NORTH CAROLINA STATE HEALTH COORDINATING COUNCIL

PETITION FOR ADJUSTED NEED DETERMINATION IN NEW HANOVER COUNTY
FOR FIXED CARDIAC CATHETERIZATION EQUIPMENT

Petitioner New Hanover Regional Medical Center ("NHRMC") hereby submits this petition for modification to the need determination of fixed cardiac catheterization equipment in New Hanover County within the 2014 State Medical Facilities Plan.

Petitioner:
New Hanover Regional Medical Center
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PO Box 9000
Wilmington, NC 28402-9000

Contact: David Parks
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Statement of the Requested Adjustment:

NHRMC requests that the 2014 State Medical Facilities Plan identify a need determination for zero (0) units of fixed cardiac catheterization equipment in New Hanover County (as reflected in Table 9Y).
Background:

Table 9Y in the Draft 2014 State Medical Facilities Plan identifies a need determination for one (1) unit of cardiac catheterization equipment in New Hanover County. This need determination is based on data from NHRMC’s 2013 Hospital License Renewal Application. The data is reported in Table 9S and Table 9V and results in the weighted procedures in Table 9W. The following table shows the cardiac catheterization procedure volumes and calculations:

<table>
<thead>
<tr>
<th>SMFP Table</th>
<th>Description</th>
<th>Procedures</th>
<th>Procedure Weight</th>
<th>Weighted Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>9S</td>
<td>Diagnostic Cardiac Cath Procedures</td>
<td>3,131</td>
<td>1.0</td>
<td>3,131</td>
</tr>
<tr>
<td>9V</td>
<td>PTCA Interventional Procedures</td>
<td>2,309</td>
<td>1.75</td>
<td>4,040</td>
</tr>
</tbody>
</table>

The cardiac catheterization weighted procedure volumes results in the following Table 9W:

<table>
<thead>
<tr>
<th>Cardiac Catheterization Equipment Service Areas</th>
<th>Facility</th>
<th>Current Inventory</th>
<th>CON Issued/ Pending Development</th>
<th>Pending Review or Appeal</th>
<th>Total Planning Inventory</th>
<th>2012 Procedures (Weighted Totals)</th>
<th>Machines Required Based on 80% Utilization</th>
<th>Total No. of Additional Machines Required by Facility</th>
<th>No. of Machines Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Hanover</td>
<td>NHRMC</td>
<td>5</td>
<td></td>
<td></td>
<td>5</td>
<td>7,175</td>
<td>5.98</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pending Review/Appeal</td>
<td>Wilmington Heart Center [DLP Healthcare]</td>
<td>0</td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>6</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Reasons for the Proposed Adjustment:

The five (5) cardiac catheterization units at NHRMC operate from 7:00am to 5:00pm, 5 days per week, 52 weeks per year. This results in an annual capacity of 2,600 hours per unit or 13,000 total hours. At NHRMC, as at most other cardiac catheterization provider locations, a cardiac
catheterization procedure, whether it is diagnostic or interventional, takes approximately one (1) hour to perform. As a result, it is appropriate to refer to NHRMC’s annual cardiac catheterization capacity of 13,000 hours as 13,000 diagnostic-equivalent procedures.

Based on the 7,175 diagnostic-equivalent procedures identified in Table 9W, the actual utilization for the five (5) cardiac catheterization units in New Hanover County is 55.2 percent [(7,175 / 13,000) x 100 = 55.2%] rather than the SMFP “assumed utilization” of 95.7 percent [(7,175 / (5 x 1,500)) x 100 = 95.7%]. This is well below the planning threshold of 80% as stated in the Draft 2014 State Medical Facilities Plan.

Furthermore, the cardiac catheterization volume at NHRMC has been relatively flat over the past several years with the exception of FY2012, and that increase in cardiac catheterization volume can be directly attributed to the elimination of cardiac catheterization services at Wilmington Heart Center, as illustrated in the graph below.
Additionally, according to a recent Healthcare Advisory Board Cardiovascular study, PCI volume from 2012-2017 is projected to decrease by 5%\(^1\).

Finally, one (1) of the five (5) cardiac catheterization units at NHRMC is used for interventional radiology procedures and has no cardiac catheterization procedures performed on it. In effect, NHRMC currently performs 7,175 diagnostic-equivalent procedures on just four (4) cardiac catheterization units. NHRMC has not experienced any delays in treating patients based on the effective capacity of 4 machines.

**Adverse effect on providers and consumers without adjustment:**

The proposed cardiac catheterization unit need determination will have an adverse effect on both providers and consumers if it is not adjusted. First, NHRMC has capacity on its existing five (5) cardiac catheterization units and does not desire to increase unnecessary capacity through the acquisition of a sixth cardiac catheterization unit. It should also be noted that the *Draft 2014 State Medical Facilities Plan* states, “It is further determined that fixed and mobile cardiac catheterization equipment and services shall only be approved for development on hospital sites.” NHRMC and Cape Fear Hospital are the only hospitals in New Hanover County, and therefore, they are the only potential applicants for this additional unit of cardiac catheterization equipment. It would not make sense to include a need determination for additional cardiac catheterization equipment when the only potential applicant for that equipment does not foresee at the present time a need for the additional equipment. Second, the acquisition of unnecessary cardiac catheterization equipment may impact the costs associated with providing cardiac catheterization services in New Hanover County.

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Alternatives considered:

Because of available capacity on the existing cardiac catheterization units, the only logical alternative is to avoid creating an unnecessary need determination for one (1) unit of fixed cardiac catheterization equipment in New Hanover County in the 2014 State Medical Facilities Plan. This alternative resulted in the submission of this petition for an adjusted need determination in New Hanover County.

Evidence that the proposed adjustment would not result in unnecessary duplication of health services in the area:

Adjusting the need determination for one (1) unit of fixed cardiac catheterization equipment in New Hanover County will most assuredly not result in duplication of health services in the area, but rather would avoid the duplication of health services from being proposed.

Evidence that the requested adjustment is consistent with the Basic Principles of Safety and Quality, Access and Value:

The proposed adjustment is consistent with these basic principles in that safety and quality, access and value, all of which are associated with the existing provision of cardiac catheterization services in New Hanover County, will not be impacted. Based on the actual capacity of existing cardiac catheterization units in New Hanover County, adjusting the need determination will eliminate the possible duplication of services, which would help maintain cardiac catheterization volumes at the existing provider location and would eliminate the expenses associated with acquiring and operating an additional cardiac catheterization unit in the service area.

Requested Adjustment:

NHRCNM requests that the 2014 State Medical Facilities Plan indicate a need determination for zero (0) units of fixed cardiac catheterization equipment in New Hanover County (as to be reflected in Table 9Y).