

**Technology and Equipment Committee
Agency Report
Adjusted Need Determination Petition for
Linear Accelerators in Service Area 20 in the
Proposed 2013 State Medical Facilities Plan**

Petitioner:

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Contact:

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Request:

Duke Raleigh Hospital proposed an adjusted need determination in Service Area 20 (encompassing Wake, Franklin, and Harnett Counties) for one additional linear accelerator, to reflect a perceived unmet need for an additional linear accelerator in the service area.

Background Information:

The Proposed 2013 State Medical Facilities Plan (SMFP) provides standard need determination methodology for linear accelerators that incorporates three criteria: geographic accessibility, efficiency (utilizing the concept of an Equivalent Simple Treatment Visit (ESTV) for radiation treatments) and patient origin parameters. A need determination is generated when two of the three criteria are met within the service area.

In deference to the standard methodology, Chapter Two of the North Carolina Proposed 2013 SMFP allows persons to petition for an adjusted need determination in consideration of "...unique or special attributes of a particular geographic area or institution..." if they believe their needs are not appropriately addressed by the standard methodology. Duke Raleigh Hospital has submitted a petition to adjust the need determination in Service Area 20 to reflect what they believe to be unmet need for additional linear accelerator capacity within the service area. Duke Raleigh Hospital states in their petition that this need is unmet due to two factors: 1) an undeveloped Certificate of Need (CON) in the area; and 2) an imbalance between highly utilized and underutilized linear accelerator equipment.

Analysis/Implications:

The methodology in the Proposed 2013 SMFP derives a total number of linear accelerators by summing the total number of operational linear accelerators, the number of approved linear accelerators not yet operational but for which a certificate of need has been awarded and the linear accelerator need determinations from previous years. As shown in Table 9H in the Proposed 2013 SMFP, Area 20 has a total of 9 linear accelerators, including one approved linear accelerator not yet operational but awarded a certificate of need based on a need determination from the 2007 SMFP. With a total of 44,493 adjusted (ESTV) procedures and an average of 4,944 adjusted procedures per accelerator in the Proposed 2013 SMFP, Area 20 does not exceed the threshold of 6,750 ESTV procedures per accelerator. While the data shows that Duke Raleigh hospital does exceed the threshold of 6750 ESTV procedures per accelerator, the methodology looks at the aggregate of equipment within the entire area. The linear accelerator methodology does not address individual facility needs.

The 2007 SMFP included a need determination for a linear accelerator for Service Area 20. On February 4, 2011, a Certificate of Need was issued to Cancer Centers of North Carolina. Duke Raleigh Hospital points out in their petition that “Since that time, Cancer Centers of North Carolina has made no progress towards the implementation of this asset and has not provided a timetable for expected completion”. During this time, Cancer Centers of North Carolina acquired an existing practice in Service Area 20 that owned an operational linear accelerator which resulted in the need to analyze the entire organizational process. A letter of intent has been received from the Cancer Centers of North Carolina to notify the Technology and Equipment Committee of plans to proceed with this project once the organizational analysis is complete. The operation of this new linear accelerator should provide adequate access to services.

Overall linear accelerator utilization since the 2007 SMFP in Service Area 20 has seen a slow, steady growth with one period of slight decline shown in the 2011 SMFP. As Duke Raleigh Hospital describes in their petition, there has been a 21.5% increase in ESTVs since the need was identified. However, the growth has been insufficient to trigger a new need determination according to the methodology.

Duke Raleigh Hospital points that there is one linear accelerator in Franklin county that has been in operation since 2006 but did not report utilization until the Proposed 2013 SMFP with reported utilization for 2010-11 at 1407 ESTVs (20.84% of capacity). The petitioner describes the concern over an “imbalance between highly utilized and underutilized equipments that has not corrected over several years”. The petitioner further sets forth that “two providers in particular have significantly higher utilization per machine than the others”. Duke Raleigh Hospital averaged 7486 ESTVs per unit and Cancer Centers of North Carolina averaged 8351 ESTVs if only considering the 2 operational units in the calculation. Once the CON approved unit is operational, the average ESTVs for Cancer Centers of North Carolina is 5568 ESTVs (as reflected in Table 9G) and no need is determined in the service area. While the data shows one unit of underutilized equipment, the standard methodology and the current inventory, including

the CON approved linear accelerator to be developed, is providing sufficient access to linear accelerator services in Service Area 20.

Agency Recommendation:

The Agency believes that the linear accelerator standard methodology is adequately addressing the needs of the people in Wake, Franklin and Harnett counties – Service Area 20. Therefore, given available information and comments submitted by the 8/17/12 deadline, and in consideration of factors discussed above, the Agency recommends that the petition for an adjusted need determination for one additional linear accelerator in Service Area 20 be denied.