ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

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

Decision Date: March 29, 2018
Findings Date: March 29, 2018

Project Analyst: Mike McKillip
Team Leader: Lisa Pittman

Project ID #: J-11428-17
Facility: WakeMed Cary Hospital
FID #: 990332
County: Wake
Applicant: WakeMed
Project: Construct a two-story addition and relocate 30 acute care beds and one shared operating room from WakeMed Raleigh Campus to WakeMed Cary Hospital for a total of 208 acute care beds and 12 operating rooms at WakeMed Cary Hospital

REVIEW CRITERIA FOR NEW INSTITUTIONAL HEALTH SERVICES

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

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

C

WakeMed **[WakeMed]** proposes to construct a two-story addition to WakeMed Cary Hospital to accommodate 30 approved acute care beds and one existing shared operating room to be relocated from Wake Raleigh Campus. Following completion of the proposed project, WakeMed Cary Hospital will have a total of 208 acute care beds and 12 operating rooms.

Need Determination

There are no need determinations in the 2017 State Medical Facilities Plan (SMFP) applicable to the proposed project.

Policies

Policy GEN-4: Energy Efficiency and Sustainability for Health Service Facilities is applicable.

Policy GEN-4

Policy GEN-4 states:

> *"Any person proposing a capital expenditure greater than $2 million to develop, replace, renovate or add to a health service facility pursuant to G.S. 131E-178 shall include in its certificate of need application a written statement describing the project's plan to assure improved energy efficiency and water conservation.*
>
> *In approving a certificate of need proposing an expenditure greater than $5 million to develop, replace, renovate or add to a health service facility pursuant to G.S. 131E-178, Certificate of Need shall impose a condition requiring the applicant to develop and implement an Energy Efficiency and Sustainability Plan for the project that conforms to or exceeds energy efficiency and water conservation standards incorporated in the latest editions of the North Carolina State Building Codes. The plan must be consistent with the applicant's representation in the written statement as described in paragraph one of Policy GEN-4.*
>
> *Any person awarded a certificate of need for a project or an exemption from review pursuant to G.S. 131E-184 are required to submit a plan of energy efficiency and water conservation that conforms to the rules, codes and standards implemented by the Construction Section of the Division of Health Service Regulation. The plan must be consistent with the applicant's representation in the written statement as described in paragraph one of Policy GEN-4. The plan shall not adversely affect patient or resident health, safety or infection control."*

The proposed capital expenditure for this project is greater than $5 million. In Section B, page 24-25, the applicant explains why it believes its application is conforming to Policy GEN-4. The applicant states:

> *"WakeMed develops all capital projects with the goal of maximizing energy efficiency and water conservation. … Following project approval, WakeMed will submit, upon request from the Agency, an Energy Efficiency and Sustainability Plan that addresses energy and water conservation."*

The applicant adequately demonstrates that the application includes a written statement describing the project's plan to assure improved energy efficiency and water conservation. Therefore, the application is consistent with Policy GEN-4.

Conclusion

The Agency reviewed the:

- Application
- Exhibits to the application
- Written comments
- Remarks made at the public hearing
- Responses to comments
- Information publicly available during the review and used by the Agency

Based on that review, the Agency concludes that the application is conforming to this criterion for the following reasons:

The applicant adequately demonstrates that the proposal is consistent with Policy GEN-4 for the following reasons:

- The applicant includes a written statement describing the project's plan to assure improved energy efficiency and water conservation.
- Upon approval of the certificate of need, the applicant states its intention to develop and implement an Efficiency and Sustainability Plan.

(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.

C

The applicant, WakeMed, proposes to construct a two-story addition to WakeMed Cary Hospital to accommodate 30 approved acute care beds and one existing shared operating room to be relocated from Wake Raleigh Campus. Following completion of the proposed project, WakeMed Cary Hospital will have a total of 208 acute care beds and 12 operating rooms.

WakeMed owns and operates three hospitals in Wake County: WakeMed Raleigh Campus, WakeMed Cary Hospital, and WakeMed North Hospital, which is licensed as part of WakeMed Raleigh Campus. On January 6, 2014, WakeMed was approved (Project I.D. # J-10165-13) to reconvert 21 nursing facility beds back to acute care beds and relocate the beds to WakeMed Raleigh Campus. On January 28, 2014, WakeMed was approved (Project I.D. # J-8660-11) to develop 29 additional acute care beds at WakeMed Raleigh Campus. Also January 28, 2014, WakeMed was approved (Project I.D. # J-8661-11) to develop 22 additional acute care beds at WakeMed Cary Hospital, which the applicant states is nearly complete. On page 27 of the application, the applicant states, *"On October 10, 2017, DHSR's Construction Section completed its plan review and facility inspection, and WakeMed anticipates that these beds will be licensed by November 1, 2017."* In Section C.1, pages 27-28, the applicant describes the proposed project as follows:

"WakeMed is proposing this certificate of need application consisting of the following project components:

1. *Construction of a two-story addition at WakeMed Cary, over the existing 'West' wing, creating a fourth and fifth floor;*

2. *Relocation of 30 previously-approved but heretofore undeveloped, acute care beds from WakeMed Raleigh Campus (located at 3000 New Bern Avenue, Raleigh, NC 27610) to WakeMed Cary, as follows:*
   - *All 29 beds approved in Project No. J-8660-11;*
   - *1 of the 21 beds approved in Project No. J-10165-13;*

3. *Relocation of one existing shared surgical operating room from WakeMed Raleigh to WakeMed Cary, which will be housed in the existing surgical suite by converting one unlicensed procedure room to a licensed operating room….*

The proposed project would relocate one surgical operating room from WakeMed Raleigh to WakeMed Cary, where the existing unlicensed Procedure Room 3 would be converted to a licensed operating room. … To accommodate the proposed increase in acute care beds capacity at WakeMed Cary, a two-story addition will be constructed over the existing West wing, creating a fourth and fifth floor. The thirty relocated acute care beds will be housed on the fourth floor ('4 West'), while the fifth floor ('5 West') will be used for additional administrative and support spaces for services, which either occupy undersized space or are spread throughout the hospital."

The following table summarizes the acute care beds and operating rooms at the WakeMed hospitals before and after the proposed project is completed:

Existing, Approved and Proposed Acute Care Beds and Operating Rooms				
Facility	**Existing Beds**	**Approved Beds**	**Proposed Beds**	**Total**
WakeMed Raleigh	567	50	-30	587
WakeMed North	61	16	0	77
Total WakeMed Raleigh	628	66	-30	664
WakeMed Cary	156	22	+30	208
Total Acute Care Beds	**784**	**88**	**0**	**872**
Facility	**Existing ORs***	**Approved ORs**	**Proposed ORs**	**Total**
WakeMed Raleigh	23	0	-1	22
WakeMed North	5	0	0	5
Total WakeMed Raleigh	28	0	-1	27
WakeMed Cary	11	0	+1	12
Total Operating Rooms	**39**	**0**	**0**	**39**

Source: Table on page 28 of the application.
*Includes three dedicated C-Section operating rooms at WakeMed Raleigh Campus, one at WakeMed North Hospital, and two at WakeMed Cary Hospital.

Patient Origin

On page 39, the 2017 SMFP defines the service area for acute care beds as *"the acute care bed planning area in which the bed is located. The acute care bed planning areas are the single and multicounty groupings shown in Figure 5.1."* Figure 5.1 on page 42 of the 2017 SMFP indicates that Wake County is a single county service area. On page 57, the 2017 SMFP states, *"An operating room's service area is the operating room planning area in which the operating room is located. The operating room planning areas are the single and multicounty groupings shown in Figure 6.1."* In Figure 6.1, page 60 of the 2017 SMFP, Wake County is shown as a single-county operating room service area. Thus, the service area for this facility consists of Wake County. Facilities may also serve residents of counties not included in their service area.

In Sections C.2 and C.3, pages 32-38, the applicant provides the historical (FY2017) and projected patient origin for WakeMed Cary Hospital's acute care beds and surgical services for the first three operating years (FY2020-FY2022), as shown in the tables below.

Historical and Projected Patient Origin
WakeMed Cary Hospital Acute Care Beds

County	FY2017	Project Year 1	Project Year 2	Project Year 3
Wake	84.4%	83.9%	84.0%	84.2%
Harnett	3.7%	3.7%	3.6%	3.5%
Johnston	2.6%	2.4%	2.4%	2.3%
Durham	1.3%	1.4%	1.4%	1.4%
Lee	1.0%	1.1%	1.1%	1.1%
Chatham	0.8%	0.9%	0.9%	0.9%
Cumberland	0.6%	0.6%	0.6%	0.6%
Alamance	0.4%	0.5%	0.5%	0.5%
Orange	0.4%	0.5%	0.5%	0.5%
Nash	0.3%	0.4%	0.4%	0.4%
Out of State	1.6%	1.7%	1.7%	1.7%
Other*	2.9%	2.9%	2.9%	2.9%
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Tables on pages 32-34 and 37 of the application.
*The applicant lists the counties included in the *"Other"* category on pages 32-34 and page 37 of the application.

Historical and Projected Patient Origin
WakeMed Cary Hospital Surgical Services

County	FY2017	Project Year 1	Project Year 2	Project Year 3
Wake	78.9%	79.1%	79.2%	79.3%
Harnett	5.0%	4.9%	4.9%	4.9%
Johnston	4.0%	3.9%	3.9%	3.9%
Durham	1.5%	1.5%	1.5%	1.5%
Lee	1.2%	1.2%	1.2%	1.2%
Chatham	0.9%	0.9%	0.9%	0.9%
Cumberland	0.8%	0.8%	0.8%	0.8%
Sampson	0.8%	0.8%	0.8%	0.8%
Alamance	0.7%	0.7%	0.7%	0.7%
Franklin	0.5%	0.5%	0.5%	0.5%
Orange	0.5%	0.5%	0.4%	0.4%
Out of State	1.0%	1.0%	1.0%	1.0%
Other*	4.2%	4.2%	4.2%	4.2%
TOTAL	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Tables on pages 34-35 and 38 of the application.
*The applicant lists the counties included in the *"Other"* category on pages 34-35 and page 38 of the application.

In Section C.3, page 39, the applicant states, *"The methodology used to project inpatient origin and surgical patient origin was based on historic utilization of those services at WakeMed Cary Hospital."* The applicant's assumptions are reasonable and adequately supported.

Analysis of Need

In Section C.4, pages 41-51, the applicant explains why it believes the population projected to utilize the proposed services needs the proposed services, including:

- The projected growth and aging of the service area population (p. 41-45).
- The growth in acute care bed utilization at WakeMed Cary from FY2014 to FY2017 (p. 45-46).
- The higher rates of utilization of medical/surgical beds rather than specialty use beds such as obstetrical, neonatal and intensive care unit beds (p. 46-48).
- The use of licensed acute care beds for observation patients (p. 48-49).
- The growth in operating room utilization at WakeMed Cary from FY2014 to FY2017 (p. 49-51).

The information provided by the applicant in the pages referenced above is reasonable and adequately supported.

Projected Utilization

Acute Care Beds

WakeMed Cary Hospital (WCH) is currently licensed for 156 acute care beds. Upon completion of Project I.D. # J-8661-11 in FY2018, WCH will be licensed for 178 acute care beds [156 + 22 = 178]. In Section Q, page 152 and page 160, the applicant provides WCH's historical and projected acute care bed utilization from FY2014 through the first three years of the proposed project, as summarized in the table below.

Fiscal Year	Licensed Acute Care Beds	Acute Patient Days of Care	Average Daily Census	Percent Change	Average Occupancy Rate
2014 Actual	156	41,510	113.7	---	72.9%
2015 Actual	156	42,937	117.6	3.4%	75.4%
2016 Actual	156	40,516	111.0	-5.6%	71.2%
2017 Projected*	156	45,182	123.8	11.5%	79.4%
2018 Projected	178	47,314	129.6	4.7%	72.8%
2019 Projected	178	49,545	135.7	4.7%	76.3%
2020 Year 1	208	51,850	142.1	4.7%	68.3%
2021 Year 2	208	54,214	148.5	4.6%	71.4%
2022 Year 3	208	56,666	155.2	4.5%	74.6%

*Applicant states FY2017 projections is based on 11 months of actual utilization data annualized.
Source: Tables on pages 151 and 160 of the application.

As shown in the table above, AMC projects an average occupancy rate of 74.6% in the third operating year following completion of the project.

In Section Q, pages 152-160, the applicant describes its assumptions and methodology for projecting utilization of the acute care beds at WCH, as summarized below.

Step 1: Review Service Area Population Projections by Age Cohorts

The applicant obtained population projections for its primary service area, Wake County, and secondary service area, Harnett and Johnston counties, by age cohort from FY2014 to FY2022 from the North Carolina Office of State Management and Budget (NCOSMB). See tables on page 153 of the application.

Step 2: Calculate Historic Inpatient Use Rates

The applicant obtained inpatient case volumes for its three-county service area by age cohort from FY2014 to FY2016 from Truven Health Analytics, and calculated the three-year average inpatient use rates per 1,000 population. See tables on pages 154-155 of the application.

Step 3: Project Inpatient Discharges by County and Age Cohort

The applicant projects inpatient discharges by county age cohort by applying the age-specific and county-specific inpatient use rates per 1,000 population calculated in the previous step to the population projections in the first step. See tables on pages 155-156 of the application.

Step 4: Calculate WCH Market Shares by Service Area County

The applicant obtained inpatient case volumes for WCH (excluding normal newborns and rehabilitation admissions) from Truven Health Analytics for the service area counties for FY2014 to FY2016, and divided WCH cases by total cases for each of the three counties to calculate WCH's inpatient market shares. See table on page 157 of the application.

Step 5: Project WCH Market Shares by Service Area County

Based on WCH's three-year average market shares by county calculated in the previous step, the applicant projects WCH's inpatient market shares by county through the first three operating years of the proposed project, as shown in the table below:

WCH Projected Market Shares by Service Area County

County	2017	2018	2019	2020	2021	2022
Harnett	3.6%	3.6%	3.6%	3.6%	3.6	3.6%
Johnston	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
Wake	11.8%	12.0%	12.2%	12.4%	12.6%	12.8%

Source: Table on page 157 of the application.

On page 157, the applicant states,

> *"For all counties except Wake, market shares were held constant through Project Year 3. … WakeMed Cary's market share of Wake County was increased by 0.2 percentage point per year through Project Year 3 – the total effect is an increase of 1.0 percentage point by FY 2022. This is the expected impact of the increase* [sic] *30 percent increase in acute care beds at WakeMed Cary between FY 2018 and FY 2020, as well as western and southern Wake County's population growth, which is outpacing Wake County overall (discussed in Section C)."*

Step 6: Determine the Proportion of WCH Patients Originating Outside the Service Area

The applicant obtained patient origin data for inpatient cases by county for WCH (excluding normal newborns) from Truven Health Analytics for each of the service area counties for FY2016, and determined that 10 percent of total inpatient cases at WCH originate from outside the service area. See table on page 158 of the application.

Step 7: Project WCH Market Shares by Service Area County

Based on applicant's projections of total inpatient cases, WCH market shares, the out-of-service area patients from the previous steps, the applicant projects WCH's inpatient cases by

county through the first three operating years of the proposed project, as shown in the table below:

WCH Projected Inpatient Cases by Service Area County						
	Interim			Projected		
County	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**
Harnett	439	446	454	462	470	479
Johnston	271	280	289	298	306	315
Wake	9,037	9,486	9,951	10,432	10,926	11,437
Service Area Cases	9,746	10,212	10,694	11,192	11,702	12,231
Outside Service Area (10%)	1,082	1,134	1,187	1,242	1,299	1,358
Total Inpatient Cases	**10,828**	**11,346**	**11,881**	**12,434**	**13,001**	**13,589**

Source: Table on page 158 of the application.

Step 8: Calculate Average Length of Stay

The applicant obtained average length of stay (ALOC) for WCH from Truven Health Analytics for FY2014 to FY2016, which averaged 4.17 days over the three-year period. See table on page 159 of the application.

Step 9: Project Inpatient Volumes for WCH

Based on applicant's projections of total WCH discharges and ALOS from the previous steps, the applicant projects WCH's inpatient utilization through the first three operating years of the proposed project, as shown in the table below:

WCH Projected Inpatient Cases and Patient Days						
	Interim			Projected		
	2017	**2018**	**2019**	**Year 1 2020**	**Year 2 2021**	**Year 3 2022**
Total Discharges	10,828	11,346	11,881	12,434	13,001	13,589
ALOS	4.17	4.17	4.17	4.17	4.17	4.17
Total Patient Days	45,153	47,313	49,544	51,850	54,214	56,666
Average Daily Census	135.7	142.1	148.5	154.8	148.5	155.2
Licensed Beds	156	178	178	208	208	208
Percent Utilization	**79.3%**	**72.8%**	**76.3%**	**68.1%**	**71.4%**	**74.6%**

Source: Table on page 159 of the application.

Projected utilization is reasonable and adequately supported for the following reasons:

- The applicant projects utilization of the hospital's acute care beds based on historical utilization of the existing WCH facility, population growth projections from NCSOMB, historical inpatient cases, market share, and ALOS data from Truven Analytics.

- Exhibit I.2 contains letters from physicians expressing support for the proposed project.

Operating Rooms

WCH has nine shared surgical operating rooms and two dedicated C-Section operating rooms. The applicant proposes to relocate one shared surgical operating room from WakeMed Raleigh Campus to WCH, for a total of ten shared surgical operating rooms and two dedicated C-Section operating rooms following completion of the proposed project. In Section Q, page 150 and page 164, the applicant provides WCH's historical and projected operating room utilization from FY2014 through the first three years of the proposed project, as summarized in the table below.

Fiscal Year	Shared Operating Rooms	Inpatient Surgical Cases	Outpatient Surgical Cases	Total Surgical Cases	Percent Change	Percent Utilization*
2014 Actual	9	2,242	5,035	7,277	---	84.7%
2015 Actual	9	2,769	4,815	7,584	4.2%	92.2%
2016 Actual	9	3,037	4,820	7,857	3.6%	97.0%
2017 Projected+	9	3,131	5,242	8,373	6.6%	102.4%
2018 Projected	9	3,446	5,363	8,809	5.2%	109.1%
2019 Projected	9	3,507	5,458	8,965	1.8%	111.0%
2020 Year 1	10	3,569	5,555	9,124	1.8%	101.7%
2021 Year 2	10	3,632	5,653	9,285	1.8%	103.5%
2022 Year 3	10	3,696	5,753	9,449	1.8%	105.3%

Source: Tables on pages 50 and 164 of the application.
*Based on 1.5 surgical hours per outpatient surgical case and 3.0 surgical hours per inpatient surgical case and a total operating room capacity of 1,872 surgical hours per operating room per year.
+The applicant provides two different projections for surgical cases at WCH for FY2017 based on *"11 months annualized."* In the table on page 50, the applicant projects 3,131 inpatient surgical cases and 5,242 outpatient surgical cases. In the tables on page 150 and 164, the applicant projects 3,386 inpatient surgical cases and 5,720 outpatient surgical cases. For purposes of this review, the lower of the two projections, from the table on page 50, are used.

As shown in the table above, WCH projects operating room utilization will exceed 100 percent of the utilization threshold in 10A NCAC 14C .2103(b) in the first year of operation following completion of the project. In Section Q, pages 161-165, the applicant describes its assumptions and methodology for projecting utilization of the operating rooms at WCH, as summarized below.

Step 1: Identify the Service Area by Reviewing Patient Origin

Based on patient origin data for FY2017, the applicant identified WCH's service area for surgical services as Wake, Harnett, Johnston, Durham and Lee counties. See table on page 161 of the application.

Step 2: Review Service Area Population Projections by County

The applicant obtained population projections for its service area counties from FY2014 to FY2022 from the North Carolina Office of State Management and Budget (NCOSMB) and calculated the compound annual growth rate for the population in each county in the service area from FY2017 to FY2022. See table on page 162 of the application.

Step 3: Calculate Weighted Average Population Growth Rate for Service Area

The applicant multiplies each service area county's population growth rate from the previous step by the percentage of total surgery patient origin for WCH (Step 1 above) to calculate a weighted average annual population growth rate of 1.7703 percent for the applicant's identified service area as a whole. See table on page 163 of the application.

Step 4: Review WCH Historical Surgical Service Utilization

The applicant obtained inpatient and outpatient surgical case volumes for WCH from license renewal applications and internal data for FY2014 to FY2017, as shown in the table below:

Fiscal Year	Inpatient Surgical Cases	Outpatient Surgical Cases	Total Surgical Cases
2014	2,242	5,035	7,277
2015	2,769	4,815	7,584
2016	3,037	4,820	7,857
2017 (11 months annualized)	3,131	5,242	8,373

Source: Tables on page 50 and 164 of the application.

Step 5: Project WCH Surgical Cases

Based on the weighted average annual population growth rate (1.7703 percent) for WCH's service area calculated in a previous step, the applicant projects inpatient and outpatient surgical case volumes at WCH through the first three operating years of the proposed project, as shown in the table below:

Fiscal Year	Inpatient Surgical Cases	Outpatient Surgical Cases	Total Surgical Cases
2018 Projected	3,446	5,363	8,809
2019 Projected	3,507	5,458	8,965
2020 Year 1	3,569	5,555	9,124
2021 Year 2	3,632	5,653	9,285
2022 Year 3	3,696	5,753	9,449

Source: Table on page 164 of the application.

Projected utilization is reasonable and adequately supported for the following reasons:

- The applicant projects utilization of the hospital's operating rooms based on historical utilization of the existing WCH facility and population growth projections for the applicant's identified service area.
- Exhibit I.2 contains letters from physicians expressing support for the proposed project.

Access

In Section C.10, page 56, the applicant states their commitment to provide services to all patients who need the services regardless of income, payer status, gender, race, ethnicity or physical handicap or other conditions that would classify them as underserved. In Section L.3, page 118, the applicant projects the following payment sources for the entire WCH facility, acute care bed services, and surgical services during the second operating year (FY2021):

Payment Source	Entire WCH Facility	Acute Care Bed Services	Surgical Services
Self-Pay/Charity Care	5.2%	3.4%	2.8%
Medicare	43.9%	53.1%	43.7%
Medicaid	5.7%	5.0%	3.0%
Commercial Insurance/Managed Care	42.7%	36.6%	48.1%
Workers Compensation/Other Government	2.5%	1.9%	2.4%
Total	**100.0%**	**100.0%**	**100.0%**

Source: Table on page 118 of the application.

The projected payor mix is reasonable and adequately supported.

Conclusion

The Agency reviewed the:

- Application
- Exhibits to the application
- Written comments
- Remarks made at the public hearing
- Responses to comments
- Information publicly available during the review and used by the Agency

Based on that review, the Agency concludes that the application is conforming to this criterion for the following reasons:

- The applicant adequately identifies the population to be served.
- The applicant adequately explains why the population to be served needs the services proposed in this application.
- Projected utilization is reasonable and adequately supported.

- The applicant projects the extent to which all residents, including underserved groups, will have access to the proposed services (payor mix) and adequately supports its assumptions.

(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

The applicant, WakeMed, proposes to construct a two-story addition to WakeMed Cary Hospital (WCH), and to relocate 30 approved acute care beds and one existing shared surgical operating room from Wake Raleigh Campus to WCH.

Acute Care Beds

WakeMed Raleigh Campus is currently licensed for 567 acute care beds. On January 6, 2014, WakeMed was approved (Project I.D. # J-10165-13) to reconvert 21 nursing facility beds back to acute care beds and relocate the beds to WakeMed Raleigh Campus. On January 28, 2014, WakeMed was approved (Project I.D. # J-8660-11) to develop 29 additional acute care beds at WakeMed Raleigh Campus. Neither project has been developed. In this application, WakeMed proposes to relocate 30 of the 50 approved but undeveloped acute care beds from WakeMed Raleigh Campus to WakeMed Cary Hospital. The applicant states it will develop the remaining 20 approved acute care beds at WakeMed Raleigh Campus by FY2020. In Section D.2, pages 74-75, the applicant states,

> *"While inpatient utilization and surgical cases at WakeMed Cary have increased over the last 36-48 months, utilization for the same measures at WakeMed Raleigh has remained relatively flat, and even declined slightly since FY2014. … Total inpatient utilization of WakeMed Raleigh has declined 2.7 percent from FY 2014-2017. Utilization of medical-surgical beds decrease* [sic] *8.7 percent during the same period. These declines in occupancy are the* [sic] *due to several factors, including decreases in inpatient cardiovascular volume which utilizes medical-surgical beds, and efforts to reduce lengths of stay by implementing population health initiatives. While this reduction in utilization has been relatively modest, WakeMed's senior leadership, most of whom came to work at WakeMed since 2014, has been cautious to develop all Agency-approved inpatient bed projects prematurely. It has been apparent that the system's inpatient volume growth of late has been experienced at WakeMed Cary Hospital. WakeMed North Hospital, whose first acute care beds opened in 2015, is also building inpatient volume, but in a measured way. Given these trends for inpatient bed utilization by campus, WakeMed believes that WakeMed Raleigh's patient volume will be met by current licensed bed capacity and the development of 20 approved beds by 2022."*

In Section Q, page 174, the applicant projects that WakeMed Raleigh Campus will have an average occupancy rate of 81.5 percent in 587 licensed acute care beds in the third operating year (FY2022) of the proposed project, as shown in the table below:

WakeMed Raleigh Campus Projected Inpatient Discharges and Patient Days

	Interim			Projected		
	2017	**2018**	**2019**	**Year 1 2020**	**Year 2 2021**	**Year 3 2022**
Total Discharges	32,099	32,353	32,584	32,783	32,942	33,064
ALOS	5.28	5.28	5.28	5.28	5.28	5.28
Total Patient Days	169,483	170,824	172,044	173,094	173,934	174,578
Average Daily Census	471.4	474.2	476.5	477.0	476.5	478.3
Licensed Beds	567	567	567	587	587	587
Percent Utilization	**81.9%**	**82.5%**	**83.1%**	**80.6%**	**81.2%**	**81.5%**

Source: Table on page 174 of the application.

Projected utilization is reasonable and adequately supported for the following reasons:

- The applicant projects utilization of the hospital's acute care beds based on historical utilization of the existing WakeMed Raleigh facility, population growth projections from NCSOMB, historical inpatient cases, market share, and ALOS data from Truven Analytics.
- Exhibit I.2 contains letters from physicians expressing support for the proposed project.

Operating Rooms

WakeMed Raleigh Campus has 16 shared surgical operating rooms, four dedicated open heart surgery operating rooms and three dedicated C-section operating rooms. The applicant proposes to relocate one shared surgical operating room from WakeMed Raleigh Campus to WCH. In Section D.1, page 75, the applicant states,

> *"WakeMed Raleigh Campus's surgical utilization continues to grow, but at a slower pace than WakeMed Cary's, as shown in Table D.2. Since FY 2014, inpatient surgery cases at WakeMed Raleigh have increased 15 percent, but outpatient surgery cases have increased by less than 1 percent – this is a direct result of the opening of Capital City Surgery Center (CCSC), which relocated 4 operating rooms from WakeMed Raleigh to a new freestanding ambulatory surgery center. Since the opening of CCSC, outpatient surgery volume at Raleigh Campus has grown more slowly, as less complex cases have shifted to the new ASC. … WakeMed believes that outpatient surgery volume at Raleigh Campus will continue to grow slowly, as more cases are performed in freestanding ASCs. Give* [sic] *that outpatient volume has been relatively flat, and that the small OR proposed for relocation is not often utilized, WakeMed leadership believes its projected surgical utilization will be met with one fewer licensed OR. The best use of this small OR is relocation to WakeMed Cary where surgical utilization is growing more quickly and the room can be replaced with a larger OR, which will be better utilized."*

In Section Q, page 179, the applicant projects that WakeMed Raleigh Campus will perform 7,815 inpatient cases (excluding trauma and open heart surgery) and 9,244 outpatient surgical cases, for a total of 17,059 surgical cases in the third operating year (FY2022) of the proposed project. Assuming 1.5 surgical hours per outpatient surgical case and 3.0 surgical hours per inpatient surgical case, and a total operating room capacity of 1,872 surgical hours per operating room per year, the total number of operating rooms required would be 19.9 [(7,815 X 3.0) + (9,244 X 1.5))/1,872 = 19.9]. In Section C.11, page 68, the applicant states,

> *"While Table C.18* [on page 68 of the application] *suggests that WakeMed Raleigh has a deficit of surgical operating rooms, this calculation does not take into account that WakeMed Raleigh, as a tertiary hospital and Level I Trauma Center with one of North Carolina's busiest emergency departments, keeps several operating rooms open during evenings, overnight and on weekends, to accommodate emergency cases and accommodate changes to the OR schedule. Thus, the Performance Standard of 1,872 hours per OR per year does not fully reflect the existing OR capacity of WakeMed Raleigh based on its current pattern of use. WakeMed would not be proposing this project if WakeMed Raleigh were truly experiencing a shortage of ORs as the Performance Standard suggests. WakeMed believes the current and proposed OR capacity at WakeMed Raleigh will be adequate for the future, particularly given that the OR proposed for relocation is inadequately sized."*

Projected utilization is reasonable and adequately supported for the following reasons:

- The applicant projects utilization of the hospital's operating rooms based on historical utilization of the existing WakeMed Raleigh facility and population growth projections for the applicant's identified service area.
- Exhibit I.2 contains letters from physicians expressing support for the proposed project.

In Section D.4, page 76, the applicant states, *"WakeMed does not anticipate that the proposed project will negatively affect the ability of low income persons, racial and ethnic minorities, women, handicapped person, the elderly, or any other underserved groups to obtain needed care because the same policies and procedures are in effect at both WakeMed Raleigh and WakeMed Cary."*

Conclusion

The Agency reviewed the:

- Application
- Exhibits to the application
- Supplemental information requested by the Agency
- Information publicly available during the review and used by the Agency

Based on that review, the Agency concludes that the applicant adequately demonstrates that:

- The needs of the population currently using the services to be reduced, eliminated or relocated will be adequately met following project completion.
- The project will not adversely impact the ability of underserved groups to access these services following project completion.

(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 E.2, pages 78-79, the applicant describes the alternatives it considered and explains why each alternative is either more costly or less effective than the alternative proposed in this application to meet the need. The alternatives considered were:

- Maintain the status quo – The applicant states this was not an effective alternative due to the fact that it would not meet the need for additional medical/surgical acute care beds at WCH.
- Redistributing "limited-use" beds to medical/surgical beds – The applicant considered reallocating some of WCH's beds that are currently designated for ICU, obstetrics, and neonatal care to medical/surgical beds. However, WCH determined that the cost of reallocating and relocating those beds within the facility would be comparable to the proposed project. Also, the applicant determined that those beds were needed in their existing units.
- Relocate only acute care beds to WCH – The applicant states this was not an effective alternative due to the fact that it would not meet the need for additional operating room capacity at WCH.
- Relocate only the operating room to WCH – The applicant states this was not an effective alternative due to the fact that it would not meet the need for additional acute care beds at WCH.

On page 79, the applicant states that its proposal is the most effective alternative because it provides sufficient acute care bed capacity at WCH without decreasing the number of acute beds currently operating at WakeMed Raleigh, and it meets the needs for additional operating room capacity at WCH with negligible cost and without increasing the operating room inventory in Wake County.

The applicant adequately demonstrates that the alternative proposed in this application is the most effective alternative to meet the need.

Conclusion

The Agency reviewed the:

- Application
- Exhibits to the application
- Information which was publicly available during the review and used by the Agency.

Based on that review, the Agency concludes that the application is conforming to this criterion. Therefore, the application is approved subject to the following conditions:

1. **WakeMed shall materially comply with all representations made in the certificate of need application.**

2. **WakeMed shall relocate no more than 30 approved acute care beds from WakeMed Raleigh Campus to WakeMed Cary Hospital. Upon completion of the proposed project, WakeMed Cary Hospital will be licensed for no more than 208 acute care beds.**

3. **WakeMed shall relocate no more than one shared surgical operating room from WakeMed Raleigh Campus to WakeMed Cary Hospital. Upon completion of the proposed project, WakeMed Cary Hospital will be licensed for no more than ten shared surgical operating rooms and two dedicated C-section operating rooms.**

4. **WakeMed shall not acquire as part of this project any equipment that is not included in the project's proposed capital expenditures in Section Q of the application and that would otherwise require a certificate of need.**

5. **WakeMed 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.**

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

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

7. **WakeMed shall acknowledge acceptance of and agree to comply with all conditions stated herein to the Agency in writing prior to issuance of the certificate of need.**

(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

The applicant, WCH, proposes to construct a two-story, 97,750 square foot vertical expansion, creating a fourth and fifth floor, over the existing hospital.

Capital and Working Capital Costs

In Section Q, Form F.1a, the applicant projects the total capital cost of the project as shown in the table below.

WCH Expansion Capital Cost

Cost Category	Projected Capital Cost
Construction/Renovation	$49,518,873
Medical Equipment	$3,834,800
Financing Costs	$843,347
Interest	$2,530,042
Consultant Fees	$50,000
Other (Contingency)	$2,819,485
TOTAL CAPITAL COST	**$59,596,547**

Source: Section Q, Form F.1a of the application.

In Section Q, page 181, the applicant provides the assumptions used to project the capital cost. In Section F.3, pages 84-85, the applicant state that WCH is an existing and operational hospital and no start-up or initial operating expenses will be required.

Availability of Funds

In Section F, page 82, the applicant states that the capital cost will be funded as shown in the table below.

Sources of Capital Cost Financing

Type	Total
Loans	$0
Accumulated reserves or OE *	$0
Bonds	$59,596,547
Other (Specify)	$0
Total Financing **	$59,596,547

* OE = Owner's Equity

In Section F.2, page 82, the applicant state that the $59,596,547 in project capital costs for the proposed expansion will be funded by bond financing through the North Carolina Medical Care Commission. In Exhibit F.2.2, the applicant provides a letter dated October 10, 2017, from a Director for Citigroup Global Markets, Inc. documenting their intention to provide $60 million in bond financing for the proposed project.

Financial Feasibility

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

Projected Revenue and Expenses for WCH

	PY1 FY2020	PY2 FY2021	PY3 FY2022
Total Gross Revenue (Charges)	$1,038,112,284	$1,116,171,317	$1,198,762,429
Total Net Revenue	$254,904,069	$274,071,134	$294,351,031
Total Operating Expenses	$205,564,404	$220,222,998	$234,651,879
Net Income (Loss)	**$49,339,665**	**$53,848,135**	**$59,699,152**

The assumptions used by the applicant in preparation of the pro forma financial statements are reasonable, including projected utilization, costs and charges. See Section Q of the application for the assumptions used regarding costs and charges. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference.

Conclusion

The Agency reviewed the:

- Application
- Exhibits to the application
- Information publicly available during the review and used by the Agency

Based on that review, the Agency concludes that the application is conforming to this criterion for the following reasons:

- The applicant adequately demonstrates that the capital costs are based on reasonable and adequately supported assumptions.
- The applicant adequately demonstrates availability of sufficient funds for the capital needs of the proposal.
- The applicant adequately demonstrates sufficient funds for the operating needs of the proposal and that the financial feasibility of the proposal is based upon reasonable projections of costs and charges.

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

C

The applicant, WakeMed, proposes to construct a two-story addition to WakeMed Cary Hospital to accommodate 30 approved acute care beds and one existing shared operating room

to be relocated from Wake Raleigh Campus. Following completion of the proposed project, WakeMed Cary Hospital will have a total of 208 acute care beds and 12 operating rooms.

On page 39, the 2017 SMFP defines the service area for acute care beds as *"the acute care bed planning area in which the bed is located. The acute care bed planning areas are the single and multicounty groupings shown in Figure 5.1."* Figure 5.1 on page 42 of the 2017 SMFP indicates that Wake County is a single county service area. On page 57, the 2017 SMFP states, *"An operating room's service area is the operating room planning area in which the operating room is located. The operating room planning areas are the single and multicounty groupings shown in Figure 6.1."* In Figure 6.1, page 60 of the 2017 SMFP, Wake County is shown as a single-county operating room service area. Thus, the service area for this facility consists of Wake County. Facilities may also serve residents of counties not included in their service area.

There are four existing hospitals and one approved hospital, Rex Hospital Holly Springs, located in Wake County, as shown in the table below:

Hospital	Licensed Acute Care Beds	FY2016 Patient Days of Care	Percent Occupancy
Duke Raleigh Hospital	186	38,773	57.1%
Rex Hospital	433	110,540	69.9%
Rex Hospital Holly Springs	50	NA	NA
WakeMed (Inc. WakeMed North)	628	157,938	68.9%
WakeMed Cary Hospital	156	37,623	66.1%

Source: 2018 State Medical Facilities Plan, Table 5A: Acute Care Bed Need Projections.

In Section G, page 93, the applicant explains why it believes its proposal would not result in the unnecessary duplication of existing or approved acute care bed and operating room services in Wake County. The applicant states:

> *"The acute care beds proposed for relocation from WakeMed Raleigh Campus to WakeMed Cary have already been approved by the Agency, but have not yet been developed. Relocation of these beds will not increase the inventory of acute care beds in Wake County or in the service area. The bed capacity constraints at WakeMed Cary, especially for medical-surgical beds, demonstrate the need for the project. There are no other hospitals located in Cary that would alleviate these constraints, and as such, the project does not represent an unnecessary duplication of services.*
>
> *Likewise, WakeMed proposes to relocate one existing shared surgical operating rooms from WakeMed Raleigh to WakeMed Cary. Doing so will not increase the planning inventory of surgical operating rooms in Wake County or in the overall service area. The relocation of one OR will address growth in demand for surgical services at WakeMed Cary, particularly inpatient surgery growth. There are no other hospital providers of surgery in Cary that would address the growth in demand for specifically inpatients* [sic] *surgery, and as such, the project does not represent an unnecessary duplication of services."*

The applicant adequately demonstrates that the proposal would not result in an unnecessary duplication of existing or approved services in the service area for the following reasons:

- The proposal would not result in an increase in the number of approved or existing acute care beds or operating rooms in the Wake County service area.
- The applicant adequately demonstrates that the proposed relocation of acute care beds and operating room is needed in addition to the existing or approved acute care beds and operating rooms.

Conclusion

The Agency reviewed the:

- Application
- Exhibits to the application
- Written comments
- Remarks made at the public hearing
- Responses to comments
- Information which was publicly available during the review and used by the Agency.

Based on that review, the Agency concludes that the application is conforming to this criterion for the reasons stated above.

(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 Q, Form H, the applicant provides the current and projected full-time equivalent (FTE) staffing for WCH's inpatient and surgical services for each of the first three operating years following completion of the proposed project. The assumptions and methodology used to project staffing are provided in Section Q. Adequate costs for the health manpower and management positions proposed by the applicant are budgeted in Form F.3, which is found in Section Q. In Section H, pages 94-100, the applicant describes the methods used to recruit or fill new positions and its existing training and continuing education programs. In Section H, page 102, the applicant identifies Seth Brody as the current medical director. In Exhibit H.4.1, the applicant provides a letter from the medical director indicating an interest in serving as medical director for the proposed services. In Section H, page 102, the applicant describes its physician recruitment plans. In Exhibit H.4.2, the applicant provides supporting documentation.

The applicant adequately demonstrates the availability of sufficient health manpower and management personnel to provide the proposed services.

Conclusion

The Agency reviewed the:

- Application
- Exhibits to the application
- Information which was publicly available during the review and used by the Agency.

Based on that review, the Agency concludes that the application is conforming to this criterion for the reasons stated above.

(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 I, page 104, the applicant identifies the ancillary and support services necessary for the proposed services. On pages 104-105, the applicant adequately explains how each ancillary and support service is or will be made available and provides supporting documentation in Exhibit I.1.

In Section I, pages 105-106, the applicant describes its existing and proposed relationships with other local health care and social service providers and provides supporting documentation in Exhibit I.2.1.

The applicant adequately demonstrates that the proposed services will be coordinated with the existing health care system.

Conclusion

The Agency reviewed the:

- Application
- Exhibits to the application
- Information which was publicly available during the review and used by the Agency.

Based on that review, the Agency concludes that the application is conforming to this criterion.

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

NA

The applicant does not project to provide the proposed services to a substantial number of persons residing in Health Service Areas (HSAs) that are not adjacent to the HSA in which the services will be offered. Furthermore, the applicant does not project to provide the proposed services to a substantial number of persons residing in other states that are not adjacent to the North Carolina county in which the services will be offered.

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

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

NA

The applicant is not an HMO. Therefore Criterion (10) is not applicable.

(11) Repealed effective July 1, 1987.

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

C

In Section K, page 109, the applicant states that the project involves the construction of a two-story, 97,750 square foot vertical expansion, creating a fourth and fifth floor, over the existing hospital. Line drawings are provided in Exhibit K.1.

On page 110, the applicant adequately explains how the cost, design and means of construction represent the most reasonable alternative for the proposal.

On page 110, the applicant adequately explains why the proposal will not unduly increase the costs to the applicant of providing the proposed services or the costs and charges to the public for the proposed services.

On pages 24-25, the applicant identifies any applicable energy saving features that will be incorporated into the construction plans.

Conclusion

The Agency reviewed the:

- Application
- Exhibits to the application
- Information which was publicly available during the review and used by the Agency.

Based on that review, the Agency concludes that the application is conforming to this criterion.

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

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

C

In Section L.1, page 117, the applicant reports that 48.1% of the patients who received services at WCH had some or all of their services paid for by Medicare or Medicaid in FY2016. The table below shows the historical (FY2016) payment source for the entire WCH facility, acute care bed services, and surgical services:

Payment Source	Entire WCH Facility	Acute Care Bed Services	Surgical Services
Self-Pay/Charity Care	5.3%	3.1%	2.3%
Medicare	42.1%	51.8%	41.2%
Medicaid	6.0%	4.8%	3.1%
Commercial Insurance/Managed Care	44.1%	38.5%	50.6%
Workers Compensation/Other Government	2.5%	1.8%	2.8%
Total	**100.0%**	**100.0%**	**100.0%**

Source: Table on page 117 of the application.

In Section L, page 116, the applicant provides the following comparison

Group	Percent of WakeMed System Patients	Percent of WakeMed Cary Patients	Percentage in Wake County
Women	59.1%	61.5%	51.3%
Elderly	20.0%	28.3%	11.1%
Racial/Ethnic Minorities	48.2%	32.5%	32.4%
Low income/Uninsured Persons	33.5%	17.4%	11.3%
Children (ages 0-17)	20.3%	12.5%	24.3%

The Agency reviewed the:

- Application
- Exhibits to the application
- Information which was publicly available during the review and used by the Agency.

Based on that review, the Agency concludes that the applicant adequately documents 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. Therefore, the application is conforming to this criterion.

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

C

Regarding any obligation to provide uncompensated care, community service or access by minorities and persons with disabilities, in Section L, page 117, the applicant states: *"WakeMed has no obligation under any applicable Federal regulation to provide uncompensated care and community service. However, WakeMed provided $274 million in uncompensated care during Fiscal Year 2016, as well as $74 million in bad debt."*

In Section L, page 117, the applicant states that during the last five years no patient civil rights access complaints have been filed against the facility or any similar facilities owned by the applicant or a related entity and located in North Carolina.

The Agency reviewed the:

- Application
- Exhibits to the application
- Information which was publicly available during the review and used by the Agency.

Based on that review, the Agency concludes that the application is conforming to this criterion.

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

C

In Section L.3, page 118, the applicant projects the following payment sources for the entire WCH facility, acute care bed services, and surgical services during the second operating year (FY2021):

Payment Source	Entire WCH Facility	Acute Care Bed Services	Surgical Services
Self-Pay/Charity Care	5.2%	3.4%	2.8%
Medicare	43.9%	53.1%	43.7%
Medicaid	5.7%	5.0%	3.0%
Commercial Insurance/Managed Care	42.7%	36.6%	48.1%
Workers Compensation/Other Government	2.5%	1.9%	2.4%
Total	**100.0%**	**100.0%**	**100.0%**

Source: Table on page 118 of the application.

As shown in the table above, during the second full fiscal year of operation, the applicant projects that 5.2% of total services will be provided to self-pay/charity care patients, 43.9% to Medicare patients and 5.2% to Medicaid patients.

On page 118, the applicant provides the assumptions and methodology used to project payor mix during the second full fiscal year of operation following completion of the project. The projected payor mix is reasonable and adequately supported because the applicant states it is based on WCH's historical payment sources.

The Agency reviewed the:

- Application
- Exhibits to the application
- Information which was publicly available during the review and used by the Agency.

Based on that review, the Agency concludes that the application is conforming to this criterion.

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

C

In Section L, pages 119-120, the applicant adequately describes the range of means by which patients will have access to the proposed services.

The Agency reviewed the:

- Application
- Exhibits to the application
- Information which was publicly available during the review and used by the Agency.

Based on that review, the Agency concludes that the application is conforming to this criterion.

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

C

In Section M, page 121, the applicant describes the extent to which health professional training programs in the area have access to the facility for training purposes and provides supporting documentation in Exhibit M.1.

The Agency reviewed the:

Application
Exhibits to the application
Information which was publicly available during the review and used by the Agency.

Based on that review, the Agency concludes that the applicant adequately demonstrates that the proposed services will accommodate the clinical needs of area health professional training programs, and therefore, the application is conforming to this criterion.

(15) Repealed effective July 1, 1987.
(16) Repealed effective July 1, 1987.
(17) Repealed effective July 1, 1987.
(18) Repealed effective July 1, 1987.

(18a) The applicant shall demonstrate the expected effects of the proposed services on competition in the proposed service area, including how any enhanced competition will have a positive

impact upon the cost effectiveness, quality, and access to the services proposed; and in the case of applications for services where competition between providers will not have a favorable impact on cost-effectiveness, quality, and access to the services proposed, the applicant shall demonstrate that its application is for a service on which competition will not have a favorable impact.

C

The applicant, WakeMed, proposes to construct a two-story addition to WakeMed Cary Hospital to accommodate 30 approved acute care beds and one existing shared operating room to be relocated from Wake Raleigh Campus. Following completion of the proposed project, WakeMed Cary Hospital will have a total of 208 acute care beds and 12 operating rooms.

On page 39, the 2017 SMFP defines the service area for acute care beds as *"the acute care bed planning area in which the bed is located. The acute care bed planning areas are the single and multicounty groupings shown in Figure 5.1."* Figure 5.1 on page 42 of the 2017 SMFP indicates that Wake County is a single county service area. On page 57, the 2017 SMFP states, *"An operating room's service area is the operating room planning area in which the operating room is located. The operating room planning areas are the single and multicounty groupings shown in Figure 6.1."* In Figure 6.1, page 60 of the 2017 SMFP, Wake County is shown as a single-county operating room service area. Thus, the service area for this facility consists of Wake County. Facilities may also serve residents of counties not included in their service area.

There are four existing hospitals and one approved hospital, Rex Hospital Holly Springs, located in Wake County, as shown in the table below:

Hospital	Licensed Acute Care Beds	FY2016 Patient Days of Care	Percent Occupancy
Duke Raleigh Hospital	186	38,773	57.1%
Rex Hospital	433	110,540	69.9%
Rex Hospital Holly Springs	50	NA	NA
WakeMed (Inc. WakeMed North)	628	157,938	68.9%
WakeMed Cary Hospital	156	37,623	66.1%

Source: 2018 State Medical Facilities Plan, Table 5A: Acute Care Bed Need Projections.

In Section N, pages 128-130, the applicant describes the expected effects of the proposed services on competition in the service area and discusses how any enhanced competition in the service area will promote the cost-effectiveness, quality and access to the proposed services. On page 128, the applicant states:

> *"WakeMed Cary Hospital is the only acute care facility offering inpatient beds and surgical operating rooms in western Wake County. For residents of this area, as well as portions of southern Wake, northern Lee and northern Harnett Counties, WakeMed Cary is the closest full-service hospital. … To the extent that an acute care hospital 'competes' with other similar facilities is a function of its ability to treat patients more quickly, more effectively, and with greater patient satisfaction than other facilities in close proximity.*

An acute care hospital that has insufficient bed and/or operating room capacity, an inadequate facility, and limited ancillary and support services is less competitive than one that provides a full range of services in a sufficiently-sized and well-equipped facility. The proposed project will allow WakeMed Cary to add bed and OR capacity to be sufficiently-sized to meet current and projected demand without capacity constraints. This in turn will allow WakeMed to remain competitive."

The applicant adequately describes the expected effects of the proposed services on competition in the service area and adequately demonstrates:

- The cost-effectiveness of the proposal (see Sections F and Q of the application and any exhibits)
- Quality services will be provided (see Section O of the application and any exhibits)
- Access will be provided to underserved groups (see Section L of the application and any exhibits)

Conclusion

The Agency reviewed the:

- Application
- Exhibits to the application
- Written comments
- Remarks made at the public hearing
- Responses to comments
- Information publicly available during the review and used by the Agency.

Based on that review, the Agency concludes that the application is conforming to this criterion for the reasons stated above.

(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

In Section O, page 141, the applicant identifies the hospitals located in North Carolina owned, operated or managed by the applicant or a related entity. The applicant identifies a total of three of this type of facility located in North Carolina.

In Section O, page 147, the applicant states that, during the 18 months immediately preceding the submittal of the application, none of these hospitals have operated out of compliance with any Medicare Conditions of Participation. After reviewing and considering information provided by the applicant and considering the quality of care provided at all three WakeMed

hospitals, the applicant provided sufficient evidence that quality care has been provided in the past. Therefore, the application is conforming to this criterion.

(21) Repealed effective July 1, 1987.

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

C

The Criteria and Standards for Acute Care Beds as promulgated in 10A NCAC 14C .3800 are not applicable because the applicant does not propose to develop new acute care beds. The applicant proposes to relocate 30 acute care beds that were previously approved in Project I.D. # J-8660-11 (develop 29 additional acute care beds at WakeMed Raleigh Campus) and Project I.D. # J-10165-13 (reconvert 21 nursing facility beds back to acute care beds and relocate the beds to WakeMed Raleigh Campus), but have not yet been developed. Alternatively, the applicant could have proposed to relocate 30 existing acute care beds from WakeMed Raleigh Campus to WCH, and then back-fill those 30 beds relocated from WakeMed Raleigh Campus with 30 approved beds from the aforementioned projects.

The application submitted by WakeMed is conforming with all applicable Criteria and Standards for Surgical Services and Operating Rooms promulgated in 10A NCAC 14C .2100 and all applicable The specific criteria are discussed below.

SECTION .2100 – CRITERIA AND STANDARDS FOR SURGICAL SERVICES AND OPERATING ROOMS

10A NCAC 14C .2103 PERFORMANCE STANDARDS

(a) In projecting utilization, the operating rooms shall be considered to be available for use five days per week and 52 weeks a year.

-C- In Section C.11, page 66, the applicant states that surgical services at WCH are projected to operate five days per week and 52 weeks a year.

(b) A proposal to establish a new ambulatory surgical facility, to establish a new campus of an existing facility, to establish a new hospital, to increase the number of operating rooms in an existing facility (excluding dedicated C-section operating rooms), to convert a specialty ambulatory surgical program to a multispecialty ambulatory surgical program or to add a specialty to a specialty ambulatory surgical program shall:

(1) demonstrate the need for the number of proposed operating rooms in the facility which is proposed to be developed or expanded in the third operating year of the project

based on the following formula: {[(Number of facility's projected inpatient cases, excluding trauma cases reported by Level I or II trauma centers, cases reported by designated burn intensive care units and cases performed in dedicated open heart and C-section rooms, times 3.0 hours) plus (Number of facility's projected outpatient cases times 1.5 hours)] divided by 1872 hours} minus the facility's total number of existing and approved operating rooms and operating rooms proposed in another pending application, excluding one operating room for Level I or II trauma centers, one operating room for facilities with designated burn intensive care units, and all dedicated open heart and C-section operating rooms or demonstrate conformance of the proposed project to Policy AC-3 in the State Medical Facilities Plan titled "Exemption From Plan Provisions for Certain Academic Medical Center Teaching Hospital Projects;" and

(2) The number of rooms needed is determined as follows:

(A) in a service area which has more than 10 operating rooms, if the difference is a positive number greater than or equal to 0.5, then the need is the next highest whole number for fractions of 0.5 or greater and the next lowest whole number for fractions less than 0.5; and if the difference is a negative number or a positive number less than 0.5, then the need is zero;

(B) in a service area which has 6 to 10 operating rooms, if the difference is a positive number greater than or equal to 0.3, then the need is the next highest whole number for fractions of 0.3 or greater and the next lowest whole number for fractions less than 0.3, and if the difference is a negative number or a positive number less than 0.3, then the need is zero; and

(C) in a service area which has five or fewer operating rooms, if the difference is a positive number greater than or equal to 0.2, then the need is the next highest whole number for fractions of 0.2 or greater and the next lowest whole number for fractions less than 0.2; and if the difference is a negative number or a positive number less than 0.2, then the need is zero.

-C- The Wake County operating room service area has more than ten operating rooms. In Section C.11, page 68, the applicant provides projections of surgical case volumes, surgical hours, and operating room need, which is summarized below:

WakeMed Cary Hospital Projected Surgery Volume and Operating Room Need			
	PY 1 FY2020	**PY 2 FY2021**	**PY 3 FY2022**
Projected WCH Outpatient Surgery Cases	5,555	5,653	5,753
Projected WCH Inpatient Surgery Cases	3,569	3,632	3,696
Total Surgical Hours Required*	19,040	19,376	19,718
Operating Rooms Needed (1,872 hours per OR)	10.2	10.4	10.5

Source: Table on page 68 of the application.
*Surgical hours required based on 1.5 hours per outpatient surgical case and 3.0 hours per inpatient surgical case.

Projected utilization, which is based on reasonable and adequately supported assumptions, supports the need for the additional operating room. The discussion regarding projected utilization found in Criterion (3) is incorporated herein by reference.

(c) A proposal to increase the number of operating rooms (excluding dedicated C-section operating rooms) in a service area shall:

(1) demonstrate the need for the number of proposed operating rooms in addition to the rooms in all of the licensed facilities identified in response to 10A NCAC 14C .2102(b)(2) in the third operating year of the proposed project based on the following formula: {[(Number of projected inpatient cases for all the applicant's or related entities' facilities, excluding trauma cases reported by Level I or II trauma centers, cases reported by designated burn intensive care units and cases performed in dedicated open heart and C-section rooms, times 3.0 hours) plus (Number of projected outpatient cases for all the applicant's or related entities' facilities times 1.5 hours)] divided by 1872 hours} minus the total number of existing and approved operating rooms and operating rooms proposed in another pending application, excluding one operating room for Level I or II trauma centers, one operating room for facilities with designated burn intensive care units, and all dedicated open heart and C-Section operating rooms in all of the applicant's or related entities' licensed facilities in the service area; and

(2) The number of rooms needed is determined as follows:

(A) in a service area which has more than 10 operating rooms, if the difference is a positive number greater than or equal to 0.5, then the need is the next highest whole number for fractions of 0.5 or greater and the next lowest whole number for fractions less than 0.5; and if the difference is a negative number or a positive number less than 0.5, then the need is zero;

(B) in a service area which has 6 to 10 operating rooms, if the difference is a positive number greater than or equal to 0.3, then the need is the next highest whole number for fractions of 0.3 or greater and the next lowest whole number for fractions less than 0.3, and if the difference is a negative number or a positive number less than 0.3, then the need is zero; and

(C) in a service area which has five or fewer operating rooms, if the difference is a positive number greater than or equal to 0.2, then the need is the next highest whole number for fractions of 0.2 or greater and the next lowest whole number for fractions less than 0.2; and if the difference is a negative number or a positive number less than 0.2, then the need is zero.

-NA- WakeMed does not propose to increase the number operating rooms in the service area.

(d) An applicant that has one or more existing or approved dedicated C-section operating rooms and is proposing to develop an additional dedicated C-section operating room in the same facility shall demonstrate that an average of at least 365 C-sections per room were performed in the facility's existing dedicated C-section operating rooms in the previous 12 months and are projected to be performed in the facility's existing, approved and proposed dedicated C-section rooms during the third year of operation following completion of the project.

-NA- The applicant does not propose to develop an additional dedicated C-section operating room.

(e) An applicant proposing to convert a specialty ambulatory surgical program to a multispecialty ambulatory surgical program or to add a specialty to a specialty ambulatory surgical program shall:

(1) provide documentation to show that each existing ambulatory surgery program in the service area that performs ambulatory surgery in the same specialty area as proposed in the application is currently utilized an average of at least 1,872 hours per operating room per year, excluding dedicated open heart and C-Section operating rooms. The hours utilized per operating room shall be calculated as follows: [(Number of projected inpatient cases, excluding open heart and C-sections performed in dedicated rooms, times 3.0 hours) plus (Number of projected outpatient cases times 1.5 hours)] divided by the number of operating rooms, excluding dedicated open heart and C-Section operating rooms; and

(2) demonstrate the need in the third operating year of the project based on the following formula: [(Total number of projected outpatient cases for all ambulatory surgery programs in the service area times 1.5 hours) divided by 1872 hours] minus the total number of existing, approved and proposed outpatient or ambulatory surgical operating rooms and shared operating rooms in the service area. The need is demonstrated if the difference is a positive number greater than or equal to one, after the number is rounded to the next highest number for fractions of 0.50 or greater.

-NA- The applicant does not propose to convert a specialty ambulatory surgical program to a multispecialty ambulatory surgical program or to add a specialty to a specialty ambulatory surgical program.

(f) The applicant shall document the assumptions and provide data supporting the methodology used for each projection in this Rule.

-C- The applicant provides documentation of its assumptions and provides data supporting its methodology in Section Q, pages 161-165 of the application.