

**Technology and Equipment Committee
Agency Report
Petition for Removal of Need Determination for Fixed Cardiac
Catheterization Equipment in Cumberland County in the
2017 State Medical Facilities Plan**

Petitioner:

Cape Fear Valley Health System
P.O. Box 2000
Fayetteville, NC 28302-2000

Contact:

Sandy Godwin
Executive Director of Corporate Planning
Cape Fear Valley Health System
P.O. Box 2000
Fayetteville, NC 28302-2000
stgodwin@capefearvalley.com

Request:

Cape Fear Valley Health System (CFVHS) requests an adjusted need determination to remove the need determination for one additional unit of fixed cardiac catheterization equipment in Cumberland County in the *2017 State Medical Facilities Plan (SMFP)*.

Background Information:

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 (that is used to perform both cardiac catheterization and angiography).

Chapter Two of the *2016 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.

As noted in the petition, the *2016 SMFP* identified a need for a new shared fixed cardiac catheterization unit in Harnett County and a fixed cardiac catheterization unit in Cumberland County. The Harnett County need determination resulted from an approved adjusted need petition. The Cumberland County need was generated by the standard methodology. Harnett Health submitted a Certificate of Need (CON) application for the unit in Harnett County for the May 1, 2016 CON application review cycle and was approved. CFVHS is also an applicant for an

additional unit of cardiac catheterization equipment in Cumberland County. The standard methodology generated an additional need in the *Proposed 2017 SMFP* for one fixed cardiac catheterization equipment in Cumberland County.

Analysis/Implications:

In the face of steady increases and aging of the North Carolina population, cardiac catheterization has remained fairly stable over the last decade. Table 1 illustrates the compound annual growth rate (CAGR) and the overall change in the weighted procedures for both Cumberland County and North Carolina from 2011 to 2015. In Cumberland County, the last 5 years of data shows an average annual CAGR of 4.64% while the NC CAGR over the same time period shows an average annual decline of -2.02%. This analysis indicates that Cumberland County is having an increase in procedures even as the State is experiencing an overall decline.

Table 1: Number of Cardiac Catheterization Procedures, Cumberland County and State

Facility	2011	2012	2013	2014	2015	CAGR
Cumberland County / CFVHS	1,955	1,838	1,776	2,177	2,344	4.64%
North Carolina	63,871	62,092	60,127	59,364	58,872	-2.02%

Source: the Proposed 2017 SMFP

However, a key issue in this Petition is not just Cumberland County’s growth and subsequent need determination. It is also the pending cardiac catheterization services in neighboring Harnett County and what that could mean for the demand for services in Cumberland County. Patient origin numbers for cardiac catheterization procedures are not collected by the Agency in the License Renewal Applications. But as previously mentioned, Harnett Health petitioned for an additional fixed cardiac catheterization unit in summer of 2015; and, that Petition included Truven data on use rates with patient origin. Table 2 presents information from the Harnett Health Petition regarding Harnett County’s projected use rates through 2018.

Table 2: Projected Cardiac Catheterization Volume in Harnett County

Harnett County Truven Use Rates	2013	2014	2015	2016	2017	2018
Population of Harnett County	123,432	125,717	127,965	130,209	132,452	136,942
Use rate - Harnett County 3 Year Average	14.47	16.82	17.29	16.19	16.19	16.19
Projected Catheterization Procedures		2,115	2,213	2,109	2,145	2,181
Percent Diagnostic 3 Year Average		67%	67%	67%	67%	67%
Projected Diagnostic Catheterizations		1,417	1,482	1,413	1,437	1,461

Source: NCOSBM; Truven data, as shared in CFVHS July 2015 Cardiac Catheterization Petition

According to Step 4 of Methodology 1, a need is triggered by 1,200 annual procedures (i.e., 80 percent of capacity, which is 1,500). The projected catheterization procedures in Table 2, above, note a projected use of 1,482 diagnostic catheterizations in 2015. The July 2015 Petition also reported Truven data for the market share for where Harnett County residents currently go for their cardiac catheterizations for fiscal years FY13 through the third quarter of FY15. During these three years, there is an upward trend of Harnett County residents going to CFVHS in Cumberland County from 16.4% to 24.4%. By multiplying 24.2% by the 1,482 procedures in 2015, this

indicates 359 procedures performed on Harnett County residents at CFVHS in Cumberland County.

This 359 is subtracted from the 5,494 Cumberland County 2015 Procedures (Weighted Totals) in the *Proposed 2017 SMFP* for an adjusted total of 5,135. As 1,200 procedures is the threshold, the denominator per the methodology would be 1,200. Dividing 5,135 by 1,200 leaves the quotient of 4.28, and by subtracting the current planning inventory of 4 machines (per the methodology) this leaves 0.28, which is rounded to zero. This means that the need determination of one for Cumberland County can be adjusted to zero.

Table 3. Cumberland County Need Calculation, Excluding Procedures in Harnett County

Facility	Current Inventory	CON Issued/ Pending Dev.	Pending Review or Appeal	Total Planning Inventory	2015 Procedures (Weighted Totals)	Machined Required (Based on 80% Utilization)	Total Additional Machines Required by Facility	No. of Machines Needed
CVMC	3			3	5,135	4.28	1	
Pending Review			1	1				
Total				4		4		0

Source: the *Proposed 2017 SMFP*

Agency Recommendation:

The Agency supports the standard methodology for fixed cardiac catheterization equipment. The unique situation of increased need determinations and cardiac catheterization equipment along with patient migration between Cumberland County and Harnett County demonstrates that a need determination in the *2017 SMFP* would not be necessary. Given available information and comments submitted by the August 12, 2016 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 need determination the *2017 SMFP* to zero.