

Duke University Health System

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October 1, 2012

Lisa Pittman, Team Leader
Certificate of Need Section
Division of Health Service Regulation
North Carolina Department of Health and Human Services
809 Ruggles Drive
Raleigh, North Carolina 27626-0530

RE: Comments on Inpatient Rehabilitation Bed CON Applications for HSA IV

Dear Ms. Pittman:

Enclosed please find comments prepared by Duke Raleigh Hospital, regarding the competing CON applications for new inpatient rehabilitation beds to meet the need identified in the *2012 State Medical Facilities Plan* for Health Service Area IV. We trust that you will take these comments into consideration during the Agency's review of the applications.

If you have any questions about the information presented here, please feel free to contact me at (919) 668-0857. I look forward to seeing you at the public hearing.

Sincerely,



Catharine W. Cummer



**COMMENTS ABOUT COMPETING CERTIFICATE OF NEED APPLICATIONS
INPATIENT REHABILITATION BED NEED DETERMINATION FOR HEALTH
SERVICE AREA IV**

**SUBMITTED BY DUKE RALEIGH HOSPITAL
OCTOBER 1, 2012**

Four applicants submitted Certificate of Need (CON) applications in response to the need identified in the *2012 State Medical Facilities Plan (SMFP)* for 20 additional inpatient rehabilitation beds in Health Service Area IV. In accordance with N.C.G.S. §131E-185(a.1)(1), this document includes comments relating to the representations made by the other applicants, and a discussion about whether the material in those applications complies with the relevant review criteria, plans, and standards. These comments also address the issue of which of the competing proposals represents the most effective alternative for development of new beds in the Health Service Area.

Specifically, the CON Section, in making the decision, should consider several key issues. These include, but are not limited to:

- (1) The extent to which the applicants project to increase competition and consumer choice for HSA IV residents.
- (2) The extent to which the proposed project represents a cost-effective alternative for developing new inpatient rehabilitation beds;
- (3) The extent to which the proposed project will increase and improve accessibility to inpatient rehabilitation services, especially for the medically underserved residents of the service area;
- (4) The extent to which each applicant projects a reasonable number of patients and patient days, documented by credible assumptions and a realistic methodology.
- (5) The extent to which each applicant proposes to offer competitive salaries to ensure the ability to hire and retain excellent direct care providers.
- (6) The extent to which the competing applicants submitted full and complete applications that are conforming to all statutory and regulatory criteria.

Complementary Applications

Duke Raleigh Hospital and Johnston Health each submitted separate CON applications for new inpatient rehabilitation beds, pursuant to the 2012 SMFP need determination for HSA IV. DRAH does not consider these applications to be competing applications, but rather to be complementary. Specifically:

- The 2012 SMFP need determination is for 20 inpatient rehabilitation beds. DRAH filed an application for 12 beds, and Johnston filed for 8 beds. The combined total of 20 beds in the two applications does not exceed the total of 20 need determined beds in the 2012 SMFP.
- As set forth in the CON regulations: "Applications are competitive if they, in whole or in part, are for the same or similar services and the agency determines that the approval of one or more of the applications may result in the denial of another application reviewed in the same review period." 10A N.C.A.C. 14C.0202(f). These applications do not satisfy this rule because there is no reason to conclude that the approval of one application may result in the denial of the other application.
- Historically, the agency has reviewed need determination applications competitively when either (1) there was a finite need determination in the SMFP that cannot be split or approved for more than one applicant; or (2) the applications proposed a significant overlap of host sites. In contrast, when neither of these circumstances has been present, the Agency has approved multiple complementary applicants (i.e. nursing care bed need determinations). Because the applications of DRAH and Johnston Health do not implicate either one of these situations, these applications should be viewed as complementary.
- Johnston proposes to develop its beds in Johnston County, whereas DRAH proposes to develop its beds in Wake County. Johnston's projected patient origin is focused significantly (84%) on Johnston County. Johnston projects just 5.7% of its patients from Wake County. This is complementary to the DRAH application, which projects a patient origin of 66% Wake County and only 7.5% Johnston County. Thus, the two applicants are proposing to primarily service different geographic areas, in separate counties.
- Both Johnston and DRAH project their bed utilization based in part upon their own existence (independent of each other) as community hospitals in their respective counties, with their own historical experience of caring for inpatients who transition into patients who are referred to inpatient rehabilitation beds.

Comparison of Competitive Applications

DRAH notes that for comparative purposes in these comments, DRAH is using 2017 in its comparative tables. This equates to using the following data from each application:

- FY2017 (**Project Year 3**) for DRAH
- FFY2017 (**Project Year 3**) for Johnston
- FY2017 (**Project Year 3**) for UNC
- FFY2017 (**Project Year 1**) for WakeMed

This is due to the extended lead-time proposed by WakeMed for developing its inpatient rehabilitation bed project.

As DRAH and Johnston's applications are complementary, we have included Johnston in the comparative tables for reference purposes only.

Consumer Choice and Competition

DRAH's proposed project will enhance competition in Wake County and HSA IV via establishment of a new provider of inpatient rehabilitation services in Wake County. In its application, DRAH discussed and demonstrated that Wake County is the most effective alternative for location of additional inpatient rehabilitation beds. Thus, DRAH's proposal will benefit the delivery of care in Wake County.

HSA IV already hosts large scale inpatient rehabilitation providers, i.e. WakeMed with 98 licensed and approved beds and DRH and UNC each with 30 licensed beds. DRAH's proposal represents an alternative model for Wake County and HSA IV. One with a comparatively smaller unit than existing units, focused on serving a core range of diagnoses (i.e. primarily stroke, amputation, neurologic disorders, and/or orthopedic diagnoses) that are consistent with DRAH's historical experience and clinical expertise. Focusing on these core services in a 12-bed unit will foster the delivery of high quality care and can facilitate economies of scale, especially given DRAH's ability to coordinate with existing rehabilitation services within the same system at Durham Regional Hospital. DRAH's proposal also benefits continuity of care for the significant number of patients who receive their inpatient acute care treatment at DRAH and need rehabilitation services after discharge. These benefits of the proposed project are consistent with the Basic Principles of the 2012 SMFP.

Geography

The population of HSA IV is shown in the table below.

HSA IV Population by County 2010 Estimated and 2017 Projected

	2012	2013	2014	2015	2016	2017	12-17 CAGR	2012 % of total	2017 % of total
Wake	945,209	964,481	983,754	1,003,024	1,022,298	1,041,571	2.0%	50%	51%
Durham	275,946	279,579	283,209	286,841	290,473	294,105	1.3%	15%	14%
Johnston	175,467	178,361	181,263	184,158	187,056	189,953	1.6%	9%	9%
Orange	137,760	139,741	141,723	143,709	145,692	147,675	1.4%	7%	7%
Chatham	65,814	67,072	68,334	69,593	70,854	72,112	1.8%	3%	4%
Franklin	63,214	64,233	65,640	66,508	67,943	68,954	1.8%	3%	3%
Granville	61,427	61,948	62,469	62,987	63,508	64,028	0.8%	3%	3%
Lee	58,712	59,119	59,527	59,933	60,340	60,748	0.7%	3%	3%
Vance	45,708	45,860	46,010	46,162	46,314	46,467	0.3%	2%	2%
Person	40,247	40,746	41,225	41,698	42,169	42,640	1.2%	2%	2%
Warren	20,962	20,941	20,916	20,894	20,873	20,849	-0.1%	1%	1%
HSA IV	1,890,466	1,922,081	1,954,070	1,985,507	2,017,520	2,049,102	1.6%	100%	100%

Source: NC OSBM, as of May 2012

As the table above reflects, 50% of HSA IV currently resides in Wake County and 51% of the HSA's population is projected to reside in Wake County in 2017. Wake County's population is projected to have the highest percentage growth during the 7-year period; also Wake County's projected growth alone (96,362) is 65% of the projected Orange County population in 2017 (147,675). Orange County is the smallest of the three counties with proposed projects.

Cost Effectiveness

In the current economic climate, effective initiatives to contain unnecessary costs and expenditures are especially important to promote value in healthcare. In the current healthcare marketplace, declining reimbursement rates and increased government regulations are increasingly placing downward pressure on healthcare providers, demanding them to effectively do more with less.

Cost of care is a major concern with healthcare payors and the public. Therefore, the projected average cost of services is an important measure of consumer value. DRAH proposes the lowest average cost per patient day of all applicants. The table on the following page demonstrates that DRAH's proposal is the most effective alternative.

**Average Operating Cost per Patient Day
FY2017**

Applicant	Average Cost Per Patient Day
DRAH	\$898
Johnston	\$1,020
UNC	\$1,080
WakeMed	\$1,225

Source: CON applications

Current economic conditions make low operating costs especially important to patients, payors, and providers. DRAH’s low average costs make its application the least costly and most effective alternative.

Additionally, DRAH proposes the second lowest net revenue per patient day of all the applicants. The following page has a summary of competing applicants’ proposed net revenue per patient day.

**Average Net Revenue per Patient Day
FY2017**

Applicant	Operating Cost Per Patient
UNC	\$1,147
DRAH	\$1,422
WakeMed	\$1,514
Johnston	\$1,528

Source: CON applications

In summary, DRAH’s application is clearly the most cost-effective alternative based on its demonstration of competitive costs and revenues. DRAH’s application is consistent with Policy GEN-3 of the 2012 SMFP, in projecting to maximize healthcare value for resources expended.

Access to Services

Medically Underserved

A key factor in considering the relative accessibility of the alternative proposals is the extent to which each applicant expands access to the medically underserved. As indicated in the following table, in terms of access for the medically underserved Medicare and Medicaid populations, DRAH’s proposal represents an effective alternative. The table below summarizes the projected combined Medicare and Medicaid payor mixes for the competing applicants.

**Projected Combined Medicare/Medicaid Payor Mix
FY2017**

Applicant	% Medicare	% Medicaid	Combined% of Patients
Johnston	60.2%	21.8%	82.0%
DRAH	61.5%	14.4%	75.9%
WakeMed	55.5%	15.4%	70.9%
UNC	44.9%	22.1%	66.9%

Source: CON Applications

Based on a review of the payor mix for inpatient rehabilitation services at Durham Regional Hospital and the current payor mix of DRAH acute care patients who were appropriate for discharge to inpatient rehabilitation services, DRAH projects to serve a higher percentage of Medicare and Medicaid patients than the four-year State average for inpatient rehabilitation beds. As stated in its application, DRAH will actively market Medicaid patients. DRAH has a relationship with Community Care of North Carolina, which provides management services for Carolina Access Medicaid patients, and refers patients to DRAH. This philosophy is consistent with the Access Basic Principle as described in the 2012 State Medical Facilities Plan.

New Bed Operational Date

As the SMFP need determination evidences, HSA IV residents lack adequate access to local inpatient rehabilitation beds. It is useful to compare the service availability dates of competing applicants. Applicants who propose to offer services sooner are better suited to address the established need and are comparatively most effective. As shown in the table on the following page, DRAH projects to make operational its beds before any of the other applicants.

Offering of Services

Applicant	New Bed Operational Date
DRAH	January 2014
UNC	July 2014
Johnston	October 2014
WakeMed	October 2016

Source: CON applications

Thus, DRAH is the most effective alternative for making the inpatient rehabilitation beds available to service area residents.

Patient Origin

The identified need is established for additional inpatient rehabilitation beds to serve the residents of Health Service Area IV. As shown on the table below, DRAH proposes to develop a service which is highly accessible to HSA IV residents.

HSA IV Patient Origin

Applicant	% of Patients
Johnston	93.3%
DRAH	84.9%
WakeMed	76.5%
UNC	49.3%

Source: CON applications

As the table shows, DRAH will serve the local residents who have a need for inpatient rehabilitation services to a greater extent than either WakeMed or UNC.

Physical Environment

Consumer expectations are very high for their healthcare services, both the perspectives of both quality of care and comfort. The physical environment plays an important role in this regard. As shown below, DRAH offers a very competitive alternative in terms of both percentage of private rooms, and program square footage per patient bed.

Program Square Footage per Bed

Applicant	SF Per Bed
WakeMed	1,451
DRAH	1,252
Johnston	1,137
UNC	830

Source: CON applications

Percentage of Private Rooms

Applicant	% Private Rooms
Johnston	100%
WakeMed	100%
DRAH	83%
UNC	57%

Source: CON applications

Physician Support

Evidence of physician awareness and involvement in a proposal to develop new inpatient rehabilitation beds is an important sign of support. As shown in the table below, DRAH offered substantive evidence of support from the local physician community, especially for a new service. It should also be noted that DRAH letters of support included those from multi-physician practices reflecting the support of several physicians.

Physician Letters of Support

Applicant	Physician Letters
WakeMed	145
DRAH	49
UNC	29
Johnston	27

Source: CON applications

Clinical Staff Salaries

Salaries are a significant contributing factor in recruitment and retention of quality clinical staff, and therefore, from a quality of care perspective, represent a significant comparative metric for this CON batch review. Please see the following tables. Please note that the salary information for WakeMed is two years later (FY2018) than all the other applicants (which portray staff salaries for FY2016).

**Projected Nursing Salaries
Project Year 2**

Applicant	RN
WakeMed	\$83,400
DRAH	\$77,252
UNC	\$69,565
Johnston	\$69,038

Source: CON Applications

**Projected Physical Therapist Salaries
Project Year 2**

Applicant	PT
DRAH	\$94,313
Johnston	\$79,420
WakeMed	\$77,713
UNC	\$77,177

Source: CON Applications

**Projected Speech Therapist Salaries
Project Year 2**

Applicant	ST
DRAH	\$100,549
Johnston	\$77,667
WakeMed	\$76,247
UNC	\$74,767

Source: CON Applications

**Projected Occupational Therapist Salaries
Project Year 2**

Applicant	T
DRAH	\$87,393
UNC	\$77,606
Johnston	\$77,448
WakeMed	\$74,931

Source: CON Applications

DRAH projects the second highest RN salary per FTE RN, and the highest salaries for all therapists while still having the lowest total operating cost per day. Therefore, DRAH is the most effective alternative with regard to compensation for nursing and therapists.

Specific Comments Regarding Competing Applicants

WakeMed

- In 2011 WakeMed’s own proposed medical director from Carolina Rehabilitation and Surgical Associates filed comments (a copy of which are attached) opposing the addition of beds to the 2012 SMFP need determination, on the grounds that it was premature to add beds to the inventory before the full utilization impact of last year’s award of 14 beds is known. Any utilization impact will fall primarily on WakeMed itself, and these public comments demonstrate why it would not be appropriate for WakeMed to be awarded additional beds before it even develops the 14 beds it was awarded last year.
- WakeMed’s utilization projection methodology is overly optimistic when compared to its historical utilization. As the following table shows, WakeMed’s projected CAGR of 3.0% is 30.4% higher than its historical CAGR of 2.3%. Of particular note, WakeMed’s inpatient rehabilitation days actually declined by 1.6% in FY2012. Therefore, WakeMed did not reasonably project the need the population has for its services, and is non-conforming to Criterion 3.

WakeMed Patient Days

Year	Inpatient Rehab Days	Annual Growth Rate	2006-2012 CAGR	2013-2019 CAGR
2006	24,036	--		
2007	24,616	1.2%		
2008	27,543	5.8%		
2009	27,916	0.7%		
2010	28,201	0.5%		
2011	28,415	0.4%		
2012	27,492	-1.6%	2.3%	
2013	30,673	5.6%		
2014	31,230	0.9%		
2015	31,708	0.8%		
2016	32,321	1.0%		
2017	32,839	0.8%		
2018	33,366	0.8%		
2019	33,905	0.8%		3.0%

Source: WakeMed CON application, pp. 67 & 117

- According to WakeMed’s 2011 and 2012 Hospital License Renewal Applications, between FY10 and FY11, the size of the WakeMed orthopedic nursing unit decreased by 6 beds (down 18.2%), and utilization decreased by 12.7% (8,467 days down to 7,389 days). Even though WakeMed reduced the size of the unit from 33 beds to 27 beds, it still only staffed 22 beds during FY11. Significantly, this does not support WakeMed’s projection (Table IV.22 on page 120) that 29.5% of its inpatient rehabilitation cases in PY2 will be orthopedic (up from 28.8% during FY12).
- WakeMed projects to bring its new beds on line in October 2016, which is much later than all the other applicants. Even taking into account WakeMed’s 14 beds in development, the utilization of existing and approved rehabilitation beds in HSA IV in 2011 was almost 80%. It is not viable to wait another 4 years before all 20 beds needed in the service area for a growing and aging population are developed.

Offering of Services

Applicant	New Bed Operational Date
DRAH	January 2014
UNC	July 2014
Johnston	October 2014
WakeMed	October 2016

Source: CON applications

- The WakeMed project capital cost is \$25.2M, which is significantly more expensive than all three competing applicants combined. More specifically, this equates to a cost of \$2.1M/bed for WakeMed, compared with only \$348K/bed for DRAH. Therefore, the WakeMed application is not conforming to Review Criterion 4, because it is not the least costly alternative.

Project Capital Cost

Applicant	\$
WakeMed	\$25,234,051
DRAH	\$4,172,000
UNC	\$2,677,000
Johnston	\$2,205,533

Source: CON applications

- As shown on the following table from WakeMed’s application, WakeMed has a history of delayed development of approved CON projects. Every WakeMed CON project currently under development is delayed, included the approved 14 rehab beds. Combined with the already distant proposed operational date for WakeMed’s additional rehab beds, the prospects of the need determined beds becoming available to local residents in a timely manner are dim. Therefore, WakeMed’s project is not the most effective alternative for meeting the need for additional inpatient rehabilitation beds in HSA IV.

The table below lists WakeMed’s certificate of need projects that are under development.

Facility Name and Location	Project I.D. #	Projected Completion Date on the Certificate or in Application	Approved or Proposed Capital Expenditure	Current Stage of Development	Number of Months Delayed
Harnett Health System – Hospital with 50 Acute Care Beds and 3 Operating Rooms ³⁶	M-7351-05	1/1/2010	\$7,400,000 (WakeMed portion)	Under construction. Scheduled for completion by end of 2012.	24 months
WakeMed East Healthplex	J-7629-06	1/1/2009	\$23,887,343	In design.	42 months
WakeMed North -- Relocate 20 acute care beds from WakeMed Raleigh	J-7843-07	4/1/2010	\$24,580,649	Will be developed concurrently with J-8180-08.	See Project J-8180-08
WakeMed South Healthplex	J-8018-07	12/1/2011	\$26,365,702	In design.	9 months
WakeMed North -- Develop 41 acute care beds	J-8180-08	10/1/2011	\$34,062,006	Will be developed concurrently with J-7843-07.	22 months
WakeMed Raleigh Campus -- Develop 12 neonatal beds	J-8328-09	10/1/2011	\$8,891,179	Under construction.	14 months
WakeMed Rehab Hospital – Develop 14 rehab beds	J-8631-11	10/1/2012	\$2,422,165	In design -- construction to begin Fall 2012.	3 months

- WakeMed projects a significant increase in the number of patients originating from Johnston County. The projected Johnston FY2013 patient origin is 41.7% higher than FY2012, without explanation.

WakeMed does not propose any new services or new location, and therefore is not an effective alternative from the perspective of enhancing competition. There fore, WakeMed’s proposal is not conforming to Review Criterion 18a. WakeMed’s proposal also does not enhance continuity of care for rehabilitation patients who receive their acute care services at another hospital, especially one which refers a large number of patients for inpatient rehabilitation services, such as DRAH.

UNC

- UNC provides inconsistent projections. UNC's total projected inpatient rehab patient days for FY13-FY15 (shown on pp.68-69 of the UNC application) do not match totals shown on p.64 and elsewhere in application. These significant differences cannot be attributed to rounding. Therefore, the UNC application is non-conforming to Review Criteria 3 and 5.
- UNC's projected utilization is based on unreasonable assumptions. As shown on page 61 of its application, UNC's historical inpatient rehabilitation utilization in days of care increased from 8,429 to 9,100 from FY06-FY11, which is a CAGR of 1.54%. More recently, UNC had a negative CAGR of 1.1% from FY09-FY11 (9,303 days down to 9,100 days). UNC's annualized FY12 inpatient rehabilitation utilization equals 9,117 days, only a .19% increase from FY11. This historical data showing modest or declining growth presents a stark contrast to UNC's projection of 8% annual growth in patient days for inpatient rehabilitation. UNC based this projection upon assumptions of population aging/growth, increased burn patient admissions, more pediatric patient admissions, and fewer transfers of IP rehab patients to other facilities. Unfortunately for the viability of its application, UNC provides very little analysis to support these wildly optimistic assumptions. Specifically:
 - While the population of HSA IV is indeed growing and aging, Orange County is not the primary source of this growth, and is not well positioned geographically to most conveniently serve local residents. Of the projected HSA IV population increase of 127,054 between 2012 and 2016, only 7,932 (or 6%) will be in Orange County.

Health Service Area IV

Projected Population

County	2012	2013	2014	2015	2016	12-16 CAGR
Wake	945,209	964,481	983,754	1,003,024	1,022,298	2.0%
Durham	275,946	279,579	283,209	286,841	290,473	1.3%
Johnston	175,467	178,361	181,263	184,158	187,056	1.6%
Orange	137,760	139,741	141,723	143,709	145,692	1.4%
Chatham	65,814	67,072	68,334	69,593	70,854	1.9%
Franklin	63,214	64,233	65,640	66,508	67,943	1.8%
Granville	61,427	61,948	62,469	62,987	63,508	0.8%
Lee	58,712	59,119	59,527	59,933	60,340	0.7%
Vance	45,708	45,860	46,010	46,162	46,314	0.3%
Person	40,247	40,746	41,225	41,698	42,169	1.2%
Warren	20,962	20,941	20,916	20,894	20,873	-0.1%
HSA IV	1,890,466	1,922,081	1,954,070	1,985,507	2,017,520	1.6%

Source: NC Office of State Budget and Management, updated May 2012

Further, as UNC itself says, UNC’s mission is to serve all state residents, so more than half of its patient origin is from outside HSA IV. (See a following comment regarding patient origin.)

- o UNC applies its 8% annual growth assumption beginning with FY13, which is prior to the operation of the proposed new IP rehab beds. This invalidates its methodology, as population growth and aging are historically present, but UNC’s IP rehabilitation days of care (as portrayed on page 61 of UNC’s application, duplicated below) have not grown by 8% in any one year period extending back to FY06. In fact, the cumulative growth in volume from 2006 to 2011 does not reach 8%. Therefore, UNC is projecting annual growth – before any new beds are developed – greater than its total growth over the past five years.

The annual occupancy of UNC Hospitals Inpatient Rehabilitation has exceeded 80 percent for the past five years.

Annual Reporting Periods	Licensed Beds	Annual Days	Occupancy %
Oct, 1, 2005 to Sept. 30, 2006	30	8,429	76.98%
Oct, 1, 2006 to Sept. 30, 2007	30	9,084	82.96%
Oct, 1, 2007 to Sept. 30, 2008	30	9,046	82.61%
Oct, 1, 2008 to Sept. 30, 2009	30	9,303	84.73%
Oct, 1, 2008 to Sept. 30, 2010	30	8,937	81.62%
Oct, 1, 2010 to Sept. 30, 2011	30	9,100	83.11%

Sources: 2007, 2008, 2009, 2010, 2011 and 2012 Hospital License Renewal Applications

- UNC claims that the planned increase of 23 licensed acute care beds will add acute care patients, which “will generate higher demand for admissions to the Inpatient Rehabilitation Center”. However, nowhere in the application did UNC provide quantitative data or analysis to substantiate this claim, or to quantify the demand or incremental number of rehabilitation admissions. UNC simply then shows a number of additional patients in its methodology, and says they will appear.
- Further, UNC states that it has pent up demand that is not currently able to be met due to limited capacity and a lack of private beds; however, neither condition will be ameliorated in FY13. Moreover, UNC could address any demand for additional private beds simply by renovating its current services, without increasing the total number of licensed beds. This would be a more effective alternative that UNC did not consider.
- UNC unreasonably projects an increase in the IP rehab pediatric patients, growing from .18% of IP rehab patients in FY12 to 1.7% by PY1. UNC only served one (1) pediatric patient during the most recent 12 months. Yet it projects an 844% increase over three years (FY12-FY15), including a 727% increase between FY12 and FY13, which is before the proposed additional beds are even on-line. Again, UNC provides no quantitative analysis, nor even any qualitative discussion, to justify this projection, especially given UNC’s own historical experience.
- On page 66, UNC states it based its pediatric patients, ALOS and days of care on data of the Mayo Clinic (St. Mary’s Hospital) Pediatric Inpatient Rehabilitation Unit. However, UNC does not provide an explanation for why the Mayo Clinic, located in Rochester, Minnesota, is a reliable proxy for UNC Hospitals with regard to pediatric inpatient rehabilitation.

- Wake County has a much larger population, which is also faster growing than Orange County. Thus, the need for the additional beds is much greater in Wake County.
- UNC proposes to locate the beds in a less populated county in HSA IV, inconvenient from most of the population. Orange County has the smallest population of any of the three host counties of the proposed 2012 applicants.

County Population Bed Comparison

HSA IV County	HSA IV Estimated Population 2012	HSA IV # Existing & Approved Rehabilitation Beds	# Rehabilitation Beds Needed Based on HSA IV Population under 2012 SMFP	Bed Surplus/ (Deficit)
Orange	7%	30	14	16
Total	100%	169	189	(20)

[Orange County rehabilitation beds based on HSA IV population]

$$(137,760 / 1,890,466) \times 189 = .0729 \times 189 = 13.77$$

The table also shows that UNC has enough beds to support Orange County as well as other contiguous and other regional counties in its tertiary base.

- The eastern five counties (Johnston, Wake, Franklin, Vance, Warren) in HSA IV have 66% (1,250,560/1,890,466) of the overall HSA IV population but only 57% of the licensed rehabilitation beds. This supports the need for the additional beds to be located in Wake and Johnston County rather than Orange County.
- As shown on the table on the following page, the 2012 inpatient rehabilitation patient population per bed is much greater in Wake County compared to Orange County. Again, the need for additional beds is much greater in Wake. Addition of 12 beds to Wake County will not fundamentally change this comparative (945,209/110 beds = 8,593 pop/bed), but instead would make it more equitable, especially going forward as Wake County's population grows.

Health Service Area IV

Inpatient Rehabilitation Beds Per Population

Provider	County	# IP Rehab Beds	2012 Population	County Pop/Bed
WakeMed	Wake	98*	945,209	9,645
Durham Regional Hospital	Durham	30	275,946	9,198
UNC Hospitals	Orange	30	137,760	4,592
Maria Parham Hospital	Vance	11	45,708	4,155
HSA IV Total		169	1,404,623	8,311

*Includes 14 IP rehab beds that are approved, but not operational.

Source: Proposed 2013 SMFP, NCOSBM

- As shown in its application, 10% of the current and projected UNC patient origin is from Wake County. This represents the second highest county of origin at UNC, and is further evidence of the need for additional inpatient rehabilitation beds in Wake County rather than Orange County.
- Only 35.18% of current and projected UNC patients derive from the six western-most counties (Orange, Chatham, Lee, Person, Durham, and Granville) in HSA IV. This supports the need for the additional beds to be located in Wake County rather than Orange County.
- Although UNC proposes to add all private beds, its proposed private mix is still the lowest (57.1%) of all the applicants.

Percentage of Private Rooms

Applicant	% Private Rooms
Johnston	100%
WakeMed	100%
DRAH	83%
UNC	57%

Source: CON applications

- UNC projects its new beds to become operational in July 2014, which is six months later than DRAH.

Offering of Services

Applicant	New Bed Operational Date
DRAH	January 2014
UNC	July 2014
Johnston	October 2014
WakeMed	October 2016

Source: CON applications

- UNC’s proposed SF/bed is by far the lowest of all the applicants.

Program Square Footage per Bed

Applicant	SF Per Bed
WakeMed	1,451
DRAH	1,252
Johnston	1,137
UNC	830

Source: CON applications

- UNC does not propose any new services or new location, and therefore is not an effective alternative from perspective of enhancing competition. Therefore, UNC’s proposal is not conforming to Review Criterion 18a.
- UNC cites a need for continuity of care. However, a greater such need exists for DRAH, which has no inpatient rehabilitation beds but regularly transfers such patients to other facilities. Therefore, UNC’s proposal is not the most effective alternative, and is not conforming to Review Criterion 4.
- UNC is a tertiary medical center, and by nature serves patients from the entire State of North Carolina. While DRAH appreciates the role UNC Hospitals serves in providing North Carolina with quality healthcare services, UNC Hospitals is not ideally suited, nor focused on providing inpatient rehabilitation services to meet local demand in HSA IV, and thus is not the most effective alternative for this SMFP need determination. Therefore, UNC’s proposal is not conforming to Review Criterion 4.

HSA IV Patient Origin

Applicant	% of Patients Projected from HSA IV
Johnston	93.3%
DRAH	84.9%
WakeMed	76.5%
UNC	49.3%

Source: CON applications

