

March 21, 2014

VIA ELECTRONIC MAIL

Mr. Jerry Parks, Chairman
North Carolina State Health Coordinating Council
c/o Division of Health Service Regulation
Medical Facilities Planning Branch
2714 Mail Service Center
Raleigh, NC 27699-2714

Re: Comments Opposing Petition Filed by Rex Healthcare to Change the Cardiac Catheterization Need Determination Methodology

Dear Mr. Parks and Members of the State Health Coordinating Council:

WakeMed appreciates the opportunity to comment on the petition filed by Rex Healthcare to change the Cardiac Catheterization Need Determination Methodology for the 2015 State Medical Facilities Plan (SMFP). For the reasons outlined below, WakeMed believes this petition should be denied.

Rex seeks to impose significant changes to the Cardiac Catheterization Need Determination Methodology, particularly in Steps 5 and 6, and adds a section for "Qualified Applicants" that would exclude any facility from applying from a need determination in its service area that does not perform at least 1,200 diagnostic-equivalent procedures per unit of equipment.

This request is at best premature, and at worst may never be needed. Cardiac catheterization volume trends are declining, and this petition would unnecessarily modify the methodology.

Cardiac Catheterization Volumes Declining

Based on information provided in annual License Renewal Applications, the number of cardiac catheterization procedures has been declining in recent years both statewide and in Wake County. In 2009, a total of 114,740 weighted, diagnostic-equivalent cardiac catheterization procedures¹ were performed in North Carolina facilities. In 2013, total volume had declined to 108,486, a 5.5 percent decrease. Total diagnostic-equivalent cardiac catheterizations have decreased statewide each year since peaking in 2010. Please see Attachment 1. Based on 2013 utilization, no cardiac catheterization equipment service area in the state will generate need for additional cardiac cath equipment in the 2015 SMFP.

Among Wake County facilities, diagnostic-equivalent cardiac catheterization volume *declined* 14.5 percent from 2009-2013. Mirroring the statewide trend, total cardiac catheterization procedures have also decreased each year since 2010. Please see the following table.

¹ Diagnostic cardiac catheterizations weighted at 1.00, interventional cardiac catheterizations weighted at 1.75, pediatric cardiac catheterizations weighted at 2.00.

Diagnostic-Equival	ent Cardiac	Tab Catheteriz 2009-	ation Volu	mes at Wa	ke County	Facilities	
Facility	2009	2010	2011	2012	2013	Percent Change 2009-13	CAGR 2009-13
Duke Raleigh Hospital	770	967	701	366	447	-41.9%	-12.7%
Rex Hospital	3,489	3,002	3,132	3,875	5,029	44.1%	9.6%
WakeMed Cary Hospital	325	382	325	282	222	-31.7%	-8.3%
WakeMed Raleigh Campus	12,108	12,618	12,130	10,535	8,570	-29.2%	-9.1%
Total	16,692	16,969	16,288	15,058	14,268	-14.5%	-3.8%

Source: 2010-2014 License Renewal Applications

Wake County's hospitals operate a total of 17 units of fixed cardiac catheterization equipment. Based on 2013 utilization, the aggregate Wake County Service Area need is for 11.89 units, a surplus of 5 units when rounded to the nearest whole number. Please see the following table.

		Table 2			
2013 Cardiac Catheterization	on Equipment	Inventory and		ke County Ser	
		2013	Utilization		Units
		Diagnostic-	Based on		Required
	Planning	Equivalent	1,200	Procedures	at 80%
Facility	Inventory	Procedures	Procs/Unit	Per Unit	Utilization
Duke Raleigh Hospital	3	447	10%	149.0	0.37
Rex Hospital	4	5,029	84%	1257.3	4.19
WakeMed Cary Hospital	1	222	15%	222.0	0.19
WakeMed Raleigh Campus	9	8,570	63%	952.2	7.14
Total	17	14,268	56%	839.3	11.89

Source: 2014 License Renewal Applications

The declines in cardiac catheterization utilization in Wake County and in North Carolina are also being experienced nationally, and are projected to continue. The Advisory Board Company projects that inpatient cardiac cath procedure volumes will decrease 22 percent nationally from 2012-2017, and that outpatient cardiac caths will decline 7 percent. Percutaneous coronary intervention volumes are projected to decline 15 percent over the same period.²

Rex Healthcare's Cardiac Catheterization Equipment Can Absorb Additional Volume

While Rex's 2013 utilization suggests that it currently needs 4.19 units of cardiac catheterization equipment, this equates to 83.8 percent utilization, based on capacity of 1,500 weighted diagnostic-equivalent procedures per unit [calculation: 5,029 diagnostic-equivalent procedures \div (1,500 x 4) = 0.838]. This is the first year Rex's cardiac catheterization equipment utilization has exceeded its

² Source: Cardiovascular Market Trends for 2014, The Advisory Board Company, Cardiovascular Roundtable & Service Line Strategy Advisor, published March 10, 2014, accessed at: http://www.advisory.com/Research/Service-Line-Strategy-Advisor/Resources/2014/Cardiovascular-Market-Trends, 3/19/2014.

planning inventory since 2006, and is its highest diagnostic-equivalent procedure volume since 2004. Please see the following table.

		Tab			
	Rex Hospital (Cardiac Catheter	ization Utiliza	tion, 2004-20	13
	Cardiac		Units		
	Cath	Weighted	Required		Cath
	Planning	Cardiac Cath	at 80%	Percent	Procedures
Year	Inventory	Procedures	Utilization ³	Utilization ⁴	Per Unit
2004	3	4,206	3.51	93.5%	1,402
2005	3	3,897	3.25	86.6%	1,299
2006	3	4,015	3.35	89.2%	1,338
2007	3	3,557	2.96	79.0%	1,186
2008	3	3,581	2.98	79.6%	1,194
2009	4	3,489	2.91	58.2%	872
2010	4	3,002	2.50	50.0%	751
2011	4	3,132	2.61	52.2%	783
2012	4	3,875	3.23	64.6%	969
2013	4	5,029	4.19	83.8%	1,257

Sources: 2006-2013 SMFPs, 2014 License Renewal Application

Rex has operated at higher utilization in prior years, and has indicated that it could do so with its current inventory of cardiac cath equipment. In its response to comments filed during the 2011 Wake County Acute Care Bed CON Review, Rex indicated that its cardiac catheterization lab utilization could be extended well beyond its current utilization. As evidenced in the passage below, Rex acknowledges that it believes it can operate its cardiac catheterization equipment well above the 80 percent threshold:

Moreover, Rex is currently taking immediate steps to increase its cardiac cath capacity by implementing its approved fourth cardiac cath on an interim basis in administrative space and by extending cath lab hours to 9 pm. These actions will allow Rex to achieve greater cath capacity than WakeMed has assumed at an earlier date. While WakeMed contends that 1,500 procedures per lab is the maximum capacity, its historic experience as well as that of other providers suggests that cath labs can operate well above that level:

Year	Facility	Weighted	Current Cath	Weighted Procedures
		Procedures	Lab Inventory	per Lab
2008	High Point Regional	8,443	4	2,110
2008	New Hanover Regional	6,421	3	2,140
2007	Frye Regional	5,727	3	1,909
2007	New Hanover Regional	6,189	3	2,063
2006	Frye Regional	5,353	3	1,784
2006	New Hanover Regional	5,975	3	1,991
2005	WakeMed	11,984	7	1,712
2005	Frye Regional	4,593	2	2,296

³ Calculation: [Weighted cardiac cath procedures ÷ 1,200].

⁴ Calculation: [Weighted cardiac cath procedures ÷ (Cardiac cath planning inventory x 1,500)].

Source: 2007 to 2010 SMFPs

In addition, WakeMed has projected or exhibited greater than 100 percent utilization of similar assets in prior CON applications. In the 2010 WakeMed Cary OR Application (Project ID# J-8463-10), WakeMed Raleigh projected, on page 68, to provide 31,319 surgical hours in 2015 with 13 ORs or over 100 capacity as defined in the SMFP (103 percent = 31,319 \div 9 hours per day \div 260 days per year \div 13 ORs).

Table II.31 WakeMed Raleigh Campus Surgery Hours and Operating Rooms Needed, FYs 2013-2015 Excluding Cases Performed in Dedicated Open Heart ORs, Trauma Cases, and Cases Performed in Dedicated C-Section Rooms ORs IP OP IP OP Needed Current Cases Cases (Total OR Hours Hours Surgical (from (from Hrs ÷ Surplus/ (Cases (Cases Total Total Table Table Inventory¹² (Deficit) Fiscal Year x 1.5)Cases Hours 1872) x 3.0)11.27) 11.27)

11,432

11,925

12,428

28,808

30,051

31,319

15.4

16.1

16.7

See page 68.

7,774

8,109

8,451

23,321

24,327

25,353

3,658

3,816

3,977

2013

2014

2015

Similarly, in its 2007 application to add one cardiac cath unit (Project ID# J-8018-07), WakeMed stated that had been operating its cardiac cath equipment above 100 percent of capacity for four years:

5,487

5,724

5,966

Cardiac Catheterization Utilization at WakeMed Raleigh Campus Using Data from Hospital License Renewal Application

Counting only the diagnostic and interventional cardiac catheterization procedures recognized in the annual Hospital License Renewal Application, utilization of cardiac catheterization equipment at WakeMed Raleigh Campus has been consistently high in recent years. WakeMed Raleigh Campus's cardiac catheterization diagnostic-equivalent procedure utilization was above 95% of capacity as defined by the State since 2000, and was over 100% capacity from 2000-2004. Please see the following table.

See page 45.

Given that there is significant evidence that other providers have exceeded the maximum capacity that WakeMed assumes and maintained that level of utilization over time, Rex believes it too can provide more than 1,500 diagnostic equivalent procedures per lab, if necessary. Rex recognizes that this is not ideal, but as the historic utilization of other providers shown above demonstrates, it can be achieved and will be achieved in order to treat Rex's patients. If Rex

(2.4)

(3.1)

(3.7)

13

13

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Comments Regarding Rex Healthcare Petition to Modify Cardiac Catheterization Need Determination Methodology

operates at such a high level of utilization, then a need for additional cardiac cath labs in Wake County would be generated and Rex would apply to develop those resources.⁵
[emphasis added]

Please see Attachment 2 for the pages referenced above.

In a deposition taken during the Contested Case that followed the Wake County Acute Care Bed Review, a consultant for Rex Healthcare provided his opinions regarding "capacity" of cardiac catheterization equipment:

Page 113 And this approach is taken for -- in three 11 12 different iterations. The next is Pages 228580 and 228581 with the distinguishing factor being 13 14 the capacity of a cath lab. In this -- the next 15 page you'll see on Page -- in Table 5 Column C, we've identified the capacity of a cath lab to be 16 17 1,712. And that is referenced in the Agency -- references the Agency file on Page 854, 18 19 which is our response to comments. And that is actually what WakeMed has achieved in 2005. So 20 21 WakeMed in 2005 provided 1,712 caths per lab. Using that analysis, we show the occupancy 22 rates below average. There's not much 23 distinguishing factors between that. 24 Page 114 The final analysis uses the cath 2 capacity -- I'm sorry, the capacity of a cath lab from Frye Regional in the same year that we are 3

[emphasis added]

4

Please see Attachment 3 for the pages referenced above.

discussing for WakeMed, 2,296 caths per lab.6

⁵ Excerpted from "Response to Comments on Rex Hospital's CON Applications to Develop Additional Acute Care Beds in Wake County (Project Nos. J-8667-11, J-8669-11 and J-8670-11)", submitted to Certificate of Need Section June 20, 2011, pages 15-16.

⁶ Excerpted from the deposition of Nathan Marvelle, March 6, 2012, pages 113-114, in Case Nos. 11 DHR 12727, 11 DHR 12795 and 11 DHR 11796, filed at the Office of Administrative Hearings.

This testimony, along with comments made by Rex during the 2011 Wake County Acute Care Bed CON Review, makes it apparent that Rex believes the capacity of a cardiac catheterization lab may be 1,712-2,296 procedures per unit. It is clear that Rex believes it can operate its cardiac cath equipment well above the State's definition of capacity (1,200 diagnostic-equivalent procedures). Modification of the SMFP's Cardiac Catheterization Need Determination Methodology when Rex has been utilized above 80 percent for only one year is premature and unnecessary.

Proposed Modification to Methodology Would Only Benefit Rex Healthcare

Petitions filed during the Spring for consideration for the next year's SMFP are typically reserved for requests that involve changes in policies or methodologies that may have a statewide effect, which the SHCC and its committees have the opportunity to consider during the planning year. Upon closer analysis of Rex Healthcare's proposed modifications to the Cardiac Catheterization Need Determination Methodology, it becomes apparent that Rex would be the only likely beneficiary of the changes. For counties with more than one provider of fixed cardiac catheterization, Rex was the only provider with utilization of greater than 1,200 procedures per unit (see Attachment 1). If adopted as proposed, Rex's modifications of the Cardiac Catheterization Need Determination Methodology would preclude all providers in Wake County, except Rex, from even applying for additional cardiac cath equipment.

Rex's assertion on page 5 that "it is unlikely that that many providers will generate a need in the near future" casts into doubt why this petition is being proposed in the first place. Over the last five years, only 4 units of fixed cardiac catheterization equipment have been allocated statewide in the annual SMFPs — only *one* of these allocations resulted from a need determination generated through the Cardiac Catheterization Need Determination Methodology (Craven/Jones/Pamlico Service Area - 2013 SMFP). In 2013, New Hanover Regional Medical Center filed a petition for an Adjusted Need Determination to eliminate the allocation of one unit of cardiac cath equipment for New Hanover County.

Approval of Petition Would Have Adverse Effects

The Rex petition represents an unnecessary modification to a need methodology that has served the State well in its current iteration. According to Rex on page 6, "[a] provider could operate above the utilization standards indefinitely and not be able to acquire additional capacity, if another provider in its community was sufficiently underutilized." Rex further contends that filing a petition for an adjusted need determination "would, at best, result in a one-time allocation and would fail to address the problematic aspects of the current methodology" and "would not address potential issues in other counties or issues that arise in future years" (page 7). These are precisely the circumstances that are typically addressed by petitions for adjusted need determination.

The proposed Step 6(a) would trigger a need determination in a service area in the next year's SMFP when a *single provider* calculates a deficit threshold of 0.1 or greater. There are inherent problems with this step. First, a provider need have only one year of sufficiently high utilization to trigger the need determination, regardless of their utilization in prior years. Second, the 0.1 deficit threshold is barely above 80 percent utilization, particularly if a provider has several cath labs. The current methodology sums the number of machines required for *all facilities* in a service area (rounding to the nearest whole number), then subtracts that number from the total planning inventory for the service area to determine number of units of cardiac catheterization equipment needed.

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The proposed addition of "Qualified Applicants" effectively shuts out any potential applicant for a need allocation save for the provider that created the need determination. If adopted, this would create a form of inequity with "haves" and "have-nots" — essentially, providers with lower utilization would likely never generate sufficient volume to create a need determination of their own, and they would not be eligible to apply for the need determinations generated by other providers. The obvious by-product of this change would perpetuate underutilization of existing equipment and unnecessary duplication of resources.

The reality is that, given the trend of declining fixed cardiac catheterization equipment utilization locally and nationally, Rex's petition is unnecessary. Modification of the need methodology would have no impact on cost, quality or value. Physicians can and do perform procedures in more than one facility in a service area.

Summary

In conclusion, the Rex Healthcare petition would do little, if anything, to improve access to fixed cardiac catheterization in North Carolina. The petition is unnecessary, untimely, seeks to correct a problem that does not exist, and represents bad health policy. WakeMed respectfully requests that the petition be denied. Thank you for your consideration of these comments. If you have questions or require additional information, please call me at 919-350-8108.

Sincerely,

W. Stan Taylor

Vice President, Corporate Planning

Diagnostic-Famiyalent Car	Diagnostic-Faujvalent Cardiac Catheterization Procedures by Service Area and Eacility	a and Facili	}						ПА	ATTACHMENT 1
2009-2013		3	<u>.</u>							
Includes Adult & Pediatri		ary Interve	ntions	-						
sources: 2014 State Med	Sources: 2014 State Medical Facilities Plan (Tables 9S, 9T and 9V), 2014 License Renewal Applications on file at DHSR	cense Rene	wal Applic	ations on	file at DF	SR				
						*	Percent Change,	CAGR.	2013 Planning	2013 Units Reg. at 80%
Service Area	Facility	2009	2010	2011	2012	2013	2009-13	2009-13	=	
Alamance	Alamance Regional Medical Ctr.	1,222	1,398	1,133	1,109	1,007	-17.6%	-4.7%	1	0.84
Buncombe/Graham/ Madison/Yancey	Mission Hospital	5,818	5,586	5,485	5,492	5,238	-10.0%	-2.6%	9	4.37
Burke	CMC-Blue Ridge	393	795	426	266	453	15.3%	3.6%	,	0.38
Cabarrus	CMC-NorthEast	2,067	2,238	2,414	2,172	2,103	1.7%	0.4%	2	1.75
Caldwell	Caldwell Memorial Hospital	331	190	91	169	323	-2.4%	-0.6%	1	0.27
Catawba	Catawba Valley Medical Ctr.	549	445	440	555	658	19.9%	4.6%		0.55
Total for Service Area	ri ye neglorial ivledical cit.	5,720	5,918	5,052	5,217	5,066	-11.4%	-3.9%	4 2	3.67
Cleveland	Cleveland Regional Medical Ctr.	396	333	305	194	302	-23.0%	-6.3%	H	0.25
Craven/Jones/ Pamlico	Carolina East Medical Ctr.	2,306	2,722	3,205	2,538	2,304	-0.1%	0.0%	æ	1.92
Cumberland	Cape Fear Valley Medical Ctr.	3,558	3,405	3,800	4,005	3,906	9.8%	2.4%	ю	3.26
Durham/Caswell	Duke Regional Hospital Duke University Hospital	1,164	1,046	1,015	958	834	-28.4%	-8.0%	2 7	0.70
Total for Service Area		7,860	8,497	8,247	8,324	7,573	-3.7%	-0.9%		9
Forsyth	North Carolina Baptist Hospital	3,376	3,129	3,268	3,176	3,361	-0.4%	-0.1%	2	2.80
Total for Service Area	Novant Health Forsyth Medical Ctr.	5,667	5,101	4,550	4,511	4,612	-18.6%	-5.0%	,	3.84
i Otal IOI Sel Vice Allea		9,043	8,230	7,818	/89′/	1,973	-11.8%	-3.1%	FT	
Gaston	Caromont Regional Medical Ctr.	3,672	4,100	3,766	3,929	3,188	-13.2%	-3.5%	4	2.66

									ATT.	ATTACHMENT 1
Diagnostic-Equivalent Ca	Diagnostic-Equivalent Cardiac Catheterization Procedures by Service Area and Facility מחסב מחזי	ea and Facil	lity							
Includes Adult & Pediatr	Includes Adult & Pediatric Diagnostic Cardiac Caths, Percutaneous Coronary Interventions	nary Interv	entions							
Sources: 2014 State Med	Sources: 2014 State Medical Facilities Plan (Tables 9S, 9T and 9V), 2014 L	9V), 2014 License Renewal Applications on file at DHSR	ewal Appli	cations or	i file at Di	1SR				
							Percent Change,	CAGR,	2013 Planning	2013 Units Req. at 80%
Service Area	Facility	2009	2010	2011	2012	2013	2009-13	2009-13		CEII.
Guilford	Cardiovascular Diagnostic Ctr.	992	970	891	837	830	-16.3%	-4.4%		0.69
	Cone Health	5,044	5,261	5,793	5,701	5,245	4.0%	1.0%	7	4.37
	Greensboro Heart & Sleep Ctr. [CLOSED]	464	302	120	0	0	-100.0%	-100.0%	0	0.00
	High Point Regional Health	5,552	5,252	4,870	4,371	3,973	-28.4%	-8.0%		3.31
Total for Service Area		12,052	11,785	11,674	10,909	10,048	-16.6%	-4.4%	12	8
Halifax/Northamnton	Halifay Regional Medical Ctr	83	20	103	00	OF.	15 70/	/00 /	,	000
		3	3	707	3	2	0//:СТ-	0/7:4-	-1	00.0
Haywood	MedWest Haywood	171	276	308	299	226	32.2%	7.2%	1	0.19
Henderson	Margaret Pardee Memorial Hosp.	165	168	158	91	102	-38.2%	-11.3%	П	0.09
Iredell	Davis Regional Medical Ctr.	258	153	432	407	441	%6 0Z	14.3%	_	75.0
	Iredell Memorial Hosp.	814	806	1,445	1,281	1,194	46.7%	10.1%		1.00
	Lake Norman Regional Medical Ctr.	126	77	23	44	53	-57.9%	-19.5%	Н	0.04
Total for Service Area		1,198	1,036	1,900	1,732	1,688	40.9%	9.0%	3	1
Johnston	Johnston Memorial Hosp.	442	472	292	434	576	30.3%	6.8%	H	0.48
lee	Central Carolina Hospital	0	0	0	0	186	NA	NA	1	0.16
Lenoir	Lenoir Memorial Hosp.	357	439	328	254	781	118.8%	21.6%	ਜ	0.65
Mecklenburg	Carolinas Medical Center	7,657	7,281	7,302	5,929	6,478	-15.4%	-4.1%	7	5.40
	CMC-Mercy/Pineville	1,527	1,758	2,195	2,394	3,552	132.6%	23.5%	4	2.96
	CMC-University	153	121	89	87	39	-74.5%	-28.9%	Н	0.03
	Novant Health Matthews Medical Ctr.	266	584	069	786	765	35.2%	7.8%	Н	0.64
	Novant Health Presbyterian Medical Ctr.	3,967	4,289	3,638	3,770	3,447	-13.1%	-3.5%	4	2.87
Total for Service Area		13,870	14,033	13,893	12,966	14,281	3.0%	0.7%	17	12
Moore	FirstHealth Moore Regional Hosp.	6,331	6,243	4,723	5,238	5,340	-15.7%	-4.2%	2	4.45

Service Area Percent Applications on file at DHSR Percent	Disanostic-Famiyalont Car	cov Corner of Decoding by Souries	illoca Pac							TTA	ATTACHMENT 1
Area Facilities Plan (Tables 95, 97 and 9V), 2014 License Relevant Applications on file at DHSR Area Facility 2004 License Relevant Applications on file at DHSR Nash General Hospital 754 2009 14,434 1,495 1,334 76,98 15,3% 15,	2009-2013 Includes Adult & Pediatria	Diagnostic Cardiac Caths, Percutaneous Coronar	y lotery	y.							
Area Facility 2009 2010 2011 2012 2013 Change, Coffe, Change, Coffe, Change, Cha	Sources: 2014 State Med	cal Facilities Plan (Tables 9S, 9T and 9V), 2014 Lice	nse Renev	val Applic	ations on	file at DH	SR				
Nash General Hospital (Critical Center)								Percent Change,	CAGR,	2013 Planning	I
Nash General Hospital 754 709 1,434 1,495 1,334 76.9% 15.3% 2 New Hannover Regional Medical Ctr.	Service Area	racility	5002	2010	2011	2012	2013	2009-13	2009-13	Inventory) CŒÎI
New Hanover Regional Medical Ctr. 6,554 6,641 6,596 7,172 6,456 1,16% 0.04% Service Area Wilmington Heart Center (ZLOSED) 977 916 386 0 10 0 100.0% 1,00.0% 0 0 0 100.0% 1,00.0% 0 0 0 0 100.0% 1,00.0% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nash	Nash General Hospital	754	402	1,434	1,495	1,334	%6.92	15.3%	2	1.11
Novant Health Regional Medical Ctr. Novant Health Regional Medical Ctr. Scotland Memorial Hospital State Conc. Union C	New Hanover	New Hanover Regional Medical Ctr.	6,564	6,641	965'9	7,172	6,456	-1.6%	-0.4%	5	5.38
Onslow Memorial Hospital 45 16 17 1 0 -100.0% -100.0% 1 uNC Hospitals 3,443 3,469 3,581 3,982 3,400 -1.2% -0.3% 4 ank/Camden/ Albemarle Hospital 860 789 791 964 922 7.2% 1.8% 1 uNc and phy Hospital 7 2 3 3 1 -85.7% -38.5% 1 uNc ant Health Rowan Medical Ctr. 1,188 924 1,363 1,532 1,603 34.9% 7.8% 7.8% 1 und Rutherford Regional Medical Ctr. 701 629 724 719 634 99.6% 7.2% 11.1% 1 und Scotland Memorial Hospital 0 0 36 502 429 NA NA 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 -100.0% -100.0% 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 -100.0% -100.0% 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 -100.0% -20.5% 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 -100.0% -20.3% -8.6% 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 -100.0% -20.3% -8.6% 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 -100.0% -20.3% -8.6% 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 -100.0% -20.3% -8.6% 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 -100.0% -20.3% -8.6% 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 0 -100.0% -20.3% -8.6% 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 0 -100.0% -20.3% -8.6% 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 0 -100.0% -20.3% -8.6% 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 0 -100.0% -20.3% -8.6% 1 und Stanly Regional Medical Ctr. 29 2 23 7 0 0 0 -100.0% -20.3% -8.6% 1 und Stanly Regional Medical Ctr. 29 2 23 7 24 21 20.3% -8.6% 1 und Stanly Regional Medical Ctr. 29 2 23 7 24 21 20.3% -8.6% 1 und Stanly Regional Medical Ctr. 29 2 23 7 24 21 20.3% -8.6% 1 und Stanly Regional Medical Ctr. 20 2 23 23 7 24 21 20.3% -8.6% 1 und Stanly Regional Medical Ctr. 20 2 23 23 23 23 23 23 23 23 23 23 23 23 2	Total for Service Area	Wilmington Heart Center (CLOSED)	7.541	916	386	7.172	6.456	-100.0%	-100.0%	0 5	0.00
UNC Hospitals Albemarle Hospitals Albemarle Hospital Red Albemarle Hospital Red Albemarle Hospital Rendolph Hospital Albemarle Hospital	Onslow	Onslow Memorial Hospital	45	16	17	H	0	-100.0%	-100.0%	1	0.00
tank/Camden/ Ick/Perquimans Albemarle Hospital 860 789 791 964 922 7.2% 1.8% 1 Ick/Perquimans Vidant Medical Center 5,131 5,428 5,056 4,813 4,439 -13.5% -3.6% 7 Iph Randolph Hospital 7 2 3 3 1 -85.7% -38.5% 1 In Novant Health Rowan Medical Ctr. 1,188 924 1,363 1,592 1,603 34.9% 7.8% 2 Individual Rutherford Regional Medical Ctr. 701 629 724 719 634 -9.6% -2.5% 1 Individual Scotland Memorial Hospital 0 0 36 502 429 NA NA 1 Individual Stanly Regional Medical Ctr. 29 23 7 0 -100.0% 100.0% 1 Individual 379 489 536 411 264 -30.3% -86% 1	Orange	UNC Hospitals	3,443	3,469	3,581	3,982	3,400	-1.2%	-0.3%	4	2.83
Ick/Perquimans Albemarle Hospital 860 789 791 964 922 7.2% 1.8% 1 Iph Randolph Hospital 7 2 3 3 1 -85.7% -38.5% 7 Iph Randolph Hospital 7 2 3 3 1 -85.7% -38.5% 1 Iph Rutherford Regional Medical Ctr. 1,188 924 1,532 1,603 34.9% 7.8% 2 Iph Novant Health Rowan Medical Ctr. 701 629 724 719 634 -9.6% -2.5% 1 Iph Rutherford Regional Medical Ctr. 42 20 70 39 64 52.4% 11.1% 1 Idea Scotland Memorial Hospital 0 0 36 502 429 NA NA 1 Idea Stanly Regional Medical Ctr. 29 23 7 0 -100.0% -100.0% 1 CMC-Union 379 489	Pasquotank/Camden/			·2							
Product Medical Center 5,131 5,428 5,056 4,813 4,439 -13.5% -3.6% 7 Iph Randolph Hospital 7 2 3 3 1 -85.7% -38.5% 1 In Southeastern Regional Medical Ctr. 1,188 924 1,363 1,603 34.9% 7.8% 2 In Novant Health Rowan Medical Ctr. 701 629 724 719 634 -9.6% -2.5% 1 Indicator Rutherford Regional Medical Ctr. 42 20 70 39 64 52.4% 11.1% 1 Indicator Scotland Memorial Hospital 0 0 36 502 429 NA NA NA Indicator Stanly Regional Medical Ctr. 29 23 7 0 -100.0% -100.0% 1 CMC-Union 379 489 536 411 264 -30.3% -8.6% 1	Currituck/Perquimans	Albemarle Hospital	860	789	791	964	922	7.2%	1.8%	1	0.77
Iph Randolph Hospital 7 2 3 3 1 -85.7% -38.5% 1 on Southeastern Regional Medical Ctr. 1,188 924 1,363 1,532 1,603 34.9% 7.8% 2 1 Novant Health Rowan Medical Ctr. 701 629 724 719 634 -9.6% -2.5% 1 ford Rutherford Regional Medical Ctr. 42 20 70 39 64 52.4% 11.1% 1 nd Scotland Memorial Hospital 0 0 36 502 429 NA NA NA 1 cMC-Union 379 489 536 411 264 -30.3% -8.6% 1	Pitt	Vidant Medical Center	5,131	5,428	2,056	4,813	4,439	-13.5%	-3.6%	7	3.70
Southeastern Regional Medical Ctr. 1,188 924 1,363 1,532 1,603 34.9% 7.8% 2 Interpretation of the construction	Randolph	Randolph Hospital	7	7	m	m	П	-85.7%	-38.5%	1	0.00
Indexesting the spiral Medical Ctr. 701 629 724 719 634 -9.6% -2.5% 1 ford Rutherford Regional Medical Ctr. 42 20 70 39 64 52.4% 11.1% 1 nd Scotland Memorial Hospital 0 0 36 502 429 NA NA 1 Stanly Regional Medical Ctr. 29 23 7 0 -100.0% -100.0% -100.0% 1 CMC-Union 379 489 536 411 264 -30.3% -8.6% 1	Robeson	Southeastern Regional Medical Ctr.	1,188	924	1,363	1,532	1,603	34.9%	7.8%	2	1.34
ford Rutherford Regional Medical Ctr. 42 20 70 39 64 52.4% 11.1% 1 nd Scotland Memorial Hospital 0 0 36 502 429 NA NA 1 stanly Regional Medical Ctr. 29 23 7 0 0 -100.0% -100.0% 1 CMC-Union 379 489 536 411 264 -30.3% -8.6% 1	Rowan	Novant Health Rowan Medical Ctr.	701	629	724	719	634	%9.6-	-2.5%	1	0.53
nd Scotland Memorial Hospital 0 0 36 502 429 NA NA 1 Stanly Regional Medical Ctr. 29 23 7 0 -100.0% -100.0% 1 CMC-Union 379 489 536 411 264 -30.3% -8.6% 1	Rutherford	Rutherford Regional Medical Ctr.	42	20	70	39	64	52.4%	11.1%	1	0.05
Stanly Regional Medical Ctr. 29 23 7 0 0 -100.0% -100.0% 1 CMC-Union 379 489 536 411 264 -30.3% -8.6% 1	Scotland	Scotland Memorial Hospital	0	0	36	505	429	NA	NA	н	0.36
CMC-Union 379 489 536 411 264 -30.3% -8.6% 1	Stanly	Stanly Regional Medical Ctr.	29	23	7	0	0	-100.0%	-100.0%	H	0.00
	Union	CMC-Union	379	489	536	411	264	-30.3%	-8.6%	1	0.22

									AT	ATTACHMENT 1
Diagnostic-Equivalent Card	Diagnostic-Equivalent Cardiac Catheterization Procedures by Service Area and Facility	a and Facil	ity							
Includes Adult & Pediatric	Includes Adult & Pediatric Diagnostic Cardiac Caths. Percutaneous Coronary Interventions	ary Interve	entions							
Sources: 2014 State Medic	Sources: 2014 State Medical Facilities Plan (Tables 9S, 9T and 9V), 2014 License Renewal Applications on file at DHSR	cense Rene	wal Appli	cations or	file at DF	1SR				
Service Area	Facility	2009	2010	2011	2012	2013	Percent Change,	CAGR,	2013 Planning	2013 2013 Units Planning Req. at 80%
Wake	Duke Raleigh Hospital	770	796	701	366	447	-41.9%	-12.7%	3	0.37
	Rex Hospital	3,489	3,002	3,132	3,875	5,029	44.1%	9.6%	4	4.19
	WakeMed	12,108	12,618	12,130	10,535	8,570	-29.2%	-8.3%	6	7.14
	WakeMed Cary Hospital	325	382	325	282	222	-31.7%	-9.1%	-	0.19
Total for Service Area		16,692	16,969	16,288	15,058	14,268	-14.5%	-3.8%	17	12
Watauga	Watauga Medical Center	66	28	Ħ	238	768	675.8%	%6.99	1	0.64
Wayne	Wayne Memorial Hospital	362	258	237	229	649	79.3%	15.7%	1	0.54
Wilkes	Wilkes Regional Medical Ctr.	0	0	0	0	0	%0.0	%0.0	1	0.00
Wilson	Wilson Medical Center	412	361	429	682	518	25.7%	5.9%	4	0.43
TOTAL		114,740	114,740 115,630 112,685 111,250 108,486	112,685	111,250	108,486	-5.5%	-1.4%		

ATTACHMENT 2

Received 6/20/11

Response to Comments on Rex Hospital's (Rex's) CON Applications to Develop Additional Acute Care Beds in Wake County (Project ID #s J-8667-11, J-8669-11, and J-8670-11)

Below, Rex has grouped comments submitted on its applications by issue, followed by Rex's response in italics. Please note that in some instances for the sake of brevity, Rex has produced only a portion of a comment; however, it is responding to each comment in its entirety.

CRITERION 3 ISSUES

RESPONSE TO COMMENTS REGARDING POPULATION TO BE SERVED

Comments:

On page 177 of its Application Rex states that they have "excluded" zip codes where some of the population is closer to Rex's existing hospital and to other acute care providers than to the proposed site. Following this logic, Rex also should have excluded zip code 27606 as 100% of the zip is closer to Rex's existing hospital AND to WakeMed Cary. Therefore, Rex's statement on page 178 that inclusion of portions of zip 27606 "is appropriate as the proposed hospital would be closer or more convenient for residents of the areas within ten miles than Rex or other acute care providers in the county," is incorrect.

The proposed Rex Hospital Holly Springs is not closer for residents of zip 27606 and Rex provides no discussion or documentation to support that traveling further for hospital or outpatient care at Rex Holly Springs would be more convenient for residents of zip 27606. Therefore, the population to be served is overstated which results in overstated volumes for all proposed inpatient and outpatient services at Rex Holly Springs.

Page 2 of Novant's Comments submitted on Rex Hospital Holly Springs.

Rex's assumptions about patient origin for the Rex Holly Springs linear accelerator seem to suggest a change existing referral patterns and the capture substantial market share from existing providers by locating a satellite cancer center and linear accelerator at the proposed new hospital in Holly Springs. These assumptions are unsupported and unexplained in the Rex Holly Springs application. The 14-step Rex Holly Springs linear accelerator need method fails to take into consideration the context of the existing market and its referral patterns and the impact of a linear accelerator in Holly Springs on existing radiation therapy providers.

Page 9 of Novant's Comments submitted on Rex Hospital Holly Springs.

have historically accounted for over 62 percent of total caths at Rex. Likewise, for Wake Heart & Vascular Associates, approximately two-thirds of total caths are outpatient. WakeMed's summary analysis concludes that 46.6 percent of Wake Heart & Vascular Associates' cath procedures will be in excess of Rex's capacity; as such, even by WakeMed's analysis the majority (53.6 percent) of Wake Heart & Vascular Associates' cath procedures can shift. Given that outpatient cath is majority of total caths, Rex will have the capacity to treat Wake Heart & Vascular Associates' inpatient caths.

Moreover, Rex is currently taking immediate steps to increase its cardiac cath capacity by implementing its approved fourth cardiac cath on an interim basis in administrative space and by extending cath lab hours to 9 pm. These actions will allow Rex to achieve greater cath capacity than WakeMed has assumed at an earlier date. While WakeMed contends that 1,500 procedures per lab is the maximum capacity, its historic experience as well as that of other providers suggests that cath labs can operate well above that level:

Year	Facility	Weighted Procedures	Current Cath Lab Inventory	Weighted Procedures per Lab
2008	High Point Regional	8,443	4	2,110
2008	New Hanover Regional	6,421	3	2,140
2007	Frye Regional	5,727	3	1,909
2007	New Hanover Regional	6,189	3	2,063
2006	Frye Regional	5,353	3	1,784
2006	New Hanover Regional	5,975	3	1,991
2005	WakeMed	11,984	7	1,712
2005	Frye Regional	4,593	2	2,296

Source: 2007 to 2010 SMFPs.

In addition, WakeMed has projected or exhibited greater than 100 percent utilization of similar assets in prior CON applications. In the 2010 WakeMed Cary OR Application (Project ID# J-8463-10), WakeMed Raleigh projected, on page 68, to provide 31,319 surgical hours in 2015 with 13 ORs or over 100 percent of capacity as defined by the SMFP (103 percent = 31,319 \div 9 hours per day \div 260 days per year \div 13 ORs).

Table II.31

WakeMed Raleigh Campus

Surgery Hours and Operating Rooms Needed, FYs 2013-2015
Excluding Cases Performed in Dedicated Open Heart ORs, Trauma Cases, and Cases Performed

in Dedicated C-Section Rooms

Fiscal Year	IP Cases (from Table (1.27)	IP Hours (Cases x 3.0)	OP Cases (from Table II.27)	OP Hours (Cases x 1.5)	Total Cases	Total Hours	ORs Needed (Total Hrs ÷ 1872)	Current Surgical OR Inventory ¹²	OR Surplus/ (Deficit)
2013	7,774	23,321	3,658	5,487	11,432	28,808	15.4	13	(2.4)
2014	8,109	24,327	3,816	5,724	11,925	30,051	16.1	13	(3.1)
2015	8,451	25,353	3,977	5,966	12,428	31,319	16.7	13	(3.7)

See page 68.

Similarly, in its 2007 application to add one cardiac cath unit (Project ID# J-8017-07), WakeMed stated that had been operating its cardiac cath equipment above 100 percent of capacity for four years:

Cardiac Catheterization Utilization at WakeMed Raleigh Campus Using Data from Hospital License Renewal Application

Counting only the diagnostic and interventional cardiac catheterization procedures recognized in the annual Hospital License Renewal Application, utilization of cardiac catheterization equipment at WakeMed Raleigh Campus has been consistently high in recent years. WakeMed Raleigh Campus's cardiac catheterization diagnostic-equivalent procedure utilization was above 95% of capacity as defined by the State since 2000, and was over 100% capacity from 2000-2004. Please see the following table.

See page 45.

Given that there is significant evidence that other providers have exceeded the maximum capacity that WakeMed assumes and maintained that level of utilization over time, Rex believes it too can provide more than 1,500 diagnostic equivalent procedures per lab, if necessary. Rex recognizes that this is not ideal, but as the historic utilization of other providers shown above demonstrates, it can be achieved and will be achieved in order to treat Rex's patients. If Rex operates at such a high level of utilization, then a need for additional cath labs in Wake County would be generated and Rex would apply to develop those resources.

Finally, WakeMed assumes that Rex will only have have four cath labs by 2017. Rex projects that the shift of Wake Heart & Vascular Associates' inpatient utilization will occur over several years. The population growth in Wake County in recent years has resulted in additional need determinations for inpatient beds, operating rooms, MRI units, and other health care services.

ATTACHMENT 3

STATE OF NORTH CAROLINA	IN THE OFFICE OF
	ADMINISTRATIVE HEARINGS
COUNTY OF WAKE	
HOLLY SPRINGS HOSPITAL II, LLC	,)
)
Petitioner,)
v.) 11 DHR 12727
)
N.C. DEPARTMENT OF HEALTH AND)
HUMAN SERVICES, DIVISION OF HE	
SERVICE REGULATION, CERTIFICAT	E OF)
NEED SECTION,)
Respondent,)
and)
and	
REX HOSPITAL, INC., HARNETT HE	AT.TH)
SYSTEM, INC. and WAKEMED,)
,)
Intervenor	s.)
)
(CAPTION CONTINUED ON NEXT PAGE	E)
DEPOSIT	ION OF

DEPOSITION OF NATHAN MARVELLE

TUESDAY, MARCH 6, 2012 2:02 P.M.

AT THE OFFICES OF
SMITH MOORE LEATHERWOOD LLP
300 NORTH GREENE STREET, SUITE 1400
GREENSBORO, NORTH CAROLINA

VOLUME I

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10.0

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scenario assumes that Wakefield is not developed, those days are also subtracted. And then you have revised ADCs, and the occupancy rate, per the Agency's decision, assuming all we've discussed, would be 79.3 percent.

And then, finally, the scenario where Rex is awarded no beds. Again, Wakefield days are taken out. Holly Springs days that I did, you know, the same scenario for Wakefield days are taken out.

And the revised occupancy rate of 87.4 percent.

And this approach is taken for--in three different iterations. The next is Pages 228580 and 228581 with the distinguishing factor being the capacity of a cath lab. In this--the next page you'll see on Page--in Table 5 Column C, we've identified the capacity of a cath lab to be 1,712. And that is referenced in the Agency--references the Agency file on Page 854, which is our response to comments. And that is actually what WakeMed has achieved in 2005. So WakeMed in 2005 provided 1,712 caths per lab.

Using that analysis, we show the occupancy rates below average. There's not much distinguishing factors between that.

The final analysis uses the cath capacity—I'm sorry, the capacity of a cath lab from Frye Regional in the same year that we are discussing for WakeMed, 2,296 caths per lab. And that results in revised occupancy rates as shown.

And then just to point out one other thing,

I have provided an excerpt of the State Medical

Facilities Plan behind that and-behind these

pages in the exhibit, which shows those providers

and their cath utilization in that year.

Q. So is the bottom line in here in your opinion is that you believe that Rex has sufficient capacity to handle the cath volume attributable to the Wake

14 Heart and Vascular doctors?

Yes, I mean, I think what I discussed in the response to comments in terms of, you know, our response to WakeMed that we--you know, that we could provide additional capacity, and also I think this--this deposition exhibit is responding to the premise that WakeMed has put forward that 1,500 is the maximum and that all days are associated, I think was responsive to certain points that they made and rebutting certain points. But, yes, I think in--in summary it says