

**Technology and Equipment Committee  
Agency Report  
Petition to Remove Need Determination for  
One Fixed Magnetic Resonance Imaging (MRI) Scanner in the  
Stanly County Service Area  
2021 State Medical Facilities Plan**

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**Petitioner:**

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**Request:**

The Charlotte-Mecklenburg Hospital Authority, d/b/a Atrium Health, requests removal of the need for an additional fixed MRI scanner in the Stanly County service area from the *2021 State Medical Facilities Plan (SMFP)*.

**Background Information:**

Chapter Two of the SMFP provides that “[a]nyone who finds that the North Carolina State Medical Facilities Plan 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.” The SMFP annual planning process and timeline allow for submission of petitions for changes to policies and methodologies in the spring and petitions requesting adjustments to need projections in the summer. It should be noted that any person might submit a certificate of need (CON) application for a need determination in the Plan. The CON review could be competitive and there is no guarantee that the petitioner would be the approved applicant.

The standard methodology uses the total number of weighted 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 mobile sites, the fixed equivalent is the number of MRI weighted 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 weighted procedures per scanner for each service area. A need determination for additional MRI scanners occurs when the average weighted procedures per scanner in a service area exceeds the threshold established for that service area. Application of the methodology to utilization data in the Proposed 2021 SMFP generated a need determination for one additional fixed MRI in the Stanly County service area.

Atrium Health has submitted a petition to remove the need determination for one fixed MRI scanner in the Stanly County service area for the following reasons: 1) low MRI procedure volume growth trends, 2) low existing population with minimal growth rate, and 3) enough MRI operating capacity which will make it difficult to meet the CON performance standards.

**Analysis/Implications:**

Atrium Health is the only provider that offers fixed MRI services in the Stanly County service area; they currently operate one fixed MRI machine. Atrium Health also has one operational mobile MRI scanner offering services in the Stanly County service area. The need determination in the service area is driven by Atrium Health’s MRI utilization of 4,323 total MRI weighted procedures reported for the Proposed 2021 SMFP. The threshold for a service area with one fixed machine is an average of 3,775 weighted scans per machine. Therefore, the Stanly County service area surpassed the threshold for a need by 548 weighted scans.

If Atrium Health were to apply, it would have to demonstrate that its existing and the proposed MRI scanners would perform an average of 3,775 weighted procedures per scanner during the third operating year of the proposed scanner. Thus, Atrium Health would have to demonstrate that the two scanners would perform a total of at least 7,550 weighted MRI scans during the third operating year of the proposed scanner [3,775 x 2 = 7,550]. The petition asserts the growth rate in MRI procedures would preclude any applicant from meeting this performance requirement. In the last five years, the Stanly County service area has demonstrated an overall positive trend in the numbers of MRI procedures (see Table 1).

**Table 1: Service Area and Statewide Trends in MRI Procedures, Data Years 2015 - 2019**

	2017 SMFP	2018 SMFP	2019 SMFP	2020 SMFP	Proposed 2021 SMFP	Total Percent Change	CAGR
<b>Stanly County Service Area</b>	3,022	3,094	3,503	3,772	4,323	43.05%	9.36%
<b>Annual Change in Service Area</b>		2.38%	13.22%	7.68%	14.61%		
<b>Statewide</b>	848,142	852,633	872,498	888,436	939,196	10.74%	2.58%

Source: 2016 – 2020 License Renewal Applications

Note: The data in the SMFP is two years earlier than the publication year of the SMFP.

The service area has a 9.36% Compound Annual Growth Rate (CAGR). If the 9.36% CAGR were used to project the number of procedures in the Stanly County service area after three years, the total number of projected procedures would be 5,655 (see Table 2). Thus, based on the data, a

projection of 3,775 weighted MRI procedures by the end of year three would be obtainable for one machine but would not be enough for two machines.

**Table 2: Anticipated Growth of MRI Procedures in the Stanly County Service Area**

	Proposed 2021 SMFP	Year 1	Year 2	Year 3
<b>Atrium Health MRI Procedures</b>	4,323	4,728	5,171	5,655

The Stanly County service area consists of small and rural communities with a low population growth rate. The county population is projected to have a 1.22% compound average growth rate over a five-year period (see Table 3). This increase in population is not significant enough to support the necessary procedures required for an additional fixed MRI machine.

**Table 3: Annual County Population Totals, Years 2017 - 2021**

County	2017	2018	2019	2020	Projected 2021	Total Percent Change	CAGR
<b>Stanly County Service Area Population</b>	61,670	63,069	63,994	64,236	64,743	4.98%	1.22%

*Source: NC Office of State Budget and Management: Annual County Populations*

Uncertainty in the healthcare industry persists. In addition, the COVID-19 pandemic has created a possible fluctuation in the patient volumes receiving MRI services. Therefore, determining anticipated utilization of MRI equipment in this service area is complex.

**Agency Recommendation:**

The Agency supports the standard methodology for fixed MRI equipment. However, in consideration of the above, the Agency recognizes that the Stanly County service area has unique attributes, including insufficient MRI procedure volume and a low population growth rate to support an additional MRI scanner. Given available information submitted by the August 12, 2020 deadline and in consideration of factors discussed above, the Agency recommends approval of the petition to remove the need determination for an additional fixed MRI scanner for the Stanly County service area in the 2021 SMFP.