

**Technology and Equipment Committee
Agency Report
Adjusted Need Petition to Remove Need Determination of
One Fixed Magnetic Resonance Imaging Equipment (MRI) in Lincoln County
Proposed 2015 State Medical Facilities Plan**

Petitioner:

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Request:

Carolinas HealthCare System (CHS) requests the need for an additional fixed MRI scanner in Lincoln County be removed from the Proposed 2015 State Medical Facilities Plan (SMFP).

Background Information:

The methodology in the Proposed 2015 SMFP for MRI scanners uses the total number of adjusted procedures in an MRI service area, equivalent values for fixed and mobile MRI scanners, and graduated need determination thresholds based on the number of fixed scanners in a service area. Procedures are weighted according to complexity and then combined to determine a total number of weighted procedures. The fixed equivalent value is 1.00 for approved and existing fixed MRI scanners, including need determinations from previous SMFPs for MRI scanners. For mobile sites, the fixed equivalent is the number of MRI adjusted procedures performed at the site divided by the threshold for the MRI service area. The fixed equivalent for a mobile site can be no greater than 1.00. The sum of the weighted MRI procedures is divided by the number of fixed equivalent scanners to get the average adjusted procedures per scanner for each service area. A need determination for additional MRI scanners occurs when the average adjusted procedures per scanner for the service area exceeds the threshold established for the service area. Application of the methodology to utilization data in the Proposed 2015 SMFP generated a need determination for one additional fixed MRI in Lincoln County.

Chapter Two of the North Carolina Proposed 2015 SMFP allows persons to petition for an adjusted need determination in consideration of “unique or special attributes of a particular geographic area or institution...,” if they believe their needs are not addressed by the standard methodology. CHS has submitted a petition to adjust the need determination in Lincoln County for several reasons including: 1) The removal of a mobile MRI host site contributed to the need determination; 2) The performance standards in the CON Rules could be challenging to reach

based on recent utilization trends; 3) The uncertainty of future MRI utilization due to changes in insurance coverage and plan design.

Analysis/Implications:

CMC-Lincoln, a Carolinas Healthcare System (CHS) affiliated facility, is the only provider that offered fixed MRI services in Lincoln County as reported for the Proposed 2015 SMFP and has only one fixed MRI machine. The need determination in Lincoln County is driven by CMC-Lincoln’s MRI utilization of 3,860 MRI procedures reported for the Proposed 2015 SMFP. The threshold for a service area with one fixed machine is an average of 3,775 scans per machine. Therefore, the service area only surpassed the threshold for a need by 85 weighted scans.

In previous planning years, Blue Ridge Radiology, a provider using a mobile machine offset any potential need because of the conversion of mobile machines to fixed equivalents in the standard methodology as seen in Table 1 below. Therefore, the removal of this machine from the inventory had a direct and significant impact to the need methodology as evidenced by the decline in the number of fixed equivalents.

| | 2011 SMFP | 2012 SMFP* | 2013 SMFP | 2014 SMFP | Proposed 2015 SMFP |
|------------------------------------|------------------|-------------------|------------------|------------------|---------------------------|
| CMC-Lincoln | 2,728 | 2,264 | 2,978 | 3,497 | 3,860 |
| Blue Ridge Radiology | 725 | 758 | 851 | 338 | 0 |
| Lincoln County Total | 3,453 | 3,022 | 3,829 | 3,835 | 3,860 |
| Annual Change in Procedures | N/A | -431 | 807 | 6 | 25 |
| Fixed Equivalents | 1.79 | 1.56 | 1.21 | 1.08 | 1.00 |
| Average Scan per MRI | 1,929 | 1,937 | 3,164 | 3,551 | 3,860 [†] |

*Data is adjusted for the removal of 94 weighted procedures from Romedical Care, Inc. This facility had data for only one year.
[†]The threshold for a service are with one MRI scanner is an average of 3,775 procedures per machine.

Another consideration presented in this petition is the ability for an existing provider located in Lincoln County to be approved for a second MRI scanner. The petition asserts the growth rate in MRI procedures would preclude any applicant from meeting the performance requirements. However, pursuant to 10A NCAC 14C .2703(b)(3)(B), an applicant (including any related entities) that does not currently own or operate a fixed MRI scanner located in Lincoln County would have to adequately demonstrate in its CON application that the proposed fixed MRI scanner would perform 3,775 weighted MRI scans during the third operating year of the proposed scanner. That applicant does not have to demonstrate that the existing MRI scanner at CMC-Lincoln would perform 3,775 weighted MRI scans. However, that applicant does have to demonstrate that its projected utilization is reasonable and adequately supported. Furthermore, that applicant would have to adequately demonstrate that its proposed fixed MRI scanner would not result in an unnecessary duplication of the existing fixed MRI scanner. On the other hand, CMC-Lincoln would have to demonstrate that its existing and proposed MRI scanners would perform an average of 3,775 weighted procedures per scanner during the third operating year of the proposed scanner. Thus, CMC-Lincoln would have to demonstrate that the two scanners would perform at least 7,550 weighted MRI scans during the third operating year of the proposed scanner [3,775 x 2 = 7,550]. That would almost double the number of scans CMC-Lincoln currently performs.

In the last five years, Lincoln County demonstrates a slow growth in the numbers of MRI procedures as seen in Table 2 below. The county had a 2.25% Compound Annual Growth Rate (CAGR). If the 2.25% CAGR were used to project the number of procedures one would expect in Lincoln County after three years, the total number of projected procedures would be 4,126 (Table 3). Thus, based on the data, a projection of 7,550 weighted MRI procedures by the end of year three would be questionable.

| Table 2: Statewide Trends in MRI Procedures in NC SMFP, 2011-2015 | | | | | | | | |
|---|-----------|-----------|-----------|-----------|--------------------|--------------------------------|--------|--|
| | 2011 SMFP | 2012 SMFP | 2013 SMFP | 2014 SMFP | Proposed 2015 SMFP | Total Percent Change 2011-2013 | CAGR | |
| Lincoln County | 3,453 | 3,022 | 3,829 | 3,835 | 3,860 | 11.79% | 2.25% | |
| Annual Change | | -12.48% | 26.70% | 0.16% | 0.65% | | | |
| Statewide | 828,805 | 777,609 | 776,852 | 791,443 | 775,159 | -6.47% | -1.66% | |
| Annual Change | | -6.18% | -0.10% | 1.88% | -2.06% | | | |

| Table 3: Anticipated Growth in MRI Procedures in Lincoln County | | | | |
|---|--------------------|--------|--------|--------|
| | Proposed 2015 SMFP | Year 1 | Year 2 | Year 3 |
| Lincoln County MRI Procedures | 3,860 | 3,947 | 4,036 | 4,126 |

Finally, the petition asserts the changes in healthcare make predicting the utilization of MRI in any given service area difficult. The healthcare industry, particularly insurance, has made and will continue to make significant modifications in the coming years. In the last 5 years in both the statewide and Lincoln County data, the number of procedures has great variation as evidenced by the annual change shown in Table 2. Thus, determining anticipated utilization of MRI equipment in Lincoln County is complex.

Agency Recommendation:

The agency supports the standard methodology for fixed MRI equipment in the Proposed 2015 SMFP. However, in consideration of the above, the agency recognizes that CMC-Lincoln and Lincoln County have unique attributes such as the potential changes in MRI procedure volume. Given available information submitted by the August 15, 2014 deadline date for comments on petitions and comments, and in consideration of factors discussed above, the agency recommends approval of the petition to adjust the projected need determination for an additional unit of fixed MRI equipment to zero (0) in Lincoln County in the Final 2015 SMFP.