Technology and Equipment Committee
Agency Report
Petition Related to Fixed Cardiac Catheterization Methodology for the Proposed 2016 State Medical Facilities Plan

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Petitioner:
WakeMed Health and Hospitals
3000 New Bern Avenue
Raleigh, North Carolina 27610

Contact:
W. Stan Taylor
Vice President of Corporate Planning
WakeMed Health and Hospitals
919-350-8108

Request:
The petitioner request[s] that the methodology for determining need for cardiac catheterization equipment in North Carolina be revised for the 2016 State Medical Facilities Plan.

Background Information:
Chapter 2 of the State Medical Facilities Plan (SMFP) describes the purpose and process for submitting petitions to amend the SMFP during its development. Petitions may be sent to Healthcare Planning twice during the course of plan development. Early in the planning year petitions related to basic SMFP policies and methodologies that have a statewide impact may be submitted. The SMFP defines changes with the potential for a statewide impact as *"the addition, deletion, and revision of policies and revision of the projection methodologies."* The review requested by this petitioner could affect a methodology and/or policies in the SMFP and should be considered before publication of the Proposed 2015 SMFP. The petition's requested change would have a statewide impact.

Later in the planning cycle when need projections are identified in the Proposed SMFP, petitions may be submitted seeking adjustments to the projected need determination in any service area if the petitioner believes the needs of a service area are not fully addressed by the standard methodology.

The Proposed 2016 SMFP provides two standard need determination methodologies for cardiac catheterization equipment. Methodology One is the standard methodology for determining need for additional fixed cardiac catheterization equipment and Methodology Two is the need determination methodology for shared fixed cardiac catheterization equipment. The petition requests a review and changes to Methodology One.

The methodology states that capacity for cardiac catheterization equipment is defined as 1,500 diagnostic equivalent procedures per year. Need for additional cardiac catheterization equipment is triggered when 80% capacity is reached (1,200 procedures). The SMFP values one therapeutic cardiac catheterization procedure at 1.75 diagnostic equivalent procedures, and one diagnostic cardiac catheterization procedure at one diagnostic equivalent procedure.

In 2013, New Hanover Regional Medical Center (NHRMC) successfully petitioned the State Health Coordinating Council (SHCC) to remove a need for the New Hanover service area. They included three different arguments in the petition, which were: 1). Capacity is greater than calculated in the SMFP because the hours of operation are extended; 2) Both diagnostic and interventional procedures take an average of one hour, despite the increased weight given to interventional procedures in the methodology; 3) A flat trend in number of procedures performed in the county.

NHRMC included data that showed their utilization was well below the 80% threshold or 1200 procedures as required in the methodology for a need. Additionally, from 2006 to 20012 they were able to show that in the health service area the number of procedures either declined or were relatively unchanged. Thus, the SHCC agreed the need should be removed.

Last year, Rex Hospital petitioned the SHCC to change the methodology such that the calculations should not apply the threshold to the entire service area, but to each individual hospital/health system irrespective of capacity at other facilities located in the same service area. Thus, the need in each service area would be sum of all of the needs generated by each facility/health system in the county. This petition was unsuccessful because the requested changes had the potential to add additional capacity to health service areas that already had surpluses and because procedure volumes were declining.

In Table 1 below, a review of the statewide data indicates the decrease in procedures continues into 2013, the data year of the 2015 SMFP.

Table 1: Total Number of Adult Diagnostic Procedures Using Fixed Cardiac Catheterization Equipment by Year, 2005-2013

Data Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Procedures	80,305	69,589	65,335	68,182	64,847	63,138	62,519	60,836	60,127

2007-2015 SMFPs. Note: Data year is always two years prior to the SMFP.

Furthermore, as shown in Table 2, there have been five need determinations in the 2007-2015 SMFPs. Two successful petitions requesting adjusted need determinations had an impact on this total, one removed a need determination and another added a need.

Table 2: Number of Fixed Cardiac Catheterization Equipment Need Determinations in the State Medical Facilities Plans, 2007-2015

SMFP Year	2007	2008	2009	2010	2011	2012	2013	2014	2015
Needs	1	2	0	0	0	0	2*	0†	0

2007-2015 SMFPs. Note: This table does not include needs generated for fixed shared cardiac catheterization as calculated under Methodology Two.
**One of the two need determinations was the result of an adjusted need determination petition.*
†One need determination was removed as an adjusted need determination petition.

The current methodology along with the declining procedure volumes are currently generating very few need determinations across the state.

Analysis/Implications:
WakeMed discusses some of the issues that were included in the NHRMC petition, including that capacity of one machine at 1500 weighted procedures is too low and that both diagnostic and interventional procedures do not take as long as assumed in the current methodology. Discussions about procedure volumes are further complicated by the notion that despite the methodology, facilities may judge capacity at their respective facilities differently depending on the hours of operation as discussed in the NHRMC petition.

Further considerations of the methodology include the number of cardiac catheterization units at each facility. Raising the threshold or changes in the procedure weighting may have a greater impact on providers with one machine as compared to facilities with several machines. The logic is that facilities with one machine may not be able to build efficiencies of service with the cleaning and turnover of the room between patients as providers operating multiple machines. Thus, with a higher threshold, facilities with fewer units or procedure volumes may be prevented from generating a need.

Any increases in capacity of the equipment would further limit the number of calculated need determinations, which are already fairly low as evidenced in Table 2. Currently, the methodology appears to be working and further restricting the calculation of need determinations does not seem warranted at this time. Facilities or service areas with special circumstances can, and have in the past, successfully submitted petitions in the summer for an adjusted need determination for their particular health service areas.

Agency Recommendation:
Given available information and comments submitted by the March 20, 2015 deadline date for comments on petitions and comments, and in consideration of factors discussed above, the agency recommends denial of the petition. The decline in cardiac catheterization procedures and the relatively few need determinations generated by the current methodology demonstrate the methodology does not require changing at this time. The Agency supports the standard methodology for fixed cardiac catheterization equipment. Furthermore, in the coming years, all methodologies will eventually be reviewed as discussed at the initial SHCC meeting on March, 4, 2105, with the committee chairs discretion on the review priority.