentage Growth*
1,249	2,230	981	78.5%

Even factoring out the fistula cases that the application states cannot currently be performed in an office-based setting, the utilization projections assume that the historical cases will grow by 78.5 percent by the third project year. While the physician support letters do claim that they

expect their cases to grow significantly following development of the proposed project, there is simply no reasonable basis for the tremendous amount of growth projected in the application and support letters. In particular, the application provides no analysis of growth in the number of patients, disease incidence, market share, or any other factors that would support the growth in the number of cases projected to be performed by the five physicians involved in the project. Although additional letters from referring physicians are included in the exhibits, these do not provide any support for the unreasonable growth in cases performed by the physicians practicing at the facility.

Further, even though the physician support letters provide no basis to support the projected growth in procedures they anticipate at the proposed ASC, assuming the projections are reasonable, they do not support the utilization projected in the application. As shown in the following table, the total surgical cases projected in the physician letters fall far short of the projected utilization in the application.

Physician	***Projected OR Cases***
Donald Berling, MD	519
Jason Burgess, MD	100
Verachai Lohavichan, MD	346
Paul Orland, MD	100
Thomas Smarz, Jr., MD	306
Total	**1,371**
Projected OR Cases in Form C	**1,647**
OR Cases Without Physician Support	**276**

Thus, even assuming that the growth projected in the physicians' letters is reasonable, the application still fails to demonstrate how an additional 276 cases would be performed, or by whom, and therefore fails to show that its utilization projections are supported and reasonable.

These issues are similar to those in a recent review by the Agency in which the application was found non-conforming with multiple review criteria. In the 2018 Buncombe County OR review, the Agency found that one applicant, Summit Health Partners (SHP), failed to demonstrate the reasonableness of its utilization projections, despite the inclusion of physician support letters. On page 35 of the Agency Findings in that review, the Agency found that:

> *"The physician letters of support relied upon by the applicant do not adequately demonstrate that the projected number of surgical cases are reasonable and adequately supported. None of the letters provide any explanation of the basis for the projections. Therefore, utilization projections based solely on those support letters is not reasonable and adequately supported."*

Metrolina's utilization projections and physician support letters contain similar flaws considered by the Agency in the Buncombe County review and found to be unreasonable and non-conforming.

Based on these issues, the application should be found non-conforming with Criteria 1, 3, 5, 6, and 18a, as well as the performance standards at 10A NCAC 14C .2103.

3. The financial information and statements in the application contain multiple errors, omissions and inconsistencies.

   a. Understated capital costs. The term sheet for the proposed loan to fund the project states that a fee of $29,000 will be required; however, the capital costs fail to include this fee. As a result, the applicant also failed to pay sufficient application fees based on correct capital costs.

   b. Understated interest expense/no amortization schedule. In Section F.2(b), the application instructs applicants funding the proposed project with a loan, as Metrolina proposes, to include an amortization schedule for the loan. The application includes no amortization schedule, nor does it explain in the application, financial pro formas or elsewhere the assumed interest rate used in the income statement or the number of payments to be made per year, which impact the interest expense. Based on the terms of the loan, however, the interest expense is clearly understated. The term sheet provided in Exhibit F-2.1 on page 176 states that the interest rate will be the 3-month LIBOR plus 7.0 percent. While not stated, it appears that the application assumes a rate of approximately 8.5 percent, based on the total interest expense for Year 1. This rate is unreasonably low for a few reasons. First, the 3-month LIBOR rate on October 4, 2018, the date of the financing term sheet, was 2.41 percent[7]; thus, the corresponding interest rate on the loan for the applicant would be 9.41 percent (3-month LIBOR plus 7.0 percent). It is likely, however, given current trends, that the interest rate would be even higher. The same website reports that the 3-month LIBOR was 1.35 percent on October 4, 2017. If the same trend continues, the interest rate is likely to be over three percent by the time the funding is secured; however, even assuming the rate as of October 4, 2018, 9.41 percent, the interest expense in Year 1 should be at least $252,680, assuming monthly payments, which is an understatement of more than $25,000 for that year alone. Since the income statement for the MSO entity shows zero net income in all three years, the MSO would experience a net loss with the corrected interest expense.

   c. Understated professional fee expense. In Section F.4.(b), the application projects the professional fees for the project in terms of both gross and net revenue. As explained by the applicant, it appears that the collected professional fees (net revenue) then are paid to the MSO, which then pays the physicians. However, the professional fee expenses listed on Form F.3 for the MSO are significantly lower in all three project years than the net professional revenue listed in Section F.4.(b). Further, the fees are $547,222 in Year 1, then are $575,000 in both Years 2 and 3. In contrast, page 53 of the application shows net professional revenue ranging from $639,280 in Year 1 to $723,823 in Year 3. The change each year is related to the growth in revenue, yet no such growth is reflected in the expenses on Form F.3. The assumption for the professional fee line item also states that the projected expense is based on historical expenses; however, it does not demonstrate how it accounts for the increase in professional fees shown in Section F.4.(b). Since the income statement for the MSO entity shows zero net income in all three years, the MSO would experience a net loss with the corrected professional fee expense.

   d. No expense for housekeeping/laundry. The assumptions on the income statement for the MSO states that these expenses are not applicable; however, as a licensed ASC, the facility will certainly need to clean its operating rooms and launder its linens. In addition, Form H

[7] https://ycharts.com/indicators/3month_libor_based_on_united_states_dollar

includes no direct costs for staff to perform these functions. With no costs included for these items, the application fails to demonstrate that its expenses are based on reasonable assumptions, and it also fails to demonstrate that it will provide the necessary ancillary and support services.

e. Balance sheet issues. The application contains a single balance sheet, Form F.2, and states that it is for the MSO entity. However, the balance sheet contains assets for the Metrolina entity as well, such as patient receivables. As such, the balance sheet data do not provide a clear picture of the financial position of either applicant.

Based on these numerous issues, the application has failed to demonstrate the availability of funds and the immediate and long-term feasibility of the project, and it has failed to demonstrate that the projections of costs and charges are reasonable or that it will provide the necessary ancillary and support services. As such, the application should be found non-conforming with Criteria 1, 5, 8 and 18a.

COMPARATIVE ANALYSIS-ACUTE CARE BEDS

The CHS Pineville and Novant applications each propose to develop acute care beds in response to the *2018 SMFP* need determination for acute care beds in Mecklenburg County. Atrium Health and CCSS acknowledge that each review is different and, therefore, that the comparative review factors employed by the Project Analyst in any given review may be different depending upon the relevant factors at issue. Given the nature of the review, the Analyst must decide which comparative factors are most appropriate in assessing the applications.

In order to determine the most effective alternative to meet the identified need for 50 additional acute care beds in Mecklenburg County, Atrium Health and CCSS reviewed and compared the following factors in each application:

- Conformity with Review Criteria
- Geographic Accessibility
- Projected Charity Care
- Projected Access by Medicare Patients
- Projected Access by Medicaid Patients
- Average Net Revenue
- Average Operating Cost

Atrium Health and CCSS believe that the factors presented above and discussed in turn below should be used by the Analyst in reviewing the competing applications. The factors are appropriate and/or have been used in previous competitive acute care bed review findings including the most recent review of acute care beds in Mecklenburg County, the 2017 Mecklenburg Acute Care Bed Review.[8]

[8] The 2017 Mecklenburg County acute care bed review included Service to Mecklenburg County Residents as a comparative factor. Atrium Health and CCSS strongly believe that this comparative factor is inappropriate for this review. The need determination for 50 additional acute care beds in Mecklenburg County identified by the *2018 SMFP* is a result of facility utilization. Specifically, it is based on the utilization of Atrium Health facilities including the utilization of CHS Pineville by patients from outside of Mecklenburg County. This need was recognized by the State Health Coordinating Council and the Governor. CHS Pineville is located just over two miles from the South Carolina border and serves as a tertiary care facility to residents of that state, particularly for York and Lancaster counties. Many of the residents of those counties are closer to CHS Pineville than any other facility. Specifically, 40.8 percent of CHS Pineville's medical/surgical discharges are proposed to be provided to patients from South Carolina, particularly from counties considered part of the Charlotte metropolitan statistical area (MSA). CHS Pineville's need for additional beds, as demonstrated in its application, as well as the need identified in the *2018 SMFP* is based on the utilization of all of its patients, including those originating from outside of Mecklenburg County. As such, the need for the proposed project as well as the need as recognized by the State Health Coordinating Council and the Governor is based on residents of areas outside of Mecklenburg County that seek care at CHS Pineville and other acute care facilities in Mecklenburg County. It is inappropriate to determine the comparative effectiveness of an applicant based on service to Mecklenburg County residents when the need as identified for the proposed beds is not based solely on Mecklenburg County patients. Further, it is inappropriate when applicants, such as CHS Pineville in this instance, are located in areas within a county that will naturally draw patients from outside of the county. Under such circumstances, CHS Pineville will always be disadvantaged in such a comparison no matter how well it would serve the identified need. For these reasons, CHS Pineville considers the Service to Mecklenburg County residents comparative factor to be inappropriate for this review.

Conformity with Review Criteria

CHS Pineville adequately demonstrates that its acute care bed proposal is conforming to all applicable statutory and regulatory review criteria. By contrast, the Novant application did not adequately demonstrate that its proposal was conforming to all applicable statutory and regulatory review criteria as discussed previously. Therefore, the CHS Pineville Beds application is the most effective with regard to conformity with review criteria.

Geographic Access

The *2018 SMFP* identifies a need for 50 additional acute care beds in Mecklenburg County. The following table demonstrates that the need identified in the *2018 SMFP* is located at CMC, a downtown or Center City facility, and at CHS Pineville, a south Mecklenburg County facility.

Mecklenburg County Acute Care Bed Need/Surplus

	2020 Projected ADC	***2020 Beds Adjusted for Target Occupancy***	***Current Bed Inventory***	***Projected 2020 Deficit/ (Surplus)***
CHS Pineville	171	240	206	34
CHS University	62	93	100	(7)
CMC/CMC-Mercy	854	1,093	1,010	83
Atrium Health Total	**1,087**	**1,426**	**1,316**	**110**
NHHMC	61	91	139	(48)
NHMMC	103	144	154	(10)
NHPMC	355	473	519	(46)
NHMHMC	0	0	50	(50)
Novant Health Total	**519**	**708**	**862**	**(154)**

Source: *2018 SMFP*.

Both acute care bed applications propose to add acute care beds to an existing facility. Novant proposes to develop beds at NHHMC, a north Mecklenburg County facility. CHS Pineville proposes to develop the beds at a south Mecklenburg County facility. Therefore, with regard to geographic access, CHS Pineville is comparatively superior because it addresses the need in south Mecklenburg County while NHHMC does not address the geographic needs in the county.

Projected Charity Care

The following table shows the projected charity care for acute care beds to be provided in second operating year for each applicant and the percentage of total net revenue.

Service Component Charity Care as Percentage of Net Revenue

	Charity Care	*Net Revenue*	*Charity as % of Net Revenue*
NHHMC	$6,988,000	$78,310,000	8.9%
CHS Pineville	$11,728,276	$49,837,333	23.5%

Source: Novant Acute Care Form F.4. CHS Pineville Beds Med/Surg Form F.4.

As shown above, CHS Pineville projects the highest charity care amount and the highest charity care as a percentage of net revenue to be provided to patients for the proposed services. Therefore, the CHS Pineville beds application is the most effective alternative with regard to projected charity care amounts.

Projected Access by Medicare Patients

The following table illustrates the projected percentage of acute care days to be provided to Medicare recipients in the second operating year for each applicant.

Medicare Patients as Percentage of Service Component Patients

	% Medicare
NHHMC	41.03%
CHS Pineville	60.3%

Source: Section L.3.(a) for Novant and CHS Pineville Beds applications.

As shown in the table above, CHS Pineville projects the highest percentage of Medicare patients as a percent of the total patient for the proposed services. Therefore, with regard to projected access by Medicare patients, CHS Pineville is the most effective alternative.

Projected Access by Medicaid Patients

The following table illustrates the projected percentage of acute care days to be provided to Medicaid recipients in the second operating year for each applicant.

Medicaid Patients as Percentage of Service Component Patients

	% Medicaid
NHHMC	10.17%
CHS Pineville	6.1%

Source: Section L.3.(a) for Novant and CHS Pineville Beds applications.

As shown in the table above, NHHMC projects the highest percentage of Medicaid patients as a percent of the total patient for the proposed services. However, CHS Pineville is the only applicant that is conforming with statutory and regulatory review criteria. Therefore, CHS Pineville is the most effective alternative with regard to projected access to Medicaid patients.

Average Net Patient Revenue

The following table shows projected net revenue per patient in in the second operating year for each applicant.

Service Component Net Revenue per Patient

	Average Net Revenue per Patient
NHHMC	$11,002
CHS Pineville	$3,243

Source: Form F.6 Net Revenue for proposed services for Novant and CHS Pineville Beds applications.

As shown in the table above, CHS Pineville projects the lowest net revenue per patient.

Novant states in the financial assumptions on page 231 that "*Gross acute care beds revenue . . . includes all services provided to a patient not included as ICU, Surgery or NICU including room charges, surgery charges, pharmacy, respiratory, EKG, laboratory, radiology, and other charges incurred as an acute inpatient*." By contrast, CHS Pineville states in its Form F.5 Assumptions #4 that "[c]*harges include direct medical/surgical beds charges only and do not include ICU bed services or ancillary services such as lab or radiology which generate additional revenue."* As such, it may not be possible to make conclusive comparisons with regard to net revenue per patient.

Average Total Operating Cost

The following table shows projected operating cost per patient in in the second operating year for each applicant.

Service Component Operating Cost per Patient

	Average Operating Cost per Patient
NHHMC	$7,202
CHS Pineville	$2,715

Source: Form F.3 for proposed services for Novant and CHS Pineville Beds applications.

As shown in the table above, CHS Pineville projects the lowest operating cost per patient.

NHPMC states in the financial assumptions on page 211 that "FTEs were determined by using existing staffing levels with adjustments for projected volumes for the entire hospital, which include Med/Surg units, surgery, pharmacy, respiratory, EKG, laboratory, radiology and other department." By contrast, CHS Pineville states in its Form F.4 assumptions that "*Form F.4 only includes direct med/surg service charges and expenses and does not include ICU bed services or ancillary services such as lab or radiology which generate additional revenue and expenses*." As such, it may not be possible to make conclusive comparisons with regard to operating costs per patient.

COMPARATIVE ANALYSIS-OPERATING ROOMS

The CHS Pineville OR, CMC, CCSS, NHHMC, and Metrolina applications each propose to develop operating rooms in response to the *2018 SMFP* need determination for operating rooms in Mecklenburg County. Atrium Health and CCSS acknowledge that each review is different and, therefore, that the comparative review factors employed by the Project Analyst in any given review may be different depending upon the relevant factors at issue. Given the nature of the review, the Analyst must decide which comparative factors are most appropriate in assessing the applications.

In order to determine the most effective alternative to meet the identified need for six additional operating rooms in Mecklenburg County, Atrium Health and CCSS reviewed and compared the following factors in each application:

- Conformity with Review Criteria
- Geographic Accessibility
- Physician Support
- Patient Access to New Provider
- Patient Access to Lower Cost Surgical Services
- Patient Access to Multiple Surgical Services
- Projected Charity Care
- Projected Access by Medicare Patients
- Projected Access by Medicaid Patients
- Average Net Revenue
- Average Operating Expense

Atrium Health and CCSS believe that the factors presented above and discussed in turn below should be used by the Analyst in reviewing the competing applications. The factors are appropriate and/or have been used in previous competitive operating room review findings including the 2018 Forsyth County Operating Room Review which is the most recent review of operating rooms that included both hospital and ASC applicants.

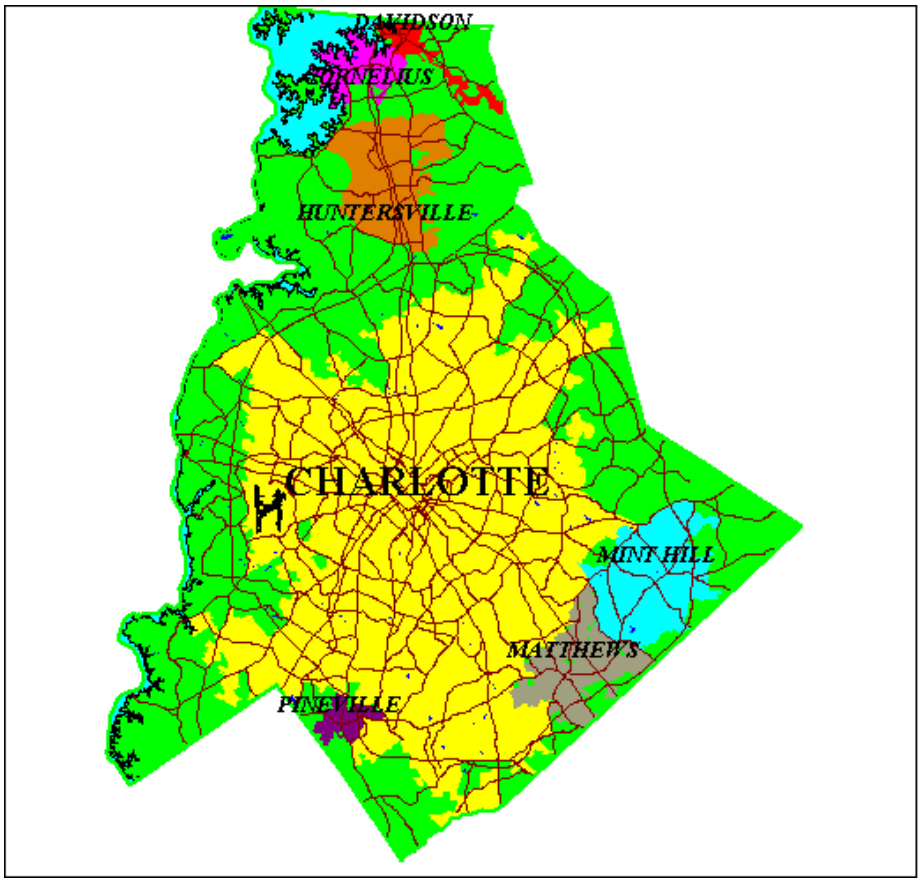
Please note that in the comparative factors below, dedicated C-Section operating rooms are excluded from each applicant's inventory as the financial results provided by the applicants do not relate to those rooms. However, CMC's trauma operating room is included in its inventory as its financial results relate to utilization of that room (whereas the trauma operating room is excluded from CMC's inventory when determining need under the *2018 SMFP* Operating Room Methodology).

<u>Conformity with Review Criteria</u>

CHS Pineville, CMC, and CCSS adequately demonstrate that their operating room proposals are conforming to all applicable statutory and regulatory review criteria. By contrast, the Novant and Metrolina applications do not adequately demonstrate that their proposals are conforming to all applicable statutory and regulatory review criteria as discussed previously. Therefore, the CHS Pineville OR, CMC, and CCSS applications are the most effective with regard to conformity with review criteria.

Geographic Access

In its analysis of geographic access, the 2018 Forsyth County operating room review included an analysis of operating room need by municipality. Atrium Health and CCSS strongly believe that such an analysis by municipality for this comparative factor is inappropriate for this review. As shown in a representative map below, Mecklenburg County contains seven municipalities including the city of Charlotte and the towns of Cornelius, Davidson, Huntersville, Matthews, Mint Hill, and Pineville.



The city of Charlotte encompasses the vast majority of the area and population of Mecklenburg County. Within the city, there are different regions that have different needs and travel patterns. As a result, an analysis of geographic need for the city of Charlotte in total would not account for these internal differences. For example, operating room need in the northern areas of Charlotte may differ from the southern area and there is significant distance and travel time between these two areas. By comparison, the townships in the county have very small geographies and populations that do not necessarily reflect the population that comprises those regions. For example, Pineville township has a population of less than 9,000 people, as shown below based on U.S. Census data, however, the area of southern Mecklenburg County that is oriented around Pineville has a much larger population.

Mecklenburg County Operating Rooms by Location and Facility

	*2017 Population Estimate**	*Percent of Total County Population Centers*
Charlotte	859,035	83.8%
Cornelius	29,191	2.8%
Davidson	12,684	1.2%
Huntersville	56,212	5.5%
Matthews	32,117	3.1%
Mint Hill	26,748	2.6%
Pineville	8,746	0.9%
Total Population Centers**	**1,024,733**	**100.0%**

*Source: U.S. Census Bureau Quick Facts.
**Total Population Centers population represents 95.2 percent of the total Mecklenburg County population per U.S. Census Bureau Quick Facts.

As such, Atrium Health and CCSS conducted an analysis of geographic access based on the operating room needs identified in the *2018 SMFP* for Mecklenburg County.

Mecklenburg County Operating Room Need/Surplus

	Projected Surgical Hours for 2020	*Projected Surgical ORs Required in 2020*	*Adjusted Planning Inventory*	*Projected OR Deficit/ Surplus (Surplus shows as a "-")*
CHS Huntersville Surgery Center	0	0.00	1	-1.00
Carolina Center for Specialty Surgery	2,780	2.12	2	0.12
CHS Pineville	17,503	9.97	10	-0.03
CMC	139,557	71.57	55	16.57
CHS University	11,988	7.99	7	0.99
Atrium Health System Total		***91.65***	***75***	***16.65***
Randolph Surgery Center	0	0.00	6	-6.00
Charlotte Surgery Center	9,753	7.43	6	1.43
Charlotte Surgery Center Total		***7.43***	***12***	***-4.57***
Presbyterian Hospital Mint Hill	0	0.00	4	-4.00
SouthPark Surgery Center	11,778	8.97	6	2.97
Novant Health Ballantyne Outpatient Surgery	1,401	1.07	2	-0.93
Novant Health Huntersville Outpatient Surgery	2,563	1.95	2	-0.05
Matthews Surgery Center	2,843	2.17	2	0.17
Novant Health Presbyterian Medical Center	66,984	34.35	36	-1.65
Novant Health Matthews Medical Center	9,020	6.01	6	0.01
Novant Health Huntersville Medical Center	8,933	5.96	6	-0.04
Novant Health Total		***60.48***	***64***	***-3.52***
Mallard Creek Surgery Center**	5,392	0.00	2	-2.00
Carolinas Center for Ambulatory Dentistry**				

Source: *2018 SMFP*.

The table above demonstrates that the need identified in the *2018 SMFP* is located primarily at CMC, a downtown or Center City facility. Note, CHS University's deficit should be combined with CHS Huntersville Surgery Center's surplus as the latter facility is approved to be developed based on operating rooms currently licensed as part of the former facility.

Each of the operating room applications, with the exception of Metrolina, proposes to add operating rooms to an existing facility. Novant proposes to develop operating rooms at NHHMC, a north Mecklenburg County facility with a surplus of operating rooms. CHS Pineville proposes to develop operating rooms at a south Mecklenburg County facility with a negligible surplus of operating rooms. CMC proposes to develop operating rooms at downtown or Center City facility with a deficit of operating rooms. CCSS proposes to develop operating rooms at a downtown or Center City facility with a deficit of operating rooms. Therefore, with regard to geographic access, CMC and CCSS are comparatively superior because they address the need in downtown or Center City.

Physician Support

The following table illustrates the number of letters of support included with each application from surgeons, other physicians, and community members.

Please note that Novant includes 18 letters of support in its Exhibit H-4.1 Letters of Support-Physicians; however, only 14 of those letters are from physicians (the remaining four are from three Novant executives and one nurse practitioner). Of the 14 letters from physicians, 10 are from obstetricians/gynecologists, one is from an orthopedic surgeon, one is from the Chief of Surgery at NHHMC, and two are from non-surgeons. While the obstetrician/gynecologist (Ob/Gyn) letters of support are included in the NHHMC application, they primarily reference and serve as support for the requested additional acute care beds. Specifically, the proposed operating room is mentioned at the beginning of each Ob/Gyn letter along with the 12 proposed obstetrics beds as part of the description of the scope of the NHHMC project, but the remainder of the letter discusses the need and benefits of the proposed additional postpartum capacity and makes no reference to the need for the additional operating room. As such, Novant only has two letters of support from surgeons and one of those is from the Chief of Surgery at NHHMC.

Letters of Support

	Surgeons	***Other Physicians/Providers***	***Community***
CHS Pineville	34	43	81
CMC	115	0	55
CCSS	10	0	3
Atrium Health and CCSS Total	**159**		
NHHMC	2	16	1
Metrolina	2	29	0

Source: CHS Pineville OR Exhibit I.2. CMC Exhibit I.2. CCSS Exhibit I.2. NHHMC Exhibit H.4-1. Metrolina Exhibit C-4.1 and C.4-2.

Please note that each of the letters of support from surgeons in the CHS Pineville, CMC, and CCSS applications expresses support for all three of these projects. Thus, in total, the CHS Pineville, CMC, and CCSS applications submitted 159 letters of support from surgeons including 34 from CHS Pineville, 115

from CMC, and 10 from CCSS. By comparison, NHHMC and Metrolina each only included two letters of support from surgeons. Therefore, with regard to physician support, CHS Pineville, CMC, and CCSS are more effective alternatives.

Patient Access to New Provider

CHS Pineville, CMC, CCSS, and Novant are all existing providers of surgical services in Mecklenburg County. Metrolina represents a new proposed provider of surgical services in the county. However, the Metrolina application does not adequately demonstrate that its proposal is conforming to all applicable statutory and regulatory review criteria as discussed previously. Therefore, with regard to patient access to a new provider, no applicant is more effective.

Patient Access to Lower Cost Surgical Services

As noted in prior operating room reviews, non-hospital based surgical services typically provide patients with lower costs. CHS Pineville, CMC, and NHHMC are existing hospitals that offer hospital-based surgical services. CCSS and Metrolina do or would offer non-hospital based surgical services. However, Metrolina does not adequately demonstrate that its proposal is conforming to all applicable statutory and regulatory review criteria as discussed previously. Therefore, with regard to patient access to lower cost surgical services, CCSS is the most effective applicant.

Patient Access to Multiple Surgical Services

The following table illustrates the surgical specialties (as reported on the 2018 License Renewal Application for all applicants with exception of Metrolina which is based on its application) that the individual CON applicants in this review propose:

Proposed Services to be Offered

	CHS Pineville	*CMC*	*CCSS*	*NHHMC*	*Metrolina*
Cardiothoracic, excl. open heart	X	X		X	
Open Heart	X	X			
General Surgery	X	X		X	
Neurosurgery (incl. spine)	X	X	X		
OB GYN (excl. C-Section)	X	X		X	
Ophthalmology	X	X		X	
Oral Surgery/Dental	X	X		X	
Orthopedic (incl. spine)	X	X	X	X	
ENT	X	X		X	
Plastic Surgery	X	X		X	
Podiatry			X	X	
Urology	X	X	X	X	
Vascular	X	X			X
Other:	X	X	X		

Source: 2018 License Renewal Applications for CHS Pineville, CMC, CCSS, and NHHMC. Metrolina application.

As the above table illustrates, CHS Pineville and CMC, as acute care tertiary hospitals, offer a full continuum of surgical services. NHHMC does not offer tertiary services such as open heart or neurosurgery. CCSS is a multi-specialty ambulatory-only surgical provider. Metrolina is a proposed single-specialty ambulatory-only surgical provider. As such, CHS Pineville and CMC offer access to a broader range of specialties and are therefore more effective alternatives with regard to access to multiple surgical specialties.

Projected Charity Care

The following table shows the projected charity care to be provided in third operating year for each applicant.

Charity Care

	Charity Care	*Charity Care per OR^*	*Charity Care per Surgical Case/Procedure**	*Charity Care as % of Total Net Revenue*
CHS Pineville	$15,002,180	$1,363,835	$1,561	11.7%
CMC	$83,810,211	$1,904,778	$2,841	19.4%
CCSS	$85,667	$28,556	$30	0.5%
NHHMC	$4,052,000	$578,857	$694	4.6%
Metrolina	$106,462	$106,462	$44	2.6%

Source: Forms F.3, F.4, and F.5 for each applicant.
^Excludes dedicated C-Section rooms. Includes existing, approved, and proposed operating rooms including trauma rooms as charity care will be provided to patients utilizing those rooms.
*For CCSS and Metrolina operating room and procedure room utilization is included as the projected charity care relates to both operating rooms and procedure rooms.

As shown above, CMC and CHS Pineville project the highest charity care amounts, the highest charity care amount per operating room, the highest charity care per surgical case/procedure, and the highest charity care as a percentage of net revenue to be provided to patients for the proposed services. Therefore, the CMC and CHS Pineville applications are the most effective alternatives with regard to projected charity care.

Projected Access by Medicare Patients

The following table illustrates the projected percentage of operating room cases to be provided to Medicare recipients in the third operating year for each applicant.

Medicare

	Projected Total OR Cases	*Projected Medicare OR Cases*	*% of Medicare*
CHS Pineville	9,612	3,840	40.0%
CMC	29,503	8,054	27.3%
CCSS	2,344	552	23.5%
NHHMC	5,842	1,719	29.4%
Metrolina	1,647	1,080	65.6%

Source: Forms F.4 for operating rooms for each applicant.

As shown in the table above, Metrolina projects the highest percentage of Medicare patients as a percent of the total operating room cases, followed by CHS Pineville, NHHMC, CMC, and CCSS. However, the Novant and Metrolina applications do not adequately demonstrate that their proposals are conforming to all applicable statutory and regulatory review criteria as discussed previously. Therefore, the CHS Pineville application is the most effective alternative with regard to projected access by Medicare patients.

Projected Access by Medicaid Patients

The following table illustrates the projected percentage of operating room cases to be provided to Medicaid recipients in the third operating year for each applicant.

Medicaid

	Projected Total OR Cases	*Projected Medicaid OR Cases*	*% of Medicaid*
CHS Pineville	9,612	492	5.1%
CMC	29,503	5,872	19.9%
CCSS	2,344	18	0.8%
NHHMC	5,842	255	4.4%
Metrolina	1,647	84	5.1%

Source: Forms F.4 for operating rooms for each applicant.

As shown in the table above, CMC projects the highest percentage of Medicaid patients as a percent of the total operating room cases, followed by CHS Pineville, Metrolina, NHHMC, and CCSS. Therefore, the CMC application is the most effective alternative with regard to projected access by Medicaid patients.

Average Net Revenue

The following table shows projected net revenue for operating room cases in in the third operating year for each applicant.

Net Revenue

	Net Revenue for OR Cases	*# of ORs^*	*# of OR Cases*	*Net Revenue per OR*	*Net Revenue per OR Case*
CHS Pineville	$127,752,355	11	9,612	$11,613,850	$13,291
CMC	$431,010,506	44	29,503	$9,795,693	$14,609
CCSS	$17,922,000	3	2,344	$5,974,000	$7,646
NHHMC	$87,966,800	7	5,842	$12,566,686	$15,058
Metrolina	$3,398,633	1	1,647	$3,398,633	$2,064

Source: Forms F.5 for operating rooms for each applicant.
^Excludes dedicated C-Section rooms. Includes existing, approved, and proposed operating rooms including trauma rooms as net revenue attributable to patients utilizing those rooms.

As shown in the table above, Metrolina projects the lowest net revenue per operating room and the lowest net revenue per operating room cases followed by CCSS. However, the Metrolina application does not adequately demonstrate that its proposal is conforming to all applicable statutory and regulatory

review criteria as discussed previously. Thus, the CCSS application is the most effective with regard to net revenue. Among hospital-based providers, CMC projects the lowest net revenue per operating room and CHS Pineville projects the lowest net revenue per operating room case. Thus, CMC and CHS Pineville are the most effective alternatives among hospital-based providers with regard to net revenue.

Average Operating Expense

The following table shows projected operating costs for operating room and procedure room cases in in the third operating year for each applicant.

Operating Cost

	Operating Expense	*# of ORs/Procedure Rooms^*	*# of OR Cases/Procedures*	*Operating Expense per OR/Procedure Room*	*Operating Expense per OR Case/Procedure*
CHS Pineville	$52,453,431	11	9,612	$4,768,494	$5,457
CMC	$213,508,006	44	29,503	$4,852,455	$7,237
CCSS	$8,350,502	3	2,901	$2,783,501	$2,878
NHHMC	$51,331,000	7	5,842	$7,333,000	$8,787
Metrolina	$3,445,152	1	2,430	$3,445,152	$1,418

Source: Forms F.5 for operating rooms for each applicant.
^Excludes dedicated C-Section rooms. Includes procedure rooms and existing, approved, and proposed operating rooms including trauma rooms as operating costs are attributable to patients utilizing those rooms.

As shown in the table above, Metrolina projects the lowest operating expense per operating room/procedure room and the lowest operating expense per operating room case/procedure followed by CCSS. However, the Metrolina application does not adequately demonstrate that its proposal is conforming to all applicable statutory and regulatory review criteria as discussed previously. Thus, the CCSS application is the most effective with regard to operating expense. Among hospital-based providers, CHS Pineville projects the lowest operating expense per operating room and the lowest operating expense per operating room case. Thus, CHS Pineville is the most effective alternative among hospital-based providers with regard to operating expense.

SUMMARY

As noted previously, Atrium Health and CCSS maintain that the NHHMC and Metrolina applications cannot be approved as proposed. As such, Atrium Health and CCSS maintain that they have the only approvable applications, as supported by these comments. Based on both the comparative analysis and the comments on competing applications, Atrium Health and CCSS believe that their applications represent the most effective alternatives for meeting the needs identified in the *2018 SMFP* for additional acute care beds and operating rooms in Mecklenburg County. As such, the CON Section can and should approve the Atrium Health and CCSS applications.

Please note that in no way does Atrium Health or CCSS intend for these comments to change or amend their applications as filed on October 15, 2018. If the Agency considers any statements to be amending Atrium Health's or CCSS's applications, those comments should not be considered.

Attachment 1

DRAFT - 9/11/2018

Table 5A: Acute Care Bed Need Projections

2017 Utilization Data from Truven Health Analytics compiled by the Cecil B. Sheps Center for Health Services Research

Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC>400: 78%

Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	**License Number**	**Facility Name**	**Licensed Acute Care Beds**	**Adjustments for CONs/ Previous Need**	**Truven Health Analytics 2017 Acute Care Days**	**County Growth Rate Multiplier**	**4 Years Growth Using County Growth Rate (= 2017 Days, if negative growth)**	**2021 Projected Average Daily Census (ADC)**	**2021 Beds Adjusted for Target Occupancy**	**Projected 2021 Deficit or Surplus (surplus shows as a "-")**	**2021 Need Determination**
Alamance	H0272	Alamance Regional Medical Center**	182	0	36,666	-1.0292	36,666	100	141	-41	
Alamance Total			**182**	**0**							**0**
Alexander	H0274	Alexander Hospital (closed)*	25	-25		0.0000	0	0	0	0	
Alexander Total			**25**	**-25**							**0**
Alleghany	H0108	Alleghany Memorial Hospital**	41	0	1,367	-1.1083	1,367	4	6	-35	
Alleghany Total			**41**	**0**							**0**
Anson	H0082	Carolinas HealthCare System Anson	15	0	385	-1.2061	385	1	2	-13	
Anson Total			**15**	**0**							**0**
Ashe	H0099	Ashe Memorial Hospital,Inc.	76	0	4,328	1.0004	4,335	12	18	-58	
Ashe Total			**76**	**0**							**0**
Avery	H0037	Charles A. Cannon, Jr. Memorial Hospital††	30	0	1,884	-1.1783	1,884	5	8	-22	
Avery Total			**30**	**0**							**0**
Beaufort	H0188	Vidant Beaufort Hospital	120	0	11,569	-1.0212	11,569	32	48	-72	
Beaufort	H0002	Vidant Pungo Hospital (closed)^^	39	0		-1.0212	0	0	0	-39	
Beaufort Total			**159**	**0**							**0**
Bertie	H0268	Vidant Bertie Hospital	6	0	1,327	-1.0592	1,327	4	5	-1	
Bertie Total			**6**	**0**							**0**
Bladen	H0154	Cape Fear Valley-Bladen County Hospital**	48	0	3,588	-1.0076	3,588	10	15	-33	
Bladen Total			**48**	**0**							**0**
Brunswick	H0150	J. Arthur Dosher Memorial Hospital	25	0	2,743	-1.0182	2,743	8	11	-14	
Brunswick	H0250	Novant Health Brunswick Medical Center	74	0	14,551	-1.0182	14,551	40	60	-14	
Brunswick Total			**99**	**0**							**0**
Buncombe	H0036	Mission Hospital	708	25	189,146	1.0073	194,704	533	683	-50	
Buncombe/Graham/Madison/Yancey Total			**708**	**25**							**0**
Burke	H0062	Carolinas HealthCare System Blue Ridge	293	0	22,071	-1.0180	22,071	60	91	-202	
Burke Total			**293**	**0**							**0**
Cabarrus	H0031	Carolinas HealthCare System NorthEast	447	0	98,783	1.0211	107,402	294	391	-56	
Cabarrus Total			**447**	**0**							**0**

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2013, 2014, 2015, 2016 and 2017 were used to generate four-year growth rate.

(ADC= Average Daily Census)

DRAFT - 9/11/2018

Table 5A: Acute Care Bed Need Projections

2017 Utilization Data from Truven Health Analytics compiled by the Cecil B. Sheps Center for Health Services Research

Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC>400: 78%

Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/ Previous Need	Truven Health Analytics 2017 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2017 Days, if negative growth)	2021 Projected Average Daily Census (ADC)	2021 Beds Adjusted for Target Occupancy	Projected 2021 Deficit or Surplus (surplus shows as a "-")	2021 Need Determination
Caldwell	H0061	Caldwell Memorial Hospital	110	0	17,896	1.0193	19,315	53	79	-31	
Caldwell Total			**110**	**0**							**0**
Carteret	H0222	Carteret General Hospital**	135	0	23,817	1.0097	24,759	68	102	-33	
Carteret Total			**135**	**0**							**0**
Catawba	H0223	Catawba Valley Medical Center	200	0	38,278	1.0130	40,309	110	155	-45	
Catawba	H0053	Frye Regional Medical Center	209	0	36,219	1.0130	38,141	104	146	-63	
Catawba Total			**409**	**0**							**0**
Chatham	H0007	Chatham Hospital**	25	0	1,890	1.0530	2,323	6	10	-15	
Chatham Total			**25**	**0**							**0**
Cherokee	H0239	Erlanger Murphy Medical Center	57	0	5,956	-1.0323	5,956	16	24	-33	
Cherokee/Clay Total			**57**	**0**							**0**
Chowan	H0063	Vidant Chowan Hospital	49	0	5,692	-1.0281	5,692	16	23	-26	
Chowan/Tyrrell Total			**49**	**0**							**0**
Cleveland	H0024	Carolinas HealthCare System Cleveland	241	0	28,913	-1.0093	28,913	79	119	-122	
Cleveland	H0113	Carolinas HealthCare System Kings	47	0	6,187	-1.0093	6,187	17	25	-22	
		Carolinas HealthCare System Total	288	0	35,100		35,100	96	144	-144	
Cleveland Total			**288**	**0**							**0**
Columbus	H0045	Columbus Regional Healthcare System	154	0	15,763	-1.0598	15,763	43	65	-89	
Columbus Total			**154**	**0**							**0**
Craven	H0201	CarolinaEast Medical Center	307	0	55,507	1.0313	62,786	172	241	-66	
Craven/Jones/Pamlico Total			**307**	**0**							**0**
Cumberland	H0213	Cape Fear Valley Medical Center	516	73	160,933	-1.0123	160,933	441	564	-25	
Cumberland Total			**516**	**73**							**0**
Dare	H0273	The Outer Banks Hospital	21	0	2,350	-1.0893	2,350	6	10	-11	
Dare Total			**21**	**0**							**0**
Davidson	H0027	Lexington Medical Center**	94	0	9,110	1.0353	10,464	29	43	-51	
Davidson	H0112	Novant Health Thomasville Medical Center	101	0	12,143	1.0353	13,948	38	57	-44	

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2013, 2014, 2015, 2016 and 2017 were used to generate four-year growth rate.

(ADC= Average Daily Census)

DRAFT - 9/11/2018

Table 5A: Acute Care Bed Need Projections

2017 Utilization Data from Truven Health Analytics compiled by the Cecil B. Sheps Center for Health Services Research

Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC>400: 78%

Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/ Previous Need	Truven Health Analytics 2017 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2017 Days, if negative growth)	2021 Projected Average Daily Census (ADC)	2021 Beds Adjusted for Target Occupancy	Projected 2021 Deficit or Surplus (surplus shows as a "-")	2021 Need Determination
Davidson Total			**195**	**0**							**0**
Davie	H0171	Davie Medical Center**	50	0	2,036	-1.2500	2,036	6	8	-42	
Davie Total			**50**	**0**							**0**
Duplin	H0166	Vidant Duplin Hospital	56	0	8,797	1.0320	9,978	27	41	-15	
Duplin Total			**56**	**0**							**0**
Durham	H0233	Duke Regional Hospital	316	0	65,189	1.0248	71,886	197	276	-40	
Durham	H0015	Duke University Hospital**/***	924	90	281,338	1.0248	310,242	850	1,088	74	
		Duke University Health System Total	1,240	90	346,527		382,128	1,047	1,364	34	
Durham	H0075	North Carolina Specialty Hospital**	18	6	3,649	1.0248	4,024	11	17	-7	
Durham/Caswell Total			**1,258**	**96**							**34**
Edgecombe	H0258	Vidant Edgecombe Hospital	101	0	14,729	1.0092	15,276	42	63	-38	
Edgecombe Total			**101**	**0**							**0**
Forsyth	H0011	North Carolina Baptist Hospital	802	4	227,283	1.0041	231,009	633	810	4	
Forsyth	H0209	Novant Health Forsyth Medical Center	823	0	209,585	1.0041	213,021	584	747	-76	
Forsyth	H0229	Novant Health Medical Park Hospital	22	0	3,129	1.0041	3,180	9	13	-9	
		Novant Health Total	845	0	212,714		216,201	592	760	-85	
Forsyth Total			**1,647**	**4**							**0**
Franklin	H0261	Franklin Medical Center (closed)^/†††	70	0		0.0000	0	0	0	-70	
Franklin Total			**70**	**0**							**0**
Gaston	H0105	CaroMont Regional Medical Center	372	0	94,795	1.0408	111,252	305	405	33	
Gaston Total			**372**	**0**							**33**
Granville	H0098	Granville Health System**	62	0	6,835	-1.0110	6,835	19	28	-34	
Granville Total			**62**	**0**							**0**
Guilford	H0159	Cone Health	777	-23	173,958	-1.0136	173,958	477	610	-144	
Guilford	H0052	High Point Regional Health	307	0	58,332	-1.0136	58,332	160	224	-83	
Guilford Total			**1,084**	**-23**							**0**
Halifax	H0230	Halifax Regional Medical Center	184	0	20,195	-1.0245	20,195	55	83	-101	

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2013, 2014, 2015, 2016 and 2017 were used to generate four-year growth rate.

(ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2017 Utilization Data from Truven Health Analytics compiled by the Cecil B. Sheps Center for Health Services Research

Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC>400: 78%

Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	**License Number**	**Facility Name**	**Licensed Acute Care Beds**	**Adjustments for CONs/ Previous Need**	**Truven Health Analytics 2017 Acute Care Days**	**County Growth Rate Multiplier**	**4 Years Growth Using County Growth Rate (= 2017 Days, if negative growth)**	**2021 Projected Average Daily Census (ADC)**	**2021 Beds Adjusted for Target Occupancy**	**Projected 2021 Deficit or Surplus (surplus shows as a "-")**	**2021 Need Determination**
Halifax	H0004	Our Community Hospital (closed)**	0	0	41	-1.0245	41	0	0	0	
Halifax/Northampton Total			**184**	**0**							**0**
Harnett	H0224	Betsy Johnson Hospital	151	0	21,429	1.0905	30,307	83	125	-26	
Harnett Total			**151**	**0**							**0**
Haywood	H0025	Haywood Regional Medical Center	126	0	17,475	1.0473	21,025	58	86	-40	
Haywood Total			**126**	**0**							**0**
Henderson	H0161	Margaret R. Pardee Memorial Hospital	201	0	23,415	1.0160	24,954	68	103	-98	
Henderson	H0019	Park Ridge Health	62	0	10,109	1.0160	10,774	30	44	-18	
Henderson Total			**263**	**0**							**0**
Hertford	H0001	Vidant Roanoke-Chowan Hospital	86	0	14,380	1.0262	15,944	44	66	-20	
Hertford/Gates Total			**86**	**0**							**0**
Hoke	H0288	Cape Fear Valley Hoke Hospital	41	0	3,014	0.0000	3,014	8	12	-29	
Hoke	H0287	FirstHealth Moore Regional Hospital - Hoke Campus	8	28	1,560	0.0000	1,560	4	6	-30	
Hoke Total			**49**	**28**							**0**
Iredell	H0248	Davis Regional Medical Center	102	0	8,246	-1.0436	8,246	23	34	-68	
Iredell	H0259	Lake Norman Regional Medical Center**	123	0	14,460	-1.0436	14,460	40	59	-64	
		Community Health Systems Total	225	0	22,706		22,706	62	93	-132	
Iredell	H0164	Iredell Memorial Hospital**	199	0	36,189	-1.0436	36,189	99	149	-50	
Iredell Total			**424**	**0**							**0**
Jackson	H0087	Harris Regional Hospital	86	0	12,536	1.0235	13,755	38	57	-29	
Jackson Total			**86**	**0**							**0**
Johnston	H0151	Johnston Health	179	0	30,321	1.0210	32,943	90	135	-44	
Johnston Total			**179**	**0**							**0**
Lee	H0243	Central Carolina Hospital	127	0	16,665	-1.0129	16,665	46	68	-59	
Lee Total			**127**	**0**							**0**
Lenoir	H0043	UNC Lenoir Health Care	218	0	25,186	-1.0463	25,186	69	104	-114	
Lenoir Total			**218**	**0**							**0**

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2013, 2014, 2015, 2016 and 2017 were used to generate four-year growth rate.

(ADC= Average Daily Census)

DRAFT - 9/11/2018

Table 5A: Acute Care Bed Need Projections

2017 Utilization Data from Truven Health Analytics compiled by the Cecil B. Sheps Center for Health Services Research

Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC>400: 78%

Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	**License Number**	**Facility Name**	**Licensed Acute Care Beds**	**Adjustments for CONs/ Previous Need**	**Truven Health Analytics 2017 Acute Care Days**	**County Growth Rate Multiplier**	**4 Years Growth Using County Growth Rate (= 2017 Days, if negative growth)**	**2021 Projected Average Daily Census (ADC)**	**2021 Beds Adjusted for Target Occupancy**	**Projected 2021 Deficit or Surplus (surplus shows as a "-")**	**2021 Need Determination**
Lincoln	H0225	Carolinas HealthCare System Lincoln	101	0	16,822	1.0288	18,844	52	77	-24	
Lincoln Total			**101**	**0**							**0**
Macon	H0034	Angel Medical Center	59	0	5,574	1.0615	7,076	19	29	-30	
Macon	H0193	Highlands-Cashiers Hospital**	24	0	2,727	1.0615	3,462	9	14	-10	
Macon Total			**83**	**0**							**0**
Martin	H0078	Martin General Hospital	49	0	4,141	-1.1174	4,141	11	17	-32	
Martin Total			**49**	**0**							**0**
McDowell	H0097	Mission Hospital McDowell	65	0	7,298	1.0121	7,659	21	31	-34	
McDowell Total			**65**	**0**							**0**
Mecklenburg		2018 Acute Care Bed Need Determination	0	50		1.0136	0	0	0	-50	
Mecklenburg	H0042	Carolinas HealthCare System Pineville	206	15	64,405	1.0136	67,978	186	261	40	
Mecklenburg	H0255	Carolinas HealthCare System University	100	0	24,160	1.0136	25,500	70	105	5	
Mecklenburg	H0071	Carolinas Medical Center	1,010	45	307,039	1.0136	324,072	888	1,136	81	
		Carolinas HealthCare System Total	1,316	60	395,604		417,551	1,144	1,502	126	
Mecklenburg	H0282	Novant Health Huntersville Medical Center**	91	48	22,640	1.0136	23,896	65	98	-41	
Mecklenburg	H0270	Novant Health Matthews Medical Center	154	0	35,724	1.0136	37,706	103	145	-9	
Mecklenburg	H0010	Novant Health Presbyterian Medical Center	567	-48	127,232	1.0136	134,290	368	489	-30	
Mecklenburg		Presbyterian Hospital Mint Hill	0	50		1.0136	0	0	0	-50	
		Novant Health Total	812	50	185,596		195,892	537	732	-130	
Mecklenburg Total			**2,128**	**160**							**76**
Mitchell	H0169	Blue Ridge Regional Hospital**	46	0	3,577	-1.1070	3,577	10	15	-31	
Mitchell/Yancey Total			**46**	**0**							**0**
Montgomery	H0003	FirstHealth Montgomery Memorial Hospital**	37	0	527	-1.0542	527	1	2	-35	
Montgomery Total			**37**	**0**							**0**
Moore	H0100	FirstHealth Moore Regional Hospital	337	22	97,070	1.0257	107,453	294	392	33	
Moore Total			**337**	**22**							**33**

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2013, 2014, 2015, 2016 and 2017 were used to generate four-year growth rate.

(ADC= Average Daily Census)

DRAFT - 9/11/2018

Table 5A: Acute Care Bed Need Projections

2017 Utilization Data from Truven Health Analytics compiled by the Cecil B. Sheps Center for Health Services Research

Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC>400: 78%

Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	**License Number**	**Facility Name**	**Licensed Acute Care Beds**	**Adjustments for CONs/ Previous Need**	**Truven Health Analytics 2017 Acute Care Days**	**County Growth Rate Multiplier**	**4 Years Growth Using County Growth Rate (= 2017 Days, if negative growth)**	**2021 Projected Average Daily Census (ADC)**	**2021 Beds Adjusted for Target Occupancy**	**Projected 2021 Deficit or Surplus (surplus shows as a "-")**	**2021 Need Determination**
Nash	H0228	Nash General Hospital	262	0	47,137	-1.0168	47,137	129	181	-81	
Nash Total			**262**	**0**							**0**
New Hanover	H0221	New Hanover Regional Medical Center	647	31	182,005	1.0187	195,991	537	687	9	
New Hanover Total			**647**	**31**							**0**
Onslow	H0048	Onslow Memorial Hospital	162	0	27,642	-1.0386	27,642	76	114	-48	
Onslow Total			**162**	**0**							**0**
Orange	H0157	University of North Carolina Hospitals	799	132	233,539	1.0301	262,955	720	922	-9	
Orange Total			**799**	**132**							**0**
Pasquotank	H0054	Sentara Albemarle Medical Center**	182	0	21,050	1.0017	21,197	58	87	-95	
Pasquotank/Camden/Currituck/Perquimans Total			**182**	**0**							**0**
Pender	H0115	Pender Memorial Hospital**	43	0	1,470	-1.0681	1,470	4	6	-37	
Pender Total			**43**	**0**							**0**
Person	H0066	Person Memorial Hospital**	38	0	3,140	-1.1559	3,140	9	13	-25	
Person Total			**38**	**0**							**0**
Pitt	H0104	Vidant Medical Center	782	150	218,817	-1.0171	218,817	599	767	-165	
Pitt/Greene/Hyde/Tyrrell Total			**782**	**150**							**0**
Polk	H0079	St. Luke's Hospital	25	0	3,987	1.0003	3,993	11	16	-9	
Polk Total			**25**	**0**							**0**
Randolph	H0013	Randolph Hospital	145	0	17,840	-1.0533	17,840	49	73	-72	
Randolph Total			**145**	**0**							**0**
Richmond	H0265	FirstHealth Moore Regional Hospital - Hamlet (closed)**	54	0	2,464	-1.0790	2,464	7	10	-44	
Richmond	H0158	FirstHealth Moore Regional Hospital - Richmond**	99	0	8,466	-1.0790	8,466	23	35	-64	
		FirstHealth of the Carolinas Total	153	0	10,930		10,930	30	45	-108	
Richmond Total			**153**	**0**							**0**
Robeson	H0064	Southeastern Regional Medical Center	292	0	60,543	-1.0167	60,543	166	232	-60	
Robeson Total			**292**	**0**							**0**

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2013, 2014, 2015, 2016 and 2017 were used to generate four-year growth rate.

(ADC= Average Daily Census)

DRAFT - 9/11/2018

Table 5A: Acute Care Bed Need Projections

2017 Utilization Data from Truven Health Analytics compiled by the Cecil B. Sheps Center for Health Services Research

Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC>400: 78%

Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	**License Number**	**Facility Name**	**Licensed Acute Care Beds**	**Adjustments for CONs/ Previous Need**	**Truven Health Analytics 2017 Acute Care Days**	**County Growth Rate Multiplier**	**4 Years Growth Using County Growth Rate (= 2017 Days, if negative growth)**	**2021 Projected Average Daily Census (ADC)**	**2021 Beds Adjusted for Target Occupancy**	**Projected 2021 Deficit or Surplus (surplus shows as a "-")**	**2021 Need Determination**
Rockingham	H0023	Annie Penn Hospital	110	0	12,288	-1.0627	12,288	34	50	-60	
Rockingham	H0072	UNC Rockingham Health Care	108	0	10,153	-1.0627	10,153	28	42	-66	
Rockingham Total			**218**	**0**							**0**
Rowan	H0040	Novant Health Rowan Medical Center	203	0	38,052	1.0208	41,320	113	158	-45	
Rowan Total			**203**	**0**							**0**
Rutherford	H0039	Rutherford Regional Medical Center	129	0	13,730	-1.0824	13,730	38	56	-73	
Rutherford Total			**129**	**0**							**0**
Sampson	H0067	Sampson Regional Medical Center	116	0	10,113	-1.0230	10,113	28	42	-74	
Sampson Total			**116**	**0**							**0**
Scotland	H0107	Scotland Memorial Hospital	97	0	19,615	-1.0031	19,615	54	81	-16	
Scotland Total			**97**	**0**							**0**
Stanly	H0008	Carolinas HealthCare System Stanly	97	0	11,998	-1.0169	11,998	33	49	-48	
Stanly Total			**97**	**0**							**0**
Stokes	H0165	LifeBrite Community Hospital of Stokes**	53	0	1,689	1.0705	2,218	6	9	-44	
Stokes Total			**53**	**0**							**0**
Surry	H0049	Hugh Chatham Memorial Hospital	81	0	12,195	-1.0116	12,195	33	50	-31	
Surry	H0184	Northern Hospital of Surry County	100	0	12,636	-1.0116	12,636	35	52	-48	
Surry Total			**181**	**0**							**0**
Swain	H0069	Swain Community Hospital	48	0	630	-1.1088	630	2	3	-45	
Swain Total			**48**	**0**							**0**
Transylvania	H0111	Transylvania Regional Hospital	42	0	5,974	1.0047	6,087	17	25	-17	
Transylvania Total			**42**	**0**							**0**
Union	H0050	Carolinas HealthCare System Union	182	0	33,148	1.0404	38,836	106	149	-33	
Union Total			**182**	**0**							**0**
Vance	H0267	Maria Parham Health	91	11	18,696	-1.0301	18,696	51	77	-25	
Vance/Warren Total			**91**	**11**							**0**
Wake	H0238	Duke Raleigh Hospital	186	0	43,615	1.0115	45,661	125	175	-11	

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2013, 2014, 2015, 2016 and 2017 were used to generate four-year growth rate.

(ADC= Average Daily Census)

DRAFT - 9/11/2018

Table 5A: Acute Care Bed Need Projections

2017 Utilization Data from Truven Health Analytics compiled by the Cecil B. Sheps Center for Health Services Research

Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC>400: 78%

Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	**License Number**	**Facility Name**	**Licensed Acute Care Beds**	**Adjustments for CONs/ Previous Need**	**Truven Health Analytics 2017 Acute Care Days**	**County Growth Rate Multiplier**	**4 Years Growth Using County Growth Rate (= 2017 Days, if negative growth)**	**2021 Projected Average Daily Census (ADC)**	**2021 Beds Adjusted for Target Occupancy**	**Projected 2021 Deficit or Surplus (surplus shows as a "-")**	**2021 Need Determination**
Wake	H0065	Rex Hospital	439	0	111,647	1.0115	116,885	320	426	-13	
Wake		Rex Hospital Holly Springs	0	50		1.0115	0	0	0	-50	
		UNC Health Care Total	439	50	111,647		116,885	320	426	-63	
Wake	H0199	WakeMed	628	66	162,849	1.0115	170,489	467	598	-96	
Wake	H0276	WakeMed Cary Hospital	156	22	46,740	1.0115	48,933	134	188	10	
		WakeMed Total	784	88	209,589		219,422	601	786	-86	
Wake Total			**1,409**	**138**							**0**
Washington	H0006	Washington County Hospital	49	-37	457	-1.2655	457	1	2	-10	
Washington Total			**49**	**-37**							**0**
Watauga	H0077	Watauga Medical Center	117	0	13,537	-1.0165	13,537	37	56	-61	
Watauga Total			**117**	**0**							**0**
Wayne	H0257	Wayne UNC Health Care	255	0	47,400	1.0074	48,817	134	187	-68	
Wayne Total			**255**	**0**							**0**
Wilkes	H0153	Wilkes Regional Medical Center**	120	0	11,045	-1.0790	11,045	30	45	-75	
Wilkes Total			**120**	**0**							**0**
Wilson	H0210	Wilson Medical Center†	270	0	26,420	-1.0505	26,420	72	109	-161	
Wilson Total			**270**	**0**							**0**
Yadkin	H0155	Yadkin Valley Community Hospital (closed)^^^	22	0		0.0000	0	0	0	-22	
Yadkin Total			**22**	**0**							**0**

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2013, 2014, 2015, 2016 and 2017 were used to generate four-year growth rate.

(ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2017 Utilization Data from Truven Health Analytics compiled by the Cecil B. Sheps Center for Health Services Research

Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC>400: 78%

Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/ Previous Need	Truven Health Analytics 2017 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2017 Days, if negative growth)	2021 Projected Average Daily Census (ADC)	2021 Beds Adjusted for Target Occupancy	Projected 2021 Deficit or Surplus (surplus shows as a "-")	2021 Need Determination
		Grand Total All Hospitals	**21,063**	**785**	**4,425,601**		**4,657,313**				**176**

* Acute care beds in the "Adjustments for CONs/Previous Need" column are to be converted to inpatient psychiatric beds. This conversion is exempt from certificate of need review, pursuant to G.S. 131E-184(c).

** Truven Health Analytics acute days of care data and the Division of Health Service Regulation Hospital License Renewal Application days of care data have a greater than ± 5% discrepancy between the two data sources.

*** Duke University Hospital is licensed for 14 acute care beds under Policy AC-3. The 14 beds are not counted when determining acute care bed need.

^ The Division of Health Service Regulation received notice on September 19, 2017 from Duke LifePoint Maria Parham Medical Center regarding designation of Franklin Medical Center as a legacy medical care facility. The facility has 36 months from the date of its notice to reopen the hospital.

^^ The Division of Health Service Regulation received notices from two different buyers regarding the designation of Vidant Pungo Hospital as a legacy medical care facility. The prospective buyers have 36 months from the date of their respective notices to reopen the hospital. One notice was effective on May 16, 2016, and the other was effective on June 14, 2016.

^^^ The Division of Health Service Regulation received notice on January 19, 2016 from Yadkin Valley Community Hospital regarding designation as a legacy medical care facility. The facility has 36 months from the date of its notice to reopen the hospital.

† One acute care bed was converted to a psychiatric bed on November 13, 2017, and has been removed from the acute care bed inventory.

†† Charles A. Cannon, Jr. Memorial Hospital received a grant from the Dorothea Dix Hospital Property Fund to convert 27 acute care beds to adult psychiatric beds. This project is exempt from certificate of need review and the beds are not yet accounted for in Table 5A.

††† Duke LifePoint Maria Parham Medical Center received a grant from the Dorothea Dix Hospital Property Fund to renovate and convert 33 acute care beds to adult psychiatric beds on the site of the closed Franklin Medical Center. This project is exempt from certificate of need review and the beds are not yet accounted for in Table 5A.

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2013, 2014, 2015, 2016 and 2017 were used to generate four-year growth rate.

(ADC= Average Daily Census)