

# Technology and Equipment Committee

## Recommendations to the North Carolina State Health Coordinating Council

May 27, 2009

The Technology and Equipment Committee has met once since the March Council meeting, on April 29<sup>th</sup>.

At the April 29<sup>th</sup> meeting the Committee:

- Considered a petition from Daniel Carter from Health Planning Source;
- Reviewed and discussed recommendations for clarifying language in the Chapter Nine narrative about service areas and steps for methodologies;
- Reviewed and discussed draft tables for equipment types; and
- Reviewed and discussed preliminary drafts of need projections resulting from the standard methodologies and data and information available at the time.

Following is a report of the Committee's recommendations for the Technology and Equipment Committee's chapter of the Proposed 2010 State Medical Facilities Plan (SMFP), which is Chapter Nine. Information and Committee recommendations about the petition is presented first, followed by other Committee recommendations organized by equipment type as found in Chapter Nine.

### **Petition from Daniel Carter from Health Planning Source**

- The petitioner requested inclusion of language in the Proposed 2010 SMFP to “*address a disconnect between the SMFP technology methodologies and the required performance standards in the [CON] rules by permitting the SHCC to establish target utilization recommendations for applicants that could be different from the historical utilization required to generate need determinations.*” The petitioner also stated, “*Rather than suggest a specific solution in this Petition, we request that the SHCC begin a dialogue to discuss the most appropriate projected utilization targets for the respective technology modalities*” (see TEC Attachment A for Agency Analysis and petition).
- The Committee recommends denial of the petition. As the petitioner pointed out, the petitioner was not making any recommendations for changes to the technology and equipment methodologies. The petition instead requested changes to performance standards in the CON administrative regulations. As indicated in the Agency Analysis (see TEC Attachment A), the appropriate mechanism for recommending changes in administrative rules is to submit a petition to the Director of the Division of Health Service Regulation in accordance with 10A NCAC 14A .0101.

### **Lithotripsy**

- The Committee reviewed and discussed recommended clarifying narrative language (see TEC Attachment B) and draft tables for the Lithotripsy section of the Proposed 2010 SMFP. The Committee recommends adoption of the recommended narrative language.

- The Committee reviewed draft tables. Using the standard methodology and data and information available at the time of the Committee meeting, the Committee recommends no need for additional lithotripters for the Proposed 2010 SMFP.

### **Gamma Knife**

- The Committee reviewed and discussed recommended clarifying narrative language (see TEC Attachment B) for the Gamma Knife section of the Proposed 2010 SMFP. The Committee recommends adoption of the recommended narrative language.
- Using the standard methodology and data and information available at the time of the Committee meeting, the Committee recommends no need for an additional gamma knife for the Proposed 2010 SMFP.

### **Linear Accelerator**

- The Committee reviewed and discussed recommended additional and clarifying narrative language (see TEC Attachment B) for the Linear Accelerator section of the Proposed 2010 SMFP. The Committee recommends adoption of the recommended narrative language.
- The Committee reviewed draft tables. Since the Committee meeting, the inventory has been updated to reflect a linear accelerator at Murphy Medical Center in Sylva (Service Area 1), and a linear accelerator at Beaufort County Hospital (Service Area 26) (see TEC Attachment C).
- Using the standard methodology and data and information available at the time of the Committee meeting, the Committee recommends no need for additional linear accelerators for the Proposed 2010 SMFP (see TEC Attachment D).
- The Committee received a summary of suggestions about CPT codes and Equivalent Simple Treatment Visit (ESTV) values made by participants in a discussion group held in April 2008. Staff was authorized to continue to gather information and data about linear accelerator CPT codes, ESTV values, and other issues relevant to the linear accelerator data collection instrument.

### **Positron Emission Tomography (PET) Scanners**

- The Committee reviewed and discussed recommended clarifying narrative language (see TEC Attachment B) for the PET scanner section of the Proposed 2010 SMFP. The Committee recommends adoption of the recommended narrative language.
- The Committee reviewed draft tables. Using the standard methodology and data and information available at the time of the Committee meeting, the Committee recommends no need for additional PET scanners for the Proposed 2010 SMFP (see TEC Attachments E and F).

### **Magnetic Resonance Imaging (MRI) Scanners**

- The Committee reviewed and discussed recommended clarifying narrative language (see TEC Attachment B) for the MRI scanner section of the Proposed 2010 SMFP. The Committee recommends adoption of the recommended narrative language.
- The Committee recommends that the following additional narrative language be included in the MRI section of the Chapter Nine narrative of the Proposed 2010 SMFP: *“There is no need for any additional mobile MRI scanners anywhere in the state.”*

- The standard methodology and data available at the time of the Committee meeting resulted in one need determination for an MRI scanner in Wake County. Since the Committee meeting, an update in a calculation resulted in a need determination in Forsyth County, making a total of two need determinations for MRI scanners in the state at the time of this report (see TEC Attachment G). The Committee recommends that there is no need for additional fixed MRI scanners anywhere else in the state for the Proposed 2010 SMFP.

### **Cardiac Catheterization Equipment**

- The Committee reviewed and discussed recommended clarifying narrative language (see TEC Attachment B) for the Cardiac Catheterization Equipment section of the Proposed 2010 SMFP. The Committee recommends adoption of the recommended narrative language.
- The Committee reviewed draft tables. Using the standard methodology and data and information available at the time of the Committee meeting, the Committee recommends no need for additional cardiac catheterization equipment for the Proposed 2010 SMFP (see TEC Attachment H).

NOTE: The Committee authorized staff to make updates and corrections to the data and tables as indicated.

**Technology & Equipment Committee  
Technology Methodologies Petition  
Regarding the Proposed 2010 SMFP**

**AGENCY ANALYSIS:**

Petitioner:

**Daniel Carter**

**Health Planning Source, Inc.**

**Durham, Durham County, North Carolina**

---

**Request**

The petitioner requests inclusion of language in the Proposed 2010 State Medical Facilities Plan (SMFP) to “*address a disconnect between the SMFP technology methodologies and the required performance standards in the [CON] rules by permitting the SHCC to establish target utilization recommendations for applicants that could be different from the historical utilization required to generate need determinations.*” The petitioner also states “*Rather than suggest a specific solution in this Petition, we request that the SHCC begin a dialogue to discuss the most appropriate projected utilization targets for the respective technology modalities.*”

**Background Information**

Methodologies for need determinations for four of the six types of medical equipment in Chapter 9 of the SMFP are based on actual utilization of existing equipment for the operating year reported in the most recent license renewal applications and equipment inventories. Specifically, these methodologies do not include projections of need for a future date utilizing an assumed growth rate factor. The four types of equipment for which need methodologies are based on actual recent utilization and not on projected utilization include: linear accelerators, PET scanners, MRI scanners, and cardiac catheterization equipment. Other need determinations in the SMFP that also are based on actual recent utilization instead of projected utilization include: open heart surgery, burn intensive care, solid organ transplants, rehabilitation beds,

Examples of need methodologies that are based on applying projections for a future year include: acute care beds, operating rooms, nursing care beds, adult care home beds, home health agencies, hospices, psychiatric beds, and substance abuse beds.

In accordance with G. S. 131E-183(b) and 150B, Article 2A, the Certificate of Need Section adopts by rule criteria to be used in the review of certificate of need (CON) applications for specific services and equipment. The review criteria include standards for projected utilization of the proposed equipment, i.e. performance standards. The performance standards specify the number of procedures the applicant is required to project it will perform in the applicant’s third year of operation to be approved. The performance standards must be adopted as rules or administrative regulations in accordance with the Administrative Procedures Act.

**Petitioner's Analysis/Implications**

The petitioner characterizes the need determination methodologies in the SMFP as falling into two primary categories: projected need and historical need (i.e. need based on actual recent utilization). Projected need methodologies take historical utilization, project it forward based on the methodology's assumptions, then compare the projected future need with the current capacity to assess any additional capacity that may be needed. Unlike the projected need methodologies, historical need methodologies base the need determination on a threshold that has been met in the past. For example, the MRI methodology examines the average historical utilization in a given service area (using weighted procedures). Once a service area has hit the target utilization, a need for an additional MRI scanner is generated.

The petitioner continues that in the historical need methodologies, no consideration is given for the projected utilization of the additional unit of equipment, and therefore no utilization is projected for those units in the future. The petitioner contends that since each of the technology need methodologies is based on the historical volume in a service area, the conclusion is that the need was demonstrated in the past; therefore, an applicant would not be required to project any particular future volume. The petitioner further points out that providers with fewer pieces of equipment have a more difficult time achieving targeted utilization.

The petitioner states *“the Technology and Equipment Committee and the SHCC should identify what, if any, projected utilization should be required of an applicant, in order to ensure that the certificate of need performance standards and the SMFP need methodologies are consistent.”* The petitioner also states, *“It is important to note that this Petition does not question the technology methodologies themselves, but rather their direct translation into the performance standards in the CON rules.”*

**Agency Recommendation**

As explained in Chapter Two of the 2009 SMFP, “Anyone who finds that the SMFP's policies or methodologies, or the results of their application, are inappropriate may petition for changes or revisions. Such petitions are of two general types: those requesting changes in basic policies and methodologies; and those requesting adjustments to the need projections.” As the petitioner pointed out, the petitioner is not making any recommendations for changes to the technology and equipment methodologies. The petition instead requests changes to performance standards in the CON administrative regulations. The appropriate mechanism for recommending changes in administrative rules is to submit a petition to the Director of the Division of Health Service Regulation in accordance with 10A NCAC 14A .0101. Therefore, the Agency recommends denial of the petition. The Technology and Equipment Committee may wish to review the technology and equipment need determination methodologies in light of the petitioner's comments.

---

---

**PETITION**

---

---

**TO:** NORTH CAROLINA DIVISION OF HEALTH SERVICE  
REGULATION  
MEDICAL FACILITIES PLANNING SECTION  
2714 MAIL SERVICE CENTER  
RALEIGH, NC 27699-2714

**PETITIONER:** DANIEL CARTER  
324 BLACKWELL STREET, SUITE 1100  
DURHAM, NC 27701  
DANIELCARTER@HEALTHPLANNINGSOURCE.COM  
919.226.1705

**SUBJECT:** SMFP TECHNOLOGY METHODOLOGIES

**DATE:** MARCH 4, 2009

---

**REQUESTED CHANGE**

This Petition respectfully requests the inclusion of clarifying language in the SMFP relative to its impact and use in the subsequent development of performance standards for the technology methodologies. As discussed in detail below, performance standards in the regulatory criteria (“rules”) find their origin in the utilization standards developed by the SHCC in the SMFP. This Petition will demonstrate that while such a method is warranted for those services utilizing projected need methodologies, such a method is counterintuitive and impractical for those services utilizing historical need methodologies.

The requested clarifying language would directly address the disconnect between the SMFP technology methodologies and the required performance standards in the rules by permitting the SHCC to establish target utilization recommendations for applicants that could be different from the historical utilization required to generate need determinations. Given that the current rules mirror the language in the SMFP need methodology, the inclusion of such clarifying language and accompanying recommendations would enable the Certificate of Need Section to update the rules to reflect the SHCC’s recommendations, which while they may differ from the historical utilization which generated the need, will address the impracticality of using the SMFP technology methodologies to dictate the required performance standards in the rules.

## **REASONS FOR THE REQUESTED CHANGE**

Over the past several months, we (HPS) have reviewed the various methodologies in the SMFP to discover both similarities and differences to help us assess how differences in the methodologies translate into different standards in the rules. The current methodologies in the SMFP, while different for each service, fall into two primary categories: projected need and historical need. The projected need methodologies take historical utilization, project it forward based on the methodology's assumptions, then compare the projected future need with the current capacity to assess any additional capacity that may be needed. Two examples are the acute care bed and operating room methodologies. While the respective methodologies differ considerably, both take historical utilization and project it forward to calculate the need for those services in the future. The second category of methodology is based on historical need. Unlike the projected need methodologies, these methodologies do not project future need; rather, they base the need determination on a threshold that has been met historically. For example, the MRI methodology examines the average historical utilization in a given service area (using weighted procedures); once a service area has hit the target utilization, a need for an additional MRI scanner is generated. In the historical need methodologies, no consideration is given for the projected utilization of the additional unit of equipment, and therefore no utilization is projected for those units in the future.

The different approach used by these two primary types of methodologies is certainly warranted, given the evolution of the methodologies over the past several years and the considerable differences among the services represented. The different approaches have a substantial impact on the rules for each service, however, which is the focus of this discussion. For the projected methodologies, specifically acute care beds and operating rooms, the performance standards in the rules, particularly the required projected utilization, mirror the methodology and the projected need. For example, the operating room rules require an applicant to project future utilization that corresponds with the SMFP-projected need. Thus, an SMFP need determination in a county with fewer than five operating rooms that resulted in a need determination based on a projected deficit of 0.2 operating rooms corresponds with a requirement in the CON rules than an applicant project utilization of a minimum of 0.2 operating rooms. Because the methodology contemplates future need based on projected utilization, the CON rules can reasonably require applicants to also meet that future need.

For the historical need methodologies, however, the SMFP does not contemplate the future volume of the service, but only looks at the historical volume generated by the service. As a result, the performance standards in the rules are based on the historical volume thresholds, but require applicants to project this volume in the future for the proposed service. While this situation has existed for some time, as the SMFP methodologies have been refined, the threshold utilization required to generate a need determination has generally increased. As a result, the utilization required by the performance standards in the rules has also increased. The performance standards in the rules place a disproportional burden on providers in less populated service areas. Applicants in areas with one piece of equipment are the most disadvantaged, in some cases needing to project as much as a 100 percent increase in volume by the third project year.

## **ADVERSE EFFECTS ON PROVIDERS IF THE CHANGE IS NOT MADE**

Consider the following example using MRI.

An existing provider of MRI services in a small county operates the only fixed MRI unit in the county, which is the only MRI service in the county. Based on its 2008 utilization of 3,775 weighted procedures, the 2010 SMFP allocates a second MRI scanner in the county. The provider files a certificate of need application in 2010, projecting to begin operating the second scanner in 2011. The third project year for the project is 2013, five years from the data that generated the allocation in the 2010 SMFP. The performance standards in the MRI rules require the applicant's two MRI scanners to perform a total of two times the 3,775 weighted procedures that generated the need, or 7,550 weighted procedures. Thus, in a five year period, the applicant must project (reasonably) to double its volume, which translates into 20 percent growth each year for five years. This sustained rate of growth for several years is unlikely under most circumstances and the applicant's ability to be found conforming with the MRI rules for certificate of need is doubtful. If the applicant in this scenario had two MRI scanners and a need was generated for a third based on the average volume of 4,118 weighted procedures (or a total of 8,236 weighted procedures), then the performance standards would require the applicant to project a total of three times 4,118 or 12,354 weighted procedures by the third project year. This would equate to a total growth of 50 percent, which translates into 10 percent growth each year for five years. While this growth may be more easily achieved than 20 percent per year, it is still higher than the current statewide growth rate in MRI procedures. As a final MRI example, an applicant operating the sole mobile MRI service in a county with no fixed scanners would generate a need at 1,716 weighted procedures, which also serves as the required performance standard for the third year. Thus, this applicant would not need to project any growth to be conforming with the rules. While this is certainly much easier to achieve, it is considerably different from the requirement once the need is generated for a second MRI in the service area.

A similar situation exists for other modalities as well. Providers of radiation oncology services must project the same volume on the proposed linear accelerator as what was required to generate a need. As a result, applicants with one existing linear accelerator must double their volume; applicants with two existing linear accelerators must increase by 50 percent, etc. Even more concerning is that applicants with no linear accelerators, even in counties without any existing linear accelerators, must project to achieve the 6,750 ESTVs necessary to show need for another linear accelerator by the third project year, even though the need determination is generated because of the need for at least one linear accelerator in that service area, without consideration of any specific projected volume.

The same challenge exists for the other technology modalities as well, including PET and cardiac catheterization equipment in particular. While these modalities generate need determinations less frequently of late, applicants are required to project similar increases in volume, and applicants with more units of existing equipment can project lower growth rates than those with fewer units of existing equipment. Because the required utilization is more easily achieved by providers with multiple pieces of existing equipment, the growth rates required differ considerably, as shown in the following tables.

**Volume requirements for applicants with one existing unit**



<i>Modality</i>	<i>Applicant volume to generate need</i>	<i>Applicant projected volume to meet rules</i>	<i>Incremental growth required</i>	<i>Per year growth (assumed 5 years)</i>
<b>PET</b>	2,080	4,160	100%	20.0%
<b>MRI</b>	3,775	7,550	100%	20.0%
<b>Cardiac Cath</b>	1,200	2,100	75%	15.0%
<b>Linear Accelerator</b>	6,750	13,500	100%	20.0%

**Volume requirements for applicants with four existing units**

<i>Modality</i>	<i>Applicant volume to generate need</i>	<i>Applicant projected volume to meet rules</i>	<i>Incremental growth</i>	<i>Per year growth (assumed 5 years)</i>
<b>PET</b>	8,320	10,400	25%	5.0%
<b>MRI</b>	19,219	24,024	25%	5.0%
<b>Cardiac Cath</b>	4,800	5,700	19%	3.8%
<b>Linear Accelerator</b>	27,000	33,750	25%	5.0%

As the tables show, applicants with multiple units of equipment can more reasonably project to achieve the required utilization by the third project year. Please note that this analysis assumes for the sake of simplicity that the need was generated solely from the volume of the applicant with either one or four units of equipment, respectively.

**ALTERNATIVES CONSIDERED AND REJECTED**

Maintaining the status quo fails to address the disconnect between the SMFP technology methodologies and the required performance standards in the rules. Further, in considering maintaining the status quo, it is important to understand that the challenges described within this Petition are not just theory; in the past few years, several certificate of need reviews have denied all applicants for additional units of technology equipment, at least in part on the basis of unreasonable volume projections. Although some of these reviews have been settled and certificates of need issued, the initial findings have rejected the utilization projections in the applications, which, as explained above, must reach 20 percent per year in some cases.

**THE PROPOSED CHANGE IS CONSISTENT WITH THE THREE BASIC PRINCIPLES AND WILL NOT RESULT IN UNNECESSARY DUPLICATION OF HEALTH RESOURCES IN THE AREA**

The proposed clarifying language would neither involve nor result in the unnecessary duplication of health resources in the area. Rather, the proposed language would directly address current challenges faced by technology modalities. Further, the proposed change is consistent with the three basic principles governing the development of the SMFP: safety and quality, access, and value. It is important to note that this Petition does not question the technology methodologies themselves, but rather their direct translation into the performance standards in the CON rules. The current use of technology methodologies to develop performance standards that often act as insurmountable obstacles to prospective applicants is not in the spirit of improving quality, access or value. This Petition seeks to address this discrepancy by eliminating any unnecessary or unduly burdensome obstacles for potential applicants and thereby encouraging competition which will serve to improve overall quality, access, and value within the health care system.

### **CONCLUSION**

The discussion at last year's PET workgroup meeting around this subject indicated that the SHCC could establish target utilization for applicants that could be different from the historical utilization required to generate need determinations. Given the situation described in this Petition, there are significant questions regarding the utilization required of applicants:

- If the SMFP methodology is based on historical volume reaching a threshold indicating more capacity is needed, does that not demonstrate that additional equipment is needed based on the existing equipment and regardless of the future utilization of the additional equipment?
- If a target utilization threshold is established, should it not be something considerably less than the volume required to generate the need determination?
- Should target utilization thresholds be tiered so that providers in smaller counties can more easily achieve them reasonably?

Since each of the technology need methodologies is based on the historical volume in a service area, the simplest conclusion is that the need was demonstrated in the past; therefore, an applicant would not be required to project any particular future volume. For example, if the MRI utilization in a service area with one MRI scanner reached 3,775 weighted procedures, does the SHCC not intend that the 3,775 warrants a second MRI scanner? Or is there some level of utilization that should be required by the second scanner? In any case, it seems appropriate that the Technology and Equipment Committee and the SHCC should identify what, if any, projected utilization should be required of an applicant, in order to ensure that the certificate of need performance standards and the SMFP need methodologies are consistent. Rather than suggest a specific solution in this Petition, we request that the SHCC begin a dialogue to discuss the most appropriate projected utilization targets for the respective technology modalities.

## Lithotripsy

### Introduction

Lithotripsy is defined as the pulverization of urinary stones by means of a lithotripter. Extracorporeal lithotripsy is lithotripsy that occurs outside the body. Extracorporeal shock wave lithotripsy (ESWL) is the non-invasive procedure with which this section will concern itself.

A lithotripter is a device that uses shock waves to pulverize urinary stones, which can then be expelled in the urine. An emitter is placed in contact with the patient's abdomen and the shock waves are focused on the stone, which is shattered by the force.

A lithotripter's service area is the lithotripter planning area in which the lithotripter is located. The lithotripter planning area is the entire state.

### Lithotripter Utilization

Lithotripter utilization can be reasonably estimated by the incidence of urinary stone disease. Urinary stone disease, or urolithiasis, is a disease in which urinary tract stones or calculi are formed. The annual incidence of urinary stone disease is approximately 16 per 10,000 population<sup>1</sup>, which translates into 15,036 urinary stone disease cases per year in North Carolina based on the estimated population of the state as of July 1, 2009. Not all cases of urinary stone disease would be appropriately treated by lithotripsy. ; thus, the cases that could be treated by this technology would be less than the 15,036 cases that occur annually. It has been estimated that 85 to 90 percent of kidney stone patients, when surgery is indicated, can be treated successfully by ESWL treatment. The above estimate translates to 13,532 cases based on 90 percent that could be treated by ESWL; thus, approximately 13,532 patients have the potential to be treated by lithotripsy per year. The annual treatment capacity of a lithotripter has been estimated at between 1,000 and 1,500 cases.

### North Carolina Utilization

The number of lithotripsy procedures reported in North Carolina for the period of 2007-08 was 11,420 procedures. There were 14 lithotripsy units operated by eight providers. Procedures were provided by a fixed unit at one hospital, and by 13 mobile units operated by seven providers. There was one need determination for a lithotripter in Mecklenburg County in the North Carolina 2007 State Medical Facilities Plan and the Certificate of Need (CON) was awarded to The Stone Institute. Including the non-operational CON approved lithotripter, there is a total of 14 lithotripsy units. Given the 14 lithotripsy units, the average number of procedures per lithotripter for the 2007-08 year is 816.

### Access

Due to the mobility of lithotripter services, and the subsequent number of sites from which the service is provided, it may be concluded that geographic access is available to the maximum economically feasible extent.

<sup>1</sup> Pahiri, J.J. & Razack, A.A. (2001) "Chapter 9: Nephrolithiasis". In Clinical Manual of Urology, by Philip M. Hanno, Alan J. Wein, S. Bruce Malkowicz. McGraw-Hill Professional Publisher.

### North Carolina's Need Determination Methodology

North Carolina uses a methodology based on the incidence of urinary stone disease. The need is linked to the above estimate of 15,036 urinary stone disease cases and is based on the assumption that 90 percent could be treated by ESWL; thus, approximately 13,532 patients in the state have the potential to be treated by lithotripsy per year.

~~Not all cases of urinary stone disease would be appropriately treated by lithotripsy; thus, the cases that could be treated by this technology would be less than the 15,036 cases that occur annually. It has been estimated that 85 to 90 percent of kidney stone patients, when surgery is indicated, can be treated successfully by ESWL treatment. The above estimate translates to 13,532 cases based on 90 percent that could be treated by ESWL; thus, 13,532 patients have the potential to be treated by lithotripsy per year.~~

~~With an annual treatment capacity of a lithotripter being estimated at between 1,000 and 1,500 cases, the maximum number of lithotripters needed in the state would be 14, based on the estimated 13,532 cases and 1,000 procedures per lithotripter.~~

The standard methodology used for determining need for lithotripters is calculated as follows:

- Step 1. Divide the July 1, 2010 estimated population of the state, available from the North Carolina Office of State Budget and Management, by 10,000 and multiply the result by 16, which is the incidence of urinary stone disease per 10,000 population.
- Step 2. Multiply the result from Step 1 by 90 percent to get the number of patients in the state who have the potential to be treated by lithotripsy in one year.
- Step 3. Divide the result of Step 2 by 1,000, which is the low range of the annual treatment capacity of a lithotripter, and round to the nearest whole number.
- Step 4. Sum the number of existing lithotripters in the State, lithotripters not yet operational but for which a CON has been awarded, and lithotripter need determinations published in previous SMFPs for which a CON has yet to be awarded.
- Step 5. Subtract the result of Step 4 from the result of Step 3 to calculate the number of additional lithotripters needed in the state.

### North Carolina's Need

With an annual treatment capacity of a lithotripter being estimated at between 1,000 and 1,500 cases, the maximum number of lithotripters needed in the state would be 14, based on 13,532 estimated cases and 1,000 procedures per lithotripter. There are 14 lithotripters (including the CON approved lithotripter) in the state, and the methodology indicates a maximum need of 14 lithotripters in the state. As a result, it is determined that there is no need for additional lithotripters anywhere in the state.

### Lithotripsy Services in North Carolina

The eight providers that offer lithotripsy services in North Carolina are listed on the following pages. (NOTE: The lithotripsy tables are next in the SMFP. For purposes of this Attachment only, the remainder of the recommended Chapter Nine narrative follows.)

## **Gamma Knife**

### **Definition**

"Gamma Knife," as defined in General Statute § 131E-176(7c), means "equipment which emits photon beams from a stationary radioactive cobalt source to treat lesions deep within the brain and is one type of stereotactic radiosurgery."

Two types of equipment, both using photon beams, are available for performing this kind of radiosurgery. In one type, LINAC, beams from a linear accelerator are focused from a device that rotates around the patient. The other type of equipment, gamma knife, emits 201 beams from stationary radioactive cobalt sources.

### **Facility Inventory-Service Volume**

Gamma knife fixed and movable equipment capital costs exceed \$3,500,000. There is one gamma knife that was approved for acquisition pursuant to Policy AC-3 of the North Carolina 1998 State Medical Facilities Plan. The approved unit is located at Wake Forest University Baptist Medical Center, and became operational effective September 1, 1999. During 2007-08, as reported in the 2009 Hospital Licensure Renewal Application, which reflects 2007 data, 286 gamma knife procedures were reported. Pitt County Memorial Hospital received a Certificate of Need pursuant to a need determination in the North Carolina 2003 State Medical Facilities Plan for one gamma knife to serve the eastern portion of the state (HSAs IV, V and VI). Pitt began offering service as of October 2005. During 2007-08, 115 gamma knife procedures were reported.

### **Gamma Knife Need Determination Methodology**

A gamma knife's service area is the gamma knife planning region in which the gamma knife is located. There are two gamma knife planning regions, the west region (HSAs I, II, and III as described in Appendix A) and the east region (HSAs IV, V, and VI as described in Appendix A). The gamma knife located at Wake Forest University Baptist Medical Center in HSA II serves the western portion of the state (HSAs I, II, and III). The gamma knife located at Pitt County Memorial Hospital in HSA VI serves the eastern portion of the state (HSAs IV, V and VI). The two gamma knives assure that the western and eastern portions of the state have equal access to gamma knife services.

There is adequate capacity and geographical accessibility for gamma knife services in the State.

### **Need Determination**

It is determined that there is no need for an additional gamma knife anywhere in the state.

## **~~Radiation Oncology Services~~ -- Linear Accelerators**

### **Introduction**

The methodology incorporates a geographic accessibility criterion (a population base of 120,000), a criterion aimed at assuring efficient use of megavoltage radiation facilities (when Equivalent Simple Treatment Visit (ESTV) procedures divided by 6,750 minus the number of present linear accelerators equals .25+), and a patient origin criterion that indicates when a service area has 45 percent or more of the patients coming from outside the service area. A need determination is generated when two of the three criteria are met within a service area.

Counties are the basic units for the formation of ~~radiation oncology~~ linear accelerator service areas, based on proximity, utilization patterns, and patient origin data. A small percentage of the population lives some distance from ~~an existing radiation oncology facility~~ a linear accelerator, but the sparsity of population in and around these areas does not provide the population required to support a ~~radiation oncology facility~~ linear accelerator.

The statewide average number of procedures per accelerator as shown in Table 9E is 4,939.

### **~~Radiation Therapy Assessment~~ -- Linear Accelerators**

Radiation therapy (megavoltage radiation) is used in the treatment of about half of all cancers. Its users seek to destroy cancer cells with ionizing radiation while limiting damage to non-cancerous tissue. Linear accelerators are now the instruments of choice because most are capable of producing either electron or photon beams at variable energy levels.

In the 2009 Hospital Licensure Renewal Applications, which reflect 2008 data, there are 14 linear accelerators in nine different locations in North Carolina reported as being operational and providing stereotactic radiosurgery treatment: Carolinas Medical Center (115 procedures); CMC-NorthEast (240 CyberKnife procedures); Duke University Hospital (272 procedures on two linear accelerators); Memorial Mission Hospital (339 CyberKnife procedures); Pitt County Memorial Hospital ( \_\_ procedures on two linear accelerators, reported as being owned by Brody School of Medicine); UNC Hospitals (381 procedures on four linear accelerators configured for stereotactic radiosurgery, including one CyberKnife); Wake Forest University Baptist Medical Center (10 procedures on one linear accelerator configured for stereotactic radiosurgery); Forsyth Memorial Hospital (73 procedures on one linear accelerator configured for stereotactic radiosurgery); and North Carolina Radiation Therapy Management Services in Asheville (five procedures on one linear accelerator configured for stereotactic radiosurgery).

In recent years, radiation therapy has been offered increasingly in comprehensive oncology programs where medical oncologists and hematologists also offer chemotherapy. Most such programs are associated with general hospitals, but some are freestanding. Some programs offering only radiation therapy, or only chemotherapy, may refer to themselves as oncology centers. A new radiation oncology facility, with necessary equipment, usually costs about \$2,000,000.

### **~~Assessment~~ -- Radiation Oncology Programs**

In addition to a linear accelerator, every radiation oncology program uses a treatment simulator to aid in treatment planning, a computer for calculating dosages, and devices for cutting blocks to protect non-targeted areas from radiation. One simulator, which is the most expensive of these additional items (\$200,000 - \$400,000), can serve a facility with three linear accelerators or serve multiple facilities with linear accelerators. The specialized staff who operate and maintain this equipment, including a required radiation physicist, are more efficiently utilized in facilities with more than one linear accelerator.

~~Presently, existing radiation oncology programs are reasonably convenient to the population of the state. The high cost of establishing new programs and the possibilities for achieving further equipment and staff economies of scale are critical considerations in evaluating the need for new radiation oncology treatment center programs.~~

### **Assessment – Linear Accelerators**

There are 72 hospitals and freestanding oncology treatment centers statewide in North Carolina with 116 linear accelerators that are operational, have a CON in hand, or for which there is a prior year need determination.

The utilization methodology used calls for data gathering that is uniform. There are radiation treatments of varying complexity, and the concept of ESTV is used. ESTVs are recommended by the American College of Radiology. In addition, ESTVs were recommended as part of the comments during public hearings when the original methodology was developed.

The data gathering survey that the Medical Facilities Planning Section sends out to the providers has changed the manner in which procedures are counted. This survey asks for the procedures by CPT codes and shows the equivalent ESTVs. The hospitals and free-standing centers have responded well in giving procedures that can be translated into ESTV totals.

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

A linear accelerator's service area is the linear accelerator planning area in which the linear accelerator is located. Linear accelerator planning areas are the 27 multi-county groupings defined in Table 9G. In determining whether an additional linear accelerator is needed in a service area, three principal questions must be addressed:

1. Are the linear accelerators in ~~existing radiation oncology centers~~ a linear accelerator service area performing greater than 6,750 procedures (ESTVs) per accelerator per year?
2. Is the population that lives in a ~~radiation oncology~~ linear accelerator service area sufficiently great to support the addition of another accelerator (population per accelerator greater than 120,000 - a figure suggested by the Inter-Society Council for Radiation Oncology)?
3. Does the patient origin data show that over 45 percent of the patients come from outside the service area?

Patient origin data is requested in order to establish service areas, and the vast majority of the facilities have responded with the patient origin data.

To examine the second and third questions, ~~radiation oncology~~ linear accelerator service areas are delineated, including in each area the counties that are closest to each ~~radiation oncology program or cluster of programs.~~ A cluster of programs is defined as all of the ~~programs in a single county~~ a linear accelerator. Two exceptions were employed in applying this method:

- a. Where patient origin data indicate a county's primary use of a ~~program~~ linear accelerator that is not the closest, the county is aligned with the ~~radiation oncology area~~ linear accelerator county where most or a plurality of its citizens go for ~~hospital care~~ linear accelerator services. Example: Alleghany to Forsyth
- b. When a ~~program is one that~~ linear accelerator county has a population too small to support it, ~~the area for that program that county~~ is combined with an adjacent ~~area in which the smaller program's base county's patient origin data indicates that county to which a sizable percentage of patients go for linear accelerator services, according to the base county's patient origin data.~~ ~~to the adjacent programs.~~ Example: (Haywood - Buncombe)

Data regarding each of the ~~radiation oncology~~ linear accelerator service areas of North Carolina were organized so as to examine each of the questions noted above.

### **Methodology for Determining Need**

The methodology incorporates a geographic accessibility criterion (population base of 120,000), a criterion aimed at assuring efficient use of megavoltage radiation facilities (when ESTV Procedures divided by 6,750 minus the number of present linear accelerators equals .25+), and a patient origin criterion (when a service area has 45 percent or more of the patients coming from outside the service area). A need determination is generated when two of the three criteria are met within a service area.

~~An additional criterion has been incorporated into the methodology based on a petition. Any county that has a population of 120,000 or more and does not have a recognized linear accelerator shall have a need for one linear accelerator and the county shall become a separate Linear Accelerator Service Area.~~

The standard methodology used for determining need for linear accelerators is calculated as follows:

#### Criterion 1:

Step 1. Using the 2009 NC population estimate obtained from the North Carolina Office of State Budget and Management, sum the population estimates for counties that comprise each linear accelerator service area to determine the population for linear accelerator service areas.

Step 2. For each linear accelerator service area, sum the number of operational linear accelerators acquired in accordance with G.S. 131E-175, et. seq., the number of



approved linear accelerators not yet operational but for which a CON has been awarded, and the linear accelerator need determinations from previous SMFPs.

Step 3. Divide the service area population by the result of Step 2 to determine the population residing in the service area per linear accelerator. If the result is greater than or equal to 120,000 per linear accelerator, Criterion 1 is satisfied.

Criterion 2:

Step 4. Using patient origin data reported on the 2009 Hospital License Renewal Applications and Linear Accelerator Registration and Inventory Forms for linear accelerators, for each service area, count the number of patients who were served on linear accelerators located in the service area, and who reside in a county outside the service area.

Step 5. For each service area, divide the results of Step 4 by the total number of patients served on linear accelerators located in the service area. If more than 45 percent of total patients served on linear accelerators located in a service area reside outside the service area, then Criterion 2 is satisfied.

Criterion 3:

Step 6. For each linear accelerator service area, sum the number of ESTV procedures performed on the linear accelerators located in the service area as reported in each provider's 2009 Hospital License Renewal Application or Linear Accelerator Registration and Inventory Form.

Step 7. Divide the results of Step 6 by the number of linear accelerators in the service area which are counted in Step 2 to determine the average number of ESTV procedures performed per linear accelerator in each linear accelerator service area.

Step 8. Divide the results of Step 7 by 6,750 ESTV procedures.

Step 9. Subtract the number of linear accelerators in the service area counted in Step 2 from the results of Step 8. If the difference is greater than or equal to positive 0.25, Criterion 3 is satisfied.

Step 10. If any two of the above three criteria are satisfied in a linear accelerator service area, a need is determined for one additional linear accelerator in that service area.

Criterion 4:

Step 11. Regardless of the results of Steps 1-10 above, if a county has a population of 120,000 or more and there is not a linear accelerator counted in Step 2 for that county, a need is determined for one linear accelerator for that county. As a result, the county becomes a separate, new linear accelerator service area.

**Linear Accelerator Need Determination**

It was suggested by some radiation oncologists in 2006 that CPT Code 77427, weekly radiation therapy management, not be counted in the totals of freestanding radiation oncology centers. The advice was accepted in 2006 for the North Carolina 2007 State Medical Facilities Plan, and the procedure counts for CPT Code 77427 were removed from the totals. The procedure counts for CPT Code 77427 also have been removed from Table 9E in this Proposed North Carolina 2010 State Medical Facilities Plan.

In the North Carolina 2008 State Medical Facilities Plan, in response to a petitioner's request for an adjustment to the need determination for linear accelerators, there was an adjusted need determination for one linear accelerator in Linear Accelerator Service Area 18. The need determination did not specify certain configurations or specifications. As Table 9F indicates, there are two service areas where the threshold equals .25+; however, there is no need determination for Service Areas 17 and 19 because these service areas do not meet the criterion of a population base of 120,000 per linear accelerator. In response to a petition, there was included in the North Carolina 2009 State Medical Facilities Plan a statewide need determination for one dedicated linear accelerator that shall be part of a demonstration project for a model multidisciplinary prostate health center focused on the treatment of prostate cancer, particularly in African American men.

Through the regular need determination methodology, it is determined that there is no need for an additional linear accelerator anywhere else in the state.

## **Positron Emission Tomography Scanner**

### **Definition**

Positron Emission Tomography (PET) Scanner as defined in General Statute § 131E-176(19a), means "Equipment that utilizes a computerized radiographic technique that employs radioactive substances to examine the metabolic activity of various body structures."

From its introduction in the mid-1980's until the last few years, PET scanning was used more in research than clinical practice. Early clinical applications focused on the heart and the brain.

Now, the clinical use of PET scanning is increasing rapidly, and new applications involve the diagnosis of cancer. At North Carolina's most active PET facilities, the diagnosis of cancer accounts for well over 80 percent of clinical studies.

A PET scanner is a device with multiple radiation detectors designed to detect the two simultaneous photons emitted from the body after a positron annihilation. Positron annihilation occurs after a positron (a sub-atomic particle) is emitted from certain radioactive substances. Such events are recorded over the course of a scan and subsequently reconstructed via computerized techniques into images. These images represent the cross-sectional distribution of the radioactive (positron-emitting) tracer in the body. By measuring the distributions of certain radiotracers in the body some time after they have been administered, PET can be used both to diagnose physical abnormalities and to study body functions in normal subjects.

PET differs from other nuclear medicine both in the type of radiation emitted and in the type of scanner required to detect it. The radioactive tracers used in PET imaging may be produced on-site with a cyclotron (or generator, for some tracers) and appropriate chemistry labs, or may be ordered from commercial distributors, even though all PET tracers are relatively short-lived (110 minutes is the longest half-life). Therefore, the capital costs associated with developing the equipment capable of PET scanning can range from a few hundred thousand

dollars (for the gamma camera being upgraded with coincident circuitry to perform PET scans) to less than one million dollars (for a low-end scanner) to several million dollars for a high-end scanner, a cyclotron, and associated chemistry capabilities.

Coincidence cameras are “built” by adding electronic circuitry to gamma cameras. The coincident circuitry makes it a PET system. The coincidence camera is nuclear medicine equipment that is designed, built or modified to detect only the single photon emitted from nuclear events other than positron annihilation. This hybrid machine is used as a gamma camera 90-95 percent of the time to perform non-PET imaging; thus, coincidence cameras are non-dedicated PET scanners.

The first PET scanners were dedicated machines performing only that service, supported by cyclotrons on-site. However, PET scanners also include hybrid machines, performing a variety of nuclear medicine studies and supported by new tracer production facilities housing cyclotrons in stand-alone facilities.

All these machines are PET scanners as defined in G.S. § 131E-176(19a), but they vary widely in their capabilities. The less expensive hybrid devices are capable of disclosing the presence of lesions as small as 1.5 to 2 cms., while the better dedicated scanners can disclose lesions as small as 0.5 to 1 cm. Because they can provide definitive studies for many patients and because they cost less, hybrid devices have quickly found a market. In fact, there are now over 85 dedicated scanners and more than 200 hybrid devices in the country.

The leading impetus to hybridization is the fact that the technology is rapidly improving. As a result, less expensive devices are now better than their predecessors and higher-end dedicated scanners are being adapted to include CT scanners, which will give them the capacity to perform, more accurately, the range of studies now performed on hybrid machines. Additionally, mobile PET scanners are available, and the number in operation in the United States is growing.

Dedicated PET scanners are scanners used exclusively for PET imaging. Dedicated PET scanners can be fixed or mobile. Mobile PET scanner means a dedicated PET scanner and its transporting equipment that is moved to provide services at two or more host facilities.

The rapid improvements in the equipment are being driven both by the rate of technological advances and by the steady growth in the number of clinical studies for which the Centers for Medicare & Medicaid Services (CMS) authorizes reimbursement. Among oncologists, oncologic surgeons, and radiation oncologists, PET is already recognized as essential to the diagnosis and treatment of patients with melanoma, colorectal cancer, lung cancer and lymphoma. CMS has approved reimbursement for studies for patients with solitary pulmonary nodules, carcinoma of the lung (non-small cell), melanoma, colorectal cancer, lymphoma, head and neck tumors, esophageal cancer, breast cancer, refractory seizures, perfusion of the heart, and questions concerning myocardial viability.

## **Facility Inventory-Service Volume**

There are 27 approved or operational fixed dedicated PET scanners in North Carolina. Duke University Hospital acquired a cyclotron generated fixed dedicated PET scanner in 1985. During the following years, North Carolina Baptist Hospitals, Carolinas Medical Center and University of North Carolina Hospitals also acquired a cyclotron generated fixed dedicated PET scanner each. Pitt County Memorial Hospital, Rex Hospital, Mission Hospitals, New Hanover Regional Medical Center, Catawba Valley / Frye Regional, Cape Fear Valley Medical Center, First Health Moore, Forsyth Medical Center, Moses Cone Health System, Gaston Memorial Hospital, NorthEast Medical Center, Craven Regional Medical Center, The Presbyterian Hospital, High Point Regional and Wake PET Services were approved for each entity to acquire one fixed dedicated PET scanner. Duke University Hospital, Carolinas Medical Center and UNC Hospitals were also approved to acquire a second fixed dedicated PET scanner. There were three additional need determinations in the North Carolina 2006 State Medical Facilities Plan, one each in HSAs II, III, and VI. Alamance Regional Medical Center, Iredell Memorial Hospital, and Nash General Hospital were approved in 2007 to acquire fixed dedicated PET/CT scanners. The reported number of procedures performed on these fixed dedicated PET scanners for the years ending 9/30/2005, 9/30/2006, 9/30/2007 and 9/30/2008 are reflected in Table 9I.

Table 9I is followed by Tables 9J(1) and 9J(2), which reflect the reported number of procedures performed on mobile dedicated PET scanners for the years ending 9/30/2005, 9/30/2006, 9/30/2007 and 9/30/2008.

#### **Fixed Dedicated PET Scanner Need Methodology**

A fixed PET scanner's service area is the health service area (HSA) in which the scanner is located. The HSAs are the six multi-county groupings as defined in Appendix A.

A mobile PET scanner's service area is the planning region in which the scanner is located. There are two mobile PET scanner planning regions, the west region (HSAs I, II, and III as described in Appendix A) and the east region (HSAs IV, V, and VI as described in Appendix A).

One additional fixed dedicated PET scanner is needed for each existing fixed dedicated PET scanner that was utilized at or above 80 percent of capacity during the twelve month period reflected in the owner's 2009 Hospital Licensure Renewal Application on file with the North Carolina Division of Health Service Regulation.<sup>1</sup> The North Carolina State Health Coordinating Council approved a change in the annual capacity for fixed dedicated PET scanners from 2,600 to 3,000. For the purposes of this determination, the annual capacity of a fixed dedicated PET scanner is 3,000 ( $3,000 \times .80 = 2,400$ ) procedures. ~~and~~

The standard methodologies used to determine need for fixed PET scanners are calculated as follows:

#### **Methodology 1:**

<sup>1</sup> The need generated by this part of the methodology may be met by any applicant, and not just the owner or operator of the scanner that has achieved the target utilization.

- Step 1. Determine the planning inventory of all fixed PET scanners in the State, to include existing fixed PET scanners in operation, approved fixed PET scanners for which a CON was issued but is pending development, and fixed PET scanners for which no CON has been issued because the decision on a need determination in a previous SMFP is under review or appeal.
- Step 2. For each facility at which a PET scanner is operated, determine the total number of procedures performed on all fixed PET scanners located at each facility as reported for the 12-month period reflected in the Hospital License Renewal Application or Registration and Inventory of Equipment on file with the North Carolina Division of Health Service Regulation.
- Step 3. Multiply the number of fixed PET scanners at each facility by 3,000 procedures to determine the PET scanner capacity at each facility.
- Step 4. Divide the total number of PET scanner procedures performed at each facility, as determined in Step 2, by the capacity calculated in Step 3. Multiply the results by 100 to convert the numbers to a utilization percentage.
- Step 5. A need is determined for an additional fixed PET scanner if the utilization percentage is 80% or greater at a facility, except as provided in Step 8 for both methodologies combined.

Methodology 2:

- Step 6. Identify each major cancer treatment facility, program or provider in the State, i.e. providers that operate two linear accelerators and performed over 12,500 ESTV procedures in the 12 month period reflected on the Hospital License Renewal Application or Equipment Registration and Inventory Form.
- Step 7. A need is determined for one additional fixed PET scanner if a major cancer treatment facility, program or provider identified in Step 6 is hospital based and does not own or operate a fixed dedicated PET scanner, except as provided in Step 8 for both methodologies combined.<sup>1</sup>
- Step 8. The maximum need determination for a single HSA in any one year will be no more than two additional fixed PET scanners regardless of the numbers generated by each methodology individually.

~~One fixed dedicated PET scanner is needed for each major cancer treatment facility that is hospital based and does not own or operate a fixed dedicated PET scanner. For the purposes of this determination, a major cancer treatment facility, program, or provider is one that performed~~

---

<sup>1</sup> The need generated by this part of the methodology may be met by any applicant, and not just a major cancer treatment facility, program, or provider that does not own or operate a fixed dedicated PET scanner.

~~over 12,500 procedures/ESTVs in 2008 and has two operational linear accelerators, as reflected on the 2009 Hospital Licensure Renewal Application on file with the North Carolina Division of Health Service Regulation. The maximum need determination for an HSA in any one year will be two additional fixed dedicated PET scanners.~~

### **Need Determinations**

The first part of the methodology indicates that there is no need for additional fixed dedicated PET scanners anywhere in the State. The second part of the methodology indicates that there is no need for any additional fixed dedicated PET scanners anywhere in the state. There is no need for any additional mobile dedicated PET scanners anywhere in the state.

## **Magnetic Resonance Imaging**

### **Introduction**

Magnetic Resonance Imaging (MRI) technology is mobile and apparently is financially feasible at relatively small-volume mobile sites. Geographic accessibility is a significant planning issue, and it is important to assure that the rural areas of the State have the opportunity to access this important technology through both fixed and mobile scanners, as it has become the standard of care.

The methodology that is used allows the addition of a fixed MRI scanner at a fixed site within the same MRI service area.

### **The Technology**

Nuclei of atoms in various structures of the human body resonate differentially when exposed to a strong magnetic field. MRI devices register these differences in response as images for use in making diagnoses. Use of MRI technology has grown rapidly because it does not expose patients to ionizing radiation, and because of the quality of images it obtains. In 1983, there were only two MRI programs in North Carolina, performing a total of 531 procedures. In 2007-08, fixed and mobile scanners were reported as providing 815,945 procedures.

An MRI procedure is defined as a single discrete MRI study of one patient (single CPT coded procedure). An MRI study means one or more scans relative to a single diagnosis or symptom.

An MRI procedure is a single MRI procedure performed on one defined body part during one visit. Each MRI procedure must be directly linked to a single billable CPT code associated with an MRI procedure. For example, an MRI brain scan with and without contrast is a single procedure, with a single CPT code.

For reporting verification, each reporting site will provide the number of scans performed annually for all CPT codes by volume on Hospital License Renewal Applications and Registration and Inventory of Medical Equipment Forms for Fixed (Non-Hospital) and Mobile MRI Providers.

## Assessment

### MOBILE MRI

Because of the availability of mobile units, it appears that MRI technology is accessible within a reasonable distance and travel time to all of the population of North Carolina. Several mobile sites in operation all of 2007-08 reported less than 200 procedures.

Mobile MRI scanner means an MRI scanner and transporting equipment that is moved at least weekly to provide services at two or more host facilities.

Some sites that initiated MRI service with mobile units have installed fixed scanners as volumes increased. Because of the need to house a unit in a specially constructed building or area of a building, the cost of each such new fixed facility may exceed \$2,000,000.

### 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 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

1. Facilities that currently offer mobile MRI services, but have received the transmittal of a CON 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 CON 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 CON 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 Magnets in Table 9K.

### MRI Tiered Planning Thresholds

Acute Care Service Area Fixed Scanners	Inpatient and Contrast Adjusted Thresholds	Planning Threshold
4 and over	4,805 <sup>1</sup>	70.0%
3	4,462 <sup>2</sup>	65.0%
2	4,118 <sup>3</sup>	60.0%
1	3,775 <sup>4</sup>	55.0%
0	1,716 <sup>5</sup>	25.0%

The above tiering is based on the assumption that the time necessary to complete 1.0 MRI procedure (a basic outpatient procedure without contrast) is 30 minutes, or an average throughput of two procedures per hour on an MRI scanner. Capacity of a single MRI scanner is defined as that of an MRI scanner being available and staffed for use at least 66 hours per week, and 52 weeks per year. The resulting capacity of a fixed MRI scanner is defined below:

**Annual Maximum Capacity of a Single Fixed MRI Scanner =  
66 hours per week x 52 weeks x 2 procedures per hour = 6,864 procedures annually**

This definition of capacity represents 100% of the procedure volume the equipment is capable of completing, given perfect scheduling, no machine or room downtime, no

---

<sup>1</sup> 6,864 X 70% = 4,805

<sup>2</sup> 6,864 X 65% = 4,462

<sup>3</sup> 6,864 X 60% = 4,118

<sup>4</sup> 6,864 X 55% = 3,775

<sup>5</sup> 6,864 X 25% = 1,716



cancellations, no patient transportation problems, no staffing or physician delays and no MRI procedures outside the norm.

Procedure totals are from the 2009 Hospital Licensure Renewal Application or the 2009 MRI Registration and Inventory of Medical Equipment Form as submitted to the North Carolina Division of Health Service Regulation concerning equipment registration and inventory, and number of procedures.

The table below indicates the weighting values assigned to the procedure type:

### Weighting System

<b>PROCEDURE TYPE</b>	<b>BASE WEIGHT</b>	<b>INPATIENT WEIGHT</b>	<b>CONTRAST WEIGHT</b>	<b>PROCEDURE TIME MINUTES</b>
Outpatient/No Contrast/Sedation	1.0	0.0	0.0	30
Outpatient/With Contrast/Sedation	1.0	0.0	.4 (Add 12 minutes)	42
Inpatient/No Contrast/Sedation	1.0	.4 (Add 12 minutes)	0.0	42
Inpatient/With Contrast/Sedation	1.0	.4 (Add 12 minutes)	.4 (Add 12 minutes)	54

Procedures with contrast include those with sedation as reported in the annual Hospital Licensure Renewal Application and the annual Registration and Inventory of Medical Equipment for Fixed and Mobile MRIs.

### Need Determination

The standard methodology used to determine need for fixed MRI scanners is calculated as follows:

Step 1. Determine the number of clinical fixed and mobile MRI scanners in each MRI service area by site to include: existing fixed or mobile MRI scanners in operation, approved fixed or mobile MRI scanners for which a CON was issued but is pending development, and fixed MRI scanners for which no CON has been issued because the decision regarding a need determination in a previous SMFP is under review or appeal. The inventory shall exclude: MRI scanners used for research only, non-clinical MRI scanners, and MRI scanners awarded based on need determinations for a dedicated purpose or demonstration project.

Step 2. Convert the number of fixed and mobile MRI scanners to fixed equivalent magnets as follows:

- (a) For each existing fixed MRI scanner, assign a value of one fixed equivalent magnet;
- (b) For each approved fixed MRI scanner, assign a value of one fixed equivalent magnet, even though the site may be receiving mobile services temporarily until the fixed scanner

is operational. [Note: The mobile services are not listed separately from the approved fixed MRI scanner if the mobile unit will no longer be used when the fixed MRI scanner is operational.]

(c) For each existing mobile MRI scanner site, calculate the fixed equivalent for each mobile site by dividing the number of MRI scans performed at each site by the threshold for the MRI service area, with the exception that the fixed equivalent shall be no greater than one; and

(d) For each approved mobile MRI scanner site, at which services have not started, calculate the days to be operated at the site as a fraction of the total days of service to be provided by the approved mobile MRI scanner. [For example, if a CON has been awarded to a provider to serve six different sites in the State for one day per week at each site, the fixed equivalent for each approved site in the State is 0.17 ( $1/6=.1666$ ). If the mobile is approved to serve two sites for three days per week at each site the fixed equivalent for each site is 0.50 ( $3/6=.50$ ).]

Step 3. Sum the number of fixed equivalent magnets for each MRI service area.

Step 4. Determine the total number of MRI scans performed at each site regardless of whether the MRI scanner is fixed or mobile, as reported in the 2009 Hospital License Renewal Applications or 2009 MRI Registration and Inventory Forms.

Step 5. Of the total number of MRI scans performed, determine the number of MRI scans performed by type (i.e. inpatient, outpatient, with contrast or sedation, no contrast or sedation) as reported in the 2009 Hospital License Renewal Applications or 2009 MRI Registration and Inventory Forms.

Step 6. For each site, multiply the number of inpatient MRI scans by 0.40 to calculate the inpatient adjustment.

Step 7. For each site, multiply the number of contrast or sedation scans by 0.40 to calculate the contrast adjustment.

Step 8. For each site, sum the total number of MRI scans performed (Step 4), the inpatient adjustment (Step 6), and the contrast adjustment (Step 7) to calculate the total number of adjusted MRI procedures for each site.

Step 9. For each service area, sum the number of adjusted total MRI procedures for all sites in the MRI service area.

Step 10. Calculate the average number of adjusted total MRI procedures per MRI scanner in the service area by dividing the adjusted total procedures for the service area (Step 9) by the sum of fixed equivalent magnets in the service area (Step 3).

Step 11. Determine the utilization threshold for the service area based only on the number of existing, approved and pending fixed MRI scanners located in the service area as identified in Step 1:

- 4+ fixed MRI scanners – 4,805 threshold
- 3 fixed MRI scanners – 4,462 threshold
- 2 fixed MRI scanners – 4,118 threshold
- 1 fixed MRI scanner – 3,775 threshold
- 0 fixed MRI scanners – 1,716 threshold

Step 12. Compare the area average procedures per fixed equivalent magnet (Step 10) with the threshold for the MRI service area (Step 11). If the area average procedure per magnet is greater than or equal to the service area threshold, a need is determined for one additional MRI scanner in the service area.

The tables reflect the MRI service areas. There is a need in Table 9K for one additional fixed MRI scanner each in the Wake County and Forsyth County MRI Service Areas. There is no need for any additional fixed MRI scanners anywhere else in the state. There is no need for any additional mobile MRI scanners anywhere in the state.

### Tables

The following tables are included in this section of the chapter: Table 9K, MRI Procedures by MRI Service Areas – All Fixed and Mobile Procedures – TOTALS with Tiered & % Mobile Equivalents; Table 9L (1), Inventory of MRI Scanners for Cardiovascular Clinical Research Use Pursuant to Policy AC-3 in the 2001 SMFP; Table 9L (2), Inventory of Dedicated Breast MRI Scanners Pursuant to Adjusted Need Determination in the 2002 and 2006 SMFPs; Table 9L (3) Inventory of Dedicated Pediatric MRI Scanner Pursuant to Adjusted Need Determination in the 2005 SMFP; Table 9L (4) Inventory of Demonstration Project for a Fixed Extremity MRI Scanner Pursuant to Adjusted Need Determination in the 2006 SMFP; Table 9L (5), Inventory of MRI Scanners Dedicated for Radiation Oncology and Use in Operating Room Suite; Table 9L (6): Inventory of Fixed Multi-Position MRI Scanners Dedicated For Two Demonstration Projects; and Table 9M, Fixed MRI Scanners Need Determination.

## Cardiac Catheterization Equipment

### Definitions

“Cardiac catheterization equipment”, as defined in G.S. §131E-176(2f), “means the equipment used to provide cardiac catheterization services.”

“Cardiac catheterization services”, as defined in G.S. §131E-176(2g), “means those procedures, excluding pulmonary angiography procedures, in which a catheter is introduced into a vein or artery and threaded through the circulatory system into the heart specifically to diagnose abnormalities in the motion, contraction, and blood flow of the moving heart or to perform surgical therapeutic interventions to restore, repair, or reconstruct the coronary blood vessels of the heart.”

A cardiac catheterization (fixed or shared) equipment's service area is the cardiac catheterization equipment planning area in which the equipment is located. The cardiac catheterization equipment planning areas are the same as the Acute Care Service Areas defined

in Chapter 5, Acute Care Beds, and contained in Figure 5.1. The cardiac catheterization equipment 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.

### Facility Inventory-Service Volume

There were 44 hospitals with fixed cardiac catheterization programs in North Carolina during FY 2007-08. The reported number of adult cardiac catheterization procedures for the years ending 9/30/94 through 9/30/08, and the reported number of pediatric cardiac catheterization procedures for the years ending 9/30/96 through 9/30/08 are presented in Tables 9N and 9O. Table 9R displays **fixed** cardiac catheterization equipment capacity and volume based on a capacity of 1,500 procedures.

### Cardiac Catheterization Equipment Need Determination Methodology

The North Carolina State Health Coordinating Council defines capacity of an item of cardiac catheterization equipment as 1,500 diagnostic-equivalent procedures per year, with the trigger of need at 80 percent of capacity. One therapeutic cardiac catheterization procedure is valued at 1.75 diagnostic-equivalent procedures. One cardiac catheterization procedure performed on a patient age 14 or younger is valued at two diagnostic-equivalent procedures. All other procedures are valued at one diagnostic-equivalent procedure.

1. ~~The need for additional fixed cardiac catheterization equipment (i.e., equipment that is not moved to provide services at two or more sites) is determined as follows:~~

~~Step 1: For each county, determine the total planning inventory of all fixed cardiac catheterization equipment, immediately prior to publication of the annual State Medical Facilities Plan, by summing:~~

- ~~a. equipment in operation,~~
- ~~b. equipment for which a CON was issued, but is pending development, and~~
- ~~c. equipment for which no CON has been issued because the decision on a need determination in a previous SMFP is under review or appeal.~~

~~Step 2: Determine the number of procedures performed on each unit of fixed cardiac catheterization equipment using the number of procedures reported for the 12 month period reflected in the 2009 Hospital License Renewal Application or the 2009 Registration and Inventory of Cardiac Catheterization Equipment.~~

~~Step 3: For each facility, determine the number of units of fixed cardiac catheterization equipment required for the number of procedures performed by dividing the number of cardiac catheterization procedures performed at each facility by 1,200 procedures (i.e., 80 percent of capacity, which is 1,500 procedures).~~

- ~~Step 4: Sum the number of units of fixed cardiac catheterization equipment required, for all facilities in the same county. (NOTE: The sum is rounded to the nearest whole number.)~~
- ~~Step 5: Subtract the number of units of fixed cardiac catheterization equipment required in each county from the total planning inventory for each county. The difference is the number of units of fixed cardiac catheterization needed.~~
2. A need also exists for shared fixed cardiac catheterization equipment (*i.e. fixed equipment that is used to perform both cardiac catheterization procedures and angiography procedures*) in a county served by a mobile cardiac catheterization unit when:
- ~~a. The number of cardiac catheterization procedures as defined in 10A NCAC 14C .1601(5) performed at any mobile site exceeds 240 (300 X 80 percent) such procedures per year for each eight hours per week mobile equipment is operated at that site during the 12-month period reflected in the 2009 Hospital License Renewal Application or the 2009 Registration and Inventory of Cardiac Catheterization Equipment on file with the NC Division of Health Service Regulation; and~~
  - ~~b. No other fixed or mobile cardiac catheterization service is provided within the same county.~~

The standard methodologies used to determine need for additional fixed cardiac catheterization equipment are calculated as follows:

#### Methodology 1:

- Step 1. Determine the planning inventory for each facility that has fixed cardiac catheterization equipment, immediately prior to publication of the annual State Medical Facilities Plan, to include: existing equipment in operation, approved equipment for which a CON was issued but is pending development, and pending equipment for which no CON has been issued because the decision on a need determination in a previous SMFP is under review or appeal. For each cardiac catheterization equipment service area, calculate the total number of existing, approved and pending units of cardiac catheterization equipment located in the cardiac catheterization equipment service area.
- Step 2. Determine the number of adult diagnostic, pediatric diagnostic and interventional procedures performed at each facility as reported for the 12-month period reflected in the 2009 Hospital License Renewal Application or the 2009 Registration and Inventory of Cardiac Catheterization Equipment.
- Step 3. For each facility, calculate the total weighted (diagnostic-equivalent) cardiac catheterization procedures by multiplying adult diagnostic procedures by 1.0, interventional cardiac catheterization procedures by 1.75, and pediatric diagnostic procedures performed on patients age 14 or younger by 2.00.

- Step 4. For each facility, determine the number of units of fixed cardiac catheterization equipment required for the number of procedures performed by dividing the number of weighted (diagnostic-equivalent) cardiac catheterization procedures performed at each facility by 1,200 procedures (i.e., 80 percent of capacity, which is 1,500 procedures). (NOTE: Round the result to the nearest hundredth.)
- Step 5. Sum the number of units of fixed cardiac catheterization equipment required for all facilities in the same cardiac catheterization equipment service area as calculated in Step 4. (NOTE: The sum is rounded to the nearest whole number.)
- Step 6. Subtract the number of units of fixed cardiac catheterization equipment required in each cardiac catheterization equipment service area from the total planning inventory for each cardiac catheterization equipment service area. The difference is the number of units of fixed cardiac catheterization equipment needed.

#### Methodology 2:

For cardiac catheterization equipment service areas in which a unit of fixed cardiac catheterization equipment is not located, need exists for one shared fixed cardiac catheterization equipment (i.e. fixed equipment that is used to perform both cardiac catheterization procedures and angiography procedures) when:

- a. The number of cardiac catheterization procedures as defined in 10A NCAC 14C .1601(5) performed at any mobile site in the cardiac catheterization equipment service area exceeds 240 (300 X 80 percent) procedures per year for each eight hours per week the mobile equipment is operated at that site during the 12-month period reflected in the 2009 Hospital License Renewal Application or the 2009 Registration and Inventory of Cardiac Catheterization Equipment on file with the NC Division of Health Service Regulation; and
- b. No other fixed or mobile cardiac catheterization service is provided within the same cardiac catheterization equipment service area.

There is adequate capacity and geographical accessibility for cardiac catheterization equipment in the State, and therefore there is no need for any additional mobile cardiac catheterization equipment.

#### Need Determination

It is determined that there is no need for any additional fixed cardiac catheterization equipment anywhere in the State and no CON reviews will be scheduled. It is determined that there is no need for additional units of shared fixed cardiac catheterization equipment anywhere in the State and no CON reviews will be scheduled. It is determined that there is no need for additional units of mobile cardiac catheterization equipment anywhere in the State and no reviews will be scheduled.

It is further determined that fixed cardiac catheterization equipment and services shall only be approved for development on hospital sites. It is further determined that mobile cardiac catheterization equipment and services shall only be approved for development on hospital sites.

Table 9E: Hospital and Free-Standing Linear Accelerators and Radiation Oncology Procedures (for May 27, 2009 SHCC Meeting)					
Facility Name	Service Area #	County	Number of Linear Accelerators	Number of Procedures (ESTVs) 10/1/2007-9/30/2008	Average # of Procedures per Unit
Murphy Medical Center	1	Cherokee	1	2,343	2,343
Harris Regional Hospital, Inc.	1	Jackson	1	4,693	4,693
NC Radiation Therapy - Franklin	1	Macon	1	1,530	1,530
Mission Hospitals (S) (b)	2	Buncombe	3	20,668	6,889
NC Radiation Therapy - Asheville	2	Buncombe	2	8,639	4,320
NC Radiation Therapy - Clyde	2	Haywood	1	4,489	4,489
NC Radiation Therapy - Marion	2	McDowell	1	3,838	3,838
Watauga Hospital	3	Watauga	1	4,005	4,005
Margaret Pardee Mem. Hospital	4	Henderson	1	7,879	7,879
NC Radiation Therapy - Brevard	4	Transylvania	1	1,453	1,453
NC Rad. Therapy - Hendersonville	4	Henderson	1	1,258	1,258
Catawba Valley Medical Center	5	Catawba	2	14,405	7,202
Frye Regional Medical Center	5	Catawba	1	NA	NA
Grace Hospital, Inc.	5	Burke	1	NR	NR
Valdese General	5	Burke	1	4,004	4,004
Caldwell Memorial Hospital, Inc.	5	Caldwell	1	2,762	2,762
Cleveland Regional	6	Cleveland	1	7,343	7,343
Gaston Memorial Hospital (h)	6	Gaston	3	13,531	4,510
Lincoln Radiation Oncology Associates (s)	6	Lincoln	will be transferred	NR	NR
NC Radiation Therapy - Forest City	6	Rutherford	1	2,464	2,464
Pineville Radiation Therapy Center (n)	7	Mecklenburg	1		NA
Carolinas Medical Center (S)	7	Mecklenburg	3	18,619	6,206
CMC-Union Reg. Medical Center ( i )	7	Union	1	8,125	8,125
Matthews Radiation Oncology	7	Mecklenburg	1	12,704	12,704
Presbyterian Hospital	7	Mecklenburg	4	12,341	3,085
University Radiation Oncology	7	Mecklenburg	1	6,956	6,956
Iredell Memorial	8	Iredell	2	5,862	2,931
Lake Norman Radiation Oncology Center	8	Iredell	1	8,617	8,617
Rowan Regional Medical Center	8	Rowan	1	5,785	5,785
CMC-NorthEast Medical Center	9	Cabarrus	2	13,712	6,856
Stanly Regional Medical Center	9	Stanly	1	3,846	3,846
Forsyth Memorial Hospital	10	Forsyth	4	26,944	6,736
Hugh Chatham Memorial Hospital (d)	10	Surry	1	5,260	5,260
N. C. Baptist Hospitals (S)	10	Forsyth	4	17,688	4,422
Cancer Center of Davidson County (o)	11	Davidson	1	NA	NA
High Point Regional Health System	12	Guilford	2	10,090	5,045
Morehead Memorial Hospital	12	Rockingham	1	4,474	4,474
Moses Cone Health System	12	Guilford	4	26,998	6,749
Randolph Cancer Center (m)	13	Randolph	1	NA	NA
UNC Hospitals (S)	14	Orange	4	22,414	5,603
Alamance Regional Medical Center (j)	15	Alamance	2	9,700	4,850
Duke University Hospital (S)	16	Durham	5	37,245	7,449
Durham Regional Hospital	16	Durham	1	2,766	2,766
Maria Parham Hospital (e)	16	Vance	1	5,773	5,773
FirstHealth Moore Regional	17	Moore	2	19,550	9,775

Table 9E: Hospital and Free-Standing Linear Accelerators and Radiation Oncology Procedures (for May 27, 2009 SHCC Meeting)					
Facility Name	Service Area #	County	Number of Linear Accelerators	Number of Procedures (ESTVs) 10/1/2007-9/30/2008	Average # of Procedures per Unit
Scotland Memorial Hospital ( 1 )	17	Scotland	1	4,917	4,917
Cape Fear Valley Medical Center (a)	18	Cumberland	4	21,340	5,335
Southeastern Regional Medical Center	18	Robeson	1	6,705	6,705
Sampson Regional Medical Center	18	Sampson	1	2,365	2,365
2008 SMFP Need Determination	18		1		
New Hanover Radiation Oncology	19	New Hanover	2	23,613	11,807
New Hanover Regional Med Ctr	19	New Hanover	1	7,186	7,186
South Atlantic Radiation Oncology, LLC ( c )	19	Brunswick	1	3,694	3,694
2007 SMFP Need Determination	20		1		
Raleigh Hematology Oncology Associates dba Cancer Centers of NC	20	Wake	1	11,277	11,277
Duke Health Raleigh Hospital	20	Wake	1	7,566	7,566
Rex Hospital	20	Wake	4	16,970	4,242
Wake Radiology / Oncology Services	20	Wake	1	6,216	6,216
Rex Healthcare (Smithfield Radiation Oncology)	21	Johnston	1	3,706	3,706
Johnston Memorial Hospital Authority (t)	21	Johnston	1	NR	NR
Lenoir Memorial	22	Lenoir	1	6,911	6,911
Goldsboro Radiation Therapy Services dba Wayne Radiation Oncology Center	22	Wayne	1	5,955	5,955
Carteret General (g)	23	Carteret	1	4,162	4,162
Craven Regional Med Ctr	23	Craven	2	12,771	6,386
Onslow Radiation Oncology, LLC	24	Onslow	1	NR	NR
Nash Day Hospital	25	Nash	2	8,183	4,091
Roanoke Valley Cancer Center	25	Halifax	1	3,844	3,844
Wilson Medical Center	25	Wilson	1	4,526	4,526
Beaufort County Hospital	26	Beaufort	1	3,470	3,470
Ahoskie Cancer Center	26	Hertford	1	2,048	2,048
NC Radiation Therapy Management Services (prev Carolina Radiation Medicine, P.A.) (f) (S)	26	Pitt	1	7,668	7,668
Pitt County Memorial Hospital (S)	26	Pitt	3	NR	NR
Albemarle Hospital	27	Pasquotank	1	4,696	4,696
Alliance Oncology dba Outer Banks Cancer Center	27	Dare	1	2,323	2,323
<b>TOTALS (72 Facilities)</b>			<b>116</b>	<b>572,869</b>	<b>4,939</b>



- (a) Cape Fear Valley Health System received a CON in May 2004 for one additional linac bringing their total to 4 linacs.
- (b) Mission Hospitals received a CON in September 2004 to initiate CyberKnife linac service; to be operational in October 2005.
- (c) South Atlantic Radiation Oncology received a CON in August 2005 to initiate linac service; operation effective May 2007.
- (d) Hugh Chatham Memorial Hospital became operational in March 2000 with a leased linac from NC Baptist Hospitals.
- (e) Maria Parham Hospital received a CON in July 2001 to lease and install one linac.
- (f) Carolina Radiation Medicine, P.A. became operational in July 1998.
- (g) Carteret General Hospital received a no review in June 1999 to replace a linear accelerator and purchase a simulator.
- (h) Gaston Memorial Hospital received a CON in August 1999 to add one linac; operation projected for April 2001.
- (i) Union Regional Medical Center received a CON in April 2000 to acquire one linac; operation projected for September 2001.
- (j) Alamance Regional Medical Center received a CON in August 2002 to add one linac; operation projected for July 2003.
- (k) Forsyth Medical Center received a CON in August 2002 to add one linac; operational in October 2004.
- (l) Scotland Memorial Hospital became operational in August 2003.
- (m) Randolph Cancer Center received a CON in June 2006 to initiate linac service.
- (n) Pineville Radiation Therapy Center received a CON in June 2007 to initiate linac service.
- (o) Cancer Center of Davidson County, LLC received a CON in July 2007 to initiate linac service.
- (p) East Carolina University Brody School of Medicine (Pitt Memorial) received a CON in December 2007 to replace an existing linear accelerator with a CyberKnife linear accelerator; to be operational June 2008.
- (q) UNC Hospitals received a CON in October 2006 to replace an existing linear accelerator with a CyberKnife linear accelerator; to be operational in April 2007.
- (r) Carolinas Medical Center - NorthEast received a CON in February 2006 to acquire a CyberKnife linear accelerator; to be operational in October 2007.
- (s) Lincoln Radiation Oncology Associates received CON 10/27/08 to acquire existing linear accelerator through ownership transfer from Gaston Memorial Hospital, replace the linear accelerator and relocate to Lincoln Radiation Oncology Center.
- (t) Johnston Memorial Hospital Authority received CON # J-8188-08 on 2/24/09.

CPT Code 77427 - Weekly radiation therapy management. These procedure numbers from Freestanding (fixed non-hospital) Centers were removed from the count for purposes to determine need.

NA - Not Applicable, not in operation for appropriate time frame.

NR - No report

S - Has at least one Linear Accelerator configured for Stereotactic Radiosurgery

Table 9F: Linear Accelerator Service Areas and Calculations (for May 27, 2009 SHCC Meeting)

Service Area	2009 Civilian Population	Accelerators	Population within Service Area Per Accelerator	Percentage of Patients from Outside the Service Area	2007-2008 ESTV Procedures	Procedures Per Accelerator	ESTV Procedures Divided by 6,750 Minus # of Accelerators	NEED Determination
Area 1	133,777	3	44,592	3.70%	8,566	2,855	-1.73	*
Area 2	390,739	7	55,820	21.32%	37,634	5,376	-1.42	*
Area 3	90,427	1	90,427	6.29%	4,005	4,005	-0.41	*
Area 4	156,733	3	52,244	12.93%	10,589	3,530	-1.43	*
Area 5	363,074	6	60,512	15.29%	21,170	3,528	-2.86	*
Area 6	442,271	5	88,454	3.07%	23,337	4,667	-1.54	*
Area 7	1,146,032	11	104,185	12.09%	58,743	5,340	-2.30	*
Area 8	297,958	4	74,490	25.79%	20,263	5,066	-1.00	*
Area 9	235,292	3	78,431	27.14%	17,558	5,853	-0.40	*
Area 10	629,269	9	69,919	27.19%	49,891	5,543	-1.61	*
Area 11	158,855	1						
Area 12	567,337	7	81,048	24.22%	41,561	5,937	-0.84	*
Area 13	141,696	1						
Area 14**	192,495	4	48,124	74.64%	22,414	5,603	-0.68	*
Area 15	170,348	2	85,174	7.08%	9,700	4,850	-0.56	*
Area 16	422,621	7	60,374	27.96%	45,784	6,541	-0.22	*
Area 17*	303,465	3	101,155	16.61%	24,467	8,156	0.62	*
Area 18	545,707	7	77,958	14.09%	30,409	4,344	-2.49	*
Area 19*	415,820	4	103,955	12.94%	34,492	8,623	1.11	*
Area 20	1,068,619	8	133,577	16.10%	42,028	5,254	-1.77	
Area 21	167,849	2	83,925	39.77%	3,706	1,853	-1.45	
Area 22	227,753	2	113,877	12.21%	12,866	6,433	-0.09	*
Area 23	186,014	3	62,005	22.27%	16,933	5,644	-0.49	*
Area 24	173,460	1						
Area 25	300,550	4	75,138	7.57%	16,552	4,138	-1.55	*
Area 26	311,418	6	51,903	3.42%	13,186	2,198	-4.05	*
Area 27	157,818	2	78,909	1.77%	7,019	3,510	-0.96	*
Totals	9,397,397	116	81,012		572,869	4,939	-31.13	0

\* Service Area does not have 120,000 base population per accelerator

\*\* Area 14 has more than 45% of its patients coming from outside its service area

Table 9I: PET Scanner Utilization of Existing Fixed Dedicated Scanners  
(for May 27, 2009 SHCC Meeting)

Center	Procedures				HSA	Inventory	Utilization Rate 2008 Procedures/ 3000 as Capacity	Need Determination by Criteria - 80% of Present Capacity
	2004- 2005	2005- 2006	2006- 2007	2007- 2008				
Mission Hospitals (f)	875	1003	1607	1674	I	1	53.57%	
Catawba Valley/ Frye Reg. (j)	848	1258	1574	1597	I	1	52.47%	
N.C. Baptist Hospitals	1266	1477	1919	2011	II	1	67.03%	
Moses Cone Health System (o)	1352	1760	1955	NR	II	1	0.00%	
Forsyth Medical Center (p)	1579	2417	2983	3208	II	2	53.47%	
High Point Regional ( r )	356	574	785	1101	II	1	36.70%	
Alamance Reg. Medical Ctr. (u)		374	480	37	II	1	1.23%	mobile procedures, too
Carolinas Med Center(a),(k)	3049	3635	3654	3510	III	2	58.50%	
CMC-Union (w)					III	1	0.00%	mobile procedures only
Gaston Memorial Hospital/CIS Summit (m)	700	846	984	870	III	1	29.00%	
CMC-NorthEast Medical Center (n)	481	615	818	868	III	1	28.93%	
The Presbyterian Hospital (q)	1544	1988	2173	2062	III	1	68.73%	
Iredell Memorial Hospital (t)			NA	306	III	1	10.20%	
Duke Univ. Hospital (d)	3091	3596	3858	3924	IV	2	65.40%	
UNC Hospitals (b)	1144	1386	1878	1553	IV	2	51.77%	
Rex Hospital (e)	1544	1913	2139	1704	IV	1	56.80%	
Wake PET Services, Wake Radiology Oncology, Wake Radiology (s)		NA	NA	NA	IV	1	0.00%	
New Hanover Reg. Med. (g)	582	755	895	1020	V	1	34.00%	
Cape Fear Valley Medical Ctr. (h)	1218	2069	2268	NA	V	1	0.00%	
First Imaging of the Carolinas ( i )	529	550	865	1025	V	1	34.17%	
Pitt Co. Memorial ( c )	393	832	981	1120	VI	1	37.33%	
Craven Regional Medical ( 1 )	719	831	852	869	VI	1	28.97%	
Nash General Hospital (v)		336	421	0	VI	1	0.00%	mobile procedures only
<b>TOTAL</b>	<b>21,270</b>	<b>28,215</b>	<b>33,089</b>	<b>28,459</b>		<b>27</b>		<b>0</b>

NA Not Applicable for time period ending September 30, 2008.

NR No Report at this time.

- (a) Approved for additional scanner in November 2001.  
 (b) Approved for scanner in June 2000 and additional scanner under Policy AC-3 in November 2005.  
 (c) Approved for scanner in August 2001.  
 (d) Approved for additional scanner under Policy AC-3 in September 2002.  
 (e) Approved for scanner in September 2002.  
 (f) Approved for scanner in January 2003.  
 (g) Operational in October 2004.  
 (h) Approved for scanner in August 2003.  
 ( i )Approved for scanner in August 2003.  
 ( j )Approved for scanner in July 2003.  
 (k) Approved for replacement of 1 scanner in June 2003.

- ( 1 ) Approved for scanner in October 2003.  
 (m) Approved for scanner in December 2003.  
 (n) Approved for scanner in December 2003.  
 (o) Operational in October 2004.  
 (p) Approved for scanners in June 2004 and November 2008.  
 (q) Approved for scanner in June 2004.  
 (r) Approved for scanner in January 2005.  
 (s) Approved for scanner in November 2005.  
 (t) Approved for scanner in January 2007.  
 (u) Approved for scanner in April 2007.  
 (v) Approved for scanner in May 2007.  
 (w) Approved for scanner in April 2009.

Table 9J(1): PET Scanner Provider of Mobile Dedicated Scanners (for May 27, 2009 SHCC Meeting)

PET Scanners Planning Region	Provider	Procedures	Inventory	Utilization Rate
				Year 2008 Procedures / 2600 as Capacity
1 (HSAs I, II, III)	Alliance Imaging	3196	1	
2 (HSAs IV, V, VI)	Alliance Imaging	2619	1	
TOTAL		5,815	2	

Table 9J(2): PET Scanner Sites Utilization of Existing Mobile Dedicated Scanners (for May 27, 2009 SHCC Meeting)

Center					HSA	Sites	Utilization Rate	Need Determination by Criteria - 80% of Present Capacity
	2004-2005	2005-2006	2006-2007	2007-2008			Year 2008 Procedures/ 2600 as Capacity	
Caldwell Memorial Hospital			78	143	I	1	6%	
Cleveland Regional	38	67	190	278	I	1	11%	
Grace Hospital	77	101	78	93	I	1	4%	
Margaret Pardee		113	178	141	I	1	5%	
Park Ridge		91	216	205	I	1	8%	
Rutherford Hospital				6	I	1	0%	
Valdese Hospital	97	101	105	108	I	1	4%	
Watauga Medical Center	62	101	123	138	I	1	5%	
West Care Harris Regional		197	241	251	I	1	10%	
Alamance Regional	288	374	471	440	II	1	17%	
High Point Regional	356	16	0	0	II	1	0%	
Hugh Chatham	50	84	103	138	II	1	5%	
Northern Hospital Surry		90	129	189	II	1	7%	
CMC - Union		60	350	350	III	1	13%	
Gaston Memorial	0	0	0	0	III	1	0%	
Lake Norman Medical Center			121	199	III	1	8%	
Northeast Medical Center	0	0	0	0	III	1	0%	
Rowan Regional	478	290	443	517	III	1	20%	
Duke Raleigh Hospital	201	303	375	554	IV	1	21%	
FirstHealth Moore	529	0	0	0	V	1	0%	
Scotland Memorial	76	93	155	117	V	1	5%	
Southeastern Regional	211	268	274	290	V	1	11%	
Albemarle Hospital	458	261	268	250	VI	1	10%	
Lenoir Memorial Hospital				235	VI	1	9%	
Nash General Hospital	240	336	423	434	VI	1	17%	
Wayne Memorial	255	190	274	418	VI	1	16%	
Wilson Medical Center	205	292	267	321	VI	1	12%	
TOTAL	3,621	3,428	4,862	5,815		27		0

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Alamance	Hospital Fixed		Alamance Regional Medical Center, Inc	2	2.00	6,442	3,393	1,934	534	581	7,894			
	Mobile	G-7053-04	Alamance Regional Medical Center	0	0.67	0	0	0	0	0	0			
		Grandfathered	Atlantic Diagnostic-Burlington (Alliance Imaging Inc.)	0	0.01	27	18	9	0	0	31			
		Grandfathered	Atlantic Diagnostic-Burlington (Alliance Imaging Inc.)	0	0.01	25	21	4	0	0	27			
		Grandfathered	Atlantic Diagnostic-Burlington (Alliance Imaging Inc.)	0	0.17	720	557	160	3	0	785			
		Grandfathered	Atlantic Diagnostic-Burlington (Alliance Imaging Inc.)	0	0.04	175	122	55	0	0	199			
		Temp. unit removed 12/07	Atlantic Diagnostic-Burlington (Alliance Imaging Inc.)	0	0.01	47	38	9	0	0	51			
<b>Alamance</b>				<b>2</b>	<b>2.91</b>	<b>7,436</b>					<b>8,986</b>	<b>3,087</b>	<b>4,118</b>	<b>0</b>
Alexander	Mobile	E-7059-04	Alexander County Public Health Dept. (Frye Regional Medical Center, Inc)	0	0.10	0	0	0	0	0	0			
<b>Alexander</b>				<b>0</b>	<b>0.10</b>	<b>0</b>					<b>0</b>	<b>0</b>	<b>1,716</b>	<b>0</b>
			No Service Site											
<b>Alleghany</b>													<b>1,716</b>	<b>0</b>
Anson	Mobile	F-6868-03	Anson Community Hospital (Carolinas Imaging Services)	0	0.05	92	66	24	2	0	102			
<b>Anson</b>				<b>0</b>	<b>0.05</b>	<b>92</b>					<b>102</b>	<b>102</b>	<b>1,716</b>	<b>0</b>
Ashe	Hospital Fixed	D-8162-08	Ashe Memorial Hospital	1	1.00	0	0	0	0	0	0			
	Mobile	G-6271-00	Ashe Memorial Hospital Inc. (Alliance Imaging Inc.)	0	0.07	270	176	72	11	11	312			
		Grandfathered	Ashe Memorial Hospital Inc. (Alliance Imaging Inc.)	0	0.19	776	506	224	28	18	891			
<b>Ashe</b>				<b>1</b>	<b>1.26</b>	<b>1,046</b>					<b>1,203</b>	<b>951</b>	<b>3,775</b>	<b>0</b>
Avery	Mobile	Grandfathered	Charles A. Cannon Memorial Hospital (Alliance Imaging Inc.)	0	0.23	397	283	91	21	2	443			
		G-6271-00	Charles A. Cannon Memorial Hospital (Alliance Imaging Inc.)	0	0.11	181	139	32	9	1	198			
<b>Avery</b>				<b>0</b>	<b>0.34</b>	<b>578</b>					<b>642</b>	<b>642</b>	<b>1,716</b>	<b>0</b>
Beaufort	Hospital Fixed		Beaufort County Hospital Association, Inc	1	1.00	2,413	1,657	558	84	114	2,761			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Beaufort	Mobile	Q-6885-03	Pungo District Hospital (Alliance Imaging, Inc and University Health Systems Inc.)	0	0.08	316	243	47	17	9	349			
<b>Beaufort/Hyde</b>				<b>1</b>	<b>1.08</b>	<b>2,729</b>					<b>3,110</b>	<b>2,870</b>	<b>3,775</b>	<b>0</b>
Bertie	Mobile	Q-6885-03	Bertie Memorial Hospital (Alliance Imaging, Inc and University Health Systems Inc.)	0	0.22	377	317	41	11	8	404			
<b>Bertie</b>				<b>0</b>	<b>0.22</b>	<b>377</b>					<b>404</b>	<b>404</b>	<b>1,716</b>	<b>0</b>
Bladen	Mobile	J-7013-04 7013-04	Bladen County Hospital (WakeMed Health and Hospitals)	0	0.26	441	356	69	10	6	477			
<b>Bladen</b>				<b>0</b>	<b>0.26</b>	<b>441</b>					<b>477</b>	<b>477</b>	<b>1,716</b>	<b>0</b>
Brunswick	Hospital Fixed		Brunswick Community Hospital, LLC	1	1.00	2,451	1,592	533	212	114	2,840			
	Mobile	Grandfathered	Arthur Doshier Memorial Hospital (Alliance Imaging Inc.)	0	0.00	13	9	4	0	0	15			
		F-7001-04	Arthur Doshier Memorial Hospital (Alliance Imaging Inc.)	0	0.30	1,117	714	343	28	32	1,291			
		Grandfathered	Arthur Doshier Memorial Hospital (Alliance Imaging Inc.)	0	0.00	10	8	2	0	0	11			
		Grandfathered	Atlantic Radiology Associates (Alliance Imaging Inc.)	0	0.00	10	2	8	0	0	13			
<b>Brunswick</b>				<b>1</b>	<b>1.30</b>	<b>3,601</b>					<b>4,170</b>	<b>3,196</b>	<b>3,775</b>	<b>0</b>
Buncombe	Hospital Fixed		Memorial Mission Hospital	2	2.00	6,777	2,572	1,268	1,831	1,112	8,912			
			St. Joseph Hospital	1	1.00	2,862	973	419	818	652	3,878			
	Freestanding Fixed	B-6446-01	Asheville MRI	1	1.00	0	0	0	0	0	0			
		B-4178-90	Asheville MRI	1	1.00	10,284	6,294	3,990	0	0	11,880			
		B-6643-02	Asheville Orthopaedic Assoc P.A. (Insight Health Corp)	1	1.00	1,549	1,491	58	0	0	1,572			
		B-5583-97	Mountain Neurological and Spine Center PA (Mountain Nuerosurgical and Spine	1	1.00	2,907	1,522	1,385	0	0	3,461			
		B-6440-01	Open MRI of Asheville (Asheville Open MRI, Inc)	1	1.00	3,305	2,987	318	0	0	3,432			
		B-5492-96	Open MRI of Asheville (Asheville Open MRI, Inc)	1	1.00	6,587	5,625	962	0	0	6,972			
		B-6444-01	Skyland MRI (Skyland MRI, Inc)	1	1.00	613	534	79	0	0	645			
	Mobile	Grandfathered	Park Ridge Hospital (Alliance Imaging Inc.)	0	0.01	72	67	5	0	0	74			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Buncombe	Mobile	Temp. unit removed 12/07	Park Ridge Hospital (Alliance Imaging Inc.)	0	0.01	50	50	0	0	0	50			
		Grandfathered	Park Ridge Hospital (Alliance Imaging Inc.)	0	0.01	30	24	6	0	0	32			
		Grandfathered	Park Ridge Hospital (Alliance Imaging Inc.)	0	0.05	236	219	17	0	0	243			
		F-5723-97	Southeastern Sports Medicine (Insight Health Corp)	0	0.05	246	246	0	0	0	246			
			Southern Sports Medicine (Insight Health Corp)	0	0.01	36	36	36	0	0	86			
<b>B-M-Y</b>				<b>10</b>	<b>10.14</b>	<b>35,554</b>					<b>41,484</b>	<b>4,091</b>	<b>4,805</b>	<b>0</b>
Burke	Hospital Fixed		Grace Hospital, Inc.	1	1.00	3,304	2,360	304	580	60	3,706			
			Valdese General Hospital, Inc.	1	1.00	2,580	1,924	224	292	140	2,898			
	Mobile	E-7066-04	Blue Ridge Radiology (Blue Ridge Radiology Associates; OA)	0	0.51	0	1,410	691	0	0	2,377			
		Grandfathered	Carolina Orthopaedic Specialist (Alliance Imaging Inc.)	0	0.00	14	13	1	0	0	14			
		Grandfathered	Carolina Orthopaedic Specialist (Alliance Imaging Inc.)	0	0.16	667	610	53	4	0	690			
<b>Burke</b>				<b>2</b>	<b>2.68</b>	<b>6,565</b>					<b>9,686</b>	<b>3,620</b>	<b>4,118</b>	<b>0</b>
Cabarrus	Hospital Fixed		CMC-NorthEast, Inc.	4	4.00	21,979	9,043	6,537	2,576	3,823	28,683			
	Freestanding Fixed	F-7088-04	Access Medical Imaging (Access Medical Imaging, PLLC)	1	1.00	1,644	1,158	486	0	0	1,838			
		F-5916-98	Cabarrus Diagnostic Imaging (Cabarrus Diagnostic Imaging, Inc)	1	1.00	2,159	1,790	369	0	0	2,307			
		F-7859-07	Southern Piedmont Imaging (Southern Piedmont Imaging, LLC)	1	1.00	0	0	0	0	0	0			
	Mobile	F-6734-02	Carolina NeuroSurgery & Spine Associates, PA	0	0.04	193	136	57	0	0	216			
		Grandfathered	CMC-Northeast Medical Center (Alliance Imaging Inc.)	0	0.01	48	36	12	0	0	53			
		Grandfathered	CMC-Northeast Medical Center (Alliance Imaging Inc.)	0	0.02	85	65	20	0	0	93			
		Northeast Orthopedics, PA (Insight Health Corp)	0	0.20	979	591	388	0	0	1,134				
<b>Cabarrus</b>				<b>7</b>	<b>7.27</b>	<b>27,087</b>					<b>34,323</b>	<b>4,720</b>	<b>4,805</b>	<b>0</b>

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Caldwell	Hospital Fixed		Caldwell Memorial Hospital, Inc.	1	1.00	2,969	1,839	697	347	86	3,455			
	Mobile	Grandfathered	Carolina Orthopaedic Specialist (Alliance Imaging Inc.)	0	0.37	1,381	1,277	103	1	0	1,423			
<b>Caldwell</b>				<b>1</b>	<b>1.37</b>	<b>4,350</b>					<b>4,878</b>	<b>3,571</b>	<b>3,775</b>	<b>0</b>
Carteret	Hospital Fixed		Carteret County General Hospital Corporation	1	1.00	2,937	1,410	916	272	339	3,683			
	Freestanding Fixed	8049-08	Carteret General Hospital (Carteret General Hospital and Seashore Imaging, LLC)	1	1.00	0	0	0	0	0	0			
	Mobile	Grandfathered	Atlantic Diagnostic-Morehead (Alliance Imaging Inc.)	0	0.03	131	104	27	0	0	142			
		Grandfathered	Atlantic Diagnostic-Morehead (Alliance Imaging Inc.)	0	0.00	11	9	2	0	0	12			
		Grandfathered	Atlantic Diagnostic-Morehead (Alliance Imaging Inc.)	0	0.04	147	126	21	0	0	155			
		Grandfathered	Atlantic Diagnostic-Morehead (Alliance Imaging Inc.)	0	0.15	613	537	76	0	0	643			
		Grandfathered	Atlantic Diagnostic-Morehead (Alliance Imaging Inc.)	0	0.23	959	808	151	0	0	1,019			
		O-6434-01	Atlantic Diagnostic-Morehead (Cape Fear Diagnostic Imaging, Inc.)	0	0.09	362	286	76	0	0	392			
		J-7013-04 7013-04	Carteret County Hospital (WakeMed Health and Hospitals)	0	0.05	225	157	68	0	0	252			
<b>Carteret</b>				<b>2</b>	<b>2.59</b>	<b>5,385</b>					<b>6,300</b>	<b>2,428</b>	<b>4,118</b>	<b>0</b>
Catawba	Hospital Fixed		Catawba Valley Medical Center	2	2.00	8,151	1,491	3,446	470	1,087	8,930			
			Frye Regional Medical Center	2	2.00	4,526	2,012	1,189	539	786	5,846			
	Mobile	Grandfathered	Carolina Orthopaedic Specialist (Alliance Imaging Inc.)	0	0.15	736	634	102	0	0	777			
		G-7038-04	Carolina Orthopaedic Specialist (Alliance Imaging Inc.)	0	0.00	16	12	4	0	0	18			
		Grandfathered	Carolina Orthopaedic Specialist (Alliance Imaging Inc.)	0	0.32	1,544	1,389	153	2	0	1,606			
		E-7059-04	FryeCare (Frye Regional Medical Center, Inc)	0	0.63	3,044	2,013	1,031	0	0	3,456			
		Temp. unit removed 12/07	Hickory Orthopaedic Center (Alliance Imaging Inc.)	0	0.04	177	155	22	0	0	186			
		G-7038-04	Hickory Orthopaedic Center (Alliance Imaging Inc.)	0	0.17	832	748	84	0	0	866			



Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Catawba	Mobile	Grandfathered	Hickory Orthopaedic Center (Alliance Imaging Inc.)	0	0.06	297	255	42	0	0	314			
		Grandfathered	Hickory Orthopaedic Center (Alliance Imaging Inc.)	0	0.02	117	102	15	0	0	123			
<b>Catawba</b>				<b>4</b>	<b>5.41</b>	<b>19,440</b>					<b>22,121</b>	<b>4,091</b>	<b>4,805</b>	<b>0</b>
Chatham	Mobile	Grandfathered	Chatham Hospital (Alliance Imaging Inc.)	0	0.13	217	147	48	15	7	248			
		Grandfathered	Chatham Hospital (Alliance Imaging Inc.)	0	0.13	226	162	40	23	1	252			
<b>Chatham</b>				<b>0</b>	<b>0.26</b>	<b>443</b>					<b>500</b>	<b>500</b>	<b>1,716</b>	<b>0</b>
Cherokee	Hospital Fixed		Murphy Medical Center, Inc.	1	1.00	1,728	1,157	496	50	25	1,966			
<b>C-G-C</b>				<b>1</b>	<b>1.00</b>	<b>1,728</b>					<b>1,966</b>			
Chowan	Hospital Fixed	R-8168-08	Chowan Hospital	1	1.00	0	0	0	0	0	0			
	Mobile	Q-6885-03	Chowan Hospital (Alliance Imaging, Inc and University Health Svstems Inc.)	0	0.32	1,196	833	227	86	50	1,361			
<b>Chowan/Tyrell</b>				<b>1</b>	<b>1.32</b>	<b>1,196</b>					<b>1,361</b>	<b>1,034</b>	<b>3,775</b>	<b>0</b>
Cleveland	Hospital Fixed		Cleveland Regional Medical Center	1	1.00	4,789	2,566	1,627	287	309	5,802			
			Kings Mountain Hospital	1	1.00	1,166	720	336	54	56	1,367			
	Mobile	F-7987-07	Ortho Carolina P.A.	0	0.25	0	0	0	0	0	0			
	Grandfathered		Miller Orthopedic-Shelby (Alliance Imaging Inc.)	0	0.19	794	794	0	0	0	794			
<b>Cleveland</b>				<b>2</b>	<b>2.44</b>	<b>6,749</b>					<b>7,963</b>	<b>3,260</b>	<b>4,118</b>	<b>0</b>
Columbus	Hospital Fixed		Columbus Regional Healthcare System	1	1.00	2,326	2,007	0	319	0	2,454			
	Mobile	Grandfathered	Atlantic Radiology Associates (Alliance Imaging Inc.)	0	0.01	32	28	4	0	0	34			
		Grandfathered	Atlantic Radiology Associates (Alliance Imaging Inc.)	0	0.03	105	78	27	0	0	116			
		Grandfathered	Atlantic Radiology Associates (Alliance Imaging Inc.)	0	0.10	362	286	76	0	0	392			
		Grandfathered	Atlantic Radiology Associates-Goldsboro Orthopaedics (Alliance Imaging Inc.)	0	0.00	17	12	5	0	0	19			
		0-7340-05	Columbus Orthopedics (Waccamaw Ultrasound & Diagnostics, Inc)	0	0.08	309	309	0	0	0	309			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Columbus	Mobile	Grandfathered	Waccamaw Imaging, Inc. (Alliance Imaging Inc.)	0	0.04	133	120	13	0	0	138			
		0-7340-05	Waccanaw Imaging (Waccamaw Ultrasound & Diagnostics, Inc)	0	0.26	996	896	100	0	0	1,036			
		0-7340-05	Whiteville Medical (Waccamaw Ultrasound & Diagnostics, Inc)	0	0.08	294	294	0	0	0	294			
<b>Columbus</b>				<b>1</b>	<b>1.60</b>	<b>4,574</b>					<b>4,792</b>	<b>3,003</b>	<b>3,775</b>	<b>0</b>
Craven	Hospital Fixed		CarolinaEast Medical Center (Craven Reg Med Auth)	2	2.00	6,104	2,349	1,461	1,392	902	7,967			
	Freestanding Fixed	P-6764-03	CCHC Imaging (Coastal Carolina Health Care, PA)	1	1.00	5,547	3,442	2,105	0	0	6,389			
			2008 SMFP Need Determination	1	1.00	0	0	0	0	0	0			
Jones	Mobile	Grandfathered	Eastern Carolina Internal Medicine (Alliance Imaging Inc.)	0	0.01	57	44	13	0	0	62			
		Grandfathered	Eastern Carolina Internal Medicine (Alliance Imaging Inc.)	0	0.04	211	142	69	0	0	239			
		Q-6885-03	Eastern Carolina Internal Medicine (Alliance Imaging, Inc and University Health Systems	0	0.12	599	425	172	1	1	669			
<b>C-J-P</b>				<b>4</b>	<b>4.18</b>	<b>12,518</b>					<b>15,326</b>	<b>3,666</b>	<b>4,805</b>	<b>0</b>
Cumberland	Hospital Fixed		Cape Fear Valley Medical Center	2	2.00	7,386	1,303	2,395	1,921	1,767	10,526			
			Highsmith-Rainey Specialty Hospital	1	1.00	1,123	281	836	6	0	1,460			
	Freestanding Fixed	M-7924-07	Carolina Imaging, Inc. of Fayetteville	1	1.00	0	0	0	0	0	0			
		M-5899-98	Carolina Imaging (Carolina Imaging, Inc. of Fayetteville)	1	1.00	6,587	5,590	997	0	0	6,986			
		Grandfathered	Diagnostic Health of Fayetteville (National Imaging Affiliates of Fayetteville, Inc.)	1	1.00	5,429	4,300	1,129	0	0	5,881			
		M-005905-98	Diagnostic Health of Fayetteville (Open MRI of Fayetteville)	1	1.00	1,558	1,254	304	0	0	1,680			
	Mobile	Grandfathered	Atlantic Radiology Associates-Fayetteville (Alliance Imaging Inc.)	0	0.00	12	11	1	0	0	12			
		Grandfathered	Atlantic Radiology Associates-Fayetteville (Alliance Imaging Inc.)	0	0.01	47	43	4	0	0	49			
		Grandfathered	Atlantic Radiology Associates-Fayetteville (Alliance Imaging Inc.)	0	0.06	222	51	0	0	0	51			
		Grandfathered	Atlantic Radiology Associates-Fayetteville (Alliance Imaging Inc.)	0	0.03	122	103	19	0	0	130			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Cumberland	Mobile		Carolina Imaging, Inc of Fayetteville (King's Medical Company)	0	0.23	1,082	801	281	0	0	1,194			
		6665-02	Carolina Imaging, Inc. of Fayetteville (Cape Fear Mobile Imaging, LLC)	0	0.68	3,290	2,447	843	0	0	3,627			
			Cross Creek Imaging (Insight Health Corp)	0	0.26	1,240	968	272	0	0	1,349			
		F-5723-97	Cross Creek Imaging (Insight Health Corp)	0	0.02	88	72	16	0	0	94			
			Cross Creek Imaging (Insight Health Corp)	0	0.01	38	25	13	0	0	43			
		Grandfathered	Cross Creek Imaging, LLC (Alliance Imaging Inc.)	0	0.01	28	23	5	0	0	30			
		Grandfathered	Cross Creek Imaging, LLC (Alliance Imaging Inc.)	0	0.00	15	11	4	0	0	17			
		Grandfathered	Cross Creek Imaging, LLC (Alliance Imaging Inc.)	0	0.00	11	9	2	0	0	12			
	Grandfathered	Cross Creek Imaging, LLC (Alliance Imaging Inc.)	0	0.00	16	10	6	0	0	18				
<b>Cumberland</b>				<b>7</b>	<b>8.30</b>	<b>28,294</b>					<b>33,158</b>	<b>3,993</b>	<b>4,805</b>	<b>0</b>
Dare	Hospital Fixed		The Outer Banks Hospital, Inc.	1	1.00	1,605	923	576	45	61	1,902			
	Mobile	R-6293-00	Regional Medical Center (Regional Medical Services)	0	0.21	807	556	251	0	0	907			
		R-6293-00	Spring Arbor (Regional Medical Services)	0	0.00	3	3	0	0	0	3			
<b>Dare</b>				<b>1</b>	<b>1.21</b>	<b>2,415</b>					<b>2,813</b>	<b>2,316</b>	<b>3,775</b>	<b>0</b>
Davidson	Hospital Fixed		Community General Health Partners, Inc.	1	1.00	2,378	1,518	491	216	153	2,783			
			Lexington Memorial Hospital, Inc	1	1.00	3,036	2,090	434	268	244	3,512			
<b>Davidson</b>				<b>2</b>	<b>2.00</b>	<b>5,414</b>					<b>6,295</b>	<b>3,148</b>	<b>4,118</b>	<b>0</b>
Davie	Mobile	G-7038-04	Davie County Hospital (Alliance Imaging Inc.)	0	0.28	481	431	37	9	4	503			
		G-7065-04	Medical Associates of Davie (Forsyth Memorial Hospital, Inc)	0	0.10	180	138	42	0	0	197			
<b>Davie</b>				<b>0</b>	<b>0.39</b>	<b>661</b>					<b>699</b>	<b>699</b>	<b>1,716</b>	<b>0</b>
Duplin	Mobile	Grandfathered	Atlantic Radiology Associates-Goldsboro Orthopaedics (Alliance Imaging Inc.)	0	0.01	17	15	2	0	0	18			
		Grandfathered	Duplin General Hospital Inc. (Alliance Imaging Inc.)	0	0.23	394	243	109	17	25	464			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Duplin	Mobile	Grandfathered	Duplin General Hospital Inc. (Alliance Imaging Inc.)	0	0.01	19	16	3	0	0	20			
		Grandfathered	Duplin General Hospital Inc. (Alliance Imaging Inc.)	0	0.09	160	97	45	6	12	190			
		Grandfathered	Duplin General Hospital Inc. (Alliance Imaging Inc.)	0	0.01	13	11	0	0	2	15			
		Grandfathered	Duplin General Hospital Inc. (Alliance Imaging Inc.)	0	0.02	41	26	10	2	3	48			
		Grandfathered	Duplin General Hospital Inc. (Alliance Imaging Inc.)	0	0.33	562	371	137	17	37	653			
<b>Duplin</b>				<b>0</b>	<b>0.70</b>	<b>1,206</b>					<b>1,408</b>	<b>1,408</b>	<b>1,716</b>	<b>0</b>
Durham	Hospital Fixed		Duke University Hospital	5	5.00	15,136	4,141	4,549	2,297	4,149	21,194			
			Durham Regional Hospital	2	2.00	4,855	1,973	528	1,896	458	6,191			
		J-6598-02	Lenox Baker Hospital (Duke University Hospital)	1	1.00	3,653	1,745	1,908	0	0	4,416			
		Alliance grandfathered unit	Lenox Baker Hospital (Duke University Hospital)	1	1.00	3,856	1,842	2,014	0	0	4,662			
		J-6108-99	Lenox Baker Hospital (Duke University Hospital)	1	1.00	2,324	1,103	1,221	0	0	2,812			
		J-7174-04	Lenox Baker Hospital (Duke University Hospital)	1	1.00	3,484	1,664	1,820	0	0	4,212			
		Insight grandfathered unit	Lenox Baker Hospital (Duke University Hospital)	1	1.00	3,505	1,674	1,831	0	0	4,237			
	Freestanding Fixed	J-6760-03	Durham Diagnostic Imaging, LLC	1	1.00	3,856	2,685	1,171	0	0	4,324			
		J-7031-04	Triangle Orthopaedic Associates, P.A.	1	1.00	6,285	5,932	353	0	0	6,426			
	Mobile	Grandfathered	Atlantic Diagnostic-Durham (Alliance Imaging Inc.)	0	0.10	473	367	103	2	1	516			
		Grandfathered	Atlantic Diagnostic-Durham (Alliance Imaging Inc.)	0	0.00	2	2	0	0	0	2			
		Grandfathered	Atlantic Diagnostic-Durham (Alliance Imaging Inc.)	0	0.04	190	148	42	0	0	207			
			Duke University Medical Center (Insight Health Corp)	0	0.73	3,505	1,674	1,831	0	0	4,237			
M-6605-02		Durham Diagnostic Imaging, LLC (Mobile Imaging of North Carolina, LLC)	0	0.17	796	591	235	0	0	920				

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Durham	Mobile	M-6605-02	Regional Neurosurgery, PLLC (Mobile Imaging of North Carolina, LLC)	0	0.09	409	259	150	0	0	469			
		Grandfathered	Triangle Orthopedic (Alliance Imaging Inc.)	0	0.12	564	562	2	0	0	565			
<b>Durham</b>				<b>14</b>	<b>15.24</b>	<b>52,893</b>					<b>65,391</b>	<b>4,292</b>	<b>4,805</b>	<b>0</b>
Edgecombe	Mobile	Q-6885-03	Heritage Hospital (Alliance Imaging, Inc and University Health Systems Inc.)	0	0.23	856	449	122	156	129	1,070			
		Grandfathered	Heritage Hospital-N.C (Alliance Imaging Inc.)	0	0.21	811	510	119	94	88	967			
			2009 SMFP Need Determination	1	1.00	0	0	0	0	0	0			
<b>Edgecombe</b>				<b>1</b>	<b>1.44</b>	<b>1,667</b>					<b>2,037</b>	<b>1,413</b>	<b>3,775</b>	<b>0</b>
Forsyth	Hospital Fixed		Forsyth Memorial Hospital, Inc.	3	3.00	12,747	998	2,022	2,709	7,018	20,254			
			North Carolina Baptist Hospital	5	5.00	21,896	5,894	9,982	1,616	4,404	30,058			
	Freestanding Fixed	G-7780-07	NCBH Outpatient Imaging, LLC	1	1.00	0	0	0	0	0	0			
			Excel Imaging Maplewood	0	0.00	1,551	1,156	395	0	0	1,709			
		G-7387-05	Excel Imaging Maplewood	1	1.00	6,203	4,622	1,581	0	0	6,835			
			Excel Imaging Salem MRI	1	1.00	3,391	2,647	744	0	0	3,689			
			Excel Imaging Salem MRI	1	1.00	4,145	3,235	910	0	0	4,509			
		Grandfathered	Piedmont Imaging, Inc	1	1.00	5,259	4,050	1,209	0	0	5,743			
		G-6893-03	Piedmont Imaging, Inc. (Piedmont Imaging, Inc)	1	1.00	5,904	4,450	1,454	0	0	6,486			
	G-8196-08	Piedmont Imaging-Kernersville (Piedmont Imaging, LLC and Novant Health)	1	1.00	0	0	0	0	0	0				
	Mobile	G-7065-04	Central Triad Imaging (Forsyth Memorial Hospital, Inc)	0	0.28	1,357	1,357	0	0	0	1,357			
			Excel Imaging (Insight Health Corp)	0	0.52	2,516	2,035	481	0	0	2,708			
		F-5723-97	Excel Imaging- Kernersville (Insight Health Corp)	0	0.06	307	247	67	0	0	341			
		Excel Imaging-Kernersville (Insight Health Corp)	0	0.01	57	48	9	0	0	61				

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Forsyth	Mobile	Grandfathered	Greensboro Imaging @ Kernersville (Alliance Imaging Inc.)	0	0.01	51	43	8	0	0	54			
		G-7723-06	Kernersville Clinic (Orthopaedic Specialists of the Carolinas PA)	0	0.04	180	146	34	0	0	194			
		G-7723-06	Orthopaedic Specialists of the Carolinas PA	0	0.58	2,771	2,560	211	0	0	2,855			
		G-7038-04	Orthopedic Specialists of the Carolinas (Alliance Imaging Inc.)	0	0.16	782	718	64	0	0	808			
		G-7065-04	Winston-Salem Healthcare (Forsyth Memorial Hospital, Inc)	0	0.28	1,340	1,340	0	0	0	1,340			
			2009 SMFP Need Determination	1	1.00	0	0	0	0	0	0			
<b>Forsyth</b>				<b>16</b>	<b>17.95</b>	<b>70,457</b>					<b>89,000</b>	<b>4,959</b>	<b>4,805</b>	<b>1</b>
Franklin	Hospital Fixed		Franklin Regional Medical Center	1	1.00	1,899	995	400	412	92	2,297			
<b>Franklin</b>				<b>1</b>	<b>1.00</b>	<b>1,899</b>					<b>2,297</b>	<b>2,297</b>	<b>3,775</b>	<b>0</b>
Gaston	Hospital Fixed		Caromont Imaging Services - Belmont	1	1.00	4,558	2,824	1,733	0	1	5,252			
			Caromont Imaging Services - Summit Crossing	1	1.00	3,895	2,607	1,288	0	0	4,410			
			Gaston Memorial Hospital	1	1.00	7,532	1,524	2,199	1,601	2,208	10,818			
			The Diagnostic Center	1	1.00	2,734	1,827	907	0	0	3,097			
	Mobile	F-8000-07	MRI Specialists of The Carolinas, LLC	0	1.00	0	0	0	0	0	0			
		Grandfathered	Mecklenburg Diagnostic-Gastonia (Alliance Imaging Inc.)	0	0.21	1,029	808	221	0	0	1,117			
		Grandfathered	Mecklenburg Diagnostics-Cox (Alliance Imaging Inc.)	0	0.20	961	735	226	0	0	1,051			
<b>Gaston</b>				<b>4</b>	<b>5.41</b>	<b>20,709</b>					<b>25,746</b>	<b>4,755</b>	<b>4,805</b>	<b>0</b>
Granville	Hospital Fixed		Granville Health System	1	1.00	1,782	1,301	253	79	35	1,829			
<b>Granville</b>				<b>1</b>	<b>1.00</b>	<b>1,782</b>					<b>1,829</b>	<b>1,829</b>	<b>4,118</b>	<b>0</b>
Guilford	Hospital Fixed		High Point Regional Health System	2	2.00	5,201	2,447	732	1,494	528	6,514			
			The Moses H. Cone Memorial Operating Corporation	2	2.00	7,964	1,781	1,504	2,978	1,701	11,118			
			Wesley Long Community Hospital	1	1.00	3,164	1,063	1,229	537	335	4,138			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Guilford	Freestanding Fixed	G-7269-05	Cornerstone Health Care, PA	1	1.00	3,689	2,495	1,194	0	0	4,167			
		G-6952-03	Diagnostic Radiology & Imaging, LLC	1	1.00	5,980	2,327	3,653	0	0	7,441			
			Diagnostic Radiology & Imaging, LLC	1	1.00	5,988	2,582	3,406	0	0	7,350			
			Southeastern Radiology P.A.	1	1.00	2,969	2,265	704	0	0	3,251			
	Grandfathered	Triad Imaging, Inc	1	1.00	5,286	4,281	1,005	0	0	5,688				
	Mobile		Cornerstone Healthcare, PA (Insight Health Corp)	0	0.58	2,779	1,976	803	0	0	3,100			
	Grandfathered	Greensboro Orthopaedic Center (Alliance Imaging Inc.)	0	0.76	3,664	3,333	331	0	0	3,796				
	Grandfathered	Greensboro Orthopaedic Center (Alliance Imaging Inc.)	0	0.02	98	92	6	0	0	100				
		Guilford Neurologic Associates, Inc. (King's Medical Company)	0	0.23	1,111	557	554	0	0	1,333				
	G-7064-04	HPRHS (High Point Regional Health System)	0	0.25	1,198	931	264	2	1	1,305				
	G-7064-04	Johnson Neurological Clinic, Inc. (High Point Regional Health System)	0	0.08	405	263	142	0	0	462				
	Grandfathered	SE Orthopaedic Specialists, P.A. (Alliance Imaging Inc.)	0	0.12	561	526	32	3	0	575				
	G-6271-00	SE Orthopaedic Specialists, P.A. (Alliance Imaging Inc.)	0	0.66	3,176	2,843	329	3	1	3,310				
	Grandfathered	SE Orthopaedic Specialists, P.A. (Alliance Imaging Inc.)	0	0.26	1,256	1,133	123	0	0	1,305				
		Triad Imaging, Inc- (King's Medical Company)	0	0.14	683	505	178	0	0	754				
	Grandfathered	Vanguard Brain & Spine Specialists (Alliance Imaging Inc.)	0	0.03	138	93	45	0	0	156				
	G-6271-00	Vanguard Brain & Spine Specialists (Alliance Imaging Inc.)	0	0.03	164	164	0	0	0	164				
	Grandfathered	Vanguard Brain & Spine Specialists (Alliance Imaging Inc.)	0	0.00	6	6	0	0	0	6				
	G-6271-00	Vanguard Brain & Spine Specialists (Alliance Imaging Inc.)	0	0.02	90	65	25	0	0	100				
		2009 SMFP Need Determination	1	1.00	0	0	0	0	0	0				

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
<b>Guilford</b>				<b>11</b>	<b>14.19</b>	<b>55,570</b>					<b>66,133</b>	<b>4,660</b>	<b>4,805</b>	<b>0</b>
Halifax	Hospital Fixed		Halifax Regional Medical Center, Inc.	1	1.00	2,349	1,476	472	225	176	2,769			
<b>Halifax/Northampton</b>				<b>1</b>	<b>1.00</b>	<b>2,349</b>					<b>2,769</b>	<b>2,769</b>	<b>3,775</b>	<b>0</b>
Harnett	Hospital Fixed		Betsy Johnson Regional Hospital	1	1.00	3,248	1,929	829	202	288	3,891			
	Mobile	M-6605-02	Carolina Regional Radiology (Mobile Imaging of North Carolina, LLC)	0	0.27	1,124	943	181	0	0	1,196			
		Grandfathered	Eastern Carolina Medical Center (Alliance Imaging Inc.)	0	0.06	231	198	33	0	0	244			
		Grandfathered	Eastern Carolina Medical Center (Alliance Imaging Inc.)	0	0.00	10	7	9	0	0	20			
			Oudeh Medical Plaza (Insight Health Corp)	0	0.05	225	225	0	0	0	225			
			2009 SMFP Need Determination	1	1.00	0	0	0	0	0	0			
<b>Harnett</b>				<b>2</b>	<b>2.39</b>	<b>4,838</b>					<b>5,576</b>	<b>2,337</b>	<b>4,118</b>	<b>0</b>
Haywood	Hospital Fixed		Haywood Regional Medical Ctr	2	2.00	3,551	1,874	1,269	288	120	4,270			
<b>Haywood</b>				<b>2</b>	<b>2.00</b>	<b>3,551</b>					<b>4,270</b>	<b>2,135</b>	<b>4,118</b>	<b>0</b>
Henderson	Hospital Fixed		Margaret R. Pardee Memorial Hospital	2	2.00	6,337	3,972	1,823	326	216	7,369			
			Park Ridge Hospital	1	1.00	2,684	1,828	506	205	145	3,084			
	Mobile	Grandfathered	Laurel Park Medical Centre (Alliance Imaging Inc.)	0	0.02	88	70	18	0	0	95			
		G-6271-00	Laurel Park Medical Centre (Alliance Imaging Inc.)	0	0.03	144	106	38	0	0	159			
		Grandfathered	Laurel Park Medical Centre (Alliance Imaging Inc.)	0	0.00	10	7	3	0	0	11			
<b>Henderson</b>				<b>3</b>	<b>3.05</b>	<b>9,263</b>					<b>10,719</b>	<b>3,510</b>	<b>4,462</b>	<b>0</b>
Hertford	Hospital Fixed		Roanoke-Chowan Hospital	1	1.00	2,259	1,396	430	221	212	2,689			
<b>Hertford/Gates</b>				<b>1</b>	<b>1.00</b>	<b>2,259</b>					<b>2,689</b>	<b>2,689</b>	<b>3,775</b>	<b>0</b>
Iredell	Hospital Fixed		Davis Regional Medical Center	1	1.00	2,653	1,440	682	360	171	3,207			
			Iredell Memorial Hospital	1	1.00	4,067	1,754	994	520	799	5,312			



Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Iredell	Hospital Fixed		Lake Norman Regional Medical Center	2	2.00	4,052	2,201	1,226	455	170	4,860			
	Freestanding Fixed	F-6957-03	Piedmont Healthcare, P.A.	1	1.00	3,483	2,797	686	0	0	3,757			
	Mobile		Carolina Specialty Care (Insight Health Corp)	0	0.05	255	255	0	0	0	255			
	Grandfathered		Mecklenburg Diagnostic Imaging (Alliance Imaging Inc.)	0	0.37	1,776	1,473	303	0	0	1,897			
	Grandfathered		Northshore Orthopedic and Sport (Alliance Imaging Inc.)	0	0.08	365	365	0	0	0	365			
	Grandfathered		Piedmont Healthcare (Alliance Imaging Inc.)	0	0.10	489	421	68	0	0	516			
	Grandfathered		Piedmont HealthCare PA (Alliance Imaging Inc.)	0	0.00	9	7	2	0	0	10			
<b>Iredell</b>				<b>5</b>	<b>5.60</b>	<b>17,149</b>					<b>20,179</b>	<b>3,602</b>	<b>4,805</b>	<b>0</b>
Jackson	Hospital Fixed		Harris Regional Hospital	1	1.00	3,763	2,301	1,187	135	140	4,404			
	Freestanding Fixed	A-8195-08	WestCare and Harris Regional Hospital	1	1.00	0	0	0	0	0	0			
<b>Jackson</b>				<b>2</b>	<b>2.00</b>	<b>3,763</b>					<b>4,404</b>	<b>2,202</b>	<b>4,118</b>	<b>0</b>
Johnston	Hospital Fixed		Johnston Memorial Hospital	1	1.00	3,481	2,625	22	819	15	3,829			
	Freestanding Fixed	J-7900-07	Johnston MRI, LLC	1	1.00	0	0	0	0	0	0			
	Mobile	Grandfathered	Raleigh Radiology (Alliance Imaging Inc.)	0	0.13	532	532	0	0	0	532			
	Mobile	Grandfathered	Raleigh Radiology (Alliance Imaging Inc.)	0	0.00	3	3	0	0	0	3			
<b>Johnston</b>				<b>2</b>	<b>2.13</b>	<b>4,016</b>					<b>4,364</b>	<b>2,049</b>	<b>4,118</b>	<b>0</b>
Lee	Hospital Fixed		Central Carolina Hospital	1	1.00	2,761	1,775	531	308	147	3,214			
<b>Lee</b>				<b>1</b>	<b>1.00</b>	<b>2,761</b>					<b>3,214</b>	<b>3,214</b>	<b>3,775</b>	<b>0</b>
Lenoir	Hospital Fixed		Lenoir Memorial Hospital, Inc.	1	1.00	3,513	1,710	760	496	547	4,453			
	Freestanding Fixed	P-8147-08	Lenoir Imaging, Inc.	1	1.00	0	0	0	0	0	0			
	Mobile	Grandfathered	Atlantic Radiology Associates-Goldsboro Orthopaedics (Alliance Imaging Inc.)	0	0.01	42	40	2	0	0	43			
	Mobile	Grandfathered	Atlantic Radiology Associates-Goldsboro Orthopaedics (Alliance Imaging Inc.)	0	0.00	13	13	0	0	0	13			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Lenoir	Mobile	Grandfathered	Atlantic Radiology Associates-Goldsboro Orthopaedics (Alliance Imaging Inc.)	0	0.02	93	91	2	0	0	94			
<b>Lenoir</b>				<b>2</b>	<b>2.04</b>	<b>3,661</b>					<b>4,603</b>	<b>2,261</b>	<b>4,118</b>	<b>0</b>
Lincoln	Freestanding Fixed	F-8081-08	CMC-Lincoln	1	1.00	0	0	0	0	0	0			
	Mobile	E-7066-04	Blue Ridge Radiology (Blue Ridge Radiology Associates; OA)	0	0.15	0	488	67	0	0	582			
		Grandfathered	Carolinas HealthCare System (Alliance Imaging Inc.)	0	0.26	964	620	228	56	60	1,126			
		Grandfathered	Carolinas HealthCare System (Alliance Imaging Inc.)	0	0.06	255	178	43	17	17	293			
		F-6868-03	CMC-Lincoln (Carolinas Imaging Services)	0	0.24	1,033	512	255	72	61	1,080			
<b>Lincoln</b>				<b>1</b>	<b>1.70</b>	<b>2,252</b>					<b>3,080</b>	<b>1,811</b>	<b>3,775</b>	<b>0</b>
Macon	Hospital Fixed		Angel Medical Center, Inc	1	1.00	1,601	519	1,013	27	42	2,051			
			Highlands-Cashiers Hospital, Inc.	1	1.00	409	284	116	9	0	459			
	Mobile	Grandfathered	WestCare Health System-Franklin (Alliance Imaging Inc.)	0	0.04	149	93	56	0	0	171			
		G-6271-00	WestCare Health System-Franklin (Alliance Imaging Inc.)	0	0.01	30	30	0	0	0	30			
<b>Macon</b>				<b>2</b>	<b>2.04</b>	<b>2,189</b>					<b>2,711</b>	<b>1,327</b>	<b>4,118</b>	<b>0</b>
Martin	Mobile	Grandfathered	Martin General Hospital (Alliance Imaging Inc.)	0	0.32	544	503	41	0	0	560			
<b>Martin</b>				<b>0</b>	<b>0.32</b>	<b>544</b>					<b>560</b>	<b>560</b>	<b>1,716</b>	<b>0</b>
McDowell	Hospital Fixed		The McDowell Hospital, Inc.	1	1.00	1,763	1,348	337	56	22	1,938			
<b>McDowell</b>				<b>1</b>	<b>1.00</b>	<b>1,763</b>					<b>1,938</b>	<b>1,938</b>	<b>3,775</b>	<b>0</b>
Mecklenburg	Hospital Fixed		Carolinas Medical Center	3	3.00	13,579	4,533	4,232	2,186	2,628	18,249			
			Carolinas Medical Center Mercy/Pineville	2	2.00	10,901	5,479	3,448	931	1,043	13,487			
			Carolinas Medical Center-University	1	1.00	5,121	2,577	1,710	332	502	6,339			
			Presbyterian Hospital Huntersville	1	1.00	4,509	2,692	1,242	422	153	5,297			
			Presbyterian Hospital Matthews	1	1.00	6,477	2,880	2,274	869	454	8,097			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Mecklenburg	Hospital Fixed		Presbyterian Orthopaedic Hospital, LLC	1	1.00	3,398	2,219	1,111	39	29	3,881			
			The Presbyterian Hospital	2	2.00	8,650	1,971	2,552	2,434	1,693	11,999			
	Freestanding Fixed	F-7167-04	Carolinas Imaging Services	0	0.00	664	479	185	0	0	738			
		F-7167-04	Carolinas Imaging Services	1	1.00	469	351	118	0	0	516			
		Grandfathered	Carolina's Imaging System (Carolinas Healthcare System)	1	1.00	603	384	221	0	0	693			
			Charlotte Radiology PA	1	1.00	2,325	1,744	595	0	0	2,577			
			Charlotte Radiology PA	1	1.00	1,550	1,162	396	0	0	1,716			
		F-5748-97	Mecklenburg Diagnostic Imaging	1	1.00	2,890	2,185	705	0	0	3,172			
		F-7068-04	Mecklenburg Diagnostic Imaging (Mecklenburg Diagnostic Imaging)	1	1.00	1,761	1,412	349	0	0	1,901			
		J-6698-02	OrthoCarolina P.A.	1	1.00	8,242	7,419	824	0	0	8,573			
		F-2332-85	Presbyterian Imaging Center-Mint Museum (Presbyterian Imaging Centers LLC)	1	1.00	2,425	955	1,470	0	0	3,013			
	Mobile	F-7040-04	Carolinas Imaging Services	1	1.00	0	0	0	0	0	0			
		F-7987-07	Ortho Carolina P.A.	0	0.75	0	0	0	0	0	0			
		F-6734-02	Carolina NeuroSurgery & Spine Associates, PA	0	0.23	1,082	895	187	0	0	1,157			
		F-6734-02	Carolina NeuroSurgery & Spine Associates, PA	0	0.80	3,849	2,535	1,314	0	0	4,375			
		Grandfathered	Carolinas Physician Network , Inc (Alliance Imaging Inc.)	0	0.21	1,024	622	402	0	0	1,185			
		F-6868-03	CIS NorthCross (Carolinas Imaging Services)	0	0.06	287	205	86	0	0	325			
		Grandfathered	Miller Orthopaedic Clinic, Inc. (Alliance Imaging Inc.)	0	0.46	2,218	2,049	169	0	0	2,286			
		Grandfathered	Miller Orthopedic-Ballantyne (Alliance Imaging Inc.)	0	0.34	1,628	1,628	0	0	0	1,628			
		Grandfathered	Miller Orthopedics-Huntersville (Alliance Imaging Inc.)	0	0.32	1,547	1,547	0	0	0	1,547			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Mecklenburg	Mobile	Grandfathered	OrthoCarolina, P.A. (Alliance Imaging Inc.)	0	0.01	30	30	0	0	0	30			
		Grandfathered	OrthoCarolina, P.A. (Alliance Imaging Inc.)	0	0.02	118	118	0	0	0	118			
		Grandfathered	Oweida Orthopaedic Associates (Alliance Imaging Inc.)	0	0.08	384	384	0	0	0	384			
		Grandfathered	Perry & Barrons Orthopaedics (Alliance Imaging Inc.)	0	0.07	327	327	0	0	0	327			
			Presbyterian Hospital Huntersville (Insight Health Corp)	0	0.00	18	16	2	0	0	19			
		F-5723-97	Presbyterian Hospital Huntersville (Insight Health Corp)	0	0.07	319	170	79	55	15	385			
		F-5723-97	Presbyterian Medical Plaza (Insight Health Corp)	0	0.20	980	650	330	0	0	1,112			
			Presbyterian Medical Plaza (Insight Health Corp)	0	0.03	144	108	36	0	0	158			
		Grandfathered	Total Spine Specialist (Alliance Imaging Inc.)	0	0.10	461	461	0	0	0	461			
	F-7164-04	University Imaging (Presbyterian Mobile Imaging, LLC)	0	0.18	851	452	399	0	0	1,011				
<b>Mecklenburg</b>				<b>20</b>	<b>23.93</b>	<b>88,831</b>					<b>106,755</b>	<b>4,462</b>	<b>4,805</b>	<b>0</b>
Mitchell	Hospital Fixed		Blue Ridge Regional Hospital, Inc	1	1.00	1,075	724	303	25	23	1,225			
<b>Mitchell</b>				<b>1</b>	<b>1.00</b>	<b>1,075</b>					<b>1,225</b>			
Montgomery	Mobile		FH Montgomery Memorial Hospital (FirstHealth of the Carolinas, Inc.)	0	0.21	358	296	57	2	3	384			
<b>Montgomery</b>				<b>0</b>	<b>0.21</b>	<b>358</b>					<b>384</b>			
Moore	Hospital Fixed		FirstHealth of the Carolinas, Inc.	3	3.00	11,470	6,064	3,197	1,308	901	13,993			
	Freestanding Fixed	H-6845-03	Pinehurst Surgical Clinic, PA (Alliance Imaging Inc. And Pinehurst Surgical Clinic)	1	1.00	4,331	3,376	955	0	0	4,713			
	Mobile	6665-02	Triad Imaging dba Southern Pines Diagnostic Imaging (Cape Fear Mobile Imaging)	0	0.23	1,113	988	125	0	0	1,163			
			Triad Imaging dba Southern Pines Diagnostic Imaging (King's Medical Company)	0	0.27	1,278	439	839	0	0	1,614			
			2009 SMFP Need Determination	1	1.00	0	0	0	0	0	0			
<b>Moore/Hoke</b>				<b>5</b>	<b>5.50</b>	<b>18,192</b>					<b>21,482</b>	<b>3,908</b>	<b>4,805</b>	<b>0</b>
Nash	Hospital Fixed		Nash Hospitals, Inc.	2	2.00	5,688	3,027	1,509	606	546	6,971			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need	
Nash	Freestanding Fixed	L-7499-06	Nash Imaging, Inc	1	1.00	0	0	0	0	0	0				
	Mobile	Grandfathered	Boice-Willis Clinic, P.A. (Alliance Imaging Inc.)	0	0.19	849	594	255	0	0	951				
		Grandfathered	Carolina Regional Orthopaedics (Alliance Imaging Inc.)	0	0.06	277	277	0	0	0	277				
<b>Nash</b>				<b>3</b>	<b>3.25</b>	<b>6,814</b>					<b>8,199</b>	<b>2,521</b>	<b>4,462</b>	<b>0</b>	
New Hanover	Hospital Fixed		New Hanover Regional Medical Center	4	4.00	13,656	5,252	4,595	1,674	2,135	17,872				
	Freestanding Fixed	O-7259-05	Atlantic Orthopedics, PA	1	1.00	3,097	2,961	136	0	0	3,151				
	Mobile	Grandfathered		Atlantic Diagnostic-17th Street (Alliance Imaging Inc.)	0	0.16	766	514	251	1	0	867			
		Grandfathered		Atlantic Diagnostic-Landfall (Alliance Imaging Inc.)	0	0.00	7	3	4	0	0	9			
		Grandfathered		Atlantic Diagnostic-Landfall (Alliance Imaging Inc.)	0	0.03	126	78	48	0	0	145			
		Grandfathered		Atlantic Diagnostic-Landfall (Alliance Imaging Inc.)	0	0.12	585	389	188	6	2	664			
		Grandfathered		Atlantic Diagnostic-Landfall (Alliance Imaging Inc.)	0	0.01	61	45	16	0	0	67			
		O-6434-01		Cape Fear Diagnostic Imaging, Inc	0	0.55	2,643	2,036	607	0	0	2,886			
		0-7254-05		Delaney Radiologists (Porter's Neck Imaging, LLC)	0	0.48	2,290	1,267	1,023	0	0	2,699			
		0-7254-05		Delaney Radiologists (Porter's Neck Imaging, LLC)	0	0.09	413	240	173	0	0	482			
		F-7001-04		Delaney Radiology (Alliance Imaging Inc.)	0	0.19	912	586	326	0	0	1,042			
		F-7001-04		Delaney Radiology (Alliance Imaging Inc.)	0	0.06	298	185	113	0	0	343			
		F-7001-04		Delaney Radiology (Alliance Imaging Inc.)	0	0.21	1,028	617	411	0	0	1,192			
		Grandfathered		WHA Medical Clinic PLLC (Alliance Imaging Inc.)	0	0.42	2,017	982	988	17	30	2,443			
		Grandfathered		Wilmington Orthopaedic Group (Alliance Imaging Inc.)	0	0.03	139	139	0	0	0	139			
		F-7001-04		Wilmington Orthopaedic Group (Alliance Imaging Inc.)	0	0.09	441	441	0	0	0	441			
<b>New Hanover</b>				<b>5</b>	<b>7.44</b>	<b>28,479</b>					<b>34,443</b>	<b>4,629</b>	<b>4,805</b>	<b>0</b>	

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Onslow	Hospital Fixed		Onslow Memorial Hospital, Inc.	1	1.00	2,795	1,253	1,012	202	328	3,543			
	Freestanding Fixed	P-7324-05	Jacksonville Diagnostic Imaging	1	1.00	4,222	3,526	696	0	0	4,500			
	Mobile	O-6434-01	Jacksonville Diagnostic Imaging (Cape Fear Diagnostic Imaging, Inc)	0	0.14	610	508	102	0	0	651			
			2009 SMFP Need Determination	1	1.00	0	0	0	0	0	0			
<b>Onslow</b>				<b>3</b>	<b>3.14</b>	<b>7,627</b>					<b>8,694</b>	<b>2,772</b>	<b>4,462</b>	<b>0</b>
Orange	Hospital Fixed		University of North Carolina Hospitals at Chapel H	6	6.00	26,111	5,034	12,695	2,850	5,532	36,755			
	Freestanding Fixed	Grandfathered	Wake Radiology-Chapel Hill (Wake Radiology Diagnostic Imaging)	1	1.00	1,804	1,249	555	0	0	2,026			
			2008 SMFP Need Determination	1	1.00	0	0	0	0	0	0			
			2009 SMFP Need Determination	1	1.00	0	0	0	0	0	0			
<b>Orange/Caswell</b>				<b>9</b>	<b>9.00</b>	<b>27,915</b>					<b>38,781</b>	<b>4,309</b>	<b>4,805</b>	<b>0</b>
Pasquotank	Hospital Fixed		Albemarle Hospital	2	2.00	3,558	2,093	1,006	251	208	4,227			
<b>C-C-P-P</b>				<b>2</b>	<b>2.00</b>	<b>3,558</b>					<b>4,227</b>	<b>2,114</b>	<b>4,118</b>	<b>0</b>
Pender	Mobile	Grandfathered	Pender Memorial Hospital (Alliance Imaging Inc.)	0	0.02	38	24	10	4	0	44			
		Grandfathered	Pender Memorial Hospital (Alliance Imaging Inc.)	0	0.12	211	161	50	0	0	231			
		Grandfathered	Pender Memorial Hospital (Alliance Imaging Inc.)	0	0.02	42	32	5	5	0	46			
		Grandfathered	Pender Memorial Hospital (Alliance Imaging Inc.)	0	0.04	71	50	18	3	0	79			
<b>Pender</b>				<b>0</b>	<b>0.21</b>	<b>362</b>					<b>400</b>	<b>400</b>	<b>1,716</b>	<b>0</b>
Person	Mobile	Grandfathered	Person County Memorial Hospital (Alliance Imaging Inc.)	0	0.01	18	11	5	2	0	21			
		Grandfathered	Person County Memorial Hospital (Alliance Imaging Inc.)	0	0.06	104	59	35	5	5	124			
		Grandfathered	Person County Memorial Hospital (Alliance Imaging Inc.)	0	0.00	0	0	0	0	0	0			
		Grandfathered	Person County Memorial Hospital (Alliance Imaging Inc.)	0	0.11	190	135	38	8	9	216			
		Grandfathered	Person County Memorial Hospital (Alliance Imaging Inc.)	0	0.03	47	28	16	1	2	55			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need	
<b>Person</b>				<b>0</b>	<b>0.21</b>	<b>359</b>					<b>416</b>	<b>416</b>	<b>1,716</b>	<b>0</b>	
Pitt	Hospital Fixed		Pitt County Memorial Hospital, Inc.	3	3.00	8,843	1,637	1,826	2,416	2,964	12,911				
	Freestanding Fixed		Greenville MRI LLC	1	1.00	5,307	3,381	1,926	0	0	6,077				
		Q-6854-03	Greenville MRI LLC	1	1.00	3,833	2,384	1,449	0	0	4,413				
			MRI of Eastern Carolina (East Carolina Neurology)	1	1.00	6,444	5,176	1,268	0	0	6,951				
			Physicians East PA (King's Medical Company)	1	1.00	2,296	1,536	760	0	0	2,600				
	Mobile	Grandfathered		Orthopaedics East, Inc. (Alliance Imaging Inc.)	0	0.10	504	471	33	0	0	517			
		Grandfathered		Orthopaedics East, Inc. (Alliance Imaging Inc.)	0	0.02	106	102	3	1	0	108			
		Grandfathered		Orthopaedics East, Inc. (Alliance Imaging Inc.)	0	0.13	619	582	37	0	0	634			
<b>Pitt/Greene</b>				<b>7</b>	<b>7.26</b>	<b>27,952</b>					<b>34,211</b>	<b>4,715</b>	<b>4,805</b>	<b>0</b>	
Polk	Mobile	F-5723-97	Saint Luke's Hospital (Insight Health Corp)	0	0.43	730	514	205	5	6	819				
			St. Luke's Hospital (Insight Health Corp)	0	0.04	61	48	12	0	1	67				
<b>Polk</b>				<b>0</b>	<b>0.46</b>	<b>791</b>					<b>885</b>	<b>885</b>	<b>1,716</b>	<b>0</b>	
Randolph	Hospital Fixed		Randolph Hospital, Inc.	1	1.00	3,200	1,631	1,061	206	302	3,948				
	Mobile	Grandfathered	Asheboro Imaging (Alliance Imaging Inc.)	0	0.27	1,127	1,004	121	2	0	1,176				
		Grandfathered	Asheboro Imaging (Alliance Imaging Inc.)	0	0.02	91	83	8	0	0	94				
			2009 SMFP Need Determination	1	1.00	0	0	0	0	0	0				
<b>Randolph</b>				<b>2</b>	<b>2.30</b>	<b>4,418</b>					<b>5,219</b>	<b>2,273</b>	<b>4,118</b>	<b>0</b>	
Richmond	Freestanding Fixed	H-8193-08	Sandhills Regional Medical Center	1	1.00	0	0	0	0	0	0				
	Mobile		FH Richmond Memorial Hospital (FirstHealth of the Carolinas, Inc.)	0	0.34	1,284	246	957	52	29	1,711				
			Sandhills Regional Medical Center (Insight Health Corp)	0	0.07	247	200	40	5	2	267				
		J-7008-04	Sandhills Regional Medical Center (Insight Health Corp)	0	0.16	609	448	144	11	6	676				

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Richmond	Mobile		Sandhills Regional Medical Center (Insight Health Corp)	0	0.01	23	10	13	0	0	28			
		F-5723-97	Sandhills Regional Medical Center (Insight Health Corp)	0	0.00	23	9	4	4	0	20			
			Sandhills Regional Medical Center (Insight Health Corp)	0	0.01	24	14	8	1	0	27			
<b>Richmond</b>				<b>1</b>	<b>1.58</b>	<b>2,210</b>					<b>2,728</b>	<b>1,724</b>	<b>3,775</b>	<b>0</b>
Robeson	Hospital Fixed		Southeastern Regional Medical Center	2	2.00	6,306	3,844	575	1,641	246	7,389			
			Allen Orthopedic (Waccamaw Ultrasound & Diagnostics, Inc)	0	0.14	568	568	0	0	0	568			
	Mobile	Grandfathered	Atlantic Diagnostic-Pembroke (Alliance Imaging Inc.)	0	0.01	36	36	0	0	0	36			
		Grandfathered	Waccamaw Imaging (Allen Ortho) (Alliance Imaging Inc.)	0	0.02	91	91	0	0	0	91			
<b>Robeson</b>				<b>2</b>	<b>2.17</b>	<b>7,001</b>					<b>8,084</b>	<b>3,728</b>	<b>4,118</b>	<b>0</b>
Rockingham	Hospital Fixed		Annie Penn Hospital	1	1.00	2,829	2,250	279	289	11	3,065			
			Morehead Memorial Hospital	1	1.00	2,755	1,720	621	276	138	3,224			
	Mobile		Reidsville Imaging, LLC (Insight Health Corp)	0	0.04	161	147	14	0	0	167			
			Reidsville Imaging, LLC (Insight Health Corp)	0	0.13	547	498	49	0	0	567			
<b>Rockingham</b>				<b>2</b>	<b>2.17</b>	<b>6,292</b>					<b>7,022</b>	<b>3,233</b>	<b>4,118</b>	<b>0</b>
Rowan	Hospital Fixed		Rowan Regional Medical Center, Inc.	3	3.00	12,066	8,531	2,454	812	269	13,588			
			Romedical Care, Inc. (Alliance Imaging Inc.)	0	0.24	1,147	1,147	0	0	0	1,147			
	Mobile	Grandfathered	Romedical Care, Inc. (Alliance Imaging Inc.)	0	0.03	150	150	0	0	0	150			
			2009 SMFP Need Determination	1	1.00	0	0	0	0	0	0			
<b>Rowan</b>				<b>4</b>	<b>4.27</b>	<b>13,363</b>					<b>14,885</b>	<b>3,486</b>	<b>4,805</b>	<b>0</b>
Rutherford	Hospital Fixed		Rutherford Hospital, Inc.	1	1.00	3,337	2,120	758	198	261	3,928			
			2009 SMFP Need Determination	1	1.00	0	0	0	0	0	0			
<b>Rutherford</b>				<b>2</b>	<b>2.00</b>	<b>3,337</b>					<b>3,928</b>	<b>1,964</b>	<b>4,118</b>	<b>0</b>



Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need	
Sampson	Hospital Fixed		Sampson Regional Medical Center, Inc.	1	1.00	1,804	1,308	429	47	20	2,010				
	Mobile	Grandfathered	Atlantic Radiology Associates-Fayetteville (Alliance Imaging Inc.)	0	0.00	10	10	0	0	0	0	10			
		Grandfathered	Atlantic Radiology Associates-Fayetteville (Alliance Imaging Inc.)	0	0.01	56	47	9	0	0	0	60			
		Grandfathered	Atlantic Radiology Associates-Fayetteville (Alliance Imaging Inc.)	0	0.02	96	87	9	0	0	0	100			
		Grandfathered	Atlantic Radiology Associates-Roseboro (Alliance Imaging Inc.)	0	0.03	129	106	23	0	0	0	138			
		Grandfathered	Atlantic Radiology Associates-Roseboro (Alliance Imaging Inc.)	0	0.01	47	34	13	0	0	0	52			
		Grandfathered	Clinton Medical Clinic (Alliance Imaging Inc.)	0	0.11	463	417	46	0	0	0	481			
		Grandfathered	Clinton Medical Clinic (Alliance Imaging Inc.)	0	0.02	76	66	10	0	0	0	80			
		Grandfathered	Clinton Medical Clinic (Alliance Imaging Inc.)	0	0.00	0	0	0	0	0	0	0			
		Grandfathered	Sampson Regional Medical Center (Alliance Imaging Inc.)	0	0.04	164	122	25	10	7	0	184			
		J-7013-04 7013-04	Sampson Regional Medical Center (WakeMed Health and Hospitals)	0	0.02	71	53	10	3	5	0	80			
<b>Sampson</b>				<b>1</b>	<b>1.27</b>	<b>2,916</b>					<b>3,195</b>	<b>2,516</b>	<b>4,118</b>	<b>0</b>	
Scotland	Hospital Fixed		Scotland Memorial Hospital, Inc.	1	1.00	3,027	1,757	656	418	196	3,613				
	Mobile	J-7008-04	Scotland Imaging (Insight Health Corp)	0	0.35	1,445	1,208	237	0	0	0	1,540			
			2007 SMFP Need Determination	1	1.00	0	0	0	0	0	0	0			
<b>Scotland</b>				<b>2</b>	<b>2.35</b>	<b>4,472</b>					<b>5,153</b>	<b>2,192</b>	<b>4,118</b>	<b>0</b>	
Stanly	Hospital Fixed		Stanly Regional Medical Center	1	1.00	3,023	2,057	603	269	94	3,447				
<b>Stanly</b>				<b>1</b>	<b>1.00</b>	<b>3,023</b>					<b>3,447</b>	<b>3,447</b>	<b>3,775</b>	<b>0</b>	
Stokes	Mobile	G-7065-04	Mountainview Medical (Forsyth Memorial Hospital, Inc)	0	0.21	365	365	0	0	0	365				
<b>Stokes</b>				<b>0</b>	<b>0.21</b>	<b>365</b>					<b>365</b>	<b>365</b>	<b>1,716</b>	<b>0</b>	
Surry	Hospital Fixed		Hugh Chatham Memorial Hospital, Inc.	1	1.00	3,361	2,624	354	334	49	3,675				
			Northern Hospital Surry County	2	2.00	3,886	2,569	939	299	79	4,444				

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
<b>Surry</b>				<b>3</b>	<b>3.00</b>	<b>7,247</b>					<b>8,120</b>	<b>2,707</b>	<b>4,462</b>	<b>0</b>
Swain	Mobile	Grandfathered	WestCare Health System-Swain (Alliance Imaging Inc.)	0	0.07	112	83	27	1	1	124			
		G-6271-00	WestCare Health System-Swain (Alliance Imaging Inc.)	0	0.02	32	24	7	1	0	35			
<b>Swain</b>				<b>0</b>	<b>0.08</b>	<b>144</b>					<b>159</b>	<b>159</b>	<b>1,716</b>	<b>0</b>
Transylvania	Hospital Fixed		Transylvania Community Hospital, Inc.	1	1.00	2,342	1,558	618	139	27	2,666			
<b>Transylvania</b>				<b>1</b>	<b>1.00</b>	<b>2,342</b>					<b>2,666</b>	<b>2,666</b>	<b>3,775</b>	<b>0</b>
Union	Hospital Fixed		CMC-Union Regional Medical Center	1	1.00	4,886	2,656	848	1,064	318	5,905			
	Freestanding Fixed		Union Medical Services LLC	1	1.00	657	545	112	0	0	702			
	Mobile	Grandfathered	Mecklenburg Diagnostic-Monroe D (Alliance Imaging Inc.)	0	0.04	165	120	45	0	0	183			
		Grandfathered	Mecklenburg Diagnostic-Monroe D (Alliance Imaging Inc.)	0	0.36	1,501	1,210	291	0	0	1,617			
		Grandfathered	Mecklenburg Diagnostic-Monroe D (Alliance Imaging Inc.)	0	0.05	202	152	50	0	0	222			
		F-7164-04	Southern Piedmont Primary Care (Presbyterian Mobile Imaging, LLC)	0	0.06	251	181	70	0	0	279			
<b>Union</b>				<b>2</b>	<b>2.51</b>	<b>7,662</b>					<b>8,908</b>	<b>3,543</b>	<b>4,118</b>	<b>0</b>
Vance	Hospital Fixed		Maria Parham Medical Center, Inc.	2	2.00	3,849	2,245	702	708	194	4,568			
	Mobile	M-6605-02	Henderson (Mobile Imaging of North Carolina, LLC)	0	0.05	215	215	0	0	0	215			
<b>Vance/Warren</b>				<b>2</b>	<b>2.05</b>	<b>4,064</b>					<b>4,783</b>	<b>2,331</b>	<b>4,118</b>	<b>0</b>
Wake	Hospital Fixed		Duke Raleigh Hospital	1	1.00	4,071	1,617	1,689	366	399	5,212			
			Rex Hospital, Inc.-Consolidated	3	3.00	10,974	4,486	3,650	1,870	968	13,956			
			WakeMed	2	2.00	10,338	4,816	1,767	2,249	1,506	13,149			
			WakeMed Cary Hospital	1	1.00	4,449	2,417	1,084	576	372	5,411			
	Freestanding Fixed	Grandfathered	Raleigh MRI, LLC (Wake Radiology Imaging)	1	1.00	4,946	3,047	1,899	0	0	5,706			
		J-5783-97	Raleigh MRI, LLC (Wake Radiology Imaging)	1	1.00	4,896	3,222	1,674	0	0	5,566			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Wake	Freestanding Fixed		Raleigh Neurology Associates, P.A.	1	1.00	1,347	956	391	0	0	1,503			
			Raleigh Neurology Associates, P.A.	0	0.00	2,047	1,280	767	0	0	2,354			
			Raleigh Neurology Associates, P.A.	0	0.00	1,147	761	386	0	0	1,301			
		J-7289-05	Raleigh Radiology at Cedarhurst (Pinnacle Health Services Of North Carolina)	1	1.00	6,379	4,957	1,422	0	0	6,948			
Mobile	J-7008-04	Carolina Rehab & Surgical Associates (Insight Health Corp)	0	0.25	1,193	1,135	58	0	0	1,216				
	Grandfathered	Cary Diagnostic Radiology (Alliance Imaging Inc.)	0	0.04	187	119	68	0	0	214				
	Grandfathered	Cary Diagnostic Radiology (Alliance Imaging Inc.)	0	0.00	24	10	14	0	0	30				
	Grandfathered	Cary Diagnostic Radiology (Alliance Imaging Inc.)	0	0.07	330	262	68	0	0	357				
	Grandfathered	Cary Diagnostic Radiology (Alliance Imaging Inc.)	0	0.00	0	0	0	0	0	0				
	J-7013-04 7013-04	Dorothea Dix Hospital (WakeMed Health and Hospitals)	0	0.02	120	4	0	69	47	185				
	J-7012-04	Raleigh MRI Center (Wake Radiology Diagnostic Imaging-Mobile)	0	0.09	432	299	133	0	0	485				
	Grandfathered	Raleigh Neurology Imaging, PLLC (Alliance Imaging Inc.)	0	0.10	464	286	178	0	0	535				
	Grandfathered	Raleigh Neurology Imaging, PLLC (Alliance Imaging Inc.)	0	0.01	41	22	19	0	0	49				
	Grandfathered	Raleigh Neurology Imaging, PLLC (Alliance Imaging Inc.)	0	0.01	68	49	19	0	0	76				
	Grandfathered	Raleigh Orthopaedic Clinic (Alliance Imaging Inc.)	0	0.18	847	841	6	0	0	849				
	J-7756-06	Raleigh Orthopaedic Clinic	0	0.05	240	240	0	0	0	240				
	J-7756-06	Raleigh Orthopaedic Clinic	0	0.03	166	166	0	0	0	166				
	J-7756-06	Raleigh Orthopaedic Clinic	0	0.30	1,446	1,411	35	0	0	1,460				
Grandfathered	Raleigh Radiology (Alliance Imaging Inc.)	0	0.27	1,309	1,240	42	2	0	1,302					
Grandfathered	Raleigh Radiology (Alliance Imaging Inc.)	0	0.00	3	3	0	0	0	3					

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need	
Wake	Mobile	Grandfathered	Raleigh Radiology (Alliance Imaging Inc.)	0	0.64	3,057	2,220	835	2	0	3,392				
		Grandfathered	Raleigh Radiology (Alliance Imaging Inc.)	0	0.02	110	83	27	0	0	121				
		Grandfathered	Raleigh Radiology, LLC (Alliance Imaging Inc.)	0	0.03	142	105	37	0	0	157				
		Grandfathered	Raleigh Radiology, LLC (Alliance Imaging Inc.)	0	0.03	150	121	29	0	0	162				
		Grandfathered	Raleigh Radiology, LLC (Alliance Imaging Inc.)	0	0.00	7	7	0	0	0	7				
		Grandfathered	Raleigh Radiology, LLC (Alliance Imaging Inc.)	0	0.09	430	331	99	0	0	470				
		Grandfathered	Raleigh Radiology, LLC (Alliance Imaging Inc.)	0	0.00	11	8	3	0	0	12				
		J-7284-05	Rex Family Practice of Wakefield (Rex Hospital, Inc)	0	0.25	0	0	0	0	0	0	0			
		J-7284-05	Rex Hospital, Inc. (Rex Hospital, Inc)	0	0.12	558	272	282	3	1	673				
		J-7284-05	Rex Knightdale (Rex Hospital, Inc)	0	0.25	0	0	0	0	0	0	0			
		Grandfathered	Southeastern Imaging Consultant (Alliance Imaging Inc.)	0	0.04	203	159	44	0	0	221				
		Grandfathered	Southeastern Imaging Consultant (Alliance Imaging Inc.)	0	0.13	605	387	218	0	0	692				
			Superior Diagnostic Imaging, Inc (Insight Health Corp)	0	0.01	61	40	21	0	0	69				
		J-7008-04	Superior Diagnostic Imaging, Inc Carolina Radiology (Insight Health Corp)	0	0.05	247	199	48	0	0	266				
		Grandfathered	Triangle Orthopedic (Alliance Imaging Inc.)	0	0.01	60	60	0	0	0	60				
		Grandfathered	Triangle Orthopedic (Alliance Imaging Inc.)	0	0.00	16	16	0	0	0	16				
		Grandfathered	Triangle Orthopedic (Alliance Imaging Inc.)	0	0.02	82	82	0	0	0	82				
		Grandfathered	Triangle Orthopedic (Alliance Imaging Inc.)	0	0.00	12	12	0	0	0	12				
		Grandfathered	Triangle Orthopedic (Alliance Imaging Inc.)	0	0.18	853	853	0	0	0	853				
		Temp. unit removed 12/07	Triangle Orthopedic (Alliance Imaging Inc.)	0	0.02	101	101	0	0	0	101				

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
Wake	Mobile	Grandfathered	Triangle Orthopedic (Alliance Imaging Inc.)	0	0.00	24	24	0	0	0	24			
		J-7012-04	Wake Radiology (Wake Radiology Diagnostic Imaging-Mobile)	0	0.03	152	126	26	0	0	162			
		J-7012-04	Wake Radiology (Wake Radiology Diagnostic Imaging-Mobile)	0	0.50	2,396	1,816	580	0	0	2,628			
		Grandfathered	Wake Radiology-Garner (Alliance Imaging Inc.)	0	0.02	109	78	31	0	0	121			
		Grandfathered	Wake Radiology-Garner (Alliance Imaging Inc.)	0	0.00	12	10	2	0	0	13			
		Grandfathered	Wake Radiology-Garner (Alliance Imaging Inc.)	0	0.02	87	67	20	0	0	95			
		Grandfathered	Wake Radiology-Garner (Alliance Imaging Inc.)	0	0.02	92	74	18	0	0	99			
		J-7013-04 7013-04	WakeMed North Healthplex (WakeMed Health and Hospitals)	0	0.16	748	530	218	0	0	835			
<b>Wake</b>				<b>11</b>	<b>15.09</b>	<b>67,855</b>					<b>79,689</b>	<b>5,280</b>	<b>4,805</b>	<b>1</b>
Washington	Mobile	Grandfathered	Washington County Hospital (Alliance Imaging Inc.)	0	0.16	281	237	25	16	3	300			
		Grandfathered	Washington County Hospital (Alliance Imaging Inc.)	0	0.03	48	43	5	0	0	50			
<b>Washington</b>				<b>0</b>	<b>0.19</b>	<b>329</b>					<b>350</b>	<b>350</b>	<b>1,716</b>	<b>0</b>
Watauga	Hospital Fixed		Watauga Medical Center, Inc.	2	2.00	4,128	2,318	1,350	277	183	4,925			
<b>Watauga</b>				<b>2</b>	<b>2.00</b>	<b>4,128</b>					<b>4,925</b>	<b>2,463</b>	<b>4,805</b>	<b>0</b>
Wayne	Hospital Fixed		Wayne Memorial Hospital, Inc.	2	2.00	6,121	4,754	688	528	151	6,728			
	Mobile	Grandfathered	Atlantic Radiology Associates-Goldsboro Orthopaedics (Alliance Imaging Inc.)	0	0.37	1,534	1,504	30	0	0	1,546			
		Grandfathered	Atlantic Radiology Associates-Goldsboro Orthopaedics (Alliance Imaging Inc.)	0	0.00	15	13	2	0	0	16			
		Grandfathered	Atlantic Radiology Associates-Goldsboro Orthopaedics (Alliance Imaging Inc.)	0	0.01	29	29	0	0	0	29			
		Grandfathered	Atlantic Radiology Associates-Goldsboro Orthopaedics (Alliance Imaging Inc.)	0	0.03	117	102	15	0	0	123			
<b>Wayne</b>				<b>2</b>	<b>2.41</b>	<b>7,816</b>					<b>8,442</b>	<b>3,501</b>	<b>4,118</b>	<b>0</b>
Wilkes	Hospital Fixed		Wilkes Regional Medical Center	1	1.00	2,727	2,184	231	283	29	2,956			

Table 9K: MRI by MRI Service Areas-All Fixed and Mobile Procedures-TOTALS with Tiered and % Mobile Equivalents - for 5/27/09 SHCC Meeting

MRI - Service Area	Service Type	CON #	Service Site (Provider/Owner)	Fixed Magnet	Fixed Equiv	Total MRI Scans	Outpt No Contrast	Outpt Contrast	Inpt No Contrast	Inpt Contrast	Adjusted Total	Area Aver Procs	Threshold	MRI Need
<b>Wilkes</b>				<b>1</b>	<b>1.00</b>	<b>2,727</b>					<b>2,956</b>	<b>2,956</b>	<b>3,775</b>	<b>0</b>
Wilson	Hospital Fixed		Wilson Medical Center	1	1.00	3,861	1,477	1,586	439	359	4,958			
		L-7624-06	WilMed Imaging Services, LLC	1	1.00	0	0	0	0	0	0			
	Freestanding Fixed		Regional MRI of Wilson	1	1.00	2,531	1,853	678	0	0	2,802			
	Mobile	Grandfathered	Atlantic Radiology Associates-Fayetteville (Alliance Imaging Inc.)	0	0.03	131	81	50	0	0	151			
<b>Wilson</b>				<b>3</b>	<b>3.03</b>	<b>6,523</b>					<b>7,911</b>	<b>2,612</b>	<b>4,462</b>	<b>0</b>
Yadkin	Mobile	G-7038-04	Hoots Memorial Hospital (Alliance Imaging Inc.)	0	0.11	184	160	13	10	1	194			
<b>Yadkin</b>				<b>0</b>	<b>0.11</b>	<b>184</b>					<b>194</b>	<b>194</b>	<b>1,716</b>	<b>0</b>
<b>Total</b>				<b>222</b>	<b>259.29</b>	<b>815,945</b>					<b>Total of Need Determinations 2</b>			

**Threshold**  
**4+ Fixed Scanners = 4,805**  
**3 Fixed Scanners = 4,462**  
**2 Fixed Scanners = 4,118**  
**1 Fixed Scanner = 3,775**  
**0 Fixed Scanners = 1,716**

Table 9R: Fixed Cardiac Catheterization Equipment, Capacity and Volume (for May 27, 2009 SHCC Meeting)

Cardiac Catheterization Equipment Service Areas	Facility	Current Inventory	CON Issued/ Pending Development	Pending Review or Appeal	Total Planning Inventory	F o o t n o t e	2008 Procedures (Weighted Totals)	Machines Required based on 80% utilization	Total No. of Additional Machines Required by Facility	No. of Machines Needed
<b>Alamance</b>	Alamance Regional	1			1	b	1,299	1.08	0	
	Pending Review/ Appeal				0					
	TOTAL				1			1		0
<b>Buncombe</b>	Mission Hospitals	5	1		6	a	6,163	5.14	0	
					0	c				
	Pending Review/ Appeal				0					
	TOTAL				6			5		0
<b>Cabarrus</b>	CMC-NorthEast	2			2	b	2,031	1.69	0	
	Pending Review/ Appeal			0	0					
	TOTAL				2			2		0
<b>Catawba</b>	Catawba Valley	1			1	b	557	0.46	0	
	Frye Regional	3	1		4	b	5,482	4.57	1	
	Pending Review/ Appeal				0					
	TOTAL				5			5		0
<b>Cleveland</b>	Cleveland Regional	1			1	c	390	0.33	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0
<b>Craven</b>	Craven Regional	2			2	b	2,211	1.84	0	
	Pending Review/ Appeal			0	0					
	TOTAL				2			2		0
<b>Cumberland</b>	Cape Fear Valley	2	1		3	b	3,818	3.18	0	
	Pending Review/ Appeal			0	0					
	TOTAL				3			3		0
<b>Durham</b>	Duke	7			7	a	8,055	6.71	0	
	Durham Regional	2	0	0	2	b	1,129	0.94	0	
	Pending Review/ Appeal			0	0					
	TOTAL				9			8		0

Table 9R: Fixed Cardiac Catheterization Equipment, Capacity and Volume (for May 27, 2009 SHCC Meeting)

Cardiac Catheterization Equipment Service Areas	Facility	Current Inventory	CON Issued/ Pending Development	Pending Review or Appeal	Total Planning Inventory	F o o t n o t e	2008 Procedures (Weighted Totals)	Machines Required based on 80% utilization	Total No. of Additional Machines Required by Facility	No. of Machines Needed
<b>Forsyth</b>	Forsyth Memorial Hospital	6	2		8	b	5,702	4.75	0	
	N. C. Baptist	5	0		5	a	3,601	3.00	0	
	Pending Review/ Appeal				0					
	TOTAL				13			8		0
<b>Gaston</b>	Gaston Memorial	3	1		4	b	3,699	3.08	0	
	Pending Review/ Appeal			0	0					
	TOTAL				4			3		0
<b>Guilford</b>	High Point Regional	4	0		4	b	8,460	7.05	3	
	Moses Cone	7	2		9	b	5,244	4.37	0	
	Pending Review/ Appeal			0	0					
	TOTAL				13			11		0
<b>Halifax</b>	Halifax Regional		1		1		NR		0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0
<b>Haywood</b>	Haywood Regional	1			1	c	151	0.13	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0
<b>Iredell</b>	Iredell Memorial	1			1	c	445	0.37	0	
	Davis Regional	1			1	c	295	0.25	0	
	Lake Norman Regional	1	0		1	c	156	0.13	0	
	Pending Review/ Appeal			0	0					
	TOTAL				3			1		0
<b>Johnston</b>	Johnston Memorial	1	0		1	c	826	0.69	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			1		0
<b>Lenoir</b>	Lenoir Memorial	1			1	c	430	0.36	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0



Table 9R: Fixed Cardiac Catheterization Equipment, Capacity and Volume (for May 27, 2009 SHCC Meeting)

Cardiac Catheterization Equipment Service Areas	Facility	Current Inventory	CON Issued/ Pending Development	Pending Review or Appeal	Total Planning Inventory	F o o t n o t e	2008 Procedures (Weighted Totals)	Machines Required based on 80% utilization	Total No. of Additional Machines Required by Facility	No. of Machines Needed
<b>Mecklenburg</b>	Carolinas Med. Center	7			7	a	7,561	6.30	0	
	CMC Mercy-Pineville	4			4	b	1,332	1.11	0	
	Presbyterian	4			4	b	3,918	3.26	0	
	CMC-University	1	0		1	c	220	0.18	0	
	Presbyterian-Matthews	1			1	c	415	0.35	0	
	Pending Review/ Appeal			0	0					
	TOTAL				17			11		0
<b>Moore</b>	First Health Moore	4	1	0	5	b	5,882	4.90	0	
	Pending Review/ Appeal				0					
	TOTAL				5			5		0
<b>Nash</b>	Nash General	2			2	c	882	0.74	0	
	Pending Review/ Appeal			0	0					
	TOTAL				2			1		0
<b>New Hanover</b>	New Hanover Regional Medical Center	3	2		5	b	6,421	5.35	0	
	Pending Review/ Appeal			0	0					
	TOTAL				5			5		0
<b>Onslow</b>	Onslow Memorial	1			1	c	29	0.02	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0
<b>Orange</b>	UNC	4	0	0	4	a	3,614	3.01	0	
	Pending Review/ Appeal			0	0					
	TOTAL				4			3		0
<b>Pasquotank</b>	Albemarle	1			1	c	948	0.79	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			1		0
<b>Pitt</b>	Pitt County Memorial	5	2		7	a	4,948	4.12	0	
	Pending Review/ Appeal			0	0					
	TOTAL				7			4		0

Table 9R: Fixed Cardiac Catheterization Equipment, Capacity and Volume (for May 27, 2009 SHCC Meeting)

Cardiac Catheterization Equipment Service Areas	Facility	Current Inventory	CON Issued/ Pending Development	Pending Review or Appeal	Total Planning Inventory	F o o t n o t e	2008 Procedures (Weighted Totals)	Machines Required based on 80% utilization	Total No. of Additional Machines Required by Facility	No. of Machines Needed
<b>Robeson</b>	Southeastern Regional	1			1	b	1,213	1.01	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			1		0
<b>Rowan</b>	Rowan Regional	1			1	c	541	0.45	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0
<b>Scotland</b>	Scotland Memorial		1		1		NR	0.00	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0
<b>Stanly</b>	Stanly Reg. Medical Center	1			1	c	19	0.02	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0
<b>Union</b>	CMC-Union	1			1	c	413	0.34	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0
<b>Wake</b>	Rex	3	1		4	b	3,527	2.94	0	
	WakeMed	9	1		10	b	12,312	10.26	0	
	WakeMed Cary Hospital	1			1	c	393	0.33	0	
	Duke Raleigh Hospital	1	0		1		262	0.22	0	
	Pending Review/ Appeal			0	0					
	TOTAL				16			14		0
<b>Watauga</b>	Watauga Medical Center	0	1		1	c	148	0.12	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0
<b>Wayne</b>	Wayne Memorial	1			1	c	362	0.30	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0

Table 9R: Fixed Cardiac Catheterization Equipment, Capacity and Volume (for May 27, 2009 SHCC Meeting)

Cardiac Catheterization Equipment Service Areas	Facility	Current Inventory	CON Issued/ Pending Development	Pending Review or Appeal	Total Planning Inventory	F o o t n o t e	2008 Procedures (Weighted Totals)	Machines Required based on 80% utilization	Total No. of Additional Machines Required by Facility	No. of Machines Needed
Wilkes	Wilkes Regional	1			1	c	5	0.00	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0
Wilson	Wilson Medical Center	1			1	c	396	0.33	0	
	Pending Review/ Appeal			0	0					
	TOTAL				1			0		0
<b>NORTH CAROLINA TOTALS</b>		115	18	0	133		115,902	97		<b>0</b>

- a Adult procedures plus angioplasty x 1.75 plus pediatric procedures x 2.
- b Adult procedures plus angioplasty x 1.75.
- c Adult procedures.