Technology and Equipment Committee
Agency Report
Petition Related to Fixed Cardiac Catheterization Methodology for the Proposed 2017 State Medical Facilities Plan

---

Petitioner:
UNC Rex Healthcare
4420 Lake Boone Trail
Raleigh, North Carolina 27607

Contact:
Steve Burriss
President, UNC Rex Healthcare
919-784-2244
stephen.burriss@unchealthcare.unc.edu

Request:
The petitioner requests that the methodology for determining need for cardiac catheterization equipment in North Carolina be revised for the 2017 State Medical Facilities Plan. Specifically, the petitioner requests changes to steps 5 and 6 of the Cardiac Catheterization Methodology 1 so that "The number of units of fixed cardiac catheterization equipment needed is calculated for each hospital, and a need determination is generated irrespective of surpluses at other hospitals in the service area" with the exception of hospitals under common ownership, where the "surpluses and deficits would be totaled."

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. 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 or policies in the SMFP and should be considered before publication of the Proposed 2017 SMFP.

The cardiac catheterization section of Chapter 9 uses the health service planning areas as defined in Acute Care Bed Service areas in Chapter 5. In summary, a county with a licensed acute care hospital is a health service area. When there is no licensed acute care hospital, a multi-county health service area is designated based on where the largest proportion of patients receive inpatient care. This calculation is based on three years of acute care days patient origin data.

The Proposed 2017 SMFP provides two standard need determination methodologies for cardiac catheterization equipment. Methodology 1 is the standard methodology for determining need for additional fixed cardiac catheterization equipment and Methodology 2 is the need determination

methodology for shared fixed cardiac catheterization equipment. The petition requests a review of and changes to Methodology 1.

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 percent 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) petitioned the State Health Coordinating Council (SHCC) to remove the need determination for one unit of cardiac catheterization in the New Hanover County. One of the primary reasons cited by the petitioner was that capacity of the equipment in the service area is greater than calculated in the SMFP. Based on the data presented, the SHCC agreed the need should be removed.

In 2014, Rex Hospital petitioned the SHCC twice for changes to the Cardiac Catheterization section of the Plan. The first petition was 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 a total 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. The second request was an adjusted need determination. The SHCC voted to deny Rex's adjusted need petition because there was only one year of data showing deficits at their facility.

In 2015, WakeMed petitioned in the spring for a methodology change. This petition maintained a similar argument to New Hanover Regional Medical Center, stating that the capacity of cardiac catheterization machines is greater than the current methodology assumes. However, one of the reasons this petition was denied by the SHCC is because each service area has variation in capacity. In the summer of 2015, Rex Hospital petitioned again for an adjusted need determination. The agency recommended approval of the petition since the data showed increasing procedures at Rex Hospital with more than one year of data. The petition was extracted from the Technology and Equipment Committee report for a vote by the full Council, which voted to deny it.

Analysis/Implications:
In Table 1 below, a review of the statewide data indicates a continued decrease in the number of procedures into 2014, the data year of the 2016 SMFP.

Table 1: Total Number of Adult Diagnostic Procedures Using Fixed Cardiac Catheterization Equipment by Year, 2006-2014

Data Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
Procedures	69,589	65,335	68,182	64,847	63,138	62,519	60,836	60,127	59,364

2008-2016 SMFPs. Note: Data year is always two years prior to the SMFP.

Furthermore, as shown in Table 2, there have been six need determinations in the 2008-2016 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, 2008-2016

SMFP Year	2008	2009	2010	2011	2012	2013	2014	2015	2016
Needs	2	0	0	0	0	2*	0†	0	1

2008-2016 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. This year there was one need determination, in Cumberland County, generated by the standard methodology for fixed cardiac catheterization equipment. Applying the proposed methodology to data drawn from the 2016 SMFP (the most recent dataset available) generates need determinations in Cumberland and Wake Counties. Under the proposed methodology, Wake County would be the only affected county since the existing approved methodology generated a need in Cumberland County.

Modifying a statewide methodology for a single county 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.

Finally, the petitioner mentioned in the current written request and at the March 2, 2016 SHCC public hearing, that a meeting between WakeMed and Rex Hospital would take place in two weeks, "to discuss collaboration on these issues" and "determine a positive solution." The State Medical Facilities Plan recognizes that, "Long-term enhancement of health care value will result from a State Medical Facilities Plan that promotes a balance of competition and collaboration and encourages innovation in healthcare delivery" (pg3, *2016 SMFP*). Hence, the agency is interested to see if a mutually agreeable resolution may be reached.

Agency Recommendation:
Given available information and comments submitted by the March 18, 2016 deadline date for comments on petitions and comments, and in consideration of factors discussed above, the agency recommends denial of the petition. The limitations of the methodology as cited in the petitioner's request and the outcome of the proposed methodology are evident only in Wake County. Data shows a continued decline in cardiac catheterization procedures and relatively few need determinations generated by the current methodology. Furthermore, in the coming years, all methodologies will eventually be reviewed as discussed at last year's initial SHCC meeting on March, 4, 2015. In a broad examination of the cardiac catheterization methodology, questions brought forth in this petition should be included for discussion. The Agency supports the standard methodology for fixed cardiac catheterization equipment.