

PETITION

Petition to the North Carolina State Health Coordinating Council to Remove Need Determination for One Fixed MRI Scanner in Lincoln County from the 2017 Proposed State Medical Facilities Plan

Submitted by:

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Requested Change

The Charlotte-Mecklenburg Hospital Authority d/b/a Carolinas HealthCare System (CHS) requests the need for an additional fixed MRI scanner in Lincoln County be removed from the Proposed 2017 State Medical Facilities Plan (SMFP). CHS is supportive of the current need methodology for fixed MRI scanners in the SMFP and we are not proposing any changes to the methodology. We are requesting the need determination for Lincoln County be removed for 2017.

Review of MRI Methodology

The current MRI methodology was included in the 2005 SMFP after extensive effort by an MRI work group and Division of Health Service Regulation (DHSR) staff. The major change from the prior methodology was to create a tiered approach to determine need for fixed MRI scanners. A very low threshold of 1,716 scans was established for a service area with no fixed scanner with the intent of increasing access to MRI services for small, rural counties. The methodology created tiered thresholds based on the number of scanners present in the service area. (Please see table below).

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

Lincoln County currently has only one fixed MRI scanner so a need determination was generated when the weighted MRI scans exceeded 3,775.

Reasons for the Requested Change

The main reason for the petition is the unlikely possibility that an applicant for a second MRI scanner in Lincoln County could meet the required CON performance standards with reasonable utilization assumptions and therefore could not be approved. The CON performance standards for MRI scanners included in 10A NCAC 14C .2703 (b)(3)(B) require an applicant in a service area with one fixed MRI scanner to demonstrate the total number of projected scans will exceed 3,775 weighted scans per existing, approved, or proposed scanner in the third year of operation of the new MRI scanner. In Lincoln County that would require a total of 7,550 weighted scans be performed on the two fixed MRI scanners¹. In order to achieve the required volume the number of MRI scans performed in the county would need to increase by 52.5 percent over the FFY 2015 volume (shown in the table below). In the most recent three-year period (FFY 2012 to FFY 2015) the number of MRI scans in Lincoln County increased by only 29.1 percent.

	Historical Weighted MRI Scans							
	FFY 2010	FFY 2011	FFY 2012	FFY 2013	FFY 2014	FFY 2015	% Change 10-15	CAGR 10-15
Carolinas HealthCare System Lincoln	2,264	2,978	3,497	3,860	4,667	4,952	118.7%	16.9%
Blue Ridge Radiology	758	851	338	0	0	0	-100.0%	-100.0%
Lincoln County Total	3,022	3,829	3,835	3,860	4,667	4,952	63.9%	10.4%
Annual % Change		26.7%	0.2%	0.7%	20.9%	6.1%		

The total number of weighted MRI scans in Lincoln County has increased each year since FFY 2010 as the table above shows. The compound annual growth rate (CAGR) for weighted MRI scans performed in Lincoln County between FFY 2010 and FFY 2015 was 10.4 percent per year. There was a significant increase of 26.7 percent in FFY 2011 which was the first full year of operation of the fixed MRI scanner at the newly constructed Carolinas HealthCare System Lincoln facility. Growth between FFY 2011 and FFY 2013 was minimal with an annual percent change in FFY 2012 and FFY 2013 of 0.2 and 0.7 percent, respectively. There was significant growth in FFY 2014 of 20.9 percent, but this was primarily due to an increase in the number of inpatients and the use of contrast which contributed to the growth in weighted scans. In FFY2015 the annual growth rate was 6.1 percent.

In addition, increased retention of Lincoln County MRI patients will not be sufficient to reasonably support a second scanner. The table below shows the number of Lincoln County patients who received MRI scans and the county where they received their MRI scan, based on data reported by hospitals and freestanding MRI providers to DHSR. The total number of Lincoln County residents receiving MRI scans in FFY 2015 was 5,804, or 8.3 percent lower than the previous year. Only 36.0 percent of these patients received their MRI scans in Lincoln County.

¹ Although the CON performance standards would require a new provider to demonstrate projected volume for only their proposed MRI scanner, it is unlikely that an applicant could do so based on reasonable assumptions, without simply shifting volume from an existing provider and thereby resulting in underutilized scanners in Lincoln County.

Service Location	Patients	% of Total
Lincoln	2,087	36.0%
Mecklenburg	1,825	31.4%
Catawba	707	12.2%
Gaston	662	11.4%
Iredell	179	3.1%
Forsyth	84	1.4%
Burke	67	1.2%
Cabarrus	65	1.1%
Cleveland	57	1.0%
All Other NC Counties	71	1.2%
Total	5,804	100.0%

The Lincoln County average historical ratio of weighted scans to scans is 1.20. Applying this weighted ratio to the 5,804 patients results in 6,965 weighted scans ($5,804 \times 1.20 = 6,965$). Thus, 100 percent retention of Lincoln County MRI patients is still not sufficient to achieve the CON performance standard target of 7,550 weighted scans for two fixed MRI scanners,

As each of the two measures above demonstrates, the assumptions required to meet the CON performance standard volume threshold do not match recent experience in Lincoln County. There have been similar examples in other counties where a need for an additional MRI scanner was included in the SMFP but applicants could not demonstrate the performance standards could be achieved with reasonable assumptions. The most similar example was in Wilkes County in 2008. There were two applicants for the MRI scanner need determination in the 2008 SMFP for Wilkes County but neither was approved. The volume of MRI scans in the county declined the following year and the need determination was subsequently removed from future plans.

Impact of Request/Implications if Petition is Not Approved

As outlined above, approval of this petition as proposed will result in an adjusted need for zero MRI scanners in Lincoln County.

If this petition is not approved, the development of an additional fixed MRI scanner in Lincoln County would result in unnecessary duplication of services and underutilized scanners. It is also possible that interested parties could undergo the expense to prepare and file CON applications only to have their applications denied because the utilization projections were not deemed reasonable when compared to historical growth rates.

Adverse Effects on Population

The approval of this petition would not have any adverse effect on the population of Lincoln County. The only current provider of fixed MRI services is Carolinas HealthCare System Lincoln. The MRI scanner is in operation from 7 a.m. to 7 p.m. Monday through Friday and on an as-needed basis for inpatients and emergency department patients. There is no current backlog for patients to

receive MRI scans and the service could expand service hours to meet future demand. According to the Proposed 2017 SMFP, there are at least 28 fixed MRI scanners in the state that provide over 5,000 weighted MRI scans per year. It is reasonable to assume the fixed MRI scanner at Carolinas HealthCare System Lincoln can easily meet the projected demand for MRI scans in the county through 2017.

If the petition is not approved the citizens of Lincoln County would be adversely impacted by the premature installation of second fixed MRI scanner that would be underutilized and therefore contributing to higher healthcare costs.

Alternatives Considered

The only realistic alternative to the proposed request is to maintain the status quo and keep the need as identified in the Proposed 2017 SMFP. As stated previously, including a need determination for an additional fixed MRI scanner for Lincoln County will most likely result in no CON applicant being approved to add an MRI scanner.

Impact of Proposed Changes on Unnecessary Duplication

The proposed changes will prevent unnecessary duplication of services by avoiding the addition of a fixed MRI scanner to the service area.

Proposal's Consistency with the Basic Principles of the SMFP

The proposed removal of this MRI need determination will ensure greater safety, quality, access and value. By ensuring sufficient utilization of MRI scanners, safety and quality will be enhanced through more appropriate utilization of the existing scanner. Access will not be negatively impacted by the proposed change. Finally, healthcare value will be maximized through the avoidance of underutilized fixed MRI scanners.

Summary

Based on the evidence presented above, CHS believes that the removal of need for an additional fixed MRI scanner in the Proposed 2017 SMFP is in the best interest of the citizens of Lincoln County. Utilization trends may generate a need for an additional fixed MRI scanner in the future. It would be prudent to delay adding a second fixed MRI scanner in the county until utilization trends demonstrate sustainable growth over multiple years.