

**Technology and Equipment Committee  
Agency Report  
Petition to Add Need Determination for  
One Unit of Fixed Cardiac Catheterization Equipment in the  
Mecklenburg County Service Area  
2022 State Medical Facilities Plan**

---

**Petitioner:**

Novant Health Matthews Medical Center  
1500 Matthews Township Parkway  
Matthews, NC 28105

**Contact:**

Jason Bernd  
President & Chief Operating Officer  
(704) 384-6367  
[jlbernd@novanthealth.org](mailto:jlbernd@novanthealth.org)

**Request:**

Presbyterian Medical Care Corporation d/b/a Novant Health Matthews Medical Center requests an adjusted need determination for one unit of fixed cardiac catheterization equipment for the Mecklenburg County service area in the *2022 State Medical Facilities Plan (SMFP or "Plan")*.

**Background Information:**

Chapter Two of the SMFP provides that “[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 for changes to policies and methodologies in the spring and petitions requesting adjustments to need projections in the summer. Any person may submit a certificate of need (CON) application for a need determination in the Plan. The CON review could be competitive and there is no guarantee that the Petitioner would be the approved applicant.

The standard methodology in the SMFP generates a need for one additional unit of fixed cardiac catheterization equipment when an existing unit of cardiac catheterization is being used at 80% capacity. The capacity of a unit of cardiac catheterization equipment is defined as 1,500 diagnostic equivalent procedures per year; a need determination is triggered at 1,200 diagnostic equivalent procedures. One interventional cardiac catheterization procedure is valued at 1.75 diagnostic-equivalent procedures. One cardiac catheterization procedure performed on a patient age 14 or younger is valued at 2 diagnostic equivalent procedures. All other procedures are valued at 1 diagnostic-equivalent procedure. Application of the methodology to utilization data in the

Proposed 2022 SMFP did not generate a need determination for fixed cardiac catheterization equipment in Mecklenburg County.

Novant Health Matthews has submitted a Petition to request an adjusted need determination for one additional unit of fixed cardiac catheterization equipment for Mecklenburg County in the 2022 SMFP for the following reasons: 1) growth in demand for cardiac catheterization at Novant Health Matthews; 2) growth in county population; and 3) projected steady increase in utilization at Novant Health Matthews.

**Analysis/Implications:**

Mecklenburg County is currently operating with a six-unit surplus of fixed cardiac catheterization equipment. Novant Health Matthews is one of five providers of cardiac catheterization services and operates one of 16 cardiac catheterization units in Mecklenburg County. Novant Health Matthews reported 1,833 weighted procedures in the Proposed 2022 SMFP. Despite an overall decrease of 14.74% of cardiac catheterization use in Mecklenburg County during the past five years, utilization at Novant Health Matthews increased by 157.59% over the same period (see Table 1). Based on the application of the methodology and an 80% utilization rate, Novant Health Matthews needs an additional unit of fixed cardiac catheterization equipment.

The Compound Annual Growth Rate (CAGR) shows the same pattern. Novant Health Matthews has a 25.84% CAGR in the above-mentioned five-year period while Mecklenburg County has a -3.91% CAGR. The last year of the five-year period coincided with the COVID-19 pandemic which may have negatively impacted utilization. This observation may be especially true for Carolinas Medical Center; it had an increasing utilization trend for four years but experienced a precipitous drop in utilization in 2020.

The Petition hints at a possible reason that all other hospitals in Mecklenburg County have experienced decreased cardiac catheterization utilization, but Novant Health Matthews and Novant Health Huntersville have experienced increases. Novant Presbyterian relocated cardiac catheterization equipment to Matthews and Huntersville which are suburban hospitals. The Petition indicates that this approach has been popular with patients. (Even after relocating two units to the suburban hospitals, Novant Presbyterian still has high utilization of its two remaining units of equipment. Table 17A-3 in the Proposed 2022 SMFP shows that its current utilization is at 1.85 units. )

**Table 1: Service Area Trends in Weighted Cardiac Catherization Procedures, Data Years 2016 – 2020**

	2018 SMFP	2019 SMFP	2020 SMFP	2021 SMFP	Proposed 2022 SMFP	Total % Change	CAGR
<b>Atrium Health Pineville</b> <i>(3 units)</i>	3,068	2,976	2,827	2,737	2,215	-27.8%	-7.82%
<b>Carolinas Medical Center</b> <i>(9 units)</i>	6,929	6,429	7,784	10,811	4,334	-37.45%	-11.07%
<b>Novant Health Huntersville Medical Center</b> <i>(1 unit) *</i>	81	49	456	785	813	903.7%	77.99%
<b>Novant Health Matthews Medical Center</b> <i>(1 unit)</i>	731	924	1,279	1,936	1,833	150.75%	25.84%
<b>Novant Health Presbyterian Medical Center</b> <i>(2 units)</i>	2,586	2,769	2,484	2,631	2,225	-13.96%	-3.69%
<b>Service Area Totals</b>	13,395	13,147	14,830	18,900	11,420	-14.74%	-3.91%
<b>Service Area Annual Change</b>		-1.85%	12.8%	27.44%	-39.58%		

Source: 2017 – 2021 License Renewal Applications

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

\* Equipment was put into operation in 2016, so Total % Change and CAGR are somewhat exaggerated and not indicative of a standard change had the equipment been operating for a longer period. Excluding Novant Health Huntersville Medical Center yields a Total % Change of -20.33% and a CAGR of -5.52%.

Mecklenburg County is having a steady rise in population. The annual change rate is 3.53% over the past four years (see Table 2). Specifically, Census data from the NC Office of State Budget and Management projects that the 65 and older population of Mecklenburg County will increase 20% from 2021-2025, compared to a 7.5% increase for the county population as a whole. A growing population includes a growing aging population within Mecklenburg County. Cardiac catheterization services are more common in the aging population, which supports the projected increase in utilization.

**Table 2: Annual County Population Totals, Years 2018-2021**

County	2018	2019	2020	2021	Total Percent Change	CAGR
<b>Mecklenburg</b>	1,099,382	1,115,571	1,131,342	1,138,138	3.53%	1.16%

*Source: State Medical Facilities Plan*

**Agency Recommendation:**

The Agency supports the standard methodology for fixed cardiac catheterization equipment. However, in consideration of the above, the Agency recognizes that the Mecklenburg County service area has unique attributes, including a sufficient growth in cardiac catheterization procedure volume and a growing population to support an additional unit of fixed cardiac catheterization equipment. Given available information submitted by the August 11, 2021 deadline date for comments, and in consideration of factors discussed above, the Agency recommends approval of the petition to add a need determination for an additional unit of fixed cardiac catheterization equipment for the Mecklenburg County service area in the 2022 SMFP.