Proposed Revisions

A. CARDIAC CATHETERIZATION EQUIPMENT

Introduction

G.S. § 131E-176(2f) defines *cardiac catheterization equipment* as "equipment used to provide cardiac catheterization services." G.S. § 131E-176(2g) defines *cardiac catheterization services* as "those procedures, excluding pulmonary angiography procedures, in which a catheter is introduced into a vein or artery and threaded through the circulatory system into the heart specifically to diagnose abnormalities in the motion, contraction, and blood flow of the moving heart or to perform surgical therapeutic interventions to restore, repair, or reconstruct the coronary blood vessels of the heart." Tables 15A-1 and 15A-2 show the number of cardiac catheterization procedures performed during the reporting year.

Changes from the Previous Plan

This section contains no two technical substantive changes from the previous State Medical Facilities Plan (SMFP). Data from the previous Tables 15A-1 and 15A-3 have been consolidated into a single table (now Table 15A-1). While this does not alter the methodology, the steps of the methodology have been revised so that they align with the current Table 15A-1. Table 15A-2 has no changes. The narrative also clarifies that electrophysiology procedures are excluded from the methodology. This change also does not alter the methodology.

Assumptions of the Methodology

- 1. Cardiac catheterization equipment service areas are the Acute Care Bed Service Areas defined in Chapter 5 and shown in Figure 5.1.
- 2. The capacity of a unit of cardiac catheterization equipment is defined as 1,500 diagnostic-equivalent procedures per year, with the trigger of need at 80% of capacity. One interventional cardiac catheterization procedure is valued at 1.75 diagnostic-equivalent procedures. One cardiac catheterization procedure performed on a patient of age 14 or younger is valued at two diagnostic-equivalent procedures. All other procedures are valued at one diagnostic-equivalent procedure.
- 3. Cardiac catheterization equipment and services shall only be approved for development on hospital sites (i.e., in facilities that are on a hospital's license) or in a licensed ambulatory surgical facility (excluding endoscopy-only facilities).

Application of the Methodology

Fixed Equipment

Methodology 1 (Table 15A-31)

The need determination methodology in service areas with at least one unit of equipment in the current inventory is as follows:

- Step 1: For each facility with fixed cardiac catheterization equipment, sum the total units of equipment in operation (Column C), CON-approved equipment under development (Column D), and equipment available pursuant to need determinations pending review or appeal (Column E) to determine the planning inventory (Column F).
- Step 2: Determine the number of adult and pediatric diagnostic and interventional procedures performed at each facility during the current reporting year (*Table 15A-1*). If mobile procedures are provided in a county that is part of more than one service area, divide the procedures equally between the service areas.

- Step 3: Calculate the total weighted (diagnostic-equivalent) cardiac catheterization procedures for each facility by multiplying adult diagnostic procedures by 1.00, interventional procedures by 1.75, and pediatric procedures performed on patients ages 14 or younger by 2.00 (Column H).
- Step 4: For each facility, determine the number of units of fixed cardiac catheterization equipment required for the number of procedures performed by dividing the number of weighted (diagnostic-equivalent) cardiac catheterization procedures performed at each facility by 1,200 procedures (i.e., 80% of the 1,500-procedure capacity). Round the result to the nearest hundredth (Column I).
- Step 5: Sum the number of units of fixed cardiac catheterization equipment required for all facilities in the same service area as calculated in Step 4. Round up to the nearest whole number (*Column I*).
- Step 6: In each service area, subtract the total planning inventory (*Column F*) from the number of units of fixed cardiac catheterization equipment required (*Column I*). The difference is the number of additional units of fixed cardiac catheterization equipment needed (*Column J*).

Unless otherwise specified by the methodology, calculations do not use rounded values. However, fractional values are rounded automatically when displayed.

Methodology 2 (Table 15A-2)

For cardiac catheterization equipment in a service area that does not have a unit of fixed cardiac catheterization equipment, a need determination exists for one unit of shared fixed cardiac catheterization equipment (i.e., fixed equipment that is used to perform both cardiac catheterization procedures and angiography procedures) when:

- 1. The number of cardiac catheterization procedures as defined in 10A NCAC 14C .1601(5) performed at any mobile site in the service area exceeds 240 procedures (80% of 300 procedures) for each eight hours per week the mobile equipment is operated at that site during the current reporting year (*Table 15A-2*); and
- 2. No other fixed or mobile cardiac catheterization service is provided in the same service area.

Unless otherwise specified by the methodology, calculations do not use rounded values. However, fractional values are rounded automatically when displayed.

Mobile Equipment

The SMFP does not have a methodology to project need for additional mobile cardiac catheterization equipment. A summer petition is required to place a need in the upcoming SMFP. If the need determination is approved, any person may apply for a CON to acquire the mobile cardiac catheterization equipment.