### Petition for Adjustment to Need Determination to Adjust the Acute Care Bed Operating Room and MRI Multi-County Service Areas for Moore, Hoke, and Cumberland Counties by Applying Updated Data in Step 1 of the Defined Methodologies

### I. Name, Address, Email Address, and Phone Number of Petitioner:

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Medical Facilities
Planning Section

### II. Statement for the Proposed Adjustment

Cape Fear Valley Health System ("Cape Fear Valley") requests that the following specific adjustment be made in the 2010 State Medical Facilities Plan ("SMFP"):

 Designating Hoke and Cumberland Counties as one multi-county service area for acute care beds, operating rooms and magnetic resonance imaging ("MRI"), as a result of updating data used to define service areas in accordance with Step 1 of the defined acute care beds and operating room methodologies and

2. Designating Moore County as a single county service area for acute care beds, operating rooms and MRI as a result of using the same updated data.

### **III. Background Information Regarding Petitioners**

Cape Fear Valley is a non-profit regional health system with 765 beds, five hospitals, and primary care physician offices throughout Cumberland County and surrounding areas, including Hoke County and Bladen County. Cape Fear Valley Medical Center, located in Fayetteville, is an acute-care hospital offering quality care in open-heart surgery, cancer treatment, maternity services, emergency medicine, pediatric intensive care, wellness programs and more. Highsmith-Rainey Specialty Hospital, located in Fayetteville, provides long-term acute care as well as an urgent care facility. Bladen County Hospital, located in Elizabethtown, is a public, not-for-profit facility that includes a 24-hour Emergency Department, a Medical/Surgical Unit, an Intensive Care Unit and an up-to-date Birthing Center. Cape Fear Valley Rehabilitation Center is a physical rehabilitation facility offering inpatient and outpatient care for brain- and spinal-cord injured, neurologically impaired patients, stroke patients and orthopedic patients. Behavioral

Health Care is a comprehensive psychiatric hospital with inpatient and outpatient services for children, adolescents and adults.

Cape Fear Valley has physician offices located throughout Fayetteville and surrounding counties, including a medical office building, Hoke Family Medical Care, in Raeford, Hoke County. This facility is open 6 days per week and currently has 3 primary care physicians, 3 physician extenders, cardiologist coverage, Ob/Gyn coverage, Hematology coverage, Nephrology coverage, Allergy coverage, and GI coverage, and will soon be providing neurology and neurosurgery coverage.

In addition to a broad set of physician coverage in Hoke County, Cape Fear Valley provides after-hours urgent care, radiology services, EKG, pulmonary function, occupational medicine, city employees sick call, all county and city drug testing, Special Olympics participant physicals and a broad array of laboratory services to Hoke County residents.

### IV. Reasons for the Proposed Adjustment

In the Proposed 2010 SMFP, Moore and Hoke Counties are grouped together as a multi-county acute care bed service area and multi-county operating room service area for purposes of determining acute care bed need and operating room need based upon Step 1 of both the Acute Care Bed Need Methodology and the Operating Room Need Methodology. (See <u>Attachments 1 and 2</u>—acute care bed and operating room service area maps from the Proposed 2010 SMFP, Chapters 5 and 6.<sup>1</sup>) In addition, the SMFP defines MRI Services Areas as being the same as Acute Care Bed Service Areas.

### **Acute Care Bed Service Areas**

Step 1 of the Acute Care Bed Need Methodology divides the state into service areas. These service areas are defined as

"...a single county, except where there is no hospital located within the county in which case the county or counties without a hospital are combined in a multi-county grouping with a county that has a hospital. Multi-county groupings are determined based on the county in which the hospital or hospitals that provide the largest number of inpatient days of care to the residents of the county which has no hospital." [emphasis added] (Proposed 2010 SMFP, Chapter 5, Attachment 3).

The State Health Planning Section uses Thomson Reuters, a collector of hospital patient discharge information, as its data source for making the determination for the multi-county

<sup>&</sup>lt;sup>1</sup> The on-line version of the Proposed 2010 SMFP does not have page numbers. Copies of those portions of the Proposed 2010 SMFP discussed herein are referenced by chapter, and the relevant pages are attached.

groupings. The Thomson Reuters data is available annually around the end of March for the previous fiscal year. **2001 (HCIA) Solucient data** was used in the 2009 SMFP and the Proposed 2010 SMFP. The Thomson Reuters data from 2008, which is the most current data available, shows that the number of inpatient days of care provided to Hoke County residents in Cumberland County was 8.6% higher than the number of Hoke County inpatient days of care provided in Moore County. The data clearly establishes that Cumberland County now has a plurality of inpatient days of care for Hoke County residents.

The data shows that in FY 2008, Hoke County residents utilized Cumberland County inpatient providers more than any inpatient providers in any other county, as shown in the following table.

Hoke County - Acute Care Inpatient Days - Excluding Newborns<sup>2</sup>

	FY 2005	FY 2006	FY 2007	FY 2008
Cape Fear Valley Health System (Cumberland County)	6,043	6,292	6,156	7,829
FirstHealth Moore Regional (Moore County)	6,869	7,116	6,863	6,375
Other Counties	2,272	2,752	2,971	2,729

Source: Thomson Reuters, Attachment 4

The volume of Hoke County residents seeking inpatient care in Cumberland County has increased significantly over the last four years as is evidenced by the above table. In addition, FY 2008 data reflects 7,829 Hoke County patient days in Cumberland County and 6,375 Hoke County patient days in Moore County. This increase for Cumberland County and decrease for Moore County is a continuing trend, not a one-time change, as evidenced by the graph in Attachment 5 (graph of inpatient days).

In addition, FY 2008 data reflects that by every other metric, Cape Fear Valley is providing more acute care services to Hoke County residents than FirstHealth. As reflected in the following charts, in FY 2008, there were more Hoke County (1) inpatient days when newborns were included, (2) cases without newborns, and (3) cases with newborns in Cumberland County than in Moore County.

<sup>&</sup>lt;sup>2</sup> The SMFP determination of need for acute care services does not include newborn inpatient days.

	FY 2008					
	Cape Fear Valley (Cumberland)	FirstHealth (Moore)	Other Counties			
Hoke County inpatients (including newborns)	8,670	6,424	2,814			
Hoke County cases (excluding newborns)	1,484	1,451	443			
Hoke County cases (including newborns)	1,835	1,495	463			

Source: Thomson Reuters

Based on the above, grouping Moore and Hoke Counties as a multi-county service area in the Proposed 2010 SMFP is incorrect. The 2010 SMFP should be amended to correctly reflect that Hoke County residents are using Cumberland County inpatient providers to meet their acute care needs.

### **Surgical Service Areas**

Step 1 of the Operating Room Need Methodology in the Proposed 2010 SMFP also divides the state into single county and multi-county service areas. These service areas are defined as follows:

Multi-county groupings were determined based on surgical patient origin data from the Hospital and the Ambulatory Surgical Facility License Renewal Applications, supplemented by surgical patient origin data from Blue Cross and Blue Shield. Counties without a facility providing operating rooms were grouped with the contiguous county, whenever possible, which served the largest reported number of surgical patients [emphasis added]. (Proposed 2010 SMFP, Chapter 6, Attachment 6).

The Annual Hospital and Ambulatory Surgical Facility Licensure Renewal Applications show that, starting in 2007, Cumberland County surgical providers have treated more Hoke County patients than Moore County surgical providers have treated. In 2008, the difference between Cumberland and Moore Counties in the provision of surgical procedures to Hoke County residents grew even more.

A review of the applicable data for the Proposed 2010 SMFP shows that in FY 2008, Hoke County residents utilized Cumberland County operating room services more than any surgical providers in any other county. As a consequence the Surgical Service Area definitions in the 2010 SMFP should be changed so that Hoke County is combined with Cumberland County based upon Step 1 of the SMFP's Operating Room Service Area Need Methodology.

The License Renewal data used in the annual SMFP is available annually around the end of March, and therefore is the most recent data available to determine multi-county operating rooms service areas. Based upon FY 2007 data, a Hoke-Cumberland multi-county service area should have been reflected in the 2009 SMFP. As the table below shows, the number of Hoke County surgical patients was higher in Cumberland County than Moore County in both 2007 and 2008.

**Hoke County Surgical Cases** 

TAKEN SEE SEE	FY 2007	FY 2008
Cumberland County Surgical Providers	1,298	1,369
Moore County Surgical Providers	1,276	1,212
Other Counties	422	423

Source: LRAs; Attachment 7

Based on the above, the 2010 SMFP should be written to designate Hoke and Cumberland Counties as a multi-county operating room service area and to designate Moore County as a single-county operating room service area. Clearly, Cumberland County surgical providers provided the plurality of care for surgical cases in 2007 and 2008 for Hoke County residents.

### **MRI Service Areas**

The Proposed 2010 SMFP defines an MRI service area as follows:

A fixed MRI Service Area is the same as an Acute Care Service Area as defined in Chapter 5, Acute Care Beds, and contained in Figure 5.1. The fixed MRI Service Area is a single county, except where there is no hospital located within the county, in which case the county or counties without a hospital are combined in a multi-county grouping with a county that has a hospital. Multi-county groupings are determined based on the county in which the hospital or hospitals are located that provide the largest number of inpatient days of care to the residents of the county that has no hospital. A fixed MRI scanner's service area is the MRI service area in which the scanner is located.

Proposed 2010 SMFP, Chapter 9, Attachment 8.

<sup>&</sup>lt;sup>3</sup> According to Medical Facilities Planning staff, 2001 Blue Cross/Blue Shield data, rather than current data, was used in the 2009 SMFP and the Proposed 2010 SMFP to determine the multi-county operating room service areas.

Based upon this definition, Hoke and Moore Counties have been designated in the Proposed 2010 SMFP as one multi-county service area for MRI. Because Hoke and Cumberland Counties should be designated in the 2010 SMFP as one multi-county service area for acute care beds, they also should be designated as one multi-county service area for MRI. As such, Moore County should be designated as a single county service area for MRI.

### V. Statement of the Adverse Effects on the Population

If the multi-county service areas are not adjusted, there will be a misalignment of the health service areas that will restrict Hoke County residents' access to health care. Hoke County is growing rapidly as a result of the expanding military population associated with Fort Bragg. Cape Fear Valley is working with Fort Bragg representatives to meet the needs of this population. Correcting the multi-county service area designation will allow the development of expanded services for residents of Hoke County in Hoke County, by allowing those Hoke County residents to continue to use resources at Cape Fear Valley. Cape Fear Valley is committed to continue providing high quality healthcare services to residents of Hoke County.

### VI. Statement of the Alternatives Considered

There are no alternatives to this proposal. The Petitioners are seeking to have the 2010 SMFP reflect the correct distribution of health care provided to the residents of Hoke County under the procedures established under the SMFP methodologies.

### VII. The Project Would Not Result in an Unnecessary Duplication of Services

The Petitioners are not requesting additional resources. They are requesting that the 2010 SMFP correctly reflect what the most current and accurate data shows, which is that Hoke County should be in a multi-county grouping with Cumberland County for acute care bed need, operating room need and MRI need planning purposes.

## VIII. The Project is Consistent with the Three Basic Principles Governing the Development of the SMFP

The petition is consistent with the provisions of the Basic Principles. A proper alignment of acute care bed, operating room and MRI service areas ensures that the high quality services provided by Cape Fear Valley will continue to be available to Hoke County residents and that Cape Fear Valley will have the ability to improve geographic access to services for residents of Hoke County. As a result of the Department of Defense's Base Realignment and Closure (BRAC), Fort Bragg will significantly expand, resulting in further growth of the population of

eastern Hoke County and southwestern Cumberland County, along the Cumberland County-Hoke County line. As reflected in the data discussed above, the current population of Hoke County has chosen Cumberland County providers as the providers of choice. The excellent roads and geographic proximity assures continued safe delivery of these services in a timely fashion.

The population of Hoke County now and following the implementation of BRAC indicates that the vast majority of Hoke County residents will be living closer to Cape Fear Valley. Travel safety, access, and the availability of the high quality care provided at Cape Fear Valley all establish that the proposed realignment of Hoke County with Cumberland County supports the Basic Principles.

### IX. Conclusion

The Petitioners are requesting an adjustment of need in the SMFP, based upon Step 1 of the relevant need methodologies, to designate Hoke and Cumberland Counties as one multicounty service area for acute care beds, operating rooms and MRI, and to terminate the Hoke-Moore multi-county acute care bed, operating room and MRI service area.

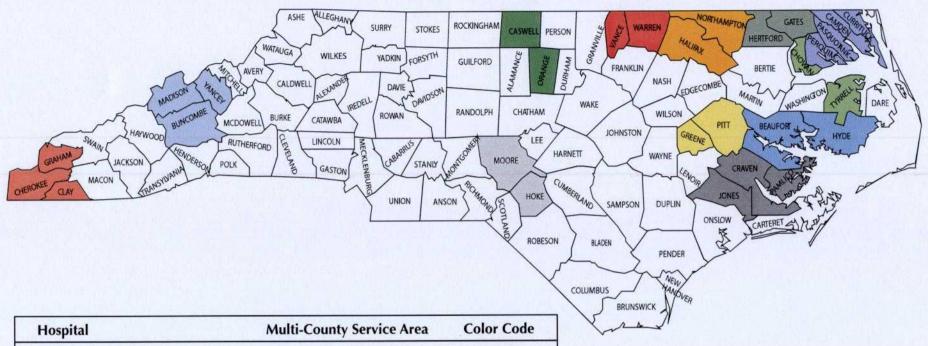
The current multi-county acute care bed and operating room service areas are incorrectly based on outdated data used in Step 1 of the methodologies. The Petitioners request that the State Health Coordinating Council adjust the need determination as requested so that the appropriate local providers can better serve the health care needs of the community. Therefore, the Petitioners request a specific adjustment in the 2010 SMFP approving their request to:

- Designate Hoke and Cumberland Counties as one multi-county service area for acute care beds, operating rooms, and MRI, and
- 2. Terminate the Hoke-Moore County multi-county acute care bed, operating room and MRI service area.

# INDEX: CAPE FEAR VALLEY PETITION 2010

ATTACHMENT:	DESCRIPTION
1	Acute care bed service area map, Proposed 2010 SMFP
2	Operating room service area map, Proposed 2010 SMFP
3	Acute care bed grouping methodology, Proposed 2010 SMFP
4	Thomson Reuters acute care bed inpatient days data (without newborns)
5	Line graph of inpatient days of care
6	Surgical service area grouping methodology, Proposed 2010 SMFP
7	License Renewal Application data re: surgical cases
8	MRI service area grouping methodology, Proposed 2010 SMFP

Figure 5.1: Acute Care Bed Service Areas



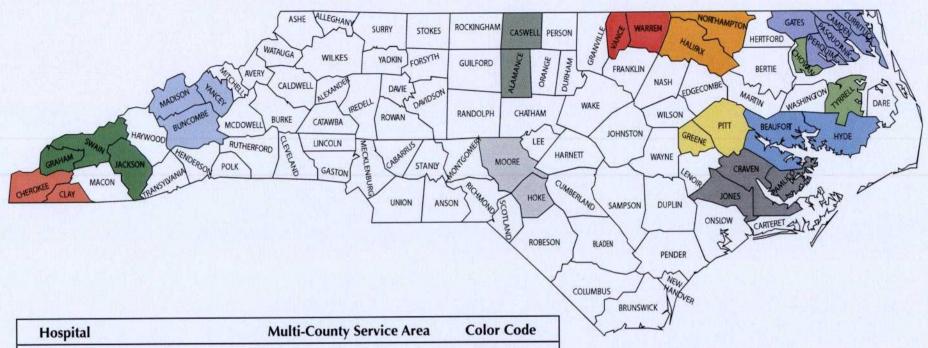
Hospital	Multi-County Service Area	Color Code	
Murphy Medical Center	Cherokee, Clay and Graham		
Mission Hospitals	Buncombe, Madison and Yancey	per transfer, and	
First Health Moore Regional	Moore and Hoke		
University of North Carolina Hospital	Orange and Caswell		
Maria Parham Hospital	Vance and Warren	<b>Pasterior</b>	
Our Community Hospital and			
Halifax Regional Medical Center	Halifax and Northampton		
Pitt County Memorial Hospital	Pitt and Greene	Park and the	
Craven Regional Medical Center	Craven, Jones and Pamlico		
Pungo District Hospital Corporation		N WEEKS	
and Beaufort County Hospital	Beaufort and Hyde		
Roanoke-Chowan Hospital	Hertford and Gates		
Chowan Hospital	Chowan and Tyrell	GRACIES	
Albemarle Hospital	Pasquotank, Camden,		
	Currituck and Perquimans	Participant of the same of the	

Shaded counties are multi-county 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. Counties without acute care hospitals were grouped with the county where a plurality of residents were served. Source: 2001 (HCIA) Solucient data

Attachment

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Figure 6.1: Operating Room Service Areas



Hospital	Multi-County Service Area	Color Code	
Murphy Medical Center	Cherokee and Clay	To us on	
Harris Regional Hospital	Jackson, Graham and Swain	(22 tomatil	
Mission Hospitals	Buncombe, Madison and		
	Yancey	Charles and the	
First Health Moore Regional	Moore and Hoke		
Alamance Regional Hospital	Alamance and Caswell		
Maria Parham Hospital	Vance and Warren		
Our Community Hospital and Halifax			
Regional Medical Center	Halifax and Northampton		
Pitt County Memorial Hospital	Pitt and Greene	ERWIEN.	
Craven Regional Medical Center	Craven, Jones and Pamlico		
Pungo District Hospital Corporation			
and Beaufort County Hospital	Beaufort and Hyde	THE THE PARTY	
Chowan Hospital	Chowan and Tyrell	Sam and	
Albemarle Hospital	Pasquotank, Camden, Currituck Gates and Perquimans		

Shaded counties are multi-county operating room service areas consisting of a county with one or more licensed facilities with operating rooms and a county or counties with no licensed facilities with operating rooms. Counties with no licensed facilities with operating rooms were grouped with the nearest county where a plurality of residents were served.

### **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
1 - 99	66.7 %
100 - 200	71.4 %
Greater than 200	75.2 %

- 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

The Acute Care Bed Service Area is a single county, except where there is no hospital located within the county in which case the county or counties without a hospital are combined in a multi-county grouping with a county that has a hospital. Multi-county groupings are determined based on the county in which the hospital or hospitals that provide the largest number of inpatient days of care to the residents of the county which has no hospital. Data to determine patient's county of residence (based on the Thomson data) that is used to establish the multi-

county groupings were provided by the Sheps Center. (Note: 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 multi-county 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)

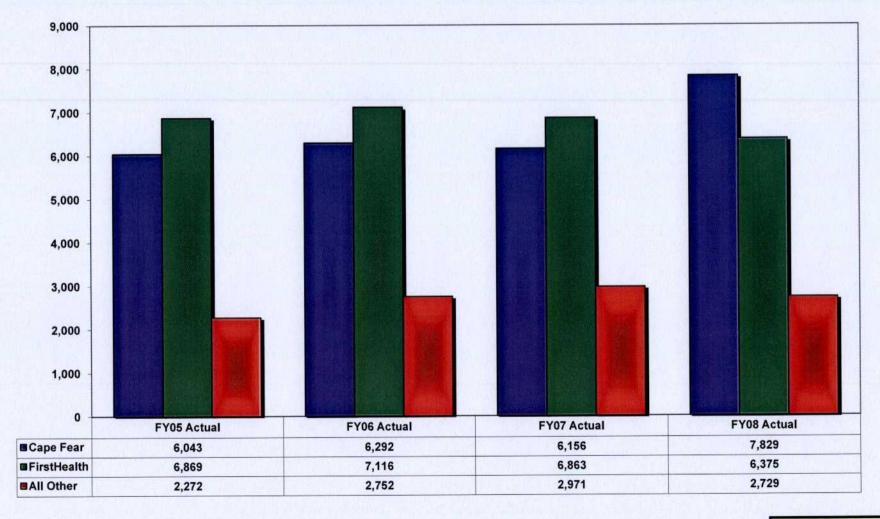
- (b) the number of acute care beds for which certificates of need have been issued, but for which changes in the license have not yet been made (i.e., additions, reductions, and relocations); and
- (c) the number of acute care beds for which a need determination in the SMFP is pending review or appeal.

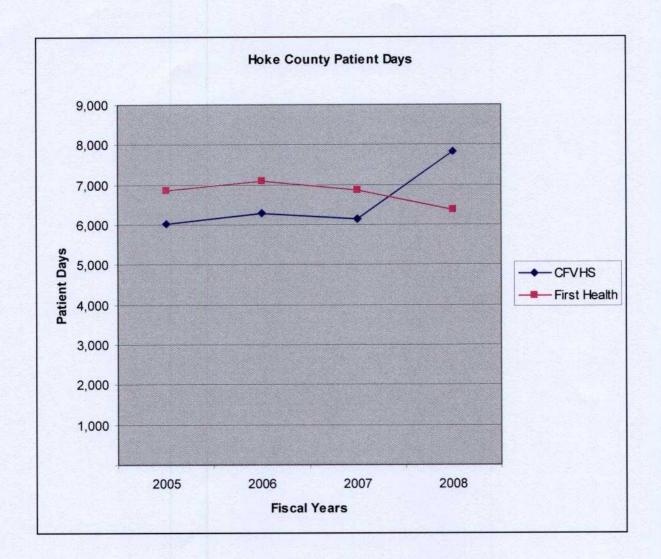
### Step 3 (Column F)

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 2008. (Please see note in "Sources of Data" regarding identification of general acute days of care.)

3

Hoke County - Patient Days (Excludes Normal Newborns)





### Methodology for Projecting Operating Room Need

The following narrative describes the assumptions and methodology used in determining the operating room inventory and in projecting need for additional operating room capacity. The objective of the methodology is to arrive at a reasonable assessment of the adequacy of current resources for performing surgery, compared with an estimate of need for additional capacity.

### Step 1 – Delineation of Service Areas (Column A)

Each county is a separate Operating Room Service Area except where there is no licensed facility with an operating room located within the county, in which case the county or counties without a licensed facility providing operating rooms are combined in a multi-county grouping with a county that has at least one licensed facility with an operating room. Multi-county groupings were determined based on surgical patient origin data from the Hospital and the Ambulatory Surgical Facility License Renewal Applications, supplemented by surgical patient origin data from Blue Cross and Blue Shield. Counties without a facility providing operating rooms were grouped with the contiguous county, whenever possible, which served the largest reported number of surgical patients. In 2006, in response to an adjusted need determination petition, the State Health Coordinating Council added Swain County to the Jackson-Graham Multi-County Operating Room Service Area. This created a Multi-County Operating Room Service Area including two counties with operating rooms and one county without operating rooms. (Note: An operating room's service area is the operating room planning area in which the operating room is located. The operating room planning areas are the single and multicounty groupings shown in Figure 6.1. For the Proposed 2010 Plan, the State Health Coordinating Council has identified three additional operating room service areas specifically for the Single Specialty Ambulatory Surgery Demonstration Project, which is described in Table 6D.

<u>Step 2 – Estimate the Total Surgery Hours for the Previous Year (Columns B through H)</u> Estimate the total number of surgery hours performed during the previous fiscal year based on reported cases by type from Annual License Renewal Applications, as follows:

- (a) Sum the number of inpatient surgical cases reported in the Inpatient Cases column of the "Surgical Cases by Specialty Area" table on the annual Hospital License Renewal Applications for all licensed facilities within the OR Service Area. (NOTE: Cases performed in Dedicated C-Section Rooms; cases reported as "Trauma Cases" by Level I or II Trauma Centers; and cases reported by designated "Burn Intensive Care Units" are excluded for purposes of these need projections.) Multiply the total number of inpatient cases by three hours to estimate the number of hours utilized for inpatient cases. (Column B \* Column C = Column D)
- (b) Sum the number of ambulatory surgical cases reported in the Ambulatory Cases column of the "Surgical Cases by Specialty Area" table on the annual Hospital License Renewal Applications and the number of Surgical Cases reported on the annual Ambulatory Surgical Facility License Renewal Applications for all licensed facilities within the OR Service Area. Multiply the total number of ambulatory cases by 1.5 hours to estimate the number of hours utilized for ambulatory cases. (Column E \* Column F = Column G)

		FY 2007 -			
Outpatient	Cases	Percent	Inpatient Surgery	Cases	Percent
Surgery Center of Pinehurst	550	25.3%	Cape Fear Valley Medical Center	350	42.3%
Fayetteville AmSurg Center	517	23.7%	FirstHealth Moore Regional Hospital	315	38.1%
Cape Fear Valley Medical Center	332	15.3%	University of North Carolina Hospitals	76	9.2%
FirstHealth Moore Regional Hospital	262	12.0%	Duke University Hospital	16	1.9%
i il su lealui Moore Regional i Tospital	202	12.070	Dake Offiversity Flospital	10	1.370
The Eye Surgery Center of the Carolinas	149	6.8%	Sandhills Regional Medical Center	12	1.5%
University of North Carolina Hospitals	101	4.6%	WakeMed	12	1.5%
Highsmith-Rainey Memorial Hospital	97	4.5%	Scotland Memorial Hospital and Edwin Morgan Center	9	1.1%
Duke University Hospital	44	2.0%	Southeastern Regional Medical Center	9	1.1%
Scotland Memorial Hospital and Edwin		2.070			11,70
Morgan Center	25	1.1%	Kindred Hospital-Greensboro	5	0.6%
				U 5 - 5 - 14	
Southeastern Regional Medical Center	16	0.7%	North Carolina Baptist Hospital	5	0.6%
			Carolinas Med. Center-Center for Mental		= 011 - 4141 -
WakeMed	15	0.7%	Health	3	0.4%
Raleigh Women's Health Organization	9	0.4%	Lenoir Memorial Hospital	3	0.4%
Sandhills Regional Medical Center	8	0.4%	Highsmith-Rainey Memorial Hospital	2	0.2%
Duke Health Raleigh Hospital	7	0.3%	New Hanover Regional Medical Center	2	0.2%
Betsy Johnson Regional Hospital	5	0.2%	Craven Regional Medical Center	1	0.1%
Central Carolinas Hospital	5	0.2%	Duke Health Raleigh Hospital	1	0.1%
North Carolina Baptist Hospital	4	0.2%	Durham Regional Hospital	1	0.1%
Rex Hospital	4	0.2%	FirstHealth Richmond Memorial Hospital	1	0.1%
WakeMed Cary Hospital	4	0.2%	Forsyth Memorial Hospital	1	0.1%
Moses Cone Health System	3	0.1%	North Carolina Specialty Hospital	1	0.1%
North Carolina Specialty Hospital	3	0.1%	Pitt County Memorial Hospital	1	0.1%
Charlotte Surgery Center	3	0.1%	Rex Hospital	1	0.1%
Surgical Center of Greensboro	3	0.1%			01110
Surgicenter Services of Pitt, Inc.	2	0.1%			77.07
Carolinas Medical Center-University	1	0.0%			
Johnston Memorial Hospital	1	0.0%			
Maria Parham Medical Center	1	0.0%		MEWBLE	A THE IN
Pitt County Memorial Hospital	1	0.0%	PER DECEMBER OF STREET OF THE STREET		E Tel
Presbyterian Orthopedic Hospital	1	0.0%			
Sampson Regional Medical Center	1	0.0%			
Wilson Medical Center	1	0.0%			
HealthSouth Blue Ridge Surgery Center	1	0.0%			La Land
James E. Davis Ambulatory Surgical	1	0.0%			KEN IN E
Total Outpatient	2,177	100.0%	Total Inpatient	827	100.0%
Total Cumberland County	946	43.5%	Total Cumberland County	352	42.3%
Total Moore County	961	44.1%	Total Moore County	315	38.1%
Total All Other	270	12.4%	Total All Other	160	19.6%
			Total Combined Inpt and Outpt	3,004	TRANS.
			Total Cumberland County	1,298	43.2%
			Total Moore County	1,276	42.5%
			Total All Other	430	14.3%

FY 2008 - 2009 LRA						
Outpatient	Cases	Percent	Inpatient Surgery	Cases	Percent	
Fayetteville AmSurg Center	648	30.3%	Cape Fear Valley Medical Center	356	41.7%	
Surgery Center of Pinehurst	492	23.0%	FirstHealth Moore Regional Hospital	335	39.2%	
Cape Fear Valley Medical Center	263	12.3%	University of North Carolina Hospitals	70	8.2%	
FirstHealth Moore Regional Hospital	230	10.7%	Duke University Hospital	33	3.9%	
The Eye Surgery Center of the Carolinas	155	7.2%	Scotland Memorial Hospital and Edwin Morgan Center	11	1.3%	
University of North Carolina Hospitals	99	4.6%	Southeastern Regional Medical Center	9	1.1%	
Highsmith-Rainey Memorial Hospital	94	4.4%	Highsmith-Rainey Memorial Hospital	8	0.9%	
Duke University Hospital	32	1.5%	New Hanover Regional Medical Center	6	0.7%	
North Carolina Specialty Hospital	28	1.3%	Sandhills Regional Medical Center	4	0.5%	
Scotland Memorial Hospital and Edwin Morgan Center	24	1.1%	Kindred Hospital-Greensboro	3	0.4%	
Southeastern Regional Medical Center	15	0.7%	North Carolina Baptist Hospital	3	0.4%	
Rex Hospital	10	0.5%	North Carolina Specialty Hospital	3	0.4%	
Wilmington SurgCare	7	0.3%	FirstHealth Montgomery Memorial Hospital	2	0.2%	
Raleigh Women's Health Organization	6	0.3%	FirstHealth Richmond Memorial Hospital	2	0.2%	
Duke Health Raleigh Hospital	5	0.2%	WakeMed Cary Hospital	2	0.2%	
Duke Health Kaleigh Hospital		0.270		autus c		
Betsy Johnson Regional Hospital	4	0.2%	Carolinas Med. Center-Center for Mental Health	1	0.1%	
Charlotte Surgery Center	4	0.2%	Duke Health Raleigh Hospital	1	0.1%	
North Carolina Baptist Hospital	3	0.1%	High Point Regional Health System	1	0.1%	
WakeMed	3	0.1%	Moses Cone Health System	1	0.1%	
Medical Park Hospital	2	0.1%	Rex Hospital	1	0.1%	
Moses Cone Health System	2	0.1%	Sampson Regional Medical Center	1	0.1%	
James E. Davis Ambulatory Surgical	2	0.1%	WakeMed	1	0.1%	
Brunswick Community Hospital	1	0.0%				
Carolinas Med. Center-NorthEast, Inc.	1	0.0%		118 1 20	S. M. WEST	
Carolinas Med. Center-Center for Mental Health	1	0.0%				
Central Carolinas Hospital	1	0.0%				
Duplin General Hospital	1	0.0%			LEIS :	
Durham Regional Hospital	1	0.0%				
High Point Regional Health System	1	0.0%				
Roanoke-Chowan Hospital	1	0.0%				
Sampson Regional Medical Center	1	0.0%				
Wayne Memorial Hospital	1	0.0%				
Blue Ridge	1	0.0%				
Chapel Hill Surgical Center	1	0.0%				
Total Outpatient	2,140	100.0%	Total Inpatient	854	100.0%	
Total Cumberland County	1,005	47.0%	Total Cumberland County	364	41.7%	
Total Moore County	877	41.0%	Total Moore County	335	39.2%	
Total All Other	258	12.1%	Total All Other	155	19.1%	
			Total Combined Inpt and Outpt	2,994		
			Total Cumberland County	1,369	45.7%	
			Total Moore County	1,212	40.5%	
			Total All Other	413	13.8%	

### **Fixed MRI Units**

Fixed MRI scanner means an MRI scanner that is not a mobile MRI scanner. The principal capital expenditure issue with respect to fixed MRI units is the volume of procedures, which warrants the acquisition of an additional magnet.

#### Definition of an MRI Service Area

A fixed MRI Service Area is the same as an Acute Care Bed Service Area as defined in Chapter 5, Acute Care Beds, and contained in Figure 5.1. The fixed MRI Service Area is a single county, except where there is no hospital located within the county, in which case, the county or counties without a hospital are combined in a multi-county grouping with a county that has a hospital. Multi-county groupings are determined based on the county in which the hospital or hospitals are located that provide the largest number of inpatient days of care to the residents of the county that has no hospital. A fixed MRI scanner's service area is the MRI service area in which the scanner is located.

### **Basic Assumptions of the Methodology**

- Facilities that currently offer mobile MRI services, but have received the transmittal of a certificate of need for a fixed MRI scanner are included in the inventory as a fixed MRI scanner in Table 9K.
- 2. A placeholder of one MRI scanner is placed in Table 9K for each new fixed MRI scanner for which a certificate of need has been issued even if the scanner is not operational. All procedures performed by a single licensed entity are counted as performed at a single site, even if MRI services are provided at more than one site.
- 3. The need determination for any one Service Area under the methodology for Fixed MRI Scanner Utilization shall not exceed one MRI scanner per year, unless there is an adjusted need determination approved for a specific MRI Service Area.
- 4. A facility that offers MRI services on a full-time basis pursuant to a service agreement with an MRI provider is not precluded from applying for a need determination in the North Carolina 2010 State Medical Facilities Plan to replace the existing contracted service with a fixed MRI scanner under the applicant's ownership and control. It is consistent with the purposes of the certificate of need law and the State Medical Facilities Plan for a facility to acquire and operate an MRI scanner to replace such a contracted service, if the acquisition and operation of the facility's own MRI scanner will allow the facility to reduce the cost of providing the MRI service at that facility.

### Methodology for Determining Need

The methodology includes need thresholds arranged in tiers based on the number of scanners, weighting of procedures based on complexity, and a component addressing MRI service areas that have no fixed MRIs, but have mobile MRI scanners serving the area. The methodology for determining need is based on fixed and mobile procedures performed at hospitals and freestanding facilities with fixed MRI scanners and procedures performed on mobile MRI scanners at mobile sites in the MRI service areas. In addition, equivalent values for mobile scanners in MRI service areas are found in the column labeled Fixed Equivalent in Table

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