

Technology and Equipment Committee
Agency Report
Petition to Change the Cardiac Catheterization Methodology in the
2023 State Medical Facilities Plan

Petitioner:

Johnston Health
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Contact:

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Request:

Johnston Health (the “Petitioner”) requests a change to the cardiac catheterization methodology in the *2023 State Medical Facilities Plan (SMFP)* to address the Step 5 rounding rules. Specifically, the Petitioner states that the application of these rules is resulting in the disproportionate treatment of service areas with one unit of cardiac catheterization equipment and a low cardiac catheterization inventory.

Background Information:

Chapter Two of the SMFP allows for “[a]nyone who finds that the North Carolina State Medical Facilities Plan policies or methodologies, or the results of their application, are inappropriate may petition for changes or revisions. Such petitions are of two general types: those requesting changes in basic policies and methodologies, and those requesting adjustments to the need projections.” The SMFP annual planning process and timeline allow for submission of petitions to the State Health Coordinating Council for changes to policies and methodologies in the spring and petitions requesting adjustments to need projections in the summer. It should be noted that any person might submit a certificate of need (CON) application for a need determination in the SMFP. The CON review could be competitive and there is no guarantee that the petitioner would be the approved applicant.

The capacity of a unit of cardiac catheterization equipment is defined as 1,500 diagnostic equivalent procedures per year. The need determination threshold is 80% of capacity, or 1,200 diagnostic equivalent procedures. Utilization of each facility is calculated to identify the number of additional units of equipment required, based on 80% utilization. These results are added to arrive at the number of units needed for the service area. A need determination exists if the service area needs more units than it has, adjusted for any units pending CON review or development. The need determination calculations are rounded to the nearest whole number.

Johnston Health has submitted a petition to change the cardiac catheterization methodology by revising the rule for rounding in Step 5 to round up to the next higher whole number. Johnston Health sets forth the following reasons in support of its request: 1) to promote the equitable application of the standard methodology; 2) to improve the quality of care and expand services; and 3) to support the growing utilization of cardiac services at Johnston Health.

Analysis/Implication

The Petition focused on counties with only one fixed unit of cardiac catheterization equipment. While they may be most affected by the rounding rule, the issue of rounding is relevant to all service areas regardless of the number of units of equipment. The current methodology rounds to the nearest whole number, resulting in calculations below .5 being rounded down. Doing so may result in service areas failing to show a need even when their utilization is above the 80% threshold.

The Magnetic Resonance Imaging (MRI) Scanner, Linear Accelerator, and Positron Emission Tomography (PET) Scanner methodologies use approaches that effectively round the final calculation up to the next higher whole number when a specific threshold is reached. In these methodologies, when the utilization threshold is reached, there is a need determination. It is not known why the cardiac catheterization need determination calculation is different. Accepting this rule of rounding will align the cardiac catheterization methodology with other methodologies in Chapter 17.

To illustrate, Johnston County’s utilization of cardiac catheterization has been trending upward over the past three years. Based on the methodology, a service area must exceed 80% (1,200 procedures) of capacity during the current year to have a need determination (see Table 1). In 2019 and 2020, Johnston County exceeded 80% utilization, yet based on the rounding used in the methodology, failed trigger a need. Using the current rounding in the methodology, Johnston County would need to perform 1,800 procedures to generate the 1.5 machines required for a need determination.

Table 1: Cardiac Catheterization Procedures in Johnston County, Reporting Years 2018-2020

	2018 Procedures	2019 Procedures	2020 Procedures
Weighted Procedures	1,126	1,362	1,465
Percent of Capacity	75%	91%	98%
Machines Required Based on 80% Utilization	0.94	1.13	1.22

Source: 2020 – 2022 License Renewal Applications

Note: The data in the SMFP is two years earlier than the publication year of the SMFP.

The proposed change would have a negligible effect on the number of units of cardiac catheterization equipment in the state. Based on the 2022 SMFP, an examination of Table 17A-3 shows that only Johnston and Wayne counties would be affected should the rounding rule change. Utilization was lower in 2020 (2022 SMFP), so the Agency also examined data from the 2021 SMFP. This examination did not identify additional service areas that would generate a need

determination upon implementation of the proposed change. In addition, interventional cardiac catheterization is increasing in North Carolina, so it is very unlikely that the development of additional units of equipment as a result of this revision would lead to an unnecessary duplication of services.

Agency Recommendation:

The Agency supports the standard methodology and current policies for cardiac catheterization equipment. Given available information submitted by the March 16, 2022 deadline date, and in consideration of factors discussed above, the Agency recommends approval of the Petition submitted by Johnston Health for changes to Step 5 of the cardiac catheterization methodology.