# PETITION FOR AN ADJUSTED NEED DETERMINATION TO REMOVE THE NEED DETERMINATION FOR ONE ADDITIONAL FIXED MRI SCANNER IN RUTHERFORD COUNTY

# **Petitioner:**

Rutherford Hospital, Inc. 288 South Ridgecrest Ave. Rutherfordton, NC 28139

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# To:

Medical Facilities Planning Section Division of Health Service Regulation 2714 Mail Service Center Raleigh, NC 27699-2714

# **Requested** Change

Based on Policy GEN 1: Reallocations, the Proposed 2010 SMFP shows the need for one additional fixed MRI scanner in Rutherford County.

Rutherford Hospital justifies the proposed adjustment to remove this projected need determination based on several factors, including:

- Projected population
- Aging
- MRI utilization, i.e. historical, current and projected
- Recent CON Agency findings
- 2010 SMFP Basic Principles

The detailed rationale for this adjusted need determination is described below.

#### **Background**

The 2009 SMFP determined the need for a second fixed MRI scanner in Rutherford County. Rutherford Hospital submitted a CON application pursuant to the need determination; however, the hospital was approved only to replace its existing equipment and not to acquire a second fixed MRI scanner. Thus, in accordance with Policy GEN-1: Reallocations, the need determination for Rutherford County will be reallocated to the 2010 SMFP. The policy states,

- 7. Need Determinations not Awarded because Application Disapproved
  - a. Disapproval in the calendar year prior to August 17:

Need Determinations or portions of such need for which applications were submitted but disapproved by the Certificate of Need Section before August 17, shall not be reallocated by the Certificate of Need Section. Instead the Medial Facilities Planning Section shall make the necessary changes in the next annual North Carolina State Medical Facilities Plan if no appeal is filed, except for dialysis stations.

The CON Agency Findings were issued on June 29, 2009. MRI reallocations are made only to the extent that the methodology in the 2010 SMFP indicates that the need exists after the inventories are revised and the need determinations are recalculated. When the inventory is revised to reflect only one fixed MRI scanner in Rutherford County and the MRI methodology is recalculated, the Proposed 2010 SMFP indicates the need for a second fixed MRI scanner in Rutherford County. Please refer to the following table.

MRI Service Area	Provider	Fixed Magnet	FY2008 MRI Scans	Adjusted FY2008 Total	Area Avg Procs	Threshold	MRI Need
Rutherford	Rutherford Hospital	1	3,337	3,928	3,928	3,775	1

### Proposed 2010 SMFP MRI Need Methodology Rutherford County

While Rutherford Hospital fully supports the State Health Coordinating Council's MRI need methodology, we feel there are several factors at this time that necessitate the removal of the fixed MRI need determination for Rutherford County from the 2010 SMFP.

### **Population**

Rutherford County hosts a rural and decreasing population. These demographics make it unlikely that a second fixed MRI scanner will be adequately utilized in the near term. The following table provides population projections for Rutherford County provided by the North Carolina Office of State Budget and Management.

#### Rutherford County Projected Population

County	2009	2010	2011	2012	2013	09-13 Change
Rutherford	62,842	62,840	62,829	62,818	62,806	-0.1%
Source: North Carolina Office of State Rudget & Management						

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According to the State's estimates, the population in Rutherford County is actually projected to decrease by 36 residents during the next five years. Rutherford County also supports a rapidly aging population. For comparison purposes, 12.2% of the State's total population is over age 65. Rutherford County's population is considerably older with 16.8% of residents age 65 and older. This disparity is expected to increase as Rutherford County is projected to continue to age faster than the state average. Please refer to the following table.

	2009		2014	
	Age 65+	% of Pop.	Age 65+	% of Pop.
Rutherford	10,578	16.8%	11,493	18.3%
North Carolina	1,148,763	12.2%	1,347,336	13.3%

#### Rutherford County Age 65+ Projected Population

Source: NC State Office of Budget and Management

While, it is important to consider the population age 65 and older with respect to increasing access to the medically underserved, it is thought that this age cohort has lower use rates for diagnostic services compared to younger patients. In other words, the large and growing percentage of population age 65 and older in Rutherford County may not be likely to utilize fixed MRI services at the same rate as younger residents. Thus, one fixed MRI scanner should be sufficient to meet Rutherford County's need for MRI services during the near term.

In conclusion, Rutherford County's population is decreasing and has a large percentage of aging population. These demographics make it unlikely that a second fixed MRI scanner will be adequately utilized during the next five years. The existing inventory of one fixed MRI scanner is sufficient to meet the county's immediate need. Additionally, based on updated MRI utilization in Rutherford County, it does not appear that a second fixed MRI scanner is needed at this time.

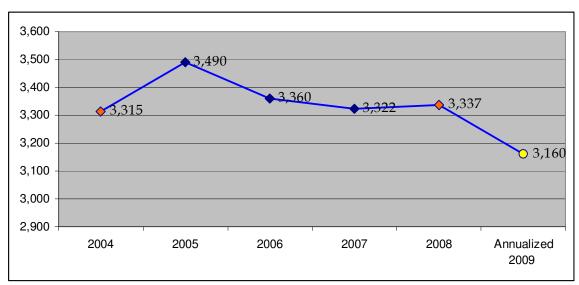
#### **Utilization**

If the need determination for a second fixed MRI scanner in Rutherford County were to remain in the 2010 State Medical Facilities Plan, the county would need to perform an additional 4,262 weighted MRI scans annually to satisfy the State's minimum performance standard for counties with two fixed MRI scanners. This is more than Rutherford County's FY2008 weighted MRI utilization of 3,928, and would require a 109.7% increase in weighted MRI utilization. Please refer to the following table.

FY2008 Weighted MRI Utilization	Performance Standard (2 MRI scanners)	Difference	% Increase Necessary to Reach Performance Standard
3,928	4,118 x 2 = 8,236	4,308	109.7%
Source: 2009 & Propos	ed 2010 SMFPs		

### **Rutherford County MRI Utilization**

Based on historical MRI utilization in Rutherford County, it is unlikely that any provider could facilitate the substantial increase in MRI scans necessary to meet the State's minimum performance standard of 4,118 weighed MRI scans per fixed MRI scanner. Specifically, Rutherford County's MRI utilization volume has actually decreased in recent years. According to the 2006 SMFP and the Proposed 2010 SMFP, Rutherford County performed 3,315 unweighted MRI scans in FY2004 and only 3,337 unweighted scans in FY2008. Furthermore, based on annualized MRI utilization from October 2008 through June 2009, Rutherford County is projected to perform 3,160 unweighted MRI scans during FY2009. This represents a 5.6% decrease from the previous year, and a 10.4% decrease from the County's recent peak volume in FY2005. The following chart provides Rutherford County's recent MRI utilization.



# Rutherford County Historical MRI Volume

As the chart indicates, despite annual fluctuation, Rutherford County's MRI utilization has remained relatively static. This trend is not consistent with

Source: 2006-Proposed 2010 SMFPs, Oct 08-June 09 Rutherford Hospital MRI Utilization

MRI utilization for the State as a whole. For example, from 2002 to 2007, the MRI use rate experienced a five-year compound annual growth rate of 6.8%. Please refer to the following table.

Year	State Population	Number of Procedures	Use Rate/1000	Percent Change
2002	8,319,523	543,635	65.34	
2003	8,421,367	592,888	70.40	7.7%
2004	8,538,579	653,889	76.58	8.8%
2005	8,679,291	719,447	82.89	8.2%
2006	8,869,655	786,694	88.69	7.0%
2007	9,069,398	821,829	90.62	2.2%

#### North Carolina MRI Utilization Rate History

Source: Population data from N.C. Office of State Budget & Management MRI volume data from State Medical Facilities Plans Totals may not foot due to rounding

Additionally, based on annualized MRI utilization from October 2008 through June 2009, Rutherford County is projected to perform 3,677 weighted MRI scans during FY2009. This is below the State's minimum performance standard for a County with only one fixed MRI scanner (3,775 weighted MRI scans). The following chart provides annualized unweighted and weighted MRI scans for Rutherford County.

Procedure	Total Unweighted Scans	Weighting Factor	Total Adjusted Scans
Outpatient MRI w/o contrast	1,533	1.0	1,533
Outpatient MRI w/ contrast or sedation	561	1.4	785
Inpatient MRI w/o contrast	143	1.4	200
Inpatient MRI w/ contrast or sedation	133	1.8	239
YTD Scans (Oct 08 - June 09)	2,370		2,757
FY2009 Annualized MRI Scans	3,160		3,677

#### FY2009 YTD Rutherford County MRI Utilization (Oct 2008-June 2009)

Based on year-to-date experience, Rutherford County will not meet the State's minimum performance standard for the current fixed MRI scanner during FY2009. Although FY2009 MRI utilization is not used in the methodology for determining need in the 2010 SMFP, it suggests that an additional fixed MRI scanner would result in unnecessary duplication of existing services at this time. This is not consistent with value basic principle of the State health planning process.

#### **Demographics of Other Counties with SMFP Need Determinations**

The Proposed 2010 SMFP includes need determinations for three counties: Forsyth, Rutherford and Wake counties. In contrast to Rutherford County, Forsyth and Wake counties are densely-populated, growing counties with historically increasing MRI utilization trends. The tables below show the projected population growth and historical MRI scan volume for Rutherford County compared to Wake and Forsyth counties.

Projected P	Population	Growth
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County	2009 Population	2014 Population	% Annual Growth
Wake	898,818	1,049,691	3.4%
Forsyth	349,449	373,022	1.4%
Rutherford	62,842	62,796	01%

Source: Proposed 2010 SMFP & NC State Office of Budget and Management

#### Historical MRI Utilization (unweighted)

County	2006	2007	2008	3-Year % Increase/ Decrease
Wake	55,692	65,582	65,808	18.2%
Forsyth	67,380	66,646	70,457	4.6%
Rutherford	3,360	3,332	3,337	-0.7%

Source: 2008-Proposed 2010 SMFP

As the tables above show, there is a considerable discrepancy between the growth of population and MRI utilization for Rutherford County and the other two counties with a fixed MRI need determination for 2010. This data,

combined with the demographic data previously discussed, substantiates the removal of the fixed MRI need determination for Rutherford County.

### **Recent CON Agency Findings**

As described previously, the 2009 SMFP included a need determination for a second fixed MRI scanner in Rutherford County. During FY2007, Rutherford Hospital performed 3,974 weighted MRI procedures which exceeded the 3,775 weighted MRI threshold, thus triggering the need. For competitive reasons, Rutherford Hospital submitted a CON application for a second fixed MRI scanner (CON Project ID# C-8313-09). The Agency found that Rutherford Hospital's proposal would result in unnecessary duplication of services. The CON Section denied Rutherford Hospital's request for a second fixed MRI scanner, but approved the replacement of the hospital's trailerbased MRI scanner for a true fixed MRI scanner located in the hospital.

The CON Section's findings indirectly support the premise of this petition. A second fixed MRI scanner is not needed in Rutherford County at this time. Rutherford Hospital believes a need determination for a second fixed MRI scanner in Rutherford County would result in the unnecessary duplication of existing healthcare services and is inconsistent with the 2010 SMFP's basic principles of quality, access, and value.

# Quality, Access & Value

Based on the existing capacity of Rutherford Hospital's fixed MRI scanner, there is currently sufficient access to MRI services in Rutherford County. Based on annualized MRI utilization from October 2008 through June 2009, Rutherford County will perform 3,677 weighted MRI scans during FY2009. This is below the SHCC's minimum performance standard for MRI scanner utilization of 3,775 weighted MRI scans for a County with one fixed MRI scanner.

Additionally, Rutherford Hospital was recently approved to replace their current trailer-based MRI scanner with a new state-of-the art MRI system (CON Project ID# C-8313-09). The hospital's current trailer-based MRI scanner is eight years old and previously served as a mobile scanner for several years. Due to the age of the equipment and wear and tear endured during four years of transport, the equipment experiences a great amount of equipment downtime. Rutherford Hospital intends to replace the antiquated

equipment with a new state-of-the-art system. The new fixed MRI scanner will enable greater access to fixed MRI services via expanded capabilities and increased throughput. Also, the new fixed MRI scanner will be conveniently located in the hospital to provide better access to emergency patients and inpatients. Thus, the recent CON decision to allow Rutherford Hospital to replace its current scanner addresses the county's immediate need to expand access to MRI services. A second fixed MRI scanner is not needed to address access at this time.

The rising cost of healthcare services remains a legitimate concern among many constituencies in North Carolina. Imminent federal healthcare reform serves to further heighten these concerns. There is downward pressure from the government and third-party payors to reduce unnecessary spending. A second fixed MRI scanner in Rutherford County would duplicate current services and be an unnecessary multi-million dollar expenditure.

Finally, Rutherford Hospital currently provides high quality MRI services. Rutherford Hospital has an on-going systematic and collaborative process for improving quality, performance, and outcomes throughout the organization. Additionally, Rutherford Hospital has been the recipient of several awards in recognition of its safety and quality standards. MRI services will continue to be offered under the purview of the hospital's quality-related policies and procedures.

#### **Conclusion**

In summary, Rutherford Hospital seeks an adjusted need determination to remove the need for an additional fixed MRI scanner in Rutherford County in the 2010 SMFP for the following reasons:

- Rutherford County's population is decreasing.
- Rutherford County would need to perform 4,262 additional MRI scans to support an additional MRI scanner.
- Rutherford County's MRI utilization has declined during recent years.
- Rutherford County's FY 2009YTD MRI volume is on pace to perform 3,677 weighted MRI scans; short of the 3,775 weighted MRI minimum performance standard.

- Counties exhibiting a need determination for a fixed MRI scanner in the Proposed 2010 SMFP primarily support large, rapidly growing populations in comparison to Rutherford County's demographics.
- Rutherford Hospital was recently denied a CON for a second fixed MRI because of the lack of need for an additional fixed MRI scanner in Rutherford County (CON Project ID# C-8313-09).
- The approved replacement of Rutherford Hospital's existing MRI scanner will result in greatly expanded access for local residents.
- The need determination would result in an unnecessary duplication of MRI services.
- Addition of a second fixed MRI scanner is not a cost effective alternative at this time.