

**Technology and Equipment Committee
Agency Report
Petition to Add Need Determination for
One Linear Accelerator (LINAC) in
Service Area 18 Designated for Robeson County
2019 State Medical Facilities Plan**

Petitioner:

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Request:

Southeastern Health requests an adjusted need determination for one additional linear accelerator (LINAC) in Service Area 18, to be designated for Robeson County the *2019 State Medical Facilities Plan (SMFP)*.

Background Information:

In the 2019 SMFP, there are 73 hospitals and freestanding oncology treatment centers statewide in North Carolina with 127 linear accelerators that are operational, have a certificate of need in hand, or for which there is a prior year need determination.

Chapter Two of the SMFP allows for “[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 in the SMFP incorporates a geographic accessibility criterion (a population base of 120,000), a criterion aimed at assuring efficient use of megavoltage radiation

facilities (when Equivalent Simple Treatment Visits (ESTV) procedures divided by 6,750 minus the number of existing linear accelerators equals at least .25) and, a patient origin criterion that indicates when a service area has 45 percent or more of its patients coming from outside the service area. A need determination is generated when two of the three criteria are met within a service area. Application of the methodology to utilization data in the Proposed 2019 SMFP did not generate a need determination for one additional LINAC in Service Area 18.

Counties are the basic units for the formation of linear accelerator service areas, based on proximity, utilization patterns, and patient origin data. A small percentage of the population lives some distance from a linear accelerator, but the sparsity of population in and around these areas does not provide the population required to support a linear accelerator.

Southeastern Health has submitted a petition to adjust the need determination to add a LINAC in Service Area 18, designated for Robeson County asserting the following reasons: 1) as a single county Robeson County has operated above the threshold of 6,750 ESTVs during the past 4 years, 2) utilization of the one LINAC in Robeson County, combined with population size would have already generated a need under standard LINAC methodology and 3) Southeastern MC has the third busiest LINAC in the state and the busiest single county LINAC according to the Proposed 2019 SMFP.

Analysis/Implications:

Southeastern Health (SeH) is the only provider that offered LINAC services in Robeson County. Service Area 18 consists of Robeson, Cumberland, Sampson and Bladen Counties. SeH has only one LINAC in Robeson County as reported for the Proposed 2019 SMFP. Robeson County is a rural county high in poverty and health disparities resulting in difficulty for patients to travel to other counties to receive medical treatment. The population for Robeson County is majority minority. The Petition provides evidence of health disparities in Robeson County that can affect not only the propensity to develop cancer but also challenges in receiving treatment. Specifically, the National Cancer Institute reports that Robeson County has among the highest rates of cancer incidence and mortality in the state.

SeH has the third busiest linear accelerator in North Carolina as reported in the Proposed 2019 SMFP. The only two LINACs that average more procedures than SeH are in Mecklenburg County, where there are 10 LINACs. Among single counties with one linear accelerator, Robeson County ranks first in the number of ESTVs performed. Only three single LINAC counties (Robeson, Union and Lenoir) surpass the 6,750 ESTV threshold.

The Petitioner has demonstrated that its current LINAC is performing above the methodology criterion of 6,750 ESTVs per year. The current LINAC is reported to have performed 8,788 ESTVs in 2017, which is 2,038 procedures over the suggested procedure capacity in the LINAC methodology. In the last five years, SeH has demonstrated an overall slightly positive trend in the number of ESTV procedures (see Table 1). The only decline came during the time that SeH had no operable LINAC due to a fire. The Petition reported that SeH provided no LINAC services from June 27, 2015 through March 23, 2016; this period affected the number of procedures in the 2017 and 2018 SMFPs.

Table 1: Service Area and Statewide Trends in LINAC ESTVs, Data Years 2013 - 2017

	2015 SMFP	2016 SMFP	2017 SMFP	2018 SMFP	Proposed 2019 SMFP	Total % Change	CAGR
Robeson County	7,741	7,475	5,910	4,099	8,788	13.53%	3.22%
Annual Change in County		-3.44%	-20.94%	-30.64%	114.39%		
	28,374	28,374	27,653	28,730	31,031	9.36%	2.26%
Annual Change in Service Area 18		0%	-2.54%	3.89%	8.01%		
Statewide	599,719	584,630	574,069	583,352	603,126	0.56%	0.14%

Source: 2014 – 2018 License Renewal Applications

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

In addition, Robeson County meets the population based criterion of 120,000 in a geographical accessible area. According to the Proposed 2019 SMFP, Service Area 18 reported a total population of 557,978. Cumberland County, the adjacent largest county in the service area reported a population of 329,653 with five LINACs averaging 3,854 ESTVs. In the last four years Robeson County has maintained a stable population that can support the population criterion if it were considered a separate service area (see Table 2).

Table 2: Population Trends in Robeson County, Data Years 2014 - 2017

	2014 Population	2015 Population	2016 Population	2017 Population	Total % Change	CAGR
Robeson County Service Area	133,599	133,247	132,948	131,384	-1.66%	-0.56%
Annual Change in County		-0.26%	-0.22%	-1.18%		

Source: 2014 – 2018 SMFP

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

Agency Recommendation:

The agency supports the standard methodology for LINAC equipment in the Proposed 2019 SMFP. However, in consideration of the above, the agency recognizes that the SeH service area has unique challenges to meeting the needs of its patients, and it has sufficient ESTVs to support an additional LINAC. Given available information submitted by the August 9, 2018 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 need determination for an additional unit of LINAC equipment to one (1) for Service Area 18 and to require that any proposed LINAC be developed in Robeson County.