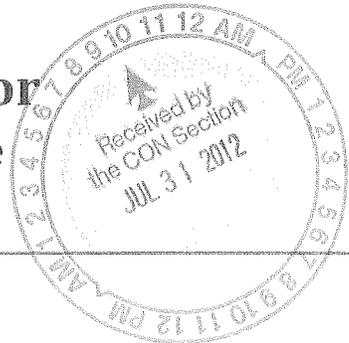
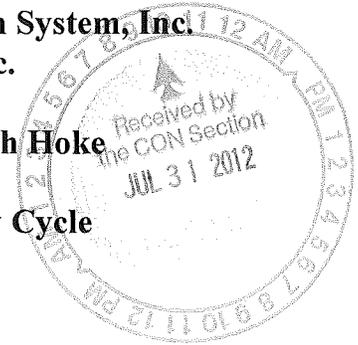


**Comments in Opposition from
Cape Fear Valley Health System, Inc.
Regarding FirstHealth of the Carolinas, Inc.
Certificate of Need Application to
Develop 28 New Acute Care Beds at FirstHealth Hoke
Project I.D. # N-8838-12
Submitted June 15, 2012 for
July 1, 2012 Review Cycle**



**Comments in Opposition from Cape Fear Valley Health System, Inc.
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to Develop 28 New Acute Care Beds at FirstHealth Hoke
(Project I.D. # N-8838-12)
Submitted June 15, 2012 for July 1, 2012 Review Cycle**



I. Introduction

In accordance with N.C.G.S. Section 131E-185(a1)(1), Cape Fear Valley Health System, Inc., submits the following comments regarding the June 15, 2012 Certificate of Need Applications Project I.D. # N-8838-12 submitted for the July 1, 2012 review cycle by FirstHealth of the Carolinas, Inc. (FirstHealth).

Cape Fear Valley Health System (“CFVHS”) also submitted an application for 28 additional acute care beds. The two CON Applications, submitted on June 15, 2012 in response to a need determination for 28 acute care beds in the Cumberland/Hoke Service Area in the *2012 State Medical Facilities Plan (2012 SMFP)* by CFVHS and FirstHealth have been deemed competitive by the CON Agency.

- Project I.D. # M-8833-12: Cumberland County Hospital System, Inc. d/b/a Cape Fear Valley Medical Center (“CFVMC”) to add 28 acute care beds to the Owen Drive campus in Fayetteville.
- Project I.D. # N-8838-12: FirstHealth of the Carolinas, Inc. to expand FirstHealth Hoke Community Hospital (FirstHealth Hoke) by 28 acute care beds, for a total of 36 beds in Raeford.

Also on June 15, 2012, FirstHealth proposed the relocation of one shared operating room from FirstHealth Moore Regional Hospital (FirstHealth Moore) to FirstHealth Hoke, for a total of two shared operating rooms (Project I. D. #N-8843-12) and requested an expedited review. FirstHealth seeks to renovate “planned storage areas”¹ at FirstHealth Hoke to operate a second shared operating room. In Project I. D. #N-8843-12, FirstHealth’s projected surgical volume, in particular, the inpatient surgical utilization was developed based on the assumed inpatient utilization associated with operation of the 36-acute care beds proposed in this CON application. Therefore, the additional operating room proposed in Project I. D. #N-8843-12 cannot be approved unless the 28 beds in this Application are approved for FirstHealth Hoke.

II. Chronology of Important Events

A. April 2012 Settlement Agreement

As part of a Settlement Agreement in April 2012, Cape Fear Valley was issued a certificate of need to build Hoke Community Medical Center, a 41-acute care bed community hospital in Hoke County (Project I.D. #N-8499-10) with a 16-bed emergency department, nine observation beds, two operating rooms, four birthing suites, a C-section room, and laboratory and imaging services.

¹ CON Application N-8843-12, page 19.

FirstHealth was issued a certificate of need to construct an 8-bed inpatient unit adjacent to an emergency room at FirstHealth Hoke with 4 observation beds and 1 shared operating room (Project I.D. #N-8497-10) as part of the same Settlement Agreement.

The following table summarizes the acute care facilities and services approved for development in Hoke County.

**Hoke County
CON-approved Acute Care Facilities and Services**

Service or Department	Hoke Community Medical Center	FirstHealth Hoke	Total
Acute Care Beds			
Med/Surg	21	8	29
ICU	4	0	4
OB	16	0	16
LDRP	0	0	0
Total	41	8	49
Level I Bassinets (unlicensed)	16	0	16
Observation Beds (unlicensed)	9	4	13
Surgery			
Shared	2	1	3
C-Section	1	0	1

As a result of the Settlement Agreement, Hoke County has two hospitals with a combined total of 49 acute care beds, including 4 ICU beds and 16 OB beds, 3 shared operating rooms, 1 dedicated C-section room, two emergency departments with a total of 24 treatment rooms under development. The two hospitals will be located in McLauchlin Township in Hoke County, on US Route 401, approximately 3 miles apart.

B. June 15, 2012 Proposed FirstHealth Hoke Hospital Expansion

FirstHealth seeks to expand FirstHealth Hoke by 28 acute care beds. FirstHealth intends to use the approved 8 beds for inpatient admissions until the completion of the proposed 36-acute care bed inpatient wing. The proposed 36-bed inpatient wing will include a new 4-bed ICU.

As part of Project I.D. #N-8497-10, FirstHealth was approved to develop a 4-bed observation unit. FirstHealth will not operate that observation unit until the 36-bed inpatient wing is operational. Instead, FirstHealth proposes to convert the 8 acute care beds adjacent to the emergency room to observation beds.

FirstHealth also proposes to relocate one operating room from FirstHealth Moore in Pinehurst, for a total of two shared operating rooms at FirstHealth Hoke in Project I.D. N-8843-12, a second application submitted June 15, 2012. FirstHealth states on page 21 of Project I.D. N-8843-12:

since twenty-eight acute care beds have become available for Hoke County under the 2012 SMFP, FirstHealth has determined that **one operating room** (as originally planned for the 8-bed hospital) **will not meet the needs of a larger hospital**. Thus,

FirstHealth is proposing to relocate an additional operating room to [FirstHealth Hoke]. [Emphasis added.]²

FirstHealth then states on page 56 of Project I.D. N-8843-12:

“this CON Application is **not contingent** on the approval of the [FirstHealth Hoke] proposed 28-bed expansion CON application. [Emphasis added.]³

Despite the contradictory statements, FirstHealth’s projected surgical volume in Project I. D. #N-8843-12, in particular, inpatient surgical utilization was developed based on the assumed inpatient utilization associated with operation of 36-acute care beds. Therefore, the additional operating room proposed in Project I. D. #N-8843-12 cannot be approved unless the 28 beds are approved for FirstHealth Hoke. As discussed in these comments FirstHealth Hoke is non-conforming to the required review criteria and the 28 beds cannot be approved.

Further, this Application cannot be approved unless the additional operating room is approved. As discussed in the context of CON Review Criterion (3) the one operating room at FirstHealth Hoke does not have sufficient capacity to meet the projected inpatient surgical demand in Project I. D. #N-8838-12 plus previous projected inpatient surgical volume in Project I.D. #N-8497-10 plus the projected outpatient surgical volume on page 239.

The following table summarizes the acute care facilities and services approved and proposed for development in Hoke County. The proposed services are highlighted in red for convenience.

Service or Department	Hoke Community Medical Center Approved	FirstHealth Hoke Approved and Proposed	Total Approved and Proposed
Acute Care Beds			
Med/Surg	21	8 + 24 = 32	21 + 32 = 53
ICU	4	4	4 + 4 = 8
OB	16	0	16
LDRP	0	0	0
Total	41	8 + 28 = 36	41 + 36 = 77
Level I Bassinets (unlicensed)	16	0	16
Observation Beds (unlicensed)	9	4	13
Surgery			
Shared	2	1 + 1 = 2	2 + 2 = 4
C-Section	1	0	1

If this Application and Project I.D. N-8843-12 are approved, Hoke County will have 2 hospitals, with a combined total of 77 acute care beds, including 8 ICU beds and 16 OB beds, 4 shared operating rooms, 1 dedicated C-section room, 2 emergency departments with a total of 24 treatment rooms. The 2 hospitals will be located in McLaughlin Township in Hoke County. Both will be on US Route 401, approximately 3 miles apart.

² CON Application N-8843-12, page 21.

³ CON Application N-8843-12, page 56.

FirstHealth Hoke has not documented the need for 28 additional acute care beds or an additional operating room in Hoke County and the proposed expansion of FirstHealth Hoke results in a duplication of services in Hoke County. Therefore, this Application and Project I.D. N-8843-12 should both be denied.

III. CON Review Criteria

The following comments are submitted based upon the CON Review Criteria found at G.S.131E-183. While some issues impact multiple Criteria, they are discussed under the most relevant review Criteria and referenced in others to which they apply.

G.S. 131E-183 (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.

A. Acute Care Bed Need Methodology

The FirstHealth bed methodology is based primarily upon a shift in patient days from FirstHealth Moore Regional. These patient days were provided by FirstHealth Moore Regional in the Moore/Hoke Service Area, not the Cumberland/Hoke Service Area.

The FirstHealth Moore Regional patient days are not included in the *SMFP* need methodology for the Cumberland/Hoke Service Area; they are included in the *SMFP* need methodology for the Moore/Hoke Service Area. There is no need identified for additional acute care beds on page 58 of the *2012 SMFP* (Attachment 1) for Moore/Hoke Service Area and there is an acute care bed surplus projected in the *Proposed 2013 SMFP* (Attachment 2). This Application is proposing a shift of acute care days within the Moore/Hoke Service Area. As such, FirstHealth does not propose to meet the need identified in the *SMFP* for Cumberland/Hoke Service Area. In addition, shifting inpatient volume from the Moore/Hoke Service Area to the Cumberland/Hoke Service Area will result in an even greater acute care bed need surplus in the Moore/Hoke Service area. Therefore, this Application is non-conforming to Criterion (1).

B. Policy Gen-3 – Basic Principles

FirstHealth failed to adequately demonstrate the need for the acute care bed expansion project in Hoke County. In addition, the proposed expansion of FirstHealth Hoke results in a duplication of existing acute care beds in Hoke County. FirstHealth therefore failed to document how its proposed projects incorporate the Basic Principles in meeting the need for 28 acute care beds in the Cumberland/Hoke Service Area identified in the *2012 SMFP*. Please see also the discussion in the context of CON Review Criterion (3) below.

On pages 128 and 129, FirstHealth erroneously compares hospital charges to "compare" patient value. That is misleading in many ways. As FirstHealth stated on page 128, "charges do not reflect the cost of the service". In fact charges have **nothing** to do with actual reimbursement for any patient. Medicare, Medicaid, and Tricare are government payors that reimburse all providers according to pre-determined rates based upon diagnosis. Commercial insurances are negotiated by

each facility. FirstHealth did not run its report by MS-DRG, but by service line. Service line definitions do not take into consideration co-morbidities or secondary and tertiary diagnosis. Comparing average charge by service line is unreasonable.

FirstHealth also implies that higher charges negatively impact patients without health insurance. FirstHealth does not discuss the fact that CFVHS offers a hospital-sponsored charity care program that offers adjustments to individuals who meet the Charity Care Guidelines. Family size and financial means compared to the Income Poverty guidelines published annually by the Department of Health and Human Services are the key elements used to determine eligibility.

G.S. 131E-183 (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.

The project proposed by FirstHealth is flawed in so many ways it is difficult to determine where to begin these Comments.

1. 2012 SMFP Need Methodology Based upon CFVMC Utilization

FirstHealth's projected need for additional beds in Hoke County is based primarily upon shifting utilization from the acute care beds at FirstHealth Moore which is in the Moore/Hoke Service Area. FirstHealth Moore utilization for residents of Hoke County is not included the need methodology for the Cumberland/Hoke Service Area in the 2012 SMFP. As reflected on page 58 of the 2012 SMFP, there is not a need for additional acute care beds in the Moore-Hoke Service Area. Therefore, if FirstHealth wishes to shift utilization from FirstHealth Moore to FirstHealth Hoke, the acute care beds also must be shifted from the FirstHealth Moore acute care bed inventory.

The need determination in the 2012 SMFP is for 28 beds for the Cumberland/Hoke Service Area. The identified bed need in the 2012 SMFP is based solely on the increasing utilization at CFVMC by residents of Cumberland and surrounding counties as shown in Attachment 1. The following table reflects CFVMC historical patient origin by county for the last five years.

**Cape Fear Valley Medical Center Patient Origin 2007-2011
Average Daily Census**

	2007	2008	2009	2010	2011	Increase in ADC 2007-2011	Increase in ADC 2009-2010
Bladen	11.5	5.3	10.0	10.7	11.9	0.4	0.7
Cumberland	279.2	294.9	305.2	318.6	345.7	66.5	13.4
Harnett	23.7	24.6	25.4	24.3	27.7	4.0	-1.2
Hoke	14.9	17.6	17.2	16.8	20.7	5.7	-0.4
Moore	0.5	0.5	0.8	0.8	0.6	0.1	0.0
Robeson	27.6	29.7	29.2	29.3	32.0	4.5	0.1
Sampson	14.5	14.8	16.2	15.8	16.6	2.0	-0.4
Total ADC					455.2		
Percent Cumberland					75.9%		

Source: CFVHS Project I.D. # M-8833-12, Exhibit 30, Table 10

Hoke County residents represented 20.7 total patients at CFVMC each day in 2011. Furthermore, the volume in the previous table has not been acuity adjusted to reflect the volume appropriate for a community hospital. CFVMC already has addressed the need for a community hospital to meet the needs of Hoke County patients seeking care at CFVMC. In 2010, Hoke Community Medical Center was approved for 41 acute care beds to meet the needs of those patients from Hoke County who receive care at CFVMC. Hoke Community Medical Center is under development and plans to be operational in 2014 to meet the needs of Hoke County patients currently seeking care in the Cumberland/Hoke Service Area. No additional beds are needed in Hoke County to meet the needs of patients seeking care in the Cumberland/Hoke Service Area. Therefore, as shown in the previous table, the increase in ADC at the county level clearly supports approving the proposed CFVMC project to add 28 beds in Cumberland County and not Hoke County.

FirstHealth states, on page 80, that 92.3% of all "approved acute care beds" will be located in Cumberland County if CFVMC is approved for the additional 28 acute care beds, and that the Cumberland County population represents only 87.3% of the Cumberland/Hoke Service Area population. FirstHealth fails to adjust CFVHS bed utilization for the population from other counties who seek tertiary care at CFVMC and utilize "approved acute care beds." As shown in the previous table, only 75.9% of total utilization at CFVMC is by the population of Cumberland County. Therefore, on 75.9% of the beds are utilized by residents of Cumberland County not 92.3% as stated by FirstHealth. FirstHealth's argument on page 80 is simplistic, misleading, and completely without merit.

2. Hoke County Does not Need 77 Acute Care Beds

As of today, there are two hospitals under development in Hoke County with a total of 49 acute care beds. If this Application is approved, then together with Hoke Community Medical Center, there will be a total of 77 beds, 41 beds at Hoke Community Medical Center and 36 beds at FirstHealth Hoke.

As shown in the following table, which utilizes a three year average use rate and three year ALOS, with an acuity adjustment of 65%, Hoke County does not have a need for more than:

- 48 acute care beds in 2015 (PY 1⁴)
- 49 beds in 2016 (PY 2)
- 50 acute care beds in 2017 (PY 3).

**Hoke County Acute Care Bed Need – Acuity Adjusted
2012 – 2017**

Data Year	2012	2013	2014	2015	2016	2017
Population	50,347	51,629	52,908	54,190	55,471	56,754
3 Yr Avg Use Rate	72.24	72.24	72.24	72.24	72.24	72.24
Estimated Inpatient Cases	3,637	3,729	3,822	3,914	4,007	4,100
3 Yr Avg ALOS	4.60	4.60	4.60	4.60	4.60	4.60
Estimated Inpatient Days	16,745	17,172	17,597	18,023	18,450	18,876
ADC	46	47	48	49	51	52
Planning Target Occupancy Rate	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%
Acute Care Beds Needed	68.6	70.5	72.3	74.0	75.8	77.5
Acuity Adjustment*	65%	65%	65%	65%	65%	65%
Acuity Adjusted Inpatient Days	10,884	11,162	11,438	11,715	11,992	12,270
ADC	30	31	31	32	33	34
Planning Target Occupancy Rate	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%
Acuity Adjusted Acute Care Beds Needed	44.6	45.8	47.0	48.1	49.3	50.4

Source: Thomson Data; Attachment 9, Table 3

Planning target occupancy rate for acute care hospitals with ADC 1-99

The above projected utilization is based upon reasonable planning assumptions. The use of a three year average use rate and a three year ALOS to project future utilization smoothes historical spikes in utilization, and results in more reliable projections. The 65% acuity adjustment reflects shifting 90% of all Hoke County cases with an acuity level less than 2.0 to a community hospital setting as reflected in Attachment 9, Table 2. That assumption allows for some level of patient and physician choice and also is consistent with previous CON decisions and findings.

The FirstHealth Hoke bed need methodology for Hoke County on page 81 is significantly overstated as a result of the following fatal flaws.

1. The base year data (FY 2011) on page 81, which also appears on page 94 in Step 3 and page 472 in the Exhibits, includes Long-Term Care Hospital (LTCH) volumes and some psychiatric hospital volume. LTCH and psychiatric patients and patient days are not included in the Acute Care Bed Need Methodology as reflected on page 41 of the 2012 SMFP (Attachment 1). Data provided by FirstHealth on pages 470 through 481, included in Attachment 3, shows clearly that data from the following LTCH and psychiatric hospitals were included in the base data utilized on page 81 and throughout the projections in Step 3 through Step 6. This resulted in FirstHealth overstating patients and days for both acute and "community" volumes.

• Brynn Marr

⁴ Proformas are consistent that project years are October-September. PY1 = October 1, 2014-September 30, 2015.

- Highsmith-Rainey Specialty Hospital
- Kindred Hospital of Greensboro
- Psychiatric Solutions of NC dba Holly Hill Hospital
- Select Specialty Hospital - Durham
- Select Specialty Hospital - Greensboro
- Carolinas Specialty Hospital

As reflected in Attachment 9, Table 4, the impact of FirstHealth's failure to delete this volume results in overstating patient day volume for Hoke County by 6.8%.

- Using population growth to project future volume assumes that the 2011 admission use rate and ALOS will remain constant. FY 2011 admission use rates and patient days both experienced unusually high growth from FY 2010 to FY 2011 as reflected below. A three year average is a better measure of future utilization.

**Hoke County Total Acute Care Inpatient Utilization
All Providers**

Inpatient Cases					
	2008	2009	2010	2011	2009-2011 Avg
Inpatient Cases	3,183	3,280	3,331	3,699	
Population	44,588	45,973	47,606	49,065	
Use Rate per 1,000	71.39	71.35	69.97	75.39	72.24
Inpatient Days					
	2008	2009	2010	2011	2009-2011 Avg
Inpatient Days	14,423	14,764	14,995	17,793	
Population	44,588	45,973	47,606	49,065	
Use Rate per 1,000	323.47	321.15	314.98	362.64	332.92
ALOS					
	2008	2009	2010	2011	2009-2011 Avg
ALOS	4.53	4.50	4.50	4.81	4.60

Source: Attachment 9, Table 1

Acute care data excludes normal newborn, psychiatric, chemical dependency and rehabilitation DRGs identified in Attachment 5.

As shown in the previous table, acute care utilization in Hoke County increased dramatically from FY 2010 to FY 2011 after a three year declining trend. FirstHealth did not discuss the unusual one-year growth in the acute care admission use rate, the acute care patient day use rate or ALOS after three years of continuous decline. In addition, FirstHealth did not provide any explanation, documentation, or discussion about why this high use rate will remain at the FY 2011 rate in the future.

In addition, as discussed below, actual utilization at FirstHealth Moore from the four counties has decreased during the last two years, further substantiating the fact that the use of population growth is unreasonable in this methodology.

FirstHealth provided no data and no discussion about why using population growth was a reasonable assumption, when in fact both the admission use rate and ALOS were unusually inflated in FY 2011, as shown in the previous table and historical utilization at FirstHealth

Moore has decreased from the service area. In fact, it is unreasonable to assume that the level of utilization experienced in FY 2011 will continue; therefore, using a population growth rate is not reasonable in this methodology based upon the above data.

3. The "community" volume is not acuity adjusted in any way for medical DRGs and surgical DRGs not included in the specific categories first discussed on page 80 of the FirstHealth application. Only some surgical DRGs were excluded based upon the assumptions on pages 80, 81 and 95 through 99. Data included on pages 482 to 500 illustrate the DRGs that FirstHealth proposed to shift to FirstHealth Hoke. In fact this is the only data available in the application which provides any information regarding what DRGs are included or excluded in the "community hospital" patient days utilized in the methodology. FirstHealth did not provide any detail regarding how the "community hospitals" additional exclusions for OB deliveries, neonatology, trauma, open heart, surgical cardiology, neurosurgery, and thoracic surgery are defined. CFVHS tried unsuccessfully to duplicate the volumes reflected in data on pages 476 through 481 of the Exhibits⁵.

Data on pages 482 to 500 of the Exhibits reflect the actual "community hospital" appropriate utilization in FY 2011 at FirstHealth Moore Regional. That is the base data for FirstHealth Hoke projections. CFVHS summarized the data by DRG, with acuity detail. That detail is included in Attachment 4.

The following table summarizes total utilization appropriate to be shifted from pages 482 to 500 of the Application, which also is summarized in Attachment 4.

**FirstHealth Moore Regional "Community" Hoke County Volumes
Acuity Level**

	Cumberland		Hoke		Robeson		Scotland	
	Pts	Days	Pts	Days	Pts	Days	Pts	Days
Total Patient Volume	350	1,281	1,499	6,482	1,076	4,390	615	2,526
Total Volume with Acuity Level Less than 2.0	250	896	1,303	5,191	785	2,903	490	1,781
Total Volume with Acuity Level Greater than 2.0	100	385	196	1,291	291	1,487	125	745
% of Greater than 2.0	28.6%	30.1%	13.1%	19.9%	27.0%	33.9%	20.3%	29.5%

Source: Attachment 4

Notes: FirstHealth included Chemical Dependency DRGs 894-897 - These were deleted in the above data. As highlighted in the previous table, nearly 20% of the base data calculated by FirstHealth as "community hospital" appropriate for Hoke County patients had an acuity level greater than 2.0. FirstHealth made no further adjustment in the table on page 81 for acuity. As a result, the projections on page 81 are overstated.

4. In-migration of 15% reflected in the projections on page 81 is unsupported. FirstHealth provided no documentation to support this level of in-migration to a rural county located between two larger counties with large tertiary care hospitals. The following table shows FirstHealth's in-migration for the two community hospitals currently operated by

⁵ Volumes in Attachment 8 related to comments regarding Criterion 13c approximate the FirstHealth projections and are close, but not equal to the FirstHealth data utilized. That data is based upon the DRGs reflected in Attachment 5.

FirstHealth. It is evident from FirstHealth's own experience that in-migration to Hoke County has been overstated.

**Historical In-Migration FirstHealth Community Hospitals
FY 2011**

Hospital	Number of Beds	Home County Volume	Total Volume	In-Migration
Admissions				
FirstHealth Montgomery	37	931	1,003	7.2%
FirstHealth Richmond	99	2,586	2,939	12.0%
Patient Days				
FirstHealth Richmond	99	8,090	8,847	8.6%

Source: Admissions, 2012 LRAs; Patient Days, Proposed 2013 SMFP and Thomson data, Attachment 9, Table 5

Furthermore, Hoke County is directly situated between Cumberland County and Moore County, both of which have large tertiary hospitals. On page 82, FirstHealth also states that the actual FirstHealth Hoke projections in Section IV, further justify a 15% in-migration factor. As will be discussed in detail below, the FirstHealth projections are unreasonable, and therefore do not justify use of a 15% in-migration multiplier.

FirstHealth has failed to answer the question why a patient from outside of Hoke County would choose a 36 bed hospital with limited services over either FirstHealth Moore Regional or Cape Fear Valley Medical Center.

The following table adjusts the projections on page 81 based on the revised admission and inpatient days (excluding LTCH and Psy as discussed in #1 above). The following projections also adjust for acuity, removing the 19.9% of projected volumes exceeding a 2.0 acuity level discussed in #3 above and utilizing the resulting ALOS. Finally, the following projections also utilize a 10% in-migration rate.

The following projections do not make any adjustment to the growth rate utilized, even though the use of population growth rates result in overstated projected volumes as discussed in #2 above.

As shown in the following table, the projections included by FirstHealth on page 81 for Hoke County are significantly overstated.

**Projected Hoke County Acute Care Bed Need
Project Year 3 - 2017**

Year	Population	Growth Rate	Acute Admissions	Community Admissions	Acute ALOS	Community ALOS	Acute Days	Community Days
2011	49,065		3,699	2,760	4.8	4.6	17,793	12,797
2012	50,347	2.6%	3,796	2,832	4.8	4.6	18,258	13,131
2013	51,629	2.5%	3,892	2,904	4.8	4.6	18,723	13,466
2014	52,908	2.5%	3,989	2,976	4.8	4.6	19,187	13,799
2015	54,190	2.4%	4,085	3,048	4.8	4.6	19,652	14,134
2016	55,471	2.4%	4,182	3,120	4.8	4.6	20,116	14,468
2017	56,754	2.3%	4,279	3,193	4.8	4.6	20,581	14,802
ADC								40.6
Adjusted for Acuity < 2.0 = 80%								32.4
Plus 10% In-migration								36
Total Bed Need								54

Source: Attachment 9, Table 6

As shown in the previous table which is not adjusted for use of the population growth rate, projected bed need for Hoke County in 2017, with 10% in- migration is only 54 total acute care beds. Therefore, FirstHealth has not documented the need for 77 acute care beds in Hoke County and is non-conforming to Criterion (3) and should be denied.

On pages 70 through 72 FirstHealth also provided population growth rates and age specific statistics which "supported" the location of the proposed beds in Hoke County. FirstHealth's data is misleading. The data either combines the population of the four county service area instead of just presenting Hoke County data, or utilizes percentages to illustrate the projected high growth in Hoke County between 2010 and 2020. While the percentage growth in Hoke County is significant, projected actual population growth for the 65+ population is only 2,492 persons age 65+ which is only 21.0% of the Cumberland County expected growth in population age 65+ as shown in the following table.

**Hoke and Cumberland Counties
65+ Ranked by Actual Population Growth**

Rank - All North Carolina Counties	County	2010	2020	Actual Increase Population Growth
1	Wake	77,799	134,232	56,433
9	Cumberland	31,258	43,097	11,839
22	Harnett	12,126	18,750	6,624
55	Hoke	3,557	6,049	2,492

Source: NC OSBM, Attachment 9, Table 7

**Hoke and Cumberland Counties
45+ Ranked by Actual Population Growth**

Rank - All North Carolina Counties	County	2010	2020	Actual Increase Population Growth
1	Wake	299,597	424,054	124,457
14	Harnett	38,964	51,858	12,894
18	Cumberland	105,801	116,558	10,757
31	Hoke	13,854	19,105	5,251

Source: NC OSBM, Attachment 9, Table 7

On page 70 FirstHealth states that, "the rapid growth in the 45-64 and 65+ population will result in a significant increase in demand for healthcare services including inpatient care." If this is true, the need for expanding serves in Cumberland County far outweighs the need in Hoke County. Cumberland County actual population growth projected for the 45+ population is more than twice the Hoke County actual population growth projected for the population 45+ as shown in the previous table.

3. FirstHealth's Bed Need Methodology for FirstHealth Hoke Is Flawed and as a Result Overstates Projected Need

On pages 93-104, FirstHealth discusses the methodology utilized to project the shift in patient volume from FirstHealth Moore to FirstHealth Hoke. The following discussion follows the methodology Step by Step pointing out errors in the methodology. In particular, volumes are overstated and incorrect and one Step, Step 14, is completely unsupported and unreasonable.

Step 1. Population Projections and Step 2. Population Growth Rates

On page 70, FirstHealth discusses the significant population growth of Hoke County from 2000 to 2010. FirstHealth fails to acknowledge that much of this growth was attributed to the Base Realignment and Closure Act (BRAC). As discussed in the CFVHS Project I.D. N-8833-12, pages 43 and 44, the growth in population is slowing and flattening. Project I.D. N-8833-12 Exhibit 32 discusses the unrealized growth associated with BRAC and the fact that population growth is slowing. While it is expected that the population will continue to grow; the Fayetteville Observer has reported that the growth rate will be lower and the growth will occur over a longer timeframe.⁶ Therefore, North Carolina Office of State Budget and Management population projections for both Cumberland and Hoke Counties may be overstated. FirstHealth failed to acknowledge that trend in its projections.

Step 3. FY 2011 Acute Care Admissions and Patient Days by County

As previously discussed, the base year data (FY 2011) on page 94 in Step 3 and pages 470-481 in the Exhibits include Long-Term Care Hospital (LTCH) volumes and some psychiatric hospital volume. LTCH and psychiatric patients and patient days are not included in the Acute Care Bed Need Methodology as reflected on page 41 if the 2012 SMFP (Attachment 1). Data provided by FirstHealth on pages 470 through 481 shows clearly that data from LTCH and psychiatric hospitals

⁶ <http://www.fayobserver.com/articles/2012/01/29/1151310?sac=Local>

were included in the base data utilized throughout the projections in Step 3 through Step 6. This resulted in FirstHealth overstating patients and days for both acute and "community" volumes. As reflected in Attachment 9, Table 4, the impact of FirstHealth's failure to delete this volume results in overstating patient day volume for Hoke County by 6.8%.

Step 4. Project Acute Care Admissions by County Using Population Growth from Step 2 and Historical Volume from Step 3.

As previously discussed, using population growth to project future volume assumes that the 2011 admission use rate and ALOS will remain constant. FY 2011 admission use rates and patient days both experienced unusually high growth from FY 2010 to FY 2011 as reflected below. A three year average is a better measure of future utilization.

**Hoke County Total Acute Care Inpatient Utilization
All Providers**

Inpatient Cases	2008	2009	2010	2011	2009-2011 Avg
Inpatient Cases	3,183	3,280	3,331	3,699	
Population	44,588	45,973	47,606	49,065	
Use Rate per 1,000	71.39	71.35	69.97	75.39	72.24
Inpatient Days	2008	2009	2010	2011	2009-2011 Avg
Inpatient Days	14,423	14,764	14,995	17,793	
Population	44,588	45,973	47,606	49,065	
Use Rate per 1,000	323.47	321.15	314.98	362.64	332.92
ALOS	2008	2009	2010	2011	2009-2011 Avg
ALOS	4.53	4.50	4.50	4.81	4.60

Source: Attachment 9, Table 1; Acute care data excludes newborn, rehabilitation, psychiatric and substance abuse DRGs identified in Attachment 5

As shown in the previous table, acute care utilization in Hoke County increased significantly from FY 2010 to FY 2011 after a three year declining trend. FirstHealth did not discuss the unusual growth in the acute care admission use rate, the acute care patient day use rate or ALOS after three years of continuous decline. In addition, FirstHealth did not provide any explanation, documentation, or discussion about why this high use rate will remain at the FY 2011 rate in the future. FirstHealth provided no data and no discussion about why using population growth was a reasonable assumption, when in fact both the admission use rate and ALOS were unusually inflated in FY 2011, as shown in the previous table.

Another factor to consider when determining if use of the population growth rate is reasonable is actual historical growth at FirstHealth Moore from Hoke County and the proposed service area. The following table shows historical volumes at FirstHealth Moore from each of the four counties in the defined service area.

**FirstHealth Moore Regional Historical Utilization
FirstHealth Hoke Proposed Service Area**

	2007	2008	2009	2010	2011	Avg Annual Growth Rate 2007-2011	Avg Annual Growth Rate 2009-2011
Cumberland County							
Admissions	579	508	624	689	494		
Annual Growth		-12.3%	22.8%	10.4%	-28.3%	-1.8%	-8.9%
Hoke County							
Admissions	1,438	1,505	1,692	1,832	1,620		
Annual Growth		4.7%	12.4%	8.3%	-11.6%	3.4%	-1.6%
Robeson County							
Admissions	1,241	1,178	1,251	1,439	1,178		
Annual Growth		-5.1%	6.2%	15.0%	-18.1%	-0.5%	-1.6%
Scotland County							
Admissions	925	914	985	1,013	815		
Annual Growth		-1.2%	7.8%	2.8%	-19.5%	-2.5%	-8.4%
Total							
Admissions	4,183	4,105	4,552	4,973	4,107		
Annual Growth		-1.9%	10.9%	9.2%	-17.4%	0.2%	-4.1%

Source: Annual FirstHealth Moore Regional Licensure Renewal Applications 2008-2012 Inpatient Patient Origin page 19

As reflected in the previous table, historical growth in admissions for FirstHealth Moore from each of the four counties was negative from 2009 to 2011. That further illustrates that using the population growth rate to project future FirstHealth Hoke inpatient volumes is an unreasonable assumption.

In some cases, a population growth rate can be utilized to project future utilization. To justify the use of a population growth rate, a methodology should include a discussion of use rates for the proposed service area, as well as historical utilization. CFVHS utilized a population growth rate in Project I.D. #N-8499-10. CFVHS provided extensive data and discussion regarding use rates for the counties impacted and discussed why this was a reasonable methodology. CFVHS also included historical utilization data to support the assumption. FirstHealth has not justified the use of the population growth rate. **In fact, it is unreasonable of FirstHealth to assume that the use rates experienced in FY 2011 will continue based upon the data presented here regarding use rates; therefore, using a population growth rate is not reasonable in this methodology.**

Step 5. FY 2011 "Community Hospital" Appropriate Admissions and Patient Days by County

As previously discussed, the base year data (FY 2011) on page 94 in Step 3. and pages 470-481 in the Exhibits include Long-Term Care Hospital (LTCH) volumes and some psychiatric hospital volume. In addition, the "community" volume is not acuity adjusted in any way for medical DRGs. Only some surgical DRGs were excluded based upon the assumptions on pages 80, 81, 95 through 99. Data included on pages 482 to 500 illustrate the DRGs that FirstHealth proposed to shift to FirstHealth Hoke. In fact this is the only data available in the application which provides any information regarding what DRGs are included or excluded in the "community hospital" inpatient

days in the FirstHealth methodology. FirstHealth did not provide any detail regarding how the "community hospitals" additional exclusions for OB deliveries, neonatology, trauma, open heart, surgical cardiology, neurosurgery, and thoracic surgery are defined. CFVHS tried unsuccessfully to duplicate the volumes reflected in data on pages 476 through 481 of the Exhibits.

Data on pages 482 to 500 reflect the actual "community hospital" appropriate utilization in FY 2011 at FirstHealth Moore Regional that is the base data for FirstHealth Hoke projections. CFVHS summarized the data by DRG, with acuity detail. That detail is included in Attachment 4, along with the FirstHealth data.

Step 6. Project "Community Hospital" Appropriate Admissions by County Using Population Growth from Step 2 and Historical Volume from Step 5.

As previously discussed, using population growth to project future volume assumes that the 2011 admission use rate and ALOS will remain constant. FY 2011 admission use rates and patient days both experienced unusually high growth from FY 2010 to FY 2011 as reflected below. A three year average is a better measure of future utilization. FirstHealth provided no data and no discussion about why using population growth was a reasonable assumption, when in fact both the admission use rate and ALOS were unusually inflated in FY 2011 as shown in the previous table. **In fact, it is unreasonable to assume that the level of utilization experienced in FY 2011 will continue; therefore, using a population growth rate is not reasonable in this methodology.**

Step 7. FY 2011 "Community Hospital" Appropriate Admissions by County Provided by FirstHealth Moore Regional

Data on page 96 in Step 7. is incorrect. As reflected in Attachment 4, FirstHealth failed to delete DRGs 884-897 for chemical dependency, resulting in overstating base year data.

In addition, FirstHealth failed to acuity adjust any of the remaining DRGs as discussed above. The following table shows acuity data by county of the FirstHealth volumes utilized as base data for the projections.

**FirstHealth Moore Regional "Community" Volumes By County
Acuity Level**

	Cumberland		Hoke		Robeson		Scotland	
	Pts	Days	Pts	Days	Pts	Days	Pts	Days
Total Patient Volume	350	1,281	1,499	6,482	1,076	4,390	615	2,526
Total Volume with Acuity Level Less than 2.0	250	896	1,303	5,191	785	2,903	490	1,781
Total Volume with Acuity Level Greater than 2.0	100	385	196	1,291	291	1,487	125	745
% of Greater than 2.0	28.6%	30.1%	13.1%	19.9%	27.0%	33.9%	20.3%	29.5%

Source: Attachment 4

As shown in the above table, 13% to 28.6% of total cases had an acuity level greater than 2.0 which reflects the difficulty of a case. Patient days are higher as more acute patients usually have longer

lengths of stay. **FirstHealth should have made an acuity adjustment to reflect patients not appropriate for a community hospital.** For illustrative purposes, the following table includes DRGs with an acuity level greater than 3.0, which represents cases with very high acuity levels, which FirstHealth included as "community" appropriate. The list would be even longer if CFVHS utilized its own definition of "community" appropriate DRGs for the following list and included all DRGs with an acuity level greater than 2.0. Leaving these high acuity patients in the methodology results in overstated ALOS.

FirstHealth "Community" DRGs with Acuity Level Greater than 3.0

MS-DRG	MDC	TYPE	MS-DRG Title	Weights
459	08	SURG	SPINAL FUSION EXCEPT CERVICAL W MCC	6.5065
870	18	MED	SEPTICEMIA OR SEVERE SEPSIS W MV 96+ HOURS	5.8305
326	06	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROC W MCC	5.8142
820	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE W MCC	5.7112
853	18	SURG	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W MCC	5.5237
329	06	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W MCC	5.2807
207	04	MED	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT 96+ HOURS	5.2068
856	18	SURG	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W O.R. PROC W MCC	5.1296
981		SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W MCC	5.0634
461	08	SURG	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY W MCC	4.9385
466	08	SURG	REVISION OF HIP OR KNEE REPLACEMENT W MCC	4.9144
471	08	SURG	CERVICAL SPINAL FUSION W MCC	4.7301
239	05	SURG	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE W MCC	4.5544
616	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS W MCC	4.4934
335	06	SURG	PERITONEAL ADHESIOLYSIS W MCC	4.2777
356	06	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W MCC	4.0293
460	08	SURG	SPINAL FUSION EXCEPT CERVICAL W/O MCC	3.8713
907	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W MCC	3.8268
414	07	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W MCC	3.6675
656	11	SURG	KIDNEY & URETER PROCEDURES FOR NEOPLASM W MCC	3.5713
469	08	SURG	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W MCC	3.4724
987		SURG	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS W MCC	3.4495
622	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS W MCC	3.4166
628	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W MCC	3.3819
462	08	SURG	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY W/O MCC	3.3425
477	08	SURG	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W MCC	3.3286
467	08	SURG	REVISION OF HIP OR KNEE REPLACEMENT W CC	3.2321
515	08	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W MCC	3.1894
037	01	SURG	EXTRACRANIAL PROCEDURES W MCC	3.1543
480	08	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT W MCC	3.0939
492	08	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR W MCC	3.0670
500	08	SURG	SOFT TISSUE PROCEDURES W MCC	3.0288
662	11	SURG	MINOR BLADDER PROCEDURES W MCC	3.0158
654	11	SURG	MAJOR BLADDER PROCEDURES W CC	3.0054

Source: Attachment 4

Step 8. Project "Community Hospital" Appropriate Admissions by County Provided by First Health Moore Regional Using Population Growth from Step 2 and Historical Volume from Step 7.

As previously discussed, using population growth to project future volume assumes that the 2011 admission use rate and ALOS will remain constant. FY 2011 admission use rates and patient days both experienced unusually high growth from FY 2010 to FY 2011 as reflected below. A three year average is a better measure of future utilization. FirstHealth provided no data and no discussion about why using population growth was a reasonable assumption, when in fact both the admission use rate and ALOS were unusually inflated in FY 2011 as shown above. **In fact, it is unreasonable to assume that the level of utilization experienced in FY 2011 will continue; therefore, using a population growth rate is not reasonable in this methodology.**

In addition, as discussed above, base data for FY 2011 was not appropriately adjusted for acuity. That results in overstating the ALOS for "community" admissions.

Step 9. Project "Community Hospital" Appropriate Patient Days by County Provided by First Health Moore Regional Using Admission from Step 8 and Historical Average Length of Stay

FirstHealth calculated historical average length of stay (ALOS) based upon the incorrect data in Step 7 above which is reflected on page 97 of the application. In addition to utilizing overstated patient days, FirstHealth did not acuity adjust the ALOS reflected in Step 9 as discussed above. The following table provides acuity adjusted ALOS for the historical data utilized in Step 7 which is summarized in Attachment 4.

FirstHealth "Community Hospital" Acuity Adjusted Average Length of Stay

	Cumberland		Hoke		Robeson		Scotland	
	Pts	Days	Pts	Days	Pts	Days	Pts	Days
Total "Community" Volume	350	1281	1499	6482	1076	4390	615	2526
ALOS		3.7		4.3		4.1		4.1
Total "Community" Volume with Acuity Level Less than 2.0	250	896	1303	5191	785	2903	490	1781
ALOS		3.6		4.0		3.7		3.6
ALOS Percent Overstated		2.8%		7.5%		10.8%		13.9%

Source: Attachment 4

As shown in the previous table, failure to adjust for higher acuity cases that are not appropriate for a community hospital setting resulted in overstating the ALOS in the FirstHealth application. Due the failure of FirstHealth to appropriately acuity adjust volumes resulted in the use of ALOS metrics in the FirstHealth application that are 2.8% to 13.9% higher than they should be. Therefore, depending on the county projected patient days were similarly overstated.

Once again, in Step 9. FirstHealth utilizes population growth to project future volume assuming that the 2011 admission use rate and ALOS will remain constant. **As discussed above, it is unreasonable to assume that the level of utilization experienced in FY 2011 will continue and ALOS is overstated; therefore, using a population growth rate is not reasonable in this methodology.**

Step 10. FY 2011 Medical/Surgical Mix of "Community Hospital" Appropriate Admissions and Patient Days Provided by First Health Moore Regional

The volumes utilized are based upon incorrect volumes and are not acuity adjusted as previously discussed. Therefore, the medical/surgical split and the resulting volumes and the average lengths of stay in the table on page 98 are incorrect and overstated. Further, as noted in Attachment 4, FirstHealth incorrectly counted surgical DRGs 853 and 857 as medical cases and days for Hoke County on page 490.

Step 11. Apply FY 2011 Medical/Surgical Mix to Projected FirstHealth "Community Hospital" Appropriate Admissions

The volumes utilized are based upon incorrect volumes and are not acuity adjusted as previously discussed. Therefore, the volumes and the average lengths of stay in the table on page 98 are overstated.

Step 12. Project Surgical Volume Shifted

FirstHealth erroneously assumes that they will shift 470 surgical admissions from FirstHealth Moore to FirstHealth Hoke. As previously discussed, that volume is not acuity adjusted and is based upon incorrect data.

In addition, FirstHealth does not discuss total surgical projections from the 2010 FirstHealth Hoke CON Application Project I.D. #N-8497-10, with one operating room, nor does FirstHealth project total surgical utilization in this Application. Projected surgical utilization must be reviewed to determine if the one operating room proposed at FirstHealth Hoke has sufficient capacity to meet the projected shift in surgical volume from FirstHealth Moore to FirstHealth Hoke.

In Project I.D. #N-8497-10, FirstHealth projected 69 inpatient surgical cases (page 220). Those were cases from the emergency room and based upon assumptions on page 209, 51.3% of these were incremental volume and not volume shifted from FirstHealth Moore's emergency department; 48.7% were shifted from FirstHealth Moore.

Therefore, total inpatient surgical volume projected for FirstHealth Hoke in Project Year 3 equals 470 cases plus 69 x 51.3% cases or 505 total inpatient surgical cases.

Outpatient surgical cases projected in Project I.D. #N-8497-10 totaled 550 total outpatient cases (page 224). Note that cases from Project I.D. #N-8497-10 were projected for 2015. For purposes of these Comments, volumes are assumed to remain constant through 2017.

Therefore, total surgical volume as reflected in this application results in operating room need shown in the following table.

**Projected Operating Room Utilization
Project Year 3**

	Projected Inpatient Cases	Projected Outpatient Cases
This Application	470	1,100
Weighted Hours	1,410	1,650
Combined Inpatient and Outpatient Weighted Hours	3,060	
OR Capacity Available Hours (1 OR)	2,340	
OR Utilization	131%	

Source: Project I.D. # N-8838-12, page 101, 239

As reflected on page 70 of Project I.D. #N-8497-10 the FirstHealth Hoke operating room will operate for scheduled inpatient and outpatient surgical cases from 7:00 AM to 4:00 PM Monday through Friday, or 2,340 hours per year. As shown in the previous table, projected volume equals 131% capacity and exceeds the *SMFP* operating room planning target of 80% by 51%. Therefore the proposed volume shifts for surgical volumes are unreasonable.

In addition, FirstHealth projected surgical volume shifts assumes that 27 surgeons (page 157) will share one operating room at FirstHealth Hoke. The one operating room in the approved FirstHealth Hoke also must meet the surgical needs of the emergency room. Therefore, the proposed inpatient surgical volume shift is unreasonable, resulting in overstated projections and the project should be denied.

A review of the surgical staff proposed for FirstHealth Hoke and FirstHealth Moore also demonstrates that the proposed shifts in volume are unreasonable. On page 157 FirstHealth states that FirstHealth Hoke will have 27 surgeons in the following surgical specialties: General Surgery, Neurosurgery, OB/GYN, Ophthalmology, Orthopedic, ENT, Plastic Surgery and Urology.

There are 72 total physicians in these same specialties at FirstHealth Moore. If all 27 proposed surgeons currently practice at FirstHealth Moore, as indicated by letters of support, 37.5% of surgeons will switch to FirstHealth Hoke or work at both locations ($27 / 72 = 37.5\%$).

On page 100, FirstHealth proposes to shift up to 60% of all surgical cases identified for Hoke County residents. Therefore, FirstHealth assumes that a significant number of patients, in-particular, those currently seeing the 62.5% of surgeons who choose not to go to FirstHealth Hoke, will change physicians. FirstHealth does not provide any documentation from patients who will be willing to switch physicians.

Furthermore, a review of surgeons at FirstHealth Moore and FirstHealth Richmond indicates very little overlap between the two locations for some specialists. OB/GYNs and Urologists do not overlap FirstHealth facilities as reflected in the FirstHealth medical staff lists included in Attachment 6.

FirstHealth Richmond is approximately 32.3 miles, 40 minutes from FirstHealth Moore. FirstHealth Hoke is approximately 28.5 miles and 38 minutes. Based upon the similar distances it is reasonable to assume that existing medical staff at FirstHealth Moore will behave in a similar manner and not overlap facilities between FirstHealth Moore and FirstHealth Hoke. Therefore, the

60% shift in surgical visits for Hoke County residents currently seeking care with Moore County physicians is overstated as are the shifts in volume from Cumberland, Scotland and Robeson.

Step 13. Project Medical Volume Shifted

FirstHealth erroneously assumes that it will shift 1,423 medical admissions from FirstHealth Moore to FirstHealth Hoke. As previously discussed, that volume is not acuity adjusted, and is based upon incorrect data.

Furthermore, a review of the medical staff proposed for FirstHealth Hoke and FirstHealth Moore also demonstrates that the proposed shifts in volume are unreasonable. On page 157, FirstHealth indicates that FirstHealth Hoke will have 27 physicians in the following medical specialties: Family Medicine, Internal Medicine, Invasive Cardiology, Medical Oncology, Pediatrics, and Pulmonary.

There are 75 total physicians in these same specialties at FirstHealth Moore. If all 27 proposed physicians currently practice at FirstHealth Moore, as indicated by letters of support, 36% of medical physicians will switch to FirstHealth Hoke or work at both locations ($27 / 75 = 36\%$).

On page 102, FirstHealth proposes to shift up to 65% of all medical cases identified for Hoke County residents. Therefore, FirstHealth assumes that a significant number of patients, in-particular, those currently seeing the 64% of physicians who choose not to go to FirstHealth Hoke, will change physicians. FirstHealth does not provide any documentation from patients who will be willing to switch physicians.

Furthermore, a review of medical physicians at FirstHealth Moore and FirstHealth Richmond indicates very little overlap between the two locations. Only specialty physicians, cardiologists, oncologists, and pulmonologists, tend to overlap FirstHealth facilities as reflected in the FirstHealth medical staff lists included in Attachment 6.

FirstHealth Richmond is approximately 32.3 miles, 40 minutes from FirstHealth Moore. FirstHealth Hoke is approximately 28.5 miles and 38 minutes. Based upon the similar distances, it is reasonable to assume that existing medical physicians at FirstHealth Moore will behave in a similar manner and not overlap facilities between FirstHealth Moore and FirstHealth Hoke. Therefore, the 65% shift in medical visits for Hoke County residents currently seeking care with Moore County physicians is overstated as are the shifts in volume from Cumberland, Scotland, and Robeson counties.

Step 14. Volume Shifted from Other Providers

In an attempt to obtain the volume necessary to justify 28 additional beds at FirstHealth Hoke, FirstHealth resurrects the methodology from Project I.D. #N-8497-10. Relevant portions of Project I. D. # N-8497-10 are included in Attachment 7. Without the 405 admissions in Step 14, and the resulting patient days, FirstHealth Hoke does not reach the required 66.7% utilization in Project Year 3. There are several reasons Step 14 is unreasonable and should not be included in the methodology.

1. The "incremental" volume in Step 14. Represents 17.6% of total projected admissions and 18.3% of total projected patient days in Project Year 3.

2. Inpatient admissions reflected in Step 14. (page 103) appeared on page 215 of Project I.D. # N-8497-10. Those admissions were projected solely based upon projected ED utilization at FirstHealth Hoke.

Projected ED utilization in CON application Project I.D. #N-8497-10 **assumed a 65.9% market share** of Hoke County ED volume (page 209 of the previous application), **which was predicated on there being only ONE emergency room in Hoke County**. FirstHealth did not revisit emergency room projections and assumed that the volume projected in 2010 remained accurate. There are **TWO emergency rooms under development in Hoke County**, Hoke Community Medical Center with 16 emergency patient bays, and FirstHealth Hoke, with 8 emergency patient bays. The 65.9% emergency room market share assumption utilized in Project I.D. N-8497-10 is not a reasonable assumption and therefore, the projected inpatient admissions from that application are invalid. Therefore, the volumes reflected in Step 14. are unreasonable.

3. On page 103, it appears that FirstHealth assumes 100% of volume projected in Project I.D. #N-8497-10 (page 215 in Attachment 7) is incremental volume shifted from other providers.

In Project I.D. #N-8497-10, the volume on page 215 is not 100% incremental volume. According on page 209 of Project I.D. #N-8497-10 (Attachment 7) only 51.3% of the ED volume, hence the surgical volume⁷ was incremental. Therefore, projected incremental volume in Step 14. of this Application is overstated.

4. FirstHealth does not explain the methodology and how the volume in Step 14. converts to patient days in Step 15. It appears that the 405 patient in Step 14. are added to the surgical volume in Step 12. and the medical volume in Step 13. to get total admissions reflected on page 104. How the volume is split between medical and surgical cases and how the volume is converted into patient days is unexplained.
5. FirstHealth provided no documentation or discussion of the 5% growth in volume from 2014 to 2015 on page 103. FirstHealth references a 5% increase in volume in the previous application from 2014 to 2015. The growth inpatient admissions from PY 2 to PY 3 in Project I.D. #N-8497-10 is only 3.0% based upon the projections on page 215 of Project I.D. #N-8497-10 (Attachment 7). Therefore, the projections in Step 14. are overstated by 2.0%.
6. FirstHealth provided no documentation or discussion of the 50% decrease reflected in the table in Step 14. on page 103.

Finally, the emergency room market share assumption utilized by FirstHealth in Project I.D. #N-8497-10 was based upon a telephone survey and assumed that the proposed FirstHealth emergency room would be the **only** emergency room in Hoke County. That survey was made prior to the approval and subsequent development of the emergency room at Hoke Community Medical Center, which will have a 16 bay emergency department and 41 acute care beds, and will be a full service hospital. The survey also did not reveal the fact that the proposed FirstHealth hospital at that time would not be a full service community hospital.

⁷ All inpatient projections in Project I.D. #N-8497-10 were based upon emergency room utilization.

FirstHealth did not adjust market share projections utilized in Project I.D. #N-8497-10 to address the presence of Hoke Community Medical Center, and it is unreasonable to assume that FirstHealth Hoke will realize 65.9% emergency room market share as projected in Project I.D. N-8497-10. Therefore, projected incremental inpatient admissions based upon emergency room utilization is overstated and in fact this Step should not be included in the projections. **Without that Step, projected utilization is well under the required 66.7% occupancy level.**

Step 15. and Step 16. Project Total Admissions, Total Patient Days and Future Occupancy Levels

FirstHealth volumes calculated in Step 12. through Step 14. are overstated and are based upon unreasonable assumptions as previously discussed. In addition, projected volumes are not acuity adjusted and are based upon incorrect data.

Furthermore, FirstHealth provides no assumptions for total patient days associated with the "incremental" volume projected in Step 14. This impacts how total patient days are calculated in Step 15. and how total utilization is calculated in Step 16.

Step 16. Project ICU Admissions

FirstHealth volumes are overstated and are based upon unreasonable assumptions as previously discussed; therefore, ICU projections are overstated on page 105.

In addition, FirstHealth utilized the FirstHealth Moore ratio of medical ICU days to total patient days. That ratio was not acuity adjusted. Therefore, higher acuity patients with longer lengths of stay are included in the ratio. FirstHealth Hoke will be a community hospital and will not be treating patients with high acuity due to the limited services available in a community hospital. Therefore, use of the FirstHealth Moore ratio is an unreasonable assumption.

FirstHealth also referenced the higher FirstHealth Richmond ICU days to total days ratio and determined it to be too high. FirstHealth Richmond is a 99 bed acute care hospital with a different patient mix and higher acuity than that proposed at FirstHealth Hoke. Therefore it also would have been an unreasonable assumption. As discussed below, historical data from other small community hospitals is available in the Annual Hospital Licensure Renewal Applications, and FirstHealth should have utilized that data to project ICU days for FirstHealth Hoke.

FirstHealth also failed to consider relocation of existing ICU beds from FirstHealth Moore Regional. In FY 2011, the 28 medical surgical ICU beds at FirstHealth were operated at 69% of capacity. Shifting 932 patient days from the FirstHealth Moore ICU will result in an occupancy level of less than 60%, well under the standard of 70% defined in the CON Criteria and Standards for Intensive Care Units with more than 20 beds.

Finally, FirstHealth failed to provide any assumptions regarding average length of stay for ICU patients as discussed in the ICU Criteria and Standards in Section IV.

Step 17. Estimate Market Share

FirstHealth's market share assumptions are incorrect. Because the base data utilized to project market share on page 106 included LTCH days and psychiatric days, projected market share would be higher in the calculations on page 106. In addition, FirstHealth did not calculate the combined FirstHealth Hoke and FirstHealth Moore market share. The combined volume compared to current FirstHealth Moore market share would reflect an increase in total service area market share because patients in Step 14, from Hoke County, reflected on page 104, are incremental patients previously served by other non-FirstHealth providers.

Step 18. Project Patient Origin

The projected patient origin on page 106 further illustrates that the proposed project cannot be successful without patients from surrounding counties. Patient origin from Hoke County decreases each year. As discussed above, the historical growth in admissions at FirstHealth Moore for patients from each of the three other counties was negative from 2010 to 2011 and negative from 2009-2011. The high growth rates utilized by FirstHealth are unreasonable resulting in unreasonable projections.

CFVHS reviewed and discussed each Step of the FirstHealth Hoke bed need methodology in detail. The FirstHealth projections are overstated, unreasonable and incorrect.

4. FirstHealth Hoke's Proposed 4-County Service Area is Over-inclusive and Overstates the Population to Be Served

In Project I.D. #N-8497-10, the CON Section approved FirstHealth Hoke's defined 1-county service area: Hoke County only.

FirstHealth's methodology to project acute care admissions and days of care is based on a projected number of medical and surgical inpatients from a 4-county service area during the first three years of operation of FirstHealth Hoke.

FirstHealth includes Cumberland County in the service area, which results in significantly overstating the population to be served by the proposed project. On page 67, FirstHealth identifies Cumberland, Hoke, Robeson, and Scotland counties as the proposed service area and states "that many residents from these counties who would travel to FirstHealth Moore for inpatient and emergency services will instead seek services at FirstHealth Hoke." Two of these counties, Cumberland and Robeson, have successful tertiary care hospitals, and the third, Scotland, has a very successful community hospital. It is more reasonable to assume that any patient from one of these counties, who leaves his own communities seeking inpatient or emergency care at FirstHealth Moore, is seeking tertiary level services, or seeking care from a specific physician or surgeon at FirstHealth Moore. As a result it is unlikely that such a patient would utilize emergency or inpatient services at FirstHealth Hoke.

FirstHealth also ignored the development of Hoke Community Medical Center which will be located in Hoke County, between FirstHealth Hoke and the Cumberland County line. FirstHealth provides no documentation or even a discussion regarding why residents from Cumberland County, who currently seek inpatient and emergency care at CFVMC, would drive past Hoke Community

Medical Center, which will be owned and operated by CFVMC, to seek emergency care at FirstHealth Hoke.

Therefore, FirstHealth’s statement on page 67 is not reasonable. It is more reasonable to assume that patients from Cumberland, Robeson, and Scotland counties seeking emergency or inpatient care at FirstHealth Moore come for tertiary services, which will not be provided at FirstHealth Hoke. Therefore, including the three additional counties in the FirstHealth Hoke Service Area overstates the population to be served and thereby the need resulting from this population base.

The following table shows FirstHealth’s projected patient origin in Project Years 1 and 2.

**FirstHealth Hoke Inpatient Services
County of Patient Origin
October 1, 2014 – September 30, 2016**

County	FY 2015	FY 2016
Cumberland	6.1%	6.7%
Hoke	69.9%	67.6%
Robeson	18.3%	19.8%
Scotland	5.7%	5.8%
Total	100.0%	100.0%

Source: CON Application N-8838-12, page 89

The previous table shows that FirstHealth projects that **25.6%** of its Project Year 2 inpatient volume will originate in Robeson and Scotland, and **32.3%** will originate in Robeson, Scotland, and Cumberland counties.

Those percentages contradict a statement on page 82 in which FirstHealth justifies an expanded service area – inclusion of Cumberland, Robeson, and Scotland counties:

FirstHealth projects that in addition to Hoke County residents, patients from Scotland, Robeson, and Cumberland counties will also utilize the services of [FirstHealth Hoke].

[...]

Assuming a conservative **15 percent in-migration from these neighboring counties**, over 80 hospital beds can be supported in Hoke County. A **15 percent in-migration factor** is conservative and in fact lower than projected for [FirstHealth Hoke] based simply on shifting patients currently using [FirstHealth Moore] to receive more accessible care in Hoke County. [**Emphasis added.**]

FirstHealth’s statement is not only contradictory of its patient origin projections, it also is false. As documented in Subsection 1., Hoke County does not need “over 80 hospital beds.”

On page 103, FirstHealth states:

In its approved CON Application, Project I.D. #N-8497-10, page 215, FirstHealth’s need methodology projected Hoke County Emergency Department inpatient

admissions ‘shifting’ from non-[FirstHealth Moore] facilities. FirstHealth assumes a 5.0 percent increase for the 2014 projection and a 1.0 percent annual increase for 2016 and 2017 and then a 50 percent decrease [...].

Acute care projections are predicated on “shifting” additional volume from existing and approved providers in Cumberland, Robeson, and Scotland counties in order to generate volume to support 36 acute care beds.

Lastly, documentation provided by FirstHealth does not substantiate physician support and “admission commitments” from Cumberland, Robeson, and Scotland counties.

5. Physician Letters of Support and “Admission Commitments” do not Support Acute Care Projections

FirstHealth makes clear that the need for 28 new acute care beds is based on “commitment” letters from physicians.

On pages 53-55, FirstHealth provides a table that “identifies those physicians and other referral sources who have expressed a willingness to refer or admit patients” to FirstHealth Hoke. Of the 111 “physicians and other referral sources” listed in that table on pages 53-55, **not 1 is based in Cumberland, Robeson or Scotland county.**

Please note that on page 53, the 16 physicians and 1 physician assistant identified by a “3-County” or “2-County” location are in practice with Sandhills Emergency Physicians,⁸ with locations at FirstHealth Moore, FirstHealth-Richmond, and FirstHealth-Montgomery⁹.

Please also note that on page 54, there are 6 physicians and physician assistants identified as having a neurosurgery specialty. In its methodology, FirstHealth explicitly excludes from FirstHealth Hoke patients admissions for neurosurgery.

On pages 68-69, FirstHealth provides a table that “identifies each physician or medical practice and their specialty and each physician’s committed annual surgical cases from the service area.” Of the 54 “physicians or medical practices” listed in that table on pages 68-69, **not 1 is based in Cumberland, Robeson or Scotland county.**

Furthermore a review of the surgical staff proposed for FirstHealth Hoke and FirstHealth Moore Regional also indicates that the proposed shifts in volume are unreasonable. On page 157 FirstHealth indicates that FirstHealth Hoke will have 27 physicians in the following surgical specialties: General Surgery, Neurosurgery, OB/GYN, Ophthalmology, Orthopedic, ENT, Plastic Surgery, and Urology.

There are 72 total physicians in these same specialties at FirstHealth Moore. If all 27 proposed surgeons currently practice at FirstHealth Moore, as indicated by letters of support, 37.5% of surgeons will switch to FirstHealth Hoke or work at both locations (27/72 = 37.5%).

⁸ <http://www.sandhillsep.com/staff/>

⁹ <http://www.sandhillsep.com/locations-2/>

On page 100, FirstHealth proposes to shift up to 60% of all surgical cases identified for Hoke County residents. Therefore, FirstHealth assumes that a significant number of patients, in-particular, those currently seeing the 62.5% of surgeons who choose not to go to FirstHealth Hoke, will change physicians. FirstHealth does not provide any documentation from patients who will be willing to switch physicians.

On page 157, FirstHealth indicates that FirstHealth Hoke will have 27 physicians in the following medical specialties: Family Medicine, Internal Medicine, Invasive Cardiology, Medical Oncology, Pediatrics, and Pulmonary.

There are 75 total physicians in these same specialties at FirstHealth Moore. If all 27 are physicians at FirstHealth Hoke practice at FirstHealth Moore, as indicated by letters of support, 36% of medical physicians will switch to FirstHealth Hoke or work at both locations ($27/75 = 36\%$).

On page 102, FirstHealth proposes to shift up to 65% of all medical cases identified. Therefore, FirstHealth assumes that a significant number of patients, in-particular, those seeing the 64% of physicians who choose not to go to FirstHealth Hoke, will change physicians. FirstHealth does not provide any documentation from patients who will be willing to switch physicians.

Furthermore, a review of medical physicians at FirstHealth Moore and FirstHealth Richmond, indicates very little overlap between the two locations. Only specialty physicians, cardiologists, oncologists, and pulmonologists, tend to overlap FirstHealth facilities as reflected in the FirstHealth medical staff lists included in Attachment 6.

FirstHealth Richmond is approximately 32.3 miles, 40 minutes from FirstHealth Moore. FirstHealth Hoke is approximately 28.5 miles and 38 minutes. Based upon the similar distances, it is reasonable to assume that existing medical physicians at FirstHealth Moore will behave in a similar manner and not overlap facilities between FirstHealth Moore and FirstHealth Hoke. Therefore, the 65% shift in medical visits, and the 60% for surgical visits for Hoke County residents currently seeking care with Moore County physicians is overstated, as are the shifts in volume from Cumberland, Scotland, and Robeson counties.

Exhibit 44 contains letters from physicians (pages stamped 000638-000735) containing "admission commitments." Please note that **not 1 of those physicians lists his/her address as Cumberland, Robeson or Scotland county.**

Included in Exhibit 44 are 6 letters from physicians and physician assistants in practice with Carolina Neurosurgical Associates, which has offices in Pinehurst and Fayetteville; **all identified their practice location as Pinehurst.**

6. FirstHealth Hoke Observation Beds

FirstHealth Hoke has a CON to develop and operate four observation beds. In this Application, FirstHealth is inconsistent in its discussion regarding observation beds. In several places in this Application, FirstHealth proposes to expand observation beds to eight beds, as indicated on pages 2 and 171. In addition, the line drawing on page 28 shows an eight bed observation unit. In several places in this Application, FirstHealth proposes only four observation beds, which will not become operational until the 36 bed acute care unit is constructed.

FirstHealth does not provide detailed projections and assumptions for observation patient days anywhere in this Application. On page 239 of the Proformas, FirstHealth provides a one page summary of projected utilization statistics utilized in the financial projections. Projected observation days decrease by 748 cases (as per Project I.D. #N-8497-10) in Project Year 1, and then increase by 3.0% and 1% annually to 274 patients in Project Year 3. No documentation of these assumptions is provided.

Furthermore, 274 outpatient observation cases represent an average daily census of only 0.75 patients per day. FirstHealth has not documented the need for four observation beds. As a result, because the four observation beds are not needed, the space for the original eight beds will be significantly underutilized and is not needed. The space for the original eight beds will remain empty or will be used as storage until FirstHealth tries to convert them to acute care beds in the future. Therefore, FirstHealth is, in fact, developing 44 acute care beds in the proposed project (36 new beds plus shelved space for eight beds future beds).

7. FirstHealth Hoke Surgical Services

FirstHealth Hoke has a CON to develop and operate one operating room. In this Application, FirstHealth provides inpatient surgical volume, and fails to provide any documentation for outpatient surgical services.

FirstHealth does not provide detailed projections and assumptions for outpatient surgical volume anywhere in the application. On page 239 of the Proformas, FirstHealth provides a one page summary of projected utilization statistics utilized in the financial projections. Projected outpatient surgery cases increase from 550 projected cases in 2015 (as per Project I.D. N-8497-10) to 786 outpatient cases in 2015 in this Application. Volumes are then increased by 3.0% and 1% annually to 1,570 patients in Project Year 3. No documentation of those assumptions is provided.

Furthermore, the one operating room at FirstHealth Hoke does not have the capacity to provide all of these cases. This Application does not request an additional operating room. Therefore, FirstHealth has overstated surgical utilization and as a result financial Proformas are overstated. Therefore, FirstHealth projections and Proformas are unreliable.

8. FirstHealth Hoke Imaging Services

FirstHealth does not provide detailed projections and assumptions for imaging volumes anywhere in the application. On page 239 of the Proformas, FirstHealth provides a one page summary of projected utilization statistics utilized in the financial projections. Projected outpatient imaging procedures decrease from 22,762 procedures in 2015 (as per Project I.D. #N-8497-10) to 8,118 outpatient imaging cases in 2015 in this Application. Volumes are then increased by 3.0% and 1% annually to 8,282 patients in Project Year 3. No documentation of those assumptions is provided. Therefore, FirstHealth projections and Proformas are unreliable.

9. FirstHealth Hoke Emergency Services

FirstHealth does not provide detailed projections and assumptions for emergency services anywhere in the application. On page 239 of the Proformas, FirstHealth provides a one page summary of projected utilization statistics utilized in the financial projections. Projected outpatient emergency procedures increase from 7,932 procedures in 2015 (as per Project I.D. #N-8497-10) to 8,170

outpatient emergency cases in 2015 in this Application. No projections are provided for inpatient emergency volumes. Volumes are then increased by 3.0% and 1% annually to 8,334 patients in Project Year 3. No documentation of those assumptions is provided. Therefore, FirstHealth projections and Proformas are unreliable.

10. FirstHealth Moore has an Occupancy Rate Lower than Planning Target of 75.2%

A central tenet of FirstHealth’s acute care bed methodology is a shift of medical/surgical cases and days of care from FirstHealth Moore to FirstHealth Hoke. FirstHealth assumes that patients who would have traveled to FirstHealth Moore for care will instead receive care at FirstHealth Hoke. The percentage of patients will “ramp-up over a three-year period.”¹⁰

The following table shows acute care bed utilization in the last three fiscal years at FirstHealth Moore.

**FirstHealth Moore
Acute Care Bed Utilization
October 1, 2008 – September 30, 2011**

FY	2009	2010	2011	2011 Adjusted to Reflect Shift to FirstHealth Hoke
SMFP Inpatient Days	78,996	81,288	82,234	82,234
Projected Volume to be shifted				- 9,703
Remaining Patient Days				72,531
Licensed Acute Care Beds	297	297	320	320
<i>SMFP Inpatient Days</i>				
ADC	216	223	225.3	198.7
Occupancy	72.9%	75.0%	70.4%	62.1%

Source: 2011, 2012 SMFPs; Proposed 2013 SMFP; FirstHealth CON Application, page 92

The previous table documents that in FY 2011, the occupancy rate at FirstHealth Moore fell below the planning target occupancy rate of 75.2%. In fact, FirstHealth Moore’s occupancy rate in the last three fiscal years was lower than the 75.2% target occupancy rate for inpatient days reported in the last three *SMFPs*. If the inpatient volume from Hoke, Robeson, Cumberland, and Scotland counties is shifted as proposed, utilization will decrease to 62% as shown in the previous table.

It is ill-timed and unreasonable for FirstHealth to project a shift of acute care days when its occupancy rate is lower than 75.2%.

11. ICU Projections are based on an Unreasonable Assumption

In Step 16 (page 105), FirstHealth calculates the number of ICU days of care and inpatients using as “proxy” medical/surgical ICU days of care as percentage of total medical/surgical days of care at FirstHealth Moore (9.6%).

¹⁰ CON Application N-8838-12, page 100.

FirstHealth selected FirstHealth Moore's 9.6% rather than FirstHealth Richmond Memorial Hospital's 14% despite the fact that FirstHealth Moore is a 320-bed tertiary hospital and FirstHealth-Richmond is a 99-bed rural hospital.

For purposes of comparison, the approved Hoke Community Medical Center with 4 ICU beds used 8.5% as a multiplier to determine its number of ICU days of care. That percent (8.5%) represents the average ICU days as a percent of total days for North Carolina hospitals in the lower 50% ranking of ICU days as a percent of total days in FY 2008. In FY 2010, 8.3% represents the mean ICU days as a percent of total days for North Carolina hospitals in the lower 50% ranking of ICU days as a percent of total days (no neonatal)¹¹.

For all of the above reasons, this Application does not conform to CON Review Criterion (3).

G.S. 131E-183 (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.

As discussed in the context of CON Review Criterion (3) above, FirstHealth does not adequately demonstrate a need to expand FirstHealth Hoke through development of 28 additional beds. When an applicant does not demonstrate need for its project(s), it has not demonstrated that it proposed the least costly or most effective alternative.

Instead of proposing a new hospital in Hoke County with an adequate number of acute care beds, operating rooms, and services consistent with a community hospital – as Cape Fear Valley Health System did from the outset -- when such a community hospital was needed -- FirstHealth proposed an emergency room with an adjacent 8 acute care beds. Three years later, FirstHealth proposes to expand its approved emergency room with 8 acute care beds – after Cape Fear Valley Health System's 41-bed, 2-operating room, community hospital has been approved and is under development. Cape Fear Valley Health System made a full commitment to meet the needs of the residents of Hoke County with the most effective alternative. It is too little and too late for FirstHealth.

For all the reasons set forth above, this Application is non-conforming to CON Review Criterion (4).

G.S. 131E-183 (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.

As discussed in the context of CON Review Criterion (3) above, FirstHealth does not adequately demonstrate a need to expand FirstHealth Hoke through development of 28 additional beds. Therefore, the Proforma financial statements are overstated and based upon unreasonable assumptions.

¹¹ 2011 LRAs

FirstHealth financial Proformas are internally inconsistent. The following table illustrates significant differences between the revenue and expense projections included in the FirstHealth Hoke Proforma Form B and the revenue and expense projections included in Proforma Forms C, D, and E. With the discrepancies identified below, the financial are irreconcilable and unreasonable.

**FirstHealth Hoke Gross and Net Revenue
Proformas - Project Years 1 - 3**

		Project Year 1		Project Year 2		Project Year 2	
		Gross	Net	Gross	Net	Gross	Net
Combined Inpt and Outpt - Forms C,D,E		\$69,540,072	\$23,351,187	\$86,438,589	\$28,901,274	\$104,559,030	\$35,108,716
Total Form B		\$60,773,455	\$19,351,577	\$75,648,355	\$23,858,899	\$ 91,618,769	\$28,992,439
	Page178						
Difference		\$(8,766,617)	\$(3,999,610)	\$(10,790,234)	\$(5,042,375)	\$(12,940,261)	\$(6,116,277)

Source: FirstHealth 28 Bed Addition CON Application Proformas

**FirstHealth Hoke Direct and Indirect Expenses
Proformas - Project Years 1 - 3**

		Project Year 1	Project Year 2	Project Year 3
Combined Inpt and Outpt - Forms C,D,E		\$13,143,985	\$15,514,353	\$18,175,556
Total Form B		\$ 7,702,920	\$19,630,625	\$21,933,249
	Page 178			
Difference		\$ 4,558,935	\$ 4,116,272	\$ 3,757,693

Source: FirstHealth 28 Bed Addition CON Application Proformas

FirstHealth provided no explanation of, or assumptions for, its Proforma financial statements. Therefore, there is no way to reconcile the financials in Form B and the financials in Forms C, D, and E.

As will be discussed in the context of CON Review Criterion (7), FirstHealth has not included sufficient staffing for hospitalists or ultrasound technicians.

FirstHealth fails to provide projections for any expenses or revenue associated with ancillary and support services, except outpatient surgery and outpatient radiology. No inpatient imaging volume is projected, no laboratory services volume is projected, no therapy services are projected, and no costs associated with other areas in the Proformas. FirstHealth also did not provide any financial assumptions for any ancillary services and did not include any indirect expenses for ancillary or support services.

In the Emergency Department Financial Proformas on pages 189-196, the cost of medical supplies is significantly deflated from the CON application for Project I.D. #8497-10 (page190). That is unusual as costs typically increase from year to year. FirstHealth has provided no assumptions

regarding why these costs are significantly lower in 2012. Therefore, FirstHealth has not demonstrated that these are reasonable costs.

FirstHealth has failed to document the immediate and long-term financial feasibility of the proposal, based upon reasonable projections of the costs of and charges for providing health services and therefore, is non-conforming to CON Review Criterion (5).

G.S. 131E-183 (6)

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

As discussed in the context of CON Review Criterion (3), FirstHealth does not adequately demonstrate a need to develop 28 additional beds and a second shared operating room at FirstHealth Hoke. A proposed hospital expansion will result in an unnecessary duplication of approved health services capabilities and facilities in Hoke County. Consequently, this Application is nonconforming to CON Review Criterion (6).

As discussed in the context of CON Review Criterion (3), there is no need for an additional 28 acute care beds in Hoke County. Please note that the total number of acute care beds needed in Hoke County through Project Year 3 will not support the proposed 36-bed acute care FirstHealth Hoke -- in addition to the approved 41-bed Hoke Community Medical Center. The FirstHealth Hoke bed expansion is duplicative of approved acute care beds in Hoke County.

G.S. 131E-183 (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.

FirstHealth has proposed the use of hospitalists for FirstHealth Hoke. According to the staffing tables included with the financial Proformas, FirstHealth includes salaries for 4.2 hospitalists. The medical staff table on page 157 does not include any hospitalists. In many cases, hospitalists are trained in Internal Medicine, and FirstHealth may assume that the internal medicine physicians reflected in the medical staff table on page 157 will be hospitalists. The medical staff table on page 157 does not include sufficient internal medicine physicians to meet the identified need for hospitalists reflected on page 182.

Furthermore, FirstHealth identified a need for 4.37 hospitalists in its previous application for 8 acute care beds to meet patient needs associated with less than 3,000 patient days. No explanation is provided regarding the need for fewer hospitalists for the 36 bed facility which projects 9,703 patient days and includes four ICU beds.

FirstHealth included vascular surgical procedures as procedures which will be provided at FirstHealth Hoke. In Attachment 4 (pages 482 to 500) FirstHealth identified vascular DRGs 239 to 241 and 252 to 257 as DRGs which will be provided at FirstHealth Hoke. The medical staff table on page 157 does not include any vascular surgeons.

FirstHealth also included invasive cardiologists on page 157 on the FirstHealth Hoke medical staff. FirstHealth Hoke will not have cardiac catheterization services, and the DRGs reflected in Attachment 4 do not include invasive cardiology procedures.

In the Emergency Department Financial Proformas on pages 189-196, the projected salaries for ED staff are significantly understated and are inconsistent with staffing levels reflected on page 181 and salaries on page 183. Therefore, it is unclear what staffing is proposed for FirstHealth Hoke.

In Section II on page 58, FirstHealth states that ultrasound services will be provided eight hours a day, seven days a week. That totals 3,285 hours per year, and reflects a need for 1.6 FTE ultrasound technicians. On page 181, FirstHealth includes only 0.8 FTE ultrasound technicians.

FirstHealth has not projected sufficient staffing to provide the services proposed in its application. As a result, FirstHealth has not shown evidence of the availability of resources, including health manpower and management personnel, for the provision of the services proposed to be provided and therefore, is non-conforming to Criterion (7).

G.S. 131E-183 (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.

FirstHealth fails to provide any projections for any ancillary and support services other than outpatient surgery and radiology. No inpatient imaging volume is projected, no laboratory services volume is projected, and no therapy services are projected. In addition, FirstHealth failed to discuss the impact that tripling patient days would have on utilization of approved imaging equipment at FirstHealth Hoke.

In the Emergency Department Financial Proformas on pages 189-196, the cost of medical supplies is significantly deflated from the CON application for Project I.D. #N-8497-10 (page 190). That is unusual as costs typically increase from year to year. FirstHealth has provided no assumptions regarding why these costs are significantly lower in 2012. Therefore, FirstHealth has not demonstrated that FirstHealth Hoke can provide necessary resources for emergency services.

Therefore, FirstHealth has not demonstrated that FirstHealth Hoke will make available, or otherwise make arrangements for, the provision of the necessary ancillary and support services, and is non-conforming to Criterion (8).

G.S. 131E-183 (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.

On page 159, FirstHealth provides no site preparation costs associated with the proposed project. FirstHealth proposed to expand a previously-approved facility by 25,000 square feet. The line drawings included reflect a larger footprint for the expanded facility, and therefore additional site work and preparation for the foundation for the additional square footage will be required. No capital expense is included on page 159 for that work. Furthermore, the site work and foundation work for the proposed expansion must be part of this project and cannot be developed as part of the previously-approved CON. FirstHealth has indicated that the original 8 beds previously approved will become operational a year prior to the 36-bed addition. Therefore, FirstHealth will have to keep equipment and construction personnel on board for an extra year. A better alternative would be to delay construction of the approved 8-bed facility until approval of the additional 28 beds in order to reduce construction costs and timeframe. As a result, FirstHealth has not demonstrated that the proposed construction cost, design, and means of construction proposed represent the most reasonable alternative and therefore, is non-conforming to Criterion (12).

G.S. 131E-183 (13c).

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

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

FirstHealth projects future payor mix for FirstHealth Hoke based solely upon the service area patients who receive care at FirstHealth. On page 144, FirstHealth projects payor mix for general inpatient days and ICU inpatient days. On pages 103 and 104, FirstHealth projects 405 incremental admissions, this represents 1,774 incremental patient days from Hoke County at FirstHealth Hoke. That represents 18.3% of total projected patient days in Project Year 3.

FirstHealth also determined that patient days provided at FirstHealth Hoke would be adjusted as defined on pages 80, 81, 95 through 99. Using that definition, CFVHS identified potential DRGs to be removed (Attachment 5) and compared the payor mix at FirstHealth for those type patients to the same type patients at Cape Fear Valley Medical Center, Scotland Memorial Hospital, and Southeastern Regional Medical Center (Attachment 8), assuming that the 1,774 incremental patient days would shift from those three facilities. That assumes that emergency patients with these DRGs will remain at FirstHealth Hoke and all others will be transported to FirstHealth Moore. That assumption also is consistent with the level of care to be provided in the inpatient units as reflected in FirstHealth's inpatient MDC mix on page 51.

The following three tables compare FirstHealth's proposed payor mix, based wholly on its own experience, to the payor mix for comparable patient types at Cape Fear Valley Medical Center, Scotland Memorial Hospital, and Southeastern Regional Medical Center.

FirstHealth Hoke Projected Combined IP/ICU Payor Mix

	Inpatient Days	Inpatient Percent	ICU Days	ICU Percent	Total Days	Total Percent
Self Pay/Charity	430	4.90%	21	2.2%	450	4.6%
Medicare/Medicare Managed Care	4,473	51%	651	69.8%	5,124	52.8%
Medicaid	912	10.40%	101	10.8%	1,013	10.4%
Commercial Insurance/ Managed Care	2,324	26.50%	144	15.5%	2,469	25.4%
Other	632	7.20%	16	1.7%	647	6.7%
Total	8,771	100%	932	100.0%	9,703	100.0%

Source: FirstHealth 28 Bed CON Application, Pg 144

**FirstHealth Moore Regional Hoke County Residents Payor Mix
Based Upon FirstHealth Defined Exclusions**

Payer	Admissions	Percent	Days	Percent
Blue Cross / Blue Shield	180	12.3%	735	11.6%
CHAMPUS	21	1.4%	73	1.2%
Commercial Insurance	38	2.6%	132	2.1%
Health Maintenance Organization	0	0%	0	0%
Health maintenance Organization (HMO) Me	156	10.7%	703	11.1%
Liability Medical	3	0.2%	14	0.2%
Medicaid	156	10.7%	696	11.0%
Medicare	717	49.1%	3,362	53.0%
Other Non-Federal Program	64	4.4%	244	3.8%
Preferred Provider Organization (PPO)	20	1.4%	58	0.9%
Self Pay	91	6.2%	263	4.1%
Veteran Administration Plan	11	0.8%	52	0.8%
Worker's Compensation Health Claim	2	0.1%	6	0.1%
Total	1,459	100%	6,338	100%

Source: Thomson data included in Attachment 8

Note: The above data was adjusted to remove Chemical Dependency patients included in FirstHealth volumes on pages 485-490.

FirstHealth did not provide definitions for DRGs excluded, therefore the above data is based upon best estimates made by CFVHS reflected in Attachment 5.

**Cape Fear Valley Medical Center, Scotland Memorial Hospital,
and Southeastern Regional Medical Center Hoke County Residents Payor Mix
Based upon FirstHealth Defined Exclusions**

Payer	Admissions	Percent	Days	Percent
Blue Cross / Blue Shield	100	10.4%	485	10.0%
CHAMPUS	91	9.5%	269	5.5%
Commercial Insurance	18	1.9%	80	1.6%
Health Maintenance Organization	35	3.6%	118	2.4%
Health maintenance Organization (HMO) Me	1	0.1%	4	0.1%
Liability	6	0.6%	21	0.4%
Medicaid	203	21.1%	819	16.9%
Medicare	417	43.3%	2,754	56.7%
Mutually Defined Unknown	2	0.2%	2	0.0%
Other Non-Federal Program	1	0.1%	2	0.0%
Self Pay	83	8.6%	278	5.7%
Veteran Administration Plan	0	0%	0	0%
Worker's Compensation Health Claim	5	0.5%	22	0.5%
Total	962	100.0%	4,854	100.0%

Source: Thomson data included in Attachment 8

Note: The above data was adjusted to remove Chemical Dependency patients included in FirstHealth volumes on pages 485-490.

FirstHealth did not provide definitions for DRGs excluded, therefore the above data is based upon best estimates made by CFVHS reflected in Attachment 5.

The following table compares the projected and actual payor mix in the three previous tables for Medicare, Medicaid, and Self Pay.

Payer	Projected FirstHealth Hoke	FirstHealth Moore	Cape Fear Valley Medical Center, Scotland Memorial Hospital and Southeastern Regional Medical Center
Medicaid	10.4%	11.0%	16.9%
Medicare	52.8%	53.0%	56.7%
Self Pay	4.6%	4.1%	5.7%
All Other	32.2%	31.9%	20.7%
Total	100.0%	100.0%	100.0%

Source: Above tables.

Note: FirstHealth did not provide definitions for DRGs excluded, therefore the above data is based upon best estimates made by CFVHS reflected in Attachment 5.

As shown in the previous table, the payor mix for Hoke County patients treated at Cape Fear Valley Medical Center, Scotland Memorial Hospital, and Southeastern Regional Medical Center is considerably different than those treated at FirstHealth. The combined Medicare, Medicaid and self pay payor mix for Hoke County patients is 11.2% greater than those payors at FirstHealth and 11.5% greater than those payors proposed at FirstHealth Hoke.

Therefore, FirstHealth has failed to adjust its payor mix to assure that the elderly and the medically underserved groups in Hoke County will be served by the applicant's proposed services to the

extent to which each of these groups is expected to utilize the proposed services and is non-conforming to Criterion (13c).

G.S. 131E-183 (18a)

The applicant shall demonstrate the expected effects of the proposed services on competition in the proposed service area, including how any enhanced competition will have a positive impact upon the cost effectiveness, quality, and access to the services proposed; and in the case of applications for services where competition between providers will not have a favorable impact on cost effectiveness, quality, and access to the services proposed, the applicant shall demonstrate that its application is for a service on which competition will not have a favorable impact.

FirstHealth suggests on page 66 that approval of the 28 beds for FirstHealth Hoke will make FirstHealth Hoke “more competitive” with Hoke Community Medical Center. FirstHealth does not need to receive approval for the 28 beds identified as needed for the Cumberland/Hoke Service Area to expand and compete with Hoke Community Medical Center. CFVHS saw the need for a comprehensive community hospital in Hoke County in 2010 and relocated 41 acute care beds approved for the Cumberland County campus of CFVMC.

The fact that FirstHealth was two years too late in recognizing a need in Hoke County does not justify the approval of unnecessary acute care beds in Hoke County for the sake of “competition.” FirstHealth also can apply to relocate additional acute care beds from FirstHealth Moore Regional if it believes there is a competitive need for more acute care beds in Hoke County.

As discussed in the context of CON Review Criterion (3), FirstHealth does not adequately demonstrate a need to develop 28 additional beds and a second shared operating room at FirstHealth Hoke.

As discussed in the context of CON Review Criterion (4), FirstHealth’s choice to expand its acute care bed inventory in Hoke County demonstrates that it has not proposed the least costly or most effective alternative.

As discussed in detail in the context of CON Review Criterion (5), FirstHealth Hoke’s expansion is not financially feasible.

As discussed in the context of CON Review Criterion (6), the proposed expansion of FirstHealth Hoke will result in an unnecessary duplication of approved health services capabilities and facilities in Hoke County.

As discussed in the context of CON Review Criterion (7), a substantial portion of the total surgical cases performed at FirstHealth Hoke will be performed on residents outside of the Moore-Hoke Operating Room Service Area.

CON Applications that do not conform to CON Review Criteria (3), (4), (5), (6), and (9) cannot demonstrate the expected effects of the proposed services on competition in proposed service area will have a positive impact upon the cost effectiveness, quality, and access to the services proposed as required by CON Review Criterion (18a).

IV. CON Criteria and Standards

Criteria and Standards for Acute Care Beds – 10A NCAC 14C .3800

FirstHealth proposes to develop an additional 28 acute care beds at FirstHealth Hoke. As discussed in the context of CON Review Criterion (3), the need methodology used by FirstHealth relies on unreasonable assumptions and results in overstated inpatient volume.

10A NCAC 14C .3802(c)(1)

The volumes in the table on page 51 are based upon the FirstHealth patient days provided to patients from the four-county service area as defined in the footnote. The data was not acuity adjusted as discussed in detail above. Furthermore, no adjustment was made for the incremental volume projected in Step 14 from additional Hoke County patients previously seen at other inpatient locations. That volume represents 18.3% of projected patient days. No adjustment was made for that incremental volume.

10A NCAC 14C .3803(a)

As discussed in the context of CON Review Criterion (3), FirstHealth Hoke cannot achieve a target annual occupancy of 66.7% in Project Year 3 (FY 2017) as required by 10A NCAC 14C .3803(a).

10A NCAC 14C .3804(a)

On page 58, FirstHealth provides a chart indicating how the services required by this Rule will be provided. Radiology services, in particular, ultrasound services will be provided seven days a week from 9:00 AM to 5:00 PM. That represents 56 hours per week, 2,912 hours per year, or 1.4 FTEs. Page 181 reflects only a 0.8 FTE ultrasound technician.

Criteria and Standards for Intensive Care Services – 10A NCAC 14C .1200

FirstHealth proposes to develop 4 ICU beds at FirstHealth Hoke. As discussed in the context of CON Review Criterion (3), the need methodology used by FirstHealth relies on an unreasonable assumption and results in unreliable volume.

V. Conclusion

FirstHealth has failed to project the need for any additional acute care beds or operating rooms in Hoke County. Therefore, the proposed project by CFVHS to expand CFVMC by 28 beds is the better alternative and should be approved. This Application is non-conforming to the required criteria, and should be denied.

**Comments in Opposition from
Cape Fear Valley Health System, Inc.
Regarding FirstHealth of the Carolinas, Inc.
Certificate of Need Application to
Develop 28 New Acute Care Beds at FirstHealth Hoke
Project I.D. # N-8838-12
Submitted June 15, 2012 for
July 1, 2012 Review Cycle**

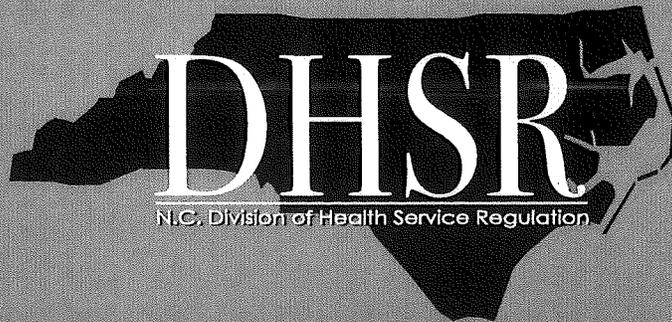


Attachments 1 - 5

ATTACHMENT 1

STATE HEALTH COORDINATING COUNCIL

STATE
MEDICAL
FACILITIES
PLAN



2012

Chapter 5:

Acute Care Hospital Beds



CHAPTER 5 ACUTE CARE HOSPITAL BEDS

Summary of Bed Supply and Utilization

As of fall 2011, there are 114 licensed acute care hospitals and 20,757 licensed acute care beds in North Carolina. Data provided by Thomson Reuters indicated that 4,417,043 days of care were provided to patients in those hospitals during 2010, which represents an average annual occupancy rate of 58.30 percent. These numbers exclude beds in service for substance abuse, psychiatry, rehabilitation, hospice, and long-term care. In addition, across the state acute care bed capacity is expected to increase in certain markets by 702 pending beds and to decrease in other markets by 149 beds, for a net increase of 553 beds.

It is important to note that not all licensed beds were in service throughout the year. Some beds were permanently idled, while others were temporarily taken out of service due to staff shortages or to accommodate renovation projects.

Changes from the Previous Plan

No substantive changes to the Acute Care Bed Need methodology have been incorporated into the North Carolina 2012 State Medical Facilities Plan. The inventory has been updated and references to dates have been advanced by one year as appropriate.

Basic Principles

A. Acute Care Hospital Goals

1. **To facilitate continuing improvement in the state's acute care services.** Advances in medical practice frequently entail the development of new services, new facilities or both. The policy of the state is to encourage their development when cost effective and essential to assure reasonable accessibility to services.
2. **To expand the availability of appropriate, adequate acute care service to the people of North Carolina.** Our improving highways and transportation systems have brought acute care services within reasonable geographic reach of all North Carolinians, but not within financial reach. Despite the expansion of the state's Medicaid Program, in 2004 17.5 percent of North Carolinians under the age of 65 were uninsured for a full year, according to a study by the Cecil G. Sheps Center for Health Services Research, at the University of North Carolina at Chapel Hill.
3. **To protect the resource that the state's acute care hospitals represent.** The acute care hospitals are the providers of essential health care services, the state's third largest employer, the largest single investment of public funds in many communities, magnets for physicians deciding where to practice, and building blocks in the economic development of their communities. North Carolina must safeguard the future of its hospitals.

Even so, it is not the state's policy to guarantee the survival and continued operation of all the state's hospitals, or even any one of them. In a dynamic, fast-changing environment, which is moving away from inpatient hospital services, the survival and future activities of hospitals will be a function of many factors beyond the realm of state policy.

The state can, however, facilitate the survival of its hospitals and promote the development of needed health care services, acute and non-acute, by encouraging hospitals to convert unused acute care inpatient facilities to new purposes, to collaborate with other health care providers, and to develop health care delivery networks.

4. **To encourage the substitution of less expensive for more expensive services whenever feasible and appropriate.** The state supports continued and expanded use of programs which have demonstrated their capacity to reduce both the number and length of hospital admissions, including:
 - a. Development of health care delivery networks;
 - b. Increased use of ambulatory surgery;
 - c. Outpatient diagnostic studies;
 - d. Preadmission testing;
 - e. Preadmission certification;
 - f. Programs to reduce admission and readmission rates;
 - g. Timely scheduling of admissions;
 - h. Effective utilization review;
 - i. Discharge planning;
 - j. Appropriate use of alternative services such as home health services, hospice, adult care homes, nursing homes; and
 - k. Initiating new, or maximizing existing, preventive health services.
5. **To assure that substantial capital expenditures for the construction or renovation of health care facilities are based on demonstrated need.**
6. **To assure that applicants proposing to expand or replace acute care beds should provide careful analysis of what they have done to promote cost-effective alternatives to inpatient care and to reduce average length of stay.**

B. Use of Swing Beds

The North Carolina Department of Health and Human Services supports the use of "swing beds" in providing long-term nursing care services in rural acute care hospitals.

Section 1883 of the Social Security Act provides that certain small rural hospitals may use their inpatient facilities to furnish skilled nursing facility (SNF) services to Medicare and Medicaid beneficiaries and intermediate care facility (ICF) services to Medicaid beneficiaries.

Hospitals wishing to receive swing bed certification for Medicare patients must meet the eligibility criteria outlined in the law which include:

1. Have a certificate of need, or a letter from the Certificate of Need Section indicating that no certificate of need review is required to provide "swing bed" services; and
2. Have a current valid Medicare provider agreement; and
3. Be located in an area of the state not designated as "urbanized" by the most recent official census; and
4. Have fewer than 100 hospital beds, excluding beds for newborns and beds in intensive type inpatient units; and
5. Not have in effect a 24-hour nursing waiver granted under 42 CFR 488.54(c); and
6. Not have had a swing bed approval terminated within the two years previous to application; and
7. Meet the Swing Bed Conditions of Participation (see 42 CFR 482.66) on Resident Rights; Admission, Transfer, and Discharge Rights; Resident Behavior and Facility Practices; Patient Activities; Social Services; Discharge Planning; Specialized Rehabilitative Services; and Dental Services.

A certificate of need is not required if capital expenditures associated with the swing bed service do not exceed \$2 million, and there is no change in bed capacity.

Sources of Data

Inventory of Acute Care Beds:

The inventory of hospital facilities is maintained through the hospitals' response to a state law that requires each facility to notify the North Carolina Department of Health and Human Services and receive appropriate approvals before construction, alterations or additions to existing buildings or any changes in bed capacities. Bed counts are revised in the state's inventory as changes are reported and approved.

Days of Care and Patient Origin Data for the Bed Need Methodology:

The data source for annual days of care used in the methodology is Thomson Reuters, a collector of hospital patient discharge information. The general acute care days of care by facility and data on patients' county of residence were provided by the Sheps Center based on the Thomson Reuters data. *(Note: The determination of whether a patient record was categorized as an "acute care/general discharge" was determined by the revenue code(s) for accommodation type, as submitted to Thomson Reuters by facilities on the UB-92 form. Included in Column F, "Thomson Reuters 2010 Acute Care Days"*

are records with revenue codes signifying an acute care/general accommodation type. Likewise, any records that are coded as substance abuse, psychiatric, or rehabilitation discharges are excluded from these figures.)

Basic Assumptions of the Methodology

- Target occupancies of hospitals should encourage efficiency of operation, and vary with average daily census:

Average Daily Census	Target Occupancy of Licensed Acute Care Beds
ADC 1-99	66.7%
ADC 100-200	71.4%
ADC >200 and ≤400	75.2%
ADC >400:	78.0%

- In determining utilization rates and average daily census, only acute care bed “days of care” are counted.
- If a hospital has received approval to increase or decrease acute care bed capacity, this change is incorporated into the anticipated bed capacity regardless of the licensure status of the beds.

Application of the Methodology

Step 1

Counties that have at least one licensed acute care hospital are single county acute care bed service areas unless the county is grouped with a county lacking a licensed acute care hospital. When a county that has at least one licensed acute care hospital is grouped with a county lacking a licensed acute care hospital, a multicounty acute care bed service area is created.

All counties lacking a licensed acute care hospital are grouped with either one or two counties, each of which has at least one licensed acute care hospital. A multicounty acute care bed service area may consist of multiple counties lacking a licensed acute care hospital that are grouped with either one or two counties, each of which has at least one licensed acute care hospital.

The three most recent years of available acute care days patient origin data are combined and used to create the multicounty acute care bed service areas. These data are updated and reviewed every three years. The multicounty acute care bed service areas are then updated, as indicated by the data. The first update occurred in the North Carolina 2011 State Medical Facilities Plan. The following decision rules are used to determine multicounty acute care bed service area groupings.

1. Counties lacking a licensed acute care hospital are grouped with the single county where the largest proportion of patients received inpatient acute care services, as measured by acute inpatient days, unless:
 - a. Two counties with licensed acute care hospitals each provided inpatient acute care services to at least 35 percent of the residents who received inpatient acute care services, as measured by acute inpatient days.
2. If 1.a. is true, then the county lacking a licensed acute care hospital is grouped with both the counties which provided inpatient acute care services to at least 35 percent of the residents who received inpatient acute care services, as measured by acute inpatient days.

A county lacking a licensed acute care hospital becomes a single county acute care bed service area upon licensure of an acute care hospital in that county. If a certificate of need is issued for development of an acute care hospital in a county lacking an acute care hospital, the acute care beds for which the certificate of need has been issued will be included in the inventory of beds in that county's multicounty acute care bed service area until those beds are licensed.

An acute care bed's service area is the acute care bed planning area in which the bed is located. The acute care bed planning areas are the single and multicounty groupings shown in Figure 5.1.

Step 2 (Columns D and E)

Determine the number of acute care beds in the inventory by totaling:

(Column D)

- a. the number of licensed acute care beds at each hospital;

(Column E)

- b. the number of acute care beds for which certificates of need have been issued, but for which changes in the license have not yet been made (i.e., additions, reductions, and relocations); and
- c. the number of acute care beds for which a need determination in the North Carolina State Medical Facilities Plan is pending review or appeal.

Step 3 (Column F)

Determine the total number of acute inpatient days of care provided by each hospital based on the data contained in the above referenced report for Federal Fiscal Year 2010. *(Please see note in "Sources of Data" regarding identification of general acute days of care.)*

Step 4 (Columns G and H)

Calculate the projected inpatient days of care in Federal Fiscal Year 2014 as follows:

- a. For each county, determine the total annual number of acute inpatient days of care provided in North Carolina acute care hospitals during each of the last five federal fiscal years based on data provided by the Sheps Center.
- b. For each county, calculate the difference in the number of acute inpatient days of care provided from year to year.
- c. For each county, for each of the last four years, determine the percentage change from the previous year by dividing the calculated difference in acute inpatient days by the total number of acute inpatient days provided during the previous year. *(Example: (YR 2010 – YR 2009) / YR 2009; etc.)*

(Column G)

- d. For each county, total the annual percentages of change and divide by four to determine the average annual historical percentage change for each county. For positive annual percentages of change, add 1 and this becomes the County Growth Rate Multiplier. For negative annual percentages of change, subtract 1. If the County Growth Rate Multiplier is negative, Thomson Reuters 2010 Acute Care Days are carried forward unchanged to Column H.
- e. For each county with a positive County Growth Rate Multiplier, calculate the compounded growth factor projected for the next four years by using the average annual historical percentage change (from d. above) in the first year and compounding the change each year thereafter at the same rate.

(Column H)

- f. For each hospital, multiply the acute inpatient days of care from Column F by the compounded county growth factor to project the number of acute inpatient days of care to be provided in Federal Fiscal Year 2014 at each hospital.

Step 5 (Column I)

Calculate the projected midnight average daily census for each hospital in Federal Fiscal Year 2014 by dividing the projected number of acute inpatient days of care provided at the hospital (from Column H) by 365 days.

Step 6 (Column J)

Multiply each hospital's projected midnight average daily census from Step 5 (Column I) by the appropriate target occupancy factor below:

Average Daily Census	Occupancy Factor
Average Daily Census less than 100	1.50
Average Daily Census 100-200	1.40
Average Daily Census greater than 200 and <=400	1.33
Average Daily Census greater than 400	1.28

Step 7 (Column K)

Determine the surplus or deficit of beds for each hospital by subtracting the inventory of beds in Step 2 (Column D plus Column E) from the number of beds generated in Step 6 (Column J). (Note: Deficits will appear as positive numbers; surpluses, as negative numbers.)

Step 8 (Column L)

The number of acute care beds needed in a service area is determined as follows:

- a. If two or more hospitals in the same service area are under common ownership, total the surpluses and deficits of beds for those hospitals to determine the surplus or deficit of beds for each owner of multiple hospitals in the service area.
- b. When the deficit of total acute care beds in the service area for an owner, regardless of number of hospitals owned, equals or exceeds 20 beds or 10 percent of the inventory of acute care beds for that owner, the deficits of all owners in the service area will be summed to determine the number of acute care beds needed in the service area.

Qualified Applicants

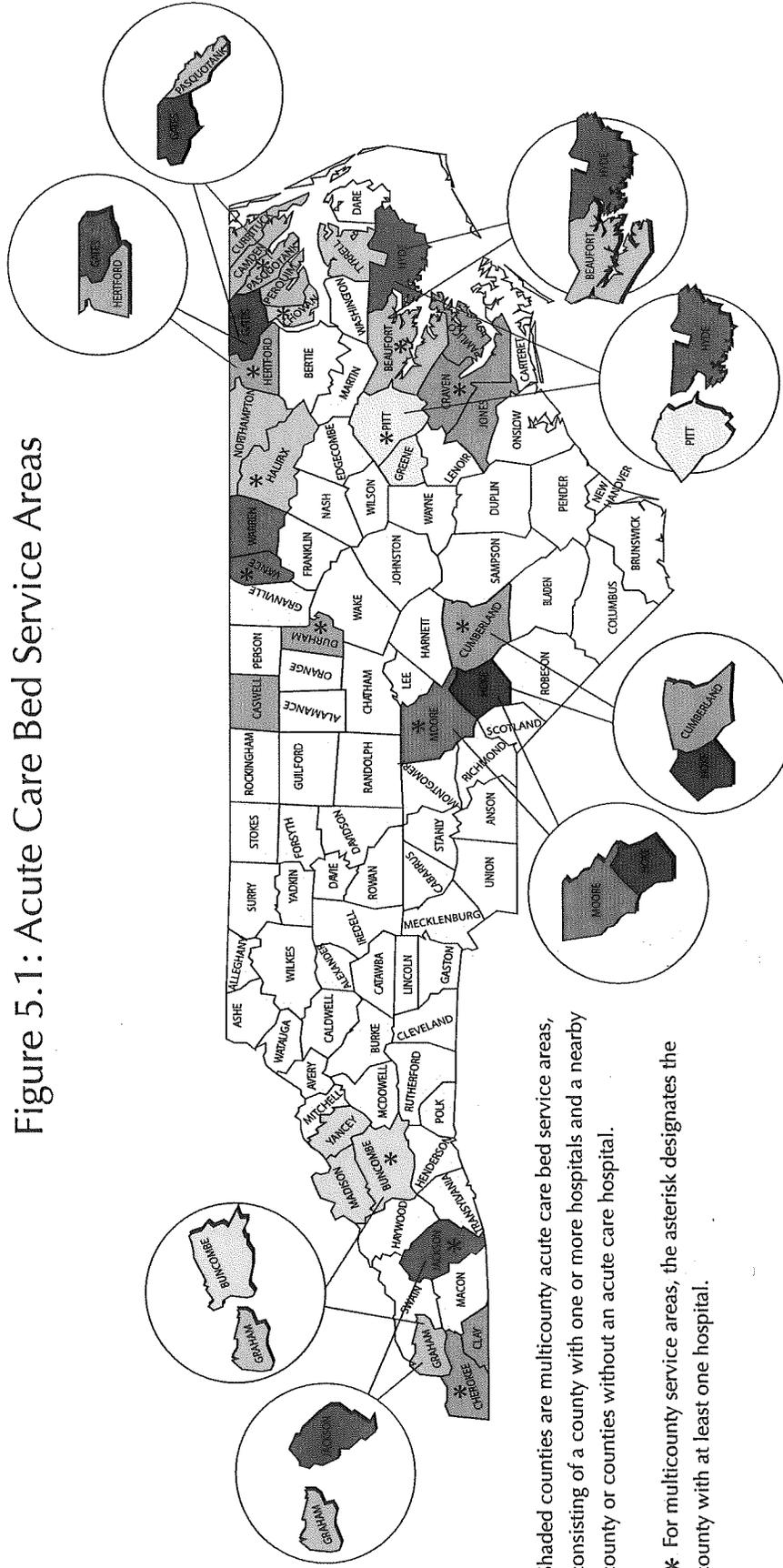
Any qualified applicant may apply for a certificate of need to acquire the needed acute care beds. A person is a qualified applicant if he or she proposes to operate the additional acute care beds in a hospital that will provide:

1. a 24-hour emergency services department,
2. inpatient medical services to both surgical and non-surgical patients, and
3. if proposing a new licensed hospital, medical and surgical services on a daily basis within at least five of the major diagnostic categories as recognized by the Centers for Medicare and Medicaid Services (CMS) as follows:

- MDC 1: Diseases and disorders of the nervous system
- MDC 2: Diseases and disorders of the eye
- MDC 3: Diseases and disorders of the ear, nose, mouth and throat
- MDC 4: Diseases and disorders of the respiratory system
- MDC 5: Diseases and disorders of the circulatory system
- MDC 6: Diseases and disorders of the digestive system

- MDC 7: Diseases and disorders of the hepatobiliary system and pancreas
- MDC 8: Diseases and disorders of the musculoskeletal system and connective tissue
- MDC 9: Diseases and disorders of the skin, subcutaneous tissue and breast
- MDC 10: Endocrine, nutritional and metabolic diseases and disorders
- MDC 11: Diseases and disorders of the kidney and urinary tract
- MDC 12: Diseases and disorders of the male reproductive system
- MDC 13: Diseases and disorders of the female reproductive system
- MDC 14: Pregnancy, childbirth and the puerperium
- MDC 15: Newborns/other neonates with conditions originating in the perinatal period
- MDC 16: Diseases and disorders of the blood and blood-forming organs and immunological disorders
- MDC 17: Myeloproliferative diseases and disorders and poorly differentiated neoplasms
- MDC 18: Infectious and parasitic diseases
- MDC 19: Mental diseases and disorders
- MDC 20: Alcohol/drug use and alcohol/drug-induced organic mental disorders
- MDC 21: Injury, poisoning and toxic effects of drugs
- MDC 22: Burns
- MDC 23: Factors influencing health status and other contacts with health services
- MDC 24: Multiple significant trauma
- MDC 25: Human immunodeficiency virus infections

Figure 5.1: Acute Care Bed Service Areas



Shaded counties are multicounty acute care bed service areas, consisting of a county with one or more hospitals and a nearby county or counties without an acute care hospital.

* For multicounty service areas, the asterisk designates the county with at least one hospital.

Hospital	Multicounty Service Area	Color Code
Duke University Hospital, Durham Regional Hospital, North Carolina Specialty Hospital	Durham, Caswell	[Color swatch]
Murphy Medical Center	Cherokee, Clay	[Color swatch]
Mission Hospitals	Buncombe, Graham, Madison, Yancey	[Color swatch]
Harris Regional Hospital	Jackson, Graham	[Color swatch]
First Health Moore Regional	Moore, Hoke	[Color swatch]
Cape Fear Valley Medical Center	Cumberland, Hoke	[Color swatch]
Maria Parham Hospital	Vance, Warren	[Color swatch]
Our Community Hospital and Halifax Regional Medical Center	Halifax, Northampton	[Color swatch]
Pitt County Memorial Hospital	Pitt, Greene, Hyde	[Color swatch]
Craven Regional Medical Center	Craven, Jones, Pamlico	[Color swatch]
Pungo District Hospital and Beaufort County Hospital	Beaufort, Hyde	[Color swatch]
Roanoke-Chowan Hospital	Hertford, Gates	[Color swatch]
Chowan Hospital	Chowan, Tyrrell	[Color swatch]
Albemarle Hospital	Pasquotank, Camden, Currituck, Gates, Perquimans	[Color swatch]

Table 5A: Acute Care Bed Need Projections

2010 Utilization Data from Thomson Reuters compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC >400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/ Previous Need	Thomson Reuters 2010 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2010 Days, if negative growth)	2014 Projected Average Daily Census (ADC)	2014 Beds Adjusted for Target Occupancy	Projected 2014 Deficit or Surplus (surplus shows as a "-")	2014 Need Determination
Alamance	H0272	Alamance Regional Medical Center	182	0	44,987	1.0258	49,806	136	191	9	0
Alamance Total			182	0							0
Alexander	H0274	Alexander Hospital	25	0	0		0	0	0	-25	0
Alexander Total			25	0							0
Alleghany	H0108	Alleghany Memorial Hospital	41	0	2,503	-1.0012	2,503	7	10	-31	0
Alleghany Total			41	0							0
Anson	H0082	Anson Community Hospital	52	0	3,330	-1.1318	3,330	9	14	-38	0
Anson Total			52	0							0
Ashe	H0099	Ashe Memorial Hospital, Inc.	76	0	4,813	-1.0332	4,813	13	20	-56	0
Ashe Total			76	0							0
Avery	H0037	Charles A. Cannon, Jr. Memorial Hospital	30	0	5,531	-1.0374	5,531	15	23	-7	0
Avery Total			30	0							0
Beaufort	H0188	Beaufort County Medical Center*	120	0	9,086	-1.0494	9,086	25	37	-83	0
Beaufort	H0002	Pungo District Hospital Corporation	39	0	2,004	-1.0494	2,004	5	8	-31	0
Beaufort/Hyde Total			159	0							0
Bertie		2011 Acute Care Bed Need Determination	0	3	0	1.0134	0	0	0	-3	0
Bertie	H0268	Bertie Memorial Hospital	6	0	1,540	1.0134	1,624	4	7	1	0
Bertie Total			6	3							0
Bladen	H0154	Cape Fear Valley-Bladen County Hospital	48	0	3,219	-1.0745	3,219	9	13	-35	0
Bladen Total			48	0							0
Brunswick	H0250	Brunswick Community Hospital	74	0	11,103	-1.0300	11,103	30	46	-28	0
Brunswick	H0150	J. Arthur Doshier Memorial Hospital	36	0	3,720	-1.0300	3,720	10	15	-21	0
Brunswick Total			110	0							0
Buncombe	H0036	Memorial Mission Hospital	673	60	184,366	1.0114	192,936	529	677	-56	0
Buncombe/Graham/Madison/Yancey Total			673	60							0
Burke	H0062	Grace Hospital, Inc.	162	0	16,505	-1.0680	16,505	45	68	-94	0
Burke	H0091	Valdese General Hospital, Inc.	131	0	8,283	-1.0680	8,283	23	34	-97	0

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2006, 2007, 2008, 2009, 2010 were used to generate four-year growth rate.

(ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2010 Utilization Data from Thomson Reuters compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC>400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/Previous Need	Thomson Reuters 2010 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2010 Days, if negative growth)	2014 Projected Average Daily Census (ADC)	2014 Beds Adjusted for Target Occupancy	Projected 2014 Deficit or Surplus (surplus shows as a "-")	2014 Need Determination
Burke Total			293	0							0
Cabarrus	H0031	Carolinas Medical Center-NorthEast	447	0	98,029	1.0154	104,222	286	380	-67	0
Cabarrus Total			447	0							0
Caldwell	H0061	Caldwell Memorial Hospital, Inc.	110	0	18,154	1.0355	20,869	57	86	-24	0
Caldwell Total			110	0							0
Carteret	H0222	Carteret General Hospital	135	0	24,768	-1.0490	24,768	68	102	-33	0
Carteret Total			135	0							0
Catawba	H0223	Catawba Valley Medical Center	200	0	34,269	-1.0213	34,269	94	141	-59	0
Catawba	H0053	Frye Regional Medical Center	209	0	43,553	-1.0213	43,553	119	167	-42	0
Catawba Total			409	0							0
Chatham	H0007	Chatham Hospital, Inc.	25	0	2,463	-1.0032	2,463	7	10	-15	0
Chatham Total			25	0							0
Cherokee	H0239	Murphy Medical Center, Inc.	57	0	9,360	1.0299	10,532	29	43	-14	0
Cherokee/Clay Total			57	0							0
Chowan	H0063	Chowan Hospital	49	0	6,643	-1.0110	6,643	18	27	-22	0
Chowan/Tyrell Total			49	0							0
Cleveland	H0024	Cleveland Regional Medical Center	241	0	34,882	-1.0517	34,882	96	143	-98	0
Cleveland	H0113	Kings Mountain Hospital	72	0	6,757	-1.0517	6,757	19	28	-44	0
Cleveland Total			313	0							0
Columbus	H0045	Columbus Regional Healthcare System	154	0	22,683	-1.0212	22,683	62	93	-61	0
Columbus Total			154	0							0
Craven	H0201	CarolinaEast Medical Center	307	0	61,379	-1.0491	61,379	168	235	-72	0
Craven/Jones/Pamlico Total			307	0							0
Cumberland/Hoke		2011 Acute Care Bed Need Determination	0	65	0	1.0360	0	0	0	-65	0
Cumberland	H0213	Cape Fear Valley Medical Center	490	41	154,432	1.0360	177,885	487	624	93	28
Cumberland/Hoke Total			490	106							28
Dare	H0273	The Outer Banks Hospital, Inc.	21	0	3,117	-1.0508	3,117	9	13	-8	0
Dare Total			21	0							0

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2006, 2007, 2008, 2009, 2010 were used to generate four-year growth rate.

(ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2010 Utilization Data from Thomson Reuters compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC >400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/Previous Need	Thomson Reuters 2010 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2010 Days, if negative growth)	2014 Projected Average Daily Census (ADC)	2014 Beds Adjusted for Target Occupancy	Projected 2014 Deficit or Surplus (surplus shows as a "-")	2014 Need Determination
Davidson	H0027	Lexington Memorial Hospital	94	0	10,465	-1.0750	10,465	29	43	-51	
Davidson	H0112	Thomasville Medical Center	113	0	9,334	-1.0750	9,334	26	38	-75	
Davidson Total			207	0							0
Davie	H0171	Davie County Hospital	81	-31	636	-1.1689	636	2	3	-47	
Davie Total			81	-31							0
Duplin	H0166	Duplin General Hospital, Inc.	56	0	7,215	-1.0638	7,215	20	30	-26	
Duplin Total			56	0							0
Durham	H0015	Duke University Hospital	924	0	247,895	1.0106	258,616	709	907	-17	
Durham	H0233	Durham Regional Hospital	316	0	63,287	1.0106	66,024	181	253	-63	
		Duke/Durham Regional Hospital Total	1,240	0	311,182		324,640	889	1,160	-80	
Durham	H0075	North Carolina Specialty Hospital	18	0	3,738	1.0106	3,900	11	16	-2	
Durham/Caswell Total			1,258	0							0
Edgecombe	H0258	Heritage Hospital	101	0	14,204	1.0282	15,878	44	65	-36	
Edgecombe Total			101	0							0
Forsyth	H0209	Forsyth Memorial Hospital	823	10	204,463	1.0039	207,672	569	728	-105	
Forsyth	H0229	Medical Park Hospital, Inc.	22	-10	3,128	1.0039	3,177	9	13	1	
		Forsyth/Medical Park Hospital Total	845	0	207,591		210,849	578	741	-104	
Forsyth	H0011	North Carolina Baptist Hospital	802	0	213,548	1.0039	216,900	594	761	-41	
Forsyth Total			1,647	0							0
Franklin	H0261	Franklin Regional Medical Center	70	0	4,791	-1.2059	4,791	13	20	-50	
Franklin Total			70	0							0
Gaston	H0105	Gaston Memorial Hospital	372	0	80,053	-1.0350	80,053	219	292	-80	
Gaston Total			372	0							0
Granville	H0098	Granville Health System	62	0	8,904	1.0607	11,272	31	46	-16	
Granville Total			62	0							0
Guilford	H0052	High Point Regional Health System	291	16	65,605	-1.0009	65,605	180	252	-55	
Guilford	H0159	Moses Cone Health System	777	0	196,928	-1.0009	196,928	540	691	-86	

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2006, 2007, 2008, 2009, 2010 were used to generate four-year growth rate.
 (ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2010 Utilization Data from Thomson Reuters compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC >400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/ Previous Need	Thomson Reuters 2010 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2010 Days, if negative growth)	2014 Projected Average Daily Census (ADC)	2014 Beds Adjusted for Target Occupancy	Projected 2014 Deficit or Surplus (surplus shows as a "-")	2014 Need Determination
Guilford Total			1,068	16							0
Halifax	H0230	Halifax Regional Medical Center, Inc.	184	0	30,116	-1.0136	30,116	83	124	-60	
Halifax	H0004	Our Community Hospital, Inc.	20	0	75	-1.0136	75	0	0	-20	
Halifax/Northampton Total			204	0							0
Harnett	H0224	Betsy Johnson Regional Hospital	101	0	24,027	-1.0360	24,027	66	99	-2	
Harnett		Harnett Health System Central Campus	0	50	0	-1.0360	0	0	0	-50	
Harnett		Betsy Johnson/Harnett Health System Total	101	50	24,027		24,027	66	99	-52	
Harnett		Good Hope Hospital (closed eff. 4/11/06)	0	34	0	-1.0360	0	0	0	-34	
Harnett Total			101	84							0
Haywood	H0025	Haywood Regional Medical Center	153	0	16,171	-1.0391	16,171	44	66	-87	
Haywood Total			153	0							0
Henderson	H0161	Margaret R. Pardee Memorial Hospital*	201	0	22,974	-1.0393	22,974	63	94	-107	
Henderson	H0019	Park Ridge Health	62	0	11,442	-1.0393	11,442	31	47	-15	
Henderson Total			263	0							0
Hertford	H0001	Roanoke-Chowan Hospital	86	0	13,849	-1.0344	13,849	38	57	-29	
Hertford/Gates Total			86	0							0
Iredell	H0248	Davis Regional Medical Center	102	0	15,026	-1.0294	15,026	41	62	-40	
Iredell	H0259	Lake Norman Regional Medical Center	123	0	24,304	-1.0294	24,304	67	100	-23	
Iredell		Davis Regional/Lake Norman Regional Medical Center Total	225	0	39,330		39,330	108	162	-63	
Iredell	H0164	Iredell Memorial Hospital, Inc.	199	0	39,465	-1.0294	39,465	108	151	-48	
Iredell Total			424	0							0
Jackson	H0087	Harris Regional Hospital	86	0	13,932	-1.0541	13,932	38	57	-29	
Jackson/Graham Total			86	0							0
Johnston	H0151	Johnston Memorial Hospital	179	0	36,135	-1.0120	36,135	99	148	-31	
Johnston Total			179	0							0
Lee	H0243	Central Carolina Hospital	127	0	22,747	1.0410	26,717	73	110	-17	
Lee Total			127	0							0

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2006, 2007, 2008, 2009, 2010 were used to generate four-year growth rate.

(ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2010 Utilization Data from Thomson Reuters compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC >400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/ Previous Need	Thomson Reuters 2010 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2010 Days, if negative growth)	2014 Projected Average Daily Census (ADC)	2014 Beds Adjusted for Target Occupancy	Projected 2014 Deficit or Surplus (surplus shows as a "-")	2014 Need Determination
Lenoir	H0043	Lenoir Memorial Hospital, Inc.*	218	0	43,475	-1.0089	43,475	119	167	-51	0
Lenoir Total			218	0							0
Lincoln	H0225	Carolinas Medical Center-Lincoln	101	0	13,641	-1.0176	13,641	37	56	-45	0
Lincoln Total			101	0							0
Macon	H0034	Angel Medical Center, Inc.	59	0	4,829	-1.0059	4,829	13	20	-39	0
Macon	H0193	Highlands-Cashiers Hospital, Inc.	24	0	803	-1.0059	803	2	3	-21	0
Macon Total			83	0							0
Martin	H0078	Martin General Hospital*	49	0	6,986	-1.0093	6,986	19	29	-20	0
Martin Total			49	0							0
McDowell	H0097	The McDowell Hospital, Inc.	65	0	5,514	-1.0695	5,514	15	23	-42	0
McDowell Total			65	0							0
Mecklenburg		2011 Acute Care Bed Need Determination	0	107	0	1.0199	0	0	0	-107	0
Mecklenburg	H0042	Carolinas Medical Center Mercy-Pineville	294	36	63,239	1.0199	68,431	187	262	-68	0
Mecklenburg	H0071	Carolinas Medical Center/Center for Mtl Hlth	795	0	244,908	1.0199	265,017	726	929	134	0
Mecklenburg	H0255	Carolinas Medical Center-University	130	-36	20,663	1.0199	22,360	61	92	-2	0
		Carolinas Medical Center Total	1,219	0	328,810		355,808	975	1283	64	0
Mecklenburg	H0010	Presbyterian Hospital	539	0	152,515	1.0199	165,038	452	579	40	0
Mecklenburg	H0282	Presbyterian Hospital Huntersville	60	15	19,610	1.0199	21,220	58	87	12	0
Mecklenburg	H0270	Presbyterian Hospital Matthews	114	20	32,909	1.0199	35,611	98	146	12	0
Mecklenburg		Presbyterian Hospital Mint Hill	0	50	0	1.0199	0	0	0	-50	0
Mecklenburg	H0251	Presbyterian Orthopaedic Hospital	64	-50	11,905	1.0199	12,882	35	53	39	0
		Presbyterian Hospital Total	777	35	216,939		234,751	643	865	53	0
Mecklenburg Total			1,996	142							0**
Mitchell	H0169	Blue Ridge Regional Hospital, Inc.	46	0	6,831	1.0263	7,579	21	31	-15	0
Mitchell Total			46	0							0
Montgomery	H0003	FirstHealth Montgomery Memorial Hospital	37	0	875	-1.1643	875	2	4	-33	0
Montgomery Total			37	0							0

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2006, 2007, 2008, 2009, 2010 were used to generate four-year growth rate.

(ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2010 Utilization Data from Thomson Reuters compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC >400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/Previous Need	Thomson Reuters 2010 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2010 Days, if negative growth)	2014 Projected Average Daily Census (ADC)	2014 Beds Adjusted for Target Occupancy	Projected 2014 Deficit or Surplus (surplus shows as a "-")	2014 Need Determination
Moore	H0100	FirstHealth Moore Regional Hospital	320	0	81,288	1.0253	89,846	246	327	7	0
Moore/Hoke Total			320	0							0
Nash	H0228	Nash General Hospital	270	-8	48,716	-1.0421	48,716	133	187	-75	0
Nash Total			270	-8							0
New Hanover	H0221	New Hanover Regional Medical Center	647	0	145,723	-1.0098	145,723	399	531	-116	0
New Hanover Total			647	0							0
Onslow	H0048	Onslow Memorial Hospital, Inc.	162	0	32,323	-1.0068	32,323	89	133	-29	0
Onslow Total			162	0							0
Orange	H0157	University of North Carolina Hospitals	698	31	194,412	1.0261	215,549	591	756	27	27
Orange Total			698	31							27
Pasquotank	H0054	Albemarle Hospital	182	0	22,619	-1.0862	22,619	62	93	-89	0
Pasquotank/Camden/Currituck/Gates/Perquimans Total			182	0							0
Pender	H0115	Pender Memorial Hospital, Inc.	43	0	2,294	-1.1440	2,294	6	9	-34	0
Pender Total			43	0							0
Person	H0066	Person Memorial Hospital	50	0	6,381	-1.0461	6,381	17	26	-24	0
Person Total			50	0							0
Pitt/Greene/Hyde		2011 Acute Care Bed Need Determination	0	48	0	1.0354	0	0	0	-48	0
Pitt	H0104	Pitt County Memorial Hospital, Inc.	734	0	218,049	1.0354	250,566	686	879	145	65***
Pitt/Greene/Hyde Total			734	48							65***
Polk	H0079	St. Luke's Hospital	45	0	3,262	-1.0028	3,262	9	13	-32	0
Polk Total			45	0							0
Randolph	H0013	Randolph Hospital, Inc.	145	0	26,066	1.0263	28,923	79	119	-26	0
Randolph Total			145	0							0
Richmond	H0158	FirstHealth Richmond Memorial Hospital	99	0	9,475	-1.0638	9,475	26	39	-60	0
Richmond	H0265	Sandhills Regional Medical Center	54	6	11,762	-1.0638	11,762	32	48	-12	0
Richmond Total			153	6							0
Robeson	H0064	Southeastern Regional Medical Center	292	0	54,373	-1.0334	54,373	149	209	-83	0
Robeson Total			292	0							0

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2006, 2007, 2008, 2009, 2010 were used to generate four-year growth rate.

(ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2010 Utilization Data from Thomson Reuters compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and ≤400: 75.2%, ADC>400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and ≤400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/Previous Need	Thomson Reuters 2010 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2010 Days, if negative growth)	2014 Projected Average Daily Census (ADC)	2014 Beds Adjusted for Target Occupancy	Projected 2014 Deficit or Surplus (surplus shows as "-")	2014 Need Determination
Rockingham	H0023	Annie Penn Hospital	110	0	12,873	-1.0403	12,873	35	53	-57	
Rockingham	H0072	Morehead Memorial Hospital	108	0	21,367	-1.0403	21,367	59	88	-20	
Rockingham Total			218	0	0	0	0	96	145	-78	0
Rowan	H0040	Rowan Regional Medical Center	223	0	35,177	-1.0107	35,177	96	145	-78	
Rowan Total			223	0	0	0	0	50	74	-55	0
Rutherford	H0039	Rutherford Hospital, Inc.	129	0	18,107	-1.0123	18,107	50	74	-55	
Rutherford Total			129	0	0	0	0	35	52	-64	0
Sampson	H0067	Sampson Regional Medical Center, Inc.*	116	0	12,616	-1.0215	12,616	35	52	-64	
Sampson Total			116	0	0	0	0	59	89	-29	0
Scotland	H0107	Scotland Memorial Hospital	97	21	21,647	-1.0419	21,647	59	89	-29	
Scotland Total			97	21	0	0	0	38	57	-40	0
Stanly	H0008	Stanly Regional Medical Center	97	0	13,764	-1.0491	13,764	38	57	-40	
Stanly Total			97	0	0	0	0	2	2	-51	0
Stokes	H0165	Stokes-Reynolds Memorial Hospital, Inc.	53	0	591	-1.2197	591	2	2	-51	
Stokes Total			53	0	0	0	0	46	68	-13	0
Surry	H0049	Hugh Chatham Memorial Hospital, Inc.	81	0	16,618	-1.0136	16,618	46	68	-13	
Surry	H0184	Northern Hospital District of Surry County	100	0	14,238	-1.0136	14,238	39	59	-41	
Surry Total			181	0	0	0	0	4	6	-42	0
Swain	H0069	Swain County Hospital	48	0	1,504	-1.0526	1,504	4	6	-42	
Swain Total			48	0	0	0	0	22	33	-9	0
Transylvania	H0111	Transylvania Regional Hospital*	42	0	6,941	1.0390	8,087	22	33	-9	
Transylvania Total			42	0	0	0	0	106	148	-34	0
Union	H0050	Carolinas Medical Center-Union	157	25	35,688	1.0204	38,688	106	148	-34	
Union Total			157	25	0	0	0	48	72	-19	0
Vance	H0267	Maria Parham Medical Center	91	0	17,482	-1.0517	17,482	48	72	-19	
Vance/Warren Total			91	0	0	0	0	0	0	-101	0
Wake		2011 Acute Care Bed Need Determination	0	101	0	1.0173	0	0	0	-101	

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2006, 2007, 2008, 2009, 2010 were used to generate four-year growth rate.

(ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2010 Utilization Data from Thomson Reuters compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC>400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/Previous Need	Thomson Reuters 2010 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (=2010 Days, if negative growth)	2014 Projected Average Daily Census (ADC)	2014 Beds Adjusted for Target Occupancy	Projected 2014 Deficit or Surplus (surplus shows as a "+")	2014 Need Determination
Wake	H0238	Duke Raleigh Hospital	186	0	30,807	1.0173	32,991	90	136	-50	
Wake	H0065	Rex Hospital, Inc.	433	6	103,206	1.0173	110,523	303	403	-36	
Wake	H0199	WakeMed	575	53	167,712	1.0173	179,602	492	630	2	
Wake	H0276	WakeMed Cary Hospital	156	0	44,647	1.0173	47,812	131	183	27	
		WakeMed Total	731	53	212,359		227,415	623	813	29	
Wake Total			1,350	160						0	
Washington	H0006	Washington County Hospital	49	-37	2,559	1.0294	2,873	8	12	0	
Washington Total			49	-37						0	
Watauga	H0160	Blowing Rock Hospital	28	0	0	-1.0333	0	0	0	-28	
Watauga	H0077	Watauga Medical Center, Inc.	117	0	21,194	-1.0333	21,194	58	87	-30	
Watauga Total			145	0						0	
Wayne	H0257	Wayne Memorial Hospital, Inc.	255	0	56,439	-1.0134	56,439	155	216	-39	
Wayne Total			255	0						0	
Wilkes	H0153	Wilkes Regional Medical Center	120	0	14,230	-1.0968	14,230	39	58	-62	
Wilkes Total			120	0						0	
Wilson	H0210	Wilson Medical Center	271	-73	35,450	1.0032	35,902	98	148	-50	
Wilson Total			271	-73						0	
Yadkin	H0155	Yadkin Valley Community Hospital	22	0	804	1.0772	1,082	3	4	-18	
Yadkin Total			22	0						0	
		Grand Total All Hospitals	20,757	553	4,417,043		4,632,666				120

* The difference between Thomson Reuters acute days of care data and the Division of Health Service Regulation Hospital License Renewal Application days of care data cannot be reconciled beyond +/- 5% discrepancy between the two data sources. Service area need determinations are not affected.

** The need determination in Mecklenburg County would have been 10 beds, which is not 10 percent of either of the two owners in Mecklenburg County. The Council voted to reduce the need determination to zero for 2012.

*** The State Health Coordinating Council approved an adjusted need determination petition to reduce the need determination from 97 beds to 65 beds in the Pitt/Greene/Hyde service area.

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2006, 2007, 2008, 2009, 2010 were used to generate four-year growth rate.
 (ADC= Average Daily Census)

Need Determinations

Application of the Acute Care Bed Need Methodology to 2010 data from Thomson Reuters projected need for 152 additional acute care beds, distributed across three service areas. However, in response to a petition from Pitt County Memorial Hospital, there was an adjustment in the need determination for the Pitt-Greene-Hyde service area from 97 acute care beds down to 65 beds. Therefore, the total number of new acute care beds needed statewide is 120, as shown in Table 5B.

Table 5B: Acute Care Bed Need Determinations

(Scheduled for Certificate of Need Review Commencing in 2012)

Application of the Acute Care Bed Need Methodology, with one adjusted need determination, indicated that the Acute Care Bed Service Areas listed in the table below need additional acute care beds as specified.

Service Area	Acute Care Bed Need Determination*	Certificate of Need Application Due Date**	Certificate of Need Beginning Review Date
Cumberland-Hoke	28	June 15, 2012	July 1, 2012
Orange	27	April 16, 2012	May 1, 2012
Pitt-Greene-Hyde	65***	November 15, 2012	December 1, 2012
It is determined that there is no need for additional acute care beds anywhere else in the state and no other reviews are scheduled.			

* Need determinations shown in this document may be increased or decreased during the year pursuant to Policy GEN-2 (see Chapter 4).

** Application due dates are absolute deadlines. The filing deadline is 5:30 p.m. on the application due date. The filing deadline is absolute (see Chapter 3).

*** The projected need for Pitt-Greene-Hyde service area was reduced from 97 to 65 as the result of the approval of an adjusted need determination petition.

Notice: Please be advised that there was one carry-over need determination from the North Carolina 2011 State Medical Facilities Plan which has been reallocated by the Certificate of Need Section for review during calendar year 2012. No certificate of need applications were received by November 15, 2011 in response to the need determination in the North Carolina 2011 State Medical Facilities Plan for three new acute care beds in Bertie County. Therefore, pursuant to "Policy GEN-1: REALLOCATIONS," Subsection 6(b), the need for three additional acute care beds has been reallocated for review in the second Category I review period in 2012 for HSA VI.

Inventory of Long-Term Care Hospital Beds

As a result of the August 2005 change in the certificate of need statute, which made “long-term care hospital beds” a separate category of health service facility beds, the bed days associated with long-term care hospitals have been removed from the acute care bed need determinations. Table 5C, based on 2010 data from the 2011 Hospital License Renewal Applications, shows long-term care hospital inventory data.

Table 5C: Long-Term Care Hospital (LTCH) Bed Inventory

License #	Facility Name	County	Licensed LTCH Beds	Adjustments for Certificates of Need and Previous Need
H0279	Asheville Specialty Hospital	Buncombe	34	0
H0278	Carolinas Select Specialty Hospital	Mecklenburg	40	0
H0236	Crawley Memorial Hospital	Cleveland	41	0
H0275	Highsmith-Rainey Memorial Hospital	Cumberland	66	0
H0073	Kindred Hospital-Greensboro	Guilford	101	0
H0242	LifeCare Hospital of North Carolina	Nash	50	0
H0280	Select Specialty Hospital - Durham	Durham	30	0
H0284	Select Specialty Hospital - Greensboro	Guilford	30	0
H0277	Select Specialty Hospital - Winston-Salem	Forsyth	42	0

ATTACHMENT 2

STATE HEALTH COORDINATING COUNCIL

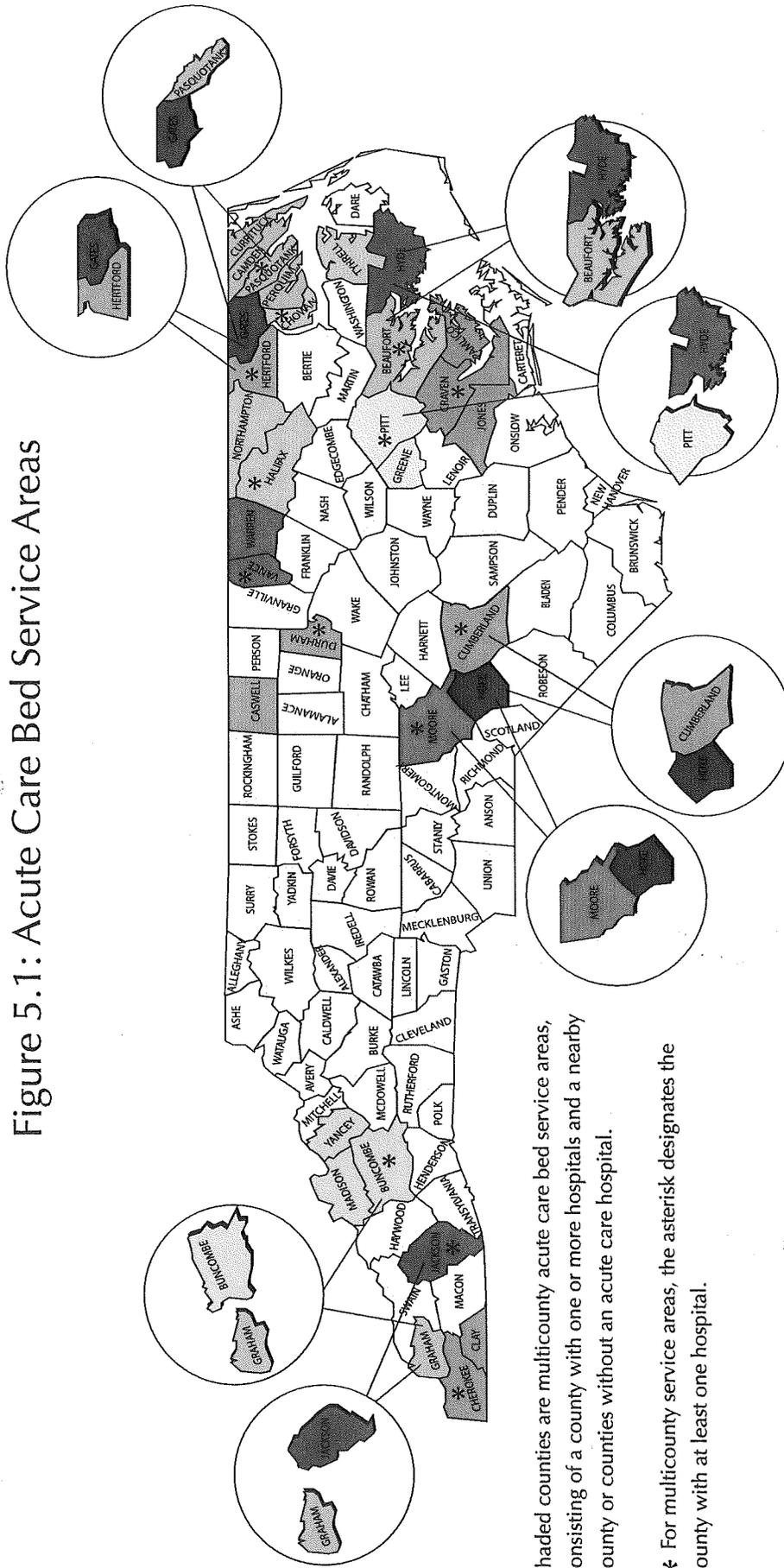
PROPOSED

STATE
MEDICAL
FACILITIES
PLAN



2013

Figure 5.1: Acute Care Bed Service Areas



Shaded counties are multicounty acute care bed service areas, consisting of a county with one or more hospitals and a nearby county or counties without an acute care hospital.

* For multicounty service areas, the asterisk designates the county with at least one hospital.

Hospital	Multicounty Service Area	Color Code
Duke University Hospital, Durham Regional Hospital, North Carolina Specialty Hospital	Durham, Caswell	[Color swatch]
Murphy Medical Center	Cherokee, Clay	[Color swatch]
Mission Hospitals	Buncombe, Graham, Madison, Yancey	[Color swatch]
MedWest Harris	Jackson, Graham	[Color swatch]
First Health Moore Regional Hospital	Moore, Hoke	[Color swatch]
Cape Fear Valley Medical Center	Cumberland, Hoke	[Color swatch]
Maria Parham Medical Center	Vance, Warren	[Color swatch]
Our Community Hospital and Halifax Regional Medical Center	Halifax, Northampton	[Color swatch]
Vidant Medical Center	Pitt, Greene, Hyde	[Color swatch]
CarolinaEast Medical Center	Craven, Jones, Pamlico	[Color swatch]
Vidant Pungo Hospital and Vidant Beaufort Hospital	Beaufort, Hyde	[Color swatch]
Vidant Roanoke-Chowan Hospital	Hertford, Gates	[Color swatch]
Vidant Chowan Hospital	Chowan, Tyrrell	[Color swatch]
Albemarle Health: A Vidant Partner in Health	Pasquotank, Camden, Currituck, Gates, Perquimans	[Color swatch]

Table 5A: Acute Care Bed Need Projections

2011 Utilization Data from Truven Health Analytics, formerly Thomson Reuters, compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC>400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/ Previous Need	Truven Health Analytics 2011 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2011 Days, if negative growth)	2015 Projected Average Daily Census (ADC)	2015 Beds Adjusted for Target Occupancy	Projected 2015 Deficit or Surplus (surplus shows as a "-")	2015 Need Determination
Alamance	H0272	Alamance Regional Medical Center	182	0	43,631	1.0008	43,771	120	168	-14	0
Alamance Total			182	0							0
Alexander	H0274	Alexander Hospital	25	0	0		0	0	0	-25	0
Alexander Total			25	0							0
Alleghany	H0108	Alleghany Memorial Hospital	41	0	2,486	1.0166	2,655	7	11	-30	0
Alleghany Total			41	0							0
Anson	H0082	Anson Community Hospital	52	0	2,416	-1.1754	2,416	7	10	-42	0
Anson Total			52	0							0
Ashe	H0099	Ashe Memorial Hospital, Inc.	76	0	5,169	1.0062	5,298	15	22	-54	0
Ashe Total			76	0							0
Avery	H0037	Charles A. Cannon, Jr. Memorial Hospital	30	0	5,918	1.0008	5,937	16	24	-6	0
Avery Total			30	0							0
Beaufort	H0188	Vidant Beaufort Hospital	120	0	7,103	-1.0804	7,103	19	29	-91	0
Beaufort	H0002	Vidant Pungo Hospital	39	0	2,082	-1.0804	2,082	6	9	-30	0
Beaufort/Hyde Total			159	0							0
Bertie	H0268	Vidant Bertie Hospital	6	0	1,617	1.0096	1,680	5	7	1	1
Bertie Total			6	0							1
Bladen	H0154	Cape Fear Valley-Bladen County Hospital	48	0	3,803	-1.0399	3,803	10	16	-32	0
Bladen Total			48	0							0
Brunswick	H0250	Brunswick Novant Medical Center	74	0	11,417	-1.0035	11,417	31	47	-27	0
Brunswick	H0150	J. Arthur Doshier Memorial Hospital	36	0	4,208	-1.0035	4,208	12	17	-19	0
Brunswick Total			110	0							0
Buncombe	H0036	Memorial Mission Hospital	673	60	183,403	1.0017	184,653	506	648	-85	0
Buncombe/Graham/Madison/Yancey Total			673	60							0
Burke	H0062	Grace Hospital, Inc.	162	0	15,944	-1.0651	15,944	44	66	-96	0
Burke	H0091	Valdese General Hospital, Inc.	131	0	8,361	-1.0651	8,361	23	34	-97	0
Burke Total			293	0							0

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2007, 2008, 2009, 2010 and 2011 were used to generate four-year growth rate.
 (ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2011 Utilization Data from Truven Health Analytics, formerly Thomson Reuters, compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC >400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/Previous Need	Truven Health Analytics 2011 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2011 Days, if negative growth)	2015 Projected Average Daily Census (ADC)	2015 Beds Adjusted for Target Occupancy	Projected 2015 Deficit or Surplus (surplus shows as "-")	2015 Need Determination
Cabarrus	H0031	Carolinas Medical Center-NorthEast	447	0	99,381	1.0033	100,699	276	367	-80	0
Cabarrus Total			447	0							0
Caldwell	H0061	Caldwell Memorial Hospital, Inc.	110	0	17,402	1.039	20,280	56	83	-27	0
Caldwell Total			110	0							0
Carteret	H0222	Carteret General Hospital	135	0	23,360	-1.0522	23,360	64	96	-39	0
Carteret Total			135	0							0
Catawba	H0223	Catawba Valley Medical Center	200	0	33,935	-1.0435	33,935	93	139	-61	0
Catawba	H0053	Frye Regional Medical Center	209	0	39,472	-1.0435	39,472	108	151	-58	0
Catawba Total			409	0							0
Chatham	H0007	Chatham Hospital, Inc.	25	0	2,466	-1.0234	2,466	7	10	-15	0
Chatham Total			25	0							0
Cherokee	H0239	Murphy Medical Center, Inc.	57	0	8,309	1.0138	8,777	24	36	-21	0
Cherokee/Clay Total			57	0							0
Chowan	H0063	Vidant Chowan Hospital	49	0	6,388	-1.0072	6,388	18	26	-23	0
Chowan/Tyrell Total			49	0							0
Cleveland	H0024	Cleveland Regional Medical Center	241	0	33,117	-1.0273	33,117	91	136	-105	0
Cleveland	H0113	Kings Mountain Hospital	72	-25	6,381	-1.0273	6,381	17	26	-21	0
Cleveland Total			313	-25							0
Columbus	H0045	Columbus Regional Healthcare System	154	0	19,953	-1.0604	19,953	55	82	-72	0
Columbus Total			154	0							0
Craven	H0201	CarolinaEast Medical Center	307	0	55,036	-1.0835	55,036	151	211	-96	0
Craven/Jones/Pamlico Total			307	0							0
Cumberland/Hoke		2012 Acute Care Bed Need Determination	0	28	0	1.0564	0	0	0	-28	0
Cumberland	H0213	Cape Fear Valley Medical Center	490	106	170,061	1.0564	211,796	580	743	147	119
Cumberland/Hoke Total			490	134							119
Dare	H0273	The Outer Banks Hospital, Inc.	21	0	3,234	-1.0273	3,234	9	13	-8	0
Dare Total			21	0							0

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2007, 2008, 2009, 2010 and 2011 were used to generate four-year growth rate.
 (ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2011 Utilization Data from Truven Health Analytics, formerly Thomson Reuters, compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC >400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONS/ Previous Need	Truven Health Analytics 2011 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (=2011 Days, if negative growth)	2015 Projected Average Daily Census (ADC)	2015 Beds Adjusted for Target Occupancy	Projected 2015 Deficit or Surplus (surplus shows as "+")	2015 Need Determination
Davidson	H0027	Lexington Medical Center	94	0	9,947	-1.057	9,947	27	41	-53	
Davidson	H0112	Thomasville Medical Center	113	-12	9,861	-1.057	9,861	27	41	-60	
Davidson Total			207	-12							0
Davie	H0171	Davie County Hospital	81	-31	499	-1.1854	499	1	2	-48	
Davie Total			81	-31							0
Duplin	H0166	Vidant Duplin Hospital	56	0	7,388	-1.1008	7,388	20	30	-26	
Duplin Total			56	0							0
Durham	H0015	Duke University Hospital*	924	0	240,707	1.0013	241,961	663	849	-75	
Durham	H0233	Durham Regional Hospital	316	0	57,797	1.0013	58,098	159	223	-93	
		Duke/Durham Regional Hospital Total	1,240	0	298,504		300,059	822	1,072	-168	
Durham	H0075	North Carolina Specialty Hospital	18	0	3,843	1.0013	3,863	11	16	-2	
Durham/Caswell Total			1,258	0							0
Edgecombe	H0258	Vidant Edgecombe Hospital	101	0	14,635	1.0125	15,381	42	63	-38	
Edgecombe Total			101	0							0
Forsyth	H0209	Forsyth Memorial Hospital	823	0	203,063	1.0021	204,774	561	718	-105	
Forsyth	H0229	Medical Park Hospital, Inc.	22	0	2,783	1.0021	2,806	8	12	-10	
		Forsyth/Medical Park Hospital Total	845	0	205,846		207,581	569	730	-115	
Forsyth	H0011	North Carolina Baptist Hospital	802	0	224,870	1.0021	226,765	621	795	-7	
Forsyth Total			1,647	0							0
Franklin	H0261	Franklin Regional Medical Center	70	0	3,500	-1.2791	3,500	10	14	-56	
Franklin Total			70	0							0
Gaston	H0105	Gaston Memorial Hospital	372	0	80,843	-1.0203	80,843	221	295	-77	
Gaston Total			372	0							0
Granville	H0098	Granville Health System	62	0	9,070	1.058	11,364	31	47	-15	
Granville Total			62	0							0
Guilford	H0159	Cone Health	777	0	194,014	-1.0078	194,014	532	680	-97	
Guilford	H0052	High Point Regional Health System	307	0	62,484	-1.0078	62,484	171	240	-67	

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2007, 2008, 2009, 2010 and 2011 were used to generate four-year growth rate.
 (ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2011 Utilization Data from Truven Health Analytics, formerly Thomson Reuters, compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC >400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/Previous Need	Truven Health Analytics 2011 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using Growth Rate (=2011 Days, if negative growth)	2015 Projected Average Daily Census (ADC)	2015 Beds Adjusted for Target Occupancy	Projected 2015 Deficit or Surplus (surplus shows as "+")	2015 Need Determination
Gulford Total			1,084	0							0
Halifax	H0230	Halifax Regional Medical Center, Inc.	184	0	27,305	-1.0468	27,305	75	112	-72	
Halifax	H0004	Our Community Hospital, Inc.	20	0	80	-1.0468	80	0	0	-20	
Halifax/Northampton Total			204	0							0
Harnett	H0224	Betsy Johnson Regional Hospital	101	0	25,186	-1.0303	25,186	69	104	3	
Harnett		Harnett Health System Central Campus	0	50	0	-1.0303	0	0	0	-50	
Harnett		Betsy Johnson/Harnett Health System Total	101	50	25,186		25,186	69	104	-47	
Harnett		Good Hope Hospital (closed eff. 4/11/06)	0	34	0	-1.0303	0	0	0	-34	
Harnett Total			101	84							0
Haywood	H0025	MedWest Haywood	153	0	16,196	-1.0564	16,196	44	67	-86	
Haywood Total			153	0							0
Henderson	H0161	Margaret R. Pardee Memorial Hospital	201	0	20,837	-1.0541	20,837	57	86	-115	
Henderson	H0019	Park Ridge Health	62	0	11,180	-1.0541	11,180	31	46	-16	
Henderson Total			263	0							0
Hertford	H0001	Vidant Roanoke-Chowan Hospital	86	0	14,516	-1.011	14,516	40	60	-26	
Hertford/Gates Total			86	0							0
Iredell	H0248	Davis Regional Medical Center	102	0	15,662	-1.0148	15,662	43	64	-38	
Iredell	H0259	Lake Norman Regional Medical Center	123	0	22,703	-1.0148	22,703	62	93	-30	
Iredell		Davis Regional/Lake Norman Regional Medical Center Total	225	0	38,365		38,365	105	157	-68	
Iredell	H0164	Iredell Memorial Hospital, Inc.	199	0	42,694	-1.0148	42,694	117	164	-35	
Iredell Total			424	0							0
Jackson	H0087	MedWest Harris	86	0	13,115	-1.0923	13,115	36	54	-32	
Jackson/Graham Total			86	0							0
Johnston	H0151	Johnston Memorial Hospital	179	0	38,100	-1.0015	38,100	104	146	-33	
Johnston Total			179	0							0
Lee	H0243	Central Carolina Hospital	127	0	20,441	1.0006	20,490	56	84	-43	
Lee Total			127	0							0

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2007, 2008, 2009, 2010 and 2011 were used to generate four-year growth rate.
 (ADC= Average Daily Census)

Table 5A: Acute Care Bed Need Projections

2011 Utilization Data from Truven Health Analytics, formerly Thomson Reuters, compiled by the Cecil B. Sheps Center for Health Services Research
 Target Occupancy Rates: ADC 1-99: 66.7%, ADC 100-200: 71.4%, ADC > 200 and <=400: 75.2%, ADC >400: 78%
 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute-Care Beds	Adjustments for CONs/ Previous Need	Truven Health Analytics 2011 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2011 Days, if negative growth)	2015 Projected Average Daily Census (ADC)	2015 Beds Adjusted for Target Occupancy	Projected 2015 Deficit or Surplus (surplus shows as a "-")	2015 Need Determination
Lenoir	H0043	Lenoir Memorial Hospital, Inc.	218	0	37,135	-1.0341	37,135	102	142	-76	0
Lenoir Total			218	0							0
Lincoln	H0225	Carolinas Medical Center-Lincoln	101	0	15,957	1.0115	16,704	46	69	-32	0
Lincoln Total			101	0							0
Macon	H0034	Angel Medical Center, Inc.	59	0	5,436	-1.0018	5,436	15	22	-37	0
Macon	H0193	HIGHLANDS-CASHIERS HOSPITAL, INC.	24	0	852	-1.0018	852	2	4	-20	0
Macon Total			83	0							0
Martin	H0078	Martin General Hospital	49	0	6,575	-1.0425	6,575	18	27	-22	0
Martin Total			49	0							0
McDowell	H0097	The McDowell Hospital	65	0	6,528	-1.0207	6,528	18	27	-38	0
McDowell Total			65	0							0
Mecklenburg	H0042	Carolinas Medical Center Mercy-Pineville	294	74	69,954	1.0157	74,452	204	271	-97	0
Mecklenburg	H0071	Carolinas Medical Center/Center for Mental	795	19	256,139	1.0157	272,607	747	956	142	0
Mecklenburg	H0255	Carolinas Medical Center-University	130	-36	20,319	1.0157	21,625	59	89	-5	0
		Carolinas Medical Center Total	1,219	57	346,412		368,684	1,010	1,316	40	0
Mecklenburg	H0010	Presbyterian Hospital	539	0	146,537	1.0157	155,959	427	547	8	0
Mecklenburg	H0282	Presbyterian Hospital Huntersville	60	15	19,515	1.0157	20,770	57	85	10	0
Mecklenburg	H0270	Presbyterian Hospital Matthews	117	17	31,493	1.0157	33,518	92	138	4	0
Mecklenburg		Presbyterian Hospital Mint Hill	0	50	0	1.0157	0	0	0	-50	0
Mecklenburg	H0251	Presbyterian Orthopaedic Hospital	64	0	10,905	1.0157	11,606	32	48	-16	0
		Presbyterian Hospital Total	780	82	208,450		221,852	608	818	-44	0
Mecklenburg Total			1,999	139							40
Mitchell	H0169	Blue Ridge Regional Hospital, Inc.	46	0	6,281	-1.004	6,281	17	26	-20	0
Mitchell Total			46	0							0
Montgomery	H0003	FirstHealth Montgomery Memorial Hospital	37	0	994	-1.0774	994	3	4	-33	0
Montgomery Total			37	0							0
Moore	H0100	FirstHealth Moore Reg Hospital & Pinchurst	320	0	82,234	1.0121	86,287	236	314	-6	0

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 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/ Previous Need	Truven Health Analytics 2011 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2011 Days, if negative growth)	2015 Projected Average Daily Census (ADC)	2015 Beds Adjusted for Target Occupancy	Projected 2015 Deficit or Surplus (shows as a "-")	2015 Need Determination
Moore/Hoke Total			320	0							0
Nash	H0228	Nash General Hospital	270	-8	47,861	-1.047	47,861	131	184	-78	
Nash Total			270	-8							0
New Hanover	H0221	New Hanover Regional Medical Center	647	0	153,104	1.0113	160,142	439	562	-85	
New Hanover Total			647	0							0
Onslow	H0048	Onslow Memorial Hospital, Inc.	162	0	38,306	1.0445	45,593	125	175	13	
Onslow Total			162	0							0
Orange		2012 Acute Care Bed Need Determination	0	27	0	1.0084	0	0	0	-27	
Orange	H0157	University of North Carolina Hospitals	698	31	199,203	1.0084	205,981	564	722	-7	
Orange Total			698	58							0
Pasquotank	H0054	Albemarle Health: A Vidant Partner in Health	182	0	21,846	-1.0838	21,846	60	90	-92	
Pasquotank/Camden/Currituck/Gates/Perquimans Total			182	0							0
Pender	H0115	Pender Memorial Hospital, Inc.	43	0	2,142	-1.1211	2,142	6	9	-34	
Pender Total			43	0							0
Person	H0066	Person Memorial Hospital	50	0	6,719	-1.1227	6,719	18	28	-22	
Person Total			50	0							0
Pitt/Greene/Hyde		2012 Acute Care Bed Need Determination	0	65	0	1.0298	0	0	0	-65	
Pitt	H0104	Vidant Medical Center	734	48	220,959	1.0298	248,498	681	871	89	
Pitt/Greene/Hyde Total			734	113							24
Polk	H0079	St. Luke's Hospital	45	0	3,664	1.0175	3,927	11	16	-29	
Polk Total			45	0							0
Randolph	H0013	Randolph Hospital, Inc.	145	0	25,573	1.0122	26,844	74	110	-35	
Randolph Total			145	0							0
Richmond	H0158	FirstHealth Richmond Memorial Hospital	99	0	8,848	-1.0837	8,848	24	36	-63	
Richmond	H0265	Sandhills Regional Medical Center	54	6	10,460	-1.0837	10,460	29	43	-17	
Richmond Total			153	6							0
Robeson	H0064	Southeastern Regional Medical Center	292	0	60,367	-1.0036	60,367	165	232	-60	
Robeson Total			292	0							0

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 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/ Previous Need	Truven Health Analytics 2011 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using County Growth Rate (= 2011 Days, if negative growth)	2015 Projected Average Daily Census (ADC)	2015 Beds Adjusted for Target Occupancy	Projected 2015 Deficit or Surplus (surplus shows as a "-")	2015 Need Determination
Rockingham	H0023	Annie Penn Hospital	110	0	13,346	-1.0321	13,346	37	55	-55	
Rockingham	H0072	Morehead Memorial Hospital	108	0	21,976	-1.0321	21,976	60	90	-18	
Rockingham Total			218	0							0
Rowan	H0040	Rowan Regional Medical Center	203	0	34,666	-1.0088	34,666	95	142	-61	
Rowan Total			203	0							0
Rutherford	H0039	Rutherford Regional Medical Center	129	0	15,804	-1.0426	15,804	43	65	-64	
Rutherford Total			129	0							0
Sampson	H0067	Sampson Regional Medical Center, Inc.	116	0	16,079	1.0755	21,513	59	88	-28	
Sampson Total			116	0							0
Scotland	H0107	Scotland Memorial Hospital and Edwin Morg	97	21	20,904	-1.039	20,904	57	86	-32	
Scotland Total			97	21							0
Stanly	H0008	Stanly Regional Medical Center	97	0	13,170	-1.0279	13,170	36	54	-43	
Stanly Total			97	0							0
Stokes	H0165	Pioneer Community Hospital of Stokes	53	0	1,127	1.0501	1,370	4	6	-47	
Stokes Total			53	0							0
Surry	H0049	Hugh Chatham Memorial Hospital, Inc.	81	0	15,235	-1.0143	15,235	42	63	-18	
Surry	H0184	Northern Hospital of Surry County	100	0	15,908	-1.0143	15,908	44	65	-35	
Surry Total			181	0							0
Swain	H0069	MedWest Swain	48	0	1,028	-1.1012	1,028	3	4	-44	
Swain Total			48	0							0
Transylvania	H0111	Transylvania Regional Hospital Inc. and Brid	42	0	6,665	1.017	7,130	20	29	-13	
Transylvania Total			42	0							0
Union	H0050	Carolinas Medical Center-Union	157	25	35,104	-1.0079	35,104	96	144	-38	
Union Total			157	25							0
Vance	H0267	Maria Parham Medical Center	91	0	18,084	-1.0253	18,084	50	74	-17	
Vance/Warren Total			91	0							0
Wake		2011 Acute Care Bed Need Determination	0	101	0	1.0074	0	0	0	-101	

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 Target Occupancy Factors: ADC 1-99: 1.50, ADC 100-200: 1.40, ADC > 200 and <=400: 1.33, ADC >400: 1.28

A	B	C	D	E	F	G	H	I	J	K	L
Service Area	License Number	Facility Name	Licensed Acute Care Beds	Adjustments for CONs/Previous Need	Truven Health Analytics 2011 Acute Care Days	County Growth Rate Multiplier	4 Years Growth Using Growth Rate (= 2011 Days, if negative growth)	2015 Projected Average Daily Census (ADC)	2015 Beds Adjusted for Target Occupancy	Projected 2015 Deficit or Surplus (surplus shows as a "-")	2015 Need Determination
Wake	H0238	Duke Raleigh Hospital	186	0	32,150	1.0074	33,112	91	136	-50	
Wake	H0065	Rex Hospital, Inc.	433	6	103,576	1.0074	106,676	292	389	-50	
Wake	H0199	WakeMed	575	53	167,782	1.0074	172,804	473	606	-22	
Wake	H0276	WakeMed Cary Hospital	156	0	42,886	1.0074	44,170	121	169	13	
		WakeMed Total	731	53	210,668		216,973	594	775	-9	
Wake Total			1,350	160							0
Washington	H0006	Washington County Hospital	49	-37	732	-1.1168	732	2	3	-9	
Washington Total			49	-37							0
Watauga	H0160	Blowing Rock Hospital	28	0	0	-1.0681	0	0	0	-28	
Watauga	H0077	Watauga Medical Center, Inc.	117	0	17,411	-1.0681	17,411	48	72	-45	
Watauga Total			145	0							0
Wayne	H0257	Wayne Memorial Hospital, Inc.	255	0	46,872	-1.0548	46,872	128	180	-75	
Wayne Total			255	0							0
Wilkes	H0153	Wilkes Regional Medical Center	120	0	13,784	-1.0605	13,784	38	57	-63	
Wilkes Total			120	0							0
Wilson	H0210	Wilson Medical Center	271	-73	32,620	-1.0065	32,620	89	134	-64	
Wilson Total			271	-73							0
Yadkin	H0155	Yadkin Valley Community Hospital	22	0	1,322	1.1193	2,075	6	9	-13	
Yadkin Total			22	0							0
		Grand Total All Hospitals	20,756	614	4,413,509		4,577,888				184

* Note: Duke University Hospital has a certificate of need (J-008029-07) for 14 acute care beds under Policy AC-3. The 14 beds are not counted when determining acute care bed need.

Projections based on four-year average county-specific growth rates, compounded annually over the next four years. Acute Care Days data from 2007, 2008, 2009, 2010 and 2011 were used to generate four-year growth rate.
 (ADC= Average Daily Census)

Table 5B: Acute Care Bed Need Determinations

(Proposed for Certificate of Need Review Commencing in 2013)

It is determined that the Acute Care Bed Service Areas listed in the table below need additional acute care beds as specified. **Note: Days of care are under review for several facilities and need determinations are subject to change.**

Service Area	Acute Care Bed Need Determination*	Certificate of Need Application Due Date**	Certificate of Need Beginning Review Date
Bertie	1	To be determined	To be determined
Cumberland-Hoke	119	To be determined	To be determined
Mecklenburg	40	To be determined	To be determined
Pitt-Greene-Hyde	24	To be determined	To be determined
It is determined that there is no need for additional acute care beds anywhere else in the state and no other reviews are scheduled.			

* Need determinations shown in this document may be increased or decreased during the year pursuant to Policy GEN-2 (see Chapter 4).

** Application due dates are absolute deadlines. The filing deadline is 5:30 p.m. on the application due date. The filing deadline is absolute (see Chapter 3).

ATTACHMENT 3

Attachment # 3

- Chem Dep
- N. Newborn
- Psych
- Rehab

State Inpatient PivotTable Report - Market Share by Hospital
Database: Inpatient NC (MS-DRG) 10/01/2010 - 09/30/2011
Area Selection: 13 Cnty PSA & SSA Excluding SC Counties
Selected Hospital: First Health Moore Regional Hospital
**** Normal Newborns are included**

County	Cumberland
Payor	(All)
DRG Product Line	(All)
DRG	(All)

HospitalName	Data		
	Patients	% Down	Total Days
Angel Medical Center	1	0.0%	3
Annie Penn Hospital	1	0.0%	4
Betsy Johnson Memorial Hospital	229	0.8%	907
Brunswick Hospital	6	0.0%	8
Brynn Marr Hospital	1	0.0%	10
Cape Fear Valley Health System	23,851	85.6%	127,015
Cape Fear Valley-Bladen County Hospital	12	0.0%	41
CarolinaEast Medical Center	3	0.0%	10
Carolinas HealthCare System Carolinas Me	29	0.1%	189
Carolinas HealthCare System University H	5	0.0%	12
Carolinas Medical Center Northeast	3	0.0%	17
CaroMont Health Inc.	5	0.0%	14
Carteret County General Hospital	1	0.0%	1
Central Carolina Hospital	30	0.1%	76
Columbus Regional Healthcare System	4	0.0%	12
Cone Health	24	0.1%	86
Duke Raleigh	55	0.2%	258
Duke University Medical Center	933	3.3%	6,995
Duplin General Hospital	3	0.0%	3
Durham Regional Hospital	27	0.1%	124
First Health Moore Regional Hospital	433	1.6%	1,690
Forsyth Memorial Hospital	5	0.0%	50
Frye Regional Medical Center	1	0.0%	3
Grace Hospital	1	0.0%	5
Halifax Regional Medical Center	1	0.0%	2
High Point Regional Hospital	14	0.1%	31
Highsmith-Rainey Specialty Hospital	200	0.7%	12,722
J. Arthur Doshier Memorial Hospital	1	0.0%	2
Johnston Medical Center-Smithfield	15	0.1%	39
Kindred Hospital of Greensboro	5	0.0%	138
Lake Norman Regional Medical Center	1	0.0%	1
Lenoir Memorial Hospital	2	0.0%	5
Margaret R. Pardee Memorial Hospital	1	0.0%	2
Mercy Hospital	4	0.0%	9
Mission Health System	5	0.0%	21
Morehead Memorial Hospital	1	0.0%	3
Nash Health Care System	4	0.0%	16

000470

Attachment # 3

New Hanover Regional Medical Center	39	0.1%	271
North Carolina Specialty Hospital	10	0.0%	17
Onslow Memorial Hospital	2	0.0%	10
Park Ridge Health	2	0.0%	4
Pitt County Memorial Hospital	49	0.2%	376
Presbyterian Hospital	5	0.0%	20
Presbyterian Hospital Huntersville	2	0.0%	8
Presbyterian Hospital Matthews	1	0.0%	3
Presbyterian Orthopaedic Hospital	1	0.0%	4
Psychiatric Solutions of NC dba: Holly H	2	0.0%	15
Randolph Hospital	1	0.0%	3
Rex Healthcare	63	0.2%	233
Roanoke-Chowan Hospital	2	0.0%	3
Sampson County Memorial Hospital	24	0.1%	79
Sandhills Regional Medical Center	2	0.0%	5
Scotland Health Care System	15	0.1%	53
Select Specialty Hospital - Durham	6	0.0%	226
Southeastern Regional Medical Center	109	0.4%	423
Stanly Regional Medical Center	1	0.0%	1
The McDowell Hospital	1	0.0%	3
The North Carolina Baptist Hospital	34	0.1%	206
Transylvania Regional Hospital	1	0.0%	1
Union Regional Medical Center	3	0.0%	5
University of North Carolina Hospitals	1,421	5.1%	10,183
WakeMed	135	0.5%	852
WakeMed Cary	15	0.1%	65
Watauga Medical Center	1	0.0%	4
Wayne Memorial Hospital	7	0.0%	27
Wilson Memorial Hospital	1	0.0%	4
Grand Total	27,872	100.0%	163,628

7.18.12 Thomson Data

Excludes DRGs for

Normal Newborn

Psychiatry

Rehabilitation

Chemical Dependency

reflected at the end of this

attachment as well as data from

all Long Term Care and

Psychiatric Hospitals

27,462 149,818

<410> <13,810>

000471

Attachment # 3

- Chem Dep
- N. Newborn
- Psych
- Rehab

State Inpatient PivotTable Report - Market Share by Hospital
 Database: Inpatient NC (MS-DRG) 10/01/2010 - 09/30/2011
 Area Selection: 13 Cnty PSA & SSA Excluding SC Counties
 Selected Hospital: First Health Moore Regional Hospital
 ** Normal Newborns are included

County	Hoke
Payor	(All)
DRG Product Line	(All)
DRG	(All)

HospitalName	Data		
	Patients	% Down	Total Days
Cape Fear Valley Health System	1,592	42.5%	7,604
Carolinas HealthCare System Carolinas Me	11	0.3%	62
Carolinas HealthCare System University H	1	0.0%	4
Carolinas Medical Center Northeast	1	0.0%	1
Carteret County General Hospital	1	0.0%	4
Catawba Valley Medical Center	1	0.0%	1
Cone Health	1	0.0%	4
Duke Raleigh	6	0.2%	32
Duke University Medical Center	77	2.1%	594
Durham Regional Hospital	5	0.1%	25
First Health Moore Regional Hospital	1,732	46.3%	7,503
First Health Richmond Memorial Hospital	3	0.1%	3
Forsyth Memorial Hospital	8	0.2%	42
Highsmith-Rainey Specialty Hospital	13	0.3%	684
Iredell Health System	5	0.1%	29
Johnston Medical Center-Smithfield	1	0.0%	1
Kindred Hospital of Greensboro	2	0.1%	368
Medical Park Hospital	1	0.0%	2
Mission Health System	1	0.0%	12
New Hanover Regional Medical Center	3	0.1%	6
North Carolina Specialty Hospital	1	0.0%	3
Onslow Memorial Hospital	1	0.0%	1
Pitt County Memorial Hospital	5	0.1%	26
Presbyterian Hospital	2	0.1%	4
Presbyterian Hospital Huntersville	1	0.0%	4
Rex Healthcare	6	0.2%	34
Rutherford Hospital	1	0.0%	1
Sandhills Regional Medical Center	2	0.1%	5
Scotland Health Care System	27	0.7%	95
Select Specialty Hospital - Durham	2	0.1%	51
Select Specialty Hospital - Greensboro	1	0.0%	96
Southeastern Regional Medical Center	21	0.6%	67
The North Carolina Baptist Hospital	8	0.2%	53
University of North Carolina Hospitals	190	5.1%	1,550
WakeMed	8	0.2%	112
WakeMed Cary	1	0.0%	2
Grand Total	3,742	100.0%	19,085

3699

17,793

<43>

<1,292>

000472

State Inpatient PivotTable Report - Market Share by Hospital
 Database: Inpatient NC (MS-DRG) 10/01/2010 - 09/30/2011
 Area Selection: 13 Cnty PSA & SSA Excluding SC Counties
 Selected Hospital: First Health Moore Regional Hospital
 ** Normal Newborns are included

- Chem Dep
 - N. Newborn
 - Psych
 - Rehab

County	Robeson
Payor	(All)
DRG Product Line	(All)
DRG	(All)

HospitalName	Data		
	Patients	% Down	Total Days
Betsy Johnson Memorial Hospital	4	0.0%	14
Brunswick Hospital	4	0.0%	13
Cape Fear Valley Health System	2,089	10.5%	11,704
Cape Fear Valley-Bladen County Hospital	34	0.2%	94
CarolinaEast Medical Center	1	0.0%	7
Carolinas HealthCare System Carolinas Me	119	0.6%	916
Carolinas HealthCare System Charlotte In	1	0.0%	61
Carolinas HealthCare System University H	5	0.0%	26
Carolinas Medical Center Northeast	11	0.1%	114
Carolinas Specialty Hospital	1	0.0%	18
CaroMont Health Inc.	2	0.0%	5
Central Carolina Hospital	2	0.0%	7
Columbus Regional Healthcare System	43	0.2%	218
Cone Health	5	0.0%	19
Duke Raleigh	40	0.2%	127
Duke University Medical Center	838	4.2%	6,707
Duplin General Hospital	2	0.0%	4
Durham Regional Hospital	34	0.2%	506
First Health Moore Regional Hospital	1,278	6.4%	5,513
First Health Richmond Memorial Hospital	1	0.0%	1
Forsyth Memorial Hospital	3	0.0%	33
Granville Health System	1	0.0%	2
Halifax Regional Medical Center	1	0.0%	4
High Point Regional Hospital	3	0.0%	9
Highsmith-Rainey Specialty Hospital	66	0.3%	2,555
Iredell Health System	1	0.0%	2
J. Arthur Doshier Memorial Hospital	2	0.0%	5
Johnston Medical Center-Smithfield	3	0.0%	10
Margaret R. Pardee Memorial Hospital	1	0.0%	1
MedWest Haywood	2	0.0%	5
Mercy Hospital	7	0.0%	31
Mission Health System	4	0.0%	16
Nash Health Care System	2	0.0%	6
New Hanover Regional Medical Center	91	0.5%	566
North Carolina Specialty Hospital	5	0.0%	11
Pitt County Memorial Hospital	16	0.1%	181
Presbyterian Hospital	5	0.0%	21

000473

Attachment # 3

Presbyterian Hospital Huntersville	1	0.0%	1
Presbyterian Hospital Matthews	2	0.0%	4
Rex Healthcare	29	0.1%	132
Rowan Regional Medical Center	1	0.0%	3
Sampson County Memorial Hospital	2	0.0%	7
Sandhills Regional Medical Center	17	0.1%	62
Scotland Health Care System	1,730	8.7%	5,925
Select Specialty Hospital - Durham	3	0.0%	60
Select Specialty Hospital - Greensboro	4	0.0%	89
Southeastern Regional Medical Center	12,742	63.7%	54,067
The North Carolina Baptist Hospital	16	0.1%	70
Transylvania Regional Hospital	1	0.0%	1
Union Regional Medical Center	1	0.0%	4
University of North Carolina Hospitals	679	3.4%	4,993
WakeMed	26	0.1%	203
WakeMed Cary	5	0.0%	11
Wayne Memorial Hospital	2	0.0%	3
Grand Total	19,988	100.0%	95,167

19,554

91,158

<434> <4009>

000474

State Inpatient PivotTable Report - Market Share by Hospital
 Database: Inpatient NC (MS-DRG) 10/01/2010 - 09/30/2011
 Area Selection: 13 Cnty PSA & SSA Excluding SC Counties
 Selected Hospital: First Health Moore Regional Hospital
 ** Normal Newborns are included

- Chem Dep
 - N Newborn
 - Psych
 - Rehab

County	Scotland
Payor	(All)
DRG Product Line	(All)
DRG	(All)

HospitalName	Data		
	Patients	% Down	Total Days
Anson County Hospital	1	0.0%	2
Brunswick Hospital	1	0.0%	2
Cape Fear Valley Health System	79	1.6%	607
Carolinas HealthCare System Carolinas Me	149	2.9%	1,315
Carolinas HealthCare System University H	3	0.1%	10
Carolinas Medical Center Northeast	12	0.2%	91
Carolinas Specialty Hospital	3	0.1%	107
CaroMont Health Inc.	1	0.0%	4
Cone Health	2	0.0%	7
Duke Raleigh	4	0.1%	14
Duke University Medical Center	91	1.8%	553
Durham Regional Hospital	7	0.1%	64
First Health Moore Regional Hospital	858	16.9%	3,926
First Health Richmond Memorial Hospital	37	0.7%	100
Highsmith-Rainey Specialty Hospital	9	0.2%	1,304
Mercy Hospital	14	0.3%	53
Mission Health System	1	0.0%	6
Nash Health Care System	1	0.0%	2
New Hanover Regional Medical Center	9	0.2%	52
Presbyterian Hospital	3	0.1%	23
Presbyterian Orthopaedic Hospital	1	0.0%	7
Rex Healthcare	5	0.1%	12
Sandhills Regional Medical Center	311	6.1%	1,168
Scotland Health Care System	3,177	62.7%	11,554
Select Specialty Hospital - Durham	2	0.0%	49
Select Specialty Hospital - Greensboro	2	0.0%	2
Southeastern Regional Medical Center	78	1.5%	314
The North Carolina Baptist Hospital	9	0.2%	58
Thomasville Medical Center	1	0.0%	5
Union Regional Medical Center	2	0.0%	4
University of North Carolina Hospitals	192	3.8%	1,495
WakeMed	3	0.1%	4
WakeMed Cary	2	0.0%	9
Watauga Medical Center	1	0.0%	4
Grand Total	5,071	100.0%	22,927

4979 21,186

<92> <1,741>

000475

-12 exclusions

State Inpatient PivotTable Report - Market Share by Hospital
 Database: Inpatient NC (MS-DRG) 10/01/2010 - 09/30/2011
 Area Selection: 13 Cnty PSA & SSA Excluding SC Counties
 Selected Hospital: First Health Moore Regional Hospital
 ** Normal Newborns are Included

County	Cumberland
Payor	(All)
DRG Product Line	(All)
DRG	(All)

HospitalName	Data		
	Patients	% Down	Total Days
Angel Medical Center	1	0.0%	3
Annie Penn Hospital	1	0.0%	4
Betsy Johnson Memorial Hospital	195	0.9%	813
Brunswick Hospital	6	0.0%	8
Brynn Marr Hospital	1	0.0%	10
Cape Fear Valley Health System	17,854	84.6%	95,624
Cape Fear Valley-Bladen County Hospital	6	0.0%	23
CarolinaEast Medical Center	3	0.0%	10
Carolinas HealthCare System Carolinas Me	26	0.1%	155
Carolinas HealthCare System University H	4	0.0%	10
Carolinas Medical Center Northeast	2	0.0%	13
CaroMont Health Inc.	3	0.0%	8
Carteret County General Hospital	1	0.0%	1
Central Carolina Hospital	18	0.1%	53
Columbus Regional Healthcare System	4	0.0%	12
Cone Health	21	0.1%	79
Duke Raleigh	42	0.2%	168
Duke University Medical Center	702	3.3%	4,373
Duplin General Hospital	1	0.0%	1
Durham Regional Hospital	27	0.1%	124
First Health Moore Regional Hospital	369	1.7%	1,360
Forsyth Memorial Hospital	3	0.0%	18
Grace Hospital	1	0.0%	5
High Point Regional Hospital	10	0.0%	20
Highsmith-Rainey Specialty Hospital	191	0.9%	10,196
J. Arthur Doshier Memorial Hospital	1	0.0%	2
Johnston Medical Center-Smithfield	12	0.1%	33
Kindred Hospital of Greensboro	5	0.0%	138
Lake Norman Regional Medical Center	1	0.0%	1
Lenoir Memorial Hospital	2	0.0%	5
Margaret R. Pardee Memorial Hospital	1	0.0%	2
Mercy Hospital	4	0.0%	9
Mission Health System	3	0.0%	16
Nash Health Care System	3	0.0%	14
New Hanover Regional Medical Center	32	0.2%	184
North Carolina Specialty Hospital	10	0.0%	17
Onslow Memorial Hospital	1	0.0%	8

Attachment # 3

Park Ridge Health	2	0.0%	4
Pitt County Memorial Hospital	38	0.2%	264
Presbyterian Hospital	5	0.0%	20
Presbyterian Hospital Huntersville	2	0.0%	8
Presbyterian Hospital Matthews	1	0.0%	3
Presbyterian Orthopaedic Hospital	1	0.0%	4
Psychiatric Solutions of NC dba: Holly H	2	0.0%	15
Randolph Hospital	1	0.0%	3
Rex Healthcare	57	0.3%	162
Sampson County Memorial Hospital	20	0.1%	65
Sandhills Regional Medical Center	2	0.0%	5
Scotland Health Care System	14	0.1%	50
Select Specialty Hospital - Durham	6	0.0%	226
Southeastern Regional Medical Center	95	0.5%	384
Stanly Regional Medical Center	1	0.0%	1
The McDowell Hospital	1	0.0%	3
The North Carolina Baptist Hospital	32	0.2%	200
Transylvania Regional Hospital	1	0.0%	1
Union Regional Medical Center	2	0.0%	3
University of North Carolina Hospitals	1,139	5.4%	6,891
WakeMed	98	0.5%	464
WakeMed Cary	14	0.1%	63
Watauga Medical Center	1	0.0%	4
Wayne Memorial Hospital	7	0.0%	27
Wilson Memorial Hospital	1	0.0%	4
Grand Total	21,110	100.0%	122,394

-410 -13,810

20,700 108,584

000477

State Inpatient PivotTable Report - Market Share by Hospital
 Database: Inpatient NC (MS-DRG) 10/01/2010 - 09/30/2011
 Area Selection: 13 Cnty PSA & SSA Excluding SC Counties
 Selected Hospital: First Health Moore Regional Hospital
 ** Normal Newborns are Included

-12 exclusions

County	Hoke
Payor	(All)
DRG Product Line	(All)
DRG	(All)

HospitalName	Data		
	Patients	% Down	Total Days
Cape Fear Valley Health System	955	34.1%	4,846
Carolinas HealthCare System Carolinas Me	9	0.3%	42
Carolinas HealthCare System University H	1	0.0%	4
Carolinas Medical Center Northeast	1	0.0%	1
Carteret County General Hospital	1	0.0%	4
Cone Health	1	0.0%	4
Duke Raleigh	5	0.2%	27
Duke University Medical Center	62	2.2%	425
Durham Regional Hospital	5	0.2%	25
First Health Moore Regional Hospital	1,514	54.0%	6,538
First Health Richmond Memorial Hospital	3	0.1%	3
Forsyth Memorial Hospital	3	0.1%	14
Highsmith-Rainey Specialty Hospital	12	0.4%	454
Iredell Health System	3	0.1%	25
Johnston Medical Center-Smithfield	1	0.0%	1
Kindred Hospital of Greensboro	2	0.1%	368
Medical Park Hospital	1	0.0%	2
Mission Health System	1	0.0%	12
New Hanover Regional Medical Center	3	0.1%	6
North Carolina Specialty Hospital	1	0.0%	3
Onslow Memorial Hospital	1	0.0%	1
Pitt County Memorial Hospital	2	0.1%	3
Presbyterian Hospital	2	0.1%	4
Presbyterian Hospital Huntersville	1	0.0%	4
Rex Healthcare	6	0.2%	34
Rutherford Hospital	1	0.0%	1
Sandhills Regional Medical Center	2	0.1%	5
Scotland Health Care System	26	0.9%	93
Select Specialty Hospital - Durham	2	0.1%	51
Select Specialty Hospital - Greensboro	1	0.0%	96
Southeastern Regional Medical Center	13	0.5%	41
The North Carolina Baptist Hospital	7	0.2%	48
University of North Carolina Hospitals	148	5.3%	860
WakeMed	6	0.2%	42
WakeMed Cary	1	0.0%	2
Grand Total	2,803	100.0%	14,089

-43

-1,292

2,760

12,797

State Inpatient PivotTable Report - Market Share by Hospital
 Database: Inpatient NC (MS-DRG) 10/01/2010 - 09/30/2011
 Area Selection: 13 Cnty PSA & SSA Excluding SC Counties
 Selected Hospital: First Health Moore Regional Hospital
 ** Normal Newborns are Included

-12 exclusions

County	Robeson
Payor	(All)
DRG Product Line	(All)
DRG	(All)

HospitalName	Data		
	Patients	% Down	Total Days
Betsy Johnson Memorial Hospital	1	0.0%	9
Brunswick Hospital	4	0.0%	13
Cape Fear Valley Health System	1,407	8.7%	6,914
Cape Fear Valley-Bladen County Hospital	17	0.1%	48
CarolinaEast Medical Center	1	0.0%	7
Carolinas HealthCare System Carolinas Me	97	0.6%	570
Carolinas HealthCare System Charlotte In	1	0.0%	61
Carolinas HealthCare System University H	5	0.0%	26
Carolinas Medical Center Northeast	10	0.1%	105
Carolinas Specialty Hospital	1	0.0%	18
CaroMont Health Inc.	2	0.0%	5
Central Carolina Hospital	1	0.0%	3
Columbus Regional Healthcare System	43	0.3%	218
Cone Health	5	0.0%	19
Duke Raleigh	37	0.2%	113
Duke University Medical Center	626	3.9%	4,255
Durham Regional Hospital	34	0.2%	506
First Health Moore Regional Hospital	1,091	6.8%	4,449
First Health Richmond Memorial Hospital	1	0.0%	1
Forsyth Memorial Hospital	3	0.0%	33
Granville Health System	1	0.0%	2
Halifax Regional Medical Center	1	0.0%	4
High Point Regional Hospital	2	0.0%	8
Highsmith-Rainey Specialty Hospital	65	0.4%	2,333
Iredell Health System	1	0.0%	2
J. Arthur Doshier Memorial Hospital	2	0.0%	5
Johnston Medical Center-Smithfield	2	0.0%	8
Margaret R. Pardee Memorial Hospital	1	0.0%	1
MedWest Haywood	2	0.0%	5
Mercy Hospital	5	0.0%	20
Mission Health System	4	0.0%	16
Nash Health Care System	2	0.0%	6
New Hanover Regional Medical Center	55	0.3%	295
North Carolina Specialty Hospital	5	0.0%	11
Pitt County Memorial Hospital	12	0.1%	114
Presbyterian Hospital	4	0.0%	19
Presbyterian Hospital Huntersville	1	0.0%	1

Attachment # 3

Presbyterian Hospital Matthews	2	0.0%	4
Rex Healthcare	28	0.2%	131
Rowan Regional Medical Center	1	0.0%	3
Sampson County Memorial Hospital	1	0.0%	3
Sandhills Regional Medical Center	17	0.1%	62
Scotland Health Care System	1,447	9.0%	4,994
Select Specialty Hospital - Durham	3	0.0%	60
Select Specialty Hospital - Greensboro	4	0.0%	89
Southeastern Regional Medical Center	10,524	65.1%	46,148
The North Carolina Baptist Hospital	16	0.1%	70
Transylvania Regional Hospital	1	0.0%	1
Union Regional Medical Center	1	0.0%	4
University of North Carolina Hospitals	538	3.3%	3,527
WakeMed	16	0.1%	119
WakeMed Cary	4	0.0%	8
Wayne Memorial Hospital	2	0.0%	3
Grand Total	16,157	100.0%	75,449

-434

-4,009

15,723

71,440

State Inpatient PivotTable Report - Market Share by Hospital
 Database: Inpatient NC (MS-DRG) 10/01/2010 - 09/30/2011
 Area Selection: 13 Cnty PSA & SSA Excluding SC Counties
 Selected Hospital: First Health Moore Regional Hospital
 ** Normal Newborns are Included

-12 exclusions

County	Scotland
Payor	(All)
DRG Product Line	(All)
DRG	(All)

HospitalName	Data		
	Patients	% Down	Total Days
Anson County Hospital	1	0.0%	2
Brunswick Hospital	1	0.0%	2
Cape Fear Valley Health System	51	1.2%	235
Carolinas HealthCare System Carolinas Me	125	3.0%	890
Carolinas HealthCare System University H	3	0.1%	10
Carolinas Medical Center Northeast	11	0.3%	68
Carolinas Specialty Hospital	3	0.1%	107
CaroMont Health Inc.	1	0.0%	4
Cone Health	2	0.0%	7
Duke Raleigh	3	0.1%	7
Duke University Medical Center	73	1.8%	411
Durham Regional Hospital	7	0.2%	64
First Health Moore Regional Hospital	629	15.1%	2,578
First Health Richmond Memorial Hospital	28	0.7%	76
Highsmith-Rainey Specialty Hospital	7	0.2%	255
Mercy Hospital	12	0.3%	47
Nash Health Care System	1	0.0%	2
New Hanover Regional Medical Center	9	0.2%	52
Presbyterian Hospital	3	0.1%	23
Presbyterian Orthopaedic Hospital	1	0.0%	7
Rex Healthcare	5	0.1%	12
Sandhills Regional Medical Center	308	7.4%	1,150
Scotland Health Care System	2,652	63.6%	9,972
Select Specialty Hospital - Durham	2	0.0%	49
Select Specialty Hospital - Greensboro	2	0.0%	2
Southeastern Regional Medical Center	64	1.5%	263
The North Carolina Baptist Hospital	7	0.2%	46
Thomasville Medical Center	1	0.0%	5
Union Regional Medical Center	2	0.0%	4
University of North Carolina Hospitals	150	3.6%	889
WakeMed	2	0.0%	3
WakeMed Cary	2	0.0%	9
Watauga Medical Center	1	0.0%	4
Grand Total	4,169	100.0%	17,255

-92

-1,741

4,077

15,514

000481

CFVHS Acute Care Definition - DRG Exclusions

MS-DRG	MDC	TYPE	MS-DRG Title	Weights
795	15	MED	NORMAL NEWBORN	0.1649
880	19	MED	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	0.6161
881	19	MED	DEPRESSIVE NEUROSES	0.6178
882	19	MED	NEUROSES EXCEPT DEPRESSIVE	0.6276
883	19	MED	DISORDERS OF PERSONALITY & IMPULSE CONTROL	1.0694
884	19	MED	ORGANIC DISTURBANCES & MENTAL RETARDATION	0.9308
885	19	MED	PSYCHOSES	0.9041
886	19	MED	BEHAVIORAL & DEVELOPMENTAL DISORDERS	0.7903
887	19	MED	OTHER MENTAL DISORDER DIAGNOSES	0.7888
894	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	0.4074
895	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE W REHABILITATION THERAPY	1.0275
896	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W MCC	1.4565
897	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W/O MCC	0.6513
945	23	MED	REHABILITATION W CC/MCC	1.2795
946	23	MED	REHABILITATION W/O CC/MCC	1.1273

ATTACHMENT 4

Attachment 4. FH "Community Hospital" Acuity Volume Shifted

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Cumberland		Hoke		Robeson		Scotland	
					Pts	Days	Pts	Days	Pts	Days	Pts	Days
				Total	350	1281	1499	6482	1076	4390	615	2526
				ALOS		3.7		4.3		4.1		4.1
				Total Surgery	187	626	286	1464	412	1691	222	1055
				ALOS		3.3		5.1		4.1		4.8
				Total Medicine	163	655	1213	5018	664	2699	393	1471
				ALOS		4.0		4.1		4.1		3.7
				Total Less than 2.0	250	896	1303	5191	785	2903	490	1781
				ALOS		3.6		4.0		3.7		3.6
				Total Surgery Less than 2.0	92	463	183	1174	296	1358	131	779
				ALOS		5.0		6.4		4.6		5.9
				Total Medicine less than 2.0	158	433	1120	4017	489	1545	359	1002
				ALOS		2.7		3.6		3.2		2.8
				% of Total Greater than 2.0	28.6%	30.1%	13.1%	19.9%	27.0%	33.9%	20.3%	29.5%
				% of Surgery Greater than 2.0	50.8%	26.0%	36.0%	19.8%	28.2%	19.7%	41.0%	26.2%
				% of Medicine Greater than 2.0	3.1%	33.9%	7.7%	19.9%	26.4%	42.8%	8.7%	31.9%

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Cumberland		Hoke		Robeson		Scotland	
					Pts	Days	Pts	Days	Pts	Days	Pts	Days
Medical DRGs with Acuity Less than 2.0												
998		**	PRINCIPAL DIAGNOSIS INVALID AS DISCHARGE DIAGNOSIS	0.0000								
999		**	UNGROUPABLE	0.0000								
780	14	MED	FALSE LABOR	0.2284								
298	05	MED	CARDIAC ARREST, UNEXPLAINED W/O CC/MCC	0.4497								
782	14	MED	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	0.4744								
916	21	MED	ALLERGIC REACTIONS W/O MCC	0.4867			3	3	1	2		
778	14	MED	THREATENED ABORTION	0.4942								
950	23	MED	AFTERCARE W/O CC/MCC	0.5040								
311	05	MED	ANGINA PECTORIS	0.5070			1	1			1	1
761	13	MED	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS W/O CC/MCC	0.5219								
779	14	MED	ABORTION W/O D&C	0.5311								
313	05	MED	CHEST PAIN	0.5499	1	1	39	54	15	49	14	25
639	10	MED	DIABETES W/O CC/MCC	0.5544			9	23	2	7	1	5
310	05	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC/MCC	0.5709	3	5	9	14	7	20	5	9
285	05	MED	ACUTE MYOCARDIAL INFARCTION, EXPIRED W/O CC/MCC	0.5712								
303	05	MED	ATHEROSCLEROSIS W/O MCC	0.5830	2	2	3	7	7	11	2	6
159	03	MED	DENTAL & ORAL DISEASES W/O CC/MCC	0.5897								
203	04	MED	BRONCHITIS & ASTHMA W/O CC/MCC	0.6081	1	6	18	29	4	6	2	4
538	08	MED	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH W/O CC/MCC	0.6108								
305	05	MED	HYPERTENSION W/O MCC	0.6138	3	9	11	26	3	6	2	3
316	05	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC/MCC	0.6147							1	1
434	07	MED	CIRRHOSIS & ALCOHOLIC HEPATITIS W/O CC/MCC	0.6152								
880	19	MED	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	0.6161								
881	19	MED	DEPRESSIVE NEUROSES	0.6178								
561	08	MED	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W/O CC/MCC	0.6211			1	1	4	5	2	4
724	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM W/O CC/MCC	0.6211					1	1		
921	21	MED	COMPLICATIONS OF TREATMENT W/O CC/MCC	0.6216			5	8			2	2
156	03	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES W/O CC/MCC	0.6226			3	3				
599	09	MED	MALIGNANT BREAST DISORDERS W/O CC/MCC	0.6265								
918	21	MED	POISONING & TOXIC EFFECTS OF DRUGS W/O MCC	0.6269			14	21	2	8		
882	19	MED	NEUROSES EXCEPT DEPRESSIVE	0.6276								
153	03	MED	OTITIS MEDIA & URI W/O MCC	0.6290	1	4	4	7	1	3	1	1
756	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC/MCC	0.6361								
390	06	MED	G.I. OBSTRUCTION W/O CC/MCC	0.6369			4	12	5	9	3	14
149	03	MED	DYSEQUILIBRIUM	0.6389			1	2	1	2	4	10
151	03	MED	EPISTAXIS W/O MCC	0.6393			2	8				
295	05	MED	DEEP VEIN THROMBOPHLEBITIS W/O CC/MCC	0.6403								
730	12	MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES W/O CC/MCC	0.6414								
688	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W/O CC/MCC	0.6479								
776	14	MED	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE	0.6513								
122	02	MED	ACUTE MAJOR EYE INFECTIONS W/O CC/MCC	0.6522								
556	08	MED	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE W/O MCC	0.6568			3	13	2	4		
684	11	MED	RENAL FAILURE W/O CC/MCC	0.6587	1	2	6	16	5	15	2	5
696	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS W/O MCC	0.6590			2	3	1	3	1	6
951	23	MED	OTHER FACTORS INFLUENCING HEALTH STATUS	0.6593					1	1		
301	05	MED	PERIPHERAL VASCULAR DISORDERS W/O CC/MCC	0.6615			4	19	3	5	1	1
443	07	MED	DISORDERS OF LIVER EXCEPT MALIGN,ALC,HEPA W/O CC/MCC	0.6615	2	3					1	2
566	08	MED	OTHER MUSCULOSKELETAL SYS & CONNECTIVE TISSUE DIAGNOSES W/O CC/MCC	0.6625								
103	01	MED	HEADACHES W/O MCC	0.6701	1	1	4	10	1	4	2	5
204	04	MED	RESPIRATORY SIGNS & SYMPTOMS	0.6714	1	2	1	1	2	4	3	9
601	09	MED	NON-MALIGNANT BREAST DISORDERS W/O CC/MCC	0.6728			1	1				
395	06	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES W/O CC/MCC	0.6749	1	1	3	8	2	3	2	4
700	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES W/O CC/MCC	0.6757			1	5			1	4
297	05	MED	CARDIAC ARREST, UNEXPLAINED W CC	0.6792								
185	04	MED	MAJOR CHEST TRAUMA W/O CC/MCC	0.6803								
923	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O MCC	0.6808	3	5	1	3				
781	14	MED	OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS	0.6809								
554	08	MED	BONE DISEASES & ARTHROPATHIES W/O MCC	0.6812	1	3	3	10	4	8	2	2
816	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC/MCC	0.6818								
093	01	MED	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC/MCC	0.6827					1	1		
293	05	MED	HEART FAILURE & SHOCK W/O CC/MCC	0.6853	1	2	8	30	7	15	4	6
607	09	MED	MINOR SKIN DISORDERS W/O MCC	0.6857			2	5	2	5		
125	02	MED	OTHER DISORDERS OF THE EYE W/O MCC	0.6859			1	2			1	6
948	23	MED	SIGNS & SYMPTOMS W/O MCC	0.6865			6	14	4	9	1	10
440	07	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY W/O CC/MCC	0.6890			13	31	6	18		
641	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS W/O MCC	0.6916			16	43	12	40	5	14
090	01	MED	CONCUSSION W/O CC/MCC	0.6927			1	1				
914	21	MED	TRAUMATIC INJURY W/O MCC	0.6994								
726	12	MED	BENIGN PROSTATIC HYPERTROPHY W/O MCC	0.7013	1	3						
195	04	MED	SIMPLE PNEUMONIA & PLEURISY W/O CC/MCC	0.7096	1	1	2	5	3	5	2	5
694	11	MED	URINARY STONES W/O ESW LITHOTRIPSY W/O MCC	0.7096	1	3			1	4	1	1
123	02	MED	NEUROLOGICAL EYE DISORDERS	0.7144			1	2			1	1
379	06	MED	G.I. HEMORRHAGE W/O CC/MCC	0.7146	1	1	2	3	4	8	2	2
563	08	MED	FX, SPRN, STRN & DISL EXCEPT FEMUR, HIP, PELVIS & THIGH W/O MCC	0.7153	1	6	4	9	4	13		
312	05	MED	SYNCOPE & COLLAPSE	0.7172	7	14	20	53	8	18	7	14
392	06	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W/O MCC	0.7173	6	16	45	141	32	97	26	89

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Cumberland		Hoke		Robeson		Scotland	
					Pts	Days	Pts	Days	Pts	Days	Pts	Days
605	09	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST W/O MCC	0.7182			1	1				
536	08	MED	FRACTURES OF HIP & PELVIS W/O MCC	0.7191			2	6	2	8		
645	10	MED	ENDOCRINE DISORDERS W/O CC/MCC	0.7198	1	4	5	24				
869	18	MED	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES W/O CC/MCC	0.7207								
201	04	MED	PNEUMOTHORAX W/O CC/MCC	0.7210	1	2			1	1	1	5
192	04	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE W/O CC/MCC	0.7220			13	47	6	16	4	9
069	01	MED	TRANSIENT ISCHEMIA	0.7311	2	3	15	27	10	20	4	17
547	08	MED	CONNECTIVE TISSUE DISORDERS W/O CC/MCC	0.7348					1	2		
759	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM W/O CC/MCC	0.7368			1	3			1	3
081	01	MED	NONTRAUMATIC STUPOR & COMA W/O MCC	0.7392			3	7				
777	14	MED	ECTOPIC PREGNANCY	0.7406								
446	07	MED	DISORDERS OF THE BILIARY TRACT W/O CC/MCC	0.7411	2	3	2	2	2	2	3	5
866	18	MED	VIRAL ILLNESS W/O MCC	0.7462			2	3	1	2	1	6
072	01	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC/MCC	0.7499			1	4				
079	01	MED	HYPERTENSIVE ENCEPHALOPATHY W/O CC/MCC	0.7533								
370	06	MED	MAJOR ESOPHAGEAL DISORDERS W/O CC/MCC	0.7546								
206	04	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O MCC	0.7575			4	11	3	7	1	3
060	01	MED	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA W/O CC/MCC	0.7578							1	4
594	09	MED	SKIN ULCERS W/O CC/MCC	0.7591								
534	08	MED	FRACTURES OF FEMUR W/O MCC	0.7601			1	3				
728	12	MED	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM W/O MCC	0.7612					2	11	1	3
101	01	MED	SEIZURES W/O MCC	0.7619	2	4	8	19	5	20	4	11
188	04	MED	PLEURAL EFFUSION W/O CC/MCC	0.7678			1	2			1	2
697	11	MED	URETHRAL STRICTURE	0.7771								
544	08	MED	PATHOLOGICAL FRACTURES & MUSCULOSKELET & CONN TISS MALIG W/O CC/MCC	0.7775								
387	06	MED	INFLAMMATORY BOWEL DISEASE W/O CC/MCC	0.7813			1	1			1	1
690	11	MED	KIDNEY & URINARY TRACT INFECTIONS W/O MCC	0.7864	3	8	21	74	13	40	1	1
887	19	MED	OTHER MENTAL DISORDER DIAGNOSES	0.7888								
886	19	MED	BEHAVIORAL & DEVELOPMENTAL DISORDERS	0.7903								
087	01	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR W/O CC/MCC	0.7929							2	4
812	16	MED	RED BLOOD CELL DISORDERS W/O MCC	0.7957	1	6	22	74	20	111	4	14
307	05	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS W/O MCC	0.7974								
845	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC/MCC	0.8029			1	6				
282	05	MED	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W/O CC/MCC	0.8064			4	9	3	9	4	18
148	03	MED	EAR, NOSE, MOUTH & THROAT MALIGNANCY W/O CC/MCC	0.8066								
848	17	MED	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS W/O CC/MCC	0.8078								
182	04	MED	RESPIRATORY NEOPLASMS W/O CC/MCC	0.8096								
382	06	MED	COMPLICATED PEPTIC ULCER W/O CC/MCC	0.8130								
066	01	MED	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W/O CC/MCC	0.8198	2	6	10	36	4	9	2	5
198	04	MED	INTERSTITIAL LUNG DISEASE W/O CC/MCC	0.8203			1	4	1	1		
552	08	MED	MEDICAL BACK PROBLEMS W/O MCC	0.8204	2	4	13	46	8	32	3	18
537	08	MED	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH W CC/MCC	0.8275			1	3				
550	08	MED	SEPTIC ARTHRITIS W/O CC/MCC	0.8276								
864	18	MED	FEVER	0.8276			2	5	1	4	1	2
638	10	MED	DIABETES W CC	0.8306	2	4	29	87	11	31	3	6
384	06	MED	UNCOMPLICATED PEPTIC ULCER W/O MCC	0.8326			1	6	1	2	2	6
603	09	MED	CELLULITIS W/O MCC	0.8377	1	3	24	121	11	27	5	16
309	05	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	0.8387			13	45	7	18	5	18
760	13	MED	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS W CC/MCC	0.8388			1	5				
202	04	MED	BRONCHITIS & ASTHMA W CC/MCC	0.8424	2	9	6	21	2	7		
053	01	MED	SPINAL DISORDERS & INJURIES W/O CC/MCC	0.8441								
376	06	MED	DIGESTIVE MALIGNANCY W/O CC/MCC	0.8478							1	1
373	06	MED	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS W/O CC/MCC	0.8599	1	3	2	8	1	1		
074	01	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W/O MCC	0.8606			9	27	4	15	3	19
541	08	MED	OSTEOMYELITIS W/O CC/MCC	0.8713								
068	01	MED	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT W/O MCC	0.8751			1	4				
596	09	MED	MAJOR SKIN DISORDERS W/O MCC	0.8779								
558	08	MED	TENDONITIS, MYOSITIS & BURSITIS W/O MCC	0.8823	1	3	5	9				
284	05	MED	ACUTE MYOCARDIAL INFARCTION, EXPIRED W CC	0.8888							1	2
685	11	MED	ADMIT FOR RENAL DIALYSIS	0.8944			1	2			1	4
084	01	MED	TRAUMATIC STUPOR & COMA, COMA >1 HR W/O CC/MCC	0.8959	1	2	1	2				
976	25	MED	HIV W MAJOR RELATED CONDITION W/O CC/MCC	0.8975								
437	07	MED	MALIGNANCY OF HEPATOBILIARY SYSTEM OR PANCREAS W/O CC/MCC	0.9004								
155	03	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES W CC	0.9017	1	9	2	4				
158	03	MED	DENTAL & ORAL DISEASES W CC	0.9027							1	4
885	19	MED	PSYCHOSES	0.9041								
076	01	MED	VIRAL MENINGITIS W/O CC/MCC	0.9050	1	5	1	4				
565	08	MED	OTHER MUSCULOSKELETAL SYS & CONNECTIVE TISSUE DIAGNOSES W CC	0.9095					1	5		
121	02	MED	ACUTE MAJOR EYE INFECTIONS W CC/MCC	0.9104								
810	16	MED	MAJOR HEMATOL/IMMUN DIAG EXC SICKLE CELL CRISIS & COAGUL W/O CC/MCC	0.9230								
884	19	MED	ORGANIC DISTURBANCES & MENTAL RETARDATION	0.9308								
389	06	MED	G.I. OBSTRUCTION W CC	0.9344			9	46	6	19		
057	01	MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS W/O MCC	0.9350	2	15	4	28	4	8		
092	01	MED	OTHER DISORDERS OF NERVOUS SYSTEM W CC	0.9404	2	12	2	6	1	4		
433	07	MED	CIRRHOSIS & ALCOHOLIC HEPATITIS W CC	0.9548					3	5	3	10
152	03	MED	OTITIS MEDIA & URI W MCC	0.9584			1	3	1	4		
600	09	MED	NON-MALIGNANT BREAST DISORDERS W CC/MCC	0.9602							1	3
089	01	MED	CONCUSSION W CC	0.9667					1	5		
315	05	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	0.9681			4	12			5	16
191	04	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE W CC	0.9735	3	16	37	131	17	57	8	25
184	04	MED	MAJOR CHEST TRAUMA W CC	0.9755								
302	05	MED	ATHEROSCLEROSIS W MCC	0.9755			2	7	1	3	1	1
300	05	MED	PERIPHERAL VASCULAR DISORDERS W CC	0.9776			2	8	7	19		
920	21	MED	COMPLICATIONS OF TREATMENT W CC	0.9785			2	3	5	11	2	4
863	18	MED	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS W/O MCC	0.9790	2	9	3	14	4	17	4	9
059	01	MED	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA W CC	0.9811							1	6
442	07	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC,HEPA W CC	0.9857	1	6	1	4	3	8	4	25
847	17	MED	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS W CC	0.9860								
179	04	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS W/O CC/MCC	0.9861			2	5				
729	12	MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES W CC/MCC	0.9892								
394	06	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES W CC	0.9939			12	40	4	10	6	17
699	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES W CC	0.9999	1	4	6	26	5	22		
949	23	MED	AFTERCARE W CC/MCC	1.0006								
560	08	MED	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W CC	1.0022					2	11		
815	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W CC	1.0024	1	6			1	13		
439	07	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY W CC	1.0089	2	13	10	39	1	7	2	6
194	04	MED	SIMPLE PNEUMONIA & PLEURISY W CC	1.0152	3	18	16	60	11	46	9	33
078	01	MED	HYPERTENSIVE ENCEPHALOPATHY W CC	1.0154			1	2				
723	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM W CC	1.0190							1	5
683	11	MED	RENAL FAILURE W CC	1.0243	3	14	33	140	22	77	13	34
200	04	MED	PNEUMOTHORAX W CC	1.0252	1	1					1	1
304	05	MED	HYPERTENSION W MCC	1.0263			2	14	1	2		

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Cumberland		Hoke		Robeson		Scotland	
					Pts	Days	Pts	Days	Pts	Days	Pts	Days
378	06	MED	G.I. HEMORRHAGE W CC	1.0274	4	10			17	46	15	45
102	01	MED	HEADACHES W MCC	1.0288								
642	10	MED	INBORN ERRORS OF METABOLISM	1.0290			1	1				
292	05	MED	HEART FAILURE & SHOCK W CC	1.0302	9	39	45	188	20	56	16	56
294	05	MED	DEEP VEIN THROMBOPHLEBITIS W CC/MCC	1.0373								
842	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC/MCC	1.0389								
386	06	MED	INFLAMMATORY BOWEL DISEASE W CC	1.0435	3	13	7	22	1	2	1	3
977	25	MED	HIV W OR W/O OTHER RELATED CONDITION	1.0486			2	7				
598	09	MED	MALIGNANT BREAST DISORDERS W CC	1.0611								
055	01	MED	NERVOUS SYSTEM NEOPLASMS W/O MCC	1.0649	3	13			1	12		
644	10	MED	ENDOCRINE DISORDERS W CC	1.0655	1	3			1	3	2	8
445	07	MED	DISORDERS OF THE BILIARY TRACT W CC	1.0688			5	19	1	4	2	3
883	19	MED	DISORDERS OF PERSONALITY & IMPULSE CONTROL	1.0694								
176	04	MED	PULMONARY EMBOLISM W/O MCC	1.0706	3	4	8	26	1	6	1	6
593	09	MED	SKIN ULCERS W CC	1.0709			1	4				
369	06	MED	MAJOR ESOPHAGEAL DISORDERS W CC	1.0772			1	2	1	4		
687	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W CC	1.0838								
287	05	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O MCC	1.0879	6	13	32	82	36	100	18	48
947	23	MED	SIGNS & SYMPTOMS W MCC	1.0952					1	5	1	9
555	08	MED	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE W MCC	1.0954			3	9			1	2
758	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM W CC	1.0963			1	5				
187	04	MED	PLEURAL EFFUSION W CC	1.1027					3	9		
071	01	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	1.1054							1	3
197	04	MED	INTERSTITIAL LUNG DISEASE W CC	1.1176			1	4				
692	11	MED	URINARY STONES W ESW LITHOTRIPSY W/O CC/MCC	1.1186							1	1
381	06	MED	COMPLICATED PEPTIC ULCER W CC	1.1207			2	7			1	3
946	23	MED	REHABILITATION W/O CC/MCC	1.1273								
553	08	MED	BONE DISEASES & ARTHROPATHIES W MCC	1.1355			3	19				
836	17	MED	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W/O CC/MCC	1.1386								
640	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS W MCC	1.1400			7	13	2	7		
755	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W CC	1.1444								
872	18	MED	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS W/O MCC	1.1545	8	38	46	217	12	44	5	15
391	06	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W MCC	1.1550	1	3	8	54	9	43	5	33
543	08	MED	PATHOLOGICAL FRACTURES & MUSCULOSKELET & CONN TISS MALIG W CC	1.1597			1	3	3	10		
868	18	MED	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES W CC	1.1614								
065	01	MED	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W CC	1.1667	4	12	11	59	15	79	6	32
296	05	MED	CARDIAC ARREST, UNEXPLAINED W MCC	1.1692								
546	08	MED	CONNECTIVE TISSUE DISORDERS W CC	1.1712			2	6	4	15	1	3
124	02	MED	OTHER DISORDERS OF THE EYE W MCC	1.1903								
080	01	MED	NONTRAUMATIC STUPOR & COMA W MCC	1.1909			2	4				
281	05	MED	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W CC	1.1912			3	6			3	8
190	04	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC	1.1924			21	93	10	55	2	6
844	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC	1.1940								
809	16	MED	MAJOR HEMATOL/IMMUN DIAG EXC SICKLE CELL CRISIS & COAGUL W CC	1.1951			2	5				
383	06	MED	UNCOMPLICATED PEPTIC ULCER W MCC	1.1982								
549	08	MED	SEPTIC ARTHRITIS W CC	1.2035								
086	01	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR W CC	1.2051	1	5	3	12	1	5		
695	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS W MCC	1.2082			1	5				
099	01	MED	NON-BACTERIAL INFECT OF NERVOUS SYS EXC VIRAL MENINGITIS W/O CC/MCC	1.2084								
181	04	MED	RESPIRATORY NEOPLASMS W CC	1.2182	3	15	2	11			3	6
689	11	MED	KIDNEY & URINARY TRACT INFECTIONS W MCC	1.2185	1	4	5	25			2	13
436	07	MED	MALIGNANCY OF HEPATOBILIARY SYSTEM OR PANCREAS W CC	1.2215			2	8				
308	05	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W MCC	1.2339			10	55	3	14	2	4
604	09	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST W MCC	1.2361								
147	03	MED	EAR, NOSE, MOUTH & THROAT MALIGNANCY W CC	1.2413								
811	16	MED	RED BLOOD CELL DISORDERS W MCC	1.2544			8	51	2	11	3	5
849	17	MED	RADIOTHERAPY	1.2627								
725	12	MED	BENIGN PROSTATIC HYPERTROPHY W MCC	1.2742								
945	23	MED	REHABILITATION W CC/MCC	1.2795								
375	06	MED	DIGESTIVE MALIGNANCY W CC	1.2801			1	5	1	5		
150	03	MED	EPISTAXIS W MCC	1.2808								
189	04	MED	PULMONARY EDEMA & RESPIRATORY FAILURE	1.2809	1	1	18	123	7	42	6	43
839	17	MED	CHEMO W ACUTE LEUKEMIA AS SDX W/O CC/MCC	1.2823								
073	01	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W MCC	1.2907			1	4				
935	22	MED	NON-EXTENSIVE BURNS	1.2919								
372	06	MED	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS W CC	1.2935	2	11	6	29	1	6	1	5
290	05	MED	ACUTE & SUBACUTE ENDOCARDITIS W/O CC/MCC	1.2959								
205	04	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W MCC	1.2972							1	2
606	09	MED	MINOR SKIN DISORDERS W MCC	1.3082								
540	08	MED	OSTEOMYELITIS W CC	1.3126					1	2		
083	01	MED	TRAUMATIC STUPOR & COMA, COMA >1 HR W CC	1.3264								
913	21	MED	TRAUMATIC INJURY W MCC	1.3444								
922	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W MCC	1.3478								
693	11	MED	URINARY STONES W/O ESW LITHOTRIPSY W MCC	1.3505								
535	08	MED	FRACTURES OF HIP & PELVIS W MCC	1.3527			2	6				
934	22	MED	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ	1.3556								
975	25	MED	HIV W MAJOR RELATED CONDITION W CC	1.3640					1	3		
727	12	MED	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM W MCC	1.3657			1	3				
562	08	MED	FX, SPRN, STRN & DISL EXCEPT FEMUR, HIP, PELVIS & THIGH W MCC	1.3944			1	8	1	3		
154	03	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES W MCC	1.3965								
299	05	MED	PERIPHERAL VASCULAR DISORDERS W MCC	1.4072			2	12			1	10
067	01	MED	NONSPECIFIC CVA & PRECEREBRAL OCCLUSION W/O INFARCT W MCC	1.4231								
915	21	MED	ALLERGIC REACTIONS W MCC	1.4252								
813	16	MED	COAGULATION DISORDERS	1.4372							2	13
637	10	MED	DIABETES W MCC	1.4462			4	35	2	8		
306	05	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS W MCC	1.4667								
564	08	MED	OTHER MUSCULOSKELETAL SYS & CONNECTIVE TISSUE DIAGNOSES W MCC	1.4702								
602	09	MED	CELLULITIS W MCC	1.4748					1	2	1	5
193	04	MED	SIMPLE PNEUMONIA & PLEURISY W MCC	1.4796	2	22	15	92	13	93	3	23
054	01	MED	NERVOUS SYSTEM NEOPLASMS W MCC	1.4863	2	5	2	2			1	6
917	21	MED	POISONING & TOXIC EFFECTS OF DRUGS W MCC	1.4868			1	1	2	18	1	3
088	01	MED	CONCUSSION W MCC	1.4872								
178	04	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS W CC	1.4887	1	6	5	22			1	4
183	04	MED	MAJOR CHEST TRAUMA W MCC	1.4942								
291	05	MED	HEART FAILURE & SHOCK W MCC	1.4943	1	21	37	186	10	47	2	8
100	01	MED	SEIZURES W MCC	1.5107			3	17	1	5		
063	01	MED	ACUTE ISCHEMIC STROKE W USE OF THROMBOLYTIC AGENT W/O CC/MCC	1.5251								
444	07	MED	DISORDERS OF THE BILIARY TRACT W MCC	1.5586			4	13	1	4		
597	09	MED	MALIGNANT BREAST DISORDERS W MCC	1.5596								
186	04	MED	PLEURAL EFFUSION W MCC	1.5637			4	31				
865	18	MED	VIRAL ILLNESS W MCC	1.5651			1	6				
533	08	MED	FRACTURES OF FEMUR W MCC	1.5657								

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Cumberland		Hoke		Robeson		Scotland	
					Pts	Days	Pts	Days	Pts	Days	Pts	Days
157	03	MED	DENTAL & ORAL DISEASES W MCC	1.5794								
058	01	MED	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA W MCC	1.5856								
919	21	MED	COMPLICATIONS OF TREATMENT W MCC	1.5903			1	2			2	20
557	08	MED	TENDONITIS, MYOSITIS & BURSTITIS W MCC	1.6021								
196	04	MED	INTERSTITIAL LUNG DISEASE W MCC	1.6062							1	3
175	04	MED	PULMONARY EMBOLISM W MCC	1.6096			2	16	1	8	1	3
698	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES W MCC	1.6098	1	12	9	50	2	5	1	5
052	01	MED	SPINAL DISORDERS & INJURIES W CC/MCC	1.6109								
691	11	MED	URINARY STONES W ESW LITHOTRIPSY W CC/MCC	1.6156								
091	01	MED	OTHER DISORDERS OF NERVOUS SYSTEM W MCC	1.6318			1	1	1	11		
841	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W CC	1.6376							1	7
551	08	MED	MEDICAL BACK PROBLEMS W MCC	1.6398	1	2	2	12				
682	11	MED	RENAL FAILURE W MCC	1.6407	4	33	16	103	12	94		
814	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W MCC	1.6431							1	3
388	06	MED	G.I. OBSTRUCTION W MCC	1.6457					1	6		
757	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM W MCC	1.6565			2	10				
075	01	MED	VIRAL MENINGITIS W CC/MCC	1.6567								
393	06	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES W MCC	1.6593			2	8	3	7	1	10
056	01	MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS W MCC	1.6748					1	4		
722	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM W MCC	1.6891								
432	07	MED	CIRRHOSIS & ALCOHOLIC HEPATITIS W MCC	1.7001			2	24	2	7	1	5
283	05	MED	ACUTE MYOCARDIAL INFARCTION, EXPIRED W MCC	1.7151	1	7	1	6			1	2
180	04	MED	RESPIRATORY NEOPLASMS W MCC	1.7361			2	16	3	18	2	8
077	01	MED	HYPERTENSIVE ENCEPHALOPATHY W MCC	1.7376								
377	06	MED	G.I. HEMORRHAGE W MCC	1.7541	1	1	5	29	6	42	2	6
368	06	MED	MAJOR ESOPHAGEAL DISORDERS W MCC	1.7578			1	5				
592	09	MED	SKIN ULCERS W MCC	1.7669			2	20	1	3		
559	08	MED	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W MCC	1.7717							1	12
199	04	MED	PNEUMOTHORAX W MCC	1.7895					1	12	1	2
435	07	MED	MALIGNANCY OF HEPATOBIILIARY SYSTEM OR PANCREAS W MCC	1.8018					3	15	2	4
314	05	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W MCC	1.8145			7	58	5	82	2	7
643	10	MED	ENDOCRINE DISORDERS W MCC	1.8159								
686	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W MCC	1.8238								
441	07	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W MCC	1.8242	1	7	4	27	1	4	3	24
438	07	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY W MCC	1.8342			1	5	1	6		
843	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W MCC	1.8363								
070	01	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W MCC	1.8417			2	13			1	32
289	05	MED	ACUTE & SUBACUTE ENDOCARDITIS W CC	1.8492								
280	05	MED	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W MCC	1.8503	3	16	5	39	2	5	2	8
064	01	MED	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W MCC	1.8674			8	80	5	28	3	45
595	09	MED	MAJOR SKIN DISORDERS W MCC	1.8690								
871	18	MED	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS W MCC	1.9074	3	29	63	467	23	155	11	80
385	06	MED	INFLAMMATORY BOWEL DISEASE W MCC	1.9102								
098	01	MED	NON-BACTERIAL INFECT OF NERVOUS SYS EXC VIRAL MENINGITIS W CC	1.9106					2	9		
096	01	MED	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM W/O CC/MCC	1.9247					1	7		
062	01	MED	ACUTE ISCHEMIC STROKE W USE OF THROMBOLYTIC AGENT W CC	1.9479								
862	18	MED	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS W MCC	1.9511			1	10	1	13	1	16
542	08	MED	PATHOLOGICAL FRACTURES & MUSCULOSKELET & CONN TISS MALIG W MCC	1.9521							1	12
548	08	MED	SEPTIC ARTHRITIS W MCC	1.9648								
380	06	MED	COMPLICATED PEPTIC ULCER W MCC	1.9656								
Medical DRGs with Acuity Greater than 2.0												
286	05	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W MCC	2.0014	1	2	7	66	7	34	5	14
082	01	MED	TRAUMATIC STUPOR & COMA, COMA >1 HR W MCC	2.0130					2	9		
754	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W MCC	2.0295								
539	08	MED	OSTEOMYELITIS W MCC	2.0467							1	6
177	04	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS W MCC	2.0667	1	3	9	53	1	9		
374	06	MED	DIGESTIVE MALIGNANCY W MCC	2.0674								
371	06	MED	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS W MCC	2.0986	1	4			1	23	1	5
085	01	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR W MCC	2.1423								
808	16	MED	MAJOR HEMATO/IMMUN DIAG EXC SICKLE CELL CRISIS & COAGUL W MCC	2.1479			1	5	2	25		
146	03	MED	EAR, NOSE, MOUTH & THROAT MALIGNANCY W MCC	2.1886			1	4				
846	17	MED	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS W MCC	2.1961								
933	22	MED	EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV 96+ HRS W/O SKIN GRAFT	2.1979								
208	04	MED	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT <96 HOURS	2.2630	1	1	5	16	2	28		
095	01	MED	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM W CC	2.3977								
835	17	MED	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W CC	2.4284								
867	18	MED	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES W MCC	2.4708								
545	08	MED	CONNECTIVE TISSUE DISORDERS W MCC	2.5467							1	6
974	25	MED	HIV W MAJOR RELATED CONDITION W MCC	2.5849			4	21				
840	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W MCC	2.9317					1	20		
288	05	MED	ACUTE & SUBACUTE ENDOCARDITIS W MCC	2.9397			1	1				
061	01	MED	ACUTE ISCHEMIC STROKE W USE OF THROMBOLYTIC AGENT W MCC	2.9568								
838	17	MED	CHEMO W ACUTE LEUKEMIA AS SDX W CC OR HIGH DOSE CHEMO AGENT	3.1428								
097	01	MED	NON-BACTERIAL INFECT OF NERVOUS SYS EXC VIRAL MENINGITIS W MCC	3.2191								
094	01	MED	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM W MCC	3.6769								
834	17	MED	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W MCC	4.9277								
207	04	MED	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT 96+ HOURS	5.2068			2	30	5	84	1	9
870	18	MED	SEPTICEMIA OR SEVERE SEPSIS W MV 96+ HOURS	5.8305	1	18	4	102				
837	17	MED	CHEMO W ACUTE LEUKEMIA AS SDX OR W HIGH DOSE CHEMO AGENT W MCC	6.6599								
Surgical DRGs with Acuity Less than 2.0												
714	12	SURG	TRANSURETHRAL PROSTATECTOMY W/O CC/MCC	0.6544								
770	14	SURG	ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	0.7017								
117	02	SURG	INTRAOCULAR PROCEDURES W/O CC/MCC	0.7305								
670	11	SURG	TRANSURETHRAL PROCEDURES W/O CC/MCC	0.7770					1	3		
627	10	SURG	THYROID, PARATHYROID & THYROID GLOSSAL PROCEDURES W/O CC/MCC	0.7821	6	7	4	5	6	16	5	6
138	03	SURG	MOUTH PROCEDURES W/O CC/MCC	0.7841								
672	11	SURG	URETHRAL PROCEDURES W/O CC/MCC	0.7885								
667	11	SURG	PROSTATECTOMY W/O CC/MCC	0.7919	1	2						
349	06	SURG	ANAL & STOMAL PROCEDURES W/O CC/MCC	0.7981			1	1				
718	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXC MALIGNANCY W/O CC/MCC	0.8044								
745	13	SURG	D&C, CONIZATION, LAPAROSCOPY & TUBAL INTERRUPTION W/O CC/MCC	0.8045								
712	12	SURG	TESTES PROCEDURES W/O CC/MCC	0.8084								
514	08	SURG	HAND OR WRIST PROC, EXCEPT MAJOR THUMB OR JOINT PROC W/O CC/MCC	0.8209					1	2		
583	09	SURG	MASTECTOMY FOR MALIGNANCY W/O CC/MCC	0.8454			2	2	2	2	1	1
134	03	SURG	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES W/O CC/MCC	0.8514			1	1	2	2	1	3
352	06	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES W/O CC/MCC	0.8628	1	1					2	8
139	03	SURG	SALIVARY GLAND PROCEDURES	0.8756			1	4				
747	13	SURG	VAGINA, CERVIX & VULVA PROCEDURES W/O CC/MCC	0.8852								
114	02	SURG	ORBITAL PROCEDURES W/O CC/MCC	0.8989								
743	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC/MCC	0.9079	1	3	5	9	5	10	11	29
748	13	SURG	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	0.9169			2	4	2	4		
581	09	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W/O CC/MCC	0.9223	2	4			2	7		

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Cumberland		Hoke		Robeson		Scotland	
					Pts	Days	Pts	Days	Pts	Days	Pts	Days
750	13	SURG	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES W/O CC/MCC	0.9368	1	2						
343	06	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC/MCC	0.9568			8	11	2	2	2	2
257	05	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS W/O CC/MCC	0.9750			1	2				
136	03	SURG	SINUS & MASTOID PROCEDURES W/O CC/MCC	0.9751								
491	08	SURG	BACK & NECK PROC EXC SPINAL FUSION W/O CC/MCC	0.9914	22	40	3	4	13	28	4	11
499	08	SURG	LOCAL EXCISION & REMOVAL INT FIX DEVICES OF HIP & FEMUR W/O CC/MCC	0.9917								
476	08	SURG	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS W/O CC/MCC	0.9920								
716	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC FOR MALIGNANCY W/O CC/MCC	0.9974								
624	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS W/O CC/MCC	1.0122								
039	01	SURG	EXTRACRANIAL PROCEDURES W/O CC/MCC	1.0185			2	2	5	6	13	15
502	08	SURG	SOFT TISSUE PROCEDURES W/O CC/MCC	1.0305	1	1	2	4	1	1	1	3
355	06	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL W/O CC/MCC	1.0329	2	4	4	8	3	11	1	1
906	21	SURG	HAND PROCEDURES FOR INJURIES	1.0356								
585	09	SURG	BREAST BIOPSY, LOCAL EXCISION & OTHER BREAST PROCEDURES W/O CC/MCC	1.0411								
578	09	SURG	SKIN GRAFT &/OR DEBRID EXC FOR SKIN ULCER OR CELLULITIS W/O CC/MCC	1.0416							1	8
804	16	SURG	OTHER O.R. PROC OF THE BLOOD & BLOOD FORMING ORGANS W/O CC/MCC	1.0446								
512	08	SURG	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC W/O CC/MCC	1.0461								
582	09	SURG	MASTECTOMY FOR MALIGNANCY W CC/MCC	1.0567			1	1	1	2	1	1
989		SURG	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS W/O CC/MCC	1.0589								
903	21	SURG	WOUND DEBRIDEMENTS FOR INJURIES W/O CC/MCC	1.0624			1	5				
497	08	SURG	LOCAL EXCISION & REMOVAL INT FIX DEVICES EXC HIP & FEMUR W/O CC/MCC	1.0770							1	1
505	08	SURG	FOOT PROCEDURES W/O CC/MCC	1.0770								
575	09	SURG	SKIN GRAFT &/OR DEBRID FOR SKIN ULCER OR CELLULITIS W/O CC/MCC	1.0899							1	3
830	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC W/O CC/MCC	1.0976								
741	13	SURG	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIGN W/O CC/MCC	1.0979								
664	11	SURG	MINOR BLADDER PROCEDURES W/O CC/MCC	1.1074								
986		SURG	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W/O CC/MCC	1.1140								
941	23	SURG	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES W/O CC/MCC	1.1457							1	4
909	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W/O CC/MCC	1.1554	2	4	3	4	2	7		
735	13	SURG	PELVIC EVISCERATION, RAD HYSTERECTOMY & RAD VULVECTOMY W/O CC/MCC	1.1684								
419	07	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC/MCC	1.1698	1	1	6	13	3	5	3	8
626	10	SURG	THYROID, PARATHYROID & THYROID GLAND PROCEDURES W CC	1.1701			3	3			1	1
905	21	SURG	SKIN GRAFTS FOR INJURIES W/O CC/MCC	1.1714								
713	12	SURG	TRANSURETHRAL PROSTATECTOMY W CC/MCC	1.1802			1	1	1	5		
506	08	SURG	MAJOR THUMB OR JOINT PROCEDURES	1.1815			1	6				
346	06	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC/MCC	1.1883							1	8
618	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DIS W/O CC/MCC	1.2006								
115	02	SURG	EXTRAOCULAR PROCEDURES EXCEPT ORBIT	1.2084								
489	08	SURG	KNEE PROCEDURES W/O PDX OF INFECTION W/O CC/MCC	1.2141	2	8	1	2	3	8	1	2
822	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE W/O CC/MCC	1.2253								
130	03	SURG	MAJOR HEAD & NECK PROCEDURES W/O CC/MCC	1.2299								
738	13	SURG	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY W/O CC/MCC	1.2324			1	3				
340	06	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC/MCC	1.2393			2	4				
825	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W/O CC/MCC	1.2418								
132	03	SURG	CRANIAL/FACIAL PROCEDURES W/O CC/MCC	1.2447								
708	12	SURG	MAJOR MALE PELVIC PROCEDURES W/O CC/MCC	1.2581	6	7	2	4	10	18	1	1
669	11	SURG	TRANSURETHRAL PROCEDURES W CC	1.2597	2	12	1	3	1	12	1	5
661	11	SURG	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM W/O CC/MCC	1.2641								
116	02	SURG	INTRAOCULAR PROCEDURES W CC/MCC	1.2675								
710	12	SURG	PENIS PROCEDURES W/O CC/MCC	1.2712								
422	07	SURG	HEPATOBILIARY DIAGNOSTIC PROCEDURES W/O CC/MCC	1.2742								
137	03	SURG	MOUTH PROCEDURES W CC/MCC	1.3007								
513	08	SURG	HAND OR WRIST PROC, EXCEPT MAJOR THUMB OR JOINT PROC W CC/MCC	1.3007			2	7	1	3		
358	06	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC/MCC	1.3010					1	7	1	1
858	18	SURG	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W O.R. PROC W/O CC/MCC	1.3050					1	9		
416	07	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC/MCC	1.3080			1	4				
494	08	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR W/O CC/MCC	1.3140	3	25	4	11	2	3	1	3
509	08	SURG	ARTHROSCOPY	1.3148								
342	06	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	1.3246	1	2						
746	13	SURG	VAGINA, CERVIX & VULVA PROCEDURES W CC/MCC	1.3373			1	1				
675	11	SURG	OTHER KIDNEY & URINARY TRACT PROCEDURES W/O CC/MCC	1.3379								
351	06	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES W CC	1.3539								
348	06	SURG	ANAL & STOMAL PROCEDURES W CC	1.3705			1	2	1	1	1	1
855	18	SURG	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W/O CC/MCC	1.3797								
828	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W/O CC/MCC	1.3861								
742	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W CC/MCC	1.3883	1	1	2	8	1	4	1	7
508	08	SURG	MAJOR SHOULDER OR ELBOW JOINT PROCEDURES W/O CC/MCC	1.3956								
615	10	SURG	ADRENAL & PITUITARY PROCEDURES W/O CC/MCC	1.3970								
630	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC/MCC	1.4164								
658	11	SURG	KIDNEY & URETER PROCEDURES FOR NEOPLASM W/O CC/MCC	1.4224					5	20	1	4
328	06	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROC W/O CC/MCC	1.4298			2	8	4	5		
671	11	SURG	URETHRAL PROCEDURES W CC/MCC	1.4400								
241	05	SURG	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE W/O CC/MCC	1.4631	1	1	1	2				
511	08	SURG	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC W CC	1.4690	1	8						
663	11	SURG	MINOR BLADDER PROCEDURES W CC	1.4718								
487	08	SURG	KNEE PROCEDURES W PDX OF INFECTION W/O CC/MCC	1.4724								
621	10	SURG	O.R. PROCEDURES FOR OBESITY W/O CC/MCC	1.4747								
337	06	SURG	PERITONEAL ADHESIOLYSIS W/O CC/MCC	1.4789	1	3	1	1	2	6	2	13
517	08	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W/O CC/MCC	1.4797					1	2		
580	09	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W CC	1.4959			6	46			1	1
744	13	SURG	D&C, CONIZATION, LAPAROSCOPY & TUBAL INTERRUPTION W CC/MCC	1.5151								
584	09	SURG	BREAST BIOPSY, LOCAL EXCISION & OTHER BREAST PROCEDURES W CC/MCC	1.5153								
740	13	SURG	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIGN W CC	1.5280								
482	08	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT W/O CC/MCC	1.5372			3	9	5	16		
038	01	SURG	EXTRACRANIAL PROCEDURES W CC	1.5462			2	13			3	14
354	06	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL W CC	1.5523					5	15	1	2
801	16	SURG	SPLENECTOMY W/O CC/MCC	1.5586								
504	08	SURG	FOOT PROCEDURES W CC	1.5685			1	1				
501	08	SURG	SOFT TISSUE PROCEDURES W CC	1.5846					3	11	2	20
256	05	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS W CC	1.5969					1	5		
334	06	SURG	RECTAL RESECTION W/O CC/MCC	1.5979					1	5		
410	07	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W/O CC/MCC	1.6114								
717	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXC MALIGNANCY W CC/MCC	1.6138								
254	05	SURG	OTHER VASCULAR PROCEDURES W/O CC/MCC	1.6152			1	5	3	4	8	31
496	08	SURG	LOCAL EXCISION & REMOVAL INT FIX DEVICES EXC HIP & FEMUR W CC	1.6207	1	1	2	11			1	7
331	06	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC/MCC	1.6267	1	5	3	11	4	16	3	12
425	07	SURG	OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES W/O CC/MCC	1.6273								
479	08	SURG	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W/O CC/MCC	1.6367	2	7	2	9			3	11
030	01	SURG	SPINAL PROCEDURES W/O CC/MCC	1.6433	1	2			1	1		
666	11	SURG	PROSTATECTOMY W CC	1.6440								
940	23	SURG	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES W CC	1.6797			1	9	1	12		
418	07	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC	1.6996	2	9	6	20	6	36	5	20

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Cumberland		Hoke		Robeson		Scotland	
					Pts	Days	Pts	Days	Pts	Days	Pts	Days
133	03	SURG	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES W CC/MCC	1.7000			1	5				
345	06	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W CC	1.7035								
577	09	SURG	SKIN GRAFT &/OR DEBRID EXC FOR SKIN ULCER OR CELLULITIS W CC	1.7035			1	1				
413	07	SURG	CHOLECYSTECTOMY W C.D.E. W/O CC/MCC	1.7180							1	6
488	08	SURG	KNEE PROCEDURES W/O PDX OF INFECTION W CC/MCC	1.7217					1	2	1	2
715	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC FOR MALIGNANCY W CC/MCC	1.7433			1	1	2	9		
711	12	SURG	TESTES PROCEDURES W CC/MCC	1.7639								
707	12	SURG	MAJOR MALE PELVIC PROCEDURES W CC/MCC	1.7747	3	23			3	12	3	14
983		SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W/O CC/MCC	1.7767	1	1			1	1	1	7
465	08	SURG	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS W/O CC/MCC	1.7905	1	4			1	2		
490	08	SURG	BACK & NECK PROC EXC SPINAL FUSION W CC/MCC OR DISC DEVICE/NEUROSTIM	1.7916	10	36	1	3	6	27	4	23
902	21	SURG	WOUND DEBRIDEMENTS FOR INJURIES W CC	1.7922					1	2		
113	02	SURG	ORBITAL PROCEDURES W CC/MCC	1.8311								
493	08	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR W CC	1.8519			3	30				
623	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS W CC	1.8558			1	3			1	3
620	10	SURG	O.R. PROCEDURES FOR OBESITY W CC	1.8627								
709	12	SURG	PENIS PROCEDURES W CC/MCC	1.8630								
339	06	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	1.8659					1	3		
407	07	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W/O CC/MCC	1.8665								
574	09	SURG	SKIN GRAFT &/OR DEBRID FOR SKIN ULCER OR CELLULITIS W CC	1.8675			3	87				
507	08	SURG	MAJOR SHOULDER OR ELBOW JOINT PROCEDURES W CC/MCC	1.8711	1	2						
988		SURG	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS W CC	1.8739	1	7						
481	08	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT W CC	1.8886	1	5	5	24	3	20	2	14
803	16	SURG	OTHER O.R. PROC OF THE BLOOD & BLOOD FORMING ORGANS W CC	1.8905	1	9						
421	07	SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURES W CC	1.8910								
660	11	SURG	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM W CC	1.9030	1	2	1	10				
135	03	SURG	SINUS & MASTOID PROCEDURES W CC/MCC	1.9082								
516	08	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W CC	1.9244	2	11	1	3	1	5		
908	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W CC	1.9251			1	12			1	10
484	08	SURG	MAJOR JOINT & LIMB REATTACHMENT PROC OF UPPER EXTREMITY W/O CC/MCC	1.9554	2	3	4	8	5	11	3	6
655	11	SURG	MAJOR BLADDER PROCEDURES W/O CC/MCC	1.9567								
475	08	SURG	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS W CC	1.9594	1	3						
498	08	SURG	LOCAL EXCISION & REMOVAL INT FIX DEVICES OF HIP & FEMUR W CC/MCC	1.9912								
Surgical DRGs with Acuity Greater than 2.0												
657	11	SURG	KIDNEY & URETER PROCEDURES FOR NEOPLASM W CC	2.0004							2	10
617	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DIS W CC	2.0006			1	10				
486	08	SURG	KNEE PROCEDURES W PDX OF INFECTION W CC	2.0339			1	4				
737	13	SURG	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY W CC	2.0375								
929	22	SURG	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W/O CC/MCC	2.0557								
769	14	SURG	POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE	2.0631								
473	08	SURG	CERVICAL SPINAL FUSION W/O CC/MCC	2.0768	28	35	4	5	13	16	5	9
415	07	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC	2.0897					2	5		
131	03	SURG	CRANIAL/FACIAL PROCEDURES W CC/MCC	2.0915								
674	11	SURG	OTHER KIDNEY & URINARY TRACT PROCEDURES W CC	2.0934					2	10		
857	18	SURG	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W O.R. PROC W CC	2.0975	1	6	1	6	1	2		
470	08	SURG	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	2.1039	26	83	40	144	115	343	27	78
035	01	SURG	CAROTID ARTERY STENT PROCEDURE W CC	2.1437					1	8		
827	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W CC	2.1459								
357	06	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC	2.1466					1	8		
985		SURG	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W CC	2.1508								
510	08	SURG	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC W MCC	2.1704								
129	03	SURG	MAJOR HEAD & NECK PROCEDURES W CC/MCC OR MAJOR DEVICE	2.2349								
625	10	SURG	THYROID, PARATHYROID & THYROID GLAND PROCEDURES W MCC	2.2423								
478	08	SURG	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W CC	2.2546	1	1	2	8	2	11	1	6
341	06	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W MCC	2.2643			2	4			1	1
629	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W CC	2.2650			3	30			1	8
503	08	SURG	FOOT PROCEDURES W MCC	2.2809								
824	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W CC	2.3055					1	10	1	12
336	06	SURG	PERITONEAL ADHESIOLYSIS W CC	2.3456	1	4	5	32	3	16	4	32
821	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE W CC	2.3998								
253	05	SURG	OTHER VASCULAR PROCEDURES W CC	2.4014	1	5	2	15	8	36	9	61
483	08	SURG	MAJOR JOINT & LIMB REATTACHMENT PROC OF UPPER EXTREMITY W CC/MCC	2.4019	1	2	2	6			2	10
347	06	SURG	ANAL & STOMAL PROCEDURES W MCC	2.4183					1	11		
424	07	SURG	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES W CC	2.4335								
734	13	SURG	PELVIC EVISCERATION, RAD HYSTERECTOMY & RAD VULVECTOMY W CC/MCC	2.4364								
614	10	SURG	ADRENAL & PITUITARY PROCEDURES W CC/MCC	2.4554								
409	07	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC	2.4875								
350	06	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES W MCC	2.4877			1	8				
412	07	SURG	CHOLECYSTECTOMY W C.D.E. W CC	2.4912							1	8
333	06	SURG	RECTAL RESECTION W CC	2.4960			1	5	1	8		
417	07	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W MCC	2.5029			2	20	1	18		
255	05	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS W MCC	2.5043					1	2		
668	11	SURG	TRANSURETHRAL PROCEDURES W MCC	2.5175			1	8				
749	13	SURG	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES W CC/MCC	2.5275							1	2
264	05	SURG	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	2.5305			1	1	2	4	5	15
468	08	SURG	REVISION OF HIP OR KNEE REPLACEMENT W/O CC/MCC	2.5728	2	10	4	11	7	25		
330	06	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC	2.5830			4	25	3	29	8	82
800	16	SURG	SPLENECTOMY W CC	2.5874								
240	05	SURG	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE W CC	2.6589			2	13			6	39
829	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC W CC/MCC	2.7093								
327	06	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROC W CC	2.7231			2	8	1	5		
353	06	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL W MCC	2.7510								
472	08	SURG	CERVICAL SPINAL FUSION W CC	2.7722	1	2	1	7	2	2	1	23
406	07	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W CC	2.7791								
854	18	SURG	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W CC	2.7883			4	34	2	38		
876	19	SURG	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	2.8143								
464	08	SURG	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS W CC	2.8528	1	6	1	9	1	52		
665	11	SURG	PROSTATRECTOMY W MCC	2.8653								
495	08	SURG	LOCAL EXCISION & REMOVAL INT FIX DEVICES EXC HIP & FEMUR W MCC	2.8683					1	3		
939	23	SURG	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES W MCC	2.8702								
029	01	SURG	SPINAL PROCEDURES W CC OR SPINAL NEUROSTIMULATORS	2.8741					3	29		
673	11	SURG	OTHER KIDNEY & URINARY TRACT PROCEDURES W MCC	2.9260								
904	21	SURG	SKIN GRAFTS FOR INJURIES W CC/MCC	2.9335								
982		SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W CC	2.9402	1	4	4	17	1	4	3	15
579	09	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W MCC	2.9576			1	6				
252	05	SURG	OTHER VASCULAR PROCEDURES W MCC	2.9754	1	4	9	41	3	8	4	31
654	11	SURG	MAJOR BLADDER PROCEDURES W CC	3.0054					1	4		
662	11	SURG	MINOR BLADDER PROCEDURES W MCC	3.0158					1	3		
500	08	SURG	SOFT TISSUE PROCEDURES W MCC	3.0288			1	9				
652	11	SURG	KIDNEY TRANSPLANT	3.0442								
492	08	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR W MCC	3.0670			1	7				
480	08	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT W MCC	3.0939			5	35	1	9		

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Cumberland		Hoke		Robeson		Scotland	
					Pts	Days	Pts	Days	Pts	Days	Pts	Days
037	01	SURG	EXTRACRANIAL PROCEDURES W MCC	3.1543					1	6		
344	06	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W MCC	3.1586								
515	08	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W MCC	3.1894					1	6		
338	06	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W MCC	3.2115								
485	08	SURG	KNEE PROCEDURES W PDX OF INFECTION W MCC	3.2131								
467	08	SURG	REVISION OF HIP OR KNEE REPLACEMENT W CC	3.2321	5	18	3	11	7	33	3	11
573	09	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W MCC	3.2461								
984		SURG	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W MCC	3.3242								
477	08	SURG	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W MCC	3.3286			1	7				
462	08	SURG	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY W/O MCC	3.3425	7	25	9	26	26	72	7	19
628	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W MCC	3.3819			1	9				
622	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS W MCC	3.4166			1	9				
739	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W MCC	3.4300								
987		SURG	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS W MCC	3.4495			2	11	2	42		
469	08	SURG	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W MCC	3.4724			1	10	4	41		
474	08	SURG	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS W MCC	3.4905								
659	11	SURG	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM W MCC	3.4988								
619	10	SURG	O.R. PROCEDURES FOR OBESITY W MCC	3.5214								
656	11	SURG	KIDNEY & URETER PROCEDURES FOR NEOPLASM W MCC	3.5713			1	5				
802	16	SURG	OTHER O.R. PROC OF THE BLOOD & BLOOD FORMING ORGANS W MCC	3.6171								
420	07	SURG	HEPATOBIILIARY DIAGNOSTIC PROCEDURES W MCC	3.6443								
414	07	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W MCC	3.6675			2	21				
411	07	SURG	CHOLECYSTECTOMY W C.D.E. W MCC	3.6818								
907	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W MCC	3.8268			1	10	2	21		
460	08	SURG	SPINAL FUSION EXCEPT CERVICAL W/O MCC	3.8713	13	37	5	18	25	87	10	38
901	21	SURG	WOUND DEBRIDEMENTS FOR INJURIES W MCC	3.9042								
576	09	SURG	SKIN GRAFT &/OR DEBRID EXC FOR SKIN ULCER OR CELLULITIS W MCC	3.9248								
408	07	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W MCC	3.9368								
356	06	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W MCC	4.0293	1	84					1	7
335	06	SURG	PERITONEAL ADHESIOLYSIS W MCC	4.2777			1	3			1	8
736	13	SURG	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY W MCC	4.3943								
423	07	SURG	OTHER HEPATOBIILIARY OR PANCREAS O.R. PROCEDURES W MCC	4.4577								
616	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DIS W MCC	4.4934			1	25				
239	05	SURG	AMPUTATION FOR CIRC SYS DISORDERS EXC UPPER LIMB & TOE W MCC	4.5544			2	23	3	22	4	69
823	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W MCC	4.5640								
471	08	SURG	CERVICAL SPINAL FUSION W MCC	4.7301			1	3	1	8		
928	22	SURG	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W CC/MCC	4.7724								
332	06	SURG	RECTAL RESECTION W MCC	4.8635								
826	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W MCC	4.8666								
466	08	SURG	REVISION OF HIP OR KNEE REPLACEMENT W MCC	4.9144					2	22		
458	08	SURG	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR 9+ FUS W/O CC/MCC	4.9379								
461	08	SURG	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY W MCC	4.9385					2	11		
799	16	SURG	SPLENECTOMY W MCC	4.9434								
463	08	SURG	WND DEBRID & SKN GRFT EXC HAND, FOR MUSCULO-CONN TISS DIS W MCC	4.9983								
981		SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W MCC	5.0634			3	32	2	32	3	36
856	18	SURG	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W O.R. PROC W MCC	5.1296			1	7	1	3	1	11
329	06	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W MCC	5.2807			1	5	1	6	3	28
455	08	SURG	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION W/O CC/MCC	5.4308								
853	18	SURG	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W MCC	5.5237	2	17	15	210	5	75	2	31
405	07	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W MCC	5.5743								
820	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE W MCC	5.7112	1	8						
326	06	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROC W MCC	5.8142			1	9	2	36		
653	11	SURG	MAJOR BLADDER PROCEDURES W MCC	6.0929								
457	08	SURG	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR 9+ FUS W CC	6.2024								
459	08	SURG	SPINAL FUSION EXCEPT CERVICAL W MCC	6.5065	1	6	1	11	1	13		
454	08	SURG	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION W CC	7.2559								
456	08	SURG	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR 9+ FUS W MCC	9.2885								
453	08	SURG	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION W MCC	10.2653								
927	22	SURG	EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV 96+ HRS W SKIN GRAFT	12.6651								
					Cumberland		Hoke		Robeson		Scotland	
					Pts	Days	Pts	Days	Pts	Days	Pts	Days
			Total		350	1281	1499	6482	1076	4390	615	2526
			ALOS			3.7		4.3		4.1		4.1
			Total Surgery		187	626	286	1464	412	1691	222	1055
			ALOS			3.3		5.1		4.1		4.8
			Total Medicine		163	655	1213	5018	664	2699	393	1471
			ALOS			4.0		4.1		4.1		3.7
			Total Less than 2.0		250	896	1303	5191	785	2903	490	1781
			ALOS			3.6		4.0		3.7		3.6
			Total Surgery Less than 2.0		92	463	183	1174	296	1358	131	779
			ALOS			5.0		6.4		4.6		5.9
			Total Medicine less than 2.0		158	433	1120	4017	489	1545	359	1002
			ALOS			2.7		3.6		3.2		2.8
			% of Total Greater than 2.0		28.6%	30.1%	13.1%	19.9%	27.0%	33.9%	20.3%	29.5%
			% of Surgery Greater than 2.0		50.8%	26.0%	36.0%	19.8%	28.2%	19.7%	41.0%	26.2%
			% of Medicine Greater than 2.0		3.1%	33.9%	7.7%	19.9%	26.4%	42.8%	8.7%	31.9%

Source: FH Application pages 482-500

Notes:

FH Included Chemical Dependency DRGs 894-897 - These were deleted in the above data

FH Included Surgical DRGs 853 and 857 in medical category for Hoke - These were corrected and included in medical in the above data

ATTACHMENT 5

Attachment 5

CFVHS Acute Care Definition - DRG Exclusions

MS-DRG	MDC	TYPE	MS-DRG Title	Weights
795	15	MED	NORMAL NEWBORN	0.1649
880	19	MED	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION	0.6161
881	19	MED	DEPRESSIVE NEUROSES	0.6178
882	19	MED	NEUROSES EXCEPT DEPRESSIVE	0.6276
883	19	MED	DISORDERS OF PERSONALITY & IMPULSE CONTROL	1.0694
884	19	MED	ORGANIC DISTURBANCES & MENTAL RETARDATION	0.9308
885	19	MED	PSYCHOSES	0.9041
886	19	MED	BEHAVIORAL & DEVELOPMENTAL DISORDERS	0.7903
887	19	MED	OTHER MENTAL DISORDER DIAGNOSES	0.7888
894	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	0.4074
895	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE W REHABILITATION THERAPY	1.0275
896	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W MCC	1.4565
897	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W/O MCC	0.6513
945	23	MED	REHABILITATION W CC/MCC	1.2795
946	23	MED	REHABILITATION W/O CC/MCC	1.1273

<u>Service Line</u>	<u>DRG</u>	<u>DRG Description</u>
CARDIOLOGY (S)	215	OTHER HEART ASSIST SYSTEM IMPLANT
CARDIOLOGY (S)	222	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK W MCC
CARDIOLOGY (S)	223	CARDIAC DEFIB IMPLANT W CARDIAC CATH W AMI/HF/SHOCK W/O MCC
CARDIOLOGY (S)	224	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK W MCC
CARDIOLOGY (S)	225	CARDIAC DEFIB IMPLANT W CARDIAC CATH W/O AMI/HF/SHOCK W/O MCC
CARDIOLOGY (S)	226	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH W MCC
CARDIOLOGY (S)	227	CARDIAC DEFIBRILLATOR IMPLANT W/O CARDIAC CATH W/O MCC
CARDIOLOGY (S)	237	MAJOR CARDIOVASC PROCEDURES W MCC OR THORACIC AORTIC ANEURYSM REPAIR
CARDIOLOGY (S)	238	MAJOR CARDIOVASC PROCEDURES W/O MCC
CARDIOLOGY (S)	242	PERMANENT CARDIAC PACEMAKER IMPLANT W MCC
CARDIOLOGY (S)	243	PERMANENT CARDIAC PACEMAKER IMPLANT W CC
CARDIOLOGY (S)	244	PERMANENT CARDIAC PACEMAKER IMPLANT W/O CC/MCC
CARDIOLOGY (S)	245	AICD GENERATOR PROCEDURES
CARDIOLOGY (S)	245	AICD LEAD & GENERATOR PROCEDURES
CARDIOLOGY (S)	246	PERC CARDIOVASC PROC W DRUG-ELUTING STENT W MCC OR 4+ VESSELS/STENT
CARDIOLOGY (S)	247	PERC CARDIOVASC PROC W DRUG-ELUTING STENT W/O MCC
CARDIOLOGY (S)	248	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT W MCC OR 4+ VES/STENT
CARDIOLOGY (S)	249	PERC CARDIOVASC PROC W NON-DRUG-ELUTING STENT W/O MCC
CARDIOLOGY (S)	250	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT OR AMI W MCC
CARDIOLOGY (S)	250	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT W MCC
CARDIOLOGY (S)	251	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT OR AMI W/O MCC
CARDIOLOGY (S)	251	PERC CARDIOVASC PROC W/O CORONARY ARTERY STENT W/O MCC
CARDIOLOGY (S)	258	CARDIAC PACEMAKER DEVICE REPLACEMENT W MCC
CARDIOLOGY (S)	259	CARDIAC PACEMAKER DEVICE REPLACEMENT W/O MCC
CARDIOLOGY (S)	260	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT W MCC
CARDIOLOGY (S)	261	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT W CC
CARDIOLOGY (S)	262	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT W/O CC/MCC
CARDIOLOGY (S)	265	AICD LEAD PROCEDURES
GENERAL MEDICINE	945	REHABILITATION W CC/MCC
GENERAL MEDICINE	946	REHABILITATION W/O CC/MCC
NEONATOLOGY	789	NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY
NEONATOLOGY	790	EXTREME IMMATURETY OR RESPIRATORY DISTRESS SYNDROME, NEONATE
NEONATOLOGY	791	PREMATURITY W MAJOR PROBLEMS
NEONATOLOGY	792	PREMATURITY W/O MAJOR PROBLEMS
NEONATOLOGY	793	FULL TERM NEONATE W MAJOR PROBLEMS
NEONATOLOGY	794	NEONATE W OTHER SIGNIFICANT PROBLEMS

<u>Service Line</u>	<u>DRG</u>	<u>DRG Description</u>
NEUROSURGERY	020	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE W MCC
NEUROSURGERY	021	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE W CC
NEUROSURGERY	022	INTRACRANIAL VASCULAR PROCEDURES W PDX HEMORRHAGE W/O CC/MCC
NEUROSURGERY	023	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX W MCC OR CHEMO IMPLAN
NEUROSURGERY	024	CRANIO W MAJOR DEV IMPL/ACUTE COMPLEX CNS PDX W/O MCC
NEUROSURGERY	025	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES W MCC
NEUROSURGERY	026	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES W CC
NEUROSURGERY	027	CRANIOTOMY & ENDOVASCULAR INTRACRANIAL PROCEDURES W/O CC/MCC
NEUROSURGERY	028	SPINAL PROCEDURES W MCC
NEUROSURGERY	029	SPINAL PROCEDURES W CC OR SPINAL NEUROSTIMULATORS
NEUROSURGERY	030	SPINAL PROCEDURES W/O CC/MCC
NEUROSURGERY	031	VENTRICULAR SHUNT PROCEDURES W MCC
NEUROSURGERY	032	VENTRICULAR SHUNT PROCEDURES W CC
NEUROSURGERY	033	VENTRICULAR SHUNT PROCEDURES W/O CC/MCC
NEUROSURGERY	040	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC W MCC
NEUROSURGERY	041	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC W CC OR PERIPH NEUROSTI
NEUROSURGERY	042	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC W/O CC/MCC
NEUROSURGERY / ORTHOPEDICS	453	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION W MCC
NEUROSURGERY / ORTHOPEDICS	454	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION W CC
NEUROSURGERY / ORTHOPEDICS	455	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION W/O CC/MCC
NEUROSURGERY / ORTHOPEDICS	456	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR 9+ FUS W MCC
NEUROSURGERY / ORTHOPEDICS	457	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR 9+ FUS W CC
NEUROSURGERY / ORTHOPEDICS	458	SPINAL FUS EXC CERV W SPINAL CURV/MALIG/INFEC OR 9+ FUS W/O CC/MCC
NEUROSURGERY / ORTHOPEDICS	459	SPINAL FUSION EXCEPT CERVICAL W MCC
NEUROSURGERY / ORTHOPEDICS	460	SPINAL FUSION EXCEPT CERVICAL W/O MCC
NEUROSURGERY / ORTHOPEDICS	471	MS CERVICAL SPINAL FUSION W MCC
NEUROSURGERY / ORTHOPEDICS	472	CERVICAL SPINAL FUSION W CC
NEUROSURGERY / ORTHOPEDICS	473	CERVICAL SPINAL FUSION W/O CC/MCC
NEUROSURGERY / ORTHOPEDICS	490	BACK & NECK PROC EXC SPINAL FUSION W CC/MCC OR DISC DEVICE/NEUROSTI
NEUROSURGERY / ORTHOPEDICS	491	BACK & NECK PROC EXC SPINAL FUSION W/O CC/MCC
NORMAL NEWBORNS	795	NORMAL NEWBORN
OB/DELIVERY	765	CESAREAN SECTION W CC/MCC
OB/DELIVERY	766	CESAREAN SECTION W/O CC/MCC
OB/DELIVERY	767	VAGINAL DELIVERY W STERILIZATION &/OR D&C
OB/DELIVERY	768	VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C
OB/DELIVERY	774	VAGINAL DELIVERY W COMPLICATING DIAGNOSES

<u>Service Line</u>	<u>DRG</u>	<u>DRG Description</u>
OB/DELIVERY	775	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES
OPEN HEART	216	CARDIAC VALVE & OTHER MAJ CARDIOTHORACIC PROC W CARD CATH W MCC
OPEN HEART	217	CARDIAC VALVE & OTHER MAJ CARDIOTHORACIC PROC W CARD CATH W CC
OPEN HEART	218	CARDIAC VALVE & OTHER MAJ CARDIOTHORACIC PROC W CARD CATH W/O CC/MC
OPEN HEART	219	CARDIAC VALVE & OTHER MAJ CARDIOTHORACIC PROC W/O CARD CATH W MCC
OPEN HEART	220	CARDIAC VALVE & OTHER MAJ CARDIOTHORACIC PROC W/O CARD CATH W CC
OPEN HEART	221	CARDIAC VALVE & OTHER MAJ CARDIOTHORACIC PROC W/O CARD CATH W/O CC/
OPEN HEART	228	OTHER CARDIOTHORACIC PROCEDURES W MCC
OPEN HEART	229	OTHER CARDIOTHORACIC PROCEDURES W CC
OPEN HEART	230	MS OTHER CARDIOTHORACIC PROCEDURES W/O CC/MCC
OPEN HEART	231	CORONARY BYPASS W PTCA W MCC
OPEN HEART	232	CORONARY BYPASS W PTCA W/O MCC
OPEN HEART	233	CORONARY BYPASS W CARDIAC CATH W MCC
OPEN HEART	234	CORONARY BYPASS W CARDIAC CATH W/O MCC
OPEN HEART	235	CORONARY BYPASS W/O CARDIAC CATH W MCC
OPEN HEART	236	CORONARY BYPASS W/O CARDIAC CATH W/O MCC
PSYCH/DRUG ABUSE	880	ACUTE ADJUSTMENT REACTION & PSYCHOSOCIAL DYSFUNCTION
PSYCH/DRUG ABUSE	881	DEPRESSIVE NEUROSES
PSYCH/DRUG ABUSE	882	NEUROSES EXCEPT DEPRESSIVE
PSYCH/DRUG ABUSE	883	DISORDERS OF PERSONALITY & IMPULSE CONTROL
PSYCH/DRUG ABUSE	884	ORGANIC DISTURBANCES & MENTAL RETARDATION
PSYCH/DRUG ABUSE	885	PSYCHOSES
PSYCH/DRUG ABUSE	886	BEHAVIORAL & DEVELOPMENTAL DISORDERS
PSYCH/DRUG ABUSE	887	OTHER MENTAL DISORDER DIAGNOSES
PSYCH/DRUG ABUSE	894	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA
PSYCH/DRUG ABUSE	895	ALCOHOL/DRUG ABUSE OR DEPENDENCE W REHABILITATION THERAPY
PSYCH/DRUG ABUSE	896	ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W MCC
PSYCH/DRUG ABUSE	897	ALCOHOL/DRUG ABUSE OR DEPENDENCE W/O REHABILITATION THERAPY W/O MCC
THORACIC SURGERY	001	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM W MCC
THORACIC SURGERY	002	HEART TRANSPLANT OR IMPLANT OF HEART ASSIST SYSTEM W/O MCC
THORACIC SURGERY	003	ECMO OR TRACH W MV 96+ HRS OR PDX EXC FACE, MOUTH & NECK W MAJ O.R.
THORACIC SURGERY	004	TRACH W MV 96+ HRS OR PDX EXC FACE, MOUTH & NECK W/O MAJ O.R.
THORACIC SURGERY	007	LUNG TRANSPLANT
THORACIC SURGERY	011	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES W MCC

<u>Service Line</u>	<u>DRG</u>	<u>DRG Description</u>
THORACIC SURGERY	012	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES W CC
THORACIC SURGERY	013	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES W/O CC/MCC
THORACIC SURGERY	163	MAJOR CHEST PROCEDURES W MCC
THORACIC SURGERY	164	MAJOR CHEST PROCEDURES W CC
THORACIC SURGERY	165	MAJOR CHEST PROCEDURES W/O CC/MCC
THORACIC SURGERY	166	OTHER RESP SYSTEM O.R. PROCEDURES W MCC
THORACIC SURGERY	167	OTHER RESP SYSTEM O.R. PROCEDURES W CC
THORACIC SURGERY	168	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC/MCC
TRAUMA	964	OTHER MULTIPLE SIGNIFICANT TRAUMA W CC
TRAUMA	183	MAJOR CHEST TRAUMA W MCC
TRAUMA	184	MAJOR CHEST TRAUMA W CC
TRAUMA	185	MAJOR CHEST TRAUMA W/O CC/MCC
TRAUMA	913	TRAUMATIC INJURY W MCC
TRAUMA	914	TRAUMATIC INJURY W/O MCC
TRAUMA	927	EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV 96+ HRS W SKIN GRAFT
TRAUMA	928	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W CC/MCC
TRAUMA	929	FULL THICKNESS BURN W SKIN GRAFT OR INHAL INJ W/O CC/MCC
TRAUMA	933	EXTENSIVE BURNS OR FULL THICKNESS BURNS W MV 96+ HRS W/O SKIN GRAFT
TRAUMA	934	FULL THICKNESS BURN W/O SKIN GRFT OR INHAL INJ
TRAUMA	935	NON-EXTENSIVE BURNS
TRAUMA	955	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA
TRAUMA	956	LIMB REATTACHMENT, HIP & FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA
TRAUMA	957	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA W MCC
TRAUMA	958	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA W CC
TRAUMA	959	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA W/O CC/MCC
TRAUMA	963	OTHER MULTIPLE SIGNIFICANT TRAUMA W MCC
TRAUMA	965	OTHER MULTIPLE SIGNIFICANT TRAUMA W/O CC/MCC



**Comments in Opposition from
Cape Fear Valley Health System, Inc.
Regarding FirstHealth of the Carolinas, Inc.
Certificate of Need Application to
Develop 28 New Acute Care Beds at FirstHealth Hoke
Project I.D. # N-8838-12
Submitted June 15, 2012 for
July 1, 2012 Review Cycle**

Attachments 6 - 9

ATTACHMENT 6

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- Carolina Eye Associates
- Pinehurst Surgical
- Pinehurst Medical Clinic, Inc.
- Pinehurst Medical Clinic, Inc.
- FirstHealth Infectious Diseases Program
- Sanford Pulmonology & Sleep Medicine
- FirstHealth Hospitalist Service
- Sanford Cardiology, PLLC
- Pinehurst Surgical
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- Sandhills Emergency Physicians
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- FirstHealth Hospitalist Service
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- Carolina Children's Consultants
- Pinehurst Anesthesia Associates
- Southern Pines Womens Health Center

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<u>Casey, David J., M.D.</u>	Pinehurst Surgical
<u>Chamberlain, Robert J., Jr., M.D.</u>	Pinehurst Surgical
<u>Chandler, David L., D.O.</u>	Pinehurst Anesthesia Associates
<u>Christaldi, Pamela Sue, ANP</u>	Pinehurst Medical Clinic - Neese Clinic
<u>Chu, H. Willy, M.D.</u>	Pinehurst Surgical
<u>Clark, Erin L., M.D.</u>	FirstHealth Hospitalist Service
<u>Cleaver, William, M.D.</u>	FirstHealth Hospitalist Service
<u>Cobos, Fernando A., M.D.</u>	Moore Regional Hospital Behavioral Services
<u>Collins, F. Farrell, Jr., M.D.</u>	Pinehurst Medical Clinic, Inc.
<u>Conti, Neil A., M.D.</u>	Pinehurst Surgical
<u>Cotton, John L., M.D.</u>	The North Carolina Children's Heart Hospital
<u>Cowan, Lisa R., M.D.</u>	Sandhills Emergency Physicians
<u>Cowherd, David M., M.D.</u>	Pinehurst Medical Clinic, Inc.
<u>Cox, Stanley C., III., M.D.</u>	Pinehurst Surgical
<u>Curran, Amy L., P.A.-C</u>	Carolina Neurosurgical Services
<u>Cutrell, Darrin G., P.A.-C</u>	FirstHealth Hospitalist Service
<u>Daley, Michael B., M.D.</u>	Pinehurst Medical Clinic, Inc.
<u>Davis, Keith E., M.D.</u>	Pinehurst Medical Clinic, Inc.
<u>Deucher, Robert L., M.D.</u>	Pinehurst Medical Clinic - Neese Clinic
<u>Diasio, Christoph R., M.D.</u>	Sandhills Pediatrics, Inc.
<u>DiFrischia, Daniel S., M.D.</u>	FirstHealth Hospitalist Service
<u>Dittmer, Monica M., P.A.-C</u>	FirstHealth Hospitalist Service
<u>Duffy, Peter L., M.D.</u>	Pinehurst Cardiology Consultants
<u>Dunlap, Glenn H., DPM</u>	Pinehurst Foot Specialist, P.A.
<u>Eberhardt, Kevin N., DPM</u>	Eberhardt Foot and Ankle Clinic
<u>Egerton, Art, M.D.</u>	FirstHealth Cardiovascular & Thoracic Center
<u>Edwards, Michael D., M.D.</u>	Pinehurst Radiology
<u>Ellman, Peter Isaac, M.D.</u>	FirstHealth Cardiovascular & Thoracic Center
<u>Fakadej, Anna F., M.D.</u>	Carolina Eye Associates
<u>Fasolak, Walter S., D.O.</u>	Southern Pines Womens Health Center
<u>Fedder, David P., M.D.</u>	Pinehurst Surgical
<u>Feron, Patrick J., P.A.-C</u>	FirstHealth Cardiovascular & Thoracic Center
<u>Fessenden, John M., M.D.</u>	Pinehurst Surgical
<u>Filby, Steven J., M.D.</u>	FirstHealth Cardiology Services - Reid Heart Center
<u>Filzer, Sofia, P.A.-C</u>	Pinehurst Medical Clinic, Inc.
<u>Fleury, Robert A., M.D.</u>	Carolina Behavioral Care, P.A.
<u>Fox, Olin M., M.D.</u>	Carolina Behavioral Care, P.A.
<u>Frazer, Chad A., P.A.-C</u>	Pinehurst Hip and Knee Center
<u>French, John W., M.D.</u>	Carolina Eye Associates
<u>Frizzell, Eric R., M.D.</u>	Pinehurst Medical Clinic, Inc.
<u>Furie, David M., M.D.</u>	Pinehurst Radiology
<u>Gavett, Aaron M., D.O.</u>	FirstHealth Hospitalist Service
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<u>Gibson, Jackson V., M.D.</u>	Pinehurst Medical Clinic, Inc.
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<u>Grantham, David W., M.D.</u>	Pinehurst Surgical
<u>Greene, Wesley, P.A.-C</u>	FirstHealth Hospitalist Service
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<u>Griewe, Greg L., M.D.</u>	Pinehurst Surgical
<u>Griffin, Soledad C., M.D.</u>	Pinehurst Radiology
<u>Griffin, Neil B., M.D.</u>	Carolina Eye Associates
<u>Guest, Pamela J., M.D.</u>	Pinehurst Dermatology, P.A.
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Skislak, Corrine A., P.A.-C	Sandhills Orthopaedic and Spine Clinic
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Slaughter, Van, Jr., M.D.	FirstHealth Hospitalist Service
Snyder, Robert D., M.D.	Pinehurst Neurology, P.A.
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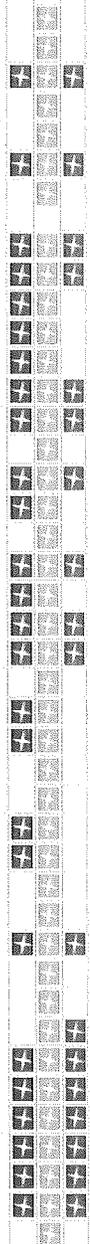
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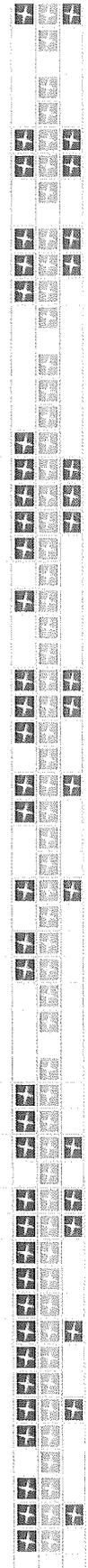
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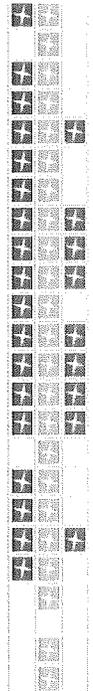
<u>Hollrah, Scott A., M.D.</u>	Sandhills Emergency Physicians
<u>Ibrahim, Mohamed A. Y., M.D.</u>	FirstHealth Richmond Medical Group-Women's Center
<u>Iqbal, Muhammad J., M.D.</u>	Scotland Medical Center
<u>Jackson, Anita L., M.D.</u>	Greater Carolina Ear, Nose & Throat, P.A.
<u>Jenkins, Grant W., M.D.</u>	FirstHealth Hospitalist Service
<u>Jingle, Linda L., M.D.</u>	Sandhills Emergency Physicians
<u>Jones, Donald C., M.D.</u>	FirstHealth Richmond Medical Group-Women's Center
<u>Kader, Ronald W., Jr., M.D.</u>	Sandhills Emergency Physicians
<u>Kauffman, Peter J., P.A.-C</u>	Pinehurst Medical Clinic, Inc.
<u>Keller, Robert M., P.A.-C</u>	Pinehurst Surgical
<u>Khader, Mohammed Sharouk, M.D.</u>	FirstHealth Richmond Medical Clinic-Internal Medicine & Family Care
<u>Khan, Shamsul A., M.D.</u>	Richmond Pediatrics
<u>Klumpar, David I., M.D.</u>	Carolina Skin Care
<u>Kodzai, William G., M.D.</u>	Charlotte Radiology, P.A.
<u>Lawal, Olujide G., M.D.</u>	
<u>Lee, Marvin, III, M.D.</u>	FirstHealth Hospitalist Service
<u>Lewis, James O., M.D.</u>	Sandhills Emergency Physicians
<u>Listrom, Chad D., M.D.</u>	Sandhills Emergency Physicians
<u>Loehr, James P., M.D.</u>	The North Carolina Children's Heart Hospital
<u>Mahon, John, M.D.</u>	Scotland Neurology, P.L.L.C.
<u>Mandell, Mary T., M.D.</u>	Moore Regional Hospital Behavioral Services
<u>Mangrum, Charita R., M.D.</u>	Sandhills Medical Group
<u>Mannava, Venkata, M.D.</u>	Sandhills Primary Care
<u>Marrow, Henry G., M.D.</u>	Moore Regional Hospital Pathology
<u>Martin, Geoffrey A., M.D.</u>	Sandhills Emergency Physicians
<u>Martinez, Michelle J., P.A.-C</u>	Pinehurst Surgical
<u>McCutchen, William, III., D.O.</u>	CWM Anesthesia
<u>McDearmon, William D., M.D.</u>	Moore Regional Hospital Pathology
<u>McGuirt, Wyman T., M.D.</u>	Pinehurst Surgical
<u>McNeill, Charlotte C., FNP</u>	Masoud Ahdieh, M.D.
<u>Merghani, Mohamed H., M.D.</u>	
<u>Milewski, Ronald J., M.D.</u>	Sandhills Emergency Physicians
<u>Mirian, MirFattah, DPM</u>	Richmond Foot Clinic
<u>Moore, John R., IV., M.D.</u>	Pinehurst Surgical
<u>Moore, Todd A., M.D.</u>	FirstHealth Outpatient Cancer Center
<u>Morley, Julie A., P.A.</u>	Carolina Skin Care
<u>Morrison, Angela S., M.D.</u>	FirstHealth Richmond Medical Group-Women's Center
<u>Nascimento, Luiz M., M.D.</u>	Sandhills Medical Group
<u>Nelson, Stacy L., P.A.-C</u>	Sandhills Emergency Physicians
<u>Oakley, Ward S., Jr., M.D.</u>	Pinehurst Surgical
<u>Ose, Benjamin, M.D.</u>	Moore Regional Hospital Behavioral Services
<u>Patel, Shilpesh P., M.D.</u>	Richmond Internal Medicine
<u>Peterson-Suri, Mary E., M.D.</u>	Sandhills Emergency Physicians
<u>Reinhardt, Matthew F., M.D.</u>	Sandhills Emergency Physicians
<u>Richman, Jonathan M., M.D.</u>	Pinehurst Neurology, P.A.
<u>Riefkohl, Waldemar, M.D.</u>	Pinehurst Surgical
<u>Ruck, David C., M.D.</u>	Carolina Behavioral Care, P.A.
<u>Schirmer, Charles C., M.D.</u>	Moore Regional Hospital Pathology
<u>Schlam, Bertrand Wax, M.D.</u>	Charlotte Radiology, P.A.
<u>Shilkitus, William F., P.A.-C</u>	Sandhills Emergency Physicians
<u>Silasi, O. Gabriel, M.D.</u>	FirstHealth Hospitalist Service
<u>Sinclair, Misty L., M.D.</u>	Pinehurst Neurology, P.A.
<u>Singh, Paul G., M.D.</u>	Carolina Spine Center
<u>Slater, Kevin T., P.A.-C</u>	Pinehurst Surgical
<u>Slaughter, Van, Jr., M.D.</u>	FirstHealth Hospitalist Service
<u>Snyder, Robert D., M.D.</u>	Pinehurst Neurology, P.A.



[Solomon, Bruce S., D.O.](#)
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[Stack, Ian C., P.A.-C](#)
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[Strom, David E., M.D.](#)
[Strong, Garon R., P.A.-C](#)
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[Tighe, Connie B., ANP](#)
[Vassallo, Peter J., M.D.](#)
[Verchick, Julie G., M.D.](#)
[Vreeland, Matthew John, M.D.](#)
[Watson, Elizabeth M., PMH-NP](#)
[White, Cindy B., FNP](#)
[Williamson, Al Bart, P.A.-C](#)
[Wilson, Suzanne L., M.D.](#)
[Winter, James A., M.D.](#)
[Wohlrab, Kurt P., M.D.](#)
[Yakubu, Rasheed A., M.D.](#)

[Young-Cadore, Dierdre T., M.D.](#)
[Zeidan, Zeidan F., M.D.](#)

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 Pinehurst Surgical
 Sandhills Emergency Physicians
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 Sandhills Emergency Physicians
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 Pinehurst Cardiology Consultants
 Sandhills Emergency Physicians
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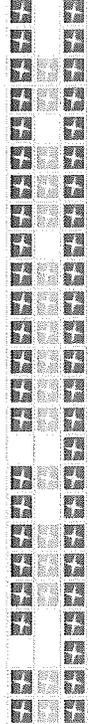
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Montgomery Memorial Hospital
Richmond Memorial Hospital
Moore Regional Hospital

Name	Clinic	
Alzamora, Fabian E., M.D.	Pinehurst Surgical	
Arora, Sonal, M.D.	Sanford Pulmonology & Sleep Medicine	
Averbook, Emily L., M.D.	Pinehurst Radiology	
Bahner, Robert, Jr., M.D.	Sandhills Emergency Physicians	
Barnes, Daniel R., D.O.	FirstHealth Hospitalist Service	
Bridgman, John A., M.D.	Sandhills Emergency Physicians	
Brower, Jonathan E., M.D.	Sandhills Emergency Physicians	
Brown, Todd B., M.D.	Sandhills Emergency Physicians	
Caberwal, Daljit S., M.D.	Montgomery Urology Clinic	
Campbell, Margaret F., M.D.	FirstHealth Hospitalist Service	
Casey, David J., M.D.	Pinehurst Surgical	
Cleaver, William, M.D.	FirstHealth Hospitalist Service	
Cobos, Fernando A., M.D.	Moore Regional Hospital Behavioral Services	
Duffy, Peter L., M.D.	Pinehurst Cardiology Consultants	
Edwards, Michael D., M.D.	Pinehurst Radiology	
Eller, Chrystal F., M.D.	FirstHealth Family Care Center-Troy	
Evans, Joan D., DPM	Troy Foot Clinic	
Fedder, David P., M.D.	Pinehurst Surgical	
Flannery, John E., M.D.	FirstHealth Hospitalist Service	
Fleury, Robert A., M.D.	Carolina Behavioral Care, P.A.	
Furie, David M., M.D.	Pinehurst Radiology	
Gibbons, Jeffrey R., M.D.	Sandhills Emergency Physicians	
Gilliam, Michael C., M.D.	FirstHealth Hospitalist Service	
Graham, Ted A., M.D.	Sandhills Emergency Physicians	
Greenwood, William R., M.D.	Sandhills Emergency Physicians	
Griffin, Soledad C., M.D.	Pinehurst Radiology	
Hanspal, Prithvi, M.D.	Montgomery Urology Clinic	
Harmody, Matthew R., M.D.	Sandhills Emergency Physicians	
Haro, Alfonso A., III., DPM	Ankle & Foot Surgical Podiatry Clinic	
Hollrah, Scott A., M.D.	Sandhills Emergency Physicians	
Hudgins, William B., M.D.	Pinehurst Radiology	
Jenkins, Grant W., M.D.	FirstHealth Hospitalist Service	
Jingle, Linda L., M.D.	Sandhills Emergency Physicians	
Kader, Ronald W., Jr., M.D.	Sandhills Emergency Physicians	
Kauffman, Peter J., P.A.-C	Pinehurst Medical Clinic, Inc.	
Kerr, John M., III., M.D.	FirstHealth Hospitalist Service	
Landers, Mark D., M.D.	Pinehurst Cardiology Consultants	
Lee, Marvin, III., M.D.	FirstHealth Hospitalist Service	
Lewis, James O., M.D.	Sandhills Emergency Physicians	
Lingler, Kimberley, M.D.	FirstHealth Richmond Family Medicine	
Listrom, Chad D., M.D.	Sandhills Emergency Physicians	
Marrow, Henry G., M.D.	Moore Regional Hospital Pathology	
Martin, Geoffrey A., M.D.	Sandhills Emergency Physicians	

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[Peterson-Suri, Mary E., M.D.](#)
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Pinehurst Radiology
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FirstHealth Hospitalist Service
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Pinehurst Cardiology Consultants
Moore Regional Hospital Behavioral Services
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ATTACHMENT 7

IV. UTILIZATION

IV.1. Using the format of Table IV below, provide annual utilization data for the following time periods:

- (a) Historical annual utilization data for the two full fiscal years prior to the submission of the application for each service component included in this application. Provide the dates for the fiscal years in the following format: Month/Date/Year to Month/Date/Year.
- (b) Projected annual utilization data for each fiscal year from the time the application was submitted through the fiscal year the project is complete for each service component included in this application.
- (c) Projected annual utilization data for each service component in this application, for the first three full fiscal years after completion of the proposed project.
- (d) Provide all assumptions and the specific methodology used for projected utilization for each service component in this application.

Need Methodology Summary

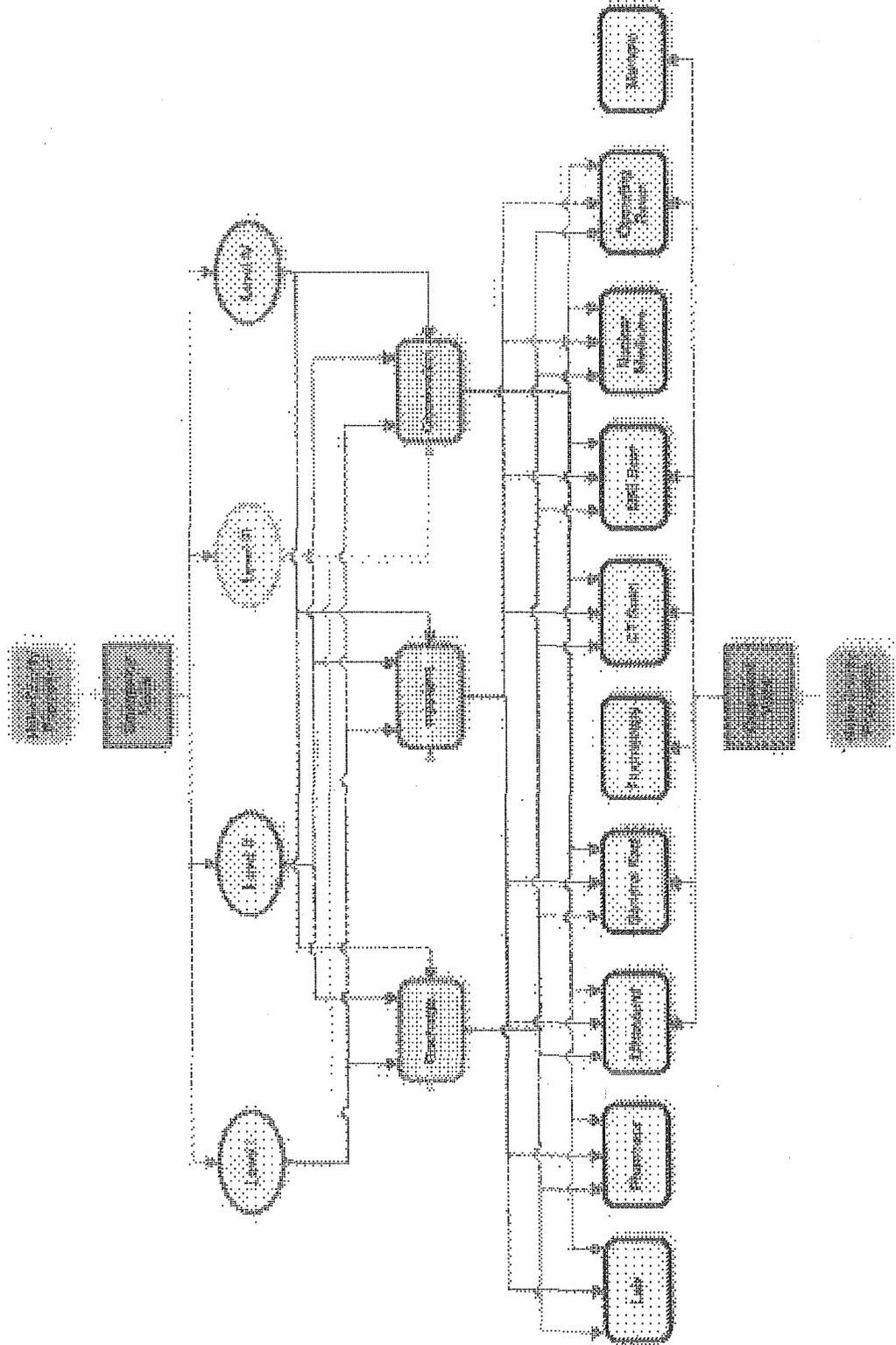
The diagram on the following page summarizes the need methodology that was used to project FHCH services in Section IV. As is evident, outpatient services, specifically the Emergency Department, will drive utilization of the inpatient unit of the hospital. This is contrary to most established hospitals in that inpatient utilization typically drives outpatient and ancillary utilization. Direct inpatient admissions are not projected in the CON application and are not planned to occur until the hospital is established and the Medical Staff increases in number.

Emergency Department Visits

- The Hoke County population generates Emergency Department visits.
- Each Emergency Department visit is categorized by level (Level I through V).
- Each Emergency Department visit categorized by level results in a discharge, an observation stay, or an inpatient stay.
- Each Emergency Department visit that results in a discharge, an observation stay, or an inpatient stay will utilize ancillary services at different rates.
- These different service rates result in utilization for ancillary services including lab, pharmacy, ultrasound, general radiography, CT scan, MRI scan, nuclear medicine, and surgery.

Outpatient Visits

- The Hoke County population by age and sex group generates outpatient visits at different rates.
- These different outpatient rates result in utilization for outpatient services including ultrasound, general radiography, fluoroscopy, CT scan, MRI scan, surgery, and mammography.



Need Methodology

Emergency Department

FirstHealth used the following need methodology to project FHCH Emergency Department visits. The projected FHCH Emergency Department visits then generated observation days, inpatient days, inpatient surgical cases, imaging procedures, laboratory tests, and other ancillary volumes. These volumes are specific to FHCH Emergency Department patients, the volumes do not include any outpatient imaging procedures referred to FHCH. Outpatient imaging projections are discussed after the Emergency Department need methodology.

Please refer to Exhibit C for population sources and for need methodology sources.

Step 1.

The following table presents actual 2008 and 2009 Hoke County ED utilization rates and the projected utilization rates for 2010 through 2015. Using the 2008 and 2009 Hoke County ED utilization rates, FirstHealth calculated that Hoke County experienced a 1-year ED utilization rate increase of 2.09 visits per 100 population (24.88 – 22.79 = 2.09). Conservatively, FirstHealth increased the annual Hoke County utilization rate by 0.21 visits from 2010 through 2015 to project the Hoke County utilization rate. 0.21 visits per 100 population represents only 10% of the 1-year ED utilization growth that Hoke County experienced between 2008 and 2009.

**Emergency Department
 Projected Hoke County Utilization Rate per 100 Population**

	2008	2009	2010	2011	2012	2013	2014	2015
Utilization Rate	22.79	24.88	25.10	25.31	25.53	25.74	25.95	26.16
Annual Utilization Growth Change		+ 2.09	+ 0.21	+ 0.21	+ 0.21	+ 0.21	+ 0.21	+ 0.21

Source: 2008 and 2009 Utilization Rates – Thomson Reuters.

Step 2.

FirstHealth used actual FY2008 and FY2009 Emergency Department visits (from all hospitals), as reported by Thomson Reuters and included in Exhibit C, to conservatively calculate the FY2008 Emergency Department utilization rate for Hoke County. FirstHealth added 10% of the 1-year Hoke County Emergency Department utilization rate growth annually to project future ED utilization rates.

**Emergency Department
 Hoke County Population
 Projected ED Utilization Rate**

		ED Visits	Population	Use Rate
Hoke County	FY2008	10,148	44,538	22.79
	FY2009	11,341	45,591	24.88
		2010	2011	2012
Projected ED Use Rate				
Hoke County	28376	25.10	25.31	25.53
		2013	2014	2015
Projected ED Use Rate				
Hoke County	28376	25.74	25.95	26.16

Step 3.

FirstHealth projected the number of Emergency Department visits that the residents of Hoke County would generate. First, FirstHealth calculated the Hoke County population by summing the North Carolina Office of State Budget and Management population projections with the BRAC military base realignment population impact. It should be noted that active duty military and military dependents make up approximately 53 percent of the BRAC Impact; however, as FHCH will become a TRICARE-certified provider, active duty military and military dependents will have access to FHCH without a referral.

Hoke County Population

		2013	2014	2015	
NCOSBM Population					
Hoke County	28376	50,232	51,391	52,551	A
BRAC Impact					
Hoke County	28376	3,742	3,742	3,742	B
Hoke County Population					
Hoke County	28376	53,974	55,133	56,293	C

Source: C = (A + B)

Second, FirstHealth multiplied the Hoke County populations by the 2013 – 2015 Projected ED Use Rates, calculated in Step 2, to project Hoke County's Emergency Department visits.

**Emergency Department
 Hoke County ED Projections**

		2013	2014	2015	
Projected Population					
Hoke County	28376	53,974	55,133	56,293	A
Projected ED Use Rate					
Hoke County	28376	25.74	25.95	26.16	B
Projected ED Visits					
Hoke County	28376	13,891	14,305	14,725	C

Source: C = (A x B)

Step 4.

FirstHealth projected the number of Emergency Department visits that would receive care at FirstHealth. FirstHealth used FY2009 Emergency Department visits reported by Thomson Reuters to determine the FirstHealth market share of emergency services in the service area population.

**Market Share
 Actual FirstHealth
 FY2009**

		ED Visit Total	FirstHealth Visits	Market Share
Hoke County	28376	11,349	5,522	48.7%

Source: Market Share = (FirstHealth Visits / County Total) x 100

In projecting conservative Emergency Department volumes, FirstHealth used its FY2009 market share of Emergency Department visits to project the number of Emergency Department visits that would be treated by FirstHealth in FY2013 through FY2015.

**Emergency Department
 FirstHealth ED Projections**

		2013	2014	2015	
Projected ED Visits					
Hoke County	28376	13,891	14,305	14,725	A
FMRH Market Share					
Hoke County	28376	48.7%	48.7%	48.7%	B
FMRH ED Visits					
Hoke County	28376	6,759	6,960	7,165	C

Source: C = (A x B)

Step 5.

FirstHealth projected the number of Emergency Department visits that would receive care at FHCH, rather than at FMRH. FirstHealth made the assumption that patients seeking Emergency Department care are less likely to leave the local community for emergency care to go to another county. To validate these assumptions, an independent marketing firm, InTandem, performed a phone survey of Hoke County residents to determine the percentage of residents who believe emergency care is important in the local community and to determine the percentage of residents who would use the hospital. The percentage of Hoke County residents who believe a local Emergency Department is important and that would use FHCH is identified in the following table.

**Emergency Department
 FHCH Utilization
 % of FirstHealth ED Visits**

	Phone Survey Results	
Local Emergency Department Important (Respond 8, 9, or 10)	76.0%	A
Would Use the Hospital (Respond Yes)	93.0%	B
FHCH Utilization	70.68%	C

Source: C = (A x B)

It should be noted that the phone survey had a +/-5.75 percent margin of error; meaning the true response to the first question may be as low as 70.25 percent or as high as 81.75 percent and the true response to the second question may be as low as 87.25 percent and as high as 98.75 percent. In order to project reasonable and conservative emergency visits, FirstHealth subtracted ½ of the margin of error from the phone survey results.

	-5.75%	-2.875%	0.0%	+2.875%	+5.75%	
Local Emergency Department Important (Respond 8, 9, or 10)	70.25%	73.125%	76.00%	78.875%	81.75%	A
Would Use the Hospital (Respond Yes)	87.25%	90.125%	93.00%	95.875%	98.75%	B
FHCH Utilization	61.29%	65.90%	70.68%	75.62%	80.73%	C

Source: C = (A x B)

**Emergency Department
 FHCH ED Projections
 % of FirstHealth ED Visits**

		2013	2014	2015	
FMRH ED Visits					
Hoke County	28376	6,759	6,960	7,165	A
FHCH Utilization					
Hoke County	28376	65.90%	65.90%	65.90%	B
FHCH ED Visits					
Hoke County	28376	4,454	4,587	4,722	C

Source: C = (A x B)

Please refer to Exhibit 47 for the InTandem survey results.

Step 6.

FirstHealth projected the number of Emergency Department visits that would receive care at FHCH, rather than go to another hospital other than FMRH. FirstHealth made the assumption that patients seeking Emergency Department care are less likely to leave the local community for emergency care to go to another county and are more likely to seek care at an Emergency Department that would have fewer patients and a shorter wait time. To validate these assumptions, an independent marketing firm, InTandem, performed a phone survey of Hoke County residents to determine the percentage of residents who believe emergency care is important in the local community and to determine the percentage of residents who would use the hospital. FirstHealth subtracted the FirstHealth ED Visits, calculated in Step 4, from the total Projected ED Visits, calculated in Step 3, to identify the Emergency Department visits that would not typically be treated at FirstHealth.

**Emergency Department
 Non-FirstHealth ED Visits**

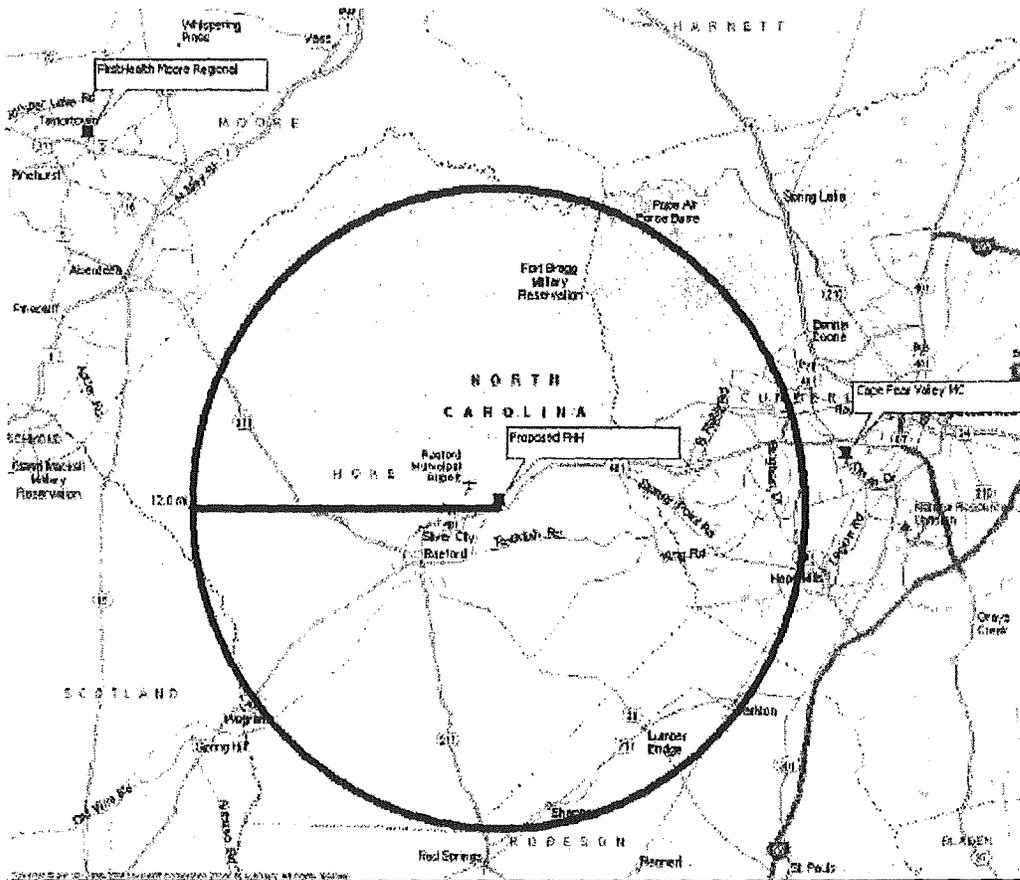
		2013	2014	2015	
Total ED Visits					
Hoke County	28376	13,891	14,305	14,725	A
FMRH ED Visits					
Hoke County	28376	6,759	6,960	7,165	B
Non-FMRH ED Visits					
Hoke County	28376	7,132	7,345	7,560	C

Source: C = (A - B)

FirstHealth applied the following FHCH percentage, based on the phone survey, to the Emergency Department visits not projected to be treated at FMRH to account for Emergency Department visits that will avoid going to Emergency Departments further away from the FHCH. To validate these assumptions, an independent marketing firm, InTandem, performed a phone survey of Hoke County residents to determine the percentage of residents who believe emergency care is important in the local community and to determine the percentage of residents who would use the hospital. FirstHealth used the FHCH Utilization Rate of 65.9 percent, as calculated in Step 5.

FirstHealth concludes that based on the phone survey, it would be valid to assume that 65.9 percent of the Hoke County residents would use the FHCH Emergency Department. As the following map shows, nearly 90% of the Hoke County is located within 12 miles of the proposed FHCH. This decrease in the distance to emergency care is enough to change emergency care patterns of travel, as the phone survey indicates.

**FHCH Emergency Department
12-mile Ring**



Please refer to Exhibit C for larger ring map.

**Emergency Department
 FHCH ED Projections
 Non-FMRH ED Visits to FHCH**

		2013	2014	2015	
Non-FMRH ED Visits					
Hoke County	28376	7,132	7,345	7,560	A
FHCH Utilization					
Hoke County	28376	65.90%	65.90%	65.90%	B
FHCH Non-FMRH ED Visits					
Hoke County	28376	4,700	4,841	4,983	C

Source: C = (A x B)

Step 7.

FirstHealth added the projected FHCH Emergency Department visits from FMRH visits, calculated in Step 5, to the FHCH Emergency Department visits from non-FMRH visits, calculated in Step 6, to identify the total number of projected Emergency Department visits for 2013 through 2015.

**Emergency Department
 Total FHCH ED Projections**

		2013	2014	2015	
FHCH FMRH ED Visits					
Hoke County	28376	4,454	4,587	4,722	A
FHCH Non-FMRH ED Visits					
Hoke County	28376	4,700	4,841	4,983	B
FHCH ED Visits					
Hoke County	28376	9,155	9,428	9,704	C

Source: C = (A + B)

Step 8.

Next, FirstHealth calculated the effective market share that the FHCH will achieve. The effective market share was calculated by dividing the projected FHCH Emergency Department visits by the Projected Hoke County ED Demand, calculated in Step 3.

**Emergency Department
 FHCH Effective Market Share**

		2013	2014	2015	
Projected ED Visits					
Hoke County	28376	13,891	14,305	14,725	A
FHCH ED Visits					
Hoke County	28376	9,155	9,428	9,704	B
FHCH Market Share					
Hoke County	28376	65.90%	65.90%	65.90%	C

Source: C = (A / B) x 100

Step 8.

Next, FirstHealth calculated the effective market share that the FHCH will achieve. The effective market share was calculated by dividing the projected FHCH Emergency Department visits by the Projected Hoke County ED Demand, calculated in Step 3.

**Emergency Department
 FHCH Effective Market Share**

		2013	2014	2015	
Projected ED Visits					
Hoke County	28376	13,891	14,305	14,725	A
FHCH ED Visits					
Hoke County	28376	9,155	9,428	9,704	B
FHCH Market Share					
Hoke County	28376	65.90%	65.90%	65.90%	C

Source: C = (A / B) x 100

Step 9.

FirstHealth projected the number of Level I through Level V Emergency Department visits that would be generated by the number of FHCH Emergency Department visits calculated in Step 7. FirstHealth did not include the most serious Emergency Department cases, Level VI, in this calculation. Using a sample data pull for FY2007 through FY2009 of Hoke County residents treated at the FMRH Emergency Department, FirstHealth calculated the 3-year average to apply to future projections. The following table shows the 3-year average calculation.

**FMRH Emergency Department
 Hoke County Service Level
 FY2007 – FY2009**

	2007	2008	2009	3-YR AVG
Level I	485	445	394	441
Level II	1,064	1,102	1,055	1,074
Level III	1,670	1,970	1,914	1,851
Level IV	1,822	2,198	2,082	2,034
Level V	13	35	15	21
ED Visits	5,054	5,750	5,460	5,421
Level I	9.6%	7.7%	7.2%	8.1%
Level II	21.1%	19.2%	19.3%	19.8%
Level III	33.0%	34.3%	35.1%	34.1%
Level IV	36.1%	38.2%	38.1%	37.5%
Level V	0.3%	0.6%	0.3%	0.4%
Total	100.0%	100.0%	100.0%	100.0%

FirstHealth then multiplied the FHCH Emergency Department visits calculated in Step 7 by the 3-year Service Level averages calculated in Step 9.

**FMRH Emergency Department
 Hoke County Service Level
 FY2013 – FY2015**

	3-YR AVG	2013	2014	2015
Level I	8.1%	745	767	790
Level II	19.8%	1,813	1,867	1,922
Level III	34.1%	3,126	3,220	3,314
Level IV	37.5%	3,435	3,537	3,641
Level V	0.4%	35	37	38
ED Visits	100.0%	9,155	9,428	9,704

Step 10.

Using the sample data pull for FY2007 through FY2009 of Hoke County residents treated at the FMRH Emergency Department used in Step 9, FirstHealth calculated the percent of observation patients, inpatients, and discharged patients by Service Level to identify the 3-year average to apply to future projections.

Table 1 shows the number, percentage, and 3-year average of observation, inpatients, and discharge patients for FY2007 through FY2009.

Table 2 shows the projected number of observation, inpatients, and discharge patients for FY2013 through FY2015 using the 3-year average observation, inpatient, and discharge patient percentages calculated in Step 9.

Table 1
FMRH Emergency Department
3-Year Average
Observation, Inpatient, and Discharge Percent by Service Level
FY2007 – FY2009

	2007	2008	2009	3-YR AVG	2007	2008	2009	3-YR AVG	2007	2008	2009	3-YR AVG
Level I	485	445	394	441	9.6%	7.7%	7.2%	8.1%	9.6%	7.7%	7.2%	8.1%
Level II	1,064	1,102	1,055	1,074	21.1%	19.2%	19.3%	19.8%	21.1%	19.2%	19.3%	19.8%
Level III	1,670	1,970	1,914	1,851	33.0%	34.3%	35.1%	34.1%	33.0%	34.3%	35.1%	34.1%
Level IV	1,822	2,198	2,082	2,034	36.1%	38.2%	38.1%	37.5%	36.1%	38.2%	38.1%	37.5%
Level V	13	35	15	21	0.3%	0.6%	0.3%	0.4%	0.3%	0.6%	0.3%	0.4%
ED Visits	5,054	5,750	5,460	5,421	100.0%							
Observation Patient Volume and Percentage												
Level I	-	1	-	0	0.0%	0.2%	0.0%	0.1%	0.0%	0.2%	0.0%	0.1%
Level II	-	2	-	0	0.0%	0.2%	0.0%	0.1%	0.0%	0.2%	0.0%	0.1%
Level III	4	1	1	2	0.2%	0.1%	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%
Level IV	164	160	104	143	9.0%	7.3%	5.0%	7.0%	9.0%	7.3%	5.0%	7.0%
Level V	-	-	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ED Observation Pts	168	164	105	146								
Inpatient Volume and Percentage												
Level I	1	-	-	0	0.2%	0.0%	0.0%	0.1%	0.2%	0.0%	0.0%	0.1%
Level II	10	1	3	5	0.9%	0.1%	0.3%	0.4%	0.9%	0.1%	0.3%	0.4%
Level III	31	28	28	29	1.9%	1.4%	1.5%	1.6%	1.9%	1.4%	1.5%	1.6%
Level IV	765	831	783	793	42.0%	37.8%	37.6%	39.0%	42.0%	37.8%	37.6%	39.0%
Level V	9	30	14	18	69.2%	85.7%	93.3%	84.1%	69.2%	85.7%	93.3%	84.1%
ED Inpatients Pts	816	890	828	845								
Discharge Volume and Percentage												
Level I	484	444	394	441	99.8%	99.8%	100.0%	99.8%	99.8%	99.8%	100.0%	99.8%
Level II	1,054	1,099	1,052	1,068	99.1%	99.7%	99.7%	99.5%	99.1%	99.7%	99.7%	99.5%
Level III	1,635	1,941	1,885	1,820	97.9%	98.5%	98.5%	98.3%	97.9%	98.5%	98.5%	98.3%
Level IV	893	1,207	1,195	1,098	49.0%	54.9%	57.4%	54.0%	49.0%	54.9%	57.4%	54.0%
Level V	4	5	1	3	30.8%	14.3%	6.7%	15.9%	30.8%	14.3%	6.7%	15.9%
ED Discharge Pts	4,070	4,696	4,527	4,431								

Table 2
FHCH Emergency Department
Observation, Inpatient, and Discharge Volumes by Service Level
FY2013 – FY2015

	3-YR AVG	2013	2014	2015
Level I	8.1%	745	767	790
Level II	19.8%	1,813	1,867	1,922
Level III	34.1%	3,126	3,220	3,314
Level IV	37.5%	3,435	3,537	3,641
Level V	0.4%	35	37	38
ED Visits	100.0%	9,155	9,428	9,704
Projected Observation Patient Volume				
Level I	0.1%	1	1	1
Level II	0.1%	1	1	1
Level III	0.1%	3	3	4
Level IV	7.0%	241	248	255
Level V	0.0%	-	-	-
ED Observation Pts		246	253	261
Projected Inpatient Volume				
Level I	0.1%	1	1	1
Level II	0.4%	8	8	8
Level III	1.6%	49	50	52
Level IV	39.0%	1,339	1,379	1,419
Level V	84.1%	30	31	32
ED Inpatients Pts		1,426	1,469	1,512
Projected Discharge Volume				
Level I	99.8%	744	766	789
Level II	99.5%	1,804	1,858	1,912
Level III	98.3%	3,074	3,166	3,258
Level IV	54.0%	1,855	1,910	1,966
Level V	15.9%	6	6	6
ED Discharge Pts		7,482	7,706	7,932

Step 11.

The following table summarizes Table 2 from Step 10:

**FHCH Emergency Department
 Observation, Inpatient, and Discharge Volumes Summary
 FY2013 – FY2015**

	2013	2014	2015
Total ED Visits	9,155	9,428	9,704
ED Observation Patients	246	253	261
ED Inpatients	1,426	1,469	1,512
ED Discharges	7,482	7,706	7,932

FirstHealth has determined that it can relocate eight (8) acute care beds from FMRH to the proposed FHCH without impacting the patients who remain at FMRH. In order to accommodate the projected ED Inpatients, specifically those patients who may have higher acuities, FirstHealth assumes that 50.0 percent of the ED Inpatients will be admitted to the inpatient unit and the remaining 50.0 percent will be held in the four observation beds, located on the inpatient unit, until they can be transferred to either FMRH or to CFVMC.

The following table presents the number of adjusted observation patients, which is equal to the number of projected ED Observation Patients plus 50.0 percent of the projected ED Inpatients, and the number of adjusted inpatients, which is equal to 50.0 percent of the projected ED Inpatients.

**FHCH Emergency Department
 Adjusted Observation, Adjusted Inpatient, and Discharge Volumes Summary
 FY2013 – FY2015**

	2012	2013	2014
Total ED Visits	9,155	9,428	9,704
ED Observation Patients	959	988	1,017
ED Inpatients	713	734	756
ED Discharges	7,482	7,706	7,932

Step 12.

Using the sample data pull for FY2007 through FY2009 of Hoke County residents treated at the FMRH Emergency Department used in Step 9, FirstHealth calculated the percent of inpatient surgical cases, imaging procedures, laboratory tests, and other ancillary volumes by observation patient, inpatient, and discharged patient to identify the 3-year average to apply to future projections.

Please refer to Exhibit C, for Table 3, which shows the number, percentage, and 3-year average of inpatient surgical hours, imaging procedures, laboratory tests, and other ancillary volumes associated with the Emergency Department observation, inpatients, and discharge patients for FY2007 through FY2009 from Hoke County.

Table 4 shows the projected number of inpatient surgical cases, imaging procedures, laboratory tests, and other ancillary volumes associated with the Emergency Department observation, inpatients, and discharge patients for FY2013 through FY2015 using the 3-year average observation, inpatient, and discharge patient utilization rates per 100 patients calculated in Step 12, Table 3, Exhibit C. For example, Table 3 shows the 3-year average laboratory tests for discharge patients to be 188.0 laboratory tests per 100 discharged ED patients; this can be further simplified to 1.9 laboratory tests per discharged ED patient. FirstHealth multiplied the 3-year average ancillary volume per 100 patients by the number of projected Emergency Department patients by observation, inpatient, or discharge divided by 100.

Table 4
FHCH Emergency Department
Ancillary Volumes by Observation, Inpatient, and Discharge Patient
FY2013 – FY2015

	Units	3-YR AVG	2013	2014	2015
Projected Ancillary Volumes by Discharge Patient					
ED Discharge Patients			7,482	7,706	7,932
Laboratory	Tests	188.0	14,064	14,483	14,908
Pharmacy	Units	193.2	14,454	14,885	15,322
General Radiology	Procedures	41.2	3,080	3,171	3,264
CT Scanner	Scans	19.3	1,444	1,487	1,531
MRI Scanner	Scans	0.6	43	44	45
Ultrasound	Procedures	8.2	611	629	647
Nuclear Medicine	Procedures	-	-	-	-
Operating Room	Hours	0.1	4.2	4.3	4.4
Projected Ancillary Volumes by Observation Patient					
Adjusted ED Observation Patients			959	988	1,017
Laboratory	Tests	1,394.1	13,371	13,770	14,174
Pharmacy	Units	2,413.7	23,151	23,842	24,541
General Radiology	Procedures	190.8	1,830	1,885	1,940
CT Scanner	Scans	53.3	511	527	542
MRI Scanner	Scans	7.8	75	77	79
Ultrasound	Procedures	17.6	169	174	179
Nuclear Medicine	Procedures	39.8	98	101	104
Operating Room	Hours	4.8	11.7	12.1	12.4
Projected Ancillary Volumes by Inpatient					
Adjusted ED Inpatients			713	734	756
Laboratory	Tests	2,659.6	18,967	19,533	20,106
Pharmacy	Units	10,050.0	71,673	73,812	75,977
General Radiology	Procedures	761.4	5,430	5,592	5,756
CT Scanner	Scans	83.9	599	616	635
MRI Scanner	Scans	17.7	126	130	134
Ultrasound	Procedures	46.4	331	341	351
Nuclear Medicine	Procedures	8.6	61	63	65
Operating Room	Hours	25.1	178.9	184.3	189.7

Step 13.

FirstHealth summed the projected FHCH ancillary service volumes for adjusted observation, adjusted inpatients, and discharge patients, calculated in Step 12, to identify the total FHCH ancillary service volumes for FY2013 through FY2015.

**FHCH Emergency Department
 Total Ancillary Volumes
 FY2013 – FY2015**

	Units	2013	2014	2015
Total Ancillary Service Volumes				
Laboratory	Tests	46,401	47,786	49,188
Pharmacy	Units	109,278	112,539	115,840
General Radiology	Procedures	10,340	10,649	10,961
CT Scanner	Scans	2,554	2,631	2,708
MRI Scanner *	Scans	70	72	74
Ultrasound	Procedures	1,110	1,144	1,177
Nuclear Medicine	Procedures	159	164	169
Operating Room	Hours	195	201	206

* MRI scans represent 28.6% of MRI scans that ED patients would generate based on the availability of the mobile MRI scanner on the FHCH campus.

Even without considering the clear need for ancillary services given the Emergency Department utilization projections, every Emergency Department needs to have these services readily available as part of the basic standard of care for patients presenting to an Emergency Department. In the American College of Emergency Physicians publication, **Emergency Department Design** (pages 163 and 164); imaging, laboratory, and pharmacy services are detailed in their inclusion in the design for Emergency Departments. Furthermore, to be licensed as a hospital in North Carolina, a facility must have at least two acute care beds and ancillary services such as lab, imaging and pharmacy. See 10A NCAC 13B.3201.

Step 14.

FirstHealth converted the number of observation patients and inpatients into “days of care,” and operating hours into inpatient surgical cases.

FirstHealth assumes that an observation patient will occupy an observation bed for less than 23 hours, but that the observation bed will only be available to one patient per day.

**FHCH
 Observation Bed Utilization**

	2013	2014	2015	
Adjusted Observation Patients	959	988	1,017	A
Observation Days per Adjusted Observation Patient	1	1	1	B
Total Observation Days	959	988	1,017	A x B
Observation Beds	4	4	4	C
Available Days per Bed	365	365	365	D
Available Observation Days of Care	1,460	1,460	1,460	C X D
Observation Bed Utilization	65.7%	67.7%	69.6%	(A x B) / (C X D)

Using the sample data pull for FY2007 through FY2009 of Hoke County residents treated at the FMRH Emergency Department used in Step 9, FirstHealth calculated the average length of stay per inpatient to be 3.1 days.

**FHCH
 Inpatient Bed Utilization**

	2013	2014	2015	
Adjusted Inpatients	713	734	756	A
Inpatient Days per Adjusted Inpatient Patient	3.1	3.1	3.1	B
Total Inpatient Days	2,211	2,277	2,344	A x B
Inpatient Beds	8	8	8	C
Available Days per Bed	365	365	365	D
Available Inpatient Days of Care	2,920	2,920	2,920	C X D
Inpatient Bed Utilization	75.7%	78.0%	80.3%	(A x B) / (C X D)

Using the SMFP standard of 3.0 hours per inpatient case, FirstHealth calculated the number of inpatient surgical cases:

FHCH
Inpatient Surgical Cases

	2012	2013	2014	
Inpatient Surgical Hours	195	201	206	A
Inpatient Surgical Hours per Case	3.0	3.0	3.0	B
Total Inpatient Surgical Cases	65	67	69	A / B

Step 15.

FirstHealth projected the number FHCH CT scans by HECT unit for CT scans generated by Emergency Department patients by using the current FMRH Emergency Department breakdown of CT scans by type, as presented in the following tables:

**FHCH
 FY2013 (Emergency Department)
 CT Scanner**

	Type of CT Scan	No. of Scans						Conver. Factor		HECT Units
		Q1	Q2	Q3	Q4	Total				
1	Head scan without contrast	183	183	183	183	733	X	1.00	=	733
2	Head scan with contrast	-	-	-	-	-	X	1.25	=	-
3	Head scan without and with contrast	3	3	3	3	13	X	1.75	=	24
4	Body scan without contrast	211	211	211	211	842	X	1.50	=	1,264
5	Body scan with contrast	161	161	161	161	646	X	1.75	=	1,130
6	Body scan without and with contrast	77	77	77	77	308	X	2.75	=	846
7	Biopsy in addition to body scan with or without contrast	3	3	3	3	12	X	2.75 plus body scan HECTs	=	32
8	Abscess drainage in addition to body scan with or without contrast	-	-	-	-	-	X	4.00 plus body scan HECTs	=	-
		639	639	639	639	2,554		Totals		4,029

Totals may not foot due to rounding.

**FHCH
 FY2014 (Emergency Department)
 CT Scanner**

	Type of CT Scan	No. of Scans						Conver. Factor		HECT Units
		Q1	Q2	Q3	Q4	Total				
1	Head scan without contrast	189	189	189	189	755	X	1.00	=	755
2	Head scan with contrast	-	-	-	-	-	X	1.25	=	-
3	Head scan without and with contrast	3	3	3	3	14	X	1.75	=	24
4	Body scan without contrast	217	217	217	217	868	X	1.50	=	1,301
5	Body scan with contrast	166	166	166	166	665	X	1.75	=	1,164
6	Body scan without and with contrast	79	79	79	79	317	X	2.75	=	872
7	Biopsy in addition to body scan with or without contrast	3	3	3	3	12	X	2.75 plus body scan HECTs	=	33
8	Abscess drainage in addition to body scan with or without contrast	-	-	-	-	-	X	4.00 plus body scan HECTs	=	-
		658	658	658	658	2,631		Totals		4,149

Totals may not foot due to rounding.

FHCH
 FY2015 (Emergency Department)
 CT Scanner

Type of CT Scan		No. of Scans						Conver. Factor	=	HECT Units
		Q1	Q2	Q3	Q4	Total				
1	Head scan without contrast	194	194	194	194	777	X	1.00	=	777
2	Head scan with contrast	-	-	-	-	-	X	1.25	=	-
3	Head scan without and with contrast	4	4	4	4	14	X	1.75	=	25
4	Body scan without contrast	223	223	223	223	893	X	1.50	=	1,340
5	Body scan with contrast	171	171	171	171	685	X	1.75	=	1,198
6	Body scan without and with contrast	82	82	82	82	326	X	2.75	=	897
7	Biopsy in addition to body scan with or without contrast	3	3	3	3	12	X	2.75 plus body scan HECTs	=	34
8	Abscess drainage in addition to body scan with or without contrast	-	-	-	-	-	X	4.00 plus body scan HECTs	=	-
		677	677	677	677	2,708		Totals		4,271

Totals may not foot due to rounding.

Need Methodology

Outpatient Departments

FirstHealth used the following need methodologies to project FHCH surgical cases and outpatient imaging procedures.

Please refer to Exhibit C for population sources and for need methodology sources.

Step 1.

Outpatient surgical cases were projected by identifying the total number of outpatient surgical cases performed on Hoke County residents in FY2009, as highlighted in the following table:

FY2009 Hoke County Patients Outpatient Surgical Cases

OP Surgical Cases	2009
Fayetteville ASC	342
FMRH	276
Surgery Center of Pinehurst	275
CFVMC	264
Eye Center of Carolinas	120
Highsmith-Rainey	89
Scotland Memorial	31
SRMC	12
Duke	6
Sandhills Regional	5
UNC Hospitals	2
Totals	1,422

Source: 2010 Hospital and ASC License Renewal Applications

FirstHealth identified the counties of similar size to identify the average percentage of outpatient surgical cases that remain at the local county hospital. The six counties closest in size were Beaufort, McDowell, Richmond, Stokes, Vance, and Watauga. With the exception of Richmond County, each county only has one hospital performing surgical cases, no ambulatory surgery centers, and each county has more than 3 operating rooms.

The following table shows the county hospitals comparison and their percentage of the FY2007 outpatient surgical market for county patients:

County	Hospital	Operating Rooms	% of County Outpatient Surgical Cases
Beaufort	Beaufort County Hospital	5	60.5%
McDowell	McDowell Hospital	3	28.9%
Richmond	Richmond Memorial	3	20.5%
Richmond	Sandhills Regional	3	17.6%
	<i>Richmond County Total</i>	6	38.1%
Stokes	Stokes-Reynolds	4	6.4%
Vance	Maria Parham	5	62.5%
Watauga	Watauga Medical Center	6	73.6%
Average		4.8	45.0%

FirstHealth assumes that with a new operating room, with no patient waitlist, and immediate surgical case scheduling that it will achieve just below the six-county average calculated in the previous table by Year 3. For the purpose of remaining conservative in its volume projections, FirstHealth assumes no increase in the number of outpatient surgical cases, but that patients will seek referral to FirstHealth Hoke Hospital and surgeons will schedule surgical cases at the new hospital during their established block times, rather than requiring Hoke County patients to travel outside of Hoke County outpatient surgeries.

The following table identifies the number of outpatient surgical cases projected to be performed during the first three years of operation:

	2013	2014	2015
County Outpatient Surgical Cases	1,422	1,422	1,422
FHCH Market Share	27.6%	33.1%	38.7%
FHCH Outpatient Surgical Cases	393	471	550

Step 2.

FirstHealth used outpatient imaging use rates by age and sex per 1000 population that were included in an Imaging Economics, June 2005 article titled **Radiology 2005: State of the Industry**. The outpatient imaging use rates were developed by National Imaging Associates and represent patients imaged between 2000 and 2004. FirstHealth is using these outpatient imaging use rates because they address the utilization implications of an aging population. FirstHealth believed it best to utilize this data, even though it is five years old, so that the relatively young population of Hoke County does not impact projected outpatient imaging cases by over projecting them based on the utilization of older residents.

Please refer to Exhibit C for the Imaging Economics article.

**Outpatient Imaging Procedure Use Rates
 By Age and Sex**

	0-19		20-44		45-64		65+	
	F	M	F	M	F	M	F	M
CT Scan	26	28	71	56	132	111	237	251
Fluoroscopy	5	5	18	14	34	26	61	54
General Radiology	256	318	289	281	574	449	1,127	933
Mammography	3	0	157	0	668	1	568	2
MRI Scan	18	18	54	44	95	75	103	92
Ultrasound	18	13	47	22	82	62	127	173

Source: Imaging Economics, June 2005, Radiology 2005: State of the Industry.

**NCOSBM Hoke County
 Population Projection by Age and Sex**

	0-19		20-44		45-64		65+		Total	
	F	M	F	M	F	M	F	M	F	M
2012	7,727	8,314	8,671	9,052	5,972	6,124	2,358	2,014	24,728	25,504
2013	7,845	8,488	8,800	9,137	6,198	6,359	2,448	2,116	25,291	26,100
2014	7,986	8,632	8,883	9,230	6,444	6,603	2,542	2,231	25,855	26,696

Source: NC State Office of Budget and Management, September 2009.

FirstHealth multiplied the outpatient imaging procedure use rates by age and sex by the NCOSBM Hoke County population projection by age and sex divided by 1,000 to calculate the number of outpatient imaging procedures that a population that mirrors Hoke County's population would generate.

**Hoke County Projected Outpatient Imaging Procedures
By Age and Sex**

	0-19		20-44		45-64		65+		Total		Total
	F	M	F	M	F	M	F	M	F	M	
2012											
CT Scan	201	233	616	507	788	680	559	506	2,164	1,925	4,089
Fluoroscopy	39	42	156	127	203	159	144	109	542	436	978
General Radiology	1,978	2,644	2,506	2,544	3,428	2,750	2,657	1,879	10,569	9,816	20,386
Mammography	23	-	1,361	-	3,989	6	1,339	4	6,713	10	6,723
MRI Scan	139	150	468	398	567	459	243	185	1,418	1,193	2,610
Ultrasound	139	108	408	199	490	380	299	348	1,336	1,035	2,371

	0-19		20-44		45-64		65+		Total		Total
	F	M	F	M	F	M	F	M	F	M	
2013											
CT Scan	204	238	625	512	818	706	580	531	2,227	1,986	4,213
Fluoroscopy	39	42	158	128	211	165	149	114	558	450	1,008
General Radiology	2,008	2,699	2,543	2,567	3,558	2,855	2,759	1,974	10,868	10,096	20,964
Mammography	24	-	1,382	-	4,140	6	1,390	4	6,936	11	6,946
MRI Scan	141	153	475	402	589	477	252	195	1,457	1,226	2,684
Ultrasound	141	110	414	201	508	394	311	366	1,374	1,072	2,446

	0-19		20-44		45-64		65+		Total		Total
	F	M	F	M	F	M	F	M	F	M	
2014											
CT Scan	208	242	631	517	851	733	602	560	2,291	2,051	4,343
Fluoroscopy	40	43	160	129	219	172	155	120	574	465	1,039
General Radiology	2,044	2,745	2,567	2,594	3,699	2,965	2,865	2,082	11,175	10,385	21,560
Mammography	24	-	1,395	-	4,305	7	1,444	4	7,167	11	7,178
MRI Scan	144	155	480	406	612	495	262	205	1,497	1,262	2,759
Ultrasound	144	112	418	203	528	409	323	386	1,412	1,111	2,523

Finally, to remain conservative in its outpatient imaging procedure projections FirstHealth does not project to perform more than 20.0 percent of projected outpatient imaging procedure at FHCH. The following tables show a ramped up outpatient imaging service increasing from 10.0 percent in FY2013 to 20.0 percent in FY2015.

**FHCH Outpatient Imaging Procedures
 FY2013-FY2015**

Projected Hoke County Imaging Procedures				
	2013	2014	2015	
CT Scan	4,089	4,213	4,343	A
Fluoroscopy	978	1,008	1,039	
General Radiology	20,386	20,964	21,560	
Mammography	6,723	6,946	7,178	
MRI Scan	2,610	2,684	2,759	
Ultrasound	2,371	2,446	2,523	

FHCH Market Share	10.0%	15.0%	20.0%	B
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Projected FHCH Imaging Procedures				
	2013	2014	2015	
CT Scan	409	632	869	C
Fluoroscopy	98	151	208	
General Radiology	2,039	3,145	4,312	
Mammography	672	1,042	1,436	
MRI Scan	261	403	552	
Ultrasound	237	367	505	

Source: C = A x B

Step 3.

FirstHealth projected the number of outpatient CT scans that would be provided at the FHCH. FirstHealth projected the number of FHCH outpatient CT scans by HECT unit by using the current FMRH outpatient imaging breakdown of CT scans by type, as presented in the following tables:

**FHCH
 FY2013 (Outpatient)
 CT Scanner**

Type of CT Scan		No. of Scans								HECT Units
		Q1	Q2	Q3	Q4	Total		Conver. Factor	=	
1	Head scan without contrast	29	29	29	29	117	X	1.00	=	117
2	Head scan with contrast	-	-	-	-	-	X	1.25	=	-
3	Head scan without and with contrast	1	1	1	1	2	X	1.75	=	4
4	Body scan without contrast	34	34	34	34	135	X	1.50	=	202
5	Body scan with contrast	26	26	26	26	103	X	1.75	=	181
6	Body scan without and with contrast	12	12	12	12	49	X	2.75	=	135
7	Biopsy in addition to body scan with or without contrast	0	0	0	0	2	X	2.75 plus body scan HECTs	=	5
8	Abscess drainage in addition to body scan with or without contrast	-	-	-	-	-	X	4.00 plus body scan HECTs	=	-
		102	102	102	102	409		Totals		645

Totals may not foot due to rounding.

**FHCH
 FY2014 (Outpatient)
 CT Scanner**

Type of CT Scan		No. of Scans								HECT Units
		Q1	Q2	Q3	Q4	Total		Conver. Factor	=	
1	Head scan without contrast	45	45	45	45	181	X	1.00	=	181
2	Head scan with contrast	-	-	-	-	-	X	1.25	=	-
3	Head scan without and with contrast	1	1	1	1	3	X	1.75	=	6
4	Body scan without contrast	52	52	52	52	208	X	1.50	=	313
5	Body scan with contrast	40	40	40	40	160	X	1.75	=	280
6	Body scan without and with contrast	19	19	19	19	76	X	2.75	=	209
7	Biopsy in addition to body scan with or without contrast	1	1	1	1	3	X	2.75 plus body scan HECTs	=	8
8	Abscess drainage in addition to body scan with or without contrast	-	-	-	-	-	X	4.00 plus body scan HECTs	=	-
		158	158	158	158	632		Totals		997

Totals may not foot due to rounding.

FHCH
 FY2015 (Outpatient)
 CT Scanner

	Type of CT Scan	No. of Scans						Conver. Factor	=	HECT Units
		Q1	Q2	Q3	Q4	Total				
1	Head scan without contrast	62	62	62	62	249	X	1.00	=	249
2	Head scan with contrast	-	-	-	-	-	X	1.25	=	-
3	Head scan without and with contrast	1	1	1	1	5	X	1.75	=	8
4	Body scan without contrast	72	72	72	72	286	X	1.50	=	430
5	Body scan with contrast	55	55	55	55	220	X	1.75	=	384
6	Body scan without and with contrast	26	26	26	26	105	X	2.75	=	288
7	Biopsy in addition to body scan with or without contrast	1	1	1	1	4	X	2.75 plus body scan HECTs	=	11
8	Abscess drainage in addition to body scan with or without contrast	-	-	-	-	-	X	4.00 plus body scan HECTs	=	-
		217	217	217	217	869		Totals		1,370

Totals may not foot due to rounding.

Step 4.

Finally, FirstHealth combined the Emergency Department and Outpatient CT scans:

FHCH
 FY2013 (Combined)
 CT Scanner

	Type of CT Scan	No. of Scans						Conver. Factor		HECT Units
		Q1	Q2	Q3	Q4	Total				
1	Head scan without contrast	213	213	213	213	851	X	1.00	=	851
2	Head scan with contrast	-	-	-	-	-	X	1.25	=	-
3	Head scan without and with contrast	4	4	4	4	16	X	1.75	=	27
4	Body scan without contrast	244	244	244	244	977	X	1.50	=	1,466
5	Body scan with contrast	187	187	187	187	749	X	1.75	=	1,311
6	Body scan without and with contrast	89	89	89	89	357	X	2.75	=	982
7	Biopsy in addition to body scan with or without contrast	3	3	3	3	14	X	2.75 plus body scan HECTs	=	38
8	Abscess drainage in addition to body scan with or without contrast	-	-	-	-	-	X	4.00 plus body scan HECTs	=	-
		741	741	741	741	2,963		Totals		4,674

Totals may not foot due to rounding.

FHCH
 FY2014 (Combined)
 CT Scanner

	Type of CT Scan	No. of Scans						Conver. Factor		HECT Units
		Q1	Q2	Q3	Q4	Total				
1	Head scan without contrast	234	234	234	234	936	X	1.00	=	936
2	Head scan with contrast	-	-	-	-	-	X	1.25	=	-
3	Head scan without and with contrast	4	4	4	4	17	X	1.75	=	30
4	Body scan without contrast	269	269	269	269	1,076	X	1.50	=	1,614
5	Body scan with contrast	206	206	206	206	825	X	1.75	=	1,443
6	Body scan without and with contrast	98	98	98	98	393	X	2.75	=	1,081
7	Biopsy in addition to body scan with or without contrast	4	4	4	4	15	X	2.75 plus body scan HECTs	=	41
8	Abscess drainage in addition to body scan with or without contrast	-	-	-	-	-	X	4.00 plus body scan HECTs	=	-
		816	816	816	816	3,263		Totals		5,146

Totals may not foot due to rounding.

FHCH
 FY2015 (Combined)
 CT Scanner

	Type of CT Scan	No. of Scans						Conver. Factor	=	HECT Units
		Q1	Q2	Q3	Q4	Total				
1	Head scan without contrast	257	257	257	257	1,027	X	1.00	=	1,027
2	Head scan with contrast	-	-	-	-	-	X	1.25	=	-
3	Head scan without and with contrast	5	5	5	5	19	X	1.75	=	33
4	Body scan without contrast	295	295	295	295	1,180	X	1.50	=	1,769
5	Body scan with contrast	226	226	226	226	904	X	1.75	=	1,582
6	Body scan without and with contrast	108	108	108	108	431	X	2.75	=	1,185
7	Biopsy in addition to body scan with or without contrast	4	4	4	4	16	X	2.75 plus body scan HECTs	=	45
8	Abscess drainage in addition to body scan with or without contrast	-	-	-	-	-	X	4.00 plus body scan HECTs	=	-
		894	894	894	894	3,576		Totals		5,641

Totals may not foot due to rounding.

Please refer to Exhibit C for need methodology supporting resources.

Step 5.

FirstHealth summed the imaging procedures generated by Emergency Department visits as calculated in Step 13 of the Emergency Department need methodology to the outpatient imaging procedures calculated in Step 2 to identify total projected imaging procedures from FY2013 through FY2015.

**FHCH
Total Imaging Procedures
FY2013-FY2015**

	2013	2014	2015
General Radiography	12,379	13,794	15,273
CT Scan	2,963	3,263	3,576
MRI Scan	331	475	626
Ultrasound	1,348	1,510	1,682
Mammography	672	1,042	1,436
Nuclear Medicine	159	164	169

IV.2. For each type of medical equipment proposed, provide the annual maximum capacity per unit if the SMFP or the certificate of need regulatory review criteria do NOT provide a standard. Provide all assumptions and the specific methodology used to determine the annual maximum capacity.

The proposed FHCH will operate 24 hours per day, 7 days per week; however, for the purposes of identifying a reasonable annual maximum capacity, FirstHealth is utilizing a 9-hour day, which better reflects the time period that most of the scheduled patients will access FHCH.

TABLE IV.2	# of Rooms	Visit Capacity per Room	Total Projected Capacity
Inpatient Services	8	365 days	2,920 days
Observation Services	4	365 days	1,460 days
Surgical Services	1	1,872 hours	1,872 hours
Emergency Service	8	1,250 visits	10,000 visits

TABLE IV.2 DIAGNOSTIC TESTING	Days per Week	Weeks per Year	Hours per Day	Total Available Hours	# of Units	Total Unit Hours Available	Procedures per Hour	Total Projected Capacity
CT Scanner	7	52	9	3,276	1	3,276	1	3,276
MRI Scanner	1	52	8	416	1	416	1.5	626
General Radiography	7	52	9	3,276	2 *	6,552	2	13,104
Fluoroscopy	7	52	9	3,276	2 **	6,552	1	6,552
Ultrasound	7	52	9	3,276	1	3,276	1	3,276
Nuclear Medicine	5	52	3	780	1	780	0.33	260
Mammography	5	52	3	780	1	780	2	1,560

* includes a mobile x-ray unit in the Emergency Department

** includes a mobile fluoroscope in the Surgical Department

ATTACHMENT 8

Attachment 8. FH Projected IP/ICU Payer Mix pg 144

	Inpatient Percent	Inpatient Days	ICU Percent	ICU Days	Total Percent	Total Days
Self Pay/Charity	4.90%	430	2.2%	21	4.6%	450
Medicare/Medicare Managed Care	51%	4,473	69.8%	651	52.8%	5,124
Medicaid	10.40%	912	10.8%	101	10.4%	1,013
Commercial Insurance/ Managed Care	26.50%	2,324	15.5%	144	25.4%	2,469
Other	7.20%	632	1.7%	16	6.7%	647
Total	100%	8,771	100.0%	932	100.0%	9,703

Source: FH 28 Bed CON Application, Pg 144

FH - Hoke County Resident - FH Exclusions Payer Mix

Payer	Admissions	Percent	Days	Percent	FH App pg
Blue Cross / Blue Shield	180	12.3%	735	11.6%	144
CHAMPUS	21	1.4%	73	1.2%	
Commercial Insurance	38	2.6%	132	2.1%	
Health Maintenance Organization	0	0%	0	0%	
Health maintenance Organization (HMO) Me	156	10.7%	703	11.1%	
Liability Medical	3	0.2%	14	0.2%	
Medicaid	156	10.7%	696	11.0%	10.44%
Medicare	717	49.1%	3,362	53.0%	52.8%
Other Non-Federal Program	64	4.4%	244	3.8%	
Preferred Provider Organization (PPO)	20	1.4%	58	0.9%	
Self Pay	91	6.2%	263	4.1%	4.64%
Veteran Administration Plan	11	0.8%	52	0.8%	
Worker's Compensation Health Claim	2	0.1%	6	0.1%	
Total	1,459	100%	6,338	100%	

Source: Thomson data

CFV, Scotland, SERMC - Hoke County Resident - FH Exclusions Payer Mix

Payer	Admissions	Percent	Days	Percent
Blue Cross / Blue Shield	100	10.4%	485	10.0%
CHAMPUS	91	9.5%	269	5.5%
Commercial Insurance	18	1.9%	80	1.6%
Health Maintenance Organization	35	3.6%	118	2.4%
Health maintenance Organization (HMO) Me	1	0.1%	4	0.1%
Liability	6	0.6%	21	0.4%
Medicaid	203	21.1%	819	16.9%
Medicare	417	43.3%	2,754	56.7%
Mutually Defined Unknown	2	0.2%	2	0.0%
Other Non-Federal Program	1	0.1%	2	0.0%
Self Pay	83	8.6%	278	5.7%
Veteran Administration Plan	0	0%	0	0%
Worker's Compensation Health Claim	5	0.5%	22	0.5%
Total	962	100.0%	4,854	100.0%

Source: Thomson data

FH Payer Mix Raw Data Below							CFV, Scotland, SERMC Payer Mix Raw Data Below							
Payer	Admissions	Days	Adm/Payer	Percent	Days/Payer	Percent	Provider	Payer	Admissions	Days	Adm/Payer	Percent	Days/Payer	Percent
Medicare Part A	2	8												
Medicare Part A	2	30												
Medicare Part A	3	13												
Medicare Part A	3	19												
Medicare Part A	1	7												
Medicare Part A	2	6												
Medicare Part A	1	4												
Medicare Part A	1	10												
Medicare Part A	1	8												
Medicare Part A	1	1												
Medicare Part A	1	7												
Medicare Part A	1	1												
Medicare Part A	6	30												
Medicare Part A	2	15												
Medicare Part A	1	1	717	49.1%	3,362	53.0%								
Other Non-Federal Program	1	5												
Other Non-Federal Program	1	3												
Other Non-Federal Program	3	6												
Other Non-Federal Program	1	2												
Other Non-Federal Program	2	4												
Other Non-Federal Program	5	7												
Other Non-Federal Program	3	15												
Other Non-Federal Program	2	11												
Other Non-Federal Program	1	3												
Other Non-Federal Program	2	5												
Other Non-Federal Program	2	6												
Other Non-Federal Program	2	7												
Other Non-Federal Program	2	6												
Other Non-Federal Program	2	10												
Other Non-Federal Program	2	7												
Other Non-Federal Program	1	8												
Other Non-Federal Program	1	8												
Other Non-Federal Program	2	16												
Other Non-Federal Program	3	10												
Other Non-Federal Program	1	5												
Other Non-Federal Program	1	1												
Other Non-Federal Program	1	3												
Other Non-Federal Program	1	3												
Other Non-Federal Program	1	1												
Other Non-Federal Program	1	3												
Other Non-Federal Program	1	6												
Other Non-Federal Program	1	6												
Other Non-Federal Program	2	13												
Other Non-Federal Program	2	5												
Other Non-Federal Program	1	3												
Other Non-Federal Program	1	2												
Other Non-Federal Program	1	1												
Other Non-Federal Program	2	4												
Other Non-Federal Program	1	6												
Other Non-Federal Program	1	3												
Other Non-Federal Program	1	9												
Other Non-Federal Program	1	14												
Other Non-Federal Program	1	8												
Other Non-Federal Program	2	8												
Other Non-Federal Program	1	3												
Other Non-Federal Program	2	6	64	4.4%	244	3.8%								
Other Non-Federal Program	2	6												
Preferred Provider Organization (PPO)	2	4												
Preferred Provider Organization (PPO)	1	1												
Preferred Provider Organization (PPO)	1	1												
Preferred Provider Organization (PPO)	1	3												
Preferred Provider Organization (PPO)	1	1												
Preferred Provider Organization (PPO)	1	3												
Preferred Provider Organization (PPO)	1	2												
Preferred Provider Organization (PPO)	1	6												
Preferred Provider Organization (PPO)	1	7												
Preferred Provider Organization (PPO)	1	4												
Preferred Provider Organization (PPO)	1	1												
Preferred Provider Organization (PPO)	1	3												
Preferred Provider Organization (PPO)	1	7												
Preferred Provider Organization (PPO)	1	3												
Preferred Provider Organization (PPO)	1	5												

ATTACHMENT 9

Table 1. Hoke County Acute Care Inpatient Utilization

Hoke County FY	Inpatient Cases					2009-2011 Avg	
	2007	2008	2009	2010	2011	2010	2011
Inpatient Cases	2,874	3,183	3,280	3,331	3,699	3,699	3,699
Population	42,918	44,588	45,973	47,606	49,065	49,065	49,065
Use Rate per 1,000	66.96	71.39	71.35	69.97	75.39	72.24	72.24
Annual % Change		6.6%	-0.1%	-1.9%	7.7%		
Hoke County FY	Inpatient Days					2009-2011 Avg	
	2007	2008	2009	2010	2011	2010	2011
Inpatient Days	14,032	14,423	14,764	14,995	17,793	17,793	17,793
Population	42,918	44,588	45,973	47,606	49,065	49,065	49,065
Use Rate per 1,000	326.95	323.47	321.15	314.98	362.64	332.92	332.92
Annual % Change		-1.1%	-0.7%	-1.9%	15.1%		
Hoke County FY	Inpatient Days/Inpatient Cases					2009-2011 Avg	
	2007	2008	2009	2010	2011	2010	2011
ALOS	4.88	4.53	4.50	4.50	4.81	4.60	4.60
Annual % Change		-7.2%	-0.7%	0.0%	6.9%		

Source: Thomson data; NCOSBM website accessed 6.22.12
Acute Care Only: Excludes LTACH, Rehab, Psych, and Normal Newborn as defined in Attachment 5

Table 3. Hoke County Acute Care Bed Need - Acuity Adjusted

Data Year	2012	2013	2014	2015	2016	2017
Population	50,347	51,629	52,908	54,190	55,471	56,754
3 Yr Avg Use Rate	72.24	72.24	72.24	72.24	72.24	72.24
Estimated Inpatient Cases	3,637	3,729	3,822	3,914	4,007	4,100
3 Yr Avg ALOS	4.60	4.60	4.60	4.60	4.60	4.60
Estimated Inpatient Days	16,745	17,172	17,597	18,023	18,450	18,876
ADC	46	47	48	49	51	52
Planning Target Occupancy Rate	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%
Acute Care Beds Needed	68.6	70.5	72.3	74.0	75.8	77.5
Acuity Adjustment*	65%	65%	65%	65%	65%	65%
Acuity Adjusted Inpatient Days	10,884	11,162	11,438	11,715	11,992	12,270
ADC	30	31	31	32	33	34
Planning Target Occupancy Rate	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%
Acuity Adjusted Acute Care Beds N	44.6	45.8	47.0	48.1	49.3	50.4

Source: Tables 1, 2; NCOSBM website accessed on 6.22.12
Planning target occupancy rate for acute care hospitals with 1-99 ADC
* Acuity adjustment of 65% from Table 2

Table 2. Hoke County Acuity Adjusted Acute Care Inpatient Utilization

Hoke 2011 Utilization	Percent of Total	
	All Providers	Total
Cases (Excludes NB, Rehab, Psy)	3,699	
Patient Days (Excludes NB, Rehab, Psy)	17,793	
ALOS	4.8	
Adjusted Acuity < 2.0		
Cases (Excludes NB, Rehab, Psy, DRG >2.0)	3,113	84.2%
Patient Days (Excludes NB, Rehab, Psy, DRG >2.0)	12,744	71.6%
ALOS	4.1	
Shift of Acuity Adjusted Days	90%	
Days Shifted	11,470	
Percent of Total		64.5%

Source: Thomson Data

Table 4. Acute Care Data - Thomson Data without Normal Newborn, Psychiatry, Rehabilitation, Chemical Dependency

FY 2011	Cumberland		Hoke		Robeson		Scotland		Combined	
	Patients	Days	Patients	Days	Patients	Days	Patients	Days	Patients	Days
Volume	27,872	163,628	3,742	19,085	19,988	95,167	5,071	22,927	56,673	300,807
Adjusted to remove LTAC admissions and days and Psy admissions and days	27,462	149,818	3,699	17,793	19,554	91,158	4,979	21,186	55,694	279,955
Volume Overstated	410	13,810	43	1,292	434	4,009	92	1,741	979	20,852
Percent Overstated	1.5%	8.4%	1.1%	6.8%	2.2%	4.2%	1.8%	7.6%	1.7%	6.9%

Source: Pages 81, 94, 470-475 (Attachment 3)

Note: FH did not provide any detail regarding what DRGs were deleted for Normal Newborn, Psychiatry, Rehabilitation, Chemical Dependency Volumes on pages 470-475 included LTCH hospitals and Psy hospitals, removed above

Table 5. Cases and Days from Richmond County at FH Richmond and Total Patient Days at FH Richmond

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Patients	Total Days
916	21	MED	ALLERGIC REACTIONS W/O MCC	0.4867	1	1
311	05	MED	ANGINA PECTORIS	0.5070	6	9
761	13	MED	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS W/O CC/MCC	0.5219	2	3
313	05	MED	CHEST PAIN	0.5499	71	130
639	10	MED	DIABETES W/O CC/MCC	0.5544	33	82
310	05	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC/MCC	0.5709	22	58
303	05	MED	ATHEROSCLEROSIS W/O MCC	0.5830	17	33
159	03	MED	DENTAL & ORAL DISEASES W/O CC/MCC	0.5897	3	9
203	04	MED	BRONCHITIS & ASTHMA W/O CC/MCC	0.6081	89	224
305	05	MED	HYPERTENSION W/O MCC	0.6138	12	27
921	21	MED	COMPLICATIONS OF TREATMENT W/O CC/MCC	0.6216	1	1
156	03	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES W/O CC/MCC	0.6226	3	6
918	21	MED	POISONING & TOXIC EFFECTS OF DRUGS W/O MCC	0.6269	11	16
153	03	MED	OTITIS MEDIA & URI W/O MCC	0.6290	38	96
390	06	MED	G.I. OBSTRUCTION W/O CC/MCC	0.6369	12	39
149	03	MED	DYSEQUILIBRIUM	0.6389	3	7
151	03	MED	EPISTAXIS W/O MCC	0.6393	2	5
730	12	MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES W/O CC/MCC	0.6414	1	1
556	08	MED	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE W/O MCC	0.6568	4	5
684	11	MED	RENAL FAILURE W/O CC/MCC	0.6587	8	20
696	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS W/O MCC	0.6590	1	3
951	23	MED	OTHER FACTORS INFLUENCING HEALTH STATUS	0.6593	9	36
301	05	MED	PERIPHERAL VASCULAR DISORDERS W/O CC/MCC	0.6615	4	16
103	01	MED	HEADACHES W/O MCC	0.6701	1	6
204	04	MED	RESPIRATORY SIGNS & SYMPTOMS	0.6714	5	9
395	06	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES W/O CC/MCC	0.6749	4	11
700	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES W/O CC/MCC	0.6757	2	4
554	08	MED	BONE DISEASES & ARTHROPATHIES W/O MCC	0.6812	5	11
816	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC/MCC	0.6818	1	5
093	01	MED	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC/MCC	0.6827	2	5
293	05	MED	HEART FAILURE & SHOCK W/O CC/MCC	0.6853	38	130
607	09	MED	MINOR SKIN DISORDERS W/O MCC	0.6857	2	7
125	02	MED	OTHER DISORDERS OF THE EYE W/O MCC	0.6859	2	4
948	23	MED	SIGNS & SYMPTOMS W/O MCC	0.6865	18	37
440	07	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY W/O CC/MCC	0.6890	15	46
641	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS W/O MCC	0.6916	47	134
195	04	MED	SIMPLE PNEUMONIA & PLEURISY W/O CC/MCC	0.7096	41	145
694	11	MED	URINARY STONES W/O ESW LITHOTRIPSY W/O MCC	0.7096	10	18
379	06	MED	G.I. HEMORRHAGE W/O CC/MCC	0.7146	9	18
312	05	MED	SYNCOPE & COLAPSE	0.7172	42	114
392	06	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W/O MCC	0.7173	96	235
605	09	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST W/O MCC	0.7182	3	8
536	08	MED	FRACTURES OF HIP & PELVIS W/O MCC	0.7191	3	12
645	10	MED	ENDOCRINE DISORDERS W/O CC/MCC	0.7198	4	10
869	18	MED	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES W/O CC/MCC	0.7207	1	3
201	04	MED	PNEUMOTHORAX W/O CC/MCC	0.7210	2	8
192	04	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE W/O CC/MCC	0.7220	74	193
069	01	MED	TRANSIENT ISCHEMIA	0.7311	20	37
759	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM W/O CC/MCC	0.7368	3	5
446	07	MED	DISORDERS OF THE BILIARY TRACT W/O CC/MCC	0.7411	2	2
866	18	MED	VIRAL ILLNESS W/O MCC	0.7462	19	45
206	04	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O MCC	0.7575	5	12

Table 5. Cases and Days from Richmond County at FH Richmond and Total Patient Days at FH Richmond

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Patients	Total Days
728	12	MED	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM W/O MCC	0.7612	4	11
101	01	MED	SEIZURES W/O MCC	0.7619	8	19
544	08	MED	PATHOLOGICAL FRACTURES & MUSCULOSKELET & CONN TISS MALIG W/O CC/MCC	0.7775	1	3
387	06	MED	INFLAMMATORY BOWEL DISEASE W/O CC/MCC	0.7813	1	2
690	11	MED	KIDNEY & URINARY TRACT INFECTIONS W/O MCC	0.7864	37	119
087	01	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR W/O CC/MCC	0.7929	1	1
812	16	MED	RED BLOOD CELL DISORDERS W/O MCC	0.7957	28	87
282	05	MED	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W/O CC/MCC	0.8064	11	37
182	04	MED	RESPIRATORY NEOPLASMS W/O CC/MCC	0.8096	1	1
066	01	MED	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W/O CC/MCC	0.8198	13	38
198	04	MED	INTERSTITIAL LUNG DISEASE W/O CC/MCC	0.8203	1	3
552	08	MED	MEDICAL BACK PROBLEMS W/O MCC	0.8204	4	14
864	18	MED	FEVER	0.8276	13	33
638	10	MED	DIABETES W CC	0.8306	26	92
384	06	MED	UNCOMPLICATED PEPTIC ULCER W/O MCC	0.8326	4	11
603	09	MED	CELLULITIS W/O MCC	0.8377	99	264
309	05	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	0.8387	17	75
760	13	MED	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS W CC/MCC	0.8388	1	1
202	04	MED	BRONCHITIS & ASTHMA W CC/MCC	0.8424	38	121
373	06	MED	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS W/O CC/MCC	0.8599	3	6
074	01	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W/O MCC	0.8606	8	20
541	08	MED	OSTEOMYELITIS W/O CC/MCC	0.8713	1	2
088	01	MED	NONSPECIFIC CVA & CEREBRAL OCCLUSION W/O INFARCT W/O MCC	0.8751	1	1
596	09	MED	MAJOR SKIN DISORDERS W/O MCC	0.8779	3	8
558	08	MED	TENDONITIS, MYOSITIS & BURSTITIS W/O MCC	0.8823	6	30
284	05	MED	ACUTE MYOCARDIAL INFARCTION, EXPIRED W CC	0.8888	1	4
976	25	MED	HIV W MAJOR RELATED CONDITION W/O CC/MCC	0.8975	1	14
155	03	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES W CC	0.9017	2	6
158	03	MED	DENTAL & ORAL DISEASES W CC	0.9027	1	2
076	01	MED	VIRAL MENINGITIS W/O CC/MCC	0.9050	1	4
810	16	MED	MAJOR HEMATOL/IMMUN DIAG EXC SICKLE CELL CRISIS & COAGUL W/O CC/MCC	0.9230	1	4
389	06	MED	G.I. OBSTRUCTION W CC	0.9344	11	46
057	01	MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS W/O MCC	0.9350	5	14
092	01	MED	OTHER DISORDERS OF NERVOUS SYSTEM W CC	0.9404	2	7
433	07	MED	CIRRHOSIS & ALCOHOLIC HEPATITIS W CC	0.9548	5	28
152	03	MED	OTITIS MEDIA & URI W MCC	0.9584	3	8
600	09	MED	NON-MALIGNANT BREAST DISORDERS W CC/MCC	0.9602	1	1
315	05	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	0.9681	5	16
191	04	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE W CC	0.9735	43	142
300	05	MED	PERIPHERAL VASCULAR DISORDERS W CC	0.9776	7	26
920	21	MED	COMPLICATIONS OF TREATMENT W CC	0.9785	1	3
442	07	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRRH,ALC HEPA W CC	0.9857	4	11
179	04	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS W/O CC/MCC	0.9861	2	8
729	12	MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES W CC/MCC	0.9892	1	6
394	06	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES W CC	0.9939	6	19
699	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES W CC	0.9999	2	4
560	08	MED	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE W CC	1.0022	1	4
815	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W CC	1.0024	2	6
439	07	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY W CC	1.0089	8	36
194	04	MED	SIMPLE PNEUMONIA & PLEURISY W CC	1.0152	77	314
683	11	MED	RENAL FAILURE W CC	1.0243	24	81
200	04	MED	PNEUMOTHORAX W CC	1.0252	1	5

Table 5. Cases and Days from Richmond County at FH Richmond and Total Patient Days at FH Richmond

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Patients	Total Days
378	06	MED	G.I. HEMORRHAGE W CC	1.0274	31	93
292	05	MED	HEART FAILURE & SHOCK W CC	1.0302	57	221
386	06	MED	INFLAMMATORY BOWEL DISEASE W CC	1.0435	7	27
055	01	MED	NERVOUS SYSTEM NEOPLASMS W/O MCC	1.0649	2	4
644	10	MED	ENDOCRINE DISORDERS W CC	1.0655	1	1
445	07	MED	DISORDERS OF THE BILIARY TRACT W CC	1.0688	2	2
176	04	MED	PULMONARY EMBOLISM W/O MCC	1.0706	9	30
369	06	MED	MAJOR ESOPHAGEAL DISORDERS W CC	1.0772	3	9
287	05	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O MCC	1.0879	30	71
947	23	MED	SIGNS & SYMPTOMS W MCC	1.0952	4	22
758	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM W CC	1.0963	1	3
187	04	MED	PLEURAL EFFUSION W CC	1.1027	2	13
071	01	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	1.1054	1	6
197	04	MED	INTERSTITIAL LUNG DISEASE W CC	1.1176	3	9
381	06	MED	COMPLICATED PEPTIC ULCER W CC	1.1207	1	2
553	08	MED	BONE DISEASES & ARTHROPATHIES W MCC	1.1355	1	5
836	17	MED	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE W/O CC/MCC	1.1386	1	1
640	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS W MCC	1.1400	5	15
872	18	MED	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS W/O MCC	1.1545	18	79
391	06	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS W MCC	1.1550	8	20
543	08	MED	PATHOLOGICAL FRACTURES & MUSCULOSKELET & CONN TISS MALIG W CC	1.1597	1	4
065	01	MED	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W CC	1.1667	20	74
546	08	MED	CONNECTIVE TISSUE DISORDERS W CC	1.1712	2	7
281	05	MED	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W CC	1.1912	15	44
190	04	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE W MCC	1.1924	37	165
844	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC	1.1940	1	4
086	01	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR W CC	1.2051	1	1
099	01	MED	NON-BACTERIAL INFECT OF NERVOUS SYS EXC VIRAL MENINGITIS W/O CC/MCC	1.2084	1	5
181	04	MED	RESPIRATORY NEOPLASMS W CC	1.2182	3	6
689	11	MED	KIDNEY & URINARY TRACT INFECTIONS W MCC	1.2185	3	19
436	07	MED	MALIGNANCY OF HEPATOBILIARY SYSTEM OR PANCREAS W CC	1.2215	1	3
308	05	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W MCC	1.2339	19	106
811	16	MED	RED BLOOD CELL DISORDERS W MCC	1.2544	5	29
375	06	MED	DIGESTIVE MALIGNANCY W CC	1.2801	2	5
189	04	MED	PULMONARY EDEMA & RESPIRATORY FAILURE	1.2809	25	132
935	22	MED	NON-EXTENSIVE BURNS	1.2919	3	4
372	06	MED	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS W CC	1.2935	6	19
562	08	MED	FX, SPRN, STRN & DISL EXCEPT FEMUR, HIP, PELVIS & THIGH W MCC	1.3944	1	10
154	03	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES W MCC	1.3965	1	3
299	05	MED	PERIPHERAL VASCULAR DISORDERS W MCC	1.4072	1	2
813	16	MED	COAGULATION DISORDERS	1.4372	1	2
637	10	MED	DIABETES W MCC	1.4462	6	28
193	04	MED	SIMPLE PNEUMONIA & PLEURISY W MCC	1.4796	14	87
917	21	MED	POISONING & TOXIC EFFECTS OF DRUGS W MCC	1.4868	6	16
178	04	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS W CC	1.4887	3	20
291	05	MED	HEART FAILURE & SHOCK W MCC	1.4943	24	95
100	01	MED	SEIZURES W MCC	1.5107	3	9
444	07	MED	DISORDERS OF THE BILIARY TRACT W MCC	1.5586	4	12
557	08	MED	TENDONITIS, MYOSITIS & BURSITIS W MCC	1.6021	2	10
175	04	MED	PULMONARY EMBOLISM W MCC	1.6096	2	9
698	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES W MCC	1.6098	5	21
091	01	MED	OTHER DISORDERS OF NERVOUS SYSTEM W MCC	1.6318	1	1

Table 5. Cases and Days from Richmond County at FH Richmond and Total Patient Days at FH Richmond

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Patients	Total Days
682	11	MED	RENAL FAILURE W MCC	1.6407	6	21
388	06	MED	G.I. OBSTRUCTION W MCC	1.6457	2	4
393	06	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES W MCC	1.6593	1	1
056	01	MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS W MCC	1.6748	1	2
432	07	MED	CIRRHOSIS & ALCOHOLIC HEPATITIS W MCC	1.7001	4	20
283	05	MED	ACUTE MYOCARDIAL INFARCTION, EXPIRED W MCC	1.7151	2	6
377	06	MED	G.I. HEMORRHAGE W MCC	1.7541	4	17
368	06	MED	MAJOR ESOPHAGEAL DISORDERS W MCC	1.7578	1	1
314	05	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W MCC	1.8145	2	10
441	07	MED	DISORDERS OF LIVER EXCEPT MALIGN, CIRRH, ALC HEPA W MCC	1.8242	2	3
438	07	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY W MCC	1.8342	1	2
280	05	MED	ACUTE MYOCARDIAL INFARCTION, DISCHARGED ALIVE W MCC	1.8503	16	113
064	01	MED	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION W MCC	1.8674	3	8
871	18	MED	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS W MCC	1.9074	45	240
380	06	MED	COMPLICATED PEPTIC ULCER W MCC	1.9556	1	8
286	05	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W MCC	2.0014	5	27
177	04	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS W MCC	2.0667	2	15
374	06	MED	DIGESTIVE MALIGNANCY W MCC	2.0674	1	1
371	06	MED	MAJOR GASTROINTESTINAL DISORDERS & PERITONEAL INFECTIONS W MCC	2.0986	1	4
146	03	MED	EAR, NOSE, MOUTH & THROAT MALIGNANCY W MCC	2.1886	1	6
208	04	MED	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT <96 HOURS	2.2630	6	26
095	01	MED	BACTERIAL & TUBERCULOUS INFECTIONS OF NERVOUS SYSTEM W CC	2.3977	1	6
974	25	MED	HIV W MAJOR RELATED CONDITION W MCC	2.5849	3	24
207	04	MED	RESPIRATORY SYSTEM DIAGNOSIS W VENTILATOR SUPPORT 96+ HOURS	5.2068	1	13
670	11	SURG	TRANSURETHRAL PROCEDURES W/O CC/MCC	0.7770	1	1
627	10	SURG	THYROID, PARATHYROID & THYROIDAL PROCEDURES W/O CC/MCC	0.7821	1	1
349	06	SURG	ANAL & STOMAL PROCEDURES W/O CC/MCC	0.7981	3	8
583	09	SURG	MASTECTOMY FOR MALIGNANCY W/O CC/MCC	0.8454	1	1
134	03	SURG	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES W/O CC/MCC	0.8514	2	5
352	06	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES W/O CC/MCC	0.8628	1	1
747	13	SURG	VAGINA, CERVIX & VULVA PROCEDURES W/O CC/MCC	0.8852	1	5
743	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC/MCC	0.9079	10	21
748	13	SURG	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	0.9169	1	1
343	06	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC/MCC	0.9568	16	28
355	06	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL W/O CC/MCC	1.0329	5	5
512	08	SURG	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC W/O CC/MCC	1.0461	5	9
989	09	SURG	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS W/O CC/MCC	1.0589	1	2
575	09	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W/O CC/MCC	1.0899	2	5
741	13	SURG	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIGN W/O CC/MCC	1.0979	1	2
419	07	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC/MCC	1.1698	16	50
340	06	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC/MCC	1.2393	5	27
708	12	SURG	MAJOR MALE PELVIC PROCEDURES W/O CC/MCC	1.2581	1	3
669	11	SURG	TRANSURETHRAL PROCEDURES W CC	1.2597	3	6
858	18	SURG	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W O.R. PROC W/O CC/MCC	1.3050	2	10
494	08	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR W/O CC/MCC	1.3140	2	7
342	06	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	1.3246	4	12
746	13	SURG	VAGINA, CERVIX & VULVA PROCEDURES W CC/MCC	1.3373	2	7
742	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W CC/MCC	1.3883	2	5
630	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC/MCC	1.4164	1	3
511	08	SURG	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC W CC	1.4690	1	5
487	08	SURG	KNEE PROCEDURES W PDX OF INFECTION W/O CC/MCC	1.4724	1	3
337	06	SURG	PERITONEAL ADHESIOLYSIS W/O CC/MCC	1.4789	2	7

Table 5. Cases and Days from Richmond County at FH Richmond and Total Patient Days at FH Richmond

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Patients	Total Days
482	08	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT W/O CC/MCC	1.5372	4	18
354	06	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL W CC	1.5523	4	17
504	08	SURG	FOOT PROCEDURES W CC	1.5685	2	5
501	08	SURG	SOFT TISSUE PROCEDURES W CC	1.5846	1	3
256	05	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC-SYSTEM DISORDERS W CC	1.5969	2	19
666	11	SURG	PROSTATECTOMY W CC	1.6440	1	17
418	07	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC	1.6996	9	46
133	03	SURG	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES W CC/MCC	1.7000	1	3
983	10	SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W/O CC/MCC	1.7767	1	1
623	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS W CC	1.8558	10	48
339	06	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	1.8659	3	14
988	08	SURG	NON-EXTENSIVE O.R. PROC UNRELATED TO PRINCIPAL DIAGNOSIS W CC	1.8739	1	7
481	08	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT W CC	1.8886	11	51
660	11	SURG	KIDNEY & URETER PROCEDURES FOR NON-NEOPLASM W CC	1.9030	2	9
484	08	SURG	MAJOR JOINT & LIMB REATTACHMENT PROC OF UPPER EXTREMITY W/O CC/MCC	1.9554	1	2
475	08	SURG	AMPUTATION FOR MUSCULOSKELETAL SYS & CONN TISSUE DIS W CC	1.9594	1	9
657	11	SURG	KIDNEY & URETER PROCEDURES FOR NEOPLASM W CC	2.0004	1	3
617	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DIS W CC	2.0006	1	6
470	08	SURG	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W/O MCC	2.1039	25	81
341	06	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W MCC	2.2643	1	4
629	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W CC	2.2650	1	3
336	06	SURG	PERITONEAL ADHESIOLYSIS W CC	2.3456	2	14
253	05	SURG	OTHER VASCULAR PROCEDURES W CC	2.4014	1	5
483	08	SURG	MAJOR JOINT & LIMB REATTACHMENT PROC OF UPPER EXTREMITY W CC/MCC	2.4019	1	1
417	07	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W MCC	2.5029	4	22
255	05	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC-SYSTEM DISORDERS W MCC	2.5043	1	10
468	08	SURG	REVISION OF HIP OR KNEE REPLACEMENT W/O CC/MCC	2.5728	1	3
330	06	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC	2.5830	3	21
327	06	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROC W CC	2.7231	1	7
854	18	SURG	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W CC	2.7883	5	43
982	09	SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS W CC	2.9402	1	4
579	09	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W MCC	2.9576	1	8
252	05	SURG	OTHER VASCULAR PROCEDURES W MCC	2.9754	1	26
467	08	SURG	REVISION OF HIP OR KNEE REPLACEMENT W CC	3.2321	1	5
573	09	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W MCC	3.2461	1	7
462	08	SURG	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY W/O MCC	3.3425	4	8
622	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DIS W MCC	3.4166	1	4
469	08	SURG	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY W MCC	3.4724	1	4
576	09	SURG	SKIN GRAFT &/OR DEBRID EXC FOR SKIN ULCER OR CELLULITIS W MCC	3.9248	1	10
616	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DIS W MCC	4.4934	1	5
856	18	SURG	POSTOPERATIVE OR POST-TRAUMATIC INFECTIONS W O.R. PROC W MCC	5.1296	1	2
329	06	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W MCC	5.2807	2	27
853	18	SURG	INFECTIOUS & PARASITIC DISEASES W O.R. PROCEDURE W MCC	5.5237	2	30
326	06	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROC W MCC	5.8142	1	35
SubTotal DRGs not excluded in FH Hoke					2,109	6,989
ALOS						3.31
Volume with Acuity > 2.0					88	520
ALOS						5.91
Volume with Acuity < 2.0					2,021	6,469
ALOS						3.20
Percent with Acuity > 2.0					4.2%	7.4%
Percent with Acuity < 2.0					95.8%	92.6%

Table 5. Cases and Days from Richmond County at FH Richmond and Total Patient Days at FH Richmond

MS-DRG	MDC	TYPE	MS-DRG Title	Weights	Patients	Total Days
Total Medical						
			Volume with Acuity > 2.0		1,895	6,082
			Volume with Acuity < 2.0		21	122
			Percent with Acuity > 2.0		1,874	5,960
			Percent with Acuity < 2.0		1.1%	2.0%
			Total Surgical		98.9%	98.0%
			Volume with Acuity > 2.0		214	907
			Volume with Acuity < 2.0		67	398
			Percent with Acuity > 2.0		147	509
			Percent with Acuity < 2.0		68.7%	56.1%
					68.7%	56.1%
Exclusions at FH Hoke						
782	14	MED	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	0.4744	2	5
778	14	MED	THREATENED ABORTION	0.4942	5	6
775	14	MED	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	0.5256	168	367
779	14	MED	ABORTION W/O D&C	0.5311	1	1
776	14	MED	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE	0.6513	5	13
781	14	MED	OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS	0.6809	12	17
774	14	MED	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	0.6848	23	56
770	14	SURG	ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	0.7017	2	3
766	14	SURG	CESAREAN SECTION W/O CC/MCC	0.7995	101	246
767	14	SURG	VAGINAL DELIVERY W STERILIZATION &/OR D&C	0.9111	15	37
965	24	MED	OTHER MULTIPLE SIGNIFICANT TRAUMA W/O CC/MCC	0.9386	1	3
262	05	SURG	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT W/O CC/MCC	1.1246	1	4
765	14	SURG	CESAREAN SECTION W CC/MCC	1.1269	25	62
794	15	MED	NEONATES W OTHER SIGNIFICANT PROBLEMS	1.2181	55	140
789	15	MED	NEONATES; DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	1.4877	17	20
792	15	MED	PREMATURITY W/O MAJOR PROBLEMS	2.0216	8	19
244	05	SURG	PERMANENT CARDIAC PACEMAKER IMPLANT W/O CC/MCC	2.0398	2	8
769	14	SURG	POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE	2.0631	2	3
264	05	SURG	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	2.5305	1	11
243	05	SURG	PERMANENT CARDIAC PACEMAKER IMPLANT W CC	2.6508	2	10
956	24	SURG	LIMB REATTACHMENT, HIP & FEMUR PROC FOR MULTIPLE SIGNIFICANT TRAUMA	3.3704	2	7
793	15	MED	FULL TERM NEONATE W MAJOR PROBLEMS	3.4417	15	37
242	05	SURG	PERMANENT CARDIAC PACEMAKER IMPLANT W MCC	3.7277	3	19
040	01	SURG	PERIPH/CRANIAL NERVE & OTHER NERV SYST PROC W MCC	3.9353	1	7
			Subtotal Volume Excluded at FH Hoke		469	1,101
			ALOS			2.35
			Total - Thomson FH Richmond PO Richmond Cty		2,362	8,090
			Thomson FH Richmond Total PD 2013 Proposed SWIFF			8,847
			Richmond % PO Patient Days			91.4%
			Percent Excluded		19.9%	13.6%

Table 6. Revised Hoke County Bed Need page 81

Year	Population	Growth Rate	Acute Admissions	Community Admissions	Acute ALOS	Community ALOS	Acute Days	Community Days
2011	49,065		3,699	2,760	4.8	4.6	17,793	12,797
2012	50,347	2.6%	3,796	2,832	4.8	4.6	18,258	13,131
2013	51,629	2.5%	3,892	2,904	4.8	4.6	18,723	13,466
2014	52,908	2.5%	3,989	2,976	4.8	4.6	19,187	13,799
2015	54,190	2.4%	4,085	3,048	4.8	4.6	19,652	14,134
2016	55,471	2.4%	4,182	3,120	4.8	4.6	20,116	14,468
2017	56,754	2.3%	4,279	3,193	4.8	4.6	20,581	14,802
							ADC	40.6
						Adjusted for Acuity < 2.0 = 80%		32.4
						Plus 10% In-migration		36
						Total Bed Need		54

Source: Table 1; Page 81; Attachment 3, pages 472 and 478; Attachment 4

Table 7. Population Data

Rank	County	Ranked by 65+ Actual Increase in Population												
		2010					2020							
		45-65 Population	65+ Population	Total	Percent 65+	Percent Increase in 65+	45-65 Population	65+ Population	Total	Percent 65+	Percent Increase in 65+			
1	Wake	221,798	77,799	906,788	8.6%	289,822	134,232	1,099,385	12.2%	124,457	56,433	72.5%	192,597	21.2%
2	Mecklenburg	218,461	82,132	923,144	8.9%	271,988	129,640	1,095,857	11.8%	53,527	47,508	57.8%	172,713	18.7%
3	Gulford	125,870	60,724	489,671	12.4%	136,555	84,850	547,184	15.5%	10,685	24,126	39.7%	57,513	11.7%
4	Buncombe	67,446	38,365	238,870	16.1%	72,462	55,531	277,265	20.0%	5,016	17,166	44.7%	38,395	16.1%
5	Forsyth	92,757	45,877	351,378	13.1%	95,786	61,904	381,660	16.2%	3,029	16,027	34.9%	30,282	8.6%
6	Brunswick	34,018	23,462	108,071	21.7%	32,759	38,869	128,763	30.2%	-1,259	15,407	65.7%	20,692	19.1%
7	New Hanover	52,561	28,387	203,254	14.0%	58,004	41,911	237,864	17.6%	5,443	13,524	47.6%	34,610	17.0%
8	Durham	62,524	26,417	268,412	9.8%	70,513	39,933	305,001	13.1%	7,989	13,476	51.0%	36,589	13.6%
9	Cumberland	74,543	31,258	327,348	9.5%	73,461	43,097	340,797	12.6%	-1,082	11,839	37.9%	13,449	4.1%
10	Union	51,255	19,718	202,200	9.8%	66,518	31,120	236,778	13.1%	15,263	29.8%	11,402	34,578	17.1%
11	Johnston	43,185	17,504	169,669	10.3%	53,764	27,327	198,644	13.9%	10,579	24.5%	10,023	28,975	17.1%
12	Orange	34,328	13,059	134,201	9.7%	37,739	22,176	153,625	14.4%	3,411	9,917	69.8%	19,424	14.5%
13	Henderson	30,065	24,016	106,966	22.5%	32,559	32,961	124,163	26.5%	2,494	8,945	37.2%	17,197	16.1%
14	Gaston	56,842	27,466	206,186	13.3%	60,935	36,332	220,302	16.5%	4,093	7,272	32.2%	14,116	6.8%
15	Pitt	38,289	16,813	168,752	10.0%	41,283	25,150	188,239	13.4%	2,994	8,337	49.6%	19,487	11.5%
16	Cabarrus	45,149	20,240	178,564	11.3%	55,686	28,556	205,369	13.9%	1,998	8,856	33.5%	12,085	18.9%
17	Iredell	44,247	20,592	159,766	12.9%	50,264	28,729	177,334	16.2%	6,017	8,137	39.5%	17,568	11.0%
18	Davidson	46,492	23,520	162,874	14.4%	48,490	31,409	172,220	18.2%	1,949	7,753	65.6%	9,992	7.0%
19	Chatham	19,014	11,811	63,806	18.5%	20,673	19,564	75,891	25.8%	1,749	7,155	35.6%	6,505	4.2%
20	Randolph	39,287	20,087	141,909	14.2%	41,646	27,242	151,901	17.9%	2,359	6,017	32.6%	9,992	7.0%
21	Catawba	43,203	21,899	154,354	14.2%	44,316	29,047	160,859	18.1%	1,113	7,148	37.6%	6,505	4.2%
22	Harnett	26,838	12,126	115,792	10.5%	33,108	18,750	144,503	13.0%	6,270	6,624	54.6%	28,711	24.8%
23	Onslow	32,657	14,060	186,866	7.5%	35,666	20,226	217,780	9.3%	3,009	6,166	43.9%	30,914	16.5%
24	Carteret	21,404	12,783	66,711	19.2%	22,149	18,881	76,417	24.7%	745	6,098	47.7%	9,706	14.5%
25	Alamance	40,009	22,246	151,533	14.7%	42,141	28,147	161,234	17.5%	2,132	5,901	26.5%	9,701	6.4%
26	Moore	24,170	20,135	88,550	22.7%	24,367	25,484	97,334	26.2%	197	5,349	26.6%	8,784	9.9%
27	Wayne	32,242	16,208	122,815	13.2%	31,951	21,508	131,031	16.4%	-291	5,300	32.7%	8,216	6.7%
28	Franklin	17,365	7,788	60,836	12.8%	20,381	12,939	72,701	17.8%	3,016	5,151	66.1%	11,865	19.5%
29	Lincoln	23,240	10,453	78,396	13.3%	25,013	18,424	84,052	18.3%	1,773	4,896	46.8%	5,628	7.2%
30	Nash	27,840	13,498	95,878	14.1%	26,587	18,180	99,557	18.3%	-1,253	4,682	34.7%	3,679	3.8%
31	Rowan	37,996	20,039	138,359	14.5%	36,363	24,644	137,985	17.9%	-1,633	4,605	23.0%	-374	-0.3%
32	Wilson	22,345	11,631	81,373	14.3%	22,399	16,022	88,118	18.2%	54	0.2%	4,391	6,745	8.3%
33	Rutherford	19,768	11,764	67,750	17.4%	20,138	15,981	72,693	22.0%	370	4,217	35.8%	4,943	7.3%
34	Haywood	17,647	12,480	58,971	21.2%	18,081	16,637	64,255	25.9%	434	4,157	33.3%	5,284	9.0%
35	Duplin	15,537	8,410	58,728	14.3%	16,893	12,447	66,810	18.6%	1,356	4,037	48.0%	8,082	13.8%
36	Cleveland	27,914	14,749	98,020	15.0%	26,694	18,725	99,325	18.9%	-1,220	3,976	27.0%	1,305	1.3%
37	Caldwell	24,142	12,888	83,006	15.5%	24,105	16,830	83,935	20.1%	-37	3,942	30.6%	929	1.1%
38	Pender	15,451	7,994	52,452	15.2%	16,754	11,935	60,846	19.6%	1,303	3,941	49.3%	8,394	16.0%
39	Wilkes	20,449	11,835	69,301	17.1%	20,113	15,678	72,022	21.8%	-336	3,843	32.5%	2,721	3.9%
40	Granville	17,620	7,578	60,513	12.5%	17,344	65,586	17,344	17.3%	2,138	3,766	49.7%	5,073	8.4%
41	Burke	25,951	14,708	90,752	16.2%	24,877	18,442	90,874	20.3%	-1,074	3,734	25.4%	122	0.1%
42	Craven	26,088	16,035	104,170	15.4%	24,283	19,704	112,594	17.5%	-1,805	3,669	22.9%	8,424	8.1%
43	Rockingham	27,961	15,263	93,626	16.3%	26,252	18,917	92,945	20.4%	-1,709	3,654	23.9%	-681	-0.7%
44	Robeson	33,707	15,291	134,489	11.4%	33,163	18,626	136,237	13.7%	-2,544	-1.8%	3,335	1,748	1.3%
45	Macon	10,091	8,120	33,928	23.9%	9,905	11,375	39,236	29.0%	-186	3,255	40.1%	5,308	15.6%
46	Stanly	16,990	9,549	60,588	15.8%	17,666	12,764	64,429	19.8%	676	4,015	33.7%	3,841	6.3%
47	Beaufort	14,359	8,865	47,783	18.6%	13,065	12,042	50,152	24.0%	-1,294	3,177	35.8%	2,369	5.0%
48	Watauga	11,468	6,380	51,034	12.5%	10,999	9,530	58,889	16.2%	-469	3,150	49.4%	7,855	15.4%
49	Dare	11,164	5,226	34,015	15.4%	10,200	8,227	36,023	22.8%	-964	3,001	57.4%	2,008	5.9%
50	Jackson	10,242	6,135	40,330	15.2%	10,233	8,995	46,608	19.3%	-9	2,861	46.6%	6,278	15.6%

Table 7. Population Data

Rank	County	Ranked by 65+ Actual Increase in Population										Ranked by 45+ Actual Increase in Population																	
		2010					2020					2010					2020												
		14,516	7,612	47,365	16.1%	14,469	10,365	48,896	21.2%	-47	-0.3%	2,753	36.2%	1,531	3.2%	14,516	7,612	47,365	16.1%	14,469	10,365	48,896	21.2%	-47	-0.3%	2,753	36.2%	1,531	3.2%
51	Stokes	13,010	7,445	45,053	16.5%	12,998	10,112	46,749	21.6%	-12	-0.1%	2,667	35.8%	1,696	3.8%	13,010	7,445	45,053	16.5%	12,998	10,112	46,749	21.6%	-12	-0.1%	2,667	35.8%	1,696	3.8%
52	McDowell	11,860	6,037	39,448	15.3%	12,372	8,680	44,061	19.7%	512	4.3%	2,643	43.8%	4,613	11.7%	11,860	6,037	39,448	15.3%	12,372	8,680	44,061	19.7%	512	4.3%	2,643	43.8%	4,613	11.7%
53	Person	12,344	6,891	41,333	16.7%	12,483	9,482	44,096	21.5%	139	1.1%	2,591	37.6%	2,763	6.7%	12,344	6,891	41,333	16.7%	12,483	9,482	44,096	21.5%	139	1.1%	2,591	37.6%	2,763	6.7%
54	Davie	10,297	3,557	47,606	7.5%	13,056	6,049	60,596	10.0%	2,759	26.8%	2,492	70.1%	12,990	27.3%	10,297	3,557	47,606	7.5%	13,056	6,049	60,596	10.0%	2,759	26.8%	2,492	70.1%	12,990	27.3%
55	Hoke	9,576	8,589	33,076	26.0%	8,670	11,073	35,303	31.4%	-906	-9.5%	2,484	28.9%	2,227	6.7%	9,576	8,589	33,076	26.0%	8,670	11,073	35,303	31.4%	-906	-9.5%	2,484	28.9%	2,227	6.7%
56	Transylvania	16,807	9,113	63,511	14.3%	16,692	11,508	65,830	17.5%	-115	-0.7%	2,395	26.3%	2,319	3.7%	16,807	9,113	63,511	14.3%	16,692	11,508	65,830	17.5%	-115	-0.7%	2,395	26.3%	2,319	3.7%
57	Sampson	10,745	5,675	37,240	15.2%	11,150	8,042	39,391	20.4%	405	3.8%	2,367	41.7%	2,151	5.8%	10,745	5,675	37,240	15.2%	11,150	8,042	39,391	20.4%	405	3.8%	2,367	41.7%	2,151	5.8%
58	Alexander	16,385	8,202	56,583	14.5%	14,161	10,520	54,497	19.3%	-2,224	-13.6%	2,318	28.3%	-2,086	-3.7%	16,385	8,202	56,583	14.5%	14,161	10,520	54,497	19.3%	-2,224	-13.6%	2,318	28.3%	-2,086	-3.7%
59	Edgemcombe	20,712	12,290	73,715	16.7%	15,188	10,223	61,968	16.5%	178	1.2%	2,245	28.1%	4,086	7.1%	20,712	12,290	73,715	16.7%	15,188	10,223	61,968	16.5%	178	1.2%	2,245	28.1%	4,086	7.1%
60	Surry	15,010	7,978	57,882	13.8%	15,188	10,223	61,968	16.5%	178	1.2%	2,245	28.1%	4,086	7.1%	15,010	7,978	57,882	13.8%	15,188	10,223	61,968	16.5%	178	1.2%	2,245	28.1%	4,086	7.1%
61	Lee	8,536	6,332	27,433	23.1%	7,274	8,401	27,788	30.2%	-1,262	-14.8%	2,069	32.7%	355	1.3%	8,536	6,332	27,433	23.1%	7,274	8,401	27,788	30.2%	-1,262	-14.8%	2,069	32.7%	355	1.3%
62	Cherokee	8,328	5,537	27,305	20.3%	8,133	7,504	29,361	25.6%	-195	-2.3%	1,967	35.5%	2,056	7.5%	8,328	5,537	27,305	20.3%	8,133	7,504	29,361	25.6%	-195	-2.3%	1,967	35.5%	2,056	7.5%
63	Ashe	16,282	8,869	57,971	15.3%	15,155	10,822	58,327	18.6%	-1,127	-6.9%	1,953	22.0%	356	0.6%	16,282	8,869	57,971	15.3%	15,155	10,822	58,327	18.6%	-1,127	-6.9%	1,953	22.0%	356	0.6%
64	Columbus	16,174	8,902	54,565	16.3%	14,128	10,845	52,806	20.5%	-2,046	-12.6%	1,943	21.8%	-1,759	-3.2%	16,174	8,902	54,565	16.3%	14,128	10,845	52,806	20.5%	-2,046	-12.6%	1,943	21.8%	-1,759	-3.2%
65	Halifax	17,356	9,581	59,400	16.1%	15,048	11,524	58,729	19.6%	-2,308	-13.3%	1,943	20.3%	-671	-1.1%	17,356	9,581	59,400	16.1%	15,048	11,524	58,729	19.6%	-2,308	-13.3%	1,943	20.3%	-671	-1.1%
66	Lenoir	12,327	6,491	45,375	14.3%	11,567	8,334	46,922	17.8%	-760	-6.2%	1,843	28.4%	1,547	3.4%	12,327	6,491	45,375	14.3%	11,567	8,334	46,922	17.8%	-760	-6.2%	1,843	28.4%	1,547	3.4%
67	Vance	10,458	5,554	35,205	15.8%	8,947	7,292	34,923	20.9%	-1,511	-14.4%	1,738	31.3%	-282	-0.8%	10,458	5,554	35,205	15.8%	8,947	7,292	34,923	20.9%	-1,511	-14.4%	1,738	31.3%	-282	-0.8%
68	Bladen	6,260	3,692	20,782	17.8%	6,619	5,427	23,157	23.4%	359	5.7%	1,735	47.0%	2,375	11.4%	6,260	3,692	20,782	17.8%	6,619	5,427	23,157	23.4%	359	5.7%	1,735	47.0%	2,375	11.4%
69	Madison	7,878	4,413	27,986	15.8%	7,634	6,136	29,687	20.7%	-244	-3.1%	1,735	39.0%	1,701	6.1%	7,878	4,413	27,986	15.8%	7,634	6,136	29,687	20.7%	-244	-3.1%	1,735	39.0%	1,701	6.1%
70	Montgomery	7,636	3,796	23,714	16.0%	6,952	5,331	23,743	22.5%	-684	-9.0%	1,535	40.4%	29	0.1%	7,636	3,796	23,714	16.0%	6,952	5,331	23,743	22.5%	-684	-9.0%	1,535	40.4%	29	0.1%
71	Caswell	10,927	6,270	38,397	16.3%	10,856	7,734	39,021	19.8%	-71	-0.6%	1,464	23.3%	624	1.6%	10,927	6,270	38,397	16.3%	10,856	7,734	39,021	19.8%	-71	-0.6%	1,464	23.3%	624	1.6%
72	Yadkin	12,707	6,742	46,634	14.5%	11,910	8,159	46,511	17.5%	-797	-6.3%	1,417	21.0%	-76	-0.3%	12,707	6,742	46,634	14.5%	11,910	8,159	46,511	17.5%	-797	-6.3%	1,417	21.0%	-76	-0.3%
73	Richmond	7,427	3,073	23,652	13.0%	7,125	4,455	23,576	18.9%	-302	-4.1%	1,382	45.0%	-76	-0.3%	7,427	3,073	23,652	13.0%	7,125	4,455	23,576	18.9%	-302	-4.1%	1,382	45.0%	-76	-0.3%
74	Currittuck	10,143	4,965	36,094	13.8%	8,761	6,257	31,527	19.8%	-1,382	-13.6%	1,292	26.0%	-4,567	-12.7%	10,143	4,965	36,094	13.8%	8,761	6,257	31,527	19.8%	-1,382	-13.6%	1,292	26.0%	-4,567	-12.7%
75	Scottland	10,602	5,552	40,643	13.7%	9,971	6,838	40,223	17.0%	-631	-6.0%	1,286	23.2%	-420	-1.0%	10,602	5,552	40,643	13.7%	9,971	6,838	40,223	17.0%	-631	-6.0%	1,286	23.2%	-420	-1.0%
76	Pasquotank	6,470	4,005	20,955	19.1%	5,315	5,184	20,517	29.8%	-1,155	-17.9%	1,119	22.4%	-172	-0.8%	6,470	4,005	20,955	19.1%	5,315	5,184	20,517	29.8%	-1,155	-17.9%	1,119	22.4%	-172	-0.8%
77	Warren	6,381	4,991	20,448	24.4%	5,630	6,110	20,517	29.8%	-751	-11.8%	1,119	22.4%	69	0.3%	6,381	4,991	20,448	24.4%	5,630	6,110	20,517	29.8%	-751	-11.8%	1,119	22.4%	69	0.3%
78	Polk	4,292	2,880	13,116	22.0%	3,534	3,960	13,445	29.5%	-758	-17.7%	1,080	37.5%	329	2.5%	4,292	2,880	13,116	22.0%	3,534	3,960	13,445	29.5%	-758	-17.7%	1,080	37.5%	329	2.5%
79	Pamlico	7,464	3,900	26,910	14.5%	7,287	4,947	26,900	18.4%	-177	-2.4%	1,047	26.8%	-10	0.0%	7,464	3,900	26,910	14.5%	7,287	4,947	26,900	18.4%	-177	-2.4%	1,047	26.8%	-10	0.0%
80	Anson	5,905	2,686	21,260	12.6%	5,907	3,730	21,667	17.2%	2	0.0%	1,044	38.9%	407	1.9%	5,905	2,686	21,260	12.6%	5,907	3,730	21,667	17.2%	2	0.0%	1,044	38.9%	407	1.9%
81	Greene	5,348	3,685	17,775	20.7%	4,977	4,719	18,811	25.1%	-371	-6.9%	1,034	28.1%	1,036	5.8%	5,348	3,685	17,775	20.7%	4,977	4,719	18,811	25.1%	-371	-6.9%	1,034	28.1%	1,036	5.8%
82	Vancey	7,243	3,960	24,755	16.0%	6,375	4,908	24,393	20.1%	-868	-12.0%	948	23.9%	-362	-1.5%	7,243	3,960	24,755	16.0%	6,375	4,908	24,393	20.1%	-868	-12.0%	948	23.9%	-362	-1.5%
83	Hertford	7,629	4,343	24,492	17.7%	6,214	5,266	22,374	23.5%	-1,415	-18.5%	923	21.3%	-2,118	-8.6%	7,629	4,343	24,492	17.7%	6,214	5,266	22,374	23.5%	-1,415	-18.5%	923	21.3%	-2,118	-8.6%
84	Martin	4,093	2,923	13,490	21.7%	3,484	3,838	13,962	27.5%	-609	-14.9%	915	31.3%	472	3.5%	4,093	2,923	13,490	21.7%	3,484	3,838	13,962	27.5%	-609	-14.9%	915	31.3%	472	3.5%
85	Perquimans	5,152	3,111	17,767	17.5%	5,084	3,949	17,789	22.2%	-68	-1.3%	838	26.9%	22	0.1%	5,152	3,111	17,767	17.5%	5,084	3,949	17,789	22.2%	-68	-1.3%	838	26.9%	22	0.1%
86	Avery	3,366	2,516	10,580	23.8%	2,615	3,264	10,357	31.5%	-751	-22.3%	748	29.7%	-223	-2.1%	3,366	2,516	10,580	23.8%	2,615	3,264	10,357	31.5%	-751	-22.3%	748	29.7%	-223	-2.1%
87	Clay	4,436	2,930	14,763	19.8%	3,684	3,563	15,103	23.6%	-752	-17.0%	633	21.6%	340	2.3%	4,436	2,930	14,763	19.8%	3,684	3,563	15,103	23.6%	-752	-17.0%	633	21.6%	340	2.3%
88	Chowan	6,823	4,375	22,063	19.8%	5,293	4,959	20,756																					

Table 7. Population Data

Rank	County	Ranked by 65+ Actual Increase in Population												
		2010					2020							
		45-65 Population	65+ Population	Total	Percent 65+	Percent Increase in Population	45-65 Population	65+ Population	Total	Percent 65+	Percent Increase in Population			
1	Wake	221,798	77,799	906,788	8.6%	289,822	134,232	1,099,385	12.2%	124,457	56,433	72.5%	192,597	21.2%
2	Mecklenburg	218,461	82,132	923,144	8.9%	271,988	129,640	1,095,857	11.8%	53,527	47,508	57.8%	172,713	18.7%
3	Union	51,255	19,718	202,200	9.8%	66,518	31,120	236,778	13.1%	15,263	11,402	57.8%	34,578	17.1%
4	Gulford	125,870	60,724	489,671	12.4%	136,555	84,850	547,184	15.5%	10,685	24,126	39.7%	57,513	11.7%
5	Johnston	43,185	17,504	169,669	10.3%	53,764	27,327	198,644	13.9%	10,579	10,023	57.3%	28,975	17.1%
6	Cabarrus	45,149	20,240	178,564	11.3%	55,686	28,556	205,369	13.9%	10,537	8,316	41.1%	26,805	15.0%
7	Durham	62,524	26,417	268,412	9.8%	70,513	39,893	305,001	13.1%	7,989	13,476	51.0%	36,589	13.6%
8	Harnett	26,838	12,126	115,792	10.5%	33,108	14,503	144,503	13.0%	6,270	6,624	54.6%	28,711	24.8%
9	Iredell	44,247	20,592	159,766	12.9%	50,264	28,729	177,334	16.2%	6,017	8,137	39.5%	17,568	11.0%
10	New Hanover	52,561	28,387	203,254	14.0%	58,004	41,911	237,864	17.6%	5,443	13,524	47.6%	34,610	17.0%
11	Buncombe	67,446	38,365	238,870	16.1%	72,462	55,531	277,265	20.0%	5,016	17,166	44.7%	38,395	16.1%
12	Gaston	56,842	27,466	206,186	13.3%	60,935	36,322	220,302	16.5%	4,093	8,856	32.2%	14,116	6.8%
13	Orange	34,328	13,059	134,201	9.7%	37,739	22,176	153,625	14.4%	3,411	9,117	69.8%	19,424	14.5%
14	Forsyth	92,757	45,877	351,378	13.1%	95,786	61,904	381,660	16.2%	3,029	16,027	34.9%	30,282	8.6%
15	Franklin	17,365	7,788	60,836	12.8%	20,381	12,939	72,701	17.8%	3,016	5,151	66.1%	11,865	19.5%
16	Onslow	32,657	14,060	186,866	7.5%	35,666	20,226	217,780	9.3%	3,009	6,166	43.9%	30,914	16.5%
17	Pitt	38,289	16,813	168,752	10.0%	41,283	25,150	188,239	13.4%	2,994	7,887	49.6%	19,487	11.5%
18	Hoke	10,297	3,557	47,606	7.5%	13,056	6,049	60,596	10.0%	2,759	2,492	70.1%	12,990	21.3%
19	Henderson	30,065	24,016	106,966	22.5%	32,559	32,961	124,163	26.5%	2,494	8,945	37.2%	17,197	16.1%
20	Randolph	39,287	20,087	141,909	14.2%	41,646	27,242	151,901	17.9%	2,359	7,155	35.6%	9,992	7.0%
21	Granville	17,620	7,578	60,513	12.5%	19,758	11,344	65,586	17.3%	2,138	3,766	49.7%	5,073	8.4%
22	Alamance	40,009	22,246	151,533	14.7%	42,141	28,147	161,234	17.5%	2,132	5,901	26.5%	9,701	6.4%
23	Davidson	46,492	23,520	162,874	14.4%	48,490	31,409	172,220	18.2%	1,998	7,889	33.5%	9,346	5.7%
24	Lincoln	23,240	10,453	78,396	13.3%	25,013	15,349	84,024	18.3%	1,773	4,896	46.8%	5,628	7.2%
25	Chatham	19,014	11,811	63,806	18.5%	20,763	19,564	75,891	25.8%	1,749	7,753	65.6%	12,085	18.9%
26	Duplin	15,537	8,410	58,728	14.3%	16,893	12,447	66,810	18.6%	1,356	4,037	48.0%	8,082	13.8%
27	Pender	15,451	7,994	52,452	15.2%	16,754	11,935	60,846	19.6%	1,303	3,941	49.3%	8,394	16.0%
28	Catawba	43,203	21,899	154,354	14.2%	44,316	29,047	160,859	18.1%	1,113	7,148	32.6%	6,505	4.2%
29	Carteret	21,404	12,783	66,711	19.2%	22,149	18,881	76,417	24.7%	745	6,098	47.7%	9,706	14.5%
30	Stanly	16,990	9,549	60,588	15.8%	17,666	12,764	64,429	19.8%	676	3,215	33.7%	3,841	6.3%
31	Person	11,860	6,037	39,448	15.3%	12,372	8,680	44,061	19.7%	512	2,643	43.8%	4,613	11.7%
32	Haywood	17,647	12,480	58,971	21.2%	18,081	16,637	64,255	25.9%	434	4,157	33.3%	5,284	9.0%
33	Alexander	10,745	5,675	37,240	15.2%	11,150	8,042	39,391	20.4%	405	2,367	41.7%	2,151	5.8%
34	Rutherford	19,768	11,764	67,750	17.4%	20,138	15,981	72,693	22.0%	370	4,217	35.8%	4,943	7.3%
35	Madison	6,260	3,692	20,782	17.8%	6,619	5,427	23,157	23.4%	359	1,735	47.0%	2,375	11.4%
36	Moore	24,170	20,135	88,550	22.7%	24,367	25,484	97,334	26.2%	197	5,349	26.6%	8,784	9.9%
37	Lee	15,010	7,978	57,882	13.8%	15,188	10,223	61,968	16.5%	178	2,245	28.1%	4,086	7.1%
38	Davie	12,344	6,891	41,333	16.7%	12,483	9,482	44,096	21.5%	139	2,591	37.6%	2,763	6.7%
39	Wilson	22,345	11,631	81,373	14.3%	22,399	16,022	88,118	18.2%	54	4,391	37.8%	6,745	8.3%
40	Greene	5,905	2,686	21,260	12.6%	5,907	3,730	21,667	17.2%	2	1,044	38.9%	407	1.9%
41	Jackson	10,242	6,135	40,330	15.2%	10,233	8,996	46,608	19.3%	-9	-0.1%	46.6%	6,278	15.6%
42	McDowell	13,010	7,445	45,053	16.5%	12,998	10,112	46,749	21.6%	-12	2,667	35.8%	1,696	3.8%
43	Caldwell	24,142	12,888	83,006	15.5%	24,105	16,383	83,935	20.1%	-37	3,942	30.6%	929	1.1%
44	Stokes	14,516	7,612	47,365	16.1%	14,469	10,365	48,896	21.2%	-47	2,753	36.2%	1,531	3.2%
45	Tyrrell	1,260	744	4,403	16.9%	1,210	871	4,341	20.1%	-50	-4.0%	127	-62	-1.4%
46	Avery	5,152	3,111	17,767	17.5%	5,084	3,949	17,789	22.2%	-68	-1.3%	838	22	0.1%
47	Yadkin	10,927	6,270	38,997	16.3%	10,856	7,734	39,021	19.8%	-71	-0.6%	1,464	624	1.6%
48	Swain	3,971	2,341	13,993	16.7%	3,897	2,906	15,710	18.5%	-74	-1.9%	565	1,717	12.3%
49	Hyde	1,741	878	5,900	15.1%	1,650	1,264	5,825	21.7%	-91	-5.2%	386	25	0.4%
50	Samson	16,807	9,113	63,511	14.3%	16,692	11,508	65,830	17.5%	-115	-0.7%	2,395	2,319	3.7%
51	Graham	2,606	1,753	8,882	19.7%	2,451	2,273	9,785	23.2%	-155	-5.9%	520	903	10.2%

Table 7. Population Data

Rank	County	Ranked by 65+ Actual Increase in Population																
		2010							2020							Population Growth		
		7,464	3,900	26,910	14.5%	7,287	4,947	26,900	18.4%	-177	-2.4%	1,047	26.8%	-10	0.0%			
52	Anson	10,091	8,120	33,928	23.9%	9,905	11,375	39,236	29.0%	-186	-1.8%	3,255	40.1%	5,308	15.6%			
53	Macon	8,328	5,537	27,305	20.3%	8,133	7,504	29,361	25.6%	-195	-2.3%	1,967	35.5%	2,056	7.5%			
54	Ashe	2,936	1,302	10,006	13.0%	2,730	1,760	9,166	19.2%	-206	-7.0%	458	35.2%	-840	-8.4%			
55	Camden	7,878	4,413	27,986	15.8%	7,634	6,136	29,687	20.7%	-244	-3.1%	1,723	39.0%	1,701	6.1%			
56	Montgomery	32,242	16,208	122,815	13.2%	31,951	31,031	131,031	16.4%	-291	-0.9%	5,300	32.7%	8,216	6.7%			
57	Wayne	7,427	3,073	23,652	13.0%	7,125	4,455	23,576	18.9%	-302	-4.1%	1,382	45.0%	-76	-0.3%			
58	Currituck	20,449	11,835	69,301	17.1%	20,113	15,678	72,022	21.8%	-336	-1.6%	3,843	32.5%	2,721	3.9%			
59	Wilkes	5,348	3,685	17,775	20.7%	4,977	4,719	18,811	25.1%	-371	-6.9%	1,034	28.1%	1,036	5.8%			
60	Yancey	11,468	6,380	51,034	12.5%	10,999	9,530	58,889	16.2%	-469	-4.1%	3,150	49.4%	7,855	15.4%			
61	Watauga	3,207	1,768	10,156	17.4%	2,722	2,309	10,497	22.0%	-485	-15.1%	541	30.6%	341	3.4%			
62	Jones	4,093	2,923	13,490	21.7%	4,142	3,743	15,381	24.3%	-529	-11.3%	476	14.6%	-172	-1.1%			
63	Mitchell	10,602	5,552	40,643	13.7%	9,971	6,838	40,223	17.0%	-609	-14.9%	915	31.3%	472	3.5%			
64	Perquimans	3,725	1,847	12,192	15.1%	3,075	2,223	10,943	20.3%	-631	-6.0%	1,286	23.2%	-420	-1.0%			
65	Pasquotank	7,636	3,796	23,714	16.0%	6,952	5,331	23,743	22.5%	-684	-17.4%	376	20.4%	-1,249	-10.2%			
66	Gates	3,396	2,319	11,160	20.8%	2,667	2,737	10,240	26.7%	-729	-21.5%	1,535	40.4%	29	0.1%			
67	Caswell	3,366	2,516	10,580	23.8%	2,615	3,264	10,357	31.5%	-751	-22.3%	748	29.7%	-223	-2.1%			
68	Alleghany	4,436	2,930	14,763	19.8%	3,684	3,563	15,103	23.6%	-752	-17.0%	633	21.6%	340	2.3%			
69	Clay	20,712	12,290	73,715	16.7%	19,958	14,565	73,212	19.9%	-754	-3.6%	2,275	18.5%	-503	-0.7%			
70	Polk	4,292	2,880	13,116	22.0%	3,534	3,960	13,445	25.5%	-758	-17.7%	1,080	37.5%	329	2.5%			
71	Surry	12,327	6,491	45,375	14.5%	11,567	8,334	46,922	17.8%	-760	-6.2%	1,843	28.4%	1,547	3.4%			
72	Pamlico	12,707	6,742	46,634	14.5%	11,910	8,159	46,511	17.5%	-797	-6.3%	1,417	21.0%	-123	-0.3%			
73	Richmond	7,243	3,960	24,755	16.0%	6,375	4,908	24,393	20.1%	-868	-12.0%	948	23.9%	-362	-1.5%			
74	Hertford	9,576	8,589	33,076	26.0%	8,670	11,073	35,303	31.4%	-906	-9.5%	2,484	28.9%	2,227	6.7%			
75	Transylvania	4,002	2,429	13,193	18.4%	3,082	2,948	12,615	23.4%	-920	-23.0%	519	21.4%	-578	-4.4%			
76	Washington	6,386	3,677	21,237	17.3%	5,430	4,187	20,573	20.4%	-956	-15.0%	510	13.9%	-664	-3.1%			
77	Bertie	11,164	5,226	34,015	15.4%	10,200	8,227	36,023	22.8%	-964	-8.6%	3,001	57.4%	2,008	5.9%			
78	Dare	25,951	14,708	90,752	16.2%	24,877	18,442	90,874	20.3%	-1,074	-4.1%	3,734	25.4%	122	0.1%			
79	Burke	16,282	8,869	57,971	15.3%	15,155	10,822	58,327	18.6%	-1,082	-1.5%	11,839	37.9%	13,449	4.1%			
80	Cumberland	6,470	4,005	20,955	19.1%	5,315	5,184	20,783	24.9%	-1,155	-17.9%	1,179	23.4%	-172	-0.8%			
81	Warren	27,914	14,749	98,020	15.0%	26,694	18,725	99,325	18.9%	-1,220	-4.4%	3,976	27.0%	1,305	1.3%			
82	Columbus	27,840	13,498	95,878	14.1%	26,587	18,180	99,557	18.3%	-1,253	-4.5%	4,682	34.7%	3,679	3.8%			
83	Nash	34,018	23,462	108,071	21.7%	32,759	38,869	128,763	30.2%	-1,259	-3.7%	15,407	65.7%	20,692	19.1%			
84	Brunswick	8,536	6,332	27,433	23.1%	7,274	8,401	27,788	30.2%	-1,262	-14.8%	2,069	32.7%	355	1.3%			
85	Cherokee	14,359	8,865	47,783	18.6%	13,065	12,042	50,152	24.0%	-1,294	-9.0%	3,177	35.8%	2,369	5.0%			
86	Beaufort	10,143	4,965	36,094	13.8%	8,761	6,257	31,527	19.8%	-1,382	-13.6%	1,292	26.0%	-4,567	-12.7%			
87	Scotland	7,629	4,343	24,492	17.7%	6,214	5,266	22,374	23.5%	-1,415	-18.5%	923	21.3%	-2,118	-8.6%			
88	Martin	10,458	5,554	35,205	15.8%	8,947	7,292	34,923	20.9%	-1,511	-14.4%	1,738	31.3%	-282	-0.8%			
89	Bladen	6,823	4,375	22,063	19.8%	5,293	4,959	20,756	23.9%	-1,530	-22.4%	584	13.3%	-1,307	-5.9%			
90	Northampton	37,996	20,039	138,359	14.5%	36,363	24,644	137,985	17.9%	-1,633	-4.3%	4,605	23.0%	-374	-0.3%			
91	Rowan	27,961	15,263	93,626	16.3%	26,252	18,917	92,945	20.4%	-1,709	-6.1%	3,654	23.9%	-681	-0.7%			
92	Rockingham	26,088	16,035	104,170	15.4%	24,283	19,704	112,594	17.5%	-1,805	-6.9%	3,669	27.9%	8,424	8.1%			
93	Craven	16,174	8,902	54,565	16.3%	14,128	10,845	52,806	20.5%	-2,046	-12.6%	1,943	21.8%	-1,759	-3.2%			
94	Halifax	16,385	8,202	56,583	14.5%	14,161	10,520	54,497	19.3%	-2,224	-13.6%	2,318	28.3%	-2,086	-3.7%			
95	Edgecombe	17,356	9,581	59,400	16.1%	15,048	11,524	58,729	19.6%	-2,308	-13.3%	1,943	20.3%	-671	-1.1%			
96	Lenoir	33,707	15,291	134,489	11.4%	31,163	18,626	136,237	13.7%	-2,544	-7.5%	3,335	21.8%	1,748	1.3%			
97	Robeson	2,520,795	1,247,171	9,575,665	13.0%	2,716,349	1,759,356	10,616,077	16.6%	-195,554	-7.8%	512,185	41.1%	1,040,412	10.9%			
98	STATE																	

Source: NC OSBM 7.22.12