# **ATTACHMENT - REQUIRED STATE AGENCY FINDINGS**

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

DECISION DATE: March 21, 2014 PROJECT ANALYST: Kim Randolph TEAM LEADER: Lisa Pittman

PROJECT I.D. NUMBER: F-10213-13/ Novant Health Matthews Medical Center/ Add 20 acute

care beds by relocating 20 existing acute care beds from Novant

Health Presbyterian Medical Center/ Mecklenburg County

## REVIEW CRITERIA FOR NEW INSTITUTIONAL HEALTH SERVICES

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

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

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Novant Health Matthews Medical Center (Matthews) proposes to relocate 20 existing acute care beds from Novant Health Presbyterian Medical Center (Presbyterian) in Charlotte for a total of 154 acute care beds at Matthews upon completion of the project. To accommodate the 20 new acute care beds, Matthews will add 12 acute care beds to the second floor by constructing a 26,532 square feet, two story building and will convert 8 existing unlicensed observation beds on the fifth floor to 8 licensed acute care beds. Specifically, in Section II.1, page 10, Matthews proposes to add the 20 beds to its Women's Center, Intensive Care Unit (ICU), and acute inpatient medical/surgical area as follows:

- Add seven Labor Delivery Recovery and Post-Partum (LDRP) beds, increasing the LDRP beds from 23 to 30 beds on the second floor;
- Add twelve general medical/surgical inpatient acute care beds including;
  - Two licensed ante-partum beds located on the second floor;
  - Two licensed gynecology beds located on the second floor;

- Eight licensed inpatient beds, in order to convert eight unlicensed observation beds to licensed beds on the fifth floor of the Matthews bed tower; and
- Add one ICU bed, increasing the ICU beds from 9 to 10 on the fifth floor of the Matthews bed tower.

The applicant does not propose to increase the number of licensed acute care beds in Mecklenburg County, add any new health service, or acquire equipment for which there is a need determination in the 2013 State Medical Facilities Plan (2013 SMFP). Therefore, there are no need determinations in the 2013 SMFP that are applicable to this review. However, AC-5 and Policy GEN-4 of the 2013 SMFP are applicable to this review.

Policy AC-5 is applicable to this review because the applicant proposes to construct new space to accommodated 12 of the 20 existing acute care beds it will relocate from Presbyterian.

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

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

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

In Section III.2, page 66, and Exhibit 4 of the application, the applicant provides Matthews' historical acute care bed utilization, as reported in the 2009-2013 Hospital

License Renewal Applications (HLRAs), and the projected acute care bed utilization from 2015 through the first three years of the proposed project, as shown in the table below.

Fiscal Year	Matthews Licensed Acute Care Beds	Matthews Patient Days	Average Daily Census	Percent Change	Average Occupancy Rate
2009 Actual	102	31,418	86	N/A	84.4%
2010 Actual	102	32,833	90	4.3%	88.2%
2011 Actual	114	33,662	92	2.5%	80.9%
2012 Actual	117	32,061	88	-5.0%	74.9%
2013 Actual + Estimated*	117	30,465	83	-5.2%	71.3%
2014 Projected	134 **	30,580	84	0.4%	62.5%
Calendar Year					
2015 Projected	134	37,291	102	18.0%	76.2%
2016 Projected	134	37,836	103	1.4%	77.1%
2017 Projected - Year 1	154	39,436	108	4.1%	70.2%
2018 Projected - Year 2	154	40,540	111	2.7%	72.1%
2019 Projected - Year 3	154	40,191	110	-0.9%	71.5%

<sup>\*</sup> In 2013, Matthews provided actual patient days for January-July and estimated patient days for Matthews

As shown in the table above, Matthews projects a facility average daily census (ADC) of 102-111 after completion of this project. Therefore, pursuant to utilization targets in Policy AC-5 of the 2013 SMFP, the projected target occupancy for Matthews' 154 licensed acute care beds is 71.4% percent. Matthews projects its 154 licensed acute care beds will operate above the target occupancy rate of 71.4% by the second operating year (CY 2018) following completion of the project.

Projected utilization is based on reasonable, credible, and supported assumptions. See Criterion (3) for discussion regarding projected utilization which is incorporated hereby as if set forth fully herein. The applicant adequately demonstrates the need to maintain the acute care bed capacity proposed in this application and the application is consistent with Policy AC-5.

Policy GEN-4 is applicable to this review because the applicant is proposing a capital expenditure greater than \$5 million to develop, replace, renovate or add to a health service facility pursuant to G.S. 131E-178.

Policy GEN-4: Energy Efficiency and Sustainability for Health Service Facilities states

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

and Carmel OB/GYN for Q4, August-December. Carmel OB/GYN was included because effective October 1, 2013, Carmel OB/GYN started admitting 100% of their patients to Matthews.

<sup>\*\*</sup> On September 27, 2013, 17 new acute care beds became operational – CON Project I.D.# F-8437-09.

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

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

# In Exhibit 12 the applicant states

"Novant Health Matthews Medical Center (NHMMC) proposes to improve the efficient use of energy resources throughout its campus by creating, implementing, and following an effective Sustainable Energy Management Plan (SEMP).

The objective of the NHMMC SEMP is to promote good stewardship of our environment, community resources, and maintain an effective energy management program to reduce operating costs and enable us to provide compassionate service to a greater number of persons throughout the community.

...

- Recent activity associated with managing these costs include the following:
  - Changing incandescent bulbs to compact fluorescent/LED
  - Changing exit signs to LED
  - Installing occupancy sensors on lighting in meeting rooms
  - Survey of steam traps
  - Optimizing boiler efficiency
  - Installing water meters on cooling towers
  - Evaluating/installing Variable Frequency Drives for Air Handling Units
  - Evaluating cog drive belts on fan motors
  - Evaluating pressure drop on Air Handling Unit coils
  - Evaluating effect of water treatment on energy efficiency
  - Evaluating low flow plumbing fixtures"

The applicant adequately demonstrates that it will assure improved energy efficiency and water conservation in the proposed project. Therefore, the application is consistent with Policy GEN-4.

In summary, the application is conforming to Policy AC-5 and Policy GEN-4. Therefore, the application is conforming to this criterion.

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

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Matthews proposes to relocate 20 existing acute care beds from Presbyterian in Charlotte for a total of 154 acute care beds at Matthews upon completion of the project. The applicant does not propose to increase the number of licensed acute care beds in Mecklenburg County as a result of this project.

To accommodate the 20 new acute care beds, Matthews will add 12 acute care beds to the second floor by constructing a 26,532 square feet, two story building and will convert 8 existing unlicensed observation beds on the fifth floor to 8 licensed acute care beds. Specifically, in Section II.1, page 10, Matthews proposes to add the 20 beds to its Women's Center, ICU, and acute inpatient medical/surgical area as follows:

- Add seven Labor Delivery Recovery and Post-Partum (LDRP) beds, increasing the LDRP beds from 23 to 30 beds on the second floor, to accommodate the increased demand for obstetrical and gynecological services caused by the addition of Carmel OB/GYN patients starting October 1, 2013;
- Add twelve general medical/surgical inpatient acute care beds to accommodate the increased demand for obstetrical, gynecological, and cardiac services including;
  - Two licensed ante-partum beds located on the second floor;
  - Two licensed gynecology beds located on the second floor;
  - Eight licensed inpatient beds, in order to convert eight unlicensed observation beds to licensed beds on the fifth floor of the Matthews bed tower; and
- Add one ICU bed, increasing the ICU beds from 9 to 10 on the fifth floor of the Matthews bed tower. The applicant states this demand is based on Matthews' plan to expand access to interventional cardiology procedures during the first quarter of CY 2014, to enable the treatment, rather than transfer, of higher acuity cardiac patients.

In Section III.1, page 28, the applicant states this new two story building is designed to expand and modernize the existing Matthews Women's Center, located on the second floor, by adding a dedicated entrance to the Women's Center on the first floor and providing additional space and beds dedicated to the care of women on the second floor, which includes a corridor connecting the new building to the existing Matthews Women's Center.

# **Population to be Served**

In Section III.4, pages 69-70, the applicant provides the actual CY 2012 Matthews patient origin data for the entire facility, medical/surgical inpatient services, ICU inpatient services, and obstetrics inpatient service, as illustrated below.

**CY 2012 Matthews Patient Origin** 

County	Percent of Patients Entire Facility	Percent of Patients Medical/Surgical	Percent of Patients ICU	Percent of Patients Obstetrics
Mecklenburg	53.6%	55.2%	56.0%	49.8%
Union	35.0%	32.4%	34.3%	40.6%
Other *	11.4%	12.4%	9.7%	9.6%
Total	100.0%	100.0%	100.0%	100.0%

<sup>\*</sup> Includes the other North Carolina counties and other states listed on page 20 of the Matthews 2013 HLRA.

In Section III.5, pages 70-74, and Exhibit 4, Table 28 of the application, the applicant provides the CY 2012 historical patient origin for Matthews' inpatient services combined with Carmel OB/GYN's admissions to other Mecklenburg County inpatient facilities. The applicant states Carmel OB/GYN was included because effective October 1, 2013, Carmel OB/GYN started admitting 100% of their patients to Matthews. On page 73, the applicant states the projected patient origin is based on the CY 2012 combined patient origin. The following table illustrates the applicant's projected patient origin for the first three years of operation, CY 2017 – CY 2019, following completion of the project.

County	CY 2012 Combined* Patient Origin	Projected PY 1 CY 2017	Projected PY 2 CY 2018	Projected PY 3 CY 2019
Southern Mecklenburg County	48.0%	4,961	5,087	5,066
Union County	33.3%	3,437	3,524	3,509
Total Matthews Service Area**	81.3%	8,398	8,610	8,575
All	Others			
Other Mecklenburg County Zip Codes	7.6%	783	802	799
Other North Carolina	5.1%	523	536	534
Other South Carolina	4.6%	477	490	488
Other States	1.5%	155	159	158
All Others	18.7%	1,938	1,987	1,979
Total	100.0%	10,336	10,597	10,554

<sup>\*</sup> The combined patient origin includes Matthews admissions and Carmel OB/GYN admissions to other inpatient facilities.

The applicant adequately identifies the population proposed to be served.

## **Need for the Services Proposed**

In Section III.1, page 28, the applicant states Matthews is proposing "...to meet the growing demand for inpatient obstetric and medical surgical services in southern Mecklenburg County and Union County through the addition of 20 acute care beds." On page 29, the applicant states "Carmel OB/GYN shifted all of its inpatient utilization to NHMMC effective October 1, 2013." On page 30, the applicant states there is strong physician and community support for the proposed project as evidenced by the letters of support in Exhibits 13-15.

In Section III.1, page 29, the applicant describes the factors supporting the need for the proposed project including, implementation of the Patient Protection and Affordable Care Act (pages 30-31), impact of NH Carmel OB/GYN volume shifting to Matthews (pages 31-33), influence of women in health care decision making (page 33), active medical staff growth and physician recruitment at Matthews (pages 34-36), impact of new programmatic initiatives at Matthews (pages 36-39), increased market share at Matthews (page 40), increasing population in the Matthews service area (page 41), increasing population in Mecklenburg and Union counties (pages 41-44), and the population growth rate and development in the Matthews service area (pages 44-54).

In Section IV.1, pages 79-80, the applicant provides the historical annual utilization for CY 2012 and 2013 (including estimated projections for Q4 of 2013) and the projected number of patient days, by service component, to be provided at Matthews for the first three operating years following completion of the project, as shown below.

<sup>\*\*</sup> In Section III.5, page 70, the applicant states the proposed service area includes 10 zip code areas in southern Mecklenburg County and all of Union County as shown on page 71 and Exhibit 4, Table 28 of the application.

## **Matthews Acute Care Bed Utilization**

	Historical	Historical	PY 1	PY 2	PY 3**
	CY 2012	CY 2013***	CY 2017	CY 2018	CY 2019
Total Cases	7,925	7,854	10,336	10,597	10,505
Total Patient Days of Care	30,200	30,890	39,436	40,540	40,191
# of Licensed Beds	117	117*	154	154	154
Average Daily Census (ADC)	82.74	84.63	108.04	111.07	110.11
Average Occupancy Rate	70.72%	72.33%	70.16%	72.12%	71.50%
Medical/Surgical					
Cases (including NICU)	4,956	4,902	5,805	6,001	5,955
Days of Care	22,851	23,195	27,452	28,373	28,157
# of Beds	88	88*	114	114	114
Average Daily Census (ADC)	62.61	63.55	75.21	77.73	77.14
Average Occupancy Rate	71.14%	72.21%	67.97%	68.19%	67.67%
ICU					
Cases	516	451	944	977	946
Days of Care	1,417	1,381	2,889	2,990	2,895
# of Beds	6	6*	10	10	10
Average Daily Census (ADC)	3.88	3.78	7.92	8.19	7.93
Average Occupancy Rate	64.70%	63.06%	79.15%	81.92%	79.32%
OB					
Cases	2,453	2,490	3,586	3,619	3,604
Days of Care	5,932	6,313	9,094	9,177	9,139
# of Beds	23	23*	30	30	30
Average Daily Census (ADC)	16.25	17.30	24.92	25.14	25.04
Average Occupancy Rate	70.66%	75.20%	83.05%	83.81%	83.46%

<sup>\*</sup> In O4 of CY 2013, licensed beds increased to 134 total acute care beds; 102 med/surg, 23 LDRP and 9 ICU.

and Carmel OB/GYN for Q4, August-December.

As shown in the table above, Matthews projects 40,191 total patient days of care in the third operating year and, therefore, projects an average annual occupancy rate of 71.5% in the third operating year. Also, in Section I.2, page 6, the applicant provides the following information showing the hospitals Novant Health will operate in Mecklenburg County in the third operating year (CY 2019) following completion of the project.

<sup>\*\*</sup> The applicant adjusted Matthews' CY 2019 projections to reflect the projected impact of Novant Health Mint Hill Medical Center's acute care and obstetrical beds opening in the Matthews service area on January 1, 2019. The applicant provides the Novant Health Mint Hill Medical Center (Mint Hill) assumptions in Exhibit 4, Tables 12-17.

<sup>\*\*\*</sup> In 2013, Matthews provided actual patient days for January-July and estimated patient days for Matthews

Novant Health Hospitals in Mecklenburg County	# of Beds
Novant Health Charlotte Orthopaedic Hospital	64
Novant Health Huntersville Medical Center	75
Novant Health Matthews Medical Center	154
Novant Health Mint Hill Medical Center	50
Novant Health Presbyterian Hospital	519
Total Beds – Novant Health, Inc.	862

Note: The applicant did not provide an average annual occupancy rate for the Novant Health System in Mecklenburg County following completion of this project.

In Section III.1, pages 28-65, and Exhibit 4, the applicant describes the assumptions and methodology used to project the number of patient days to be provided during the first three years of operation as shown below.

## **Acute Care Bed Utilization**

In Section III.1, pages 55-65, the applicant summarizes the assumptions and methodology used to project utilization of acute care beds at Matthews as follows.

	Acute Care Utilization Methodology			
Step	Description			
1	Determine the obstetrical use rate for Mecklenburg and Union counties.			
2	Determine the obstetrical market share for Matthews and Carmel OB/GYN.			
3	Calculate projected obstetrical utilization.			
4	Determine historical medical/surgical days of care excluding the Level III NICU.			
5	Determine the growth rate for medical/surgical acute inpatient days of care.			
6	Calculate medical/surgical acute inpatient days of care.			
7	Calculate future Level III NICU days of care at Matthews.			
8	Calculate total medical/surgical acute inpatient days of care.			
9	Calculate ICU days of care.			

Step 1: Determine the obstetrical use rate for Mecklenburg and Union counties.

On page 55, and Exhibit 4, Table 4 of the application, the applicant states that using Truven data and North Carolina population data for women ages 15-44, it calculated historical obstetrical use rates in Mecklenburg and Union counties as shown below.

## **Matthews Historical Obstetrical Use Rates**

	CY 2010	CY 2011	CY 2012	CY 2013*	Four-Year Average
Mecklenburg County					
Women 15-44	216,338	218,269	222,899	227,237	
Births	14,853	14,678	14,307	14,500	
OB Use Rate per 1,000	68.66	67.25	64.19	63.81	65.97
<b>Union County</b>					
Women 15-44	40,687	41,177	41,561	41,780	
Births	2,526	2,471	2,393	2,438	
OB Use Rate per 1,000	62.08	60.01	57.58	58.35	59.51

<sup>\*</sup> In 2013, Matthews provided actual patient days for January-July and estimated patient days for Matthews and Carmel OB/GYN for Q4, August-December.

The applicant states in order to remain conservative it utilized the CY 2013 projected use rates of 63.18 births in Mecklenburg County and 58.35 births in Union County, which it states are both less than the calculated four year average use rates, to project obstetrical admissions at Matthews in Step 3 below.

## Step 2: Determine the obstetrical market share for Matthews and Carmel OB/GYN.

In Section III.1, pages 55-56, and Exhibit 4, Tables 4 and 36 of the application, the applicant states Carmel OB/GYN made a decision to participate with only one health system, Matthews, effective October 1, 2013. NCMMC reviewed the zip code area patient origin for Carmel OB/GYN patients and determined that over 95% of its patients were located in zip code areas served by Matthews. The applicant states it adjusted Carmel OB/GYN's volumes to reflect only patients in the Matthews service area. The applicant states it then combined its obstetrical admissions with Carmel OB/GYN's obstetrical admissions to calculate the market share as shown below.

**CY 2012 Obstetrical Admissions** 

County	Matthews Obstetrical Admissions	Carmel OB/GYN Admissions*	Matthews and Carmel OB/GYN Combined
Mecklenburg	1,221	597	1,818
Union	997	165	1,162

<sup>\*</sup> Includes only the 95% of Carmel OB/GYN admissions located in the Matthews service area.

## **Acute Care Market Share of Obstetrical Admissions**

	CY 2012
Mecklenburg County	
Births/Obstetrical Admissions	14,307
Matthews and Carmel OB/GYN Obstetrical Admissions	1,818
Matthews and Carmel OB/GYN Obstetrical Market Share	12.7%
Union County	
Births/Obstetrical Admissions	2,393
Matthews and Carmel OB/GYN Obstetrical Admissions	1,162
Matthews and Carmel OB/GYN Obstetrical Market Share	48.6%

The applicant states it used the combined Matthews and Carmel OB/GYN market share in CY 2012 to project obstetrical admissions at Matthews in Step 3 below.

# Step 3: Calculate projected obstetrical utilization.

In Section III.1, page 56, and Exhibit 4, Tables 4, 35, and 36 of the application, the applicant states it used the historical use rates calculated in Step 1 of 63.81 for Mecklenburg County and 53.35 for Union County and the calculated market share in Step 2 of 12.7% for Mecklenburg County, 48.6% for Union County, and 12.4% for admissions outside Mecklenburg and Union counties, to project obstetrical admissions in the first three years of operation after completion of the project, as shown below.

	PY 1	PY 2	PY 3
	CY 2017	CY 2018	CY 2019
Mecklenburg County			
Women 15-44	238,387	241,144	244,165
OB Use Rate	63.81	63.81	63.81
Births	15,211	15,387	15,580
Matthews and Carmel OB/GYN Obstetrics Market Share	12.7%	12.7%	12.7%
Projected Matthews Obstetrical Admissions	1,933	1,955	1,980
Union County			
Women 15-44	42,624	42,837	43,052
OB Use Rate	58.35	58.35	58.35
Births	2,487	2,500	2,512
Matthews and Carmel OB/GYN Obstetrics Market Share	48.6%	48.6%	48.6%
Projected Matthews Obstetrical Admissions	1,208	1,214	1,220
Mecklenburg and Union Counties			
Projected Matthews Obstetrical Admissions	3,141	3,169	3,200
Outside Mecklenburg and Union Counties			
Percentage of Matthews/Carmel OB/GYN Obstetrical Admissions*	12.4%	12.4%	12.4%
Admissions from Other Counties	446	450	454
Total Projected Obstetrical Admissions	3,586	3,619	3,654

<sup>\*</sup> Calculated in Exhibit 4, Table 35.

On page 57, the applicant states to project total obstetrical utilization, it compared the Matthews historical average length of stay with the Carmel OB/GYN average length of stay at CMC-Pineville for the last 12 months. Matthews' average length of stay (ALOS) was 2.54 days per patient and Carmel OB/GYN's ALOS was 2.57 days per patient. To remain conservative, the applicant states it used Matthews' 2.54 days per patient ALOS to project obstetrical utilization. In Section III.1, page 58, the applicant provides the total projected obstetrical utilization at Matthews, as shown below.

**Matthews' Total Projected Obstetrical Utilization** 

	PY 1	PY 2	PY 3*
	CY 2017	CY 2018	CY 2019
Projected Obstetrical Admissions	3,586	3,619	3,654
Matthews ALOS	2.54	2.54	2.54
Projected Obstetrical Days of Care	9,094	9,177	9,265
Projected Impact of Mint Hill's Days of Care*	0	0	126
Adjusted Projected Obstetrical Days of Care	9,094	9,177	9,139
ADC	24.9	25.1	25.0
Projected LDRP Beds at Matthews	30	30	30
Projected Occupancy Rate	83.1%	83.8%	83.5%

<sup>\*</sup> The applicant adjusted Matthews' CY 2019 projections to reflect the projected impact of Mint Hill's acute care and obstetrical beds opening in the Matthews service area on January 1, 2019. The applicant provides the Mint Hill assumptions in Exhibit 4, Tables 12-17.

As shown above, the applicant projects utilization of the 30 LDRP beds to be above 83% in

the first three years of operation.

The applicant adequately demonstrates it is reasonable to project obstetrical utilization based on obstetrical use rates and market share for the Matthews service area.

## Step 4: Determine historical medical/surgical days of care excluding the Level III NICU.

In Section III.1, pages 58-59, and Exhibit 4, Table 1 of the application, the applicant states it used historical medical/surgical days of care and historical growth rates at Matthews to project Matthews' acute inpatient medical/surgical utilization as shown below.

Matthews' Historical Medical/Surgical Acute Care Bed Utilization

	Historical CY 2011	Historical CY 2012	Estimated CY 2013*
Medical/Surgical Days of Care (including NICU)	23,360	22,851	23,195
NICU Days of Care	1,259	1,021	1,065
Medical/Surgical Days of Care (without NICU)	22,101	21,830	22,130
Medical/Surgical ADC (without NICU)	60.6	59.8	60.6
Medical/Surgical Beds (without NICU)	77	77	77
Occupancy Rate	78.7%	77.7%	78.7%

<sup>\*</sup> In 2013, Matthews provided actual patient days for January-July and estimated patient days for Matthews

and Carmel OB/GYN for Q4, August-December.

The applicant states it separated the medical/surgical days of care from the Level III NICU days of care, even though it is not increasing the number of Level III NICU beds provided at Matthews. The Level III NICU beds were separated to account for the additional increase in Level III NICU utilization as a result of the increased demand for obstetrical services by Carmel OB/GYN patients. The opening of Mint Hill will not impact the current Level III NICU bed utilization because Mint Hill will not have Level III NICU beds. The applicant then uses the Level III NICU bed utilization to project total obstetrical days of care in Step 7 below.

On page 59, the applicant states "As shown in the previous table, utilization of medical/surgical acute inpatient beds at NHMMC has been approximately 78% during the last three years." The applicant states the noise and disruption related to major construction at Matthews, for the fifth floor addition to the bed tower which started in April 2012, may explain the flat growth at Matthews from 2012-2013. Construction on the new fifth floor at Matthews was completed in September 2013.

The applicant states it used the historical days of care, excluding the Level III NICU beds, to project medical/surgical acute inpatient days of care at Matthews in Step 6 below.

## Step 5: Determine the growth rate for medical/surgical acute inpatient days of care.

In Section III.1, pages 59-60, and Exhibit 4, Tables 2, 7 and 24 of the application, the applicant states it used its historical experience at Matthews and considered the impact of its expanded services starting in 2014, to project annual growth rates for the medical/surgical acute inpatient days of care. Some of the expanded services starting in 2014 are cardiac, obstetrical, and services as a result of the Affordable Care Act (ACA). Matthews also considered its 17 bed expansion, completed September 27, 2013, which expanded the ICU and increased the general medical/surgical acute care bed capacity on the new fifth floor at Matthews. Additionally, Matthews considered the impact of the opening of Mint Hill on January 1, 2019. To remain conservative, the applicant used the growth rates and assumptions as shown below.

Matthews' Medical/Surgical Growth Rate Assumptions

	Projected Growth Rate	Assumptions*
CY 2014^	5.50%	17 new medical/surgical beds opened at Matthews in September 2013.*
CY 2015	3.50%	Projected a lower growth rate in the second year based on historical experience.
CY 2016	1.66%	Used a lower than weighted county population growth rate due to construction on campus for the new Women's Center in 2015.
PY 1, CY 2017	5.50%	Eight new acute care medical/surgical beds will open in January 2017 as a result of this project.*
PY 2, CY 2018	3.50%	Projected a lower growth rate in the second year based on historical experience.**
PY 3, CY 2019**	1.66%	Used a lower than weighted county population growth rate based on historical experience.

<sup>\*</sup> NHMMH last added acute care beds in 2008. The first year growth rate in 2009 exceeded 12%. The second year growth rate, in 2010, exceeded 4.5%, then leveled off and decreased slightly due to initiation of major construction on site.

The applicant states it used the projected growth rates for medical/surgical acute inpatient days of care to project the total medical/surgical acute inpatient days of care at Matthews in Step 6 below.

## Step 6: Calculate medical/surgical acute inpatient days of care.

In Section III.1, pages 60-61, and Exhibit 4, Table 1 of the application, the applicant projects medical/surgical days of care using historical medical/surgical days of care, excluding Level III NICU days of care, from Step 4 multiplied by the corresponding annual projected growth rate from Step 5, as shown below.

<sup>\*\*</sup> The applicant adjusted Matthews' CY 2019 projections to reflect the projected impact of Mint Hill's acute care and obstetrical beds opening in the Matthews service area on January 1, 2019. The applicant provides the Mint Hill assumptions in Exhibit 4, Tables 12-17.

<sup>^</sup> PY 1 for CON Project I.D.# F-8437-09, the opening of 17 new beds.

Matthews' Projected Medical/Surgical	CY	CY	CY	CY	CY	CY	CY**
Utilization***	2013	2014	2015	2016	2017	2018	2019
Annual Projected Growth Rate (Step 5)		5.50%	3.50%	1.66%	5.50%	3.50%	1.66%
Growth (Days of Care without NICU)		1217	817	401	1351	907	445
Projected Days of Care (without NICU)	22,130*	23,347	24,164	24,566	25,918	26,825	27,271
Projected Impact of Mint Hill							
(Shift of Days of Care)*	0	0	0	0	0	0	678
Adjusted Projected Days of Care*	22,130	23,347	24,164	24,566	25,918	26,825	26,594

<sup>\*</sup> From Step 4.

On page 61, the applicant states it uses the adjusted projected days of care above to project the bed need at Matthews following completion of the project, as shown below.

Projected CY 2017-2019 Matthews' Medical/Surgical Utilization

Medical/Surgical Utilization	PY 1 CY 2017	PY 2 CY 2018	PY 3* CY 2019		
Adjusted Projected Days of Care*	25,918	26,825	26,594		
Medical/Surgical ADC	71.0	73.5	72.9		
Beds Needed at 66.7% SMFP Target Occupancy	107	110	109		
Beds Needed at 71.4% SMFP Target Occupancy	99	103	102		
Projected Beds	106	106	106		

<sup>\*</sup> The applicant adjusted Matthews' CY 2019 projections to reflect the projected impact of Mint Hill's acute care and obstetrical beds opening in the Matthews service area on January 1, 2019. The applicant provides the Mint Hill assumptions in Exhibit 4, Tables 12-17.

Based on table above, the applicant states it demonstrates a need for between 102 and 109 beds in CY 2019, and the applicant is proposing a bed capacity of 106 beds, which is in the middle of that range.

The applicant adequately demonstrates it is reasonable to project medical/surgical days of care based on Matthews' historical experience.

# Step 7: Calculate future Level III NICU days of care at Matthews.

In Section III.1, page 62, the applicant states Level III NICU days of care historically equaled 15% to 18 % of the total obstetrical days of care at Matthews, as shown below.

CY	CY	CY	CY	Estimated
2009	2010	2011	2012	CY 2013**

<sup>\*\*</sup> The applicant adjusted Matthews' CY 2019 projections to reflect the projected impact of Mint Hill's acute care and obstetrical beds opening in the Matthews service area on January 1, 2019. The applicant provides the Mint Hill assumptions in Exhibit 4, Tables 12-17.

<sup>\*\*\*</sup> Numbers do not foot due to rounding.

Level III NICU Days of Care	1,014	1,217	1,259	1,021	1,065*
Obstetrical Days of Care	6,678	7,286	6,841	5,932	6,313
% of Level III NICU Days of Care*	15.2%	16.7%	18.4%	17.2%	16.9%

<sup>\*</sup> Level III NICU days of care ÷ obstetrical days of care.

The applicant states the projected Level III NICU days of care were based on the projected obstetrical days of care from Step 3 and the projected CY 2013 rate of 16.9% calculated above. The applicant states the Level III NICU projections listed below are not adjusted due to the opening of Mint Hill, since Mint Hill will only provide Level 1 Normal Newborn nursery services.

Level III NICU	PY 1 CY 2017	PY 2 CY 2018	PY 3 CY 2019
Projected Obstetrical Days	9,094	9,177	9,265
% of Level III NICU Days of Care	16.9%	16.9%	16.9%
Projected Level III NICU Days of Care*	1,534	1,548	1,563
Level III NICU Beds at Matthews	8	8	8
Average Occupancy Rate	52.5%	53.0%	53.5%

<sup>\*</sup> Projected obstetrical days x 16.9%. Totals do not foot due to rounding.

The applicant states the eight currently licensed Level III NICU beds are sufficient to meet the projected need of 1,563 days of care in PY 3.

## Step 8: Calculate total medical/surgical acute inpatient days of care.

In Section III.1, page 63, the applicant states it used the adjusted projected days of care from Step 6 plus the projected Level III NICU days of care calculated in Step 7 to determine the total projected medical/surgical days of care at Matthews, as shown below.

Medical/Surgical Days of Care	PY 1 CY 2017	PY 2 CY 2018	PY 3* CY 2019
Projected Days of Care (w/o NICU)	25,918	26,825	26,594
Level III NICU Projected Days of Care	1,534	1,548	1,563
Total Projected Days of Care	27,452	28,373	28,157

<sup>\*</sup> The applicant adjusted Matthews' CY 2019 projections to reflect the projected impact of Mint Hill's acute care and obstetrical beds opening in the Matthews service area on January 1, 2019. The applicant provides the Mint Hill assumptions in Exhibit 4, Tables 12-17.

## Step 9: Calculate ICU days of care.

In Section III.1, page 63, the applicant states to project future ICU utilization at Matthews it did not use historical utilization at Matthews, since it only operated a six bed ICU unit until September 27, 2013 and did not routinely provide specialized cardiac ICU services.

<sup>\*\*</sup> In 2013, Matthews provided actual patient days for January-July and estimated patient days for Matthews

and Carmel OB/GYN for Q4, August-December.

Three additional ICU beds were opened September 27, 2013 and expanded cardiac services in the ICU will be offered in the first quarter of 2014.

To project Matthews' ICU utilization, the applicant states

- "NHMMC reviewed the historical relationship between ICU days and general medical/surgical days at all North Carolina hospitals in FFY 2012." See Exhibit 4, Table 23. Historical ICU days at North Carolina hospitals with ICU's were equal to an average of 14.7% of total medical/surgical patient days (excluding Level II and Level III NICU days).
- Matthews reviewed the historical relationship between ICU days and total medical/surgical patient days at hospitals providing 24 hour/7 day interventional cardiac catheterization according to ST segment elevation myocardial infarction (STEMI) guidelines. Historical ICU days at North Carolina hospitals were equal to an average of 14.0% of total medical/surgical patient days (excluding Level II and Level III NICU days).
- Matthews reviewed historical ICU days at Novant Health Mecklenburg County acute care hospitals with ICU's. Historical ICU days at Novant Health Mecklenburg County acute care hospitals were equal to an average of 8.3% of total medical/surgical patient days (excluding Level II and Level III NICU days).

On page 63, the applicant concluded "NHMMC's expected ICU growth is not 100% consistent with the historical ICU experience of: North Carolina hospitals, STEMI hospitals, or Novant Health Mecklenburg County acute care hospitals with ICUs." On page 64, and Exhibit 4, Table 1, the applicant states as a result of this inconsistency, the applicant combined the Novant Health Mecklenburg County facility average of 8.3%, since the policies and procedures are consistent between inpatient facilities, with the experienced STEMI facility average of 14.0%, since it believes its ICU volume will expand with the implementation of STEMI guidelines during the first quarter of 2014, and used the resulting rate of 11.15%, as shown below.

ICU Utilization	PY 1 CY 2017	PY 2 CY 2018	PY 3* CY 2019
Adjusted Projected Medical/Surgical Days of Care**	25,918	26,825	26,594
% of ICU Days of Care***	11.15%	11.15%	11.15%
Projected ICU Days of Care	2,889	2,990	2,964
Projected ICU Days of Care Shifted to Mint Hill*	0	0	69
Adjusted Projected ICU Days of Care	2,889	2,990	2,895
ICU ADC	7.9	8.2	7.9
Projected Occupancy Rate for 10 ICU Beds	79.10%	81.90%	79.30%

<sup>\*</sup> The applicant adjusted Matthews' CY 2019 projections to reflect the projected impact of Mint Hill's acute care and obstetrical beds opening in the Matthews service area on January 1, 2019. The applicant provides the Mint Hill assumptions in Exhibit 4, Tables 12-17.

On page 64, the applicant states the Matthews projected ICU days of care with 10 ICU beds in PY 3 will result in an occupancy rate of 79.3%, as shown above. In Section II.5, page 15, the applicant states these projections include the assumption that expanded access to interventional cardiology procedures, with the addition of more interventional cardiologists once Matthews achieves STEMI status during the first quarter of 2014, will prevent approximately 100-150 current cardiac patients from by-passing the Matthews emergency department per year for cardiac treatment. The applicant states these additional cardiac patients will be treated at Matthews utilizing the interventional cardiac catheterization laboratory and will be admitted to the ICU and medical/surgical beds at Matthews.

The applicant adequately demonstrates the need for one additional ICU bed.

On page 64, the applicant projects Matthews' total acute care bed utilization, for 154 acute care beds, following completion of the project as shown below.

Total Acute Care Bed Utilization	PY 1 CY 2017	PY 2 CY 2018	PY 3* CY 2019
Projected Adjusted Obstetrical Days of Care (Step 3)	9,094	9,177	9,139
Projected Medical/Surgical Days of Care (Step 8)	27,452	28,373	28,157
Projected Adjusted ICU Days of Care (Step 9)	2,889	2,990	2,895
Total Projected Days of Care*	39,436	40,540	40,191
ADC	108.0	111.1	110.1
Projected Total Beds	154	154	154
Projected Occupancy Rate	70.2%	72.1%	71.5%

<sup>\*</sup> The applicant adjusted Matthews' CY 2019 projections to reflect the projected impact of Mint Hill's acute care and obstetrical beds opening in the Matthews service area on January 1, 2019. The applicant provides the Mint Hill assumptions in Exhibit 4, Tables 12-17.

On page 65, the applicant states Matthews' total projected days of care with 154 acute care beds in PY 3 will result in an occupancy rate of 71.5%, as shown above.

<sup>\*\*</sup> From Step 6.

<sup>\*\*\*</sup> ICU days of care ÷ medical/surgical days of care.

The applicant adequately demonstrates total projected utilization is based on reasonable, credible, and supported assumptions regarding projected obstetrical utilization, medical/surgical utilization, ICU utilization and adjustments in PY 3 for the opening of Mint Hill in CY 2019, another hospital in the Matthews service area.

## Access

In Section VI.2, page 98, and Exhibit 6, the applicant states

"It is the policy of all the Novant Health facilities and programs, including Novant Health Matthews Medical Center, to provide necessary services to all individuals without regard to race, creed, color, or handicap. Novant Health facilities and programs do not discriminate against the above-listed persons, or other medically underserved persons, regardless of their ability to pay."

CY 2012** Matthews' Patient Cases as a Percent of Total Utilization		Projected CY 2018***  Matthews' Patient Cases as a Percent of Total Utilization		
Self Pay/Indigent/Charity	12.41%	Self Pay/Indigent/Charity	12.21%	
Medicare/Managed Care	29.18%	Medicare/Managed Care	33.27%	
Medicaid	12.58%	Medicaid	14.58%	
Commercial Insurance	1.49%	Commercial Insurance	1.49%	
Managed Care	42.26%	Managed Care	36.87%	
Other*	2.08%	Other*	1.58%	
Total	100.00%	Total	100.00%	

<sup>\*</sup> Includes other government payors and worker's compensation.

\*\* Source: VI.12, page 116. \*\*\* Source: VI.14, page 118.

In Section VI.14, pages 118-120, the applicant projects increases in the Medicare and Medicaid patients served at Matthews in CY 2018, as shown above. On page 118, the applicant provides the assumptions and methodology used to project the payor mix. See Criterion (13) for additional discussion which is incorporated hereby as if set forth fully herein. The applicant demonstrates the medically underserved groups will have adequate access to the proposed services.

In Section VI, pages 98-112, the applicant adequately demonstrates the extent to which all residents of the service area, including the medically underserved, will have access to the proposed services.

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

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

C

Matthews proposes to expand its Women's Center, ICU, and acute inpatient medical/surgical beds by relocating 20 existing acute care beds from Presbyterian in Charlotte to Matthews.

In Section III.7, pages 76-77, and Exhibit 4, Table 31 of the application, the applicant states that the relocation of 20 acute care beds from Presbyterian will not negatively impact the patients served at Presbyterian in terms of any changes in services, costs to the patient or access by medically underserved populations. In Section II.9, page 27, the applicant states the space currently utilized by the 20 beds at Presbyterian is in the older area of the hospital and will be converted into support space for nursing and support staff. The following table illustrates the projected utilization of acute care beds at Presbyterian following completion of the proposed project.

Novant Health Presbyterian Medical Center Downtown Charlotte	PY 1 CY 2017	PY 2 CY 2018	PY 3* CY 2019
Projected Days of Care	150,161	152,800	155,485
Days Shifted to Mint Hill	0	0	2,988
Adjusted Days of Care	150,161	152,800	152,497
ADC	411	419	418
Acute Care Beds	519	519	519
Projected Occupancy Rate	79.3%	80.7%	80.5%

<sup>\*</sup> The applicant adjusted Matthews' CY 2019 projections to reflect the projected impact of Mint Hill's acute care and obstetrical beds opening in the Matthews service area on January 1, 2019. The applicant provides the Mint Hill assumptions in Exhibit 4, Tables 12-17.

As shown in the table above, in the third operating year (CY 2019), the applicant projects that the 519 acute care beds remaining at Presbyterian will operate at 80.5% of capacity. In Section III.1, pages 58-61, and Exhibit 4, the applicant provides the assumptions and methodology used to project utilization of acute care beds at both Presbyterian and Matthews. Projected utilization is based on reasonable, credible, and supported assumptions. See Criterion (3) for discussion regarding projected utilization which is incorporated hereby as if set forth fully herein.

The applicant adequately demonstrates that the needs of the population presently served will be adequately met following the relocation of 20 existing acute care beds from Presbyterian to Matthews. Therefore, the application is conforming to this criterion.

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

C

In Section III.3, pages 68-69, the applicant describes the alternatives it considered to meet the expanded need for Woman's Services, which include

- 1. Maintain the status quo. The applicant states that not developing the proposed expanded Women's Center and using existing space with an overflow unit on the fourth floor would not be an effective alternative. The applicant states the existing LDRP unit would not be able to handle the additional obstetrical volume related to the increased demand by Carmel OB/GYN patients. This option would also involve moving patients during their stay and would impede the expansion of cardiac services.
- 2. Up fit existing space utilizing an overflow unit. The applicant states that using existing space with an overflow unit on the fourth floor would not be an effective alternative because the existing 23 bed LDRP unit is not sufficient to handle the future and ongoing obstetrical volumes associated with new births by Carmel OB/GYN patients. This option would also involve moving patients during their stay and would impede the expansion of cardiac services.
- 3. Up fit existing space and build another building to expand services. The applicant states it selected this alternative because it provides the following:
  - 41,000 total square feet for the Matthews Women's Center;
  - Consolidation of all women's clinical services on the second floor;
  - Enhancement and addition of support services;
  - Comprehensive women's service offering gynecology and ante-partum beds;
  - Dedicated Women's Center entrance and lobby;
  - Expansion of the Central Energy Plant; and
  - Space for future growth in volume.

Note: The applicant did not discuss any options considered for the medical/surgical beds or ICU bed expansion proposed in the application.

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

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

- 1. Presbyterian Medical Care Corporation d/b/a Novant Health Matthews Medical Center shall materially comply with all representations made in the certificate of need application.
- 2. Presbyterian Medical Care Corporation d/b/a Novant Health Matthews Medical Center shall relocate no more than 20 acute care beds from Novant Health Presbyterian Medical Center. Presbyterian Medical Care Corporation d/b/a Novant Health Matthews Medical Center will be licensed for no more than 154 acute care beds following the completion of this project.
- 3. Novant Health Presbyterian Medical Center shall de-license 20 acute care beds. Upon completion of this project, Novant Health Presbyterian Medical Center shall be licensed for no more than 519 acute care beds.
- 4. Presbyterian Medical Care Corporation d/b/a Novant Health Matthews Medical Center shall not acquire, as part of this project, any equipment that is not included in the project's proposed capital expenditure in Section VIII of the application and that would otherwise require a certificate of need.
- 5. Presbyterian Medical Care Corporation d/b/a Novant Health Matthews Medical Center shall develop and implement an Energy Efficiency and Sustainability Plan for the project that conforms to or exceeds energy efficiency and water conservation standards incorporated in the latest editions of the North Carolina State Building Codes. The plan must be consistent with the applicant's representations in the written statement as described in paragraph one of Policy GEN-4.
- 6. Presbyterian Medical Care Corporation d/b/a Novant Health Matthews Medical Center shall acknowledge acceptance of and agree to comply with all conditions stated herein to the Certificate of Need Section in writing prior to issuance of the certificate of need.
- (5) Financial and operational projections for the project shall demonstrate the availability of funds for capital and operating needs as well as the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services by the person proposing the service.

C

In Section VIII.1, page 137, the applicant projects the capital cost for the project will be \$20,423,994. In Section VIII.3, page 138, the applicant states the capital cost will be financed with accumulated reserves of Novant Health, Inc. In Section IX.1, page 147, the applicant states it projects no start-up expenses or initial operating expenses since

Matthews is an existing hospital seeking to expand current women's services, ICU beds, and acute inpatient beds. Exhibit 8 contains a letter dated October 1, 2013, from the Senior Vice President Operational Finance, documenting the availability of funds and states

"This letter will serve to confirm that Novant Health will be funding the capital cost of \$20,423,994, from the Novant Health's Accumulated Reserves. In the alternative, Novant also reserves the right to seek tax exempt funding for all or part of this project as discussed in Section VIII of our CON Application."

Exhibit 8 of the application contains audited financial statements for Novant Health, Inc. and Affiliates for the years ending December 31, 2012 and 2011, which document that Novant Health Inc. and Affiliates had total assets of \$4,693,854,000 as of December 31, 2012, including \$267,637,000 in cash and cash equivalents, \$308,696,000 in short term investments, and \$2,163,123,000 in net assets (total assets less total liabilities). The applicant adequately demonstrates the availability of sufficient funds for the capital needs of the project.

The applicant provided pro forma financial statements for the first three calendar years of the project. For the Women's Center expansion, the applicant projects revenues will exceed operating expenses in each of the first three operating years of the project. In the pro forma financial statements for the additional acute care beds and for the ICU bed, the applicant projects expenses will exceed revenues, resulting in an operating loss, in each of the first three operating years as illustrated in the tables below.

Matthews Women's Center* 11 beds	PY 1 CY 2017	PY 2 CY 2018	PY 3 CY 2019
Projected # of Inpatient Days	9,094	9,177	9,139
Projected Average Charge (Gross patient revenue/Projected # of inpatient days)	\$2,328	\$2,421	\$2,518
Gross Patient Revenue	\$21,169,909	\$22,217,649	\$23,010,677
Total Revenue	\$10,460,063	\$10,977,752	\$11,369,588
Total Expenses	\$9,245,330	\$9,478,996	\$9,717,268
		\$1,498,756	
Net Income	\$1,214,733	[\$1,518,756]	\$1,652,320

\* Source: Form C, pages 164-165.

Matthews Acute Care* 8 Beds	PY 1	PY 2	PY 3
	CY 2017	CY 2018	CY 2019
Projected # of Inpatient Days	27,452	28,373	28,157

Projected Average Charge (Gross patient revenue/Projected # of inpatient days)	\$1,108	\$1,152	\$1,198
Gross Patient Revenue	\$30,417,440	\$32,695,446	\$33,744,402
Total Revenue	\$9,089,355	\$9,770,070	\$10,083,519
Total Expenses	\$10,386,378	\$10,717,961	\$11,141,635
Net Income(Loss)	(\$1,297,024)	(\$947,891)	(\$1,058,116)

<sup>\*</sup> Source: Form C, pages 166-167.

Matthews ICU* 1 Bed	PY 1 CY 2017	PY 2 CY 2018	PY 3 CY 2019
Projected # of Inpatient Days	2,889	2,990	2,895
Projected Average Charge (Gross patient revenue/Projected # of inpatient days)	\$2,768	\$2,879	\$2994
Gross Patient Revenue	\$7,997,009	\$8,607,649	\$8,667,529
Total Revenue	\$2,247,233	\$2,418,828	\$2,435,655
Total Expenses	\$3,074,752	\$3,196,465	\$3,298,267
Net Income (Loss)	(\$827,519)	(\$777,637)	(\$862,612)

<sup>\*</sup> Source: Form C, pages 168-169.

In the pro forma financial statements for the entire Matthews system (Form B), pages 160-161, the applicant projects revenues will exceed expenses in each of the first three operating years as shown below.

Matthews	PY 1	PY 2	PY 3
Entire Facility*	CY 2017	CY 2018	CY 2019
Total Revenue	\$232,931,464	\$251,880,897	\$269,767,302
Total Expenses	\$154,930,683	\$165,226,365	\$175,037,979
Net Income	\$78,000,781	\$86,654,532	\$94,729,323

<sup>\*</sup> Source: Form B, pages 160-161.

The assumptions used by the applicant in preparation of the pro forma financial statements are reasonable, including projected utilization, costs and charges. See pages 186-195, of the application, for the assumptions regarding costs and charges. See Criterion (3) for discussion regarding utilization assumptions which is incorporated hereby as if set forth fully herein. The applicant adequately demonstrates that the financial feasibility of the proposal is based upon reasonable projections of operating costs and charges. The application is conforming with this criterion.

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

Matthews proposes to relocate 20 existing acute care beds from Presbyterian in downtown Charlotte to Matthews. The following table, developed by the analyst, shows the acute care beds utilization for the existing hospital providers in Mecklenburg County.

**Utilization of Existing Hospitals in Mecklenburg County\*** 

	Licensed Acute	2012 Acute Care	Average Daily	Average Occupancy
Carolinas Medical Center**	Care Beds 795	<b>Patient Days</b> 252,876	<b>Census</b> 690.9	Percent 86.9%
Carolinas Medical Center Mercy-Pineville	368	70,638	193.0	52.4%
Carolinas Medical Center - University	94	20,575	56.2	59.8%
Novant Health Charlotte Orthopedic Hospital	64	10,356	28.3	44.2%
Novant Health Huntersville Medical Center	75	19,893	54.4	72.5%
Novant Health Matthews Medical Center***	117	29,893	81.7	69.8%
Novant Health Presbyterian Medical Center	539	140,693	384.4	71.3%
Mecklenburg County Total	2,052	544,924	1,488.9	72.6%

- \* Source: 2014 State Medical Facilities Plan (2014 SMFP), Table 5A.
- \*\* Carolinas Medical Center has a 19 bed adjustment for CONs not yet developed.
- \*\*\* Matthew has a 17 bed adjustment for CONs not yet developed.

In Section III.6, page 75, the applicant states,

"The proposed project will result in additional inpatient bed capacity at NHMMC, allowing NHMMC to better meet the needs of the residents of Matthews and surrounding areas and patient volume resulting from the shift of Carmel OB/GYN physicians to the active medical staff at NHMMC and the admission of Carmel OB/GYN inpatient cases to NHMMC effective 10/1/2013.

. . .

The proposed project primarily will expand OB services for the patients of Carmel OB/GYN physicians practicing exclusively on the active medical staff at NHMMC, therefore, only NHMMC has the ability to meet those patient needs.

The projected growth at NHMMC is a result of expanding medical staff and services provided at NHMMC, which in turn results in the need for additional beds at NHMMC. NHMMC has the ability to effectively implement the additional 20 beds, as described in this application."

In Section IV.1, pages 79-80, the applicant provides the historical and projected number of patient days to be provided at Matthews through the first three operating years of the proposed project, as shown below.

	Matthews	Matthews	Average	Percent	Average
Calendar Year	<b>Licensed Acute</b>	Patient Days	Daily	Change	Occupancy
	Care Beds	of Care	Census		Rate

2011 Actual	114	31,861	87	N/A	76.6%
2012 Actual	117	30,200	83	-5.5%	70.7%
2013 Estimated**	117/134*	30,890	85	2.2%	70.0%
2014 Projected	134	36,287	99	14.9%	74.2%
Calendar Year					
2015 Projected	134	37,291	102	2.7%	76.2%
2016 Projected	134	37,836	103	1.4%	77.1%
2017 Projected - Year 1	154	39,436	108	4.1%	70.2%
2018 Projected - Year 2	154	40,540	111	2.7%	72.1%
2019 Projected - Year 3	154	40,191	110	-0.9%	71.5%

<sup>\* 134</sup> acute care beds were operational on October 1, 2013.

and Carmel OB/GYN for Q4, August-December.

As shown in the table above, Matthews projects 40,191 patient days of care in the third operating year and, therefore, projects an average annual occupancy rate of 71.5 percent in CY 2019. Matthews adequately demonstrates the need to relocate 20 acute care beds from Presbyterian. Consequently, the applicant adequately demonstrates the proposed project would not result in the unnecessary duplication of existing or approved health service capabilities or facilities in the applicant's service area. Therefore, the application is conforming with this criterion.

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

C

In Section VII.1, pages 122-125, the applicant provides tables illustrating the current and proposed staffing for Matthews. On page 122, the applicant indicates current staffing of 200.05 full-time equivalents (FTEs). On page 124, the applicant indicates proposed staffing of 259.27 FTEs in PY 2, CY 2018. As a result, Matthews projects 59.22 additional FTE positions, the difference between the current staffing and proposed staffing in PY 2, CY 2018. In Section VII.3, page 127, the applicant states "The proposed new beds will not add any new positions (job titles) since the job positions already exist at NHMMC in Women's Services, Medical-Surgical Acute Inpatient Beds, and ICU ...." Note: In Table VII.1.(b), page 124 of the application, the applicant indicates an additional admin specialist position for the ICU in PY 2. This is a new position, even though it is not a new job title.

In Section VII.6, pages 129-131, the applicant describes its recruitment and retention procedures, and indicates that it does not anticipate any difficulties identifying, hiring, and retaining qualified staff for the proposed project. In Section VII.8, page 132, the applicant identifies William Posten, M.D. as the Chief Medical Director for Matthews. Exhibit 13 of the application contains copies of letters from physician and surgeons expressing support for the proposed project. The applicant adequately demonstrates the availability of sufficient

<sup>\*\*</sup> In 2013, Matthews provided actual patient days for January-July and estimated patient days for Matthews

health manpower and management personnel to provide the proposed services. Therefore, the application is conforming to this criterion.

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

C

In Section II.2, page 13, the applicant documents that all of the necessary ancillary and support services for the proposed services are currently provided at Matthews. Exhibit 18 of the application contains a list of facilities with which Matthews has transfer agreements and a copy of a sample transfer agreement. Exhibit 13 contains copies of letters from physician and surgeons expressing support for the proposed project. The applicant adequately demonstrates that necessary ancillary and support services will be available and that the proposed project will be coordinated with the existing health care system. Therefore, the application is conforming with this criterion.

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

NA

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

NA

(11) Repealed effective July 1, 1987.

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

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In Section XI.4, pages 153-154, the applicant proposes to construct a 26,532 square foot building and renovate 7,487 square feet of the existing Matthews building located at 1500 Matthews Township Parkway, Matthews for a total of 322,017 square feet at Matthews after completion of the project. The applicant states the new building will be a two story addition, which will contain a dedicated entrance to the Women's Center on the first floor and a corridor connecting the new building to the existing second floor of the Women's Center. Additionally, the applicant states it will renovate 7,487 square feet on the fifth floor of the existing Matthews building. The Matthews current and proposed square footage is shown in the table below.

Existing Building Square Feet	New Building Addition Square Feet	Renovated Square Feet	Total New & Renovated Square Feet	Total Square Feet Upon Project Completion
295,485	26,532	7,487	34,019	322,017

Exhibit 11 contains the line drawings for the new two story building and the renovations to the fifth floor.

Exhibit 11 contains a letter, dated October 3, 2013, from McCulloch England Associates Architects, indicating

"Listed below is a budget cost estimate for the renovation of the existing 2<sup>nd</sup> floor Support Space for the existing LDRP's and the new Women's Center Addition. The addition includes a new public entrance and support on the first floor, 10 LDRP's, 2 Ante-partum, relocated NICU and associate support space on the second floor. On the 5<sup>th</sup> floor, the scope of work includes renovating 9 existing Observation rooms to provide one ICU and 8 Med/Surg patient rooms. This CON also includes the expansion of the existing Central Energy Plant & infrastructure system upgrades to support this addition. We have met with Rodgers Builders, General Contractors to help verify the proposed renovation and new construction costs.

## General Construction Cost

\$15,095,043.00"

This proposed cost is consistent with Section VIII, page 137, which indicates a total construction contract costs of \$15,095,043; including anticipated site development costs of \$613,345 and construction costs of \$14,481,698.

In Section XI.4, page 155, the applicant estimates the following construction costs per square foot, as shown below.

Matthews' Estimated Construction Cost per Square Foot

	Estimated Square Feet *	Construction Cost per Square Foot	Construction Cost per Bed	Total Cost Per Square Foot	Total Cost Per Bed
New Two Story					
Building	31,019	\$367.10	\$569,343	\$536.13	\$837,506
Central Energy					
Plant Addition	3,000	\$1,236.06	\$185,409	\$1,236.06	\$185,409
Total	34,019	\$443.72	\$754,752	\$600.37	\$1,021,200

<sup>\*</sup> Includes new and renovated square feet.

In Exhibit 12, the applicant provides a 2013-2014 Sustainable Energy Management Plan summarizing the organization-wide energy management plan designed to integrate energy efficient and sustainable design features into the day-to-day operation of the proposed facility, which includes state-of-the-art components and systems.

The applicant adequately demonstrates that the cost, design and means of construction represent the most reasonable alternative for the project as proposed and that the construction project will not unduly increase the costs and charges of providing health services. See Criterion (5) for discussion of costs and charges, which is incorporated hereby as if set forth fully herein. Therefore, the application is conforming to this criterion

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

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In Section VI.12 – VI.13, pages 116-117, the applicant provides the Matthews payor mix during CY 2012, as shown in the table below.

	<b>Entire Facility</b>	Women's Center	ICU	Acute Inpatient
Davien Cotegony	Patient Days/	(LDRP beds)	Patient Days/	Beds
Payor Category	Procedures as	Patient Days/	Procedures as	Patient Days/
	% of Total	Procedures as	% of Total	Procedures as

	Utilization	% of Total Utilization	Utilization	% of Total Utilization
Self Pay/	12.41%	1.43%	5.64%	4.61%
Indigent/ Charity				
Medicare/	29.18%	0.40%	67.68%	64.60%
Medicare				
Managed Care				
Medicaid	12.58%	32.40%	7.41%	6.60%
Commercial	1.49%	0.84%	1.27%	0.75%
Insurance				
Managed Care	42.26%	64.04%	15.53%	22.21%
Other*	2.08%	0.89%	2.47%	1.23%
Total	100.00%	100.00%	100.00%	100.00%

<sup>\*</sup> Includes other government payors and worker's compensation.

The Division of Medical Assistance (DMA) maintains a website which offers information regarding the number of persons eligible for Medicaid assistance and estimates of the percentage of uninsured for each county in North Carolina. More current data, particularly with regard to the estimated uninsured percentages, was not available.

County	Total # of Medicaid Eligibles as % of Total Population June 2010	Total # of Medicaid Eligibles Age 21 and older as % of Total Population June 2010	% Uninsured CY 2008-2009 (Estimate by Cecil G. Sheps Center)
Mecklenburg	14.7%	5.1%	20.1%
Statewide	16.5%	6.7%	19.7%

The majority of Medicaid eligibles are children under the age of 21. This age group does not utilize the same health services at the same rate as older segments of the population, particularly the inpatient women's services proposed in this application.

Moreover, the number of persons eligible for Medicaid assistance may be greater than the number of Medicaid eligibles who actually utilize health services. The DMA website includes information regarding dental services which illustrates this point. For dental services only, DMA provides a comparison of the number of persons eligible for dental services with the number actually receiving services. The statewide percentage of persons eligible to receive dental services who actually received dental services was 48.6% for those age 20 and younger and 31.6% for those age 21 and older. Similar information is not provided on the website for other types of services covered by Medicaid. However, it is reasonable to assume that the percentage of those actually receiving other types of health services covered by Medicaid is less than the percentage that is eligible for those services.

The Office of State Budget & Management (OSBM) maintains a website which provides historical and projected population data for each county in North Carolina.

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

The applicant demonstrates that medically underserved populations currently have adequate access to the applicant's existing services and is conforming to this criterion.

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

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Recipients of Hill-Burton funds were required to provide uncompensated care, community service and access by minorities and handicapped persons. In Section VI.11, page 115, the applicant states

"Novant Health's tertiary hospitals (Novant Health Forsyth Medical Center and Novant Health Presbyterian Medical Center) fulfilled their Hill-Burton obligations long ago. NHFMC fulfilled its Hill-Burton obligations in 1991. At that time, the obligation for the remainder of the 20-year term to expire in 1993 was \$144,343. NH Forsyth Medical Center had contributed \$236,289 in excess of the required amount and subsequently satisfied all obligations under 42 CFR 124, Subpart F. The quota was exceeded as of 1982."

In Section VI.10, page 115, the applicant states that no civil rights equal access complaints have been filed against Matthews in last five years. Therefore, the application is conforming to this criterion.

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

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In Section VI.14 – VI.15, pages 118-119, the applicant provides the Matthews projected payer mix for the second full fiscal year following completion of the proposed project (CY 2018), as shown in the table below.

Payor Category	Entire Facility Patient Days/ Procedures as % of Total	Procedures as	ICU Patient Days/ Procedures as % of Total Utilization	Acute Inpatient Beds Patient Days/ Procedures as % of Total
	% of Total Utilization	% of Total Utilization	Utilization	% of Total Utilization

Self Pay/	12.21%	1.36%	8.60%	4.96%
Indigent/ Charity				
Medicare/	33.27%	0.09%	70.23%	70.28%
Medicare				
Managed Care				
Medicaid	14.58%	35.31%	8.86%	7.22%
Commercial	1.49%	1.33%	0.62%	0.63%
Insurance				
Managed Care	36.87%	61.36%	9.45%	14.08%
Other*	1.58%	0.55%	2.24%	2.83%
Total	100.00%	100.00%	100.00%	100.00%

<sup>\*</sup>Includes other government payors and worker's compensation.

# On pages 119-120, the applicant states

"The projected payor mix for NHMMC for Project Year 2 is based on actual NHMMC payor mix data for [sic] first 7 months of CY 2013 (Jan through July 2013), plus additional increases in in [sic] Medicare's payor mix percentage beginning in the first quarter 2014 in the ICU and acute inpatient beds with the implementation of NHMMC becoming a fully STEMI-qualified hospital resulting in additional cardiac patients admitted to the ICU and acute inpatient beds at NHMMC. ... In addition, there will be an increase in Medicaid's payor mix percentage for the Women's Center cases due to a projected increase of more than a [sic] 1,000 newborns in 2014 at NHMMC, after Carmel OB/GYN's 9 ob/gyn physicians joined the active medical staff at NHMMC effective October 1, 2013 and chose NHMMC as the exclusive hospital where they will practice."

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

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

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In Section VI.9, page 114, the applicant describes the range of means by which a person will have access to its services. The information provided is reasonable and credible and supports a finding of conformity to this criterion.

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

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In Section V.1, pages 81-82, the applicant states they have many established relationships with area health professional training programs. In Section V.1, page 81, and Exhibit 18, the applicant provides a list of Novant Health's clinical education agreements and a sample clinical education agreement. The information provided in Section V.1 is reasonable and credible and supports a finding of conformity to this criterion.

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

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Matthews proposes to relocate 20 existing acute care beds from Presbyterian in downtown Charlotte to Matthews. According to the 2014 SMFP, there are currently 7 existing hospital in Mecklenburg County with a new hospital, Mint Hill, scheduled to open in CY 2019, as shown in the following table.

Existing Hospital in Mecklenburg County^	<b>Licensed Acute Care Beds</b>	
Carolinas Medical Center**	795	
Carolinas Medical Center Mercy-Pineville	368	
Carolinas Medical Center – University	94	
Novant Health Charlotte Orthopedic Hospital	64	
Novant Health Huntersville Medical Center	75	
Novant Health Matthews Medical Center***	117	
Novant Health Presbyterian Medical Center	539	

<sup>\*</sup> Source: 2014 State Medical Facilities Plan (2014 SMFP), Table 5A.

- \*\* Carolinas Medical Center shows a 19 bed adjustment for CONs not yet developed.
- \*\*\* Matthews shows a 17 bed adjustment for CONs not yet developed.
- ^ Mint Hill, a new 50 bed licensed acute care hospital, is scheduled to open in CY 2019.

In Section V.7, pages 86-96, the applicant discusses the impact of the proposed project on competition in the service area including how any enhanced competition will have a positive impact on the cost-effectiveness, quality and access to acute care services. On pages 86-87 and Exhibit 19, the applicant states

"Novant Health, including NHMMC, has created a new model of patient care called Transforming Care at the Bedside (TCAB). TCAB was designed and tested by Novant Health RNs and clinical staff and it has three objectives:

- 1. Nurses practicing at the top of their license;
- 2. 70% of a 12-hour shift is direct patient care; and
- 3. A 30% improvement in efficiency.

. . .

Per Novant Health CEO Carl Armato, the model has saved Novant Health \$25 million."

On pages 89-90, the applicant states that Novant Health has developed a prototypical design approach for all future new hospital construction. The prototypical approach results in a hospital design that will be less costly to build, operate, maintain, expand or renovate, as well as being less disruptive to existing services during expansion or renovation. Novant Health's goals, based on this approach, are to build and operate facilities that "... deliver effective, safe, and high quality care in an efficient manner, that does not unnecessarily contribute to healthcare inflation or rising costs or charges passed on to consumers or payors."

# On page 91, the applicant states

"Matthews Medical Center ranks among the nation's leaders in quality standards determined by the federal Centers for Medicare and Medicaid Services (CMS) who publish the results of several patient quality measures at hospitals across the U.S., including these key areas in which Novant Health participates:

- *Heart Attack (AMI Care)*
- *Heart Failure (CHF)*
- Pneumonia Care
- Surgical Care Improvement Project"

On page 92, the applicant states that Section VI and Exhibit 6 of the application provide a complete discussion of Novant Health's Charity Care and related policies that "create a framework for access to services by patients with limited financial means. These are also indicators of NHMMC's commitment to accessible care for medically underserved groups."

See also Sections II, III, V, VI and VII where the applicant discusses the impact of the project on cost-effectiveness, quality and access.

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

- The applicant adequately demonstrates the need to transfer 20 acute care beds from Presbyterian to Matthews and that it is a cost-effective alternative;
- The applicant adequately demonstrates that it will continue to provide quality services;
   and
- The applicant demonstrates that it will continue to provide adequate access to medically underserved populations.

The application is conforming to this criterion.

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

C

Matthews is certified by CMS for Medicare and Medicaid participation, and licensed by the NC Department of Health and Human Services. According to files in the Acute and Home Care Licensure and Certification Section in the Division of Health Service Regulation, no incidents have occurred at Matthews within the eighteen months immediately preceding the date of the decision for which any sanctions or penalties related to quality of care were imposed by the State. Therefore, the application is conforming to this criterion.

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

The application is conforming with all applicable Criteria and Standards for Intensive Care Services, 10A NCAC 14C .1200. The specific criteria are discussed below.

# 10A NCAC 14C .1202 INFORMATION REQUIRED OF APPLICANT

- (a) An applicant that proposes new or expanded intensive care services shall use the Acute Care Facility/Medical Equipment application form.
  - **-C-** The applicant completed the Acute Care Facility/Medical Equipment application form.
- (b) An applicant proposing new or expanded intensive care services shall submit the following information:
  - (1) the number of intensive care beds currently operated by the applicant and the number of intensive care beds to be operated following completion of the proposed project;
  - -C- In Section II.8, page 20, Matthews provides a table showing that Matthews currently operates 9 ICU beds. The applicant proposes to develop 1 additional ICU bed for a total of 10 ICU beds upon completion of the project. The applicant states that Matthews' licensed medical/surgical ICU beds increased from 6 beds to 9 beds on September 27, 2013, after the completion of CON Project I.D.# F-8132-08.
  - (2) documentation of the applicant's experience in treating patients at the facility during the past twelve months, including:
    - (A) the number of inpatient days of care provided to intensive care patients;
  - **-C-** In Section II.8, page 20, Matthews provides a table showing that Matthews provided 1,392 inpatient days of care to ICU patients during the period August 2012 July 2013.
    - (B) the number of patients initially treated at the facility and referred to other facilities for intensive care services; and
  - -C- In Section II.8, page 20, the applicant states 35 Matthews ICU patients were treated in the Matthews ICU and then referred to other inpatient facilities for ICU care during the period August 2012 July 2013.
    - (C) the number of patients initially treated at other facilities and referred to the applicant's facility for intensive care services.

- -C- In Section II.8, page 21, the applicant states 3 patients were initially treated at other facilities and referred to Matthews for ICU care during the period August 2012 July 2013.
- (3) the projected number of patients to be served and inpatient days of care to be provided by county of residence by specialized type of intensive care for each of the first twelve calendar quarters following completion of the proposed project, including all assumptions and methodologies;
- -C- In Section II.8, page 21, Matthews provides a table showing the projected number of patients to be served and inpatient days of care to be provided by county of residence for the 10 proposed general ICU beds for each of the first twelve calendar quarters following completion of the proposed project. The applicant states Matthews' projected ICU days equate to 11.1% of projected medical/surgical acute inpatient days, based on the 2012 HLRA data for Novant Health hospitals and hospitals with STEMI cardiac programs providing 24/7 interventional cardiac catheterization. ICU cases were calculated based on Matthews' historical ICU ALOS of 3.1 days per ICU admission. The applicant's assumptions and methodology are discussed on page 21 and in Exhibit 4, Table 22, of the application.
- (4) data from actual referral sources or correspondence from the proposed referral sources documenting their intent to refer patients to the applicant's facility;
- **-C-** Exhibit 5 contains correspondence from existing referral sources (including Matthews pulmonologists, cardiologists, emergency medicine physicians and inpatient care specialists documenting their intent to continue to refer patients to Matthews.
- (5) documentation which demonstrates the applicant's capability to communicate effectively with emergency transportation agencies;
- -C- Exhibit 5, page 360, contains a copy of a letter dated September 3, 2013 and signed by the Senior Director of Nursing documenting Matthews' capability to communicate effectively with emergency transportation agencies.
- (6) documentation of written policies and procedures regarding the provision of care within the intensive care unit, which includes the following:
  - (A) the admission and discharge of patients;
  - (B) infection control;
  - (C) safety procedures; and
  - (D) scope of services.
- -C- Exhibit 5, pages 381-418, contains documentation of written policies and procedures regarding the provision of care within the ICU, which includes each of the areas set forth in subparagraphs (A) through (D) above. Note: On page 387, the

Scope of Service/Care section was scheduled for review August 2013, but does not contain documentation that this section was reviewed.

- (7) documentation that the proposed service shall be operated in an area organized as a physically and functionally distinct entity, separate from the rest of the facility, with controlled access;
- -C- Exhibit 5, page 358, contains a letter dated October 1, 2013 and signed by the Director, Facilities Planning, Corporate Construction Operations for Novant Health, Inc. documenting that ICU services shall be operated in an area organized as a physically and functionally distinct entity, separate from the rest of the facility, with controlled access.
- (8) documentation to show that the services shall be offered in a physical environment that conforms to the requirements of federal, state, and local regulatory bodies;
- -C- Exhibit 5, page 358, contains a letter dated October 1, 2013 and signed by the Director, Facilities Planning, Corporate Construction Operations for Novant Health, Inc., documenting that the services will be offered in a physical environment that conforms to the requirements of federal, state, and local regulatory bodies.
- (9) a floor plan of the proposed area drawn to scale; and
- **-C-** Exhibit 11 contains a floor plan of the proposed Matthews ICU area drawn to scale.
- (10) documentation of a means for observation by unit staff of all patients in the unit from at least one vantage point.
- -C- Exhibit 5, page 358, contains a letter dated October 1, 2013 and signed by the Director, Facilities Planning, Corporate Construction Operations for Novant Health, Inc., documenting that a means for observation by unit staff of all patients in the unit from at least one vantage point will continue to exist.

## 10A NCAC 14C .1203 PERFORMANCE STANDARDS

- (a) The applicant shall demonstrate that the proposed project is capable of meeting the following standards:
  - (1) the overall average annual occupancy rate of all intensive care beds in the facility, excluding neonatal and pediatric intensive care beds, over the 12 months immediately preceding the submittal of the proposal, shall have been at least 70 percent for facilities with 20 or more intensive care beds, 65 percent for facilities with 10-19 intensive care beds, and 60 percent for facilities with 1-9 intensive care beds; and

**-C-** In Section II.8, page 23, and Exhibit 4, Table 8, the applicant provides the following table showing current ICU beds as of October 15, 2013 and projected ICU beds upon completion of the project.

Medical/Surgical ICU Beds at Matthews	Current and Projected Licensed ICU Beds
Beds reported on Matthews' 2013 HLRA	6
Beds added September 27, 2013 (CON Project I.D.# F-8132-08)	3
Beds proposed in this project	1
Total projected beds upon completion of this project	10

Since Matthews had six ICU beds, excluding neonatal and pediatric ICU beds, over the 12 months immediately preceding submission of the application, the applicant shall demonstrate an overall annual occupancy rate of 60%. The applicant states the overall average annual occupancy rate of all ICU beds in the facility, excluding neonatal ICU beds, from August 1, 2012 though July 31, 2013 exceeded 60% as shown in the following table.

ICU Utilization	Volume
Medical/Surgical ICU Patient Days	1,392
Average Daily Census (ADC)	3.81
Medical/Surgical ICU Capacity	6
Utilization	63.6%

<sup>\*</sup> Source: Application page 24.

- (2) the projected occupancy rate for all intensive care beds in the applicant's facility, exclusive of neonatal and pediatric intensive care beds, shall be at least 70 percent for facilities with 20 or more intensive care beds, 65 percent for facilities with 10-19 intensive care beds, and 60 percent for facilities with 1-9 intensive care beds, in the third operating year following the completion of the proposed project.
- -C- In Section II.8, pages 24-25, and Exhibit 4, Table 1, the applicant states Matthews will provide 2,895 adjusted patient days in the proposed 10-bed ICU for a projected occupancy rate of 79.3% in the third operating year following completion of the proposed project, exceeding the target occupancy rate of 65% set forth in this rule as shown in the table below.

	PY 1	PY 2	PY 3
	CY 2017	CY 2018	CY 2019
Projected ICU Patient Days	2,889	2,990	2,964
ICU Days Shifted to Mint Hill*	0	0	69
ICU Adjusted Patient Days	2,889	2,990	2,895
ICU ADC	7.9	8.2	7.9
ICU Beds	10	10	10
ICU Occupancy Level	79.1%	81.9%	79.3%

\* The applicant adjusted Matthews' CY 2019 projections to reflect the projected impact of Mint Hill's acute care and obstetrical beds opening in the Matthews service area on January 1, 2019. The applicant provides the Mint Hill assumptions in Exhibit 4, Tables 12-17.

See Criterion (3) for discussion regarding projected utilization which is incorporated hereby as if set forth fully herein.

- (b) All assumptions and data supporting the methodology by which the occupancy rates are projected shall be provided.
  - -C- The applicant states ICU days were projected as a percentage of total medical/surgical patient days at Matthews. The applicant states Matthews' projected ICU days equate to 11.1% of projected medical/surgical acute inpatient days, based on the 2012 HLRA data for Novant Health hospitals and hospitals with STEMI cardiac programs providing 24/7 interventional cardiac catheterization. Additionally, 50 acute care beds at Mint Hill are projected to open January 1, 2019, so the above projections were adjusted to reflect the impact of this new hospital in Mecklenburg County. Assumptions and data used to develop the projections required in this Rule are provided in Section III.1 and Exhibit 4 of the application. The applicant's assumptions regarding projected ICU utilization and ADC are reasonable and credible and support a finding of conformity with this rule. See Criterion (3) for additional discussion which is incorporated hereby as if set forth fully herein.

#### 10A NCAC 14C .1204 SUPPORT SERVICES

- (a) An applicant proposing new or additional intensive care services shall document the extent to which the following items are available:
  - (1) twenty-four hour on-call laboratory services including microspecimen chemistry techniques and blood gas determinations;
  - (2) twenty-four hour on-call radiology services, including portable radiological equipment;
  - (3) twenty-four hour blood bank services;
  - (4) twenty-four hour on-call pharmacy services;
  - (5) twenty-four hour on-call coverage by respiratory therapy;
  - (6) oxygen and air and suction capability;
  - (7) *electronic physiological monitoring capability;*
  - (8) mechanical ventilatory assistance equipment including airways, manual breathing bag and ventilator/respirator;
  - (9) *endotracheal intubation capability;*
  - (10) cardiac pacemaker insertion capability;
  - (11) cardiac arrest management plan;
  - (12) patient weighing device for bed patients; and
  - (13) isolation capability.
  - **-C-** Exhibit 5, page 361, contains a letter dated September 3, 2013 and signed by the Senior Director of Nursing documenting that the services listed in (1) through (13) above are available to support the current and proposed expanded ICU at Matthews.

- (b) If any item in Subparagraphs (a)(1) (13) of this Rule will not be available, the applicant shall document the reason why the item is not needed for the provision of the proposed services.
  - -C- Exhibit 5, page 361, contains documentation that Matthews offers and will continue to offer all of the items in Subparagraphs (a)(1) (13) of this Rule.

### 10A NCAC 14C .1205 STAFFING AND STAFF TRAINING

The applicant shall demonstrate the ability to meet the following staffing requirements:

- (1) nursing care shall be supervised by a qualified registered nurse with specialized training in the care of critically ill patients, cardiovascular monitoring, and life support;
  - **-C-** Exhibit 5, page 362, contains a letter dated September 3, 2013 and signed by the ICU Nurse Manager who states she is a qualified registered nurse (RN) with specialized training in the care of critically ill patients, cardiovascular monitoring, and life support. She also states she is responsible for supervising the ICU RNs at Matthews. See pages 363-370 for the ICU nurse manager's resume and job description.
- (2) direction of the unit shall be provided by a physician with training, experience and expertise in critical care;
  - -C- Exhibit 5, page 351, contains a letter dated September 4, 2013 and signed by the current ICU Medical Director indicating his willingness to continue to serve as Medical Director for the ICU at Matthews. In his letter he states "It is my responsibility to assure the expanded ICU at NHMMC will be staffed by a physician with expertise in critical care medicine.

I am an active member of the medical staff at NHMMC and board certified in Pulmonary and Critical Care Medicine."

See pages 352-357 for the ICU Medical Director's resume.

- (3) assurance from the medical staff that twenty-four hour medical and surgical on-call coverage is available; and
  - **-C-** Exhibit 5, page 359, contains a letter dated September 3, 2013 and signed by Matthews' Chief of Medical Staff indicating that twenty-four hour medical and surgical on-call coverage will continue for the critical care unit at Matthews.
- (4) inservice training or continuing education programs shall be provided for the intensive care staff.

-C- Exhibit 5, page 362, contains a letter dated September 3, 2013 from the ICU Nurse Manager indicating that Matthews policies and procedures provide for inservice training and continuing education for ICU staff members at Matthews. The inservice training and continuing education programs available to the intensive care staff are discussed on pages 385-413.