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 2021 State Medical Facilities Plan

Petitioner:

Sentara Albemarle Medical Center 1144 N. Road Street Elizabeth City, NC 27909

Contact: Phillip E. Jackson, FACHE, DSL President (252) 384-4600 Pejacks1@sentara.com

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 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 PCCP service area.

SAMC has submitted a petition to adjust the need determination to remove the need determination for one fixed MRI scanner in the PCCP service area for the following reasons: 1) low MRI procedure volume growth trends, 2) low existing population with minimal growth rate, 3) currently have sufficient MRI operating capacity, 4) an additional scanner will have difficulty meeting the CON performance standard rule, and 5) SAMC relinquished a CON for a second fixed scanner because they determined that it was not needed. This Petition marks the fourth request from SAMC to remove the MRI need determination in the PCCP service area.

Analysis/Implications:

SAMC is the only provider that offers fixed MRI services in the PCCP service area and currently operates one fixed MRI scanner and one mobile MRI scanner. The need determination in the service area is driven by SAMC's MRI utilization of 5,497 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 PCCP service area surpassed the threshold for a need by 1,722 weighted scans.

If SAMC 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, 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 an overall positive trend in the numbers of MRI procedures (see Table 1).

2017 SMFP	2018 SMFP	2019 SMFP	2020 SMFP	Proposed 2021 SMFP	Total Percent Change	CAGR
3,304	3,776	4,121	4,521	4,745	43.61%	9.47%
	14.29%	9.14%	9.71%	4.95%		
848,142	852,633	872,498	888,436	939,196	10.74%	2.58%
	SMFP 3,304	SMFP SMFP 3,304 3,776 14.29%	SMFP SMFP SMFP 3,304 3,776 4,121 14.29% 9.14%	SMFP SMFP SMFP SMFP 3,304 3,776 4,121 4,521 14.29% 9.14% 9.71%	2017 SMFP 2018 SMFP 2019 SMFP 2020 SMFP 2021 SMFP 3,304 3,776 4,121 4,521 4,745 14.29% 9.14% 9.71% 4.95%	2017 SMFP 2018 SMFP 2019 SMFP 2020 SMFP 2021 SMFP Percent Change 3,304 3,776 4,121 4,521 4,745 43.61% 14.29% 9.14% 9.71% 4.95%

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

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 9.47% Compound Annual Growth Rate (CAGR). If the 9.47% 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 6,224 (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 Pasquotank/Camden/Currituck/ Perquimans Service Area

	Proposed 2021 SMFP	Year 1	Year 2	Year 3
SAMC MRI Procedures	4,745	5,194	5,686	6,224

Finally, in 2006, the petitioners applied for and obtained a CON for a second fixed MRI scanner. However, the economic downturn and healthcare reform negatively impacted MRI volume, so the plan to add a second fixed MRI scanner was abandoned. SAMC relinquished the CON for the additional scanner in January 2012. SAMC currently operates a mobile MRI scanner that can support the current growth in procedures.

The PCCP Service Area consists of small and rural counties with a low population growth rate. These counties are projected to have a 0.52% 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.

County	2017	2018	2019	2020	Projected 2021	Total Percent Change	CAGR
Camden	10,358	10,414	10,460	10,717	10,808	2.09%	0.52%
Currituck	26,666	27,321	27,978	27,952	28,379		
Pasquotank	39,901	39,826	39,816	39,685	39,655		
Perquimans	13,669	13,729	13,785	13,637	13,646		
Total Service Area Population	90,594	91,290	92,039	91,991	92,488		
					T		
Annual Change in Service Area		0.77%	0.82%	1.03%	0.54%		

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

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 Pasquotank/Camden/Currituck Perquimans 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 Pasquotank/Camden/Currituck/Perquimans service area in the 2021 SMFP.