

**Technology and Equipment Committee
Agency Report
Adjusted Need Petition for
One Fixed Cardiac Catheterization Equipment in New Hanover County
Proposed 2014 State Medical Facilities Plan**

Petitioner:

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Request:

New Hanover Regional Medical Center (NHRC) requests an adjusted need determination to remove the need for one additional fixed cardiac catheterization laboratory in New Hanover County, as shown in the Proposed 2014 State Medical Facilities Plan (SMFP).

Background Information:

The Proposed 2014 State Medical Facilities Plan (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. Application of Methodology One to utilization data in the Proposed 2014 SMFP generates a need determination for one additional fixed unit of cardiac catheterization equipment in New Hanover County.

Chapter Two of the North Carolina Proposed 2014 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 addressed by the standard methodology. NHRC has submitted a petition to adjust the need determination to eliminate duplication of health services in New Hanover County.

NHRMC is the only provider that offered fixed cardiac catheterization services in New Hanover County as reported for the Proposed 2014 SMFP. For this time, NHRMC had a total of five fixed cardiac catheterization laboratories in New Hanover County.

The need determination in New Hanover County is driven by NHRMC's cardiac catheterization utilization of 7,175 diagnostic equivalent procedures reported for the Proposed 2014 SMFP. Capacity for cardiac catheterization equipment is defined in the Proposed 2014 SMFP as 1,500 diagnostic equivalent procedures per year. Need for additional cardiac catheterization equipment is triggered when 80% capacity is reached (1,200 procedures). Taking the total weighted procedures (7,175) divided by 80% of capacity (1,200) of one unit determines the number of units of fixed cardiac catheterization equipment needed for the service area. The cardiac catheterization volume at NHRMC indicates a need for 5.98 fixed units for New Hanover County.

The petition states that the five cardiac catheterization units at NHRMC are in operation 10 hours per day, 5 days per week for 52 weeks per year. The petition further states that, due to extended hours of operation, an actual functioning annual capacity of 2,600 hours per unit or 13,000 total hours for the facility is realized. Using 7,175 diagnostic-equivalent procedures from the Proposed 2014 SMFP divided by their stated actual capacity of 13,000 (instead of the 7,500 used in the methodology) multiplied by 100, the petition calculates the actual utilization to be 55.2%. Utilizing the capacity stated by the petition, no need would be generated.

NHRMC further reports that a cardiac catheterization procedure at their facility actually takes approximately one hour to perform - whether it is diagnostic or interventional. The SMFP values one therapeutic cardiac catheterization procedure at 1.75 diagnostic equivalent procedure, and one diagnostic cardiac catheterization procedure at one diagnostic equivalent procedure, which causes the standard methodology to overstate the actual utilization, according to the petition.

The petition asserts that an adverse effect on providers and consumers will occur without an adjustment to the county need determination. NHRMC notes a relatively flat trend in the numbers of diagnostic cardiac catheterizations reported in past SMFPs since 2006 with the exception of one spike in volume in the Proposed 2014 SMFP due to the elimination of cardiac catheterization services at Wilmington Heart Center. The petition cites research from the Health Care Advisory Board that projects inpatient cardiac catheterization services will experience a five-year, 5% decrease in volume. As stated in the Proposed 2014 SMFP, fixed and mobile cardiac catheterization equipment and services shall only be approved for development on hospital sites. NHRMC manages the only two hospitals in New Hanover County and does not want to increase unnecessary capacity for cardiac catheterization. The addition of an additional piece of cardiac catheterization has the potential to negatively impact the cost of these services in New Hanover County.

Analysis/Implications:

The table that follows shows an historical downward trend in numbers of total diagnostic equivalent cardiac catheterization procedures performed throughout North Carolina since 2006, and a relatively flat increase in the number of Percutaneous Coronary Interventional (PCI) procedures performed during that time.

Statewide Trend in Numbers of Fixed Cardiac Catheterization Procedures

Fixed Cardiac Catheterization Procedures	2006	2012	Percent Change
Diagnostic	74,556	62,092	-16.71%
Therapeutic or Interventional	27,713	27,981	0.97%
Total Diagnostic Equivalent Procedures-NC	118,892	114,567	-3.6%

Source: 2006 SMFP and 2012 SMFP

The inventory as reported in the Proposed 2014 SMFP for NHRMC is five fixed cardiac catheterization laboratory units. The petition reports that one of the five units is used solely for interventional radiology procedures. Therefore, the diagnostic cardiac catheterization utilization data from NHRMC’s 2013 Hospital Licensure Renewal Application used in the standard methodology for the Proposed 2014 SMFP was performed on only four fixed units in operation at that time. NHRMC is maximizing its use of existing fixed equipment.

Agency Recommendation:

The agency supports the standard methodology for fixed cardiac catheterization equipment in the Proposed 2014 SMFP. However, in consideration of the above, the agency recognizes that New Hanover Regional Medical Center has unique attributes, such as longer operating hours allowing greater capacity on the equipment currently in the county, as well as being the only potential provider of cardiac catheterization services. Given available information submitted by the August 16, 2013 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 projected need determination for an additional unit of fixed cardiac catheterization equipment to zero (0) in New Hanover County in the Final 2014 SMFP.