

**Technology and Equipment Committee  
Agency Report  
Petition to Remove Need Determination for  
One Fixed Magnetic Resonance Imaging (MRI) Scanner in the  
Pasquotank/Camden/Currituck/Perquimans County Service Area  
2022 State Medical Facilities Plan**

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**Petitioner:**

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**Contact:**

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**Request:**

Sentara Albemarle Medical Center (SAMC) requests removal of the need for an additional fixed MRI scanner in the Pasquotank/Camden/Currituck/Perquimans (PCCP) service area from the *2022 State Medical Facilities Plan (SMFP or “Plan”)*.

**Background Information:**

Chapter Two of the SMFP provides, in relevant part, 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.” Petitions requesting adjustments to need projections are submitted in the summer. Any person may 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 MRI methodology 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 SMFP’s 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 2022 SMFP generated a need determination for one additional fixed MRI in the PCCP service area.

SAMC has submitted a petition to remove the need determination for one fixed MRI scanner in the PCCP service area due to the impact of COVID-19 on utilization and the other issues the Petitioner previously cited in prior petitions submitted in each of the years between 2017 and 2020. The Agency approved the Petitioner’s prior petitions due to the following: 1) low MRI procedure volume growth trends; 2) low existing population with minimal growth rate; 3) sufficient MRI operating capacity; 4) an additional scanner would not meet CON performance standards; and 5) CON approval for a second fixed scanner at SAMC that was never developed.

**Analysis/Implications:**

SAMC is the only provider that offers MRI services in the PCCP service area. SAMC currently operates one fixed MRI machine and one mobile MRI scanner. The need determination in the service area is driven by SAMC’s MRI utilization of 5,511 total MRI weighted procedures reported for the Proposed 2022 SMFP. The threshold for a service area with one fixed machine is an average of 3,775 weighted scans per machine. Therefore, the PCCP service area surpassed the threshold for a need by 1,736 weighted scans.

If SAMC were to apply for a CON, it would have to demonstrate that its existing and the proposed MRI scanners would each perform an average of 3,775 weighted procedures during the third operating year of the proposed scanner. Thus, SAMC 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 PCCP service area has demonstrated a consistent increase in the numbers of MRI procedures (see Table 1). The 2020 data reporting year included months when the COVID-19 pandemic was impacting the availability of services. During this time, PCCP showed a modest increase in MRI procedures. In contrast, many other service areas experienced a decline in the number of weighted scans. This may indicate that in the absence of COVID SAMC’s utilization would have been even higher.

**Table 1: Service Area Trends in Weighted MRI Procedures, Reporting Years 2016-2020**

	2018 SMFP	2019 SMFP	2020 SMFP	2021 SMFP	Proposed 2022 SMFP	Total Percent Change	CAGR
<b>Weighted Scans</b>	3,790	4,121	5,252	5,497	5,511	45.41%	9.81%
<b>Annual Change</b>		8.73%	27.44%	4.66%	0.25%		

Source: 2018-Proposed 2022 State Medical Facilities Plan

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

The service area has a 9.81% Compound Annual Growth Rate (CAGR). If the 9.81% CAGR were used to project the number of procedures in the PCCP service area after three years, the total number of projected procedures would be 7,298 (see Table 2). With current growth, a new machine will be projected to only perform 650 weighted procedures under the CON performance standards.

**Table 2: Anticipated Growth of Weighted MRI Procedures in the Pasquotank/Camden/Currituck/ Perquimans Service Area**

	Proposed 2022 SMFP	Year 1	Year 2	Year 3
SAMC MRI Procedures	5,511	6,052	6,646	7,298

The PCCP Service Area consists of small and rural counties with a low population growth rate. These counties are projected to have a 0.46% increase in CAGR over a 5-year period. (see Table 3) This increase in population may be sufficient to support the necessary procedures required for an additional fixed MRI machine.

**Table 3: Annual County Population Totals, Years 2018 - 2022**

County	2018	2019	2020	2021	Projected 2022	Total Percent Change	CAGR
Camden	10,414	10,460	10,717	10,553	10,552	1.85%	.46%
Currituck	27,321	27,978	27,952	28,336	28,756		
Pasquotank	39,826	39,816	39,685	39,814	39,736		
Perquimans	13,729	13,785	13,637	13,839	13,938		
<b>Total Service Area Population</b>	91,290	92,039	91,991	92,542	92,982		

*Source: State Medical Facilities Plan; NC Office of State Budget and Management: Projected Annual County Population Totals, 2020-2029 (downloaded 8/16/2021)*

**Agency Recommendation:**

The Agency supports the standard methodology for fixed MRI equipment. However, in consideration of the above, the Agency recognizes that the Pasquotank/Camden/Currituck/Perquimans service area has unique attributes, including MRI procedure volume increases and a slight population growth rate that support an additional MRI scanner, as calculated by the standard methodology. Given available information submitted by the August 11, 2021 deadline date for comments, and in consideration of factors discussed above, the Agency recommends denial of the petition to remove the need determination in the 2022 SMFP for an additional unit of fixed MRI equipment in the Pasquotank/Camden/Currituck/Perquimans service area.