

Competitive Comments on Wake County Operating Room Applications

submitted by

**Received by the
CON Section**

Rex Hospital

31 MAR 2010 01:04

In accordance with N.C. GEN. STAT. § 131E-185(a1)(1), Rex Hospital (Rex) submits the following comments related to competing applications to develop additional operating rooms in Wake County to meet a need identified in the 2010 *State Medical Facilities Plan (SMFP)*. Rex's comments include "*discussion and argument regarding whether, in light of the material contained in the application and other relevant factual material, the application complies with the relevant review criteria, plans and standards.*" See N.C. GEN. STAT. § 131E-185(a1)(1)(c). As such, Rex's comments are organized by the general CON statutory review criteria and specific regulatory criteria and standards, as they relate to the following applications:

- **WakeMed, (WakeMed Cary), Project ID# J-8463-10**
- **Duke Raleigh Hospital, (Duke Raleigh), Project ID # J-8467-10**
- **Holly Springs Surgery Center, LLC, (Novant), Project ID# J-8471-10**
- **Rex Hospital, Inc. (Rex Holly Springs), Project ID # J-8468-10**
- **Rex Hospital, Inc. (Rex Main Campus), Project ID # J-8469-10**

GENERAL COMMENTS

WakeMed Cary

WakeMed Cary recently reached an agreement with Surgical Care Affiliates (SCA) effective March 31, 2010 and discussed in a news release on March 24, 2010 whereby:

- *WakeMed [will purchase] a controlling interest in the general partnership that operates the Blue Ridge Surgery Center located on Lake Boone Trail in Raleigh .*
- *SCA will begin managing surgical services operations for WakeMed Cary Hospital . . .*
- *Effective May 17, 2010, 142 WakeMed Cary Hospital Surgical Services employees will transition to working directly for SCA.*

See Exhibit 1 for the WakeMed news release. This agreement raises several issues as the application filed by WakeMed Cary to develop additional operating rooms does not reference it in any way. In fact, this agreement may be a material change to the WakeMed Cary application which must be considered.

WakeMed states in the news release that the two parties have been "*exploring a formal relationship for nearly 16 months*" [emphasis added] and thus, WakeMed Cary's application could have included information about the details of this forthcoming agreement. For instance, it is not known when SCA will take over management of the WakeMed Cary surgery services. WakeMed Cary surgery employees will transition in May 2010, but it is unclear whether this will coincide with the change in management. The management entity for a surgical department which is proposing to add three operating rooms should be clear to the CON Section during its review; in this case it is not.

WakeMed's purchase of the Blue Ridge Surgery Center adds six operating rooms to its existing capacity which have not been accounted for in WakeMed Cary's application. More importantly, these six operating rooms are underutilized; according to its 2010 License Renewal Application (see Exhibit 5), Blue Ridge Surgery Center has a surplus of 1.3 operating rooms ($1.3 = 6 \text{ existing rooms} - 4.7 \text{ rooms needed for } 5,904 \text{ outpatient surgical cases} \times 1.5 \text{ hours per case} \div 1,872 \text{ hours per room}$).

WakeMed's decision to have SCA manage its WakeMed Cary facility is also problematic. As shown, SCA's management of the Blue Ridge Surgery Center has resulted in underutilized operating rooms. It is unclear what impact the management of WakeMed Cary's surgery department by SCA will have, but given the underutilization of SCA's own facility, the impact is more likely to be negative. In addition, any transition in management will necessarily result in some period of adjustment for patients, physicians, and staff. It is unclear whether this also will negatively affect patient experiences and ultimately, projected surgical volumes and financial feasibility.

Finally, the surgical department at WakeMed Cary have a different financial structure once the management agreement is in effect and employees transition to working directly for SCA. This reorganization will affect the financial workings of WakeMed Cary project as proposed. It is unclear whether the proposed changes impact the financial feasibility of WakeMed Cary's project.

Again, WakeMed Cary's application contains no discussion of this agreement. Without greater information, it is impossible to determine the degree to which WakeMed Cary's project will be affected.

The WakeMed Cary should also not be approved because it relies upon unreasonable growth projections for its surgical services. These projections are not supported by historical data and rely on inconsistent external data sources. Furthermore, WakeMed Cary's projections contain wholly unsupported market share assumptions for the Raleigh Surgery Center, WakeMed's recently approved outpatient surgery center located adjacent to the WakeMed Raleigh campus, and do not reflect an expected shift of cases to Rex Surgery Center of Cary which will negatively impact the proposed project. As such, WakeMed Cary should not be approved.

Duke Raleigh

The Duke Raleigh application should not be approved because it fails to provide any methodology on which to base its projections. In a certificate of need review, the burden is on the applicant to demonstrate the need for the proposed project and to provide the statistical data (i.e., methodology) that substantiates the existence of the need of the patient population. However, Duke Raleigh fails to provide any methodology which would adequately demonstrate that its projected utilization is based on reasonable and supported assumptions. As such, the Analyst cannot reasonably rely on the projections provided. Further, in failing to provide any methodology, Duke Raleigh also failed to adequately demonstrate that its projected volumes for the proposed operating rooms incorporate the Policy Gen-3 concepts in meeting the need identified in the *2010 SMFP*. Therefore, Duke Raleigh did not adequately demonstrate that the proposed project would maximize healthcare value.

In addition, Duke Raleigh submitted its proposal on an incorrect application review form, the Acute Care/Medical Equipment application form. Given that its proposal involves the development of two additional operating rooms, the applicant should have used the OR/ASC/GI application form. Use of an incorrect application form unfairly shifts the task of determining whether the applicant has adequately responded to all appropriate and applicable questions onto the Analyst and may result in Duke Raleigh's failure to adequately respond to all questions needed to demonstrate conformity with the applicable statutory review criteria.

Novant

Novant proposes to develop a new freestanding ambulatory surgery center with one procedure room and three dedicated outpatient operating rooms to be located in southern Wake County in Holly Springs, hereinafter referred to as Holly Springs Surgery Center (HSSC). In its application, Novant refers to its attempts to develop a community hospital in Holly Springs: in 2008 Novant

submitted a certificate of need application which was subsequently denied and according to Novant, in 2009, the Town of Holly Springs petitioned the State Health Coordinating Council (SHCC) for an adjusted bed need determination for Wake County in the 2010 SMFP, so that Novant could again submit an application for a community based hospital. The SHCC subsequently denied the Town of Holly Springs petition. Given Novant's clear long-term goal to develop a hospital in Holly Springs—the location of the proposed operating rooms—its proposed project is merely a means to an end. Therefore, while Novant touts the benefits of a freestanding ambulatory surgery center—namely, lower co-pays and charges—to give its proposal a competitive advantage in this CON review, it would seem that given the opportunity to add beds to its proposed facility, Holly Springs Surgery Center (HSSC), Novant would seize the opportunity, which would negate the advantage it asserts.

Furthermore, while Novant had support from the Town of Holly Springs for its 2008 community based hospital proposal, in the current CON review, Rex has the unanimous support of the Town Council of Holly Springs. As Rex noted in its application, the Town of Holly Springs has recognized not only a need for outpatient services, but also, a need for those services to be developed by Rex. However, in its application, Novant implies that Rex garnered the Town of Holly Springs unanimous support for its project through the use of coercion—particularly as it relates to its previously approved outpatient center, Project ID # J-8007-07. In its application, Novant states "*[l]eadership for the Town of Holly Springs however, elected to support the Rex application for the freestanding ambulatory surgery center to assure that Rex moves forward with construction of the CON Project ID # J-8007-07...according to the timeframe for Project ID # J-8007-07, construction of this facility should be 25% complete by May of 2010. To date, Rex has not broken ground...*" See Novant's application p. 48. Such inflammatory statements are blatantly offensive, distracting, and improper. Novant should base its arguments on matters of substance rather than relying on unsubstantiated emotional arguments and shock value. Rex obtained the unanimous support of the Town of Holly Springs based on its historical experience providing the services proposed in its application. In fact, in a 2008 consumer survey Rex's preference share for outpatient surgery ranked #1 in Wake County, with 41 percent preference share for the total area, more than 2.5 times the next provider (WakeMed Cary at 16 percent). Moreover, Rex ranked #1 in each of the four geographic areas measured in the survey—North Raleigh, West Raleigh, South Wake and East Wake. Novant's remarks that Rex obtained the support of the Town of Holly Springs through coercion are simply ludicrous. As demonstrated in the most recent progress report submitted on February 15, 2010 to the CON Section for Project ID # J-8007-07, Rex is developing the project as originally planned and any delays are associated with partnering with a developer. The project is scheduled to be complete as of January 1, 2012. Therefore, as of Rex's

most recent progress report for Project ID # J-8007-07, the project is – contrary to Novant’s statements otherwise – proceeding according to schedule.

Notwithstanding the aforementioned, the Novant application should not be approved because Novant fails to provide responses in its application to a number of questions which relate directly to the statutory review criteria. Rex maintains that Novant’s omissions are fatal to the approvability of its application.

In its application, Novant fails to provide any responses to Section III.3-III.9. A number of these questions relate directly to the applicable statutory review criteria and are not referenced anywhere else in the application. Specifically, the questions cited above respond to *SMFP* Policies, including Gen-3, which is part of the review under Criterion 1, as well as the identification of patients by county, which is required under Criterion 3. In addition, the applicant failed to respond to omitted questions relating to alternatives, and has therefore failed to provide information required under Criterion 4. Finally, the applicant does not respond to questions about existing providers and thus fails to demonstrate conformity with Criterion 6.

APPLICATION-SPECIFIC COMMENTS

WakeMed Cary

- (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.*

WakeMed Cary fails to demonstrate the need of the population for the proposed project, based on the following reasons:

1. Unreasonable growth projections for its surgical services:
 - a. Projected growth rates are unreasonable in light of historical growth rates demonstrated by the WakeMed System.
 - b. WakeMed System historical data are not supported by its 2010 Hospital License Renewal Applications (HLRAs).
 - c. Projected growth rates are unreasonable in light of historical growth rates demonstrated by WakeMed Cary.
 - d. WakeMed Cary historical data are not supported by its HLRA.
 - e. Projected growth rates exceed the historic Wake County growth rates demonstrated in HLRA and ThomsonReuters data.
2. Inconsistent data sources:
 - a. Higher number of surgical cases in market
 - b. Higher number of surgical cases performed at WakeMed locations.
3. Unsupported market share assumptions for the Raleigh Surgery Center
4. Failure to account for the shift of cases to the Rex Cary, LLC

While WakeMed Cary's projection methodology may seem similar to WakeMed's recently approved application to develop a surgery center in Wake County, the analyses below demonstrate significant differences between the two applications.

1. Unreasonable Growth Projections

- a. On page 57 of its application, WakeMed Cary provides the estimated surgical cases for the WakeMed System which project a 6.7 percent compound annual growth rate (CAGR) for total cases, a 4.6 percent CAGR for inpatient cases, and a 7.7 percent CAGR for outpatient cases.

WakeMed System Projected Surgical Growth Rates

<i>FFY</i>	<i>Inpatient</i>	<i>Outpatient</i>	<i>Total Cases</i>
2009	9,074	18,322	27,396
2010	9,553	19,188	28,741
2011	9,242	22,664	31,906
2012	9,947	24,778	34,725
2013	10,691	26,482	37,173
2014	11,282	27,522	38,804
2015	11,898	28,568	40,466
CAGR	4.6%	7.7%	6.7%

These projected growth rates are unreasonable in light of the historical growth rates demonstrated by the WakeMed System and the failure to provide a rationale to support this drastic change. As shown below, the WakeMed System has slightly negative total CAGR from FFY 2007 to 2009, based on data provided in the 2008 to 2010 Hospital License Renewal Applications (HLRAs) for WakeMed Raleigh and WakeMed Cary.¹

WakeMed System Historical Surgical Growth Rates

<i>FFY</i>	<i>Inpatient</i>	<i>Outpatient</i>	<i>Total Cases</i>
2007	8,921	20,566	29,487

¹ Rex did not consider data from prior HLRAs due to the change in how surgical case data was requested. Beginning with the 2008 HLRA, the form requested all surgical cases including cases operated on in procedure rooms or any other location whereas prior years requested surgical cases performed in operating rooms only.

2008	9,157	19,947	29,104
2009	8,952	20,450	29,402
CAGR	0.2%	(0.3%)	(0.1%)

Note: Excludes C-section and Open Heart cases.

Source: WakeMed Raleigh and WakeMed Cary 2008 to 2010 HLRA's.

- b. The historical data presented above may include surgical cases performed in procedure rooms or other locations whereas the data presented in the WakeMed Cary application does not. Thus, it is reasonable that the total historical cases provided in the 2010 HLRA for FFY 2009 (29,402) is higher than FFY 2009 data provided in WakeMed Cary's application (27,396). **However, it is not reasonable that WakeMed Cary's application shows a higher number of FFY 2009 inpatient cases than is shown on the HLRA's (9,074 inpatient cases in the WakeMed Cary application compared to only 8,921 inpatient cases on the 2010 HLRA's), particularly without an explanation for the difference.**
- c. On page 57 of its application, WakeMed Cary provides the projected surgical cases for the WakeMed Cary location which demonstrate a 4.7 percent CAGR for total cases, a 7.2 percent CAGR for inpatient cases, and a 3.9 percent CAGR for outpatient cases.

WakeMed Cary Projected Surgical Growth Rates

<i>FFY</i>	<i>Inpatient</i>	<i>Outpatient</i>	<i>Total Cases</i>
2009	2,079	7,122	9,201
2010	2,222	7,440	9,662
2011	2,331	7,805	10,136
2012	2,442	8,174	10,616
2013	2,666	8,441	11,107
2014	2,902	8,705	11,607
2015	3,149	8,963	12,112
CAGR	7.2%	3.9%	4.7%

These projected growth rates are unreasonable in light of the historical growth rates demonstrated by WakeMed Cary and the failure to provide a rationale for the change. As shown below, WakeMed Cary has shown only a 2.5 percent total CAGR from FFY 2007 to 2009, based on data provided in the

2008 to 2010 Hospital License Renewal Applications (HLRAs) for WakeMed Cary.²

WakeMed Cary Historical Surgical Growth Rates

<i>FFY</i>	<i>Inpatient</i>	<i>Outpatient</i>	<i>Total Cases</i>
2007	1,617	7,159	8,776
2008	1,686	6,962	8,648
2009	1,947	7,273	9,220
CAGR	9.7%	0.8%	2.5%

Note: Excludes C-section and Open Heart cases.

Source: WakeMed Cary 2008 to 2010 HLRAs.

While WakeMed Cary’s projected growth rate is below its historical growth rate for inpatient cases, its projected growth rate for outpatient cases is five times as much as its historical growth rate and its projected growth rate for total cases is two times as much as its historical growth rate.

WakeMed Cary Comparison of Growth Rates

	<i>Inpatient</i>	<i>Outpatient</i>	<i>Total Cases</i>
Projected 2009 to 2015	7.2%	3.9%	4.7%
Historical 2007 to 2009	9.7%	0.8%	2.5%
Projected ÷ Historical	0.7	4.9	1.9

In addition, WakeMed Cary’s historical inpatient growth rate is likely to have been affected by the addition of 42 inpatient medical/surgical beds during FFY 2008.³ However, inpatient beds were added in FFY 2008 according to the 2009 HLRA. Thus, the growth in inpatient days from 2007 to 2009 is likely largely a result of this increased bed capacity. However, this growth is not likely to continue in the future as WakeMed Cary has no current projects to add inpatient beds and thus WakeMed Cary’s historical growth in inpatient cases is not a good predictor of future growth.

- d. The historical data presented for WakeMed Cary may include surgical cases performed in procedure rooms or other locations whereas the data presented in the WakeMed Cary application

² Ibid.

³ According to page 3 of WakeMed Cary’s 2009 HLRA which provides data for FFY 2008, there was a permanent change in the total number of beds during the reporting period.

does not. Thus, it is reasonable that the total historical cases provided in the 2010 HLRA for FFY 2009 (9,220) is higher than FFY 2009 data provided in WakeMed Cary's application (9,201). **However, it is not reasonable that WakeMed Cary's application shows a higher number of FFY 2009 inpatient cases than is shown on the HLRAs (2,079 inpatient cases in the WakeMed Cary application compared to only 1,947 inpatient cases on the 2010 HLRA), particularly without an explanation for the difference. This discrepancy represents a 6.8 percent difference (6.8 percent = $2,079 \div 1,947 - 1$).**

- e. While the historical data for WakeMed Cary and for the WakeMed System is the best context to examine the reasonableness of the projected growth rates, Rex also examined the market data provided in WakeMed Cary's application. On page 31 of its application, WakeMed Cary provides total surgery cases for Wake County as reported on HLRAs, which demonstrate a 3.8 percent CAGR from FFY 2005 to 2008.

**Wake County Historical Surgical Growth Rate
Hospital License Renewal Application Data
Per WakeMed Cary page 31**

FFY	Total Cases
2005	67,269
2006	66,242
2007	69,125
2008	75,188
CAGR	3.8%

Note: WakeMed Cary notes on page 31 that this data includes cases performed in C-section rooms, dedicated open heart operating rooms, and procedure rooms.

As shown above, the WakeMed System and WakeMed Cary are projected to demonstrate 6.7 percent and 4.7 percent CAGRs, respectively, for total surgical cases in the WakeMed Cary application **or 1.8 and 1.2 times the historical growth rate for total surgical cases in Wake County according to HLRA data.**

WakeMed Cary states in its application that *"the data in the License Renewal Applications are not considered reliable"* (page 31) and uses ThomsonReuters market data exclusively in its projection methodology. Rex examined that data to determine the reasonableness of WakeMed Cary's growth projections. On

page 41, WakeMed Cary provides the historical ThomsonReuters surgical data for Wake and 15 other counties. Rex focused on the historical trends of Wake County as 70 percent of WakeMed's patient originate from Wake County (per page 38) and the county has exhibited stronger surgical growth than most of the other 15 counties.

**Wake County Historical Surgical Growth Rates
ThomsonReuters Surgical Data
Per WakeMed Cary page 41**

<i>FFY</i>	<i>Inpatient</i>	<i>Outpatient</i>	<i>Total Cases</i>
2004	12,697	49,642	62,339
2005	13,256	51,885	65,141
2006	14,690	54,552	69,242
2007	14,481	60,706	75,187
2008	14,661	63,272	77,933
CAGR	3.7%	6.3%	5.7%

The following table compares the projected surgical growth rates for the WakeMed System and WakeMed Cary as calculated above to the ThomsonReuters historical growth rates for Wake County.

Comparison of Compound Annual Growth Rates

	<i>Inpatient</i>	<i>Outpatient</i>	<i>Total Cases</i>
WakeMed System Projected 2009 to 2015	4.6%	7.7%	6.7%
WakeMed Cary Projected 2009 to 2015	7.2%	3.9%	4.7%
Wake County per ThomsonReuters 2004 to 2008	3.7%	6.3%	5.7%
WakeMed System Projected ÷ Wake County Historical per ThomsonReuters	1.3	1.2	1.2
WakeMed Cary Projected ÷ Wake County Historical per ThomsonReuters	2.0	0.6	0.8

As shown, the WakeMed System is projected to grow 1.2 to 1.3 times as fast as Wake County has historically grown according to the ThomsonReuters provided by WakeMed Cary. The projected outpatient and total growth rates for WakeMed Cary are below the historical ThomsonReuters Wake County rates. However, the inpatient growth rate is two times as large as the historical ThomsonReuters Wake County rates. This disparity is significant as inpatient cases are weighted two times more

heavily in the calculation of operating room utilization. Thus, an unreasonable number of inpatient cases has a much more significant impact than an unreasonable number of outpatient cases.

2. Inconsistent Data Sources

- a. WakeMed Cary's projections rely entirely on ThomsonReuters surgery data which is inconsistent with the same data that WakeMed provided in its most recent surgery CON project.

As described in its response to 10A NCAC 14C .2102 (b)(5) starting on page 30, WakeMed Cary's surgery projection methodology relies completely on the ThomsonReuters Inpatient and Ambulatory Surgery Databases, and specifically on the Federal Fiscal Years 2004 to 2008. WakeMed Cary states on page 35 that:

For the reasons outlined above, the Thomson market databases clearly present a more rational and reasonably expected pattern of utilization for calculating Wake County surgery use rates. Further, the Thomson databases provide much greater versatility for analysis because of the levels of detail present. Therefore, WakeMed opted to use the Thomson databases as the basis for projecting surgery use rates for each of the market counties in the Operating Room Need Methodology presented below.

WakeMed opted to utilize Thomson data through FY 2008, given that full FY 2009 data was not available for inclusion in this application. Attempting to prorate or annualize the partial FY 2009 data could potentially skew the methodology use rates, given variations and inconsistencies in data reporting among providers, and the fact that Thomson typically "refreshes" the most recent year's data at the end of the reporting period. With five full years' of data available through FY 2008, WakeMed determined that utilizing Thomson data through FY 2008 would produce the most consistent and conservative results.
[emphasis added]

A review of WakeMed Raleigh's recent application to develop an outpatient surgery center in Raleigh (Project ID # J-8364-09),

hereafter referred to as "WakeMed 2009" clearly demonstrates that WakeMed Cary's data is neither consistent nor conservative.

On page 41 of its application, WakeMed Cary provides total market surgery cases by county according to the Thomson market databases:

Table II.11
Total Market Surgery Cases by County, FY 2004 Thru FY 2008*
For Selected Surgery Patients

County	Patient Type	2004	2005	2006	2007	2008
Wake	Inpatient	12,697	13,256	14,690	14,481	14,661
	Outpatient	49,642	51,885	54,352	60,706	63,272
	Total	62,339	65,141	69,042	75,187	77,933
Durham	Inpatient	4,839	4,705	4,281	4,769	4,816
	Outpatient	18,753	16,692	13,278	20,990	22,327
	Total	23,592	20,397	17,559	25,759	27,143
Cumberland	Inpatient	5,505	5,646	5,758	5,387	5,519
	Outpatient	16,539	17,342	17,729	18,238	19,026
	Total	22,044	22,988	23,487	23,625	24,545
Johnston	Inpatient	2,931	2,969	3,331	3,286	3,241
	Outpatient	8,845	9,364	9,876	10,820	10,574
	Total	11,776	12,333	13,207	14,106	13,815
Wayne	Inpatient	3,051	3,037	2,938	2,918	2,964
	Outpatient	8,305	8,197	8,346	8,186	8,485
	Total	11,356	11,234	11,284	11,104	11,449
Nash	Inpatient	2,166	2,189	2,365	2,309	2,295
	Outpatient	6,809	6,554	7,164	6,947	7,308
	Total	8,975	8,743	9,529	9,256	9,603
Harnett	Inpatient	1,896	1,951	2,046	2,022	2,077
	Outpatient	6,703	6,988	6,969	7,412	7,546
	Total	8,699	8,939	9,015	9,434	9,623
Wilson	Inpatient	1,033	1,959	2,091	2,097	2,110
	Outpatient	5,232	5,214	5,143	5,317	4,862
	Total	7,165	7,173	7,234	7,414	6,972
Lee	Inpatient	1,380	1,442	1,363	1,400	1,413
	Outpatient	4,423	4,768	4,518	5,125	5,793
	Total	5,803	6,210	5,881	6,525	7,116
Sampson	Inpatient	1,557	1,606	1,484	1,456	1,318
	Outpatient	4,297	3,803	3,757	3,894	4,705
	Total	5,854	5,409	5,241	5,350	6,023
Halifax	Inpatient	1,672	1,678	1,689	1,719	1,549
	Outpatient	3,351	3,757	3,880	4,064	4,378
	Total	5,023	5,435	5,569	5,783	5,927
Granville	Inpatient	1,297	1,305	1,302	1,282	1,360
	Outpatient	3,518	3,494	3,953	4,389	4,651
	Total	4,815	4,799	5,255	5,671	6,011
Franklin	Inpatient	1,165	1,210	1,362	1,306	1,172
	Outpatient	3,424	3,615	3,914	4,270	3,905
	Total	4,589	4,826	5,276	5,576	5,077
Vance	Inpatient	1,212	1,270	1,237	1,253	1,153
	Outpatient	3,217	3,382	3,573	3,826	3,960
	Total	4,429	4,652	4,810	5,079	5,113
Chatham	Inpatient	809	929	949	984	1,014
	Outpatient	2,943	2,759	2,835	3,728	4,025
	Total	3,752	3,688	3,784	4,712	5,039
Duplin	Inpatient	1,211	1,193	1,144	1,102	1,061
	Outpatient	3,055	3,055	3,042	2,934	3,229
	Total	4,266	4,248	4,186	4,036	4,290

* Note: All IP & OP surgeries included except C-sections and inpatient cardiac surgery.

WakeMed 2009 provides a similar table on page 49 of its application:

Table II.10 Total Market Surgery Cases by County, FY 2004 through FY 2008 *
For Selected Surgery Patients from the Thomson Market Databases

Counties	Pt Type	History of Selected Surgical Cases Volumes by County				
		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Wake	Inpatient	12,697	13,256	14,690	14,481	14,576
	Outpatient	49,642	51,885	54,552	60,706	63,014
	Total	62,339	65,141	69,242	75,187	77,590
Durham	Inpatient	4,839	4,705	4,781	4,769	4,846
	Outpatient	18,753	16,092	18,228	20,990	22,271
	Total	23,592	20,797	23,009	25,759	27,117
Cumberland	Inpatient	5,506	5,646	5,756	5,387	5,515
	Outpatient	16,539	17,342	17,729	18,238	18,897
	Total	22,045	22,988	23,485	23,625	24,412
Johnston	Inpatient	2,931	2,969	3,131	3,286	3,246
	Outpatient	8,845	9,364	9,876	10,820	10,437
	Total	11,776	12,333	13,007	14,106	13,683
Wayne	Inpatient	3,051	3,037	2,938	2,918	2,962
	Outpatient	8,305	8,197	8,346	8,166	8,479
	Total	11,356	11,234	11,284	11,084	11,441
Nash	Inpatient	2,166	2,189	2,365	2,309	2,296
	Outpatient	6,809	6,554	7,164	6,947	7,294
	Total	8,975	8,743	9,529	9,256	9,590
Harnett	Inpatient	1,996	1,961	2,046	2,022	2,084
	Outpatient	6,703	6,988	6,969	7,412	7,410
	Total	8,699	8,949	9,015	9,434	9,494
Wilson	Inpatient	1,933	1,969	2,091	2,097	2,105
	Outpatient	5,232	5,214	5,143	5,317	4,836
	Total	7,165	7,183	7,234	7,414	6,941
Lee	Inpatient	1,380	1,442	1,363	1,400	1,408
	Outpatient	4,423	4,768	4,618	5,425	5,508
	Total	5,803	6,210	5,981	6,825	6,916
Sampson	Inpatient	1,557	1,606	1,484	1,456	1,475
	Outpatient	4,297	3,803	3,757	3,894	4,697
	Total	5,854	5,409	5,241	5,350	6,172
Halifax	Inpatient	1,672	1,678	1,689	1,719	1,647
	Outpatient	3,351	3,757	3,880	4,064	4,362
	Total	5,023	5,435	5,569	5,783	6,009
Granville	Inpatient	1,297	1,305	1,302	1,282	1,358
	Outpatient	3,518	3,404	3,953	4,389	4,639
	Total	4,815	4,709	5,255	5,671	5,997
Franklin	Inpatient	1,165	1,210	1,362	1,306	1,166
	Outpatient	3,424	3,616	3,914	4,270	3,896
	Total	4,589	4,826	5,276	5,576	5,062
Vance	Inpatient	1,212	1,270	1,237	1,253	1,153
	Outpatient	3,212	3,382	3,623	3,826	3,950
	Total	4,424	4,652	4,860	5,079	5,103
Duplin	Inpatient	1,211	1,193	1,144	1,102	1,111
	Outpatient	3,055	3,055	3,042	2,934	3,297
	Total	4,266	4,248	4,186	4,036	4,408
Chatham	Inpatient	869	929	949	984	1,016
	Outpatient	2,933	2,759	2,835	3,728	3,955
	Total	3,802	3,688	3,784	4,712	4,971

* All IP & OP surgeries included except C-sections and IP cardiac surgery. See pages 47 & 59 for further information.

A comparison of the total number of surgery cases for each county shows a greater number of 2008 surgery cases in 14 out of the 16 counties shown:

**2008 Total Surgery Cases by County
Comparison between WakeMed Applications**

	WakeMed Cary Application, page 41	WakeMed 2009 Application, page 49	WakeMed Cary minus WakeMed 2009
Wake	77,933	77,590	343
Durham	27,183	27,117	66

Cumberland	24,585	24,412	173
Johnston	13,815	13,603	212
Wayne	11,449	11,441	8
Nash	9,603	9,590	13
Harnett	9,623	9,494	129
Wilson	6,972	6,941	31
Lee	7,116	6,916	200
Sampson	6,023	6,172	(149)
Halifax	6,027	6,009	18
Granville	6,011	5,997	14
Franklin	5,077	5,062	15
Vance	5,113	5,103	10
Chatham	5,039	4,971	68
Duplin	4,290	4,408	(118)
TOTAL	225,859	224,826	1,033

As shown, WakeMed Cary's application provides data showing 1,000 more surgery cases in 2008 than shown in the WakeMed 2009 application- a clear inconsistency. Moreover, of the two datasets provided, WakeMed Cary's is the less conservative.

WakeMed Cary does not provide any explanation for the differences in the data presented. In fact, WakeMed Cary's surgical case definition is identical to the WakeMed 2009 definition:

WakeMed Cary states on page 40:

Records were first selected for patients with an ICD-9 principal procedure code that fell within one of the Thomson surgical service lines. Data was further refined by analyzing individual principal procedure ICD-9 codes to ensure elimination of those procedures that would not typically be performed in a surgical operating room, such as endoscopy cases, skin sutures, cardiac catheterization/cardiac angioplasty, cystoscopy, and endovascular cases.

Finally, certain specialized operating room-type patients were excluded. The analysis excluded cases performed in dedicated C-section operating rooms, as well as dedicated open heart surgery operating rooms. Please see Attachment 15 for a list of current ICD-9 surgical procedure codes and whether they were selected for inclusion in the Need Methodology analysis. The following table provides total surgical cases by county for FYs 2004-2008.

and WakeMed 2009 states on pages 47-48:

Records for the analysis dataset from the Thomson database were first selected for patients that had an ICD-9 principal procedure code and fell within one of the Thomson surgery Service Lines. Further selection refinement was accomplished on this subset of patients by analyzing the principle procedure ICD9 codes to ensure elimination of those ICD9 procedures that would not typically be performed in an operating room, such as endoscopy cases, skin sutures, cardiac catheterization/cardiac angioplasty, cysto cases, and endovascular cases.

Lastly, certain specialized operating room type patients needed to be excluded. Surgery outpatients are provided services in several types of operating rooms, including hospital-based dedicated outpatient operating rooms; hospital-based inpatient/outpatient shared operating rooms; and dedicated ambulatory surgery center operating rooms. Because of the shared operating rooms, most inpatient surgery cases are included in the analysis. The dataset selection excluded surgeries that would be performed in C-Section rooms and dedicated open heart operating rooms. These specialized OR cases were excluded by the Thomson Service Lines of Inpatient Cardiac Surgery and Inpatient Obstetrics.

As shown, both applications employed identical surgical case definition and thus, different definitions are not the source of the discrepancy.

- b. In addition to the inconsistent and aggressive total surgery cases by county, WakeMed Cary also provides inconsistent and aggressive data for the number of surgery cases performed at WakeMed locations, particularly WakeMed Raleigh when compared to the WakeMed 2009 application.

On page 48 of its application, WakeMed Cary provides 2008 market share by county by location:

Table II-18
FY 2008 WakeMed Percent of Total Surgery Cases
for Each County at Active WakeMed Surgery Location
Source: Thomson

County	WakeMed Raleigh	WakeMed Cary	WakeMed North
Wake	12.8%	8.7%	3.3%
Durham	0.4%	0.3%	0.3%
Cumberland	0.5%	0.2%	0.0%
Johnston	10.0%	3.1%	1.1%
Wayne	2.7%	0.2%	0.1%
Itash	3.8%	0.3%	0.4%
Harnett	7.0%	5.4%	0.2%
Wilson	3.9%	0.1%	0.1%
Lee	1.2%	1.2%	0.1%
Sampson	5.0%	2.5%	0.1%
Halifax	2.4%	0.0%	0.1%
Granville	2.4%	0.2%	0.5%
Franklin	11.6%	1.0%	6.1%
Vance	1.4%	0.2%	0.6%
Chatham	0.5%	1.0%	0.1%
Duplin	1.5%	1.2%	0.0%

When the market share percentages by location shown in the table above are applied to the total surgery cases by county, the following number of cases by county are determined to have been provided by WakeMed by location according to WakeMed Cary's proposed project (please see Exhibit 2 for detailed tables demonstrating the calculations summarized below):

**FFY 2008 Cases by County for Each WakeMed Location
Per WakeMed Cary Application**

	<i>Calculated WakeMed Raleigh Cases</i>	<i>Calculated WakeMed Cary Cases</i>	<i>Calculated WakeMed North Cases</i>
Wake	9,975	6,780	2,572
Durham	109	82	82
Cumberland	123	49	0
Johnston	1,382	428	152
Wayne	309	23	11
Nash	365	29	38
Harnett	674	520	19
Wilson	272	7	7
Lee	85	135	7
Sampson	361	175	6
Halifax	145	0	6
Granville	144	12	30
Franklin	589	51	310
Vance	72	10	31
Chatham	30	91	5
Duplin	69	51	0
TOTAL	14,703	8,443	3,276

However, as noted above, the WakeMed 2009 application provides similar data which is inconsistent with the WakeMed Cary data.

On page 54 of the WakeMed 2009 application, the following market share data are presented:

**Table II.17 FY 2008 WakeMed Percent of Total Surgery Cases *
For Each County for Each Active WakeMed Surgery Location**

Counties	FY 2008 % Cases by WM Facility by County		
	WakeMed	WM Cary	WM North
Wake	12.1%	8.7%	3.4%
Durham	0.4%	0.3%	0.3%
Cumberland	0.5%	0.2%	0.0%
Johnston	8.3%	3.2%	1.1%
Wayne	1.2%	0.2%	0.1%
Nash	2.5%	0.3%	0.4%
Harnett	5.4%	5.4%	0.2%
Wilson	1.9%	0.1%	0.1%
Lee	1.1%	2.0%	0.1%
Sampson	2.9%	2.8%	0.1%
Halifax	1.3%	0.0%	0.1%
Granville	2.3%	0.2%	0.5%
Franklin	10.1%	1.0%	6.1%
Vance	1.3%	0.2%	0.6%
Duplin	0.8%	1.2%	0.0%
Chatham	0.5%	1.8%	0.1%

* All IP & OP surgeries included except C-sections and IP cardiac surgery. See pages 47 & 59 for further information.

A brief comparison of the market share percentages reveals that the WakeMed Cary application provides higher market share percentages for the WakeMed Raleigh location than the WakeMed 2009 application, whereas the market share percentages for the other locations are almost identical.

**FFY 2008 Market Share by County for WakeMed Raleigh
Comparison between WakeMed Applications**

	<i>WakeMed Raleigh Market Share per WakeMed Cary Application, page 48</i>	<i>WakeMed Raleigh Market Share per WakeMed 2009 Application, page 54</i>	<i>WakeMed Cary minus WakeMed 2009 Share for WakeMed Raleigh</i>
Wake	12.8%	12.1%	0.7%
Durham	0.4%	0.4%	0.0%
Cumberland	0.5%	0.5%	0.0%
Johnston	10.0%	8.3%	1.7%
Wayne	2.7%	1.2%	1.5%
Nash	3.8%	2.5%	1.3%
Harnett	7.0%	5.4%	1.6%
Wilson	3.9%	1.9%	2.0%
Lee	1.2%	1.1%	0.1%
Sampson	6.0%	2.9%	3.1%
Halifax	2.4%	1.3%	1.1%
Granville	2.4%	2.3%	0.1%
Franklin	11.6%	10.1%	1.5%
Vance	1.4%	1.3%	0.1%

Chatham	0.6%	0.5%	0.1%
Duplin	1.6%	0.8%	0.8%

As shown, for 14 of the 16 counties presented, WakeMed Cary provides higher market share percentages for the WakeMed Raleigh campus than were provided in the WakeMed 2009 application, even though the data in the two applications are for the same time period.

When the market share percentages by location provided in the WakeMed 2009 application are applied to the total surgery cases by county provided in that same application, the following cases by county are determined to have been provided by WakeMed by location according to the WakeMed 2009 application (please see Exhibit 2 for detailed tables demonstrating the calculations summarized below):

**FFY 2008 Cases by County for Each WakeMed Location
Per WakeMed 2009 Application**

	<i>Calculated WakeMed Raleigh Cases</i>	<i>Calculated WakeMed Cary Cases</i>	<i>Calculated WakeMed North Cases</i>
Wake	9,388	6,750	2,638
Durham	108	81	81
Cumberland	122	49	0
Johnston	1,129	435	150
Wayne	137	23	11
Nash	240	29	38
Harnett	513	513	19
Wilson	132	7	7
Lee	76	138	7
Sampson	179	173	6
Halifax	78	0	6
Granville	138	12	30
Franklin	511	51	309
Vance	66	10	31
Chatham	25	89	5
Duplin	35	53	0
TOTAL	12,878	8,413	3,338

A comparison between the cases by location for the WakeMed Cary application and the cases by location for the WakeMed 2009 application reveals that the data provided in each application are significantly different.

**FFY 2008 Total Cases for Each WakeMed Location
Comparison Between WakeMed Applications**

	<i>Calculated WakeMed Raleigh Cases</i>	<i>Calculated WakeMed Cary Cases</i>	<i>Calculated WakeMed North Cases</i>	<i>Calculated Total WakeMed System Cases</i>
WakeMed Cary Application	14,703	8,443	3,276	26,422
WakeMed 2009 Application	12,878	8,413	3,338	24,630
WakeMed Cary minus WakeMed 2009 Application	1,825	29	(62)	1,792

As shown, under the proposed project, WakeMed Cary states that the WakeMed system provided **1,792 more cases in 2008** than were stated in the WakeMed 2009 application. Most significantly, the WakeMed Raleigh campus is shown to have provided **1,825 more cases**. Again, these data are for the same time period and use the same surgical case definition according to each application, and WakeMed Cary provides no explanation for the discrepancy. The impact of this discrepancy is discussed below.

When the differences between the WakeMed Raleigh campus volumes are examined by county, they are even more revealing in the degree of discrepancy between the applications.

**FFY 2008 Cases by County for WakeMed Raleigh Location
Comparison Between WakeMed Applications**

	<i>WakeMed Raleigh Cases per WakeMed Cary Application, Calculated above</i>	<i>WakeMed Raleigh Cases per WakeMed 2009 Application, Calculated Above</i>	<i>WakeMed Cary minus WakeMed 2009 Cases for WakeMed Raleigh</i>
Wake	9,975	9,388	587
Durham	109	108	0

Cumberland	123	122	1
Johnston	1,382	1,129	252
Wayne	309	137	172
Nash	365	240	125
Harnett	674	513	161
Wilson	272	132	140
Lee	85	76	9
Sampson	361	179	182
Halifax	145	78	67
Granville	144	138	6
Franklin	589	511	78
Vance	72	66	5
Chatham	30	25	5
Duplin	69	35	33
TOTAL	14,703	12,878	1,825

As shown, the two applications provide different volumes for 15 of the 16 counties. The differences by county for the WakeMed Raleigh location can also be compared to the differences in total cases by county, as calculated above.

**FFY 2008 Cases by County for WakeMed Raleigh Location
Comparison Between WakeMed Applications**

	<i>WakeMed Cary minus WakeMed 2009 Cases for WakeMed Raleigh</i>	<i>WakeMed Cary minus WakeMed 2009 Total Cases for Each County</i>
Wake	587	343
Durham	0	66
Cumberland	1	173
Johnston	252	212
Wayne	172	8
Nash	125	13
Harnett	161	129
Wilson	140	31
Lee	9	200
Sampson	182	(149)
Halifax	67	18

Granville	6	14
Franklin	78	15
Vance	5	10
Chatham	5	68
Duplin	33	(118)
TOTAL	1,825	1,033

This table demonstrates that in many instances, the difference in the number of cases shown for a particular county between the two WakeMed applications is exceeded by the difference in the number of cases shown to be treated at the WakeMed Raleigh location between the two applications. For example, in Wake County, the WakeMed Cary application shows 343 more total cases than the WakeMed 2009 application and the WakeMed Cary application shows that WakeMed Raleigh treated 587 more patients in Wake County than the WakeMed 2009 application. In such instances, it appears as though WakeMed Cary has not only added more cases than the WakeMed 2009 application, but that it has also reassigned cases from non-WakeMed providers to WakeMed Raleigh.

The global impact of these inconsistencies is best seen by comparing the total projected deficit for the WakeMed System in each application. In the WakeMed 2009 application on page 69, the WakeMed System is projected to have a deficit of 2.8 operating rooms in FFY 2013. By comparison, the WakeMed Cary application projects that the WakeMed System will have a deficit of 4.4 operating rooms in FFY 2013.

Comparison of FFY 2013 WakeMed System Operating Room Need Between WakeMed Cary and WakeMed 2009 Applications

<i>Application</i>	<i>Inpatient Cases</i>	<i>Outpatient Cases</i>	<i>Total Cases</i>	<i>OR Deficit</i>
WakeMed Cary Application	10,691	26,482	37,173	4.4
WakeMed 2009 Application	9,960	26,049	36,009	2.8
Difference	731	433	1,164	1.6
Percent Difference	7.3%	1.7%	3.2%	57.1%

Source: Page 69 of the WakeMed Cary application and page 70 of the WakeMed 2009 application.

As such, WakeMed Cary's application, which uses a similar methodology and the same base year data as the WakeMed

2009 application, shows a need for 1.6 more operating rooms in FFY 2013 based on 1,164 more projected cases, or 3.2 percent more cases. Given the significant and unexplained discrepancy in the data, the validity of WakeMed Cary's data must be questioned, particularly when the impact of the difference appears to benefit its current application.

3. No justification for WakeMed Raleigh Surgery Center Market Share

On page 48 of its application, WakeMed Cary provides projected market share by county for each of its locations. WakeMed Cary states:

For this methodology, WakeMed Cary Hospital's proportion of surgery cases in the 16-county geographic market area is conservatively projected to remain at its FY 2008 level through FY 2015.

For WakeMed North, WakeMed conservatively held its proportion of surgery cases constant at the FY 2008 level through FY 2015.

At WakeMed Raleigh Campus, the FY 2008 proportion is held constant through FYs 2009 and 2010. Beginning in FY 2011, when the Raleigh Surgery Center, which recently received CON approval, is slated to open, WakeMed proposes to shift outpatient surgery case volume at that time from WakeMed Raleigh Campus to the Raleigh Surgery Center. For Raleigh Surgery Center's Project Year 1 (FY 2011), WakeMed estimates that approximately two-thirds of WakeMed Raleigh Campus's outpatient surgery case volume will shift to Raleigh Surgery Center. This is consistent with projections made in the CON application for WakeMed Raleigh Surgery Center (Project No. J-8354-09).

Accordingly, for the WakeMed Raleigh Campus and for Raleigh Surgery Center, the percentages of cases for each county of patient origin are reflective of the planned shift. Raleigh Surgery Center's proportions from each geographic market area county are held constant from FY 2013 forward.

The following tables present the projected WakeMed proportions, by facility, of each market county's total surgical volume through FY 2015.

Table II.19
Projected Percentage of Surgery Cases from Each Geographic Market Area County
at Each Currently Active WakeMed Surgery Location
FYs 2009-2015

County	Proportion of County Surgery Cases, 2009-2010			Proportion of County Surgery Cases, 2011-2012			Proportion of County Surgery Cases, 2013-2015		
	WakeMed Raleigh	WakeMed Cary	WakeMed North	WakeMed Raleigh	WakeMed Cary	WakeMed North	WakeMed Raleigh	WakeMed Cary	WakeMed North
Wake	12.4%	8.7%	3.3%	8.1%	8.7%	3.3%	8.1%	8.7%	3.3%
Durham	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%
Cumberland	0.5%	0.2%	0.0%	0.3%	0.2%	0.0%	0.3%	0.2%	0.0%
Johnston	0.6%	3.1%	1.1%	5.6%	3.1%	1.1%	5.6%	3.1%	1.1%
Wayne	1.8%	0.2%	0.1%	1.2%	0.2%	0.1%	1.2%	0.2%	0.1%
Hash	2.7%	0.3%	0.4%	1.8%	0.3%	0.4%	1.8%	0.3%	0.4%
Harnett	5.6%	5.4%	0.2%	3.6%	5.4%	0.2%	3.6%	5.4%	0.2%
Wilson	1.9%	0.1%	0.1%	1.2%	0.1%	0.1%	1.2%	0.1%	0.1%
Lee	1.2%	1.9%	0.1%	0.8%	1.9%	0.1%	0.8%	1.9%	0.1%
Sampson	3.0%	1.9%	0.1%	2.0%	1.9%	0.1%	2.0%	1.9%	0.1%
Halifax	1.4%	0.0%	0.1%	0.9%	0.0%	0.1%	0.9%	0.0%	0.1%
Granville	2.4%	0.0%	0.5%	1.6%	0.2%	0.5%	1.6%	0.2%	0.5%
Franklin	10.3%	1.0%	6.1%	6.7%	1.0%	6.1%	6.7%	1.0%	6.1%
Vance	1.4%	0.2%	0.6%	0.9%	0.2%	0.6%	0.9%	0.2%	0.6%
Chatham	0.5%	1.8%	0.1%	0.4%	1.8%	0.1%	0.4%	1.8%	0.1%
Duplin	0.9%	1.2%	0.0%	0.6%	1.2%	0.0%	0.6%	1.2%	0.0%

Table II.20
WakeMed Raleigh Surgery Center
Projected Percentage of Surgery Cases from Each Geographic Market Area County,
FYs 2011-2015
(Note: Facility scheduled to open in FY 2011)

County	2011	2012	2013	2014	2015
Wake	5.7%	6.7%	7.3%	7.3%	7.3%
Durham	0.2%	0.2%	0.2%	0.2%	0.2%
Cumberland	0.2%	0.2%	0.2%	0.2%	0.2%
Johnston	3.5%	4.6%	5.0%	5.0%	5.0%
Wayne	0.8%	1.0%	1.1%	1.1%	1.1%
Hash	1.3%	1.5%	1.6%	1.6%	1.6%
Harnett	2.5%	3.0%	3.2%	3.2%	3.2%
Wilson	0.8%	1.0%	1.1%	1.1%	1.1%
Lee	0.6%	0.7%	0.7%	0.7%	0.7%
Sampson	1.4%	1.7%	1.8%	1.8%	1.8%
Halifax	0.6%	0.7%	0.8%	0.8%	0.8%
Granville	1.1%	1.3%	1.4%	1.4%	1.4%
Franklin	4.7%	5.6%	6.0%	6.0%	6.0%
Vance	0.6%	0.7%	0.8%	0.8%	0.8%
Chatham	0.3%	0.3%	0.4%	0.4%	0.4%
Duplin	0.4%	0.5%	0.5%	0.5%	0.5%

WakeMed Cary provides no justification for the projected market share levels for the Raleigh Surgery Center, other than to say that “approximately two-thirds of WakeMed Raleigh Campus’s [sic] outpatient surgery cases volume will shift to Raleigh Surgery Center” and that these market share projections are “consistent with projections made in the CON application for WakeMed Raleigh Surgery Center (Project No. J-8364-09) [the WakeMed 2009 application]” (pages 48-49). These statements do not reveal the extent to which WakeMed Cary is projecting significant market share increases, without any justification in either its present application or in the WakeMed 2009 application (Exhibit 3 provides an excerpt from the WakeMed 2009 application which contains its entire projection methodology). In both the WakeMed 2009 and WakeMed Cary applications, the applicant states there is no physician recruitment plan as existing

physicians will continue to use the facilities (see page 141 of WakeMed 2009 and page 142 of WakeMed Cary). As such, the addition of new physicians cannot be the source of these projected market share gains.

The market share levels for the WakeMed Cary and WakeMed North facilities are projected to remain constant through the project years, and there are no statements in the applications to suggest that cases from these facilities will be shifted to Raleigh Surgery Center. As such, any projected market share levels at Raleigh Surgery Center are not related to these facilities. As shown in the statements reproduced from the WakeMed Cary application, the only facility that is projected to shift cases to Raleigh Surgery Center is WakeMed Raleigh. Thus, a comparison of WakeMed Raleigh's 2009 market share projections and the combined 2015 share of WakeMed Raleigh and Raleigh Surgery Center will reveal the projected market share increases. The following tables provide this analysis.

**FFY 2015 WakeMed Raleigh and Raleigh Surgery Center
Market Share**

	<i>WakeMed Raleigh 2015 Market Share, page 49</i>	<i>Raleigh Surgery Center 2015 Market Share, page 50</i>	<i>Calculated WakeMed Raleigh and Raleigh Surgery Center 2015 Market Share Combined</i>
Wake	8.1%	7.3%	15.4%
Durham	0.3%	0.3%	0.6%
Cumberland	0.3%	0.3%	0.6%
Johnston	5.6%	5.0%	10.6%
Wayne	1.2%	1.1%	2.3%
Nash	1.8%	1.6%	3.4%
Harnett	3.6%	3.2%	6.8%
Wilson	1.2%	1.1%	2.3%
Lee	0.8%	0.7%	1.5%
Sampson	2.0%	1.8%	3.8%
Halifax	0.9%	0.8%	1.7%
Granville	1.6%	1.4%	3.0%
Franklin	6.7%	6.0%	12.7%
Vance	0.9%	0.8%	1.7%

Chatham	0.4%	0.4%	0.8%
Duplin	0.6%	0.5%	1.1%

2015 Market Share Increases Projected by WakeMed Cary

	<i>WakeMed Raleigh 2009 Market Share</i>	<i>Calculated WakeMed Raleigh and Raleigh Surgery Center 2015 Market</i>	<i>2015 Projected Market Share Increases (Shifted from non- WakeMed providers)</i>
Wake	12.4%	15.4%	3.0%
Durham	0.4%	0.6%	0.2%
Cumberland	0.5%	0.6%	0.1%
Johnston	8.6%	10.6%	2.0%
Wayne	1.8%	2.3%	0.5%
Nash	2.7%	3.4%	0.7%
Harnett	5.6%	6.8%	1.2%
Wilson	1.9%	2.3%	0.4%
Lee	1.2%	1.5%	0.3%
Sampson	3.0%	3.8%	0.8%
Halifax	1.4%	1.7%	0.3%
Granville	2.4%	3.0%	0.6%
Franklin	10.3%	12.7%	2.4%
Vance	1.4%	1.7%	0.3%
Chatham	0.6%	0.8%	0.2%
Duplin	0.9%	1.1%	0.2%

As shown, WakeMed Cary projects market share increases for the Raleigh Surgery Center in all 16 counties, with the largest increase, 3.0 percent, in Wake County. These market share increases are shifts from non-WakeMed providers, as the above analysis accounts for the internal WakeMed shifts.

By applying these projected market share increases to the projected 2015 surgery cases by county, the total number of cases projected to be shifted from non-WakeMed providers can be determined.

2015 Cases Shifted from Non-WakeMed Providers

	<i>2015 Projected Market Share Increases (Shifted from non-WakeMed providers)</i>	<i>2015 Projected Surgery Cases, page 47</i>	<i>2015 Cases Shifted from Non-WakeMed Providers</i>
Wake	3.0%	110,939	3,328
Durham	0.2%	37,326	75
Cumberland	0.1%	29,624	30
Johnston	2.0%	19,061	381
Wayne	0.5%	11,377	57
Nash	0.7%	11,131	78
Harnett	1.2%	11,688	140
Wilson	0.4%	7,217	29
Lee	0.3%	9,682	29
Sampson	0.8%	5,921	47
Halifax	0.3%	7,794	23
Granville	0.6%	8,282	50
Franklin	2.4%	6,620	159
Vance	0.3%	6,446	19
Chatham	0.2%	7,894	16
Duplin	0.2%	3,956	8
TOTAL	NA	294,958	4,469

As shown, WakeMed Cary projects to shift 4,469 cases from non-WakeMed providers by 2015. If it is assumed that all of these cases are shifted to Raleigh Surgery Center, these 4,469 cases represent 40 percent of that facility's total volume in 2015 (40 percent = $4,469 \div 11,199$ total cases from page 55). Moreover, if it is assumed that all of these cases are outpatient cases given that Raleigh Surgery Center will only provide outpatient surgery services, these 4,469 cases represent 3.6 operating rooms (3.6 operating rooms = $4,469$ outpatient cases \times 1.5 hours per outpatient cases \div 1,872 hours per operating room). The impact of this overstatement will be demonstrated in the final section (#5) of this discussion.

4. Impact of Rex Cary LLC Physicians

As noted in both of its applications, in 2007, Rex applied for and was awarded a CON to convert its outpatient surgical center in Cary into an LLC in which physicians could invest (Project ID # J-7878-07). Recently, several local physicians reached an agreement to invest in Rex's Cary surgery facility. This group of physicians includes general surgeons, urologists, orthopedists, gynecologists, and ENT physicians. This group of physicians provided letters of support for Rex's applications committing to shift 4,320 cases from non-Rex facilities to Rex. **In order to remain conservative, Rex excluded these incremental patients from its methodologies.**

While these letters of support only refer to shifts from non-Rex facilities, Rex obtained data from the ThomsonReuters outpatient market database which demonstrates that in the twelve months ending June 2009, these physicians performed 2,403 cases at WakeMed Cary. Rex believes that these specific patients are the most likely to shift due to the proximity of WakeMed Cary to Rex Surgery Center of Cary and the ability of the physicians to shift their patients from a hospital to a dedicated outpatient surgery center.

These 2,403 outpatient cases equate to 1.9 operating rooms (1.9 operating rooms = 2,403 outpatient cases x 1.5 hours per case ÷ 1,872 hours per operating room). If it was conservatively assumed that these 2,403 cases would not grow at all through the third project year, WakeMed Cary would only project an operating room deficit of 1.3 rooms in the FFY 2015, which would be rounded down per the operating room performance standard to a need for only one additional operating room (1.3 rooms = 3.2 room deficit projected for WakeMed Cary on page 68 - 1.9 operating rooms shifted to Rex's Cary facility).

As noted above, WakeMed Cary's outpatient surgery cases are projected to grow 3.9 percent annually from 2009 to 2015. When the 3.9 percent CAGR is applied to the 2,403 cases that are likely to shift, the result is 3,024 cases in FFY 2015 or 2.4 operating rooms. In that case, WakeMed Cary would only project a deficit of 0.8 operating rooms in FFY 2015 (0.8 rooms = 3.2 room deficit projected for WakeMed Cary on page 68 - 2.4 operating rooms shifted to Rex's Cary facility).

This shifting of surgical cases from WakeMed Cary to Rex Healthcare of Cary has even further impact due to WakeMed Cary's failure to identify any additional surgeons that it plans to add to its medical staff. WakeMed Cary states on page 142 that it *"does not need a formal physician recruitment plan. The proposed project is an expansion of an existing hospital surgical program. There is an active medical staff in place that includes surgeons, anesthesiologists, pathologists, radiologists, emergency medicine physicians, and hospitalists."* WakeMed Cary projections are based on its current medical staff, some of whom will be shifting cases to Rex's Cary LLC, and does not rely on the recruitment of any physicians. As a result, WakeMed Cary does not demonstrate any plans for the future recruitment of physicians that could offset some of this lost volume, and, in fact, states that it does not need a plan to recruit additional physicians.

5. Summary of Overstated Cases and Comparison to Supporting Analysis Presented in Rex Applications

In Section III.1.(b) of both Rex applications to develop additional operating rooms, Rex provides a supporting analysis which is based on the WakeMed 2009 application surgery methodology. According to that analysis, Rex will have a deficit of 5.1 operating rooms in Calendar Year 2014 (see page 107 of Rex's Holly Springs application). This deficit includes all of Rex's facilities and reflects the impact of the Orthopaedic Surgery Center of Raleigh (OSCR), a Rex related entity which is under development, but does not include any projected operating room deficit at that facility. As demonstrated in its applications, Rex's deficit is based on a more conservative application of the WakeMed 2009 surgery methodology, includes a more conservative number of market cases, and no projected market share increases.

By comparison, WakeMed Cary projects that the WakeMed System will have an operating room deficit of 6.1 operating rooms in FFY 2014 (see page 69 of WakeMed Cary's application). However, as Rex notes above, the market share assumptions for the Raleigh Surgery Center are unsupported and unreasonable and thus the WakeMed System operating room need should be reduced by 3.4 operating rooms in FFY

2014.⁴ As such the WakeMed System would only demonstrate a need for 2.7 operating rooms, or below Rex’s projection using a similar methodology.

In addition, Rex has shown above that WakeMed Cary’s projected operating room deficit in 2014 could be reduced by 1.9 to 2.3⁵ operating rooms due to the shift of cases performed by physician investors in the Rex Cary, LLC. Under either of these scenarios, Rex demonstrates a higher projected operating room deficit than the WakeMed System using a similar methodology. The table below provides a summary of these comparisons.

**Comparison of Projected Operating Room Deficits
Using the WakeMed Projection Methodology**

	<i>Rex Facilities CY 2014</i>	<i>WakeMed System FFY 2014 without unreasonable Raleigh Surgery Center Share</i>	<i>WakeMed System FFY 2014 without unreasonable Raleigh Surgery Center Share and without cases to be shifted to Rex Cary LLC assuming no growth</i>	<i>WakeMed System FFY 2014 without unreasonable Raleigh Surgery Center Share and without cases to be shifted to Rex Cary LLC assuming growth</i>
OR Deficit	5.1	6.1	6.1	6.1
Adjustments	-	(3.4)	(5.3)	(5.7)
OR Deficit After Adjustments	5.1	2.7	0.8	0.4

This analysis demonstrates that when WakeMed Cary’s projections are adjusted to account for unreasonable market share assumptions and the impact of the shift of cases to the Rex Cary LLC, the WakeMed System has a need for 0.4 rooms, which is rounded down to a need for zero operating rooms under the operating room performance standards.

⁴ Rex calculated the number of cases to be shifted from non-WakeMed providers in 2014 to be 4,288 or 3.4 operating rooms using the same analysis shown above in its calculations for FFY 2015.

⁵ Rex calculated a reduction of 2.3 operating rooms in 2014 as follows: the 3.9 percent projected CAGR for WakeMed Cary outpatient cases is applied to the 2,403 cases that are likely to shift resulting in 2,910 cases in FFY 2014 or 2.3 operating rooms. This calculation is similar to the one above for FFY 2015 which shows a reduction of 2.4 operating rooms.

As demonstrated in the analyses above, WakeMed Cary has failed to demonstrate a need for its project and as such, should be found nonconforming with 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.*

WakeMed Cary fails to demonstrate that it has proposed the least costly or most effective alternative. In Section III.8. of its application, pages 96 to 98, WakeMed Cary discussed several alternatives it considered prior to the submission of its application as proposed. The options WakeMed Cary considered included:

- Maintain Status Quo;
- Locate Operating Rooms in an Existing Freestanding Ambulatory Surgery Center
- Locate Operating Rooms in a New Freestanding Ambulatory Surgery Center
- Locate Operating Rooms at WakeMed Raleigh Campus
- Locate Three Operating Rooms at WakeMed Cary Hospital

In reviewing WakeMed Cary's alternatives, Rex believes that WakeMed Cary failed to adequately consider the need for local access to surgical services in southern Wake County. Although WakeMed Cary notes that it considered locating operating rooms in a new freestanding ambulatory surgery center, the discussion and consideration given this alternative is superficial at best. WakeMed Cary quickly discards this option, noting that the residents of southern Wake County are "*already well-served by numerous facilities.*" See WakeMed Cary's application p. 97. While Rex does not dispute this point, WakeMed Cary failed to take into consideration the lack of local access to surgical services in southern Wake County and instead assumed that patients in southern Wake County will have to continue to travel to receive surgical services. As such, WakeMed Cary failed to adequately demonstrate that this alternative was not viable. Moreover, WakeMed Cary's analysis of providers that are currently meeting the ambulatory surgery needs in the Holly Springs area of Wake County demonstrates that Rex—which serves the highest percentage of patients, 39 percent—is in the best position to serve these patients closer to home. See WakeMed Cary's application p. 97.

Given that WakeMed Cary has failed to demonstrate that the least costly or most effective alternative has been proposed, WakeMed Cary should be found nonconforming with this criterion.

- (5) *Financial and operational projections for the project shall demonstrate the availability of funds for capital and operating needs as well as the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services by the person proposing the service.*

WakeMed Cary fails to demonstrate the financial feasibility of its proposal. As noted above, WakeMed has reached an agreement with SCA whereby SCA will manage surgical services at WakeMed Cary and will employ former WakeMed Cary surgical staff. Neither of these fundamental financial relationships is included in the WakeMed Cary application and both may have a negative impact on the financial feasibility of the project.

- (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.*

WakeMed Cary fails to demonstrate the availability of resources, including health manpower and management personnel, for the provision of the surgical services proposed. As noted above, WakeMed has reached an agreement with SCA whereby SCA will manage surgical services at WakeMed Cary and will employ former WakeMed Cary surgical staff. WakeMed Cary does not discuss the staffing or management structure that will result from this agreement and thus has not demonstrated that these arrangements will be reasonable.

CRITERIA AND STANDARDS FOR SURGICAL SERVICES AND OPERATING ROOMS

The proposal submitted by WakeMed Cary is not conforming with all applicable Criteria and Standards for Surgical Services and Operating Rooms as promulgated in 10A NCAC 14C .2100, *et seq.*, as indicated below.

10A NCAC 14C .2105(c)(1)

This rule states that "(c) A proposal to increase the number of operating rooms (excluding dedicated C-section operating rooms) in a service area shall not be approved unless the applicant reasonably demonstrates 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. The number of rooms needed is determined as follows:

- (1) 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"*

As demonstrated under Criterion 3, when WakeMed Cary's projections are adjusted to account for unreasonable market share assumptions and the impact of the shift of cases to the Rex Cary LLC, the WakeMed System has a need for 0.4 rooms, which is rounded down to a need for zero operating rooms under the operating room performance standards. Therefore, WakeMed Cary fails to demonstrate a need for the proposed operating rooms and should be found nonconforming with this rule.

Duke Raleigh

- (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.*

As noted previously, Duke Raleigh failed to provide any methodology on which to base its projections. In failing to provide any methodology, Duke Raleigh also failed to adequately demonstrate that its projected volumes for the proposed operating rooms incorporate the Policy Gen-3 concepts in meeting the need identified in the 2010 SMFP. Therefore, Duke Raleigh did not adequately demonstrate that the proposed project would maximize healthcare value. Consequently, the application is not conforming to Policy Gen-3 and is not conforming with Criterion 1.

- (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.*

Duke Raleigh fails to demonstrate the need of the population for the proposed project, based on the following:

It should be noted that Duke Raleigh identifies four factors as support for the need for its proposed project. The second of these factors encompasses the need to renovate and modernize the facility given the inefficiency and obsolescence of the hospital's existing surgical facilities. See Duke Raleigh's application p. 28. In identifying the foregoing as a factor driving the need relative to the proposed project, Duke Raleigh fails to acknowledge that renovation and modernization of its facility—for under \$2 million—does not involve any CON reviewable component and can therefore be addressed without a CON.

Further, the Duke Raleigh application should not be approved because the applicant fails to provide any methodology on which to base its projections. The burden is on the applicant to demonstrate the need for the proposed project and to provide the statistical data

(i.e., methodology) that substantiates the existence of the need. However, Duke Raleigh fails to provide any documentation to support the assumptions and methodology used in the development of the projections. As such, the Analyst cannot reasonably rely on the projections provided.

Unreasonable Surgical Growth Projections

As noted above, Duke Raleigh fails to provide any methodology to support its projected surgical cases. As shown in the table below, Duke Raleigh’s projections provided in its Exhibit IV.1 demonstrate unreasonably high growth rates through the project years.

Duke Raleigh Projected Surgical Cases and Growth Rates

	2009	2010	2011	2012	2013	2014	2015
IP Cases	3,004	3,442	3,561	4,003	4,356	4,704	5,062
Year over Year Growth for IP Cases		14.6%	3.5%	12.4%	8.8%	8.0%	7.6%
OP Cases	10,817	11,239	11,649	12,231	12,973	13,819	14,473
Year over Year Growth for OP Cases		3.9%	3.6%	5.0%	6.1%	6.5%	4.7%
Total Cases	13,821	14,681	15,210	16,234	17,329	18,523	19,535
Year over Year Growth for Total Cases		6.2%	3.6%	6.7%	6.7%	6.9%	5.5%
Total Hours (IP Cases x 3 hours + OP Cases x 1.5 hours)	25,238	27,185	28,157	30,356	32,528	34,841	36,896
Year over Year Growth for Total Hours		7.7%	3.6%	7.8%	7.2%	7.1%	5.9%

Duke Raleigh provides no support for these varying and extremely high growth rates from year to year. By comparison, the 2010 SMFP projected growth rate for surgical hours in Wake County is 3.9 percent annually (16.49 percent in total from 2008 to 2012 or 3.9 percent compounded annually).

2010 SMFP Wake County Projected Growth

<i>Federal Fiscal Year</i>	<i>Total Hours</i>
2008	156,269
2012	182,030
CAGR	3.9%

In every year from 2009 to 2015 except 2011, Duke Raleigh projects a growth in surgical hours above the 2010 SMFP growth rate, and in many years projects two times as much growth. As such, Duke Raleigh has failed to demonstrate that its projections are based on reasonable assumptions and has failed to demonstrate the need for the proposed project.

Failure to Account for Shift of Cases

As noted in its applications (see Rex Main Campus application pages 91-93), on August 1, 2009, the group of physicians formerly known as Wake Surgical Specialists joined Rex Healthcare. As a result of their employment the former Wake Surgical Specialists physicians will shift all of their surgical cases to Rex Hospital. From April 2008 to March 2009, these physicians performed 326 inpatient and 1,696 outpatient surgical cases at Duke Raleigh Hospital (2,022 cases in total). This shift in cases is part of Rex's projection methodology which demonstrates the need for its proposed project. Duke Raleigh makes no mention of this future shift of cases in its application and fails to account for its impact in its projection methodology. As such, Duke Raleigh's projections are based on unreasonable assumptions.

Failure to Demonstrate Impact of Physician Recruitment

On page 12, Duke Raleigh outlines its plan to recruit "14 additional subspecialty surgeons." However, Duke Raleigh fails to demonstrate the impact that these surgeons may have on its proposed project. In its findings for Project ID # F-7785-07, a proposed replacement hospital for CMC-Lincoln, the Agency stated "*the applicants rely on physician recruitment efforts, a new primary care center in western Lincoln County, and a newly approved ambulatory surgery center/physician office in eastern Lincoln County to reverse the current 57% to 58% out-migration of Lincoln County residents for inpatient care, and to support the assumption of a 66% increase in market share. Although the applicants identify current members of the medical staff who support the project and who are willing to refer patients to the new hospital, the applicants fail to estimate the number of additional patient admissions this support and future physician recruitment efforts will produce [emphasis added]" (pgs. 18-19, excerpt provided in Exhibit 4). Similarly, Duke Raleigh fails to estimate the number of cases that may result from the successful recruitment of these surgeons.*

In addition, Duke Raleigh provides no indication of its previous success in recruiting surgeons which would assist in determining the likelihood that the planned recruitment efforts will be successful.

Failure to Respond Appropriately to the Performance Standards

In its response to the operating room performance standard, 10A NCAC 14C .2103(b)(1)(C), Duke Raleigh states:

The need for the two additional operating rooms proposed in this application is documented in the volume projections provided in Exhibit IV.1. In the third year of the project (FY2015), Duke Raleigh anticipates providing 5,062 inpatient procedures and 14,473 ambulatory procedures with 15 shared operating rooms. Use of the algorithms incorporated in the 2010 State Plan converts those procedures to a total of 36,896 hours. Dividing by 1,872 hours yields 20 ORs, or 5 more ORs than Duke Raleigh Hospital will then have. Relocating to 3 procedure rooms the procedures that can be safely and appropriately performed there reduces the number of additional ORs needed to 2, but there appears no way to reduce it further.

Duke Raleigh's statement that some of the projected surgical procedures will be performed in its three procedure rooms is in direct contradiction to the Definitions of the Criteria and Standards for Surgical Services and Operating Rooms, specifically 10A NCAC 14C .2011(14), which states: "Surgical case" means an individual who receives one or more surgical procedures in an operating room during a single operative encounter [emphasis added]. As such, Duke Raleigh has responded to the performance standard above using total surgical procedures some of which will be performed in procedure rooms. Duke Raleigh suggests that the number of procedures that will be performed in the procedure room "reduces the number of additional ORs needed to 2", but there is no way to determine the exact number of procedures.

- (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.*

Duke Raleigh fails to demonstrate that it has proposed the least costly or most effective alternative. In Section III.3. of its application, pages 29 to 30, Duke Raleigh discussed several alternatives it

considered prior to the submission of its application as proposed. The options Duke Raleigh considered included:

- Maintenance of the Status Quo;
- Development of a Freestanding Ambulatory Surgery Facility on the Campus of Duke Raleigh Hospital

In reviewing Duke Raleigh's alternatives, Rex believes that Duke Raleigh failed to give consideration to all available alternatives. In fact, other than maintain the status quo, the only alternative considered—besides developing the project as proposed—involved the addition of services to Duke Raleigh's campus. Duke Raleigh failed to consider an alternative that would add services anywhere other than Duke Raleigh's campus. While Rex is not aware of a minimum number of alternatives that an applicant must present in order to be found conforming with this criterion, it is clear from Duke Raleigh's application that no serious consideration was given to an alternate location, which is certainly an important consideration for improving access. The need identified in the 2010 SMFP is for Wake County; however, Duke Raleigh has—in failing to give adequate consideration to any alternatives involving an alternate location—failed to demonstrate that it has proposed the least costly or most effective alternative to meet the identified need.

Given that Duke Raleigh has failed to demonstrate that the least costly or most effective alternative has been proposed, Duke Raleigh should be found nonconforming with this criterion.

- (5) *Financial and operational projections for the project shall demonstrate the availability of funds for capital and operating needs as well as the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services by the person proposing the service.*

Duke Raleigh fails to demonstrate that the financial and operational projections are based on reasonable assumptions and therefore fails to demonstrate the immediate and long-term financial feasibility of the project.

On page 50 of its application, Duke Raleigh provides its projected payor mix for surgical services and notes:

3) We assume that the aging of the population that the Hospital serves, the recruitment of 14 additional subspecialty surgeons, and the implementation of the project proposed in this application will serve to:

- Increase the percentage of Medicare patients
- Reduce the percentage of Managed Care patients

However, Duke Raleigh's projected payor mix also demonstrates increases in Self Pay, Medicaid, and Commercial patients as a percent of total and a reduction of Other patients as a percent of total.

Difference in Historical and Projected Payor Mix

<i>Payor</i>	<i>FY 2009 Surgical Cases by Payer, page 48</i>	<i>FY 2014 Surgical Cases by Payer, page 50</i>	<i>Difference</i>
Self Pay/ Indigent/Charity	1.20%	1.60%	0.4%
Medicare	29.70%	40.10%	10.4%
Medicaid	4.10%	4.30%	0.2%
Managed Care	58%	47.60%	-10.4%
Commercial	2%	3%	1.0%
Other	5.00%	3.40%	-1.6%
Total	100%	100%	

None of these changes is described or justified by Duke Raleigh.

In addition, Duke Raleigh's projected increase in Medicare patients runs counter to its historical experience and is above the projected population growth in the 65 and older population. According to its 2009 and 2010 Hospital Licensure Renewal Applications (excerpt provided in Exhibit 5), Duke Raleigh's Medicare cases as a percent of total surgical cases has declined over the last year.

Decline in Medicare as Percent of Total Cases

<i>Payor</i>	<i>2008 Cases</i>	<i>2009 Cases</i>	<i>2008 Patients as Percent of Total</i>	<i>2009 Patients as Percent of Total</i>	<i>Difference</i>
Medicare	3,225	3,473	28.1%	25.1%	3.0%
Total	11,484	13,821			

In addition, Duke Raleigh projects growth in Medicare cases of over 80 percent from 2009 to 2014 (7,428 Medicare cases in 2014 ÷ 4,105

Medicare cases in 2009 -1; 7,428 Medicare cases in 2014 = 40.1 percent Medicare as a percent of total x 18,523 projected cases in 2014; 4,105 Medicare cases in 2009 = 29.7 percent Medicare as a percent of total x 13,821 cases in 2009). This projected growth of 80 percent for Medicare cases is well beyond the projected growth in the 65 and over population. As shown in Duke Raleigh's supporting Exhibit III.1, ThomsonReuters projects Wake County males 65 and older to grow only 47.6 percent and females 65 and older to grow only 42.2 percent from 2009 to 2014. Thus, Duke Raleigh's projected payor mix is unreasonable in light of its own supporting documentation.

In addition, Duke Raleigh's financial statements provide a different proposed payor mix in 2014 than its response to Section VI.15.

<i>Payor</i>	<i>FY 2014 Surgical Cases by Payer, Forms D and E [not paginated]</i>	<i>FY 2014 Surgical Cases by Payer, page 50</i>	<i>Difference</i>
Self Pay/ Indigent/Charity	2.3%	1.6%	0.7%
Medicare	40.5%	40.1%	0.4%
Medicaid	2.6%	4.3%	-1.7%
Managed Care	52.8%	47.6%	5.2%
Commercial	1.5%	3%	-1.5%
Other	0.4%	3.4%	-3.0%
Total	100%	100%	

Given this disparity, Duke Raleigh's payor mix projections are unreliable and fail to demonstrate that the financial assumptions are reasonable.

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

Duke Raleigh fails to demonstrate that its proposal will not result in the unnecessary duplication of existing services. In particular, Duke Raleigh fails to demonstrate the inadequacy or inability of existing providers to meet the identified need. Instead, Duke Raleigh simply noted that "[d]ocumentation of the inadequacy or inability of the existing providers to meet the identified need is provided in the 2010 State Medical Facilities Plan, which finds a need for 3 [three] additional operating rooms in Wake County." Contrary to Duke

Raleigh's assertion, the identification of a need in the SMFP does not obviate the need for a response to the aforementioned question. In failing to address the inadequacy or inability of existing providers to meet the need, Duke Raleigh has failed to demonstrate that its proposal will not result in the unnecessary duplication of services. As such, Duke Raleigh should be found nonconforming with this criterion.

CRITERIA AND STANDARDS FOR SURGICAL SERVICES AND OPERATING ROOMS

The proposal submitted by Duke Raleigh is not conforming with all applicable Criteria and Standards for Surgical Services and Operating Rooms as promulgated in 10A NCAC 14C .2100, *et seq.*, as indicated below.

10A NCAC 14C .2102(b)(5)

This rule states "An applicant proposing to increase the number of operating rooms in a service area, 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 provide the following information: (5) a detailed description of and documentation to support the assumptions and methodology used in the development of the projections required by this Rule;"

As noted previously, Duke Raleigh fails to provide any documentation to support the assumptions and methodology used in the development of its projections. As such, Duke Raleigh should be found nonconforming with this rule.

10A NCAC 14C .2103(a)

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

Duke Raleigh fails to provide a response to this rule. See Duke Raleigh's application p. 20. However, on page 10 of its application, Duke Raleigh states that "[t]he two proposed ORs will be scheduled 10 hours per day 251 days per year when they begin service, and hours will be added to their schedules as required to meet demand." As required in the rule, 52 weeks a year equates to 260 days per year. Despite this requirement, Duke Raleigh used 251 days per year in projecting its utilization, as such; Duke Raleigh is nonconforming with this rule.

10A NCAC 14C .2103(b)(1)(C)

This rule states "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 not be approved unless:

- (1) *the applicant reasonably demonstrates 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: $\{[(\text{Number of facility's projected inpatient cases, excluding trauma cases reported by Level I or II trauma centers, cases reported by designated burn intensive care units and cases performed in dedicated open heart and C-section rooms, times 3.0 hours}) \text{ plus } (\text{Number of facility's projected outpatient cases times 1.5 hours})] \text{ divided by } 1872 \text{ hours}\}$ 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. The number of rooms needed is determined as follows:*

(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"

In its response to this performance standard, Duke Raleigh states:

The need for the two additional operating rooms proposed in this application is documented in the volume projections provided in Exhibit IV.1. In the third year of the project (FY2015), Duke Raleigh anticipates providing 5,062 inpatient procedures and 14,473 ambulatory procedures with 15 shared operating rooms. Use of the algorithms incorporated in the 2010 State Plan converts those procedures to a total of 36,896 hours. Dividing by 1,872 hours yields 20 ORs, or 5 more ORs than Duke Raleigh Hospital will then have. Relocating to 3 procedure rooms the procedures that can be safely and appropriately performed there reduces the number of additional ORs needed to 2, but there appears no way to reduce it further.

Duke Raleigh's statement that some of the projected surgical procedures will be performed in its three procedure rooms is in direct contradiction to the Definitions of the Criteria and Standards for Surgical Services and Operating Rooms, specifically 10A NCAC 14C .2011(14), which states: "Surgical case" means an individual who receives one or more surgical procedures in an operating room during a single operative encounter [emphasis added]. As such,

Duke Raleigh has responded to the performance standard above using total surgical procedures some of which will be performed in procedure rooms. Duke Raleigh suggests that the number of procedures that will be performed in the procedure room "*reduces the number of additional ORs need to 2*", but there is no way to determine the exact number of procedures.

10A NCAC 14C .2103(g)

This rule states "*The applicant shall document the assumptions and provide data supporting the methodology used for each projection in this Rule.*"

As noted previously, Duke Raleigh fails to provide any documentation to support the assumptions and methodology used in the development of its projections. As such, Duke Raleigh should be found nonconforming with this rule.

Novant

- (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.*

Novant failed to demonstrate how the proposed project will promote safety and quality in the delivery of health care services while promoting equitable access and maximizing health care value for resources expended under Policy Gen-3. As noted in the 2010 SMFP,

“A certificate of need applicant applying to develop or offer a new institutional health service for which there is a need determination in the North Carolina State Medical Facilities Plan shall demonstrate how the project will promote safety and quality in the delivery of health care services while promoting equitable access and maximizing health care value for resources expended. A certificate of need applicant shall document its plans for providing access to services for patients with limited financial resources and demonstrate the availability of capacity to provide these services. A certificate of need applicant shall also document how its projected volumes incorporate these concepts in meeting the need identified in the State Medical Facilities Plan as well as addressing the needs of all residents in the proposed service area.”

See 2010 SMFP p. 39. In the CON review at issue, Novant is applying to develop a new institutional health service for which there is a need determination in the SMFP; however, **Novant fails to provide a response to Section III.4. of the application** which requires an applicant to “[d]escribe how the project is consistent with each applicable policy in the State Medical Facilities Plan, including Policy Gen-3, Basic Principles.” As such, Novant omits any discussion of its conformity with the basic principles—safety and quality, equitable access, and maximizing health care value for resources expended—as outlined under Policy Gen-3. Therefore, the application should be found nonconforming with Policy Gen-3 and as a result, nonconforming with Criterion 1.

Please note that Section V.7. of the application, which requires the applicant to “[d]escribe how the proposed project will foster competition[,]” while similar to Policy Gen-3, does not specifically require an applicant to address the basic principles contained in Policy Gen-3 as required in response to Section III.4., which Novant omitted from its application. In particular, Section III.4. of the CON application form for New Operating Rooms, New Ambulatory Surgical Facilities and Gastrointestinal Endoscopy Procedure Room Projects requires an applicant to “[d]escribe how the project is consistent with each applicable policy in the State Medical Facilities Plan, including Policy Gen-3, Basic Principles.” While Novant’s response in Section V.7. of its application attempts to address how its project will foster competition by promoting cost effectiveness, quality, and access to services, such a response does not adequately address the new basic principles under Policy Gen-3—safety and quality, equitable access, and maximizing health care value for resources expended.

- (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.*

Novant fails to demonstrate the need of the population for the proposed project, based on the following:

Failure to Justify Market Share Assumptions

On page 75 of its application, Novant provides its market share assumptions for its service area:

Holly Springs Surgery Center
Projected Market Share: CY 2012 – CY 2015

Census Tract	CY 2012	CY 2013	CY 2014	CY 2015
Census Tract 537	48%	48%	54%	60%
Census Tract 531.01	28%	28%	32%	35%
Census Tract 531.03	28%	28%	32%	35%
Census Tract 531.04	28%	28%	32%	35%
Census Tract 529	28%	28%	32%	35%
Census Tract 534.04	8%	8%	9%	10%

Source: Exhibit 2, Table 4

While Novant argues that its market share assumptions are reasonable it fails to address several key factors. Novant provides no

reasonable basis for the specific market share percentages for each Census Tract. For example, it is unclear why Novant projects a 35 percent share in Census Tract 529 rather than a 10 percent or 60 percent share as projected in other tracts; the market share assumptions appear to be completely arbitrary. Novant does not demonstrate that it has adequate provider support for its market share assumptions. Novant would be a new provider of surgical services in Wake County and currently employs no surgeons in the county. In fact, only six of the surgeons who provided support to Novant's application are based in Wake County and those six have offices in Cary and Garner not Holly Springs, with no specific documentation of plans to develop an office in the Holly Springs area.

Market Share Assumption Greater than 100 Percent

As noted below, while Novant is inconsistent in its statements regarding the services that will be offered at its facility, only general surgeons, orthopedists, neurosurgeons, and spine surgeons provided support to its project. As such, it can be assumed that Novant will only offer general surgery, orthopedics, neurosurgery, and spine surgery.⁶ However, Novant's utilization projections do not account for this limited service offering and employ unreasonable market share assumptions including an assumption of 115 percent share of one census tract.

On page 73 of its application Novant calculates the historical ambulatory surgery rates in Wake County and provides the basis for its projected surgical use rates, which is the foundation of its projection methodology. Novant states "*the following table provides a summary of multi-specialty surgical data and the resulting surgical use rates for residents of Wake County.*"

⁶ Rex is using the "four" surgery service lines identified by Novant; however, it should be noted that spine surgery is a subset of neurosurgery or orthopedic surgery.

Wake County Ambulatory Surgical Use Rate: 2006 – 2009

	2005	2006	2007	2008	2009	3 Yr Avg 2007-2009
Total Outpatient Surgical Volume						
Wake County Residents	46,428	43,325	46,799	51,202	52,772	
Population	756,873	791,087	829,418	864,429	900,068	
Wake County Ambulatory Surgical Use Rate	61.34	54.77	56.42	59.33	58.63	58.10

Source: Hospital LRAs; NC Office State Demographics; Exhibit 2, Table 11

Note: Use rates exclude ambulatory surgical procedures performed on Wake County residents at the following NC specialty surgical centers: women's services, ophthalmology, and plastic surgery centers.

... HSSC utilized the more conservative 2007 to 2009 three year average Ambulatory Surgery Use Rate for Wake County residents to project future ambulatory surgical volume for the proposed HSSC Service Area."

As Novant notes, the surgical volumes used to calculate these use rates are from multi-specialty providers, which provide additional specialties beyond what will be offered by Novant. In fact, an analysis of the surgical providers in Wake County included by Novant suggests that only 52 percent of cases at these facilities are in specialties that will be provided at Novant.

The Wake County Ambulatory Use Rate table reproduced from the Novant application above refers to source data in Exhibit 2, Table 11 which is identical to the table in the application, but also refers to Tables 14-18. In Exhibit 2, Tables 14-18, Novant provides the number of Wake County ambulatory surgery patients treated by North Carolina providers according to the Hospital and Ambulatory Surgery License Renewal Applications. Again, the patients shown here are for all ambulatory surgery specialties and not just those to be provided by Novant. Moreover, the Hospital and Ambulatory Surgery License Renewal Applications provide all surgical cases including cases regardless of the location performed (such as procedure rooms). As such, Novant's surgical use rate calculations also include cases that may not be appropriate for an operating room.

On Table 19, the top six providers of ambulatory surgery to Wake County patients are facilities located in Wake County. According to their License Renewal Applications, only 52 percent of the cases at those facilities are in specialties that will be provided by Novant, as shown below. It should be noted that the License Renewal Applications do not provide a spine surgery separately, but that these cases are assumed to be included in the neurosurgery or orthopedic surgery cases.

**FFY 2009 Wake County Providers
Percent of Ambulatory Surgery Cases in Novant Provided Specialties**

	<i>General Surgery</i>	<i>Neuro-surgery</i>	<i>Orthopedic Surgery</i>	<i>Total Ambulatory Surgery</i>	<i>Novant Specialties as % of Total</i>
Rex Hospital	5,637	425	5,269	24,567	46.1%
Duke Health Raleigh	2,175	552	5,817	10,817	79.0%
WakeMed	2,052	593	2,032	9,334	50.1%
WakeMed Cary	2,711	13	767	7,273	48.0%
Blue Ridge SC	0	0	2,676	5,904	45.3%
WakeMed North	207	0	1,129	3,843	34.8%
TOTAL	12,782	1,583	17,690	61,738	51.9%

Source: 2010 Hospital and Ambulatory Surgery License Renewal Applications; pertinent excerpts provided in Exhibit 5.

The License Renewal Applications do not provide surgical data by specialty and by county and so the exact number of surgical cases for Wake County patients in the Novant specialties cannot be determined. However, the total percent of ambulatory surgery cases in the Novant specialties calculated above demonstrates definitively that a large portion of the cases used in determining Novant's projected use rate are in specialties that will not be provided by Novant. In justifying its use rate assumption, Novant states "there is no publicly available database which provides reliable outpatient surgical utilization by specialty" (pg. 74). This statement is clearly false as Novant relies upon the Hospital and Ambulatory Surgery License Renewal Applications in its calculation of surgical use rates and thus should have been able to use that data to more reasonably project the percentage of patients that require the specialties Novant will offer.

On page 75 of its application, Novant provides its market share assumptions for its service area:

Holly Springs Surgery Center
Projected Market Share: CY 2012 – CY 2015

Census Tract	CY 2012	CY 2013	CY 2014	CY 2015
Census Tract 532	48%	48%	54%	60%
Census Tract 531.01	25%	28%	32%	35%
Census Tract 531.05	28%	28%	32%	35%
Census Tract 531.04	28%	28%	32%	35%
Census Tract 529	28%	28%	32%	35%
Census Tract 534.04	8%	8%	9%	10%

Source: Exhibit 2, Table 4

In its justification for these assumptions presented on pages 75 and 76, Novant never mentions that these assumptions reflect the limited number of specialties that Novant will offer. In fact, Novant did not consider this fact as when its specialty offerings are considered, its market share assumption for Census Tract 532 is demonstrated to be above 100 percent, as shown below.

On page 74 of its application, Novant provides total projected ambulatory surgery volume for its service area:

HSSC Service Area
Total Ambulatory Surgery Volume: CY 2012 – CY 2015

Census Tract	Town	CY 2012	CY 2013	CY 2014	CY 2015
Census Tract 532	Holly Springs	2,305	2,416	2,532	2,654
Census Tract 531.01	Fuquay Varina	1,116	1,165	1,216	1,269
Census Tract 531.03	Wake County	560	585	576	585
Census Tract 531.04	Wake County	671	691	711	733
Census Tract 534.04	Holly Springs/Apex	1,269	1,309	1,350	1,392
Census Tract 529	Wake County	916	936	956	976
Total Service Area		8,837	9,084	9,341	9,609

Methodology = Projected Population in Step 1 x Use Rate in Step 2 / 1,000
Source: Exhibit 2, Table 3

Again, these projected surgery volumes are based on the inclusion of surgery specialties that will not be offered at Novant. As shown above, 52 percent of total ambulatory surgery cases performed by Wake County providers in FFY 2009 were in the Novant surgical specialties. In order to determine the potential market that Novant can serve in CY 2015, Rex applied the percentage of Novant specialties to total cases, 52 percent, to total surgery cases projected by Novant.

**CY 2015 Ambulatory Surgery Cases
That Could Be Served by Novant
Given Specialties Offered**

Census Tract	CY 2015 Total Ambulatory Surgery Volume per Novant page 74	Percent of Total Ambulatory Surgery Cases in Novant Specialties	Ambulatory Cases That Could Be Served by Novant
532	2,654	51.9%	1,378
531.01	1,269	51.9%	659
531.03	585	51.9%	304
531.04	733	51.9%	380
534.04	1,392	51.9%	723
529	976	51.9%	507

Total	7,609		5,966
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On page 77, Novant provides its projected surgical volumes by census tract which are derived from applying its projected market share of total cases to the projected total market cases.

Projected HSSC Surgical Volume from HSSC Service Area
CY 2012 – CY 2015

Census Tract	Town	CY 2012	CY 2013	CY 2014	CY 2015
Census Tract 532	Holly Springs	1,166	1,160	1,367	1,593
Census Tract 531.01	Farmington	312	326	383	444
Census Tract 531.03	Wake County	157	159	182	205
Census Tract 531.04	Wake County	188	193	224	256
Census Tract 534.04	Holly Springs/Apex	355	367	425	487
Census Tract 529	Wake County	73	74	86	98
HSSC Service Area Outpatient Surgical Volume (90% of Total)		2,192	2,280	2,667	3,083

Methodology = Projected Surgical Volume by Census Tract in Step 3 x Market Share Assumptions in Step 4
Source: Exhibit 7, Table 3 (highlighted in yellow)

Below, Rex compares Novant projected volume by census tract to the number of ambulatory cases it could potentially serve in order to demonstrate the unreasonableness of Novant's projections, and its true market share assumptions when its specialty mix is considered.

CY 2015 Novant Market Share Assumptions

Census Tract	Ambulatory Cases That Could Be Served by Novant, calculated above	Ambulatory Cases Projected to be Provided by Novant page 77	Percent of Potential Cases that Novant Projects to Provide
532	1,378	1,593	115.6%
531.01	659	444	67.4%
531.03	304	205	67.4%
531.04	380	256	67.4%
534.04	723	487	67.4%
529	507	98	19.3%
Total	5,966	3,083	51.7%

As shown above, Novant projects to provide 52 percent of the ambulatory surgery cases in its service area, when its restricted surgical specialties are considered. Moreover, Novant projects to provide 116 percent of the general surgery, orthopedics, neurosurgery, and spine surgery cases in Census Tract 532. Clearly, Novant's projection methodology is based on unreasonable

assumptions and as a result, Novant has not demonstrated the need for the proposed project.

Mathematical Error in Projection Methodology

Novant utilization projections contain a mathematical error which results in an inflation in the number of surgical cases it will provide. On pages 74 and 75, Novant provides total projected ambulatory surgery cases in its service area and its projected market share, as shown below.

HSSC Service Area
Total Ambulatory Surgery Volume: CY 2012 – CY 2015

Census Tract	Town	CY 2012	CY 2013	CY 2014	CY 2015
Census Tract 532	Holly Springs	2,305	2,436	2,532	2,654
Census Tract 531.01	Fuquay Varina	1,116	1,165	1,216	1,269
Census Tract 531.03	Wake County	560	568	576	585
Census Tract 531.04	Wake County	671	691	711	733
Census Tract 534.04	Holly Springs/Apex	1,269	1,309	1,350	1,392
Census Tract 529	Wake County	916	936	956	976
Total Service Area		6,837	7,084	7,341	7,609

Methodology – Projected Population in Step 1 x Use Rate in Step 2 / 1,000
Source: Exhibit 2, Table 3

Holly Springs Surgery Center
Projected Market Share: CY 2012 – CY 2015

Census Tract	CY 2012	CY 2013	CY 2014	CY 2015
Census Tract 532	48%	48%	54%	60%
Census Tract 531.01	28%	28%	32%	33%
Census Tract 531.03	28%	28%	32%	33%
Census Tract 531.04	28%	28%	32%	33%
Census Tract 529	28%	25%	32%	33%
Census Tract 534.04	8%	8%	9%	10%

Source: Exhibit 2, Table 4

Please note that Novant has changed the position of Census Tracts 529 and 534.04 in these two tables, which is likely the cause of its mathematical error. If the market share figures are applied to the total cases in the appropriate manner, the following projected Novant surgical cases can be calculated.

Correctly Calculated Novant Projected Cases

Census Tract	CY 2012	CY 2013	CY 2014	CY 2015
532	1,106	1,160	1,367	1,592
531.01	312	326	383	444
531.03	157	159	182	205
531.04	188	193	224	256
534.04	102	105	121	139

529	257	262	301	342
Novant Service Area Outpatient Surgical Volume (90% of Total)	2,121	2,205	2,579	2,979
Surgical Volume from Other Wake County Census Tracts	236	245	287	331
Total Novant Outpatient Surgery	2,357	2,450	2,865	3,310

Again, Novant's error is in the calculation of the projected volumes for Census Tracts 529 and 534.04; Novant applied the market share assumption for Tract 529 to the projected cases for 534.04 and vice versa. If the correct Calendar calculations shown above are adjusted to project years, the result is that Novant overstates the number of surgical cases it will serve by 82 to 111 cases in each of its project years.

Correctly Calculated Novant Projected Cases

<i>Census Tract</i>	<i>FFY 2013 (PY1)</i>	<i>FFY 2014 (PY2)</i>	<i>FFY 2015 (PY3)</i>
Correctly Calculated Total Novant Cases	2,427	2,761	3,198
Total Novant Cases per Incorrect Calculations in Application	2,509	2,856	3,310
Difference	82	95	111

Given that Novant overstates the number of surgical cases and that its methodology relies on unreasonable market share assumptions, its application has failed to document the need for the proposed project.

Use Rate Assumption

In a recent review for proposed operating rooms submitted by Novant in Union County, the Analyst was critical of the applicant's use rate assumption, stating *"the use rate based on all outpatient surgical cases performed on residents of Union County, not just residents of the primary service area. The applicant did not provide sufficient data in the application to adequately document that the rate at which residents of the primary service area utilize ambulatory surgical facilities is sufficiently similar to the rate at which residents of Union County as a whole utilize outpatient surgical services in ambulatory surgical facilities and the hospital.*

For example, the applicant did not provide data to show that the age distribution for the primary service area is similar to the age distribution for Union County as a whole. The age of a population (e.g., the median age of the population, the percentage of the total population age 65 and older, etc.) impacts the type and frequency of surgical services utilized by that population” (pgs. 14-15 of the Agency Findings in Project ID # F-8316-09, excerpts provided in Exhibit 6). Novant’s application also uses a county-wide use rate and fails to provide adequate documentation to determine that the residents of the proposed service area are sufficiently similar to the county as a whole.

Volumes for Novant Physician Supporters

According to the ThomsonReuters outpatient surgery database, the physicians who wrote letters of support for Novant’s application performed 961 outpatient surgeries on Wake County patients in the twelve months ending in March 2009.

**Outpatient Surgeries for
Physician Supporters of Novant Application**

<i>Facility</i>	<i>Outpatient Cases</i>
Blue Ridge Surgery Center	809
Rex Healthcare	57
WakeMed Cary	46
Durham, Orange, and Other County Facilities	49
TOTAL	961

Source: ThomsonReuters. Detail provided in Exhibit 7.

Even if these physicians shifted all of their 961 cases, which is unlikely as Novant’s service area is only a portion of Wake County, Novant would require only 0.8 ORs (0.8 ORs = 961 x 1.5 hours per outpatient cases ÷ 1,872 hours per OR).

Further, Rex maintains that documentation of surgeon support for the proposed project should be considered an important factor in this review. In Exhibit 3 of its application Novant represents that it has 51 physician supporters (27 surgeons and 24 primary care physicians). Of the 27 surgeons, Novant represents that it has support from one orthopaedic spine specialist, one physical

medicine and rehabilitation,⁷ three neurosurgeons, four general surgeons, and eighteen orthopaedic surgeons. However, Exhibit 3 does not include support letters from 12 of the 18 orthopaedic surgeons for which Novant claimed to have documented support. Of the 14 surgeon support letters provided in Exhibit 3 (27 - 13 [includes the 12 orthopaedic surgeon letters not provided and one physical medicine and rehabilitation letter which Novant notes will perform non-surgical procedures in the proposed procedure room] = 14), 13 constitute unique letters of support (whereby the surgeon did not also submit a letter of support for any of the competing applications). In fact, even the physician support letters that are included in Novant's application do not demonstrate a firm commitment from the physicians to practice at the proposed ambulatory surgery center; most indicate that they will seek privileges there.

Procedure Room

Novant does not provide any discussion of the need for a procedure room as proposed in its application. Therefore, this procedure room as proposed by Novant is essentially shell space. See Agency Findings for Project ID # F-7993-07, KND Development 50, LLC d/b/a Kindred Hospital Charlotte (noting that due to the inconsistencies in the proposed number of ICU beds to be developed and the inclusion of extra unnecessary shell space, the applicant did not adequately demonstrate that the design and construction costs represent the most reasonable alternative for the services proposed). Please see Exhibit 8 for the relevant excerpt from these Findings. See also, Agency Findings for WakeMed Brier Creek Healthplex (Project ID # J-8016-07) (noting, among other things, that the proposed design of the facility in Exhibit 25 includes a "Bone" room which appears to be for provision of bone densitometry services; however, the applicant failed to state in the narrative of the application that these services will be provided. In addition, the Analyst noted that a radiology/fluoroscopy room was proposed but no equipment was identified to be acquired for this room—consequently, the Analyst found that the design was not the most reasonable alternative for the services proposed by the applicant and therefore, the application was found not conforming

⁷ Contrary to Novant's categorization, a physical medicine & rehabilitation physician is not a surgeon as they do not perform surgical procedures. As such, this physician was excluded from the final count of surgeon support for Novant's project.

to this Criterion). Please see Exhibit 9 for the relevant excerpt from these Findings.

- (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.*

Novant fails to demonstrate that it has proposed the least costly or most effective alternative. In particular, in Section III of its application, Novant failed to discuss any alternatives to its project as proposed. While Novant notes elsewhere in its application that it believes that the southern portion of Wake County is underserved, it offers no additional explanation as to why its proposal is the most effective alternative to meet this unmet need within the southern portion of the county. Given Novant's complete lack of discussion relative to alternatives considered, Novant has failed to demonstrate that developing the facility in Holly Springs is the least costly or most effective alternative for the need identified in the 2010 SMFP and should be found nonconforming with this criterion.

- (5) *Financial and operational projections for the project shall demonstrate the availability of funds for capital and operating needs as well as the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services by the person proposing the service.*

Novant fails to demonstrate that the financial and operational projections are based on reasonable assumptions and therefore fails to demonstrate the immediate and long-term financial feasibility of the project.

In particular, Novant is so vague with its financial assumptions that it is impossible to determine their reasonableness. Specifically, prior to listing its assumptions, the beginning of page 165 states the following:

"In determining the financial projections for the Holly Springs Surgery Center as part of the certificate [sic] of Need Application process, the following information was relied upon from other Ambulatory Surgery Centers, Wake County Surgery Centers CONs, and a review of the payor mix from Wake County Licensure Renewal Applications."

In order to demonstrate that its financial assumptions were reasonable, Novant needed to document the facilities or CON

applications on which they are based because the revenue and expenses associated with surgical cases varies significantly based on the type of procedure that is being performed.

In addition, as noted below, Novant states in its response to 10A NCAC 14C .2102 (b) (8) that *“utilization of the multi-specialty surgery center will be comparable to existing multi-specialty centers in North Carolina and will include procedures in the following specialties: general surgery; orthopaedics; spine surgery; neurosurgery; ENT; and urology.”* See Novant’s application p. 21. However, Novant fails to provide any support from otolaryngologists or urologists. Moreover, this response is inconsistent with Novant’s response to 10A NCAC 14C .2102(a), in which Novant noted that, based on physician letters of support, the following specialties will be offered: general surgery, neurosurgery, orthopaedics, and spine surgery. See Novant’s application p. 18. Given that Novant’s projected charges are based on ENT and urology services which will not be offered at its proposed facility, its financial projections are not based on reasonable assumptions.

Novant states that its financial assumptions are based on a review of the payor mix from Wake County Licensure Renewal Applications. The following tables provide a comparison between the outpatient surgery payor mix presented in Wake County Licensure Applications and Novant’s projected payor mix.

**Wake County 2010 Licensure Renewal Application
Outpatient Surgery Payor Mix**

	<i>Rex Hospital</i>	<i>Duke Health Raleigh</i>	<i>WakeMed</i>	<i>WakeMed Cary</i>	<i>Blue Ridge SC</i>	<i>WakeMed North</i>	<i>Total</i>	<i>Total Payor Mix</i>
Self Pay/ Indigent/ Charity	356	1,722	836	181	36	241	3,372	5.2%
Medicare	6,509	2,273	1,617	2,025	1,493	816	14,733	22.6%
Medicaid	969	351	2,267	293	599	200	4,679	7.2%
Commercial	63	190	126	47	44	23	493	0.8%
Managed Care	16,076	5,794	4,831	4,595	5,872	2,438	39,606	60.7%
Other	594	487	575	132	453	125	2,366	3.6%
TOTAL	24,567	10,817	10,252	7,273	8,497	3,843	65,249	100.0%

Source: 2010 Hospital and Ambulatory Surgery License Renewal Applications, excerpts provided in Exhibit 5.
Note: Rex has only included the facilities that were used by Novant throughout its application as providing comparable services.

**Comparison Between Wake County 2010 Licensure Renewal Application
Outpatient Surgery Payor Mix and Novant Payor Mix**

	<i>Wake County Total Payor Mix</i>	<i>Novant Projected Payor Mix for Surgery, page 165</i>	<i>Difference</i>
Self Pay/ Indigent/ Charity	5.2%	6.97%	1.80%
Medicare	22.6%	31.08%	8.50%
Medicaid	7.2%	9.12%	1.95%
Commercial	0.8%	0.87%	0.11%
Managed Care	60.7%	47.34%	-13.36%
Other	3.6%	4.62%	0.99%
TOTAL	100.0%	100.0%	

As this analysis shows, Novant's projected payor mix is significantly different from the existing payor mix in Wake County. Novant makes no statements about how it may have adjusted the Wake County payor mix and thus, the proposed mix is based on unreasonable assumptions and likely to have been manipulated in order to suggest that Novant will have a payor mix that will be looked at more favorably by the CON Section in a comparative review.

In addition, Novant employs some of the physicians who provided support for the proposed project. The payor mix of the cases for these physicians could have provided support for Novant's assumptions, but it is not presented.

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

Novant fails to demonstrate that its proposal will not result in the unnecessary duplication of existing services.

As discussed under Criterion 3, Novant fails to demonstrate the need for all of the services it proposes. In addition, while Novant proposes to shift cases from existing providers of surgical services in Wake County, Novant fails to document that these existing providers are unable to meet the needs of the population proposed

to be served and likewise fails to demonstrate the impact of the proposed project on existing providers.

On page 72, Novant provides the total population of its service area from 2009 to 2015. Based on Novant's use rate assumptions, it can be calculated that approximately 6,150 ambulatory surgical cases originated from the service area in 2009 (6,150 cases = 105,864 persons in 2009 x 58.10 cases per 1,000 population). As these are current cases, all of the 6,150 cases are currently served by existing providers. As shown on page 74, Novant projects 7,609 ambulatory surgical cases in the service area in 2015. Thus, there will be an additional 1,459 cases in the service in 2015 (1,459 = 7,069 cases in 2015 - 6,150 cases in 2009). Novant projects to serve 3,083 patients in the service area in 2015 (see page 77). Assuming that Novant serves 100 percent of the 1,459 additional cases from population growth which is unlikely given that Novant has no history of providing surgical services in Wake County, Novant would have to shift 1,624 cases from other existing providers.

Source of Novant Projected Cases

A	2009 Total Ambulatory Surgery Cases in Service Area (105,864 population x 58.10 cases per 1,000)	6,150
B	2015 Total Ambulatory Surgery Cases in Service Area (page 74)	7,609
C	Total Additional Ambulatory Surgery Cases in Service Area in 2015 (B - A)	1,459
D	Novant Projected Cases in Service Area	3,083
E	# of Cases To Be Shifted From Other Providers Assuming 100% Capture of Additional Cases (D - C)	1,624

Novant has no historical basis for this projected shift of cases and fails to provide any documentation that existing providers are not able to meet of those patients. In a recent review for proposed operating rooms submitted by Novant in Union County, the Analyst completed a similar analysis of a proposed shift of cases and found that Novant had failed to "adequately demonstrate that projected utilization is based on reasonable and supported assumptions" (page 27 of the Agency Findings in Project ID # F-8316-09, excerpt provided in Exhibit 6).

Rex Hospital has submitted a competing application which proposes to serve its existing patients in the Holly Springs area. Rex, the largest provider of surgical services in Wake County, demonstrates the need for only two operating rooms in Holly Springs based on the direct shift of existing patients who reside in its proposed service area and within a greater number of surgical specialties than proposed by Novant. By contrast, Novant proposes to develop three operating rooms and a procedure room despite having no history of providing surgical services in the county.

Given the services Novant proposes to develop, the ability of existing providers to meet the identified need, and the failure of Novant to adequately demonstrate why, notwithstanding the ability of existing providers to meet the identified need, there still exists a need for the proposed project, Novant has failed to demonstrate that the proposed project would not result in the unnecessary duplication of services. Therefore the application should be found nonconforming with Criterion 6.

- (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.*

Novant fails to demonstrate the availability of resources necessary for the provision of the services proposed to be provided. The applicant is proposing to develop a new freestanding ambulatory surgery center which will operate 10 hours per day, five days per week; however, the applicant has failed to adequately document the availability of adequate manpower for the provision of the services proposed to be offered at the proposed Novant facility. In particular, Novant's application lacks adequate documentation of the availability of surgeon specialists to provide all of the specialties proposed. In response to 10A NCAC 14C .2102(b)(8), Novant notes that the "*utilization of the multi-specialty surgery center will be comparable to existing multi-specialty centers in North Carolina and will include procedures in the following specialties: general surgery; orthopaedics; spine surgery; neurosurgery; ENT; and urology.*" See Novant's application p. 21. However, Novant fails to provide any support from otolaryngologists or urologists. Moreover, this response is inconsistent with Novant's response to 10A NCAC 14C .2102(a), in which Novant noted that, based on physician letters of support, the following specialties will be offered: general surgery,

neurosurgery, orthopaedics, and spine surgery. See Novant's application p. 18. Although Novant notes that it "will continue to entertain ongoing discussions with other surgical specialists, such as ENT and urology[.]" the fact remains that Novant has no support from these two surgical specialties. See Novant's application p. 18. Given Novant's lack of documented support for the MDC's proposed, Novant has failed to demonstrate availability of health manpower for the provision of services proposed to be provided and should be found nonconforming with 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.*

Novant also fails to demonstrate how its proposed ambulatory surgery center will coordinate with the existing health care system in the area. Given the lack of existing Novant facilities in the area, Novant cannot and does not propose a shift of volume in its application. This factor, combined with the lack of substantial physician support in the application, results in a failure to demonstrate that Novant's proposed patients will receive care in coordination with the existing health care system in the county, including any of the three health care systems.

The applicant fails to demonstrate adequate physician support from all of the specialties proposed in the application necessary to support its volume projections and demonstrate coordination with the existing health care system. Novant states that its surgical procedures will include four surgical specialties (general surgery, neurosurgery, orthopaedics, and spine surgery). Further, Novant provides the following table on page 34 of its application in response to 10A NCAC 14 .2105(b).

**Holly Springs Surgery Center
Estimated Surgeon & Physician Practitioners by Specialty**

PHYSICIAN SPECIALTY	CURRENT HSSC STAFF**	EXPECTED HSSC MEDICAL STAFF
ANESTHESIOLOGY *	N/A**	4-5
GENERAL SURGERY	N/A**	4
NEUROSURGERY	N/A**	3
ORTHOPEDIC SURGERY	N/A**	18
SPINE SURGERY	N/A**	1
PHYSICAL MEDICINE & REHABILITATION***	N/A**	1
TOTAL	N/A**	31-32

*Source: Surgeon letters of Support; Radiologist, Pathologist, & Anesthesiologist professional coverage letters. Please see Exhibit 3.

**There are no current HSSC Medical Staff members, as HSSC is a new provider and is not in operation yet.

***Physical Medicine & Rehabilitation physician plans to perform non-surgical procedures in HSSC's one procedure room. Certain surgeons will also use the HSSC procedure room. See Exhibit 3 for Physical Medicine & Rehab physician & surgeon support letters.

Although Novant states that general surgery, neurosurgery, orthopaedic, and spine cases will be performed in the proposed operating rooms; Novant fails to provide adequate documentation of physician support necessary to support its proposed project. In particular, Exhibit 3 does not contain adequate documentation of physician support necessary to support its proposed volume projections. While Novant may file additional letters of support during the public comment period, the Agency has stated that an applicant must conform with criteria and standards within the application, and may not submit information during the public comment period to conform with those rules. Please see Exhibit 10 for a July 10, 2003 letter from CON regarding Letters of Support Submitted for Certificate of Need Applications (noting that "all information the applicant intends to rely on to demonstrate conformance of the application with the review criteria must be provided by the applicant in its application when first submitted to the agency"). Further, pursuant to 10A NCAC 14C .0204, "[a]n applicant may not amend an application." Exhibit 3 contains the following support:

<i>Physician Specialty</i>	<i>Documented Support in Exhibit 3</i>
General Surgeon	4
Neurosurgeon	3
Orthopaedic Surgeon	6
Spine Surgeon	1
Physical Medicine and	1

Rehabilitation	
Family Medicine	24
TOTAL	39

Of those physician support letters captured in the table above, even fewer can utilize the proposed operating rooms. In the table below, Rex isolated Novant's letters of support from surgeons, paying particular attention to those that constitute "unique" letters of support for the Novant application. Unique letters of support refer to those letters submitted by surgeons who did not in turn submit letters of support for competing applications.

A	B	C	D	E
<i>Total Letters of Support</i>	<i>Non-Surgeon Letters of Support</i>	<i>Surgeon Letters of Support</i> <i>A - B</i>	<i>Letters of Support Which Overlap with Support for Competing Applications</i>	<i>Unique Letters of Support</i> <i>C - D</i>
39	25*	14	1	13

*Please note that the physical medicine and rehabilitation physician was excluded given Novant's explanation that he will perform non-surgical procedures in Novant's one procedure room. See Novant's application page 34.

Once Novant's unique surgeon letters of support are isolated, it becomes exceedingly clear that Novant lacks adequate documentation of physician support necessary to support its volume projections and demonstrate coordination with the existing health care system. Furthermore, of the 13 unique surgeon letters of support, only six are Wake County based.

This lack of coordination is a cause for concern. If the physicians on staff at Novant's proposed facility are new to the community, they may be unfamiliar with the physicians at the existing hospitals, making referrals and coordination of care difficult if not impossible. Thus, patients in need of more than the level of care available at Novant's proposed facility would have to be transferred to a completely different system with a separate medical staff. Therefore, Novant has failed to demonstrate coordination with the existing health care system and should be found nonconforming with this criterion.

- (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.

Novant fails to demonstrate that the cost, design, and means of construction proposed represent the most reasonable alternative.

As noted under Criterion 3, Novant does not provide any discussion of the need for a procedure room as proposed in its application. Therefore, this procedure room as proposed by Novant is essentially shell space. See Agency Findings for Project ID # F-7993-07, KND Development 50, LLC d/b/a Kindred Hospital Charlotte (noting that due to the inconsistencies in the proposed number of ICU beds to be developed and the inclusion of extra unnecessary shell space, the applicant did not adequately demonstrate that the design and construction costs represent the most reasonable alternative for the services proposed). Please see Exhibit 8 for the relevant excerpt from these Findings. See also, Agency Findings for WakeMed Brier Creek Healthplex (Project ID # J-8016-07) (noting, among other things, that the proposed design of the facility in Exhibit 25 includes a "Bone" room which appears to be for provision of bone densitometry services; however, the applicant failed to state in the narrative of the application that these services will be provided. In addition, the Analyst noted that a radiology/fluoroscopy room was proposed but no equipment was identified to be acquired for this room—consequently, the Analyst found that the design was not the most reasonable alternative for the services proposed by the applicant and therefore, the application was found not conforming to this Criterion). Please see Exhibit 9 for the relevant excerpt from these Findings. Given that Novant fails to account for the need for this "shell space," Novant fails to adequately demonstrate that the cost, design, and means of construction is reasonable and will not unduly increase the cost of providing services.

CRITERIA AND STANDARDS FOR SURGICAL SERVICES AND OPERATING ROOMS

The proposal submitted by Novant is not conforming with all applicable Criteria and Standards for Surgical Services and Operating Rooms as promulgated in 10A NCAC 14C .2100, *et seq.*, as indicated below.

10A NCAC 14C .2102(b)(8)

This rule states *“An applicant proposing to increase the number of operating rooms in a service area, 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 provide the following information:*

- (8) the projected average reimbursement to be received per procedure for the 20 surgical procedures which the applicant projects will be performed most often in the facility and a list of all services and items included in the reimbursement”*

As noted in response to Criterion 7, in response to this rule, Novant notes that the *“utilization of the multi-specialty surgery center will be comparable to existing multi-specialty centers in North Carolina and will include procedures in the following specialties: general surgery; orthopaedics; spine surgery; neurosurgery; ENT; and urology.”* See Novant’s application p. 21. However, Novant fails to provide any support from otolaryngologists or urologists. Moreover, this response is inconsistent with Novant’s response to 10A NCAC 14C .2102(a), in which Novant noted that, based on physician letters of support, the following specialties will be offered: general surgery, neurosurgery, orthopaedics, and spine surgery. See Novant’s application p. 18. Given Novant’s lack of documented support for the surgical procedures proposed in response to this rule, Novant has failed to demonstrate availability of health manpower for the provision of services proposed to be provided and as such, should be found nonconforming with this rule.

10A NCAC 14C .2105(b)

This rule states *“The applicant shall identify the number of physicians who currently utilize the facility and estimate the number of physicians expected to utilize the facility and the criteria to be used by the facility in extending surgical and anesthesia privileges to medical personnel.”*

As noted previously, Novant provides misleading information regarding the number of physicians expected to utilize the proposed facility, Novant. In response to 10A NCAC 14 .2105(b), Novant provides the following on page 34 of its application.

**Holly Springs Surgery Center
Estimated Surgeon & Physician Practitioners by Specialty**

PHYSICIAN SPECIALTY	CURRENT HSSC STAFF**	EXPECTED HSSC MEDICAL STAFF
ANESTHESIOLOGY *	N/A**	4-5
GENERAL SURGERY	N/A**	4
NEUROSURGERY	N/A**	3
ORTHOPEDIC SURGERY	N/A**	18
SPINE SURGERY	N/A**	1
PHYSICAL MEDICINE & REHABILITATION***	N/A**	1
TOTAL	N/A**	31-32

*Source: Surgeon letters of Support; Radiologist, Pathologist, & Anesthesiologist professional coverage letters. Please see Exhibit 3.

**There are no current HSSC Medical Staff members, as HSSC is a new provider and is not in operation yet.

***Physical Medicine & Rehabilitation physician plans to perform non-surgical procedures in HSSC's one procedure room. Certain surgeons will also use the HSSC procedure room. See Exhibit 3 for Physical Medicine & Rehab physician & surgeon support letters.

Although Novant states that it anticipates that general surgery, neurosurgery, orthopaedic, and spine cases will be performed in the proposed operating rooms—based on the surgeon letters of support it received; Novant fails to provide adequate documentation of the surgeon support necessary to support its statements regarding surgeons expected to utilize the facility. In particular, Exhibit 3 does not contain 12 of the 18 support letters from orthopaedic surgeons Novant represents to have. While Novant may file additional letters of support during the public comment period, the Agency has stated that an applicant must conform with criteria and standards within the application, and may not submit information during the public comment period to conform with those rules. Please see Exhibit 10 for a July 10, 2003 letter from CON regarding Letters of Support Submitted for Certificate of Need Applications (noting that “all information the applicant intends to rely on to demonstrate conformance of the application with the review criteria must be provided by the applicant in its application when first submitted to the agency”). Further, pursuant to 10A NCAC 14C .0204, “[a]n applicant may not amend an application.” Exhibit 3 contains the following support:

Physician Specialty	Documented Support in Exhibit 3
General Surgeon	4
Neurosurgeon	3
Orthopaedic Surgeon	6
Spine Surgeon	1
Physical Medicine and Rehabilitation	1

Family Medicine	24
TOTAL	39

Of those physician support letters captured in the table above, even fewer can utilize the proposed operating rooms. In the table below, Rex isolated Novant's letters of support from surgeons, paying particular attention to those that constitute "unique" letters of support for the Novant application. Unique letters of support refer to those letters submitted by surgeons who did not in turn submit letters of support for competing applications.

A	B	C	D	E
<i>Total Letters of Support</i>	<i>Non-Surgeon Letters of Support</i>	<i>Surgeon Letters of Support</i> <i>A - B</i>	<i>Letters of Support Which Overlap with Support for Competing Applications</i>	<i>Unique Letters of Support</i> <i>C - D</i>
39	25*	14	1	13

*Please note that the physical medicine and rehabilitation physician was excluded given Novant's explanation that he will perform non-surgical procedures in Novant's one procedure room. See Novant's application page 34.

Once Novant's unique surgeon letters of support are isolated, it becomes exceedingly clear that Novant lacks adequate documentation of physician support necessary to support its volume projections and demonstrate coordination with the existing health care system. Furthermore, of the 13 unique surgeon letters of support, only six are Wake County based.

The information provided by Novant in response to this rule is misleading and inconsistent with actual documentation provided in Novant's application, and as such, Novant should be found nonconforming with this rule.

10A NCAC 14C .2105(c)

This rule states "The applicant shall provide documentation that physicians with privileges to practice in the facility will be active members in good standing at a general acute care hospital within the service area in which the facility is, or will be, located or documentation of contacts the applicant made with hospitals in the service area in an effort to establish staff privileges."

In response to this rule, Novant states the following "[e]ach physician credentialed to practice at HSSC will be an active member in good standing on the medical staff of an existing Wake County acute care hospital or will seek privileges on the medical staff at an existing Wake County acute care hospital prior to the opening of HSSC." See Novant's application p. 34 (emphasis added). Novant's response is unclear relative to timing. That is, Novant's

response seems to allow a physician to be credentialed at HSSC and subsequently seek privileges at an existing Wake County acute care hospital. However, applying for privileges is not equivalent to being an active member in good standing as required in this rule. Therefore, Novant is nonconforming to this rule.

10A NCAC 14C .2106(d)

This rule states *"An applicant proposing to establish a new ambulatory surgical facility, a new campus of an existing facility or a new hospital shall provide a floor plan of the proposed facility identifying the following areas:*

- (1) receiving/registering area;*
- (2) waiting area;*
- (3) pre-operative area;*
- (4) operating room by type;*
- (5) recovery area; and*
- (6) observation area."*

Contrary to Novant's response to this rule on page 37 of its application stating that the floor plan provided in its Exhibit 14 identifies the areas listed above in (1) through (6), the floor plan does not identify all of the areas required in the rule. In particular, the floor plan fails to identify the following: recovery area or observation area. Therefore, Novant should be found nonconforming with this rule.

GENERAL COMPARATIVE COMMENTS

The WakeMed Cary, Duke Raleigh, Novant, and Rex applications each propose to develop operating rooms in response to the 2010 SMFP need determination for Wake County. Rex acknowledges that each review is different and therefore, that the comparative review factors employed by the Project Analyst in any given review may be different depending upon the relevant factors at issue. Given the nature of the review, the Analyst must decide which comparative factors are most appropriate in assessing the applications.

In order to determine the most effective alternative to meet the identified need for three additional operating rooms in Wake County, Rex reviewed and compared the following factors in each application:

- Access⁸
- Demonstration of Need
- Financial Feasibility
- Coordination
- Revenue
- Operating Expenses
- Physician Support

Rex believes that the factors presented above and discussed in turn below should be used by the Analyst in reviewing the competing applications. The factors are appropriate and/or have been used in previous competitive operating room findings.⁹

Access

Under N.C. GEN. STAT. § 131E-175(3), the General Assembly of North Carolina found “[t]hat, if left to the market place to allocate health service facilities and health care

⁸ Access includes geographic access and access to the underserved.

⁹ Please note that in developing comparative review factors, Rex looked to a number of operating room reviews for guidance, such as: the 2008 Wake County Acute Care Beds and Operating Rooms Review and 2009 Union County Operating Room Review. Where appropriate, Rex included relevant comparative factors used in those reviews. *See, e.g.*, the 2008 Wake County Acute Care Beds and Operating Rooms Review (using the following comparative factors: geographic accessibility, demonstration of need, financial feasibility, coordination with existing health care system, access by underserved groups, revenue, operating expenses, and documentation of physician support); the 2009 Union County Operating Room Review (using the following comparative factors: geographic distribution, access by medically underserved groups, demonstration of need, operating costs, and revenues).

services, geographical maldistribution of these facilities and services would occur and, further, less than equal access to all population groups, especially those that have traditionally been underserved, would result." This Finding of Fact captures the notion that geographic access to health care services is an important factor in health planning. Therefore, geographic access and specifically, access to the medically underserved, were deemed appropriate comparative review factors and included in this analysis.

Geographic Access

The 2010 SMFP identifies a need for three operating rooms for Wake County. The following table identifies the location of the existing and approved operating rooms in Wake County.

<i>Provider</i>	<i>Location within Wake County</i>	<i>City/Town</i>
Blue Ridge Surgery Center	Central	Raleigh
Duke Raleigh Hospital	Central	Raleigh
Raleigh Plastic Surgery	Central	Raleigh
Raleigh Women's Health Organization, Inc.	Central	Raleigh
Southern Eye Associates	Central	Raleigh
Rex Healthcare of Wakefield	Northern	N. Raleigh (Wakefield)
Rex Hospital	Central	Raleigh
Rex Surgery Center of Cary	Southwestern	Cary
WakeMed Cary Hospital	Southwestern	Cary
WakeMed North Healthplex	Northern	N. Raleigh
WakeMed Raleigh Campus	Central	Raleigh
OSCR	Central	Raleigh

In this review, three of the five applications propose to locate additional operating rooms at existing hospitals: WakeMed proposes to develop three additional operating rooms at WakeMed Cary hospital, Duke Raleigh proposes to develop two additional operating rooms at Duke Raleigh Hospital, and Rex proposes to develop one additional operating room at its main hospital campus. In the remaining two applications Rex proposes to develop two operating rooms at its previously approved Rex Healthcare of Holly Springs while Novant proposes to develop three operating rooms at a new freestanding ambulatory surgery center. The chart below details the locations proposed by the five applications discussed in these comments.

<i>Applicant</i>	<i>Proposed Site</i>	
	<i>City</i>	<i>Address</i>

Duke Raleigh	Raleigh	3400 Wake Forest Rd. Raleigh, NC 27609
Novant	Holly Springs	Rosewood Centre Dr., Tract 3 Holly Springs, NC 27540
Rex Holly Springs	Holly Springs	704 Avent Ferry Road Holly Springs, NC 27540
Rex Main Campus	Raleigh	4420 Lake Boone Trail Raleigh, NC 27607
WakeMed	Cary	1900 Kildare Farm Rd. Cary, NC 27518

In the 2007 Forsyth County Acute Care Bed Review, the Analyst compared the applicants in this manner and found that *"because both applicants propose to locate the additional acute care beds at their existing hospitals in Forsyth County, the two applications are comparable with regard to geographic access."* See Forsyth County Acute Care Bed Review Findings page 45. Please see Exhibit 11 for a relevant excerpt from these Findings. According to this interpretation, WakeMed Cary, Duke Raleigh, and Rex's main campus application are comparable with regard to geographic access given that they propose to develop the additional operating rooms at an existing facility. Further, given the Findings in the 2008 Wake County Acute Care Beds and Operating Rooms Review relative to geographic accessibility, Rex's Holly Springs application and the Novant application will expand geographic access as they both propose to develop operating rooms in new facilities. See 2008 Wake County Acute Care Beds and Operating Rooms Review Findings p. 200-201. Please see Exhibit 12 for a relevant excerpt from these Findings. However, while Novant is expanding geographic access, it is nonetheless not the most effective alternative since the application is nonconforming with a number of review criteria and rules as discussed in detail above. Please note that this analysis does not prevent the Agency from approving both of Rex's proposed projects, which as noted in its applications, are complementary.

Access to Underserved

The Department of Health and Human Resources has recognized the need to ensure access to health care in as equitable a manner as possible. See, e.g., N.C. GEN. STAT. §§ 131E-175(3), (3a) and 131E-183(a)(3), (13). The following table illustrates each applicant's projected percentages of surgical cases to be provided to Medicaid and Medicare recipients in the second year of operation following completion of the project.

	<i>Medicare as Percent of Total Cases</i>	<i>Medicaid as Percent of Total Cases</i>	<i>Government Payors as Percent of Total Cases</i>
Duke Raleigh	40.47%	2.63%	43.10%

Novant	31.08%	9.12%	40.20%
Rex Main OR	32.11%	3.27%	35.38%
Rex Holly Springs	28.40%	3.43%	31.83%
WakeMed Cary	26.23%	4.96%	31.19%

Sources: Surgery Form D for each applicant.

As shown in the table above, Rex’s applications project the third and fourth highest Medicare and Medicaid recipients as a percent of total. However, the first and second highest ranked applications, Duke Raleigh and Novant, respectively, provide unreasonable payor mix assumptions as discussed in detail above. In particular, Duke Raleigh provides inconsistent data regarding its projected payor mix in Section VI.15 and Form D; Rex has provided its Form D data above as it is tied directly to other case and financial data. In addition, the utilization projections provided by Duke Raleigh, Novant, and WakeMed Cary are unreliable as also discussed in detail above. Therefore with regard to access to the underserved, Rex is the most effective alternative.

Demonstration of Need

Not only did WakeMed Cary, Duke Raleigh, and Novant fail to adequately demonstrate the need the population projected to be served has for their respective proposals, see Criterion 3 for discussion, but also, the applications submitted by Rex demonstrate a greater need for and are more effective in addressing the need for additional operating rooms than the proposals by WakeMed Cary, Duke Raleigh, and Novant. As noted in its concurrently filed applications, population growth and Rex’s current surgical volumes support the development of one operating room at Rex’s main campus and two operating rooms in Holly Springs—a submarket without local access to surgical services. Rex has not been able to address the Holly Springs submarket—and more generally southern Wake County—in the past because it has been operating over capacity and therefore has been unable to shift existing capacity; however, given the opportunity to develop new operating rooms as identified in the 2010 SMFP, Rex is now able to address that need.

Coordination with Existing Health Care System

Rex is an existing tertiary care hospital with well established relationships with physicians and area health care providers. WakeMed Cary is an existing facility with established relationships with physicians and area health care providers. Duke Raleigh is an existing facility with established relationships with physicians and area health care providers. Novant’s Holly Springs Surgery Center is a proposed new ambulatory surgery center without established

relationships with physicians and area health care providers. Further, Novant failed to demonstrate that its proposed surgery center will be coordinated with the existing health care system. See Criterion 8 for further discussion. Therefore, with regard to coordination with the existing health care system, Rex, WakeMed Cary, and Duke Raleigh are the more effective alternatives.

Revenue

The following table compares the applicants' gross revenue per surgical case in project year 3.

	<i>Gross Revenue</i>	<i>Surgical Cases</i>	<i>Gross Revenue/Surgical Case</i>
Novant	\$9,312,708	3,310	\$2,814
Rex Holly Springs	\$25,491,151	2,164	\$11,780
<i>Rex Total</i>	<i>\$357,989,285</i>	<i>23,165</i>	<i>\$15,454</i>
Rex Main Campus	\$332,498,134	21,001	\$15,833
WakeMed Cary	\$231,544,525	12,112	\$19,117
Duke Raleigh	\$151,243,572	4,373	\$34,586

Source: Surgery Form D for each applicant.

The following table compares the applicants' net revenue per surgical case in project year 3.

	<i>Net Revenue</i>	<i>Surgical Cases</i>	<i>Net Revenue/Surgical Case</i>
Novant	\$4,694,324	3,310	\$1,418
Rex Holly Springs	\$9,726,487	2,164	\$4,495
<i>Rex Total</i>	<i>\$132,239,745</i>	<i>23,165</i>	<i>\$5,709</i>
Rex Main Campus	\$122,513,258	21,001	\$5,834
WakeMed Cary	\$72,616,063	12,112	\$5,995
Duke Raleigh	\$42,017,451	4,373	\$9,608

Source: Surgery Form E for each applicant.

As the table above demonstrates, of the applicants, Rex projects to have the second and third lowest gross and net revenue per case. While Novant projects the lowest gross and net revenue per case, it does not provide supporting documentation for its financial assumptions in order to demonstrate that they are based on reasonable assumptions. As stated above, Novant failed to document the facilities or CON applications on which its financial assumptions are based. This documentation is essential because the revenue and expenses associated with surgical cases varies significantly based on the type of procedure that is being performed. Novant will only provide certain surgical specialties which may not be comparable with the facilities used to develop its financial statements. Moreover,

as noted above, Novant states in its response to 10A NCAC 14C .2102 (b) (8) that “utilization of the multi-specialty surgery center will be comparable to existing multi-specialty centers in North Carolina and will include procedures in the following specialties: general surgery; orthopaedics; spine surgery; neurosurgery; ENT; and urology.” See Novant’s application p. 21. However, Novant fails to provide any support from otolaryngologists or urologists. Moreover, this response is inconsistent with Novant’s response to 10A NCAC 14C .2102(a), in which Novant noted that, based on physician letters of support, the following specialties will be offered: general surgery, neurosurgery, orthopaedics, and spine surgery. See Novant’s application p. 18. Given that Novant’s projected charges are based on ENT and urology services which will not be offered at its proposed facility, its financial projections are not based on reasonable assumptions. In addition, Novant’s lower charges rely on the assumption that it will operate as a freestanding ambulatory surgery center. However, Novant refers repeatedly in its application to its efforts to develop a community hospital in Holly Springs. Given the opportunity to add beds to its proposed facility, Novant would do so. As a result, Novant’s charges and expenses would increase and be more comparable to other hospital-based facilities.

Operating Expenses

The following table compares the applicants’ operating expenses per surgical case in project year 3.

	<i>Operating Expenses</i>	<i>Surgical Cases</i>	<i>Operating Expenses/Surgical Case</i>
Novant	\$3,900,618	3,310	\$1,178
Rex Holly Springs	\$5,924,465	2,164	\$2,738
<i>Rex Total</i>	<i>\$91,222,825</i>	<i>23,165</i>	<i>\$3,938</i>
Rex Main Campus	\$85,298,360	21,001	\$4,062
WakeMed Cary	\$62,256,004	12,112	\$5,140
Duke Raleigh	\$26,770,192	4,373	\$6,122

As shown in the table above, Novant projects the lowest operating expense per surgical case. However, as noted above, Novant fails to provide supporting documentation to support its financial statements. In addition, Novant will develop inpatient beds at the proposed facility given the opportunity which would increase expenses per case.

Documentation of Physician Support

Rex maintains that documentation of support from Wake County physicians should be considered an important factor in this review, much like the 2008

Wake County Acute Care Beds and Operating Rooms Competitive Review. Of the applicants, Rex is the only one to provide adequate documentation of physician support necessary to justify its projections. In particular, Rex's surgical utilization projections for its system as a whole rely only on historical growth rates, CON approved shifts, and cases added only by Rex-employed surgeons (as noted in their letters of support). In Exhibits 6 and 12 of its applications, Rex provided letters from 53 Wake County surgeons expressing their support for Rex's proposed projects. In Exhibit 35, WakeMed Cary provided letters from 47 Wake County surgeons expressing their support for WakeMed Cary's proposal – of these letters, 46 constitute unique letters of support. In Exhibit V.3., Duke Raleigh provided letters from 20 Wake County surgeons expressing their support for Duke Raleigh's proposal. In Exhibit 3, Novant provided letters from seven Wake County surgeons expressing their support for Novant's proposal – of these letters, six constitute unique letters of support. Therefore, with regard to documentation of physician support from Wake County surgeons, Rex's proposals are the most effective, while Novant is the least effective alternative.

SUMMARY

In summary, based on both its comparative analysis and the comments on the competing applications, as well as the analysis presented in its application, Rex Hospital believes that its applications represent the most effective alternative for meeting the need identified in the 2010 SMFP for three additional operating rooms in Wake County.

Exhibit 1

Current Releases

WakeMed Partners with Surgical Care Affiliates to Enhance Ambulatory Surgery Program

RALEIGH, N.C. (March 24, 2010) – WakeMed Health & Hospitals and Surgical Care Affiliates (SCA) will enter into a formal agreement on March 31, 2010 to further enhance existing ambulatory surgery services throughout the WakeMed system.

WakeMed and SCA have been exploring a formal relationship for nearly 16 months as part of the long-term WakeMed Cary Hospital and overall WakeMed ambulatory strategy. The goal of this new partnership is to grow WakeMed's outpatient surgery business by providing WakeMed's surgical patients and physicians with outstanding service, including greater efficiencies, consistent practices across the system, and increased capacity for outpatient surgery throughout Wake County.

The first part of the SCA agreement involves WakeMed purchasing a controlling interest in the general partnership that operates the Blue Ridge Surgery Center located on Lake Boone Trail in Raleigh. The Blue Ridge Surgery Center is managed by SCA and features six operating rooms and one procedure room, and includes 41 physician partners and over 100 physicians who perform surgeries in numerous specialties, including Orthopaedics, ENT/Otolaryngology, Podiatry, Ophthalmology and more. The facility will now be jointly owned by WakeMed, these physician partners and SCA. This purchase provides WakeMed with significant gains in the Wake County ambulatory surgery market share and new opportunities for long-term growth.

The second part of this new relationship includes a management services agreement with SCA. Specifically, SCA will begin managing surgical services operations for WakeMed Cary Hospital and WakeMed North Healthplex Day Surgery program. SCA has a long track record of managing and operating successful surgery programs. While WakeMed has significant experience in inpatient surgery operations, SCA brings even more efficiencies and experience in the operation of outpatient surgery centers.

Cary Hospital Management Agreement:

Effective May 17, 2010, 142 WakeMed Cary Hospital Surgical Services employees will transition to working directly for SCA. In fiscal year 2009, WakeMed Cary Hospital performed a total of 14,006 surgeries, 11,342 of which were outpatient. This partnership is expected to provide WakeMed with even greater opportunities for efficiencies and improved services and satisfaction for our customers.

North Healthplex Management Agreement:

At North Healthplex, Surgical Services employees will continue to work for WakeMed, with the exception of the manager. The reason North Healthplex employees will not work directly for SCA is because North Healthplex is not a stand-alone hospital, but is legally considered an extension of the Raleigh Campus. In fiscal year 2009, North Healthplex performed 4,438 surgeries, all of which were outpatient. The WakeMed Raleigh Campus surgical services are not impacted by this agreement.

"Partnering with Surgical Care Affiliates supports WakeMed's long-term ambulatory growth strategy and will help us to continue to meet the outpatient surgery needs of this community," explains Dr. Bill Atkinson, president & CEO. "With the purchase of Blue Ridge and the management services agreement, we are well positioned for volume growth in our ambulatory surgery program while further enhancing the service we provide to our surgical patients and physician partners."

"We are honored to be selected to enter into this relationship with the WakeMed system", said Andrew Hayek, president and CEO of Surgical Care Affiliates. Surgical Care Affiliates' commitment is to bring the best practices from our surgical facility operations across the country to the WakeMed system. We believe that this relationship will enhance WakeMed's position as the premier health system in Raleigh and further position Surgical Care Affiliates as the partner of choice for health systems and physicians in providing surgical services.

About Surgical Care Affiliates

Surgical Care Affiliates is committed to being the partner of choice for physicians, hospitals, and health systems in delivering high quality surgical services. SCA's centers operate with outstanding clinical outcomes and patient satisfaction. SCA operates 124 ambulatory surgery centers and surgical hospitals across the country with approximately 4,000 full time teammates and approximately 2,000 physician partners across the country. For more information on SCA, visit www.scasurgery.com.

About WakeMed Health & Hospitals

WakeMed Health & Hospitals, one of the first hospital systems in the country, is a private, not-for-profit health care organization based in Raleigh, N.C. The 870-bed system comprises a network of health care facilities throughout Wake and Johnston Counties, including: a Level I Trauma Center and tertiary referral hospital and rehabilitation hospital in Raleigh, a community hospital in Cary, comprehensive outpatient centers and freestanding emergency departments in North Raleigh and Apex, seven outpatient rehabilitation sites, two skilled-nursing and outpatient facilities, a 100+-physician multispecialty practice, and home health services. The system includes accredited Chest Pain Centers and Joint Commission-certified Stroke Centers. Throughout the system, there are an additional 60 beds under construction and 41 newly approved by the state. WakeMed also provides management services for Betsy Johnson Regional Hospital in Dunn, NC. Centers of excellence include cardiac and vascular care, women's and children's services, physical rehab, emergency and trauma, orthopaedics, neurosciences, home care and numerous wellness and community outreach programs. WakeMed's team of 7,750 employees, including but not limited to nurses, technologists and medical support staff, 1,000 volunteers and more than 1,000 affiliated physicians serve the residents of North Carolina using the most advanced technologies and facilities to ensure the finest in health care.

Exhibit 2

Impact of Inconsistent Market Data – Detailed Tables

WakeMed Cary provides inconsistent and aggressive data for the number of surgery cases performed at WakeMed locations, particularly WakeMed Raleigh when compared to the WakeMed 2009 application.

On page 48 of its application, WakeMed Cary provides 2008 market share by county by location:

Table 16.18
FY 2008 WakeMed Percent of Total Surgery Cases
for Each County at Active WakeMed Surgery Location
 Source: Thomson

County	WakeMed Raleigh	WakeMed Cary	WakeMed North
Wake	12.8%	8.7%	3.3%
Durham	0.4%	0.3%	0.3%
Cumberland	0.5%	0.2%	0.0%
Johnston	10.0%	3.1%	1.1%
Wayne	2.7%	0.2%	0.1%
Nash	3.8%	0.3%	0.4%
Harnett	7.0%	5.4%	0.2%
Wilson	3.9%	0.1%	0.1%
Lee	1.2%	1.9%	0.1%
Sampson	6.0%	2.9%	0.1%
Hallfax	2.4%	0.0%	0.1%
Granville	2.4%	0.2%	0.5%
Franklin	11.6%	1.0%	6.1%
Vance	1.4%	0.2%	0.5%
Chatham	0.6%	1.8%	0.1%
Duplin	1.6%	1.2%	0.0%

When the market share percentages by location shown in the table above are applied to the total surgery cases by county, the following cases by county are determined to have been provided by WakeMed by location according to WakeMed Cary's proposed project:

FFY 2008 WakeMed Raleigh Surgery Cases by County
Per WakeMed Cary Application

	<i>Total Surgery Cases, Page 41</i>	<i>WakeMed Raleigh Market Share, page 48</i>	<i>Calculated WakeMed Raleigh Cases</i>
Wake	77,933	12.8%	9,975
Durham	27,183	0.4%	109
Cumberland	24,585	0.5%	123
Johnston	13,815	10.0%	1,382
Wayne	11,449	2.7%	309
Nash	9,603	3.8%	365
Harnett	9,623	7.0%	674

Wilson	6,972	3.9%	272
Lee	7,116	1.2%	85
Sampson	6,023	6.0%	361
Halifax	6,027	2.4%	145
Granville	6,011	2.4%	144
Franklin	5,077	11.6%	589
Vance	5,113	1.4%	72
Chatham	5,039	0.6%	30
Duplin	4,290	1.6%	69
TOTAL	225,859		14,703

**FFY 2008 WakeMed Cary Surgery Cases by County
Per WakeMed Cary Application**

	<i>Total Surgery Cases, Page 41</i>	<i>WakeMed Cary Market Share, page 48</i>	<i>Calculated WakeMed Cary Cases</i>
Wake	77,933	8.7%	6,780
Durham	27,183	0.3%	82
Cumberland	24,585	0.2%	49
Johnston	13,815	3.1%	428
Wayne	11,449	0.2%	23
Nash	9,603	0.3%	29
Harnett	9,623	5.4%	520
Wilson	6,972	0.1%	7
Lee	7,116	1.9%	135
Sampson	6,023	2.9%	175
Halifax	6,027	0.0%	0
Granville	6,011	0.2%	12
Franklin	5,077	1.0%	51
Vance	5,113	0.2%	10
Chatham	5,039	1.8%	91
Duplin	4,290	1.2%	51
TOTAL	225,859		8,443

**FFY 2008 WakeMed North Surgery Cases by County
Per WakeMed Cary Application**

	<i>Total Surgery Cases, Page 41</i>	<i>WakeMed North Market Share, page 48</i>	<i>Calculated WakeMed North Cases</i>
Wake	77,933	3.3%	2,572
Durham	27,183	0.3%	82
Cumberland	24,585	0.0%	0
Johnston	13,815	1.1%	152
Wayne	11,449	0.1%	11
Nash	9,603	0.4%	38
Harnett	9,623	0.2%	19
Wilson	6,972	0.1%	7
Lee	7,116	0.1%	7
Sampson	6,023	0.1%	6
Halifax	6,027	0.1%	6
Granville	6,011	0.5%	30
Franklin	5,077	6.1%	310
Vance	5,113	0.6%	31
Chatham	5,039	0.1%	5
Duplin	4,290	0.0%	0
TOTAL	225,859		3,276

The utilization calculated above is summarized in the following table:

**FFY 2008 Cases by County for Each WakeMed Location
Per WakeMed Cary Application**

	<i>Calculated WakeMed Raleigh Cases</i>	<i>Calculated WakeMed Cary Cases</i>	<i>Calculated WakeMed North Cases</i>
Wake	9,975	6,780	2,572
Durham	109	82	82
Cumberland	123	49	0
Johnston	1,382	428	152
Wayne	309	23	11
Nash	365	29	38
Harnett	674	520	19
Wilson	272	7	7
Lee	85	135	7

Sampson	361	175	6
Halifax	145	0	6
Granville	144	12	30
Franklin	589	51	310
Vance	72	10	31
Chatham	30	91	5
Duplin	69	51	0
TOTAL	14,703	8,443	3,276

By comparison, the WakeMed 2009 application provides similar data which is inconsistent with the WakeMed Cary data.

On page 54 of the WakeMed 2009 application, the following market share data are presented:

Table II.17 FY 2008 WakeMed Percent of Total Surgery Cases * For Each County for Each Active WakeMed Surgery Location

Counties	FY 2008 % Cases by WM Facility by County		
	WakeMed	WM Cary	WM North
Wake	12.1%	8.7%	3.4%
Durham	0.4%	0.3%	0.3%
Cumberland	0.5%	0.2%	0.0%
Johnston	8.3%	3.2%	1.1%
Wayne	1.2%	0.2%	0.1%
Nash	2.5%	0.3%	0.4%
Harnett	5.4%	5.4%	0.2%
Wilson	1.9%	0.1%	0.1%
Lee	1.1%	2.0%	0.1%
Sampson	2.9%	2.8%	0.1%
Halifax	1.3%	0.0%	0.1%
Granville	2.3%	0.2%	0.5%
Franklin	10.1%	1.0%	6.1%
Vance	1.3%	0.2%	0.6%
Duplin	0.8%	1.2%	0.0%
Chatham	0.5%	1.8%	0.1%

* All IP & OP surgeries included except C-sections and IP cardiac surgery. See pages 47 & 59 for further information.

When the market share percentages by location provided in the WakeMed 2009 application are applied to the total surgery cases by county provided in that same application, the following cases by county are determined to have been provided by WakeMed by location according to the WakeMed 2009 application:

**FFY 2008 WakeMed Raleigh Surgery Cases by County
Per WakeMed 2009 Application**

	<i>Total Surgery Cases, Page 49</i>	<i>WakeMed Raleigh Market Share, page 54</i>	<i>Calculated WakeMed Raleigh Cases</i>
Wake	77,590	12.1%	9,388
Durham	27,117	0.4%	108

Cumberland	24,412	0.5%	122
Johnston	13,603	8.3%	1,129
Wayne	11,441	1.2%	137
Nash	9,590	2.5%	240
Harnett	9,494	5.4%	513
Wilson	6,941	1.9%	132
Lee	6,916	1.1%	76
Sampson	6,172	2.9%	179
Halifax	6,009	1.3%	78
Granville	5,997	2.3%	138
Franklin	5,062	10.1%	511
Vance	5,103	1.3%	66
Chatham	4,971	0.5%	25
Duplin	4,408	0.8%	35
TOTAL	224,826		12,878

**FFY 2008 WakeMed Cary Surgery Cases by County
Per WakeMed 2009 Application**

	<i>Total Surgery Cases, Page 49</i>	<i>WakeMed Cary Market Share, page 54</i>	<i>Calculated WakeMed Cary Cases</i>
Wake	77,590	8.7%	6,750
Durham	27,117	0.3%	81
Cumberland	24,412	0.2%	49
Johnston	13,603	3.2%	435
Wayne	11,441	0.2%	23
Nash	9,590	0.3%	29
Harnett	9,494	5.4%	513
Wilson	6,941	0.1%	7
Lee	6,916	2.0%	138
Sampson	6,172	2.8%	173
Halifax	6,009	0.0%	0
Granville	5,997	0.2%	12
Franklin	5,062	1.0%	51
Vance	5,103	0.2%	10
Chatham	4,971	1.8%	89

Duplin	4,408	1.2%	53
TOTAL	224,826		8,413

**FFY 2008 WakeMed North Surgery Cases by County
Per WakeMed 2009 Application**

	<i>Total Surgery Cases, Page 49</i>	<i>WakeMed North Market Share, page 54</i>	<i>Calculated WakeMed North Cases</i>
Wake	77,590	3.4%	2,638
Durham	27,117	0.3%	81
Cumberland	24,412	0.0%	0
Johnston	13,603	1.1%	150
Wayne	11,441	0.1%	11
Nash	9,590	0.4%	38
Harnett	9,494	0.2%	19
Wilson	6,941	0.1%	7
Lee	6,916	0.1%	7
Sampson	6,172	0.1%	6
Halifax	6,009	0.1%	6
Granville	5,997	0.5%	30
Franklin	5,062	6.1%	309
Vance	5,103	0.6%	31
Chatham	4,971	0.1%	5
Duplin	4,408	0.0%	0
TOTAL	224,826		3,338

The utilization calculated above is summarized in the following table:

**FFY 2008 Cases by County for Each WakeMed Location
Per WakeMed 2009 Application**

	<i>Calculated WakeMed Raleigh Cases</i>	<i>Calculated WakeMed Cary Cases</i>	<i>Calculated WakeMed North Cases</i>
Wake	9,388	6,750	2,638
Durham	108	81	81
Cumberland	122	49	0
Johnston	1,129	435	150
Wayne	137	23	11

Nash	240	29	38
Harnett	513	513	19
Wilson	132	7	7
Lee	76	138	7
Sampson	179	173	6
Halifax	78	0	6
Granville	138	12	30
Franklin	511	51	309
Vance	66	10	31
Chatham	25	89	5
Duplin	35	53	0
TOTAL	12,878	8,413	3,338

A comparison between the cases by location for the WakeMed Cary application and the cases by location for the WakeMed 2009 application reveals that the data provided for in each application are significantly different.

**FFY 2008 Total Cases for Each WakeMed Location
Comparison Between WakeMed Applications**

	<i>Calculated WakeMed Raleigh Cases</i>	<i>Calculated WakeMed Cary Cases</i>	<i>Calculated WakeMed North Cases</i>	<i>Calculated Total WakeMed System Cases</i>
WakeMed Cary Application	14,703	8,443	3,276	26,422
WakeMed 2009 Application	12,878	8,413	3,338	24,630
WakeMed Cary minus WakeMed 2009 Application	1,825	29	(62)	1,792

As shown, under the proposed project, WakeMed Cary states that the WakeMed system provided **1,792 more cases in 2008** than were stated in the WakeMed 2009 application. Most significantly, the WakeMed Raleigh campus is shown to have provided **1,825 more cases**. Again, this data is for the same time period and uses the same surgical case definition according to each application, and WakeMed Cary provides no explanation for the discrepancy.

When the differences between the WakeMed Raleigh campus volumes are examined by county, they are even more revealing in the degree of discrepancy between the applications.

**FFY 2008 Cases by County for WakeMed Raleigh Location
Comparison Between WakeMed Applications**

	<i>WakeMed Raleigh Cases per WakeMed Cary Application, Calculated above</i>	<i>WakeMed Raleigh Cases per WakeMed 2009 Application, Calculated Above</i>	<i>WakeMed Cary minus WakeMed 2009 Cases for WakeMed Raleigh</i>
Wake	9,975	9,388	587
Durham	109	108	0
Cumberland	123	122	1
Johnston	1,382	1,129	252
Wayne	309	137	172
Nash	365	240	125
Harnett	674	513	161
Wilson	272	132	140
Lee	85	76	9
Sampson	361	179	182
Halifax	145	78	67
Granville	144	138	6
Franklin	589	511	78
Vance	72	66	5
Chatham	30	25	5
Duplin	69	35	33
TOTAL	14,703	12,878	1,825

As shown, the two applications provide different volumes for 15 of the 16 counties. The differences by county for the WakeMed Raleigh location can also be compared to the differences in total cases by county, as calculated above.

**FFY 2008 Cases by County for WakeMed Raleigh Location
Comparison Between WakeMed Applications**

	<i>WakeMed Cary minus WakeMed 2009 Cases for WakeMed Raleigh</i>	<i>WakeMed Cary minus WakeMed 2009 Total Cases for Each County</i>
Wake	587	343
Durham	0	66
Cumberland	1	173

Johnston	252	212
Wayne	172	8
Nash	125	13
Harnett	161	129
Wilson	140	31
Lee	9	200
Sampson	182	(149)
Halifax	67	18
Granville	6	14
Franklin	78	15
Vance	5	10
Chatham	5	68
Duplin	33	(118)
TOTAL	1,825	1,033

This table demonstrates that in many instances, the difference in the number of cases shown for a particular county between the two WakeMed applications is exceeded by the difference in the number of cases shown to be treated at the WakeMed Raleigh location between the two applications. For example, in Wake County, the WakeMed Cary application shows 343 more total cases than the WakeMed 2009 application and the WakeMed Cary application shows that WakeMed Raleigh treated 587 more patients in Wake County than the WakeMed 2009 application. In such instances, it appears as though WakeMed Cary has not only added more cases than the WakeMed 2009 application, but that it has also reassigned cases from non-WakeMed providers to WakeMed Raleigh.

The global impact of these inconsistencies is best seen by comparing the total projected deficit for the WakeMed System in each application. In the WakeMed 2009 application on page 69, the WakeMed System is projected to have a deficit of 2.8 operating rooms in FFY 2013. By comparison, the WakeMed Cary application projects that the WakeMed System will have a deficit of 4.4 operating rooms in FFY 2013.

**Comparison of FFY 2013 WakeMed System Operating Room Need
Between WakeMed Cary and WakeMed 2009 Applications**

<i>Application</i>	<i>Inpatient Cases</i>	<i>Outpatient Cases</i>	<i>Total Cases</i>	<i>OR Deficit</i>
WakeMed Cary Application	10,691	26,482	37,173	4.4
WakeMed 2009 Application	9,960	26,049	36,009	2.8

Difference	731	433	1,164	1.6
Percent Difference	7.3%	1.7%	3.2%	57.1%

Source: Page 69 of the WakeMed Cary application and page 70 of the WakeMed 2009 application.

As such, WakeMed Cary's application, which uses the same methodology and the same base year data as the WakeMed 2009 application, shows a need for 1.6 more operating rooms in FFY 2013 based on 1,164 more projected cases, or 3.2 percent more cases.

Exhibit 3

- (5) a detailed description of and documentation to support the assumptions and methodology used in the development of the projections required by this Rule;

WakeMed Raleigh Surgery Center
Operating Room Need Methodology, Assumptions and Projections

Comparison of Major Sources of Surgery Data

To project operating room need for the proposed project, a number of publicly-available sources of data may be used to develop total surgical case volumes in a service area, to calculate use rates for the service area population, and to project surgical case volume over time. Each data source is self-reported, and has unique characteristics.

License Renewal Applications

Licensed providers of hospital-based surgery and freestanding ambulatory surgery must submit an annual License Renewal Application to the NC Division of Health Service Regulation (DHSR). The application summarizes each provider's surgery cases by type of procedure (inpatient or outpatient), type of operating room, service line, payor mix, and county of origin for the most recent fiscal year. DHSR uses information provided in the License Renewal Applications to develop the annual State Medical Facilities Plan, which uses historic data to determine future allocations of health care resources.

Data in the License Renewal Applications are generally entered by hand onto the form, and is subject to data definition and data precision accuracy variance between facilities. Further, individual facility applicants do not consistently adhere to the Application instructions from year to year. One kind of the apparent variances may be observed by comparing a hospital's surgical counts over successive years in the Surgical Cases by Specialty table. In addition, each hospital reports "Procedure Cases" but there is no standard definition of procedure. Some cases may be reported as a "surgery" in one facility and a "procedure" in another.

Aside from trending annual data and comparing data among providers, the information contained in the License Renewal Applications is static and cannot be "drilled-down" to obtain further detail. Corrections to the data are generally only updated annually. Until the 2006 Application (FY 2005 data), surgical and endoscopy cases were combined in the patient origin tables, which limits historical analysis.

Using License Renewal Application data for FYs 2005-2008, WakeMed calculated the surgery use rates for Wake County residents. The Licensure Renewal data includes hospital inpatients and outpatients, as well as licensed ambulatory surgery center and patient origin data for Wake County, regardless of provider. The use rates indicated by this data source are as follows:

Table II.6 Wake County Surgery Use Rates, FYs 2005-2008 Using Data Obtained from Annual License Renewal Applications All Surgical Cases, Including Cases Performed in C-Section Rooms, Dedicated Open Heart Operating Rooms, and Procedure Rooms Population from North Carolina Office of State Budget and Management (OSBM) (OSBM published updates for all years 4/24/09)				
	FY 2005	FY 2006	FY 2007	FY 2008
Total Surgery Cases from License Apps.	67,269	66,242	69,125	75,188
Total Wake County Population	756,873	791,087	829,418	864,582
Total Surgery Use Rate Per 1000 Pop.	88.88	83.74	83.34	86.96

The most conspicuous element in the table above is the apparent *declining* surgery use rate per 1000 population from 2005 through 2007, followed by an unexpected substantial increase in 2008. As indicated earlier, this jump in 2008 may be related to year-to-year changes in how Wake County hospitals report procedure room cases.

Across the United States, one of the major reasons the surgery utilization rates have been increasing is the growth in the "Baby Boomer" age cohort⁶, defined as those with birth years 1946 through 1964. The earliest Baby Boomers will not reach age 65 until 2011. However, as they age through their fifties and into their early sixties, they are already pushing up the overall demand for healthcare services. One would not expect the indicated declining surgery use rate from 2005 to 2007, nor would one expect the inconsistent sudden reversal indicated in the jump in the surgery use rate from 2007 to 2008.

Because of the issues described above, the data in the License Renewal Applications are not considered reliable for purposes of assessing market utilization rates and market demand trends.

⁶ *Business Wire*, April 27, 2009, "Surgical Procedures Performed in the United States is Increasing, Most Taking Place at Outpatient or Freestanding Healthcare Facilities, According to a New Report from Medtech Insight, Windhover Information.

Thomson Reuters Databases

Providers of licensed surgical services are also mandated to submit their patient-level detail to Thomson Reuters (Thomson), for inclusion in either the North Carolina Inpatient Data System or North Carolina Ambulatory Surgery Data System, as appropriate. Thomson receives each provider's surgery data electronically in a standard ASCII format, and processes the data to eliminate records with incomplete or invalid information. The resulting product, which is updated quarterly, may be analyzed using database management software applications such as Microsoft Access or Crystal Reports. Because information is provided at the patient level, more detailed analysis is possible. Comparisons and trends can be performed consistently among providers, and over time. Errors and inconsistencies can be addressed with quarterly data updates. Data may be cross-referenced by facility, patient county, DRG, primary procedure code, surgical specialty, and other variables. However, the Thomson data does not identify the type of operating room used, nor the number of surgeries performed on a patient.

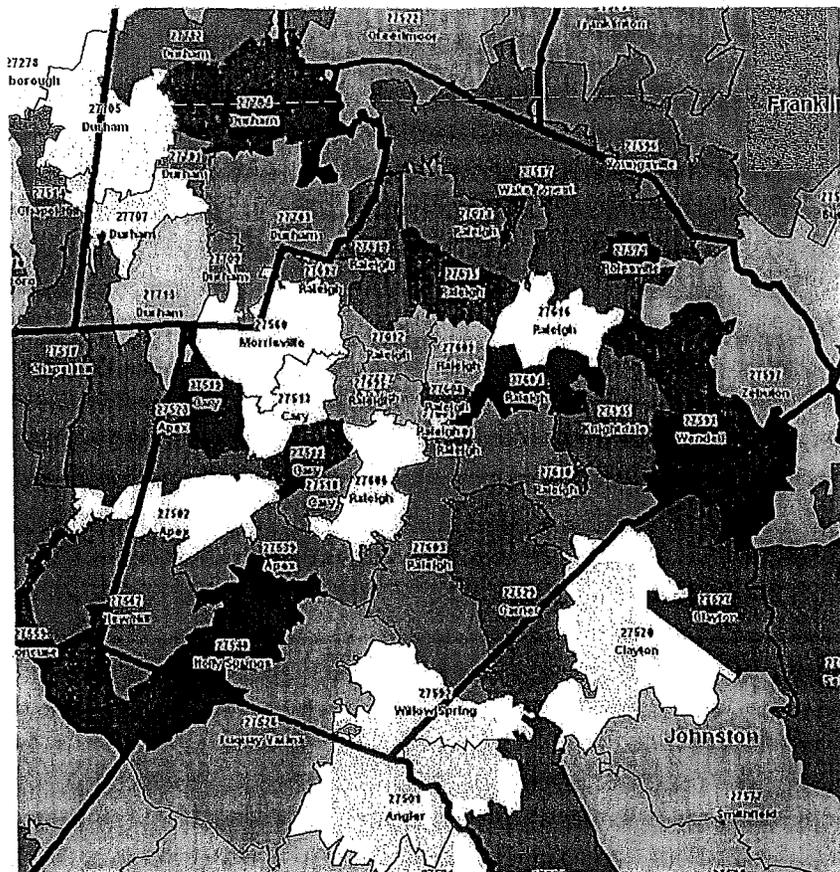
WakeMed calculated the Wake County surgery use rates for FYs 2004-2008, using the combined inpatient and outpatient surgical case data obtained from the Thomson databases. In order to make consistent comparisons of surgical volume over time, certain cases, which are generally not performed in surgical operating rooms, were excluded across all providers, as follows: endoscopy cases, cardiac catheterization, cardiac angioplasty procedures, and other non-surgical procedures, such as endovascular. However, C-section cases and all inpatient cardiac surgery cases (including open heart cases) were included in this selection to facilitate, as much as these data sources allow, an "apples-to-apples" comparison between the two data sources, License Renewal Applications and the Thomson market databases.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Total Wake County Population	724,865	756,873	791,087	829,418	864,582
Inpatient Cases	17,392	18,206	19,918	19,916	20,241
Outpatient Cases	49,675	51,929	54,560	60,706	63,049
Total Cases	67,067	70,135	74,478	80,622	83,290
Tot Surgery Use Rate Per 1000 Pop.	92.52	92.66	94.15	97.20	96.34

Note: Endoscopy cases, cardiac catheterization/cardiac angioplasty, and endovascular cases were excluded

One initial comparative observation is that the Thomson data reports a higher number of total surgical cases for Wake County as compared to the dataset compiled from statewide Hospital License Applications. This is partly explained because Thomson outpatient criteria for selecting patient records for submission to the Thomson database specifies procedure codes but not location of the procedure. Therefore, it is likely that some portion of these outpatient procedure cases were performed in settings other than licensed operating rooms.

However, a larger proportion of the differences between the two data sources for Wake County surgery cases may be explained by the differences in County geographic boundaries vs. Zip Code boundaries. The Thomson database wholly assigns patients to counties based on the patients' Zip Codes, even in situations where Zip Codes cross county boundaries. For example, a patient who resides in Johnston County but in the Garner Zip Code will be assigned to Wake County, because the majority of the Garner Zip Code is contained in Wake County. This practice has a particularly substantial impact for Wake County. The overlap of Zip Codes and counties is evident on the following map.



All patients from the eight Zip Codes in the following table are all assigned to Wake County on the Thomson database, even though a significant number of them actually may be residents of an adjacent county.

27502	Apex	27523	Apex
27529	Garner	27562	New Hill
27587	Wake Forest	27591	Wendell
27592	Willow Spring	27597	Zebulon

If the proposed project’s service area was only Wake County, this boundary issue could significantly skew a need/demand analysis. However, as will be shown, the need/demand assessment for the proposed project is predicated on a 16-county geographic area. The Zip Code/county boundary issue becomes insignificant when the multiple counties are aggregated for the need/demand analysis.

Unlike the License Renewal Application, the Thomson data indicates that surgery use rates grew in Wake County across the years FY 2004 through FY

2007. Conversely, while FY 2008 Wake County case volumes grew, the FY 2008 use rate declined by 0.9%. This FY 2008 moderation in demand for surgeries is consistent with the onset of the economic recession, and healthcare industry news articles which are reporting a decline in the demand for surgeries, particularly elective surgeries⁷. By comparison, the License Renewal Application data suggest a sharp increase in the FY 2008 surgery use rate for Wake County.

Conclusion

For the reasons stated, the Thomson market database clearly presents a more rational and reasonably expected pattern of growth for the Wake County surgery use rates. Further, the Thomson databases provide much greater versatility for analysis because of the levels of detail of the information they contain. Therefore, WakeMed opted to use the Thomson databases for projecting the surgery use rates for each of the WakeMed market counties in the Operating Room Need Methodology that follows.

Operating Room Need Methodology

Step 1: *For FY 2008, the most recent year for which market data is available, identify the group of counties that reasonably reflects the functional geographic area for inpatient and outpatient surgery patients' counties of origin as served by WakeMed System's three currently active surgery service locations: WakeMed Raleigh Campus, Cary Hospital and the WakeMed North Healthplex.*

Step 2: *For counties identified in Step 1, select inpatient and outpatient surgery cases for all providers from the Thomson market database for the five years FY 2004 to FY 2008, excluding those surgeries typically performed in the specialized operating room categories of Cesarean-sections and open hearts.*

Step 3: *For each of the counties identified in Step 1, obtain the most recent total population estimates and projections for the years 2004 through 2012 from the North Carolina Office of State Budget and Management (OSBM).*

⁷ *Business Wire*, April 27, 2009, "Surgical Procedures Performed in the United States is Increasing, Most Taking Place at Outpatient or Freestanding Healthcare Facilities, According to a New Report from Medtech Insight, Windhover Information.

- Step 4:** Calculate surgery use rates per 1,000 population for each of the counties identified in Step 1 for each of the historical years FY 2004 through FY 2008.
- Step 5:** Using linear regression, project surgery use rates per 1,000 population for each of the counties identified in Step 1 for the FYs 2009 through 2013.
- Step 6:** For the identified counties, apply the projected surgery use rates to the projected OSBM population counts and project the total surgeries by year by county for the FYs 2009 through 2013.
- Step 7:** For each county, calculate the FY 2008 percent of cases for each of WakeMed's three surgery service locations.
- Step 8:** For each of the three WakeMed surgery locations (and also for the proposed Raleigh Surgery Center location beginning in FY 2011) project the percent of surgery cases from each county for the FYs 2009 through 2012.
- Step 9:** Using the percentages developed in Step 8, calculate the projected surgery cases by county for each of the current three WakeMed surgery locations for the interim FYs of 2009 and 2010, and do the same beginning in FY 2011 (the first year of operations for the proposed project) for each of the then four WakeMed surgery locations for the first three years of the proposed project, FY 2011, FY 2012 and FY 2013.
- Step 10:** Summarize the total surgery cases by projected year for each of the four WakeMed surgery locations (three current locations plus the new proposed location, the WakeMed Raleigh Surgery Center).
- Step 11:** Apply the FY 2008 inpatient/outpatient splits to the projected volumes for each of the three current WakeMed surgery locations for the two interim years, and then (with adjustments to WakeMed Raleigh Campus to reflect the outpatient shift to the proposed ASC project beginning in FY 2011) apply the projected splits for each of the four WakeMed surgery locations for the first three years of operations.

Data Sources Used for the Operating Room Need Methodology:

Surgery patient case data	Thomson's inpatient and outpatient databases for the years FY 2004 through FY 2008
County	North Carolina Office of State Budget and Management (OSBM)

population data	http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/countytotals_2000_2009.html Accessed website on 5/26/2009
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Step 1: *For FY 2008, the most recent year for which market data available, identify the group of counties that reasonably reflect the functional geographic area for inpatient and outpatient surgery patients' counties of origin as served by WakeMed System's three currently active surgery service locations: WakeMed Raleigh Campus, Cary Hospital and the WakeMed North Healthplex*

As a major North Carolina healthcare system, WakeMed provides an extensive range of tertiary level services, such as a major Heart Center, a Level I Trauma Center, pediatric specialty medicine and surgical services, neonatal intensive care services, inpatient and outpatient rehabilitation services, neurosurgery and neuroscience services, and orthopedics surgery specialties. Further, WakeMed owns and operates one of North Carolina's largest patient transport services, including a fleet of critical care ground transport units and an air ambulance. Because of this range of tertiary services, WakeMed provide services to patients in significant numbers from many of North Carolina's counties.

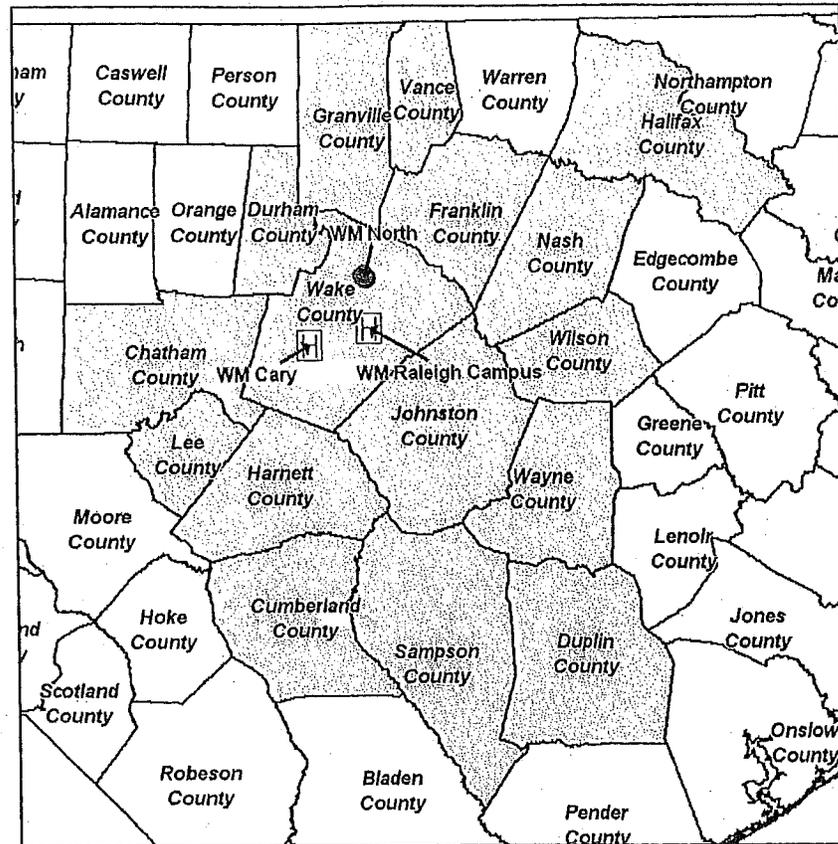
The following table rank orders the distribution of patients by county for surgery patients served by the WakeMed System for FY 2008. The definition of an appropriate functional geography for WakeMed's surgery services is based on this distribution of patient origin by county.

County #	County	FY 2008 Surgery Cases	% Total	Cum. %
1	Wake	24,906	75.4%	75.40%
2	Johnston	2,139	6.5%	81.9%
3	Harnett	1,214	3.7%	85.6%
4	Franklin	999	3.0%	88.6%
5	Sampson	486	1.5%	90.1%
6	Nash	452	1.4%	91.5%
7	Wayne	335	1.0%	92.5%
8	Durham	297	0.9%	93.4%
9	Wilson	293	0.9%	94.3%
10	Lee	227	0.7%	95.0%
11	Granville	180	0.5%	95.5%
12	Cumberland	179	0.5%	96.0%
13	Halifax	156	0.5%	96.5%
14	Chatham	136	0.4%	96.9%
15	Duplin	106	0.3%	97.2%
16	Vance	106	0.3%	97.5%
17	Orange	98	0.3%	97.8%
18	Edgecombe	67	0.2%	98.0%
19	Onslow	44	0.1%	98.1%
20	Northampton	42	0.1%	98.2%
21	Moore	41	0.1%	98.3%
22	Robeson	40	0.1%	98.4%
23	Alamance	39	0.1%	98.5%
24	Warren	37	0.1%	98.6%
25	New Hanover	34	0.1%	98.7%
26	Guilford	27	0.1%	98.8%
	Other	358	1.1%	99.9%
	Total	33,038	100.0%	

Note: Cumulative % not at 100% due to rounding in calculations.

An analysis of this county distribution of surgery patients determined a natural break in case volumes between the 16th and 17th ranked counties. Accounting for 97.5% of WakeMed surgery cases, these top 16 counties were

selected as the appropriate group of counties for purposes of assessing the market need/demand for WakeMed surgery services. These 16 counties are highlighted in the following map.



Step 2: *For counties identified in Step 1, select inpatient and outpatient surgery cases for all providers from the Thomson market database for the five years FY 2004 to FY 2008, excluding those surgeries typically performed in the specialized operating room categories of Cesarean-sections and open hearts*

In selecting the patient surgery base for this analysis, certain types of patients were excluded from the analysis for the purpose of creating a market dataset that represented the kinds of patients that would be served in the proposed ambulatory surgery center project.

Records for the analysis dataset from the Thomson database were first selected for patients that had an ICD-9 principal procedure code and fell within one of the Thomson surgery Service Lines. Further selection refinement was accomplished on this subset of patients by analyzing the

principle procedure ICD9 codes to ensure elimination of those ICD9 procedures that would not typically be performed in an operating room, such as endoscopy cases, skin sutures, cardiac catheterization/cardiac angioplasty, cysto cases, and endovascular cases.

Lastly, certain specialized operating room type patients needed to be excluded. Surgery outpatients are provided services in several types of operating rooms, including hospital-based dedicated outpatient operating rooms; hospital-based inpatient/outpatient shared operating rooms; and dedicated ambulatory surgery center operating rooms. Because of the shared operating rooms, most inpatient surgery cases are included in the analysis. The dataset selection excluded surgeries that would be performed in C-Section rooms and dedicated open heart operating rooms. These specialized OR cases were excluded by the Thomson Service Lines of Inpatient Cardiac Surgery and Inpatient Obstetrics.

Table II.10 Total Market Surgery Cases by County, FY 2004 through FY 2008 *						
For Selected Surgery Patients from the Thomson Market Databases						
Counties	Pt Type	History of Selected Surgical Cases Volumes by County				
		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Wake	Inpatient	12,697	13,256	14,690	14,481	14,576
	Outpatient	49,642	51,885	54,552	60,706	63,014
	Wake Total	62,339	65,141	69,242	75,187	77,590
Durham	Inpatient	4,839	4,705	4,781	4,769	4,846
	Outpatient	18,753	16,092	18,228	20,990	22,271
	Durham Total	23,592	20,797	23,009	25,759	27,117
Cumberland	Inpatient	5,506	5,646	5,756	5,387	5,515
	Outpatient	16,539	17,342	17,729	18,238	18,897
	Cumberland Total	22,045	22,988	23,485	23,625	24,412
Johnston	Inpatient	2,931	2,969	3,131	3,286	3,246
	Outpatient	8,845	9,364	9,876	10,820	10,437
	Johnston Total	11,776	12,333	13,007	14,106	13,683
Wayne	Inpatient	3,051	3,037	2,938	2,918	2,962
	Outpatient	8,305	8,197	8,346	8,166	8,479
	Wayne Total	11,356	11,234	11,284	11,084	11,441
Nash	Inpatient	2,166	2,189	2,365	2,309	2,296
	Outpatient	6,809	6,554	7,164	6,947	7,294
	Nash Total	8,975	8,743	9,529	9,256	9,590
Harnett	Inpatient	1,996	1,961	2,046	2,022	2,084
	Outpatient	6,703	6,988	6,969	7,412	7,410
	Harnett Total	8,699	8,949	9,015	9,434	9,494
Wilson	Inpatient	1,933	1,969	2,091	2,097	2,105
	Outpatient	5,232	5,214	5,143	5,317	4,836
	Wilson Total	7,165	7,183	7,234	7,414	6,941
Lee	Inpatient	1,380	1,442	1,363	1,400	1,408
	Outpatient	4,423	4,768	4,618	5,425	5,508
	Lee Total	5,803	6,210	5,981	6,825	6,916
Sampson	Inpatient	1,557	1,606	1,484	1,456	1,475
	Outpatient	4,297	3,803	3,757	3,894	4,697
	Sampson Total	5,854	5,409	5,241	5,350	6,172
Halifax	Inpatient	1,672	1,678	1,689	1,719	1,647
	Outpatient	3,351	3,757	3,880	4,064	4,362
	Halifax Total	5,023	5,435	5,569	5,783	6,009
Granville	Inpatient	1,297	1,305	1,302	1,282	1,358
	Outpatient	3,518	3,404	3,953	4,389	4,639
	Granville Total	4,815	4,709	5,255	5,671	5,997
Franklin	Inpatient	1,165	1,210	1,362	1,306	1,166
	Outpatient	3,424	3,616	3,914	4,270	3,896
	Franklin Total	4,589	4,826	5,276	5,576	5,062
Vance	Inpatient	1,212	1,270	1,237	1,253	1,153
	Outpatient	3,212	3,382	3,623	3,826	3,950
	Vance Total	4,424	4,652	4,860	5,079	5,103
Duplin	Inpatient	1,211	1,193	1,144	1,102	1,111
	Outpatient	3,055	3,055	3,042	2,934	3,297
	Duplin Total	4,266	4,248	4,186	4,036	4,408
Chatham	Inpatient	869	929	949	984	1,016
	Outpatient	2,933	2,759	2,835	3,728	3,955
	Chatham Total	3,802	3,688	3,784	4,712	4,971

* All IP & OP surgeries included except C-sections and IP cardiac surgery. See pages 47 & 59 for further information.

Step 3: For each of the counties identified in Step 1, obtain the most recent total population estimates and projections for the years 2004 through 2012 from the North Carolina Office of State Budget and Management

The population data in the following table was obtained through the web site:

[http://www.osbm.state.nc.us/ncosbm/facts and figures/socioeconomic data/population estimates/demog/countytotals_2000_2009.html](http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/countytotals_2000_2009.html), which was accessed 5/26/2009.

Counties	Historical County Population Totals by FY				
	2004	2005	2006	2007	2008
Wake	724,865	756,873	791,087	829,418	864,582
Durham	238,600	242,121	247,668	253,673	260,471
Cumberland	312,236	307,281	309,980	313,156	316,945
Johnston	140,935	145,627	150,710	156,799	162,776
Wayne	114,532	114,942	114,464	114,934	115,724
Nash	90,156	90,901	91,630	92,677	93,999
Harnett	98,917	100,918	103,098	106,177	109,659
Wilson	75,806	76,312	76,944	77,743	78,934
Lee	53,011	54,027	55,146	56,247	57,511
Sampson	62,346	63,082	63,618	64,281	65,408
Halifax	56,272	55,842	55,379	55,227	55,218
Granville	52,592	53,083	53,620	55,572	56,254
Franklin	52,598	53,778	55,013	56,277	57,911
Vance	43,408	43,106	43,467	43,466	43,497
Duplin	51,174	51,556	52,365	52,866	53,442
Chatham	54,888	56,006	57,410	58,857	60,895

Step 4: Calculate surgery use rates per 1,000 population for each of the counties identified in Step 1 for each of the historical years FY 2004 through FY 2008

Calculations for each county for each fiscal year were performed using the surgery cases from Table II.10 and the population data from Table II.11 to produce the surgery use rates in Table II.12.

Counties	Historical Surgery Use Rates per 1,000 Population				
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Wake ⁸	86.00	86.07	87.53	90.65	89.74
Durham	98.88	85.90	92.90	101.54	104.11
Cumberland	70.60	74.81	75.76	75.44	77.02
Johnston	83.56	84.69	86.30	89.96	84.06
Wayne	99.15	97.74	98.58	96.44	98.86
Nash	99.55	96.18	103.99	99.87	102.02
Harnett	87.94	88.68	87.44	88.85	86.58
Wilson	94.52	94.13	94.02	95.37	87.93
Lee	109.47	114.94	108.46	121.34	120.26
Sampson	93.90	85.75	82.38	83.23	94.36
Halifax	89.26	97.33	100.56	104.71	108.82
Granville	91.55	88.71	98.00	102.05	106.61
Franklin	87.25	89.74	95.90	99.08	87.41
Vance	101.92	107.92	111.81	116.85	117.32
Duplin	83.36	82.40	79.94	76.34	82.48
Chatham	69.27	65.85	65.91	80.06	81.63

* All IP & OP surgeries included except C-sections and IP cardiac surgery.
See pages 47 & 59 for further information.

Step 5: Using linear regression, project surgery use rates per 1,000 population for each of the counties identified in Step 1 for the FYs 2009 - 2013

Using the historical surgery use rates per 1,000 population, WakeMed calculated the linear trend for each of the 16 counties producing the statistical components in the following table.

Counties	Linear Regression Statistical Components		
	Slope	Y-intercept	Projection Formula
Wake	1.206	84.380	$y=1.206x+84.38$
Durham	2.610	88.836	$y=2.61x+88.836$
Cumberland	1.347	70.685	$y=1.347x+70.685$
Johnston	0.627	83.833	$y=0.627x+83.833$
Wayne	-0.188	98.718	$y=-0.188x+98.718$
Nash	0.863	97.733	$y=0.863x+97.733$
Harnett	-0.255	88.663	$y=-0.255x+88.663$
Wilson	-1.194	96.776	$y=-1.194x+96.776$
Lee	2.798	106.500	$y=2.798x+106.5$
Sampson	-0.160	88.404	$y=-0.16x+88.404$
Halifax	4.650	86.186	$y=4.65x+86.186$

⁸ The historical surgery use rates for Wake County in this table II.12 exclude inpatient cardiac surgery patients and inpatient C-sections, and will therefore be different than the Wake County surgery rates in the earlier Table II.7 which includes these two segments for purposes of comparison to Hospital License Renewal applications.

Granville	4.346	84.346	$y=4.346x+84.346$
Franklin	0.966	88.978	$y=0.966x+88.978$
Vance	3.973	99.245	$y=3.973x+99.245$
Duplin	-0.782	83.250	$y=-0.782x+83.25$
Chatham	3.893	60.865	$y=3.893x+60.865$

Counties	Projected Surgery Use Rates per 1,000 Population				
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Wake	91.62	92.82	94.03	95.23	96.44
Durham	104.50	107.11	109.72	112.33	114.94
Cumberland	78.77	80.11	81.46	82.81	84.16
Johnston	87.60	88.22	88.85	89.48	90.10
Wayne	97.59	97.40	97.21	97.03	96.84
Nash	102.91	103.77	104.64	105.50	106.36
Harnett	87.13	86.88	86.62	86.37	86.11
Wilson	89.61	88.42	87.22	86.03	84.84
Lee	123.29	126.09	128.88	131.68	134.48
Sampson	87.44	87.28	87.12	86.96	86.80
Halifax	114.09	118.74	123.39	128.04	132.69
Granville	110.42	114.77	119.11	123.46	127.81
Franklin	94.77	95.74	96.71	97.67	98.64
Vance	123.08	127.06	131.03	135.00	138.98
Duplin	78.56	77.78	76.99	76.21	75.43
Chatham	84.22	88.12	92.01	95.90	99.80

* All IP & OP surgeries included except C-sections and IP cardiac surgery. See pages 47 & 59 for further information.

Step 6: For the identified counties, apply the projected surgery use rates to the projected OSBM population counts and project the total surgeries by year by county for the FYs 2009 through 2013

The population data in the following table was obtained through the web site:

[http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic data/population estimates/demog/countytotals 2000 2009.html](http://www.osbm.state.nc.us/ncosbm/facts_and_figures/socioeconomic_data/population_estimates/demog/countytotals_2000_2009.html), which was accessed 5/26/2009.

Counties	Projected County Population Totals				
	2009	2010	2011	2012	2013
Wake	900,342	935,933	971,522	1,007,113	1,042,702
Durham	267,492	274,516	281,541	288,565	295,588
Cumberland	319,883	323,472	326,718	329,653	332,310
Johnston	168,825	174,876	180,925	186,976	193,025
Wayne	116,314	116,760	117,100	117,355	117,549
Nash	95,163	96,432	97,702	98,970	100,239
Harnett	113,001	116,342	119,684	123,025	126,367
Wilson	79,962	81,097	82,231	83,365	84,499
Lee	58,709	59,906	61,105	62,302	63,500
Sampson	66,461	67,493	68,503	69,492	70,460
Halifax	55,135	55,053	54,971	54,888	54,807
Granville	56,620	57,259	57,898	58,537	59,175
Franklin	58,999	60,085	61,171	62,254	63,338
Vance	43,529	43,560	43,592	43,623	43,654
Duplin	54,005	54,539	55,058	55,563	56,054
Chatham	62,471	64,047	65,624	67,199	68,775

The projected use rates by county by year from Table II.14 were applied to the projected population data by county by year from Table II.15 to produce the projected surgery case volumes by county for the years FY 2009 through FY 2013, which are presented in the following table.

Counties	Projected Surgery Cases				
	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Wake	82,489	86,873	91,352	95,907	100,558
Durham	27,953	29,403	30,891	32,415	33,975
Cumberland	25,197	25,913	26,614	27,299	27,967
Johnston	14,789	15,428	16,075	16,731	17,392
Wayne	11,351	11,372	11,383	11,387	11,383
Nash	9,793	10,007	10,224	10,441	10,661
Harnett	9,846	10,108	10,367	10,626	10,881
Wilson	7,165	7,171	7,172	7,172	7,169
Lee	7,238	7,554	7,875	8,204	8,539
Sampson	5,811	5,891	5,968	6,043	6,116
Halifax	6,290	6,537	6,783	7,028	7,272
Granville	6,252	6,572	6,896	7,227	7,563
Franklin	5,591	5,753	5,916	6,080	6,248
Vance	5,358	5,535	5,712	5,889	6,067
Duplin	4,243	4,242	4,239	4,234	4,228
Chatham	5,261	5,644	6,038	6,444	6,864

* All IP & OP surgeries included except C-sections and IP cardiac surgery. See pages 47 & 59 for further information.

Step 7: For each county, calculate the FY 2008 percent of cases for each of WakeMed's three surgery service locations

The FY 2008 percent of WakeMed surgery cases of the total surgery cases by county was calculated for each of WakeMed's three active surgery service locations. The results are provided in the following table.

Counties	FY 2008 % Cases by WM Facility by County		
	WakeMed	WM Cary	WM North
Wake	12.1%	8.7%	3.4%
Durham	0.4%	0.3%	0.3%
Cumberland	0.5%	0.2%	0.0%
Johnston	8.3%	3.2%	1.1%
Wayne	1.2%	0.2%	0.1%
Nash	2.5%	0.3%	0.4%
Harnett	5.4%	5.4%	0.2%
Wilson	1.9%	0.1%	0.1%
Lee	1.1%	2.0%	0.1%
Sampson	2.9%	2.8%	0.1%
Halifax	1.3%	0.0%	0.1%
Granville	2.3%	0.2%	0.5%
Franklin	10.1%	1.0%	6.1%
Vance	1.3%	0.2%	0.6%
Duplin	0.8%	1.2%	0.0%
Chatham	0.5%	1.8%	0.1%

* All IP & OP surgeries included except C-sections and IP cardiac surgery. See pages 47 & 59 for further information.

Step 8: For each of the three WakeMed surgery locations (and also for the proposed Raleigh Surgery Center location beginning in FY 2011) project the percent of surgery cases from each county for the FYs 2009 through 2012

For this projection methodology, WakeMed held constant the FY 2008 percentages of surgery cases for each county of patient origin for each WakeMed surgical services location for the interim projection years of FY 2009 and FY 2010. For the WakeMed Cary location WakeMed continued holding constant the FY 2008 percentage of surgery cases for the first three years of the project, FY 2011, FY 2012 and FY 2013. For the WakeMed North location WakeMed held its percentage constant at the FY 2008 level. However, because WakeMed North has approved CONs to develop inpatient beds beginning in FY 2012, WakeMed grew its percentages from 3.4% in FY 2008 to 3.6% for each of the second and third years of the proposed project, FY 2012 and FY 2013. This was done to reflect a small number of inpatient surgeries (non C-sections) that will result from the new inpatients beds.

However, for the third WakeMed surgery services location, WakeMed Raleigh Campus, the projected percentages of surgery patients by each county were modified to reflect the surgery volume shift from WakeMed Raleigh Campus to the proposed WakeMed Raleigh Surgery Center that will occur beginning in FY 2011, the first year of operations for the proposed project. The majority of this planned shift of surgery patients will happen in the first year of the project, with balance of the planned shift accomplished by the end of the third year of operations.

The case volumes that are planned for this change in location are outpatient surgery patients. For the first year's projected volume for the proposed WakeMed Raleigh Surgery Center, WakeMed estimates that approximately 90% of that FY 2011 volume will be cases that are shifted from the Raleigh Campus operating rooms to the operating rooms at the proposed project. Accordingly, for the WakeMed Raleigh Campus and for the proposed WakeMed Raleigh Surgery Center, the percentages of cases for each county of patient origin that are projected for the first three years of the proposed project are reflective of the planned shift as described. The following table presents for the counties of patient origin all of the percentages that will be used to calculate the projected surgery cases for each WakeMed location.

Counties	Projected % Cases FY '09-'10			Projected % Cases FY '11-'13			Projected % Cases Raleigh ASC		
	WakeMed	WM Cary	WM North	WakeMed	WM Cary	WM North	FY 2011	FY 2012	FY 2013
Wake	12.1%	8.7%	3.4%	8.1%	8.7%	3.6%*	5.8%	6.7%	7.3%
Durham	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%	0.3%
Cumberland	0.5%	0.2%	0.0%	0.3%	0.2%	0.0%	0.2%	0.2%	0.3%
Johnston	8.3%	3.2%	1.1%	5.6%	3.2%	1.1%	4.0%	4.7%	5.0%
Wayne	1.2%	0.2%	0.1%	0.8%	0.2%	0.1%	0.6%	0.7%	0.7%
Nash	2.5%	0.3%	0.4%	1.7%	0.3%	0.4%	1.2%	1.4%	1.5%
Harnett	5.4%	5.4%	0.2%	3.6%	5.4%	0.2%	2.6%	3.0%	3.2%
Wilson	1.9%	0.1%	0.1%	1.3%	0.1%	0.1%	0.9%	1.1%	1.2%
Lee	1.1%	2.0%	0.1%	0.7%	2.0%	0.1%	0.5%	0.6%	0.6%
Sampson	2.9%	2.8%	0.1%	1.9%	2.8%	0.1%	1.4%	1.6%	1.7%
Halifax	1.3%	0.0%	0.1%	0.9%	0.0%	0.1%	0.6%	0.7%	0.8%
Granville	2.3%	0.2%	0.5%	1.5%	0.2%	0.5%	1.1%	1.2%	1.4%
Franklin	10.1%	1.0%	6.1%	6.8%	1.0%	6.1%	4.9%	5.7%	6.1%
Vance	1.3%	0.2%	0.6%	0.9%	0.2%	0.6%	0.6%	0.7%	0.8%
Duplin	0.8%	1.2%	0.0%	0.5%	1.2%	0.0%	0.4%	0.4%	0.5%
Chatham	0.5%	1.8%	0.1%	0.3%	1.8%	0.1%	0.2%	0.2%	0.3%

**All IP & OP surgeries included except C-sections and IP cardiac surgery. See pages 47 & 59 for further information.

*Note: The WakeMed North percentage for Wake County in FY 2011 will be 3.4%. For FY 2012 and FY 2013 the percentage will be 3.6% to reflect the new inpatient beds under approved CONs for North.

Step 9: Using the percentages developed in Step 8, calculate the projected surgery cases by county for each of the current three WakeMed surgery locations for the interim FYs of 2009 and 2010, and do the

same beginning in FY 2011 (the first year of operations for the proposed project) for each of the then four WakeMed surgery locations for the first three years of the proposed project, FY 2011, FY 2012 and FY 2013

WakeMed applied the percentages developed in Step 8 to the corresponding total projected surgery cases developed in Step 6 to project for each of WakeMed's current and proposed surgery service locations the numbers of surgery cases for each patient of origin county for five years FY 2009 through FY 2013. The results are presented in the following three tables, Tables II.19 (a), II.19 (b), and II.19 (c).

Counties	Projected Cases FY '09 – Interim Year				Projected Cases FY '10 – Interim Year			
	WakeMed	WM Cary	WM North	Raleigh SC	WakeMed	WM Cary	WM North	Raleigh SC
Wake	9,981	7,177	2,805	0	10,512	7,558	2,954	0
Durham	112	84	84	0	118	88	88	0
Cumberland	126	50	0	0	130	52	0	0
Johnston	1,227	473	163	0	1,281	494	170	0
Wayne	136	23	11	0	136	23	11	0
Nash	245	29	39	0	250	30	40	0
Harnett	532	532	20	0	546	546	20	0
Wilson	136	7	7	0	136	7	7	0
Lee	80	145	7	0	83	151	8	0
Sampson	169	163	6	0	171	165	6	0
Halifax	82	0	6	0	85	0	7	0
Granville	144	13	31	0	151	13	33	0
Franklin	565	56	341	0	581	58	351	0
Vance	70	11	32	0	72	11	33	0
Duplin	34	51	0	0	34	51	0	0
Chatham	26	95	5	0	28	102	6	0

Counties	Projected Cases FY '11: 1 st Year of Operations				Projected Cases FY '12: 2 nd Year of Operations			
	WakeMed	WM Cary	WM North	Raleigh SC	WakeMed	WM Cary	WM North	Raleigh SC
Wake	7,400	7,948	3,106	5,327*	7,768	8,344	3,453	6,441*
Durham	93	93	93	62	97	97	97	65
Cumberland	80	53	0	53	82	55	0	55
Johnston	900	514	177	643	937	535	184	786
Wayne	91	23	11	68	91	23	11	80
Nash	174	31	41	123	177	31	42	146
Harnett	373	560	21	270	383	574	21	319
Wilson	93	7	7	65	93	7	7	79
Lee	55	158	8	39	57	164	8	49
Sampson	113	167	6	84	115	169	6	97
Halifax	61	0	7	41	63	0	7	49
Granville	103	14	34	76	108	14	36	87
Franklin	402	59	361	290	413	61	371	347

Vance	51	11	34	34	53	12	35	41
Duplin	21	51	0	17	21	51	0	17
Chatham	18	109	6	12	19	116	6	13

* Note: Calculation rounding resulted in variances between 0.1% and 0.5% for these projected values.

Counties	Projected Cases FY '13: 3rd Year of Operations			
	WakeMed	WM Cary	WM North	Raleigh ASC
Wake	8,145	8,749	3,620	7,350*
Durham	102	102	102	102
Cumberland	84	56	0	84
Johnston	974	557	191	870
Wayne	91	23	11	80
Nash	181	32	43	160
Harnett	392	588	22	348
Wilson	93	7	7	86
Lee	60	171	9	51
Sampson	116	171	6	104
Halifax	65	0	7	58
Granville	113	15	38	106
Franklin	425	62	381	381
Vance	55	12	36	49
Duplin	21	51	0	21
Chatham	21	124	7	21

* Note: Calculation rounding resulted in variances between 0.1% and 0.5% for these projected values.

Step 10: Summarize the total surgery cases by projected year for each of the four WakeMed surgery locations (three current locations plus the new proposed location, the WakeMed Raleigh Surgery Center)

The projected surgery case results for WakeMed's surgery service locations developed in Step 9 for the 16 counties of patient origin were aggregated to a summary level for each WakeMed location and are presented in the following table for the proposed project's two interim years of FY 2009 and FY 2010, and for the first three years of the proposed project, FY 2011, FY 2012 and FY 2013.

Year	Projected Cases				Total
	WakeMed	WM Cary	WM North	Ral ASC	
FY 2009	13,665	8,909	3,557	0	26,131
FY 2010	14,314	9,349	3,734	0	27,397
FY 2011	10,028	9,798	3,912	7,204	30,942
FY 2012	10,477	10,253	4,284	8,671	33,685
FY 2013	10,938	10,720	4,480	9,871	36,009

Step 11: Apply the FY 2008 inpatient/outpatient splits to the projected volumes for each of the three current WakeMed surgery locations for the two interim years, and then (with adjustments to WakeMed Raleigh Campus to reflect the outpatient shift to the proposed ASC project beginning in FY 2011) apply the projected splits for each of the four WakeMed surgery locations for the first three years of operations

WakeMed calculated the percentage splits between inpatient surgeries and outpatient surgeries for FY 2008 for each of WakeMed's three active surgical services locations. WakeMed then projected these surgery cases inpatient/outpatient splits for the two interim years and the three first years of operations for the proposed project.

	Year	WM Raleigh Campus		WM Cary Hospital		WM North Healthplex		WM Raleigh Surgery Center	
		Inpatient	Outpatient	Inpatient	Outpatient	Inpatient	Outpatient	Inpatient	Outpatient
Actual	FY 2008 Cases	5,582	7,279	1,769	6,617	0	3,306	NA	NA
	FY 2008 IP/OP %	43.4%	56.6%	21.1%	78.9%	0.0%	100.0%	NA	NA
Interim	FY 2009	43.4%	56.6%	21.1%	78.9%	0.0%	100.0%	NA	NA
	FY 2010	43.4%	56.6%	21.1%	78.9%	0.0%	100.0%	NA	NA
First 3 Years	FY 2011	66.0%	34.0%	21.1%	78.9%	0.0%	100.0%	0.0%	100%
	FY 2012	67.0%	33.0%	21.1%	78.9%	4.2%	95.8%	0.0%	100%
	FY 2013	68.0%	32.0%	21.1%	78.9%	5.8%	94.2%	0.0%	100%

For WakeMed Cary Hospital the percentage splits are assumed to remain constant across all five years, FY 2009 through FY 2013.

For WakeMed North Healthplex, an outpatient surgery center, the percentage splits were assumed to remain constant at 100% outpatient surgeries for FY 2009, FY 2010 and FY 2011. However, for FY 2012 and FY 2013, WakeMed projects a small number of inpatient surgeries in the four current operating rooms at North Healthplex. This is because of two North Healthplex CONs for which WakeMed has received approval which will add acute care inpatient beds for womens services beginning in FY 2013. Therefore, the inpatient/outpatient splits change as indicated for North Healthplex for FY 2012 and FY 2013.

For WakeMed Raleigh Campus a large proportion of outpatient surgeries will shift to the proposed WakeMed Raleigh Surgery Center, resulting in a corresponding Raleigh Campus shift to a higher percent of inpatients and a lower percent of outpatients, as indicated in the table above.

Since the proposed WakeMed Raleigh Surgery Center will be a dedicated ambulatory surgery center, its surgeries patients will be 100% outpatient.

Finally, for each WakeMed surgery services location and for each year, the inpatient/outpatient percentages from Table II.20 were applied to the projected surgery case volumes in Table II.19(d) to develop the projected inpatient and outpatient surgery volumes for each WakeMed location. The results of these calculations are presented in the following table.

	Year	WM Raleigh Campus		WM Cary Hospital		WM North Healthplex		WM Raleigh Surgery Center		WakeMed System Totals		
		Inpatient	Outpatient	Inpatient	Outpatient	Inpatient	Outpatient	Inpatient	Outpatient	Inpatient	Outpatient	Total
Interim	FY 2009	5,931	7,734	1,880	7,029	0	3,557	0	0	7,811	18,320	26,131
	FY 2010	6,212	8,102	1,973	7,376	0	3,734	0	0	8,185	19,212	27,397
First 3 Years	FY 2011	6,618	3,410	2,067	7,731	0	3,912	0	7,204	8,685	22,257	30,942
	FY 2012	7,020	3,457	2,163	8,090	180	4,104	0	8,671	9,363	24,322	33,685
	FY 2013	7,438	3,500	2,262	8,458	260	4,220	0	9,871	9,960	26,049	36,009

Operating Room Methodology Assumptions:

- As indicated earlier, the first step in this methodology was to develop a database from the 16-county service area of all residents from those counties who had a surgery at any North Carolina facility for the five year period FY 2004 through FY 2008. However, to ensure a valid analysis, it was important to select for inclusion in the dataset surgery patients that were served by WakeMed's overall compliment of operating rooms. WakeMed has four types of operating rooms: dedicated outpatient surgery operating rooms, shared operating rooms (used by both inpatients and outpatients), dedicated inpatient cardiac surgery operating rooms, and C-Section rooms for obstetrics services. The methodology includes the surgery patients from the 16-count service area for the first two types of operating rooms (dedicated outpatient and

shared), and excludes the last two types of operating rooms (cardiac surgery and C-section). Since outpatient surgery patients are served in the dedicated outpatient and shared operating rooms, all surgery patients, including inpatients, needed to be included in order to ensure that the analysis and planning factored in and accommodated all the service area's need for these operating. Since the other two types of operating rooms do not serve outpatients, it was appropriate to exclude those patients.

- With the opening of the WakeMed Raleigh Surgery Center in FY 2011, WakeMed Raleigh Campus's percentage of Wake County surgery patients will experience a significant drop when more than half of the outpatient surgery cases move to the proposed WakeMed Raleigh Surgery Center. This transition will largely occur in FY 2011, with the full transition over the first three years to accomplish a targeted 65% shift in outpatient surgeries that would have been done in the Raleigh Campus operating rooms.
- In the third year of the project, following the full transition, it is projected that 3,500 outpatient surgery cases will continue to be performed at Raleigh Campus. This overall segment of outpatient cases is comprised of patients having more complex procedures, patients with complications or other specialized needs, and the outpatients of surgeon specialists whose practices also include a major proportion of inpatient cases. These circumstances are reflective of WakeMed Raleigh Campus's role as a tertiary provider of specialized surgical services.
- With the opening of the proposed outpatient surgery center, WakeMed Raleigh Campus will have a higher proportion of inpatient surgery cases across all specialties, and a higher proportion of its total cases on residents from outside Wake County who require the specialized services of a tertiary hospital. Therefore, while the volumes of surgery cases at Raleigh Campus will grow over time, they are projected to grow at rates that are less than the ambulatory and other non-tertiary surgery segments.
- Cary Hospital's surgical volumes will grow along with the overall market demand, but the percentages of total market surgery volumes are projected to remain constant between the years 2009 to 2013.
- WakeMed North's percent of market surgeries will be stable, with a slight added increase as a result of the CON-approved inpatient beds opening in FY 2012. These new inpatient beds will be oriented to provide women's services. A large proportion of those services will be obstetrics

and will not utilize the four operating rooms at North. However, one of inpatient women's services to be offered is gynecological procedures, and that is expected to create a moderate increase in inpatient surgical case demand amounting to 180 cases beginning in FY 2012, and 260 cases in FY 2013.

- Over the first three years of the project, WakeMed System is projected to experience moderate increases in the percentages of the total market surgeries. Following the third year of the proposed project, however, these percentages are projected to reach a stable equilibrium among the surgical providers in the service area.
- Growth in demand for WakeMed Raleigh Campus' tertiary services has a produced a sustained volume of surgery cases that has reached, and gone beyond, the targeted capacity levels that ensure efficient and effective use of operating room capacities. This circumstance at Raleigh Campus is at the heart of the purpose for this project, and the supporting rationale will be fully addressed in this application.

(6) the hours of operation of the proposed new operating rooms;

WakeMed Raleigh Surgery Center will operate Monday through Friday, from 6:00 a.m. to 6:00 p.m.

Exhibit 4

ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

FINDINGS

C = Conforming

CA = Conditional

NC = Nonconforming

NA = Not Applicable

DECISION DATE: June 29, 2007
FINDINGS DATE: July 9, 2007
PROJECT ANALYST: Carol L. Hutchison
CHIEF: Lee B. Hoffman

PROJECT I.D. NUMBER: #F-7785-07/Lincoln Health System d/d/a CMC-Lincoln, The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas HealthCare System, and LMC Properties/ Develop a replacement hospital in Lincolnton on Janice Road / Lincoln 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, ambulatory surgical operating rooms, or home health offices that may be approved.

NC

Lincoln Health System d/b/a Carolinas Medical Center-Lincoln (CMC-Lincoln), and co-applicants, The Charlotte-Mecklenburg Hospital Authority (CMHA) d/b/a Carolinas HealthCare System and LMC Properties (LMC), propose to replace the existing CMC-Lincoln hospital with a new facility, also in Lincoln County. The applicants do not propose to add any new health services or to acquire equipment for which there is a need determination in the 2007 SMFP.

The policy in the 2007 SMFP applicable to the review of this application is as follows:

POLICY AC-5: REPLACEMENT OF ACUTE CARE BED CAPACITY

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

Thus, the applicants state they used LNRMC's compound annual growth rate (16.5%) that occurred during the first three years following completion of LNRMC's replacement hospital (1999-2002) to project the same percentage increase in total discharges for CMC-Lincoln its first three project years. To achieve the 16.5% CAGR annual increase in total discharges, the applicants assume CMC-Lincoln's medical/surgical and obstetric market shares would increase to 55% in project year one, 65% in project year two and 69.5% in project year three. Effectively, this is the equivalent of the applicants' increasing the hospital's Lincoln County market share approximately 66% ($69.5/41.8 = 66.3$) from 2006 (41.8%) to 2013 (69.5%). In addition, the applicants project total patient discharges would increase by approximately 78% ($6,109/3,434 = 77.9\%$) between 2006 (3,434) and 2013 (6,109).

CMC-Lincoln's assumption that its projected patient utilization will mirror LNRMC's experience is not reasonable for the following reasons: (1) the growth rate is statistically unsupported by CMC-Lincoln's experiential data; (2) the applicants use a 1 percent increase in annual market share to project total market discharges from FFY 2006 through intervening years FFY 2007 – FFY 2010, but provide no basis for assuming any growth in market share before a new facility is built. In fact, the applicants state on page 113 that market share for a segment of its population decreased from 43.3% in 2003 to 41.8% in FFY 2006; (3) the applicants did not adequately demonstrate that it is reasonable to assume CMC-Lincoln would perform like LNRMC especially given the location of the two facilities in relation to the population growth. For example, LNRMC is located in the Mooresville/South Iredell and North Mecklenburg areas, one of the fastest growing areas in the state, compared to CMC-Lincoln's central location in Lincolnton, west of the faster growing East Lincoln County area around Denver; (4) CMC-Lincoln relies solely on Lincoln County for 79.8% of its patient origin, while LNRMC relies on Iredell County for only 64.5% of its patient origin and on Mecklenburg County for another 15.0% of patient origin, for a total patient origin of 79.5%, according to 2007 Hospital Licensure Renewal Applications. The patient origin for LNRMC reflects the hospital's close proximity to Mecklenburg County and the higher acuity services provided by LNRMC which means it draws patients from a wider geographical area than CMC-Lincoln, which primarily treats patients with DRG acuity levels <2.0 and is located farther from the county line. Data in the licensure renewal applications also shows LNRMC provided twice as many days of care (28,474) in 2006 (Solucient data), compared to CMC-Lincoln's 14,065 days of care (Solucient data), although LNRMC is licensed for only 4 more acute care beds than CMC-Lincoln; and 5) the applicants rely on physician recruitment efforts, a new primary care center in western Lincoln County, and a newly approved ambulatory surgery center/physician office in eastern Lincoln County to reverse the current 57% to 58% out-migration of Lincoln

County residents for inpatient care, and to support the assumption of a 66% increase in market share. Although the applicants identify current members of the medical staff who support the project and who are willing to refer patients to the new hospital, the applicants fail to estimate the number of additional patient admissions this support and future physician recruitment efforts will produce. Instead, on pages 142 – 143 of the application, the applicants compare their projected PY 3 total acute care market share to “*other similarly-sized counties,*” and draw a conclusion that CMC-Lincoln’s projections are reasonable in comparison. The table below shows the applicants’ comparison hospitals and their respective patient origins and primary market shares, along with the number of licensed beds and surplus beds from the 2007 SMFP inserted by the project analyst.

Hospital	Discharges from Zip Codes Accounting for at Least 80% of Discharges	Zip Code Patient Origin Percentage	Market Share of Zip Codes Region	Licensed Beds*	2011 Bed Surplus in 2007 SMFP*
Stanly Regional Medical Center	4,650	81.4%	64.8%	97	-13
Halifax Regional Hospital	6,325	80.0%	62.0%	186	-45
Rutherford Hospital	4,515	79.8%	68.6%	129	-47
Columbus County Hospital	4,505	81.3%	67.1%	154	-36
Lenoir Memorial Hospital	8,422	80.3%	71.9%	218	-16

*Column added by project analyst

The above table illustrates that all of these hospitals already serve 62-72% of their respective primary service areas even though their services are provided

Exhibit 5

All responses should pertain to October 1, 2008 through September 30, 2009.

D. Beds by Service (Inpatient) continued

Number of Swing Beds *	N/A
Number of Skilled Nursing days in Swing Beds	N/A
Number of unlicensed observation beds	N/A

* means a hospital designated as a swing-bed hospital by CMS (Centers for Medicare and Medicaid Services)

E. Reimbursement Source (For "Inpatient Days," show Acute Inpatient Days only, excluding normal newborns.)

Primary Payer Source	Inpatient Days of Care (from p. 4, item D. 1.)	Emergency Visits (from p. 6)	Outpatient Visits (excluding Emergency Visits and Surgical Cases)	Inpatient Surgical Cases (from p.8, Table 8. b)	Ambulatory Surgical Cases (from p. 8, Table 8. b)
Self Pay/Indigent/Charity	2,506	12,155	1,717	180	356
Medicare & Medicare Managed Care	53,519	15,570	29,099	3,236	6,509
Medicaid	6,855	5,491	3,022	496	969
Commercial Insurance Managed Care	406	551	469	42	63
Other (Specify)	42,991	17,543	57,073	5,763	16,076
TOTAL	107,765	55,996	96,579	9,849	24,567

F. Services and Facilities

1. Obstetrics

	Enter Number of Infants
a. Live births (Vaginal Deliveries)	4,103
b. Live births (Cesarean Section)	2,455
c. Stillbirths	12

d. Delivery Rooms - Delivery Only (not Cesarean Section)	0
e. Delivery Rooms - Labor and Delivery, Recovery	20
f. Delivery Rooms - LDRP (include Item "m" on Page 4)	0
g. Normal newborn bassinets (Level I Neonatal Services) Do not include with totals under the section entitled Beds by Service (Inpatient)	Varies

2. Abortion Services

Number of procedures per Year

615

All responses should pertain to October 1, 2008 through September 30, 2009.

8. Surgical Operating Rooms, Procedure Rooms, Gastrointestinal Endoscopy Rooms, Surgical and Non-Surgical Cases and Procedures (continued)

(Campus - If multiple sites: Combined)

d) Surgical Cases by Specialty Area Table

Enter the number of surgical cases by surgical specialty area in the table below. Count each patient undergoing surgery as one case regardless of the number of surgical procedures performed while the patient was having surgery. Categorize each case into one specialty area - the total number of surgical cases is an unduplicated count of surgical cases. **Count all surgical cases, including surgical cases operated on in procedure rooms or in any other location.**

Surgical Specialty Area	Inpatient Cases	Ambulatory Cases
Cardiothoracic (excluding Open Heart Surgery)	224	21
Open Heart Surgery (from 7.(b) 4.)	299	
General Surgery	2,175	5,637
Neurosurgery	57	425
Obstetrics and GYN (excluding C-Sections)	721	2,681
Ophthalmology	10	4,997
Oral Surgery	2	25
Orthopedics	2,785	5,269
Otolaryngology	57	3,048
Plastic Surgery	81	655
Urology	560	1,258
Vascular	422	551
Other Surgeries (specify)		
Other Surgeries (specify)		
Number of C-Section's Performed in Dedicated C-Section ORs	1,050	
Number of C-Section's Performed in Other ORs	1,406	
Total Surgical Cases	9,849	24,567

e) Non-Surgical Cases by Category Table

Enter the number of non-surgical cases by category in the table below. Count each patient undergoing a procedure or procedures as one case regardless of the number of non-surgical procedures performed. Categorize each case into one non-surgical category - the total number of non-surgical cases is an unduplicated count of non-surgical cases. **Count all non-surgical cases, including cases receiving services in operating rooms or in any other location, except do not count cases having endoscopies in GI Endoscopy rooms. Report cases having endoscopies in GI Endoscopy Rooms on page 8.**

Non-Surgical Category	Inpatient Cases	Ambulatory Cases
Pain Management	51	3,753
Cystoscopy	76	408
Non-GI Endoscopies (not reported in 8. c)		
GI Endoscopies (not reported in 8. c)		
YAG Laser		
Other (specify) <u>Non-OR Diagnostic</u>	270	1,288
Other (specify) <u>Non-OR Therapeutic</u>	9,766	11,346
Other (specify)		
Total Non-Surgical Cases	10,163	16,787

All responses should pertain to October 1, 2007 through September 30, 2008.

D. Beds by Service (Inpatient) continued

Number of Swing Beds *	0
Number of Skilled Nursing days in Swing Beds	0
Number of unlicensed observation beds	0

* means a hospital designated as a swing-bed hospital by CMS (Centers for Medicare and Medicaid Services)

E. Reimbursement Source (For "Inpatient Days," show Acute Inpatient Days only, excluding normal newborns.)

Primary Payer Source	Inpatient Days of Care (from p. 4, item D. 1.)	Emergency Visits (from p. 6)	Outpatient Visits (excluding Emergency Visits and Surgical Cases)	Inpatient Surgical Cases (from p.8, Table 8. b)	Ambulatory Surgical Cases (from p. 8, Table 8. b)
Self Pay/Indigent/Charity	1157	9782	1481	70	113
Medicare & Medicare Managed Care	13,665	6693	23046	1057	2168
Medicaid	1988	5327	2144	114	236
Commercial Insurance	339	941	818	33	122
Managed Care	7027	9639	31270	972	5921
Other (Specify)	449	596	1928	100	578
TOTAL	24625	32978	60687	2346	9138

	\$ Amount	% of Total Costs	% of Net Revenues
Unreimbursed Medicaid Costs ⁽¹⁾	2,663,327	1.55	
Unreimbursed Charity Care ⁽¹⁾	5,439,470	3.17	3.09
Bad Debt	6,085,487		3.46

(1) Unreimbursed Medicaid costs and the unreimbursed charity care should come from the hospital's most recent Medicaid Cost Report.

Charity Care Definition: Health care services that never were expected to result in cash inflows. Charity care results from a provider's policy to provide health care services free of charge to individuals who meet certain financial criteria.

Bad Debt Definition: Health care services that were expected to result in cash inflows but written off after unsuccessful efforts to collect the amount owed.

F. Services and Facilities

1. Obstetrics

	Enter Number of Infants
a. Live births (Vaginal Deliveries)	0
b. Live births (Cesarean Section)	0
c. Stillbirths	0
d. Delivery Rooms - Delivery Only (not Cesarean Section)	0
e. Delivery Rooms - Labor and Delivery, Recovery	0
f. Delivery Rooms - LDRP (include Item "m" on Page 4)	0
g. Normal newborn bassinets (Level I Neonatal Services)	0
Do not include with totals under the section entitled Beds by Service (Inpatient)	

2. Abortion Services

Number of procedures per Year 0

All responses should pertain to October 1, 2008 through September 30, 2009.

D. Beds by Service (Inpatient) continued

Number of Swing Beds *	0
Number of Skilled Nursing days in Swing Beds	0
Number of unlicensed observation beds	0

* means a hospital designated as a swing-bed hospital by CMS (Centers for Medicare and Medicaid Services)

E. Reimbursement Source (For "Inpatient Days," show Acute Inpatient Days only, excluding normal newborns.)

Primary Payer Source	Inpatient Days of Care (from p. 4, item D. 1.)	Includes Admits Emergency Visits (from p. 6)	Outpatient Visits (excluding Emergency Visits and Surgical Cases)	Inpatient Surgical Cases (from p.8, Table 8. b)	Ambulatory Surgical Cases (from p. 8, Table 8. b)
Self Pay/Indigent/Charity	5331	13691	11,393	526	1722
Medicare & Medicare Managed Care	13,468	5908	22,683	1201	2273
Medicaid	1843	4708	1923	130	351
Commercial Insurance	253	688	819	39	190
Managed Care	6735	8098	26,759	1006	5794
Other (Specify)	472	573	1287	102	487
TOTAL	28,102	33,666	64,864	3004	10,817

NOTE: Total outpatient visits = emergency 33,666 less admissions 3,163 plus outpatient visits 64,864 plus ambulatory surgical cases 10,817 = 106,184

F. Services and Facilities

1. Obstetrics

	Enter Number of Infants
a. Live births (Vaginal Deliveries)	0
b. Live births (Cesarean Section)	0
c. Stillbirths	1

d. Delivery Rooms - Delivery Only (not Cesarean Section)	0
e. Delivery Rooms - Labor and Delivery, Recovery	0
f. Delivery Rooms - LDRP (include Item "m" on Page 4)	0
g. Normal newborn bassinets (Level I Neonatal Services) Do not include with totals under the section entitled Beds by Service (Inpatient)	0

2. Abortion Services

Number of procedures per Year 0

All responses should pertain to October 1, 2008 through September 30, 2009.

8. Surgical Operating Rooms, Procedure Rooms, Gastrointestinal Endoscopy Rooms, Surgical and Non-Surgical Cases and Procedures (continued)

(Campus – If multiple sites: _____)

d) Surgical Cases by Specialty Area Table

Enter the number of **surgical cases** by surgical specialty area in the table below. Count each patient undergoing surgery as one case regardless of the number of surgical procedures performed while the patient was having surgery. Categorize each case into one specialty area – the total number of surgical cases is an unduplicated count of surgical cases. **Count all surgical cases, including surgical cases operated on in procedure rooms or in any other location.**

Surgical Specialty Area	Inpatient Cases	Ambulatory Cases
Cardiothoracic (excluding Open Heart Surgery)		
Open Heart Surgery (from 7.(b) 4.)		
General Surgery	1062	2175
Neurosurgery	352	552
Obstetrics and GYN (excluding C-Sections)	33	305
Ophthalmology	4	1096
Oral Surgery Dental	0	136
Orthopedics	1415	5817
Otolaryngology ENT	12	461
Plastic Surgery	25	121
Urology	19	117
Vascular	35	23
Other Surgeries (specify) Gastro/Colorectal	47	14
Other Surgeries (specify)		
Number of C-Section's Performed in Dedicated C-Section ORs		
Number of C-Section's Performed in Other ORs		
Total Surgical Cases	3004	10,817

e) Non-Surgical Cases by Category Table

Enter the number of **non-surgical cases** by category in the table below. Count each patient undergoing a procedure or procedures as one case regardless of the number of non-surgical procedures performed. Categorize each case into one non-surgical category – the total number of non-surgical cases is an unduplicated count of non-surgical cases. **Count all non-surgical cases, including cases receiving services in operating rooms or in any other location, except do not count cases having endoscopies in GI Endoscopy rooms. Report cases having endoscopies in GI Endoscopy Rooms on page 8.**

Non-Surgical Category	Inpatient Cases	Ambulatory Cases
* Pain Management	77	4405
** Cystoscopy	52	227
Non-GI Endoscopies (not reported in 8. c)		
GI Endoscopies (not reported in 8. c)		
YAG Laser		
Other (specify)		
Other (specify)		
Other (specify)		
Total Non-Surgical Cases	129	4632

All responses should pertain to October 1, 2008 through September 30, 2009.

D. Beds by Service (Inpatient) continued WakeMed Raleigh New Bern Avenue Only

Number of Swing Beds *	0
Number of Skilled Nursing days in Swing Beds	0
Number of unlicensed observation beds	73

* means a hospital designated as a swing-bed hospital by CMS (Centers for Medicare and Medicaid Services)

E. Reimbursement Source (For "Inpatient Days," show Acute Inpatient Days only, excluding normal newborns.)

Primary Payer Source	Inpatient Days of Care (from p. 4, item D. 1.)	Emergency Visits (from p. 6)	Outpatient Visits (excluding Emergency Visits and Surgical Cases)	Inpatient Surgical Cases (from p.8, Table 8. b)	Ambulatory Surgical Cases (from p. 8, Table 8. b)
Self Pay/Indigent/Charity	5,709	25,270	28,067	545	836
Medicare & Medicare Managed Care	83,708	17,683	43,087	3,358	1,617
Medicaid	40,981	39,541	40,517	2,006	2,267
Commercial Insurance	3,391	3,509	2,354	203	126
Managed Care	36,104	28,627	89,461	2,645	4,831
Other (Specify)	4,153	5,800	5,305	370	575
TOTAL	174,046	120,430	208,791	9,127	10,252

F. Services and Facilities

1. Obstetrics

	Enter Number of Infants
a. Live births (Vaginal Deliveries)	3,859
b. Live births (Cesarean Section)	1,302
c. Stillbirths	41

d. Delivery Rooms - Delivery Only (not Cesarean Section)	0
e. Delivery Rooms - Labor and Delivery, Recovery	1
f. Delivery Rooms - LDRP (include Item "m" on Page 4)	32
g. Normal newborn bassinets (Level I Neonatal Services)	36
Do not include with totals under the section entitled Beds by Service (Inpatient)	

2. Abortion Services

Number of procedures per Year 7

All responses should pertain to October 1, 2008 through September 30, 2009.

8. Surgical Operating Rooms, Procedure Rooms, Gastrointestinal Endoscopy Rooms, Surgical and Non-Surgical Cases and Procedures (continued)**(Campus – If multiple sites: WakeMed Raleigh New Bern Avenue Only)****d) Surgical Cases by Specialty Area Table**

Enter the number of surgical cases by surgical specialty area in the table below. Count each patient undergoing surgery as one case regardless of the number of surgical procedures performed while the patient was having surgery. Categorize each case into one specialty area – the total number of surgical cases is an unduplicated count of surgical cases. **Count all surgical cases, including surgical cases operated on in procedure rooms or in any other location.**

Surgical Specialty Area	Inpatient Cases	Ambulatory Cases
Cardiothoracic (excluding Open Heart Surgery)	427	4
Open Heart Surgery (from 7.(b) 4.)	834	
General Surgery	1,992	2,052
Neurosurgery	837	593
Obstetrics and GYN (excluding C-Sections)	421	1,483
Ophthalmology	0	1
Oral Surgery	30	63
Orthopedics	2,172	2,032
Otolaryngology	369	1,964
Plastic Surgery	108	148
Urology	121	445
Vascular	312	31
Other Surgeries (specify) IP: Cystos; OP: Cystos-496;Endos-17; Podiatry-5	198	518
Other Surgeries (specify) Endoscopies	18	
Number of C-Section's Performed in Dedicated C-Section ORs	1,288	
Number of C-Section's Performed in Other Ors	0	
Total Surgical Cases	9,127	9,334

e) Non-Surgical Cases by Category Table

Enter the number of non-surgical cases by category in the table below. Count each patient undergoing a procedure or procedures as one case regardless of the number of non-surgical procedures performed. Categorize each case into one non-surgical category – the total number of non-surgical cases is an unduplicated count of non-surgical cases. **Count all non-surgical cases, including cases receiving services in operating rooms or in any other location, except do not count cases having endoscopies in GI Endoscopy rooms. Report cases having endoscopies in GI Endoscopy Rooms on page 8.**

Non-Surgical Category	Inpatient Cases	Ambulatory Cases
Pain Management	0	0
Cystoscopy	0	0
Non-GI Endoscopies (not reported in 8. c)	0	0
GI Endoscopies (not reported in 8. c)	0	0
YAG Laser	0	0
Other (specify) Dental	0	918
Other (specify)	0	0
Other (specify)	0	0
Total Non-Surgical Cases	0	918

All responses should pertain to October 1, 2008 through September 30, 2009.

D. Beds by Service (Inpatient) continued WakeMed North HealthPlex Only

Number of Swing Beds *	0
Number of Skilled Nursing days in Swing Beds	0
Number of unlicensed observation beds	0

* means a hospital designated as a swing-bed hospital by CMS (Centers for Medicare and Medicaid Services)

E. Reimbursement Source (For "Inpatient Days," show Acute Inpatient Days only, excluding normal newborns.)

Primary Payer Source	Inpatient Days of Care (from p. 4, item D. 1.)	Emergency Visits (from p. 6)	Outpatient Visits (excluding Emergency Visits and Surgical Cases)	Inpatient Surgical Cases (from p.8, Table 8. b)	Ambulatory Surgical Cases (from p. 8, Table 8. b)
Self Pay/Indigent/Charity	0	7,058	914	0	241
Medicare & Medicare Managed Care	0	3,597	7,445	0	816
Medicaid	0	6,255	1,899	0	200
Commercial Insurance	0	922	426	0	23
Managed Care	0	15,564	20,835	0	2,438
Other (Specify)	0	1,485	712	0	125
TOTAL	0	34,881	32,231	0	3,843

F. Services and Facilities

1. Obstetrics

	Enter Number of Infants
a. Live births (Vaginal Deliveries)	0
b. Live births (Cesarean Section)	0
c. Stillbirths	0

d. Delivery Rooms - Delivery Only (not Cesarean Section)	0
e. Delivery Rooms - Labor and Delivery, Recovery	0
f. Delivery Rooms – LDRP (include Item "m" on Page 4)	0
g. Normal newborn bassinets (Level I Neonatal Services) Do not include with totals under the section entitled Beds by Service (Inpatient)	0

2. Abortion Services

Number of procedures per Year 0

All responses should pertain to October 1, 2008 through September 30, 2009.

8. Surgical Operating Rooms, Procedure Rooms, Gastrointestinal Endoscopy Rooms, Surgical and Non-Surgical Cases and Procedures (continued)

(Campus – If multiple sites: WakeMed North HealthPlex Only)

d) Surgical Cases by Specialty Area Table

Enter the number of **surgical cases** by surgical specialty area in the table below. Count each patient undergoing surgery as one case regardless of the number of surgical procedures performed while the patient was having surgery. Categorize each case into one specialty area – the total number of surgical cases is an unduplicated count of surgical cases. **Count all surgical cases, including surgical cases operated on in procedure rooms or in any other location.**

Surgical Specialty Area	Inpatient Cases	Ambulatory Cases
Cardiothoracic (excluding Open Heart Surgery)	0	0
Open Heart Surgery (from 7.(b) 4.)	0	
General Surgery	0	207
Neurosurgery	0	0
Obstetrics and GYN (excluding C-Sections)	0	210
Ophthalmology	0	733
Oral Surgery	0	5
Orthopedics	0	1,129
Otolaryngology	0	1,181
Plastic Surgery	0	128
Urology	0	32
Vascular	0	0
Other Surgeries (specify) Podiatry-200; Cosmetic-13; Other-5	0	218
Other Surgeries (specify)	0	
Number of C-Section's Performed in Dedicated C-Section ORs	0	
Number of C-Section's Performed in Other ORs	0	
Total Surgical Cases	0	3,843

e) Non-Surgical Cases by Category Table

Enter the number of **non-surgical cases** by category in the table below. Count each patient undergoing a procedure or procedures as one case regardless of the number of non-surgical procedures performed. Categorize each case into one non-surgical category – the total number of non-surgical cases is an unduplicated count of non-surgical cases. **Count all non-surgical cases, including cases receiving services in operating rooms or in any other location, except do not count cases having endoscopies in GI Endoscopy rooms. Report cases having endoscopies in GI Endoscopy Rooms on page 8.**

Non-Surgical Category	Inpatient Cases	Ambulatory Cases
Pain Management	0	444
Cystoscopy	0	0
Non-GI Endoscopies (not reported in 8. c)	0	0
GI Endoscopies (not reported in 8. c)	0	0
YAG Laser	0	0
Other (specify)	0	0
Other (specify)	0	0
Other (specify)	0	0
Total Non-Surgical Cases	0	444

All responses should pertain to October 1, 2008 through September 30, 2009.

D. Beds by Service (Inpatient) continued WakeMed Cary Hospital Only

Number of Swing Beds *	0
Number of Skilled Nursing days in Swing Beds	0
Number of unlicensed observation beds	22

* means a hospital designated as a swing-bed hospital by CMS (Centers for Medicare and Medicaid Services)

E. Reimbursement Source (For "Inpatient Days," show Acute Inpatient Days only, excluding normal newborns.)

Primary Payer Source	Inpatient Days of Care (from p. 4, item D. 1.)	Emergency Visits (from p. 6)	Outpatient Visits (excluding Emergency Visits and Surgical Cases)	Inpatient Surgical Cases (from p.8, Table 8. b)	Ambulatory Surgical Cases (from p. 8, Table 8. b)
Self Pay/Indigent/Charity	1,275	7,999	1,082	84	181
Medicare & Medicare Managed Care	20,632	9,081	10,524	966	2,025
Medicaid	4,717	5,664	2,121	195	293
Commercial Insurance	235	1,078	386	20	47
Managed Care	13,750	18,225	16,047	1,455	4,595
Other (Specify)	318	1,743	578	48	132
TOTAL	40,927	43,790	30,738	2,768	7,273

F. Services and Facilities

1. Obstetrics

	Enter Number of Infants
a. Live births (Vaginal Deliveries)	1,609
b. Live births (Cesarean Section)	833
c. Stillbirths	9

d. Delivery Rooms - Delivery Only (not Cesarean Section)	0
e. Delivery Rooms - Labor and Delivery, Recovery	10
f. Delivery Rooms - LDRP (include Item "m" on Page 4)	26
g. Normal newborn bassinets (Level I Neonatal Services) Do not include with totals under the section entitled Beds by Service (Inpatient)	26

2. Abortion Services

Number of procedures per Year 3

All responses should pertain to October 1, 2008 through September 30, 2009.

8. Surgical Operating Rooms, Procedure Rooms, Gastrointestinal Endoscopy Rooms, Surgical and Non-Surgical Cases and Procedures (continued)

(Campus – If multiple sites: WakeMed Cary Hospital Only)

d) Surgical Cases by Specialty Area Table

Enter the number of surgical cases by surgical specialty area in the table below. Count each patient undergoing surgery as one case regardless of the number of surgical procedures performed while the patient was having surgery. Categorize each case into one specialty area – the total number of surgical cases is an unduplicated count of surgical cases. Count all surgical cases, including surgical cases operated on in procedure rooms or in any other location.

Surgical Specialty Area	Inpatient Cases	Ambulatory Cases
Cardiothoracic (excluding Open Heart Surgery)	2	0
Open Heart Surgery (from 7.(b) 4.)	0	
General Surgery	1,095	2,711
Neurosurgery	5	13
Obstetrics and GYN (excluding C-Sections)	120	1,454
Ophthalmology	3	933
Oral Surgery	12	33
Orthopedics	519	767
Otolaryngology	13	624
Plastic Surgery	16	130
Urology	147	607
Vascular	15	1
Other Surgeries (specify)	0	0
Other Surgeries (specify)	0	
Number of C-Section's Performed in Dedicated C-Section ORs	821	
Number of C-Section's Performed in Other ORs	0	
Total Surgical Cases	2,768	7,273

e) Non-Surgical Cases by Category Table

Enter the number of non-surgical cases by category in the table below. Count each patient undergoing a procedure or procedures as one case regardless of the number of non-surgical procedures performed. Categorize each case into one non-surgical category – the total number of non-surgical cases is an unduplicated count of non-surgical cases. Count all non-surgical cases, including cases receiving services in operating rooms or in any other location, *except* do not count cases having endoscopies in GI Endoscopy rooms. Report cases having endoscopies in GI Endoscopy Rooms on page 8.

Non-Surgical Category	Inpatient Cases	Ambulatory Cases
Pain Management	11	205
Cystoscopy	77	354
Non-GI Endoscopies (not reported in 8. c)	0	0
GI Endoscopies (not reported in 8. c)	8	6
YAG Laser	0	110
Other (specify)	2	541
Other (specify)	0	0
Other (specify)	0	0
Total Non-Surgical Cases	98	1,216

All responses should pertain to October 1, 2008 *thru* September 30, 2009.

Surgical and Non-Surgical Cases

NOTE: Read the following instructions carefully.

Surgical Cases by Specialty Area Table - Enter the number of **surgical cases** by surgical specialty area in the chart below. Count each patient undergoing surgery as one case regardless of the number of surgical procedures performed while the patient was having surgery. Categorize each case into one specialty area - the total number of surgical cases is an unduplicated count of surgical cases. **Count all surgical cases, including surgical cases operated on in procedure rooms or in any other location.**

Surgical Specialty Area	Cases
Cardiothoracic	0
General Surgery	0
Neurosurgery	0
Obstetrics and GYN	0
Ophthalmology	194
Oral Surgery	0
Orthopedics	2,626
Otolaryngology	2,397
Plastic Surgery	0
Urology	159
Vascular	0
Other Surgeries (specify)	PODIATRY 418
Other Surgeries (specify)	
Total Surgical Cases	5,904

Non-Surgical Cases by Category Table - Enter the number of **non-surgical cases** by category in the table below. Count each patient undergoing a procedure or procedures as one case regardless of the number of non-surgical procedures performed. Categorize each case into one non-surgical category - the total number of non-surgical cases is an unduplicated count of non-surgical cases. **Count all non-surgical cases, including cases receiving services in operating rooms or in any other location, except do not count cases having endoscopies in GI Endoscopy rooms. Report cases having endoscopies in GI Endoscopy Rooms on page 5.**

Non-Surgical Category	Cases
Pain Management	2,593
Cystoscopy	
Non-GI Endoscopies (not reported on page 5)	
GI Endoscopies (not reported on page 5)	
YAG Laser	
Other (specify)	
Other (specify)	
Other (specify)	
Total Non-Surgical Cases	

All responses should pertain to October 1, 2008 thru September 30, 2009.

Average Operating Room Availability and Average Case Times:

The Operating Room Methodology assumes that the average operating room is staffed 9 hours a day, for 260 days per year, and utilized at least 80% of the available time. This results in 1872 hours per OR per year. The Operating Room Methodology also assumes 1.5 hours for each Outpatient Surgery.

Based on your facility's experience, please complete the table below by showing the assumptions for the average operating room in your facility.

Average Hours per Day Routinely Scheduled for Use?	Average Number of Days per Year Routinely Scheduled for Use	Average "Case Time" in Minutes for Ambulatory Cases
8.5	261	45

* (Use only Hours per Day routinely scheduled when determining. Example: 2 rooms @ 8 hours per day plus 2 rooms @ 10 hours per day equals 36 hours per day, divided by 4 rooms equals an average of 9 hours / per room / per day.)

** "Case Time" = Time from Room Set-up Start to Room Clean-up Finish. Definition 2.4 from the "Procedural Times Glossary" of the AACD, as approved by ASA, ACS, and AORN. *NOTE: This definition includes all of the time for which a given procedure requires an OR/PR. It allows for the different duration of Room Set-up and Room Clean-up Times that occur because of the varying supply and equipment needs for a particular procedure.*

Reimbursement Source

Primary Payer Source	Number of Cases
Self-Pay/Indigent/Charity	36
Medicare & Medicare Managed Care	1493
Medicaid	579
Commercial Insurance	44
Managed Care	5892
Other (Specify)	453
TOTAL	8497

Exhibit 6

ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

FINDINGS

C = Conforming

CA = Conditional

NC = Nonconforming

NA = Not Applicable

DECISION DATE: August 26, 2009
PROJECT ANALYST: Carol L. Hutchison
TEAM LEADER: Martha J. Frisone

PROJECT I.D. NUMBER: **F-8316-09/** Presbyterian Same Day Surgery Center at Monroe, LLC/
Develop one additional operating room at the multi-specialty ambulatory surgical facility located in Monroe for a total of two operating rooms/ Union County

F-8322-09/ Union Health Services, LLC, Union Regional Medical Center, Inc. d/b/a Carolinas Medical Center-Union, and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas HealthCare System/
Develop one additional operating room at the multi-specialty ambulatory surgical facility in Indian Trail for a total of two operating rooms/ Union 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.

NC

SDSC Monroe

UHS - Union West

The 2009 State Medical Facilities Plan (SMFP) provides a methodology for determining the need for additional operating rooms in North Carolina. The 2009 SMFP establishes a need for one additional operating room in Union County. A competitive review that included two applicants began on June 1, 2009. The two applicants applied for a total of two new operating rooms. The following is a brief description of each of the proposals in this review:

However, the 2009 SMFP operating room need methodology shows a need for only 8.58 ORs in Union County in 2011. There are eight existing or approved ORs in Union County. Thus, there is a need for one additional OR in 2011 [$8.58 - 8 = 0.58$, which is rounded up to 1]. The applicant's need methodology overstates the need for ORs because the methodology does not take into account Union County residents who utilize ORs located in other counties, particularly Mecklenburg County. Moreover, the applicant does not project that any surgical patients currently utilizing Novant Health facilities in Mecklenburg County will shift to SDSC Monroe.

Step 3: Estimate the Total Number of Outpatient Surgical Cases to be Performed on Residents of the Primary Service Area (all providers) by Calendar Year

On page 60, the applicant used the 2008 Union County "outpatient/ambulatory surgical use rate" of 74.3 outpatient surgical cases per 1,000 population to estimate the number of additional dedicated outpatient ORs needed for the residents of the primary service area in CY 2013, as follows:

- 74.3 outpatient surgical cases per 1,000 population times the projected population of the primary service area in CY 2013 (134,224) equals 9,973 outpatient surgical cases in CY 2013 [$74.3 / 1,000 = 0.0743$; $0.0743 \times 134,224 = 9,973$].
- 9,973 outpatient surgical cases times 1.5 hours per outpatient surgical case equals 14,959.5 outpatient surgical hours.
- 14,959.5 outpatient surgical hours divided by 1,872 hours per OR per year equals 8 dedicated outpatient ORs needed in CY 2013 [$14,959 / 1,872 = 7.99$] for the residents of the primary service area.

After subtracting the dedicated outpatient OR at SDSC Monroe and the dedicated outpatient OR under development at UHS Union West, the applicant states there is a need for six additional dedicated outpatient ORs in the primary service area. The applicant's need methodology overstates the need for ORs because the methodology does not take into account Union County residents who utilize ORs located in other counties, particularly Mecklenburg County. Moreover, the applicant does not project that any surgical patients currently utilizing Novant Health facilities in Mecklenburg County will shift to SDSC Monroe.

Further, the applicant used a combined ambulatory surgery facility / hospital outpatient surgical use rate of 74.3 outpatient surgical cases per 1,000 population to project the total number of outpatient surgical cases to be performed but then excluded the hospital's existing shared (inpatient/outpatient) ORs from the inventory in calculating the number of additional dedicated outpatient ORs needed to serve residents of the primary service area. The combined use rate is based, in part, on outpatient surgical cases performed in the shared ORs at CMC-Union. It is possible that some of these procedures would not be performed in an ambulatory surgical facility due to the patient's higher risk for complications. Moreover, the use rate is based on all outpatient surgical cases performed on residents of Union County, not just residents of the primary service area. The applicant did not provide sufficient data in the application to adequately document that the rate at which residents of the primary service area utilize ambulatory surgical facilities is

sufficiently similar to the rate at which residents of Union County as a whole utilize outpatient surgical services in ambulatory surgical facilities and the hospital. For example, the applicant did not provide data to show that the age distribution for the primary service area is similar to the age distribution for Union County as a whole. The age of a population (e.g., the median age of the population, the percentage of the total population age 65 and older, etc.) impacts the type and frequency of surgical services utilized by that population. In addition, although not located physically in the primary service area, the six existing shared ORs in the hospital in Monroe are located within a relatively short driving distance (no more than 10 miles) for some portion of the primary service area population. When the six existing shared ORs at CMC-Union, which are available for use by all primary service area residents are included in the inventory, the applicant's methodology does not show a need for any additional ORs [$8 - (6+2) = 0$] to serve the residents of the primary service area.

To determine the number of dedicated outpatient ORs needed to serve the residents of the primary service area, the applicant should have used the ambulatory surgical facility use rate per 1,000 population which can be calculated from the data provided by the applicant in Exhibit 2, Tables 11, 12, 13, and 14 of the application. The data shows 3,540 outpatient surgical cases were performed in ambulatory surgical facilities in CY 2008, which when divided by the Union County population in CY 2008 (192,452), results in an ambulatory surgical facility use rate of only 18.39 outpatient surgical cases per 1,000 population. Multiplying the 18.39 use rate times the projected primary service area population in CY 2013 (134,224) results in 2,468 ambulatory surgical cases [$18.39 / 1,000 = 0.01839$; $0.01839 \times 134,224 = 2,468.4$], 3,702 ambulatory surgical hours [$2,468 \times 1.5 = 3,702$] and a need for only two dedicated outpatient ORs [$3,702/1,872 = 1.98$] in CY 2013. There is one existing and one approved dedicated outpatient OR located in the applicant's primary service area. Thus, using the ambulatory surgical facility use rate to project utilization, the applicant's methodology shows that no additional dedicated outpatient ORs are needed to serve residents of the primary service area.

Step 4: Determine SDSC Monroe's Market Share for the Primary Service Area

The projected market share in CY 2013 is based on the number of ORs at SDSC Monroe as a percentage of the total number of ORs in Union County [$2 / 9 = 0.222$]. See pages 61 and 62 of the application. In support of its assumption, on pages 62-63 of the application, the applicant states

- *"It is considerably less than current Presbyterian Healthcare's 42.9% market share of residents of the Primary Service Area receiving outpatient surgery in 2008 reflected in Exhibit 2, Table 6.*
- *It is considerably less than current Presbyterian Healthcare's 38.8% market share of all residents of Union County receiving outpatient surgery in 2008 reflected in Exhibit 2, Table 6.*
- *It is considerably less than 57% percent of Union County residents living in the Primary Service Area reflected in Exhibit 2, Table 7.*
- *There currently are only two freestanding ambulatory surgical operating rooms existing and approved in the Primary Service Area reflected in Exhibit 2, Table 7.*

SDSC Monroe incorrectly states that CMC-Union currently has eight ORs. The hospital currently has only seven ORs, one of which will be relocated to UHS Union West. In effect, SDSC Monroe's own analysis, which assumes utilization at CMC-Union will continue to increase at the same rate it increased between 2004 and 2008, shows that CMC-Union is in need of an additional OR.

In summary, the applicant did not adequately identify the population to be served and did not adequately demonstrate that projected utilization is based on reasonable and supported assumptions as discussed above. Therefore, the applicant did not adequately demonstrate the need for the proposed operating room. Consequently, the application is nonconforming with this criterion.

Union Health Services, LLC, Union Regional Medical Center, Inc. d/b/a Carolinas Medical Center-Union, and The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas HealthCare System (UHS-Union West) are proposing to develop one additional OR at their approved ambulatory surgical facility currently under development in Indian Trail. UHS-Union West received certificate of need approval to establish a multispecialty ambulatory surgical facility with one OR on November 3, 2006 (Project I.D. # F-7312-05). Upon approval of this project, the facility would be licensed for two ORs. Union Health Services, LLC is wholly owned by Union Regional Medical Center d/b/a Carolinas Medical Center-Union. CMC-Union will manage UHS-Union West. The ultimate parent company of UHS Union West is The Charlotte-Mecklenburg Hospital Authority.

On page 100, the applicants state

"[T]he proposed project also involves the addition of three pre/post-operative bays that will support the additional operating room. As a result, upon completion of the proposed project, UHS will have a total of nine pre/post-operative and recovery bays for its two operating rooms. The nine proposed pre-operative and recovery spaces are swing rooms capable of providing both pre-operative and recovery functions. This ratio of 4.5 pre/post-operative bays to each operating room is conservative based on recommendations from The American Institute of Architects Academy of Architecture for Health's Guidelines for Design and Construction of Hospital and Health Care Facilities, which suggests a combined ratio of five pre/post operative rooms per operating room."

POPULATION TO BE SERVED

The following table illustrates projected patient origin, during Year Two, as reported by the applicants on page 112 of the application.

Exhibit 7

Sum of Total AttendingPhysName	Detailed Groupings								Grand Total
	Blue Ridge Surgery Center	Rex Healthcare	WakeMed Cary	Durham AmSurg Durham Reg	UNC Hospitals	All Other			
Armour, Edouard F						4			4
Baerman, Kathryn			3	3					6
Bronc, Peter R				6					6
Burns, W Woodro									
Burns, Walter W			16	6					22
Carroll, Raymond M	186	4	8						198
Carroll, Raymond Mmkay	0	0	5						5
Curzan, Mark A	170	2	9						181
Gollehon, Douglas L	160	8	7						175
Kihlstrom, Bruce L				5					5
Martini, Douglas J	163	38	5		1				206
Mathur, Sameer			9						10
Price, Kenneth O				0					0
Price, Kenneth Owen				0					0
Reinke, Derek L	130	5	3						138
Shadduck, Phillip P				5					5
Grand Total	809	57	46	24	20	1	4		961

Source: ThomsonReuters outpatient market database for April 2008 to March 2009. Only includes cases within ThomsonReuters surgery service lines excluding endoscopy cases, circumcision, cysto cases, skin sutures, and other non-surgical cases, according to the Healthcare Cost and Utilization Project procedure classes by ICD-9 CM procedure code. This definition is identical to the one employed in Rex's operating room applications.

Note: Christopher Lin not included as the ThomsonReuters database does not show that this surgeon performed any surgical cases during this time period, which is reasonable given that Dr. Lin is not a surgeon.

Exhibit 8

ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

FINDINGS

C = Conforming

CA = Conditional

NC = Nonconforming

NA = Not Applicable

DECISION DATE: March 28, 2008
FINDINGS DATE: April 2, 2008
PROJECT ANALYST: Helen E. Alexander
CHIEF: Lee B. Hoffman

PROJECT I.D. NUMBER: F-7993-07 KIND Development 50, L.L.C. d/b/a Kindred Hospital Charlotte/Develop a new 60-bed freestanding long term care hospital (LTCH) / 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.

NA

The applicant, KIND Development 50, L.L.C. d/b/a Kindred Hospital Charlotte ("Kindred Charlotte"), proposes to develop a new long term care hospital (LTCH) in Charlotte with 60 long term care hospital beds. The applicant does not propose to increase the number of licensed beds in any category, add services, or acquire equipment for which there is a need determination in the *2007 State Medical Facilities Plan (SMFP)*. Specifically, there is no need methodology or need determination in the *2007 SMFP* for long term care hospital beds. There are also no policies in the *2007 SMFP* that are applicable to development of long term care hospital beds. Therefore, this criterion is not applicable.

- (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

In summary, the applicant failed to adequately demonstrate that the necessary ancillary and support services would be available and that the proposed services would be coordinated with the existing health care system. Therefore, the application is not 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

- (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

NA

- (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.

NC

Kindred Development 50, LLC proposes to construct 67,341 square feet of space to establish a new long term care hospital. Appendix 11 contains a letter dated October 12, 2007, from Phillip Moffion, architect, that states

"Array Healthcare Facilities Solutions, Inc. has reviewed the attached construction estimate for a new 67,341 gross square foot, three (3) story Long Term Acute Care (LTCH) Hospital in Charlotte, North Carolina.

We believe the construction estimate prepared by McCarthy Building Companies, Inc. is an accurate assessment of the cost to construct this project."

The summary sheet attached to the architect's letter indicates a construction cost of \$19,208,867, which includes: \$15,916,282 for the building, site cost of \$646,942, general conditions of \$1,117,710, construction contingency of \$1,237,665, building permits of \$60,000, subsurface investigation of \$10,000; inspection, inspection and testing allowance of \$50,000 and G.L. and Umbrella Insurance of \$170,267. Additional costs include design contingency of \$960,443, architectural/ engineering, civil, and reimbursables of \$1,251,250, design build fee of \$1,499,439 and pre-con allowance of \$80,000. Thus, the total construction cost is projected to be \$23,000,000.

In Section I.8., page 4, the applicant states that the facility will have 10 ICU beds in addition to 50 other long term care hospital beds. However, the design schematic in Appendix 8 shows a total of eight ICU beds and 52 other long term care hospital beds. Further, the applicant's design schematic and Table 4 (E) shows 3,281 square feet of shell space, i.e. space for which there is no stated use. Due to the inconsistencies in the proposed number of ICU beds to be developed and the inclusion of extra unnecessary space, the applicant did not adequately demonstrate that the design and construction costs represent the most reasonable alternative for the services proposed to be provided in the application. Consequently, the application is nonconforming with 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

Exhibit 9

ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

FINDINGS

C = Conforming

CA = Conditional

NC = Nonconforming

NA = Not Applicable

DECISION DATE: April 28, 2008

FINDINGS DATE: May 5, 2008

PROJECT ANALYST: Gene DePorter

ASSISTANT CHIEF: Lee Hoffman

PROJECT I.D. NUMBER: J-8016-07/WakeMed (lessee) and WakeMed Property Services (lessor) d/b/a WakeMed Brier Creek Healthplex/Development of a hospital outpatient department of the WakeMed Raleigh Campus, including an Emergency Department, CT scanner and other diagnostic services, in northwestern Wake County/Wake 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.

NA

WakeMed (lessee) and WakeMed Property Services (WMPS) (lessor) [WakeMed] propose to develop a hospital outpatient department of WakeMed Raleigh Campus, including an Emergency Department, CT scanner and other diagnostic services. The applicants do not propose to increase the number of licensed beds in any category, increase the number of operating rooms, add new services, or acquire equipment for which there is a need determination in the *2007 State Medical Facilities Plan (SMFP)*. Consequently, there are no need determinations or policies in the *2007 SMFP* that are applicable to this project. Therefore, this criterion 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.

NC

The applicants propose to construct 24,257 square feet of new space for the expansion of the emergency department and development of other diagnostic services. Attachment 19 of the application contains a certified cost estimate signed by Richard Beale, AIA, and BBH Design, which states the anticipated construction costs for the project are \$11,380,478 and the anticipated "*soft costs*" are \$23,311,855, for a total project budget of \$34,692,333. The total project budget is consistent with the applicants' projection of a total capital cost of \$34,692,333. In Section XI.7, page 137 of the application, the applicants describe the methods that will be used to maintain efficient energy operations. However, the proposed design of the facility in Exhibit 25 includes a "Bone" room which appears to be for provision of bone densitometry services. However, the applicant does not state in the narrative of the application that these services will be provided. In addition, a second mammography room is shown while the equipment list indicates only one mammography unit to be purchased. Also, a radiology/fluoroscopy room is proposed but no equipment is identified to be acquired for this room. Consequently, the design is not the most reasonable alternative for the services proposed by the applicant. Therefore, the application is not conforming to this criterion.

- (13) The applicants 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 applicants shall show:
 - (a) The extent to which medically underserved populations currently use the applicant's existing services in comparison to the percentage of

Exhibit 10

NC Division of Health Service Regulation

Certificate of Need Section

Letters of Support Submitted for Certificate of Need Applications

To: Interested Parties

From: Lee B. Hoffman, Chief, CON Section

Date: July 10, 2003

The purpose of this memorandum is to clarify procedures relative to acceptance of letters of support for a project after the application has been filed to assure conformance with the Certificate of Need law and administrative rules regarding the written comment period and amendments to the application.

From this date forward, any letters of support or petitions for a project must be received by the CON Section no later than the last day of the written comment period for the application. Any letters or petitions received after that date, including letters and petitions brought to the public hearing, will not be considered by the agency in the review of the project. This procedure is consistent with G.S. 131E-185(1) which states, "Any person may file written comments and exhibits concerning a proposal under review with the department, not later than 30 days after the date on which the application begins review." Additionally, G.S. 131E-185(2) states that at the public hearing "oral arguments may be made regarding the application or applications under review..." Therefore, the law provides for the public to make oral comments at the public hearing. There is no provision in the law allowing the submittal of written comments at the hearing given that it is held more than 30 days after the review begins. However, a speaker may provide the agency a transcript of his/her oral remarks made at the hearing in accordance with G.S. 131E-185(2) which states "any person may submit a written synopsis or verbatim statement that contains the oral presentation made at the hearing." In addition, an applicant may submit a written response or rebuttal to the written comments made on its application, to the Certificate of Need Section at the public hearing.

As has always been the case, please note that nothing contained in oral or written comments can be used to amend (i.e. revise, change or supplement) the application filed with the Certificate of Need Section. Specifically, [10A NCAC 14C .0204](#) [☞] states, "An applicant may not amend an application. Responding to a request for additional information made by the agency after the review has commenced is not an amendment." Therefore, the application cannot be amended with information contained in any letters or materials received during the written comment period or at the public hearing, even if the applicant states in the application that such letters will be submitted. Consequently, all information the applicant intends to rely on to demonstrate conformance of the application with the review criteria must be provided by the applicant in its application when first submitted to the agency.

If you have any questions regarding this matter, please submit them in writing to Lee Hoffman, Certificate of Need Section, to assist the agency in making consistent responses to all inquiries.

[☞] Denotes link to site outside of N.C. DHSR.

This page was last modified on May 27, 2008.

Division of Health Service Regulation

Exhibit 11

ATTACHMENT - REQUIRED STATE AGENCY FINDINGS

FINDINGS

C = Conforming

CA = Conditional

NC = Nonconforming

NA = Not Applicable

DECISION DATE: March 28, 2008

TEAM LEADER: Martha J. Frisone
CHIEF: Lee B. Hoffman

PROJECT I.D. NUMBERS: G-7991-07/ North Carolina Baptist Hospital/ Add 26 new acute care beds for a total of 815 acute care beds upon project completion/ Forsyth County

G-7995-07/ Novant Health, Inc. and Forsyth Memorial Hospital, Inc. d/b/a Forsyth Medical Center/ Add 26 new acute care beds for a total of 816 acute care beds upon completion of this project and Project I.D. #G-7604-06 (develop 39 new acute care beds and relocate 11 existing acute care beds from FMC to establish a satellite campus of FMC in Kernersville)/ Forsyth 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.

C – Both Applications

The 2007 State Medical Facilities Plan (2007 SMFP) includes a methodology for determining the need for additional acute care beds in North Carolina by service area. Application of the need methodology in the 2007 SMFP identified a need for 26 additional acute care beds in Forsyth County. The 2007 SMFP states:

COMPARATIVE ANALYSIS

Pursuant to N.C. Gen. Stat. §131E-183(a)(1), no more than 26 new acute care beds may be approved in this review for Forsyth County. Because the two applicants who propose to develop new acute care beds collectively propose 52 new acute care beds, both applications cannot be approved as proposed. Therefore, after considering all of the information in each application and reviewing each application individually against all applicable review criteria, the Project Analyst also conducted a comparative analysis of the proposals to decide which proposal should be approved. For the reasons set forth below and in the rest of the findings both applications are conditionally approved, but the application submitted by **FMC**, Project I.D. #G-7995-07, is approved to develop only 13 acute care beds and the application submitted by **Baptist**, Project I.D. #G-7991-07, is approved to develop only 13 acute care beds.

Geographic Access

The following table identifies the existing acute care hospitals in Forsyth County.

PROVIDER	CITY	# OF EXISTING AND APPROVED ACUTE CARE BEDS
North Carolina Baptist Hospital	Winston-Salem	789
Forsyth Medical Center	Winston-Salem	790
Medical Park Hospital	Winston-Salem	22
Total		1,601

As shown in the table above, all three hospitals are located in Winston-Salem. Baptist and FMC both propose to add 26 acute care beds to their existing hospitals, which are located approximately 3.8 miles from each other. Neither applicant proposes to expand geographic access to acute care services in Forsyth County by developing acute care services in a new location within the county. Therefore, because both applicants propose to locate the additional acute care beds at their existing hospitals in Forsyth County, the two applications are comparable with regard to geographic access.

Inpatient Charges

In Section X.2 of the application, Baptist and FMC provided the projected daily charge for room and board and the total charge per inpatient day for the first three years of the proposed project. For Baptist, the first three project years are projected to be FY 2009 – FY 2011. For FMC, the first three project years are projected to be FY 2010 –FY 2012.

DAILY ROOM AND BOARD CHARGES

BAPTIST		FMC	
OPERATING YEAR	DAILY ROOM & BOARD CHARGE	OPERATING YEAR	DAILY ROOM & BOARD CHARGE
2009	\$924	2009	NA
2010	\$979	2010	\$389
2011	\$1,038	2011	\$406
2012	NA	2012	\$425

Exhibit 12

ATTACHMENT - REQUIRED STATES AGENCY FINDINGS

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

DECISION DATE: January 28, 2009
FINDINGS DATE: January 30, 2009

PROJECT ANALYST: Michael J. McKillip
ASSISTANT CHIEF: Craig R. Smith

PROJECT I.D. NUMBER: J-8169-08/Rex Hospital, Inc./Add 41 acute care beds at Rex Hospital/Wake County

J-8170-08/Orthopaedic Surgery Center of Raleigh, LLC and Group I Ventures ASC LLC and ASC JV LLC and Rex Orthopedic Ventures, LLC and Rex Hospital, Inc./Construct an ambulatory surgical facility with four surgical operating rooms/Wake County

J-8177-08/Blue Ridge Day Surgery Center, L.P. d/b/a Blue Ridge Surgery Center and Surgical Care Affiliates, LLC/Add two surgical operating rooms to an existing ambulatory surgical facility/Wake County

J-8179-08/WakeMed & WakeMed Property Services/Add two shared surgical operating rooms at WakeMed North Healthplex/Wake County

J-8180-08/WakeMed & WakeMed Property Services/Add 41 acute care beds at WakeMed North Healthplex/Wake County

J-8181-08/WakeMed/Add two shared surgical operating rooms at WakeMed Cary Hospital/Wake County

J-8182-08/Southern Surgical Center, LLC and Southern Surgical Building, LLC/Construct an ambulatory surgical facility with four surgical operating rooms and one minor procedure room/Wake County

J-8190-08/Holly Springs Hospital, LLC and Novant Health, Inc./Construct a new hospital with 41 acute care beds and four surgical operating rooms/Wake County

REVIEW CRITERIA FOR NEW INSTITUTIONAL HEALTH SERVICES

COMPARATIVE ANALYSIS

Pursuant to N.C. General Statute 131E-183(a)(1) and the 2008 SMFP, no more than four operating rooms may be approved for Wake County. Because the six applications in this review propose a total of eighteen operating rooms, all of the applications cannot be approved. Therefore, after considering all of the information in each application and reviewing each application individually against all applicable review criteria, the analyst conducted a comparative analysis of the proposals to decide which proposal should be approved. For the reasons set forth below and in the rest of the findings, the application submitted by OSCR, Project I.D. # J-8170-08, is approved and the other applications are denied.

Geographic Accessibility

The 2008 SMFP identifies a need for four operating rooms for Wake County. The following table identifies the location of the existing and approved operating rooms in Wake County.

Facility	Surgical Facility Type*	Location Within Wake County	City/Town
Blue Ridge Surgery Center	MS	Central	Raleigh
Duke Raleigh Hospital	MS	Central	Raleigh
Raleigh Plastic Surgery	SS	Central	Raleigh
Raleigh Women's Health	SS	Central	Raleigh
Southern Eye Associates	SS	Central	Raleigh
Rex Healthcare of Wakefield **	MS	Northern	N. Raleigh
Rex Hospital	MS	Central	Raleigh
Rex Surgery Center of Cary	MS	Southwestern	Cary
WakeMed Apex Day Surgery**	MS	Southwestern	Apex
WakeMed Cary Hospital	MS	Southwestern	Cary
WakeMed North Healthplex	MS	Northern	N. Raleigh
WakeMed Raleigh Campus	MS	Central	Raleigh

*MS = Multi-specialty; SS = Single-specialty.

**Approved by the Certificate of Need Section, but not currently operational.

In this review, three of the applicants propose to locate additional operating rooms at existing surgical facilities or hospitals: WakeMed North-OR proposes to locate two additional operating rooms at WakeMed North Healthplex, WakeMed Cary-OR proposes to locate two additional operating rooms at WakeMed Cary Hospital, and BRSC proposes to locate two additional operating rooms at the Blue Ridge Surgery Center. Two of the applicants propose to locate the operating rooms in new orthopedic ambulatory surgical facilities: OSCR proposes to develop a new ambulatory surgical facility at to be located at the intersection of Edward Mills Road and Macon Pond Road in Raleigh, and SSC proposes to develop a new ambulatory surgical facility on Meadow Wood Boulevard in Raleigh. However, the proposed OSCR site is located less than one mile and approximately two minutes driving time from Rex Hospital, and the proposed SSC site is

located approximately 1.5 miles and 3 minutes driving time from Duke Raleigh Hospital. HSH proposes to locate the operating rooms in a new hospital to be constructed at 1936 Ralph Stevens Road in Holly Springs in southern Wake County. The proposed Holly Springs site is located approximately 11 miles and 13 minutes driving time from WakeMed Cary Hospital. Therefore, with regard to improving geographic access to the proposed services, the HSH application is determined to be more effective than the other applications in this review.

Demonstration of Need

OSCR, WakeMed North-OR, WakeMed Cary-OR, and SSC adequately demonstrated that the number of surgical cases they projected to perform is reasonable and adequately demonstrated the need the population it proposes to serve has for the proposed operating rooms. BRSC and HSH did not adequately demonstrate the need the population they propose to serve has for the proposed operating rooms. See Criterion (3) and 10A NCAC 14C .2103(b) for discussion.

Financial Feasibility

OSCR, WakeMed North-OR, WakeMed Cary-OR, and SSC adequately demonstrated that the financial feasibility of the proposed project is based upon reasonable projections of costs and revenues. See Criterion (5) for discussion. BRSC and HSH failed to adequately demonstrate that the financial feasibility of the proposed project is based upon reasonable projections of costs and revenues. See Criterion (5) for discussion.

Coordination with Existing Health Care System

OSCR, BRSC, WakeMed North-OR, WakeMed Cary-OR, and SSC adequately demonstrated that the project will be coordinated with the existing healthcare system. HSH did not adequately demonstrate that the project will be coordinated with the existing healthcare system. See Criterion (8) for discussion.

Access by Underserved Groups

The following table illustrates each application's projected percentage of surgical services to be provided to Medicaid and Medicare recipients in the second year following completion of the project, as stated by the applicants in Section VI.14 of the applications.