

**VIRGINIA DEPARTMENT OF HEALTH**  
**Office of Licensure and Certification**  
**Division of Certificate of Public Need**  
**Staff Analysis**

November 19, 2020

**COPN Request Number VA-8524**

Virginia Commonwealth University Health System Authority

Richmond, Virginia

Add Two General Purpose Operating Rooms at VCU Medical Center

**Applicant**

The Virginia Commonwealth University Health Systems Authority (“VCUHS”) is a public body corporate and political subdivision of the Commonwealth of Virginia governed by the Virginia Commonwealth University Health System Authority Act of 1996 (Title 23, Chapter 6.2, 23-50.16:1 of the Code of Virginia). Subsidiaries of VCUHS include MCV Associated Physicians, Crippled Children’s Hospital, Community Memorial Hospital, University Health Services, Inc., Virginia Premier Health Plan, Inc., Rehab JV, LLC, and Virginia Children’s Care Network, LLC. VCU Medical Center (“VCUMC”) is located in Richmond, Virginia in Planning District (“PD”) 15 within Health Planning Region (“HPR”) IV.

VCUMC provides comprehensive surgical services to PD 15 and HPR IV. VCUMC’s surgical services include bariatric and GI surgery, cardiothoracic surgery, gynecology, surgical oncology, neurosurgery, ophthalmology, otolaryngology, orthopedic surgery, oral surgery, dental surgery, pediatric surgery, plastic and reconstructive surgery, transplant surgery, acute care and trauma surgery, urology, colon and rectal surgery, and vascular surgery.

**Background**

Using 2018 Virginia Health Information (“VHI”) data, the most recent year for which such data is available, and current Department of Certificate of Public Need (DCOPN) records, DCOPN determined that there are currently 176 certificate of public need (COPN) authorized general-purpose operating rooms (“GPORs”) in PD 15 (**Table 1**). The 130 GPORs located in acute care hospitals operated at a collective utilization of 92.3% in 2018, while the 46 GPORs located in outpatient surgical hospitals (“OSHS”) operated at a collective utilization of 130.7% for the same period. Together, all 176 PD 15 GPORs operated at a collective utilization of 100.7% in 2018. More specifically, the 23 GPORs located within VCUHS acute care facilities operated at a collective utilization of 147.4% in 2018, while VCUHS’ 14 OSH GPORs operated at a collective utilization of 100.5% for the same period.

**Table 1. COPN Authorized GPOR Inventory for PD 15: 2018**

<b>Acute Care Hospital</b>	<b>Operating Rooms</b>	<b>Total Hours</b>	<b>Use Per OR</b>	<b>Utilization Rate</b>
Bon Secours Memorial Regional Medical Center	8	16,470	2,058.8	128.7%
Bon Secours Richmond Community Hospital	3	401	133.7	8.4%
Bon Secours St. Francis Medical Center*	13	17,667	1,606.1	100.4%
Bon Secours St. Mary's Hospital	21	38,677	1,841.8	115.1%
Chippenham Hospital	9	10,719	1,191.0	74.4%
Henrico Doctors' Hospital - Parham	11	8,125	738.6	46.2%
Henrico Doctors' Hospital - Retreat	5	4,422	884.4	55.3%
Henrico Doctors' Hospital - Forest	21	19,570	931.9	58.2%
Johnston-Willis Hospital	16	18,666	1,166.6	72.9%
VCU Health System	23	54,235	2,358.0	147.4%
<b>Acute Care TOTAL and Average</b>	<b>130<sup>1</sup></b>	<b>188,952</b>	<b>1,476.2</b>	<b>92.3%</b>
<b>Outpatient Surgical Hospital</b>	<b>Operating Rooms</b>	<b>Total Hours</b>	<b>Use Per OR</b>	<b>Utilization Rate</b>
American Access Care of Richmond**	2	-	-	-
Bon Secours Memorial Regional Medical Center	5	6,796	1,359.2	85.0%
Boulders Ambulatory Surgery Center	3	3,476	1,158.7	72.4%
Cataract and Refractive Surgery Center	1	2,216	2,216.0	138.5%
Skin Surgery Center of Virginia	2	5,461	2,730.5	170.7%
St. Mary's Ambulatory Surgery Center	4	4,504	1,126.0	70.4%
Stony Point Surgery Center	6	8,742	1,457.0	91.1%
Urosurgical Center of Richmond	1	8,439	8,439.0	527.4%
Vascular Surgery Associates of Richmond, PC***	2	-	-	-
VCU Health System****	14	12,870	1,608.8	100.5%
Virginia Eye Institute	5	21,950	4,390.0	274.4%
Virginia League for Planned Parenthood	1	832	832.0	52.0%
<b>Outpatient Surgical Center TOTAL and Avg.</b>	<b>46<sup>2</sup></b>	<b>75,286</b>	<b>2,091.3</b>	<b>130.7%</b>
<b>GRAND TOTAL and Average</b>	<b>176<sup>3</sup></b>	<b>264,238</b>	<b>1,611.2</b>	<b>100.7%</b>

Source: VHI (2018) and DCOPN records.

\*COPN No. VA-04517, issued in July 2016, authorized the addition of two GPORs at Bon Secours St. Francis Medical Center. The project is expected to become operational in June 2021.

\*\*COPN No. VA-04570, issued in July 17, authorized the establishment of an OSH with two GPORs dedicated to vascular access surgical services. The project became operational on July 1, 2018.

\*\*\* COPN No. VA-04605, issued in July 2018, authorized the establishment of an OSH with two operating rooms dedicated to vascular access surgical services. The project is not yet operational.

\*\*\*\* COPN No. VA-04686, issued in December 2019, authorized the establishment of an OSH with six ORs at the VCU Health NOW Center.

<sup>1</sup> Though not included in the calculations for utilization, this number includes the additional GPORs added pursuant to COPN No. VA-04517.

<sup>2</sup> Though not included in the calculations for utilization, this number includes the additional GPORs added pursuant to COPN Nos. VA-04570, 04605, and 04686.

<sup>3</sup> Though not included in the calculations for utilization, this number includes all additional GPORs added to the PD 15 inventory that are not included in the 2018 VHI data.

**Proposed Project**

VCUHS proposes to add two GPORs on the VCUMC campus—one at the Main Hospital and one at the Critical Care Hospital (“CCH”) — to decompress high surgical utilization of VCUHS’ existing GPORs. As the proposed addition will optimize the use of existing space within the VCUMC Perioperative Services Department, the project will require only minor construction. Specifically, the proposed GPOR at the Main Hospital will be implemented in an existing procedure room built to operating room (“OR”) specifications and will not require any construction or modernization. The proposed GPOR at the CCH will be located in space currently used as a biplane operating room and back-up to VCUHS’ hybrid OR. This biplane OR is being relocated to the Main Hospital, where it will be converted to a hybrid OR. Once the hybrid OR at the Main Hospital is complete, the old biplane room at the CCH will be dismantled and modified to accommodate a GPOR. The applicant states that this will require only limited construction to install structural supports and new flooring. The applicant further states that the proposed GPOR’s location on existing perioperative floors at the Main Hospital and the CCH will avoid unnecessary capital costs as well as operating costs, as the perioperative floors are already capable of providing preoperative and Post-Anesthesia Care Unit care for the additional GPORs.

The applicant states the proposed project will result in VCUHS’ ability to better meet existing demand for surgical services in a cost-effective and efficient manner. The applicant also states that by accommodating current demand for, and continued growth in, VCUHS’ surgical services, the project will meet an institutional need for additional GPOR capacity at VCUHS and directly support the provision of complex surgical care, patient access to needed surgical services, and education of surgical specialists at VCUMC in accordance with the VCU Master Plan.

The applicant anticipates construction for the proposed project to commence on July 1, 2021 and to be complete by July 31, 2021. The applicant projects an opening date of August 15, 2021. If approved, schedule allowances may need to be made in order to accommodate the applicant’s response to the COVID-19 pandemic.

The projected capital costs for the proposed project total \$1,548,000 (**Table 2**), the entirety of which will be funded using the accumulated reserves of the applicant. Accordingly, there are no financing costs associated with the proposed project.

**Table 2. Projected Capital Costs**

Direct Construction Costs	\$943,000
Equipment Not Included in Construction Contract	\$405,000
Architectural and Engineering Fees	\$130,000
Other Consultant Fees	\$70,000
<b>Total Capital Costs</b>	<b>\$1,548,000</b>

Source: COPN Request No. VA-8524

The proposed project, if approved, would result in a net increase of two licensed GPORs in PD 15. As will be discussed in greater detail later in this staff analysis report, DCOPN has calculated a

deficit of six GPORs in PD 15 for the planning year 2025. While the applicant cites a unique institutional specific need as justification to add the requested GPORs, DCOPN concludes that approval of the proposed project would also address this calculated deficit.

### **Project Definition**

Section 32.1-102.1:3 of the Code of Virginia defines a project, in part, as “an increase in the total number of...operating rooms in an existing medical care facility described in subsection A.” A medical care facility is defined, in part, as “Any facility licensed as a hospital, as defined in § 32.1-123.”

### **Required Considerations -- § 32.1-102.3, of the Code of Virginia**

In determining whether a public need exists for a proposed project, the following factors shall be taken into account when applicable.

- 1. The extent to which the proposed project will provide or increase access to health care services for people in the area to be served and the effects that the proposed project will have on access to health care services in areas having distinct and unique geographic, socioeconomic, cultural, transportation, and other barriers to access to health care;**

VCU Medical Center is located proximally to Interstates 95 and 64 and is easily accessible for Central Virginia residents and patients traveling from across the Commonwealth. Public transportation is available nearby. For example, the facility is proximate to all major GRTC Transit System bus routes, including the new GRTC Pulse System—a modern, high-quality, high-capacity rapid transit system that serves a 7.6 mile route along Broad and Main Streets.

As will be discussed in greater detail later in this staff analysis report, DCOPN concludes that at least 95% of the population of PD 15 is within 30 minutes’ drive time, one way, under normal driving conditions of existing surgical services. Furthermore, the applicant is a current provider of surgical services. Accordingly, DCOPN concludes that the proposed project would not improve geographic access to this service in any meaningful way.

Regarding socioeconomic barriers to access to services, the applicant has provided assurances that it would accept all patients in need of care without regard to ability to pay or payment source. Additionally, the Pro Forma Income Statement provided by the applicant proffered a charity care contribution equal to 2.1% of gross patient services revenue derived from surgical services (reflected in the “Deductions from Revenue” line) (**Table 3**). DCOPN notes that this amount is significantly beneath the 6.28% contributed by VCUHS in 2018, as well as the 3.7% HPR IV average for the same period (**Table 4**). With regard to the decrease in proffered charity care, the applicant provided the following:

*“VCUHS’ surgical services provided charity care at 6% in 2019. Due to Medicaid expansion, many formerly charity care-eligible patients are now covered by Medicaid. Accordingly, projected charity care is lower, and projected Medicaid is higher, than historic payor mix data would indicate.”*

As Medicaid expansion did not take full effect in the Commonwealth until January 2019, DCOPN contends that at this time, there is not sufficient data to determine the full extent to which Medicaid expansion may affect charity care contributions or facilities' ability to fulfill charity care obligations. Accordingly, until such time as more reliable data becomes available, DCOPN contends that the regional average charity care contribution for the most recent year reported by VHI should continue to serve as the guidepost for determining recommended charity care conditions.

Also with regard to socioeconomic barriers to access to services, DCOPN notes that according to the most recent U.S. Census data, the City of Richmond has a poverty rate of 24.5%--more than twice that of the statewide average (10.7%) and every other locality within PD 15 (**Table 5**). For the preceding reasons, should the State Health Commissioner ("Commissioner") approve the proposed project, DCOPN recommends a charity care condition consistent with the 2018 HPR IV average and equal to at least 3.7% of gross patient service revenues derived from surgical services. DCOPN notes that this recommendation includes a provision allowing for the reassessment of the charity rate at such time as more reliable data becomes available regarding the full impact of Medicaid expansion.

**Table 3. VCUHS Pro Forma Income Statement**

	<b>FY 2022</b>	<b>FY 2023</b>
Gross Revenue	\$2,054,846,503	\$2,328,141,088
Deductions from Revenue	(\$1,462,240,232)	(\$1,656,718,183)
<b>Net Revenue</b>	<b>\$592,606,272</b>	<b>\$671,422,906</b>
Total Operating Expenses	\$478,249,276	\$542,084,535
<b>Net Income</b>	<b>\$114,356,996</b>	<b>\$129,338,371</b>

Source: COPN Request No. VA-8524

**Table 4. HPR IV Charity Care Contributions: 2018**

<b>Hospital</b>	<b>Gross Patient Revenues</b>	<b>Adjusted Charity Care Contribution</b>	<b>Percent of Gross Patient Revenue</b>
Bon Secours Richmond Community Hospital	\$674,969,731	\$42,666,943	6.32%
VCU Health System	\$5,621,665,960	\$352,825,510	6.28%
Southside Community Hospital	\$293,702,705	\$14,237,351	4.85%
Bon Secours St. Francis Medical Center	\$970,223,902	\$43,084,096	4.44%
Bon Secours Memorial Regional Medical Center	\$1,552,613,092	\$68,611,063	4.42%
Bon Secours St. Mary's Hospital	\$2,176,359,866	\$77,859,815	3.58%
Sentara Halifax Regional Hospital	\$294,576,590	\$9,953,244	3.38%
Southside Regional Medical Center	\$1,956,522,794	\$63,281,154	3.23%
VCU Community Memorial Hospital	\$260,605,004	\$7,269,351	2.79%
CJW Medical Center	\$6,586,796,429	\$176,068,998	2.67%
Henrico Doctors' Hospital	\$4,501,141,313	\$97,784,217	2.17%
Southern Virginia Regional Medical Center	\$208,002,057	\$4,386,121	2.11%
John Randolph Medical Center	\$839,825,455	\$17,429,142	2.08%
Vibra Hospital of Richmond LLC	\$120,847,463	\$0	0.00%
Cumberland Hospital for Children & Adolescents	\$60,602,814	\$0	0.00%
Total Facilities			15
Median			3.2%
<b>Total \$ &amp; Mean %</b>	<b>\$26,118,455,175</b>	<b>\$975,457,005</b>	<b>3.7%</b>

Source: VHI (2018)

**Table 5. Statewide and PD 15 Poverty Rates**

Locality	Poverty Rate
Virginia	10.7%
Richmond City	24.5%
Charles City	12.3%
Henrico County	9.0%
Chesterfield County	7.6%
Powhatan County	6.9%
Goochland County	6.7%
Hanover County	5.2%
New Kent County	5.2%

Source: U.S. Census Data (census.gov)

The most recent Weldon-Cooper data projects a total PD 15 population of 1,219,936 persons by 2030 (Table 6). This represents an approximate 21.7% increase in total population from 2010 to 2030. Comparatively, Weldon-Cooper projects the total population of Virginia to increase by approximately 16.6% for the same period. With regard to the City of Richmond specifically, Weldon-Cooper projects a total population increase of approximately 20.2% from 2010 to 2030. With regard to the 65 and older age cohort, Weldon-Cooper projects a much more rapid increase among PD 15 as a whole than for the City of Richmond. Specifically, Weldon-Cooper projects an increase of approximately 92.5% for PD 15 as a whole from 2010 to 2030, while an increase of only 40% is projected among the same age cohort for the City of Richmond (Table 7).

**Table 6. Statewide and PD 15 Total Population Projections, 2010-2030**

Locality	2010	2020	% Change	2030	% Change	2010-2030 % Change
Virginia	8,001,024	8,655,021	8.17%	9,331,666	7.82%	16.63%
Charles City	8,256	6,982	(3.78%)	6,941	(0.59%)	(4.34%)
Chesterfield County	316,236	353,841	11.89%	396,647	12.10%	25.43%
Goochland County	21,717	23,547	8.43%	26,702	13.40%	22.96%
Hanover County	99,863	109,244	9.39%	119,360	9.26%	19.52%
Henrico County	306,935	332,103	8.20%	363,259	9.38%	18.35%
New Kent County	18,429	23,474	27.37%	28,104	19.72%	52.5%
Powhatan County	28,046	29,909	6.64%	33,440	11.80%	19.23%
Richmond City	204,214	232,533	13.87%	245,483	5.57%	20.21%
<b>Total PD 15</b>	<b>1,002,696</b>	<b>1,111,633</b>	<b>10.86%</b>	<b>1,219,936</b>	<b>9.74%</b>	<b>21.67%</b>

Source: U.S. Census, Weldon Cooper Center Projections (August 2019) and DCOPN (interpolations)

**Table 7. PD 15 Population Projections for 65+ Age Cohort, 2010-2030**

Locality	2010	2020	% Change	2030	% Change	2010-2030 % Change
Charles City	1,214	1,773	46.08%	2,189	23.44%	80.33%
Chesterfield County	32,878	55,297	68.19%	72,476	31.07%	120.44%
Goochland County	3,237	5,420	67.43%	7,421	36.92%	129.25%
Hanover County	13,104	19,807	51.15%	27,456	38.62%	109.52%
Henrico County	37,924	53,255	40.42%	68,003	27.69%	79.31%
New Kent County	2,226	4,303	93.32%	6,663	54.84%	199.33%
Powhatan County	3,407	6,041	77.33%	8,552	41.55%	151.00%
Richmond City	22,619	26,352	16.50%	31,657	20.13%	39.96%
<b>Total PD 15</b>	<b>116,609</b>	<b>172,249</b>	<b>47.72%</b>	<b>224,417</b>	<b>30.29%</b>	<b>92.45%</b>

Source: U.S. Census, Weldon Cooper Center Projections (August 2019) and DCOPN (interpolations)

DCOPN did not identify any other unique geographic, socioeconomic, cultural, transportation, or other barriers to care in the planning district.

**2. The extent to which the project will meet the needs of the people in the area to be served, as demonstrated by each of the following:**

- (i) The level of community support for the proposed project demonstrated by people, businesses, and governmental leaders representing the area to be served;**

The applicant provided two letters of support for the proposed project from physicians associated with VCUHS. Collectively, these letters addressed the following:

- As the Central Virginia Health Planning Region’s only academic medical center, the VCUHS and its medical staff plays a critical role in the delivery of surgical services to Central Virginia and the entire Commonwealth of Virginia.
- In recent years, the VCU medical staff has worked hard to optimize the OR block scheduling framework, reduce turnaround time between surgical cases, and extend surgical hours later into the evenings in order to meet existing demand. Staff is currently in the process of further extending hours into the evenings to address the growing need for OR times on MCV Campus. While this allows VCUHS to provide more timely care, later hours result in patient dissatisfaction, team member dissatisfaction and difficulty recruiting, and higher cost. These stopgap measures will also not address the future need of expanding medical staff. This growth is best illustrated by the VCU Department of Surgery’s recruitment of 22 surgeons in the last eighteen months, expanding the department to 89 faculty.
- As surgical case volume continues to grow, it is essential that faculty has the capacity to accommodate timely access to elective surgical procedures while maintaining capacity for critical, urgent procedures.

DCOPN received no letters in opposition to the proposed project.

**(ii) The availability of reasonable alternatives to the proposed project that would meet the needs of the people in the area to be served in a less costly, more efficient, or more effective manner;**

As stated above, the most recently published VHI data (2018) demonstrates a 100.7% collective utilization rate among all existing GPORs within PD 15 (**Table 1**). More specifically, VCUHS reported a 135.3% utilization rate among its 31 authorized GPORs for 2018 (**Table 8**). DCOPN notes that utilization for 2018 does not include the six GPORs authorized pursuant to COPN No. VA-04686, though the addition is reflected in the number of authorized GPORs. However, even with the six additional GPORs taken into account, the applicant states that utilization among VCUHS’ 37 GPORs would have reached 120% in 2019. While DCOPN cannot quantifiably confirm this data, it notes that the applicant’s projections are consistent with the historical data reported by VHI for VCUHS. Historical data demonstrates that GPOR utilization at VCUHS has consistently increased in recent years (**Table 8**).

The applicant states that it has taken numerous steps to meet demand including optimizing block scheduling and extending surgical hours into evenings to accommodate the steady growth in surgical cases. Despite these efforts, VCUHS’ GPORs continue to exceed the State Medical Facility Plan’s (“SMFP”) minimum thresholds for expansion, resulting in significant challenges for the delivery and management of patient care such as extended hours, overworked staff, and the frequent rescheduling of outpatient procedures to free up GPOR space for more complex and urgent cases. Furthermore, as **Table 1** demonstrates, VCUHS has no underutilized GPORs in PD 15 that could be transferred. For the preceding reasons, DCOPN concludes that no reasonable alternatives to the proposed project exist.

**Table 8. VCUHS GPOR Historical Occupancy<sup>4</sup>**

<b>Year</b>	<b>GPORs</b>	<b>Occupancy Rate</b>
2019	37	120.0%
2018	37 <sup>5</sup>	135.3%
2017	31	132.10%
2016	31	127.30%
2015	25	144.20%

Source: VHI 92015-2018) and COPN Request No. VA-8524

**(iii) Any recommendation or report of the regional health planning agency regarding an application for a certificate that is required to be submitted to the Commissioner pursuant to subsection B of § 32.1-102.6;**

Not applicable. Currently there is no organization in HPR IV designated by the Virginia Department of Health to serve as the regional health-planning agency for the Central Virginia Region.

<sup>4</sup> Number of GPORs includes ORs at both the main hospital and ambulatory surgery center. Occupancy Rate was computed accordingly.

<sup>5</sup> Includes the six additional GPORs added pursuant to COPN No. VA-04686.

**(iv) Any costs and benefits of the proposed project;**

As illustrated in **Table 2**, the total projected capital cost of the proposed project is \$1,548,000, the entirety of which will be funded using the accumulated reserves of the applicant. Accordingly, there are no financing costs associated with this project. DCOPN concludes that the costs for the proposed project are reasonable and consistent with previously approved projects similar in clinical scope.<sup>6</sup> The applicant provided the following with regard to this standard:

*“...In brief, the proposal offers numerous efficiencies and cost savings. Given that the two proposed GPORs will be implemented in existing space currently used for surgical services, the project requires only minimal construction and a modest capital cost of \$1,548,000. By utilizing existing space within VCUMC’s perioperative areas, this project provides a cost-efficient expansion opportunity to better utilize existing space and existing support areas.”*

The applicant cited the following benefits of the proposed project:

- The project would provide additional OR capacity to ensure that VCUHS can meet its unique role as a quaternary care provider, a Level 1 Trauma Center, an academic medical center and a transplant center.
- The project would enhance timely access to surgical services for urgent and emergent cases and elective patients alike and during periods of surge demand.
- The project would result in reduced overtime and night shift differential costs, thus lowering staffing and operational costs.

**(v) The financial accessibility of the proposed project to people in the area to be served, including indigent people; and**

As already discussed, the applicant has provided assurances that surgical services at VCUMC will be accessible to all patients, regardless of financial considerations. Additionally, the Pro Forma Income Statement provided by the applicant proffered a charity care contribution equal to 2.1% of gross patient services revenue derived from surgical services (**Table 3**). DCOPN again notes that this amount is significantly beneath the 6.28% contributed by VCUHS in 2018, as well as the 3.7% HPR IV average for the same period (**Table 4**). Furthermore, recent changes to § 32.1-102.4B of the Code of Virginia now require DCOPN to place a charity care condition on every applicant seeking a COPN. Accordingly, should the proposed project be approved, DCOPN recommends a charity care condition consistent with the 2018 HPR IV average and equal to at least 3.7% of gross patient service revenues derived from surgical services at

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<sup>6</sup> COPN No. VA-04686, issued to VCUHS, authorized the establishment of an OSH with six GPORs and had a capital cost of \$21,672,898; COPN No. VA-04568, issued to Med Atlantic, Inc., authorized the relocation of one GPOR and had a capital cost of \$87,811; COPN No. VA-04570, issued to American Access Care of Richmond, LLC, authorized the establishment of an OSH with two ORs and had a capital cost of \$1,183,424; COPN No. VA-04517, issued to Bon Secours St. Francis Medical Center, LLC authorized the addition of two GPORs and had a capital cost of \$16,042,999.

VCUMC. DCOPN notes that this recommendation includes a provision allowing for the reassessment of the charity rate at such time as more reliable data becomes available regarding the impact of Medicaid expansion.

**(vi) At the discretion of the Commissioner, any other factors as may be relevant to the determination of public need for a proposed project;**

Section 32.1-102:1 of the Code of Virginia calls for the State Health Services Plan Task Force to develop, by November 1, 2022, recommendations for a comprehensive State Health Services Plan (“SHSP”). In the interim, DCOPN will consider the consistency of the proposed project with the predecessor of the SHSP, the SMFP.

### **3. The extent to which the application is consistent with the State Health Services Plan;**

Part V of the SMFP contains criteria/standards for the addition of general-purpose operating rooms. They are as follows:

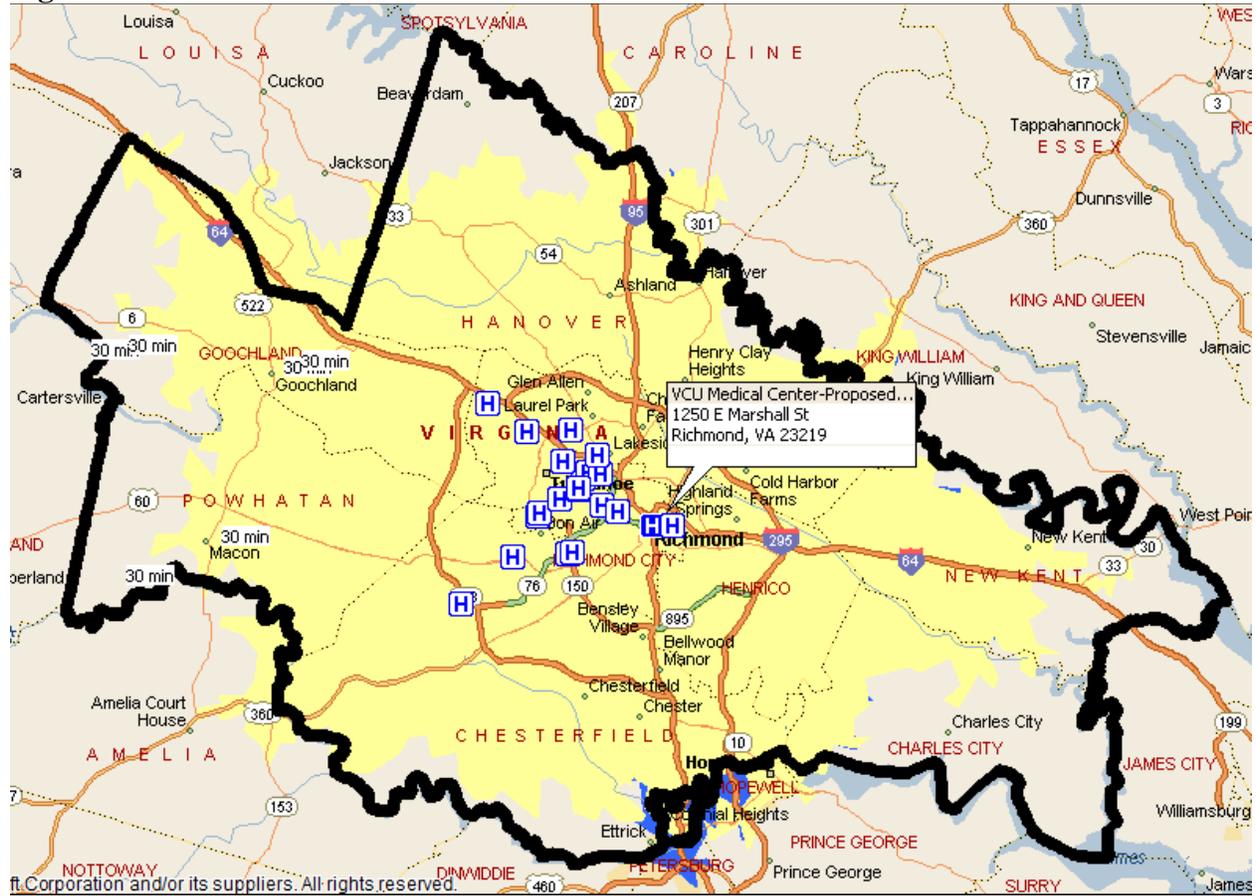
#### **Part V General Surgical Services Criteria and Standards for General Surgical Services**

##### **12VAC5-230-490. Travel Time.**

**Surgical services should be available within 30 minutes driving time one way under normal conditions for 95% of the population of the health planning district using mapping software as determined by the commissioner.**

The heavy black line in **Figure 1** represents the boundary of PD 15. The blue “H” symbol marks the location of VCMC. The white “H” symbols mark the locations of all other existing surgical services, both ambulatory and acute care facilities, within PD 15. The yellow shaded area represents the areas of PD 15 and surrounding areas that are within 30 minutes’ drive time of existing surgical services. There is no area within 30 minutes of VCUMC that is not also within 30 minutes of another existing provider. Given the amount and location of shaded area, it is evident that surgical services currently exist within a 30-minute drive for at least 95% of the population of PD 15. Furthermore, DCOPN again notes that the applicant is a current provider of surgical services. Accordingly, DCOPN concludes that approval of the proposed project would not improve geographical access to surgical services for persons of PD 15 in any meaningful way. DCPON further notes that because the applicant cites an institutional need for the requested additional GPORs, geographic access is not what prevents patients from receiving timely access to care.

Figure 1



**12VAC5-230-500. Need for New Service.**

**A. The combined number of inpatient and outpatient general purpose surgical operating rooms needed in a health planning district, exclusive of procedure rooms, dedicated cesarean section rooms, operating rooms designated exclusively for cardiac surgery, procedures rooms or VDH-designated trauma services, shall be determined as follows:**

$$\frac{\text{FOR} = ((\text{ORV}/\text{POP}) \times (\text{PROPOP})) \times \text{AHORV}}{1600}$$

**Where:**

**ORV = the sum of total inpatient and outpatient general purpose operating room visits in the health planning district in the most recent five years for which general purpose operating room utilization data has been reported by VHI; and**

**POP = the sum of total population in the health planning district as reported by a demographic entity as determined by the commissioner, for the same five-year period as used in determining ORV.**

**PROPOP = the projected population of the health planning district five years from the current year as reported by a demographic program as determined by the commissioner.**

**AHORV = the average hours per general purpose operating room visit in the health planning district for the most recent year for which average hours per general purpose operating room visits have been calculated as reported by VHI.**

**FOR = future general purpose operating rooms needed in the health planning district five years from the current year.**

**1600 = available service hours per operating room per year based on 80% utilization of an operating room available 40 hours per week, 50 weeks per year.**

The applicant is not proposing to establish a new service, but rather, to expand an existing service. However, in the interest of completeness, DCOPN will address this standard. The preceding formula can be used to affirm whether there is currently an excess of GPORs in PD 15. The preceding formula can also determine the overall need for GPORs within PD 15 five years from the current year, i.e., in the year 2025. The current GPOR inventory for PD 15 is broken down by facility, category, and utilization rate above in **Table 1**.

Based on GPOR utilization data submitted to and compiled by VHI, for the five year period of 2014-2018, which is the most recent five-year period for which relevant data is available, the total and average number of reported inpatient and outpatient operating room visits is shown below in **Table 9**.

**Table 9. Inpatient and Outpatient GPOR Visits in PD15: 2014-2018**

Year	Total Inpatient & Outpatient GPOR Visits
2014	137,143
2015	136,455
2016	133,411
2017	136,449
2018	134,998
<b>TOTAL</b>	<b>678,456</b>
Average	135,691

Source: VHI (2014-2018)

Based on actual population counts derived as a result of the 2010 U.S. Census, and population projections as compiled by Weldon Cooper, **Table 10** presents the U.S. Census' baseline population estimates for PD 15 for the five years 2014-2018 as follows:

**Table 10. PD 15 Population: 2014-2018 and 2025**

Year	Population
2014	1,045,271
2015	1,057,165
2016	1,068,058
2017	1,078,952
2018	1,089,846
<b>TOTAL</b>	<b>5,340,291</b>
2025	1,165,785

Source: U.S. Census, Weldon Cooper Center Projections (August 2019) and DCOPN (interpolations)

Based on the above population estimates from the 2010 U.S. Census, and using a straight-line average annual increase of 10,893.7 from 2010 to 2020 and 10,803.3 from 2020-2030, the cumulative total population of PD 15 for the same historical five-year period as referenced above, i.e., 2014-2018, was 5,340,291, while the population of PD 15 in the year 2025 (PROPOP – five years from the current year) is projected to be 1,165,785. These figures are necessary for the application of the preceding formula as follows:

ORV	÷	POP	=	CSUR
Total PD 15 GPOR Visits 2014 to 2018		PD 15 Historical Population 2014 to 2018		Calculated GPOR Use Rate 2014 to 2018
678,456		5,340,291		0.12704

CSUR	X	PROPOP	=	PORV
Calculated GPOR Use Rate 2014 to 2018		PD 15 Projected Population 2025		Projected GPOR Visits 2025
0.12704		1,165,785		148,101

AHORV is the average hours per operating room visit in the planning district for the most recent year for which average hours per operating room visits has been calculated using information collected by the Virginia Department of Health.

AHORV = 264,238 total inpatient and outpatient operating room hours (**Table 1**) reported to VHI in 2018, divided by 134,998 total inpatient and outpatient operating room visits reported to VHI for that same year (**Table 9**).

$$\text{AHORV} = 1.9573$$

$$\text{FOR} = \frac{((\text{ORV}/\text{POP}) \times (\text{PROPOP})) \times \text{AHORV}}{1,600}$$

$$\text{FOR} = \frac{((678,456 / 5,340,291) \times 1,165,785) \times 1.9573}{1,600}$$

$$\text{FOR} = \frac{0.1270 \times 1,165,785 \times 1.9573}{1,600}$$

$$\text{FOR} = 289,787.5 \div 1,600$$

$$\text{FOR} = 181.1 \text{ (182) GPORs needed in PD 115 in 2025}$$

Current PD 15 GPOR inventory: 176

**Net Deficit: 6 GPORs for 2025 planning year**

Using the above methodologies, the conclusion would be logically reached that there will be a need for six additional GPORs in PD 15, as the current inventory of 176 GPORs does not exceed the 182 derived by using the above formula. DCOPN again notes that the existing GPORs within the VCUHS inventory operate well above the minimum threshold for expansion set out in the SMFP, and accordingly, finds that capacity does not exist within the VCUHS inventory for transfer. DCOPN concludes that not only would approval of the proposed project help alleviate this calculated deficit, but also that the applicant has adequately demonstrated a unique institutional need for the requested two GPORs.

**B. Projects involving the relocation of existing operating rooms within a health planning district may be authorized when it can be reasonably documented that such relocation will: (i) improve the distribution of surgical services within a health planning district ; (ii) result in the provision of the same surgical services at a lower cost to surgical patients in the health planning district; or (iii) optimize the number of operations in the health planning district that are performed on an outpatient basis.**

Not applicable. The applicant is not seeking to relocate existing operating rooms.

**12VAC5-230-510. Staffing.**

**Surgical services should be under the direction or supervision of one or more qualified physicians.**

The applicant has provided assurances that the proposed surgical services will be under the direction of an appropriately qualified physician serving as Medical Director.

The SMFP also contains criteria/standards for when institutional expansion is needed. They are as follows:

**Part 1  
Definitions and General Information**

**12VAC5-230-80. When Institutional Expansion Needed.**

- A. Notwithstanding any other provisions of this chapter, the commissioner may grant approval for the expansion of services at an existing medical facility in a health planning district with an excess supply of such services when the proposed expansion can be justified on the basis of a facility's need having exceeded its current service capacity to provide such service or on the geographic remoteness of the facility.**
  
- B. If a facility with an institutional need to expand is part of a health system, the underutilized services at other facilities within the health system should be reallocated, when appropriate, to the facility with the institutional need to expand before additional services are approved for the applicant. However, underutilized services located at a health system's geographically remote facility may be disregarded when determining institutional need for the proposed project.**

As discussed above, DCOPN has calculated a net deficit of six GPORs in PD 15 for the 2025 planning year. For this reason, DCOPN contends that approval of the proposed project is warranted without relying on a unique institutional need for expansion. However, because the applicant cites an institutional need as the primary reason for its request, DCOPN will address this standard.

In 2018, the collective PD 15 GPOR inventory operated at 100.7%, well above the SMFP threshold for expansion (**Table 1**). More specifically, the collective VCUHS inventory operated at 135.3% for the same period. While the VCU Health NOW Center ambulatory surgery center will provide much-needed capacity for low-acuity ambulatory surgery, even accounting for those ORs (i.e., based on 37 authorized ORs), the applicant projects that VCUHS' 2019 volumes would have reached 120% of the SMFP's 1,600-hour threshold. As discussed previously, based on historical data submitted to VHI, DCOPN concludes that the applicant's projections are reasonable. Furthermore, as already discussed, underutilized GPOR inventory does not exist in PD 15 within the VCUHS for transfer.

**C. This section is not applicable to nursing facilities pursuant to § 32.1-102.3:2 of the Code of Virginia.**

Not applicable. The applicant is not a nursing facility seeking to utilize this section for the purpose of adding beds pursuant to §32.1-102.3:2 of the Code of Virginia.

**D. Applicants shall not use this section to justify a need to establish new services.**

Not applicable. The applicant is not seeking to utilize this section to justify a need to establish a new service.

**Required Considerations Continued**

**4. The extent to which the proposed service or facility fosters institutional competition that benefits the area to be served while improving access to essential health care services for all people in the area to be served;**

Recognizing that the current application is intended to meet a unique institutional need, while also helping to alleviate a calculated deficit of GPORs within PD 15, DCOPN does not find that the proposal is intended to foster institutional competition, but rather is intended to ensure VCUHS' patients access to needed surgical services. Furthermore, as the applicant is an established provider of surgical services, DCOPN concludes that the project will not improve geographic access to underserved members of PD 15.

**5. The relationship of the proposed project to the existing health care system of the area to be served, including the utilization and efficiency of existing services or facilities;**

**Table 1**, as well as the calculated deficit, demonstrates that there will clearly be a need for additional GPORs by 2025 in order to provide sufficient care for PD 15 patients. Furthermore, for reasons already discussed in this report, DCOPN maintains that the applicant has adequately demonstrated a unique institutional need for the additional two GPORs. Additionally, as already discussed, DCOPN maintains that no reasonable alternatives to the project exist, as maintaining the status quo is impractical due to VCUHS' consistently increasing occupancy and lack of underutilized inventory within the VCUHS for transfer. Finally, because the proposed project hinges upon a unique institutional need, DCOPN contends that while approval of the proposed project is likely to have some impact on neighboring facilities, that impact is not likely to be significant.

The applicant provided the following with regard to this standard:

*“As Central Virginia’s only academic medical center and level one trauma center, VCUHS plays an integral role in Central Virginia’s health care system. The proposed operating rooms are a critical part of being a level one trauma center and by expanding capacity at VCU Medical Center, this project will increase the ability for VCUHS to treat trauma*

*patients with less disruption while also meeting the critical surgical needs of all other patients we serve.”*

**6. The feasibility of the project, the financial benefits of the project to the applicant, the cost of construction, the availability of financial and human resources, and the cost of capital;**

The Pro Forma Income Statement (**Table 3**) provided by the applicant anticipates retained earnings of \$114,356,996 in year one and \$129,338,371 in year two, illustrating that the proposed project would be financially feasible in the immediate and the long-term. As already discussed, DCOPN contends that the projected capital costs for the proposed project are reasonable when compared to previously authorized projects similar in scope. The applicant will fund the project entirely using accumulated reserves. Accordingly, there are no financing costs associated with this project.

With regard to staffing, the applicant anticipates the need to hire 12.75 full-time employees in addition to the 56 positions currently vacant at VCU Medical Center. DCOPN notes that the applicant is an established provider of surgical services with a robust employee retention plan. Accordingly, DCOPN does not anticipate that the applicant will have difficulty staffing the proposed project or that doing so will have a significantly negative impact on existing providers of surgical services. With regard to this standard, the applicant provided the following:

*“...the VCU Health system will be able to effectively recruit additional personnel through its comprehensive workforce development program and unique ties to academic programs. Additionally, by reducing the need for extended OR operating hours and for surgical procedures scheduled late into the evening, the project will alleviate the existing over-extension of VCUHS’ OR staffing resources which incurs significant staffing costs in the form of overtime and night shift differential costs—a nearly 24% increase in staffing costs simply due to the lateness of the ORs’ operation. The project will also facilitate recruiting and retaining perioperative staff—a challenge for all hospitals nationwide and exceedingly difficult when staff is routinely kept late past scheduled working times and on weekends to accommodate high-acuity and complex rescheduled and emergency cases.”*

**7. The extent to which the proposed project provides improvements or innovations in the financing and delivery of health care services, as demonstrated by (i) the introduction of new technology that promotes quality, cost effectiveness, or both in the delivery of health care services, (ii) the potential for provision of health care services on an outpatient basis; (iii) any cooperative efforts to meet regional health care needs; and (iv) at the discretion of the Commissioner, any other factors as may be appropriate;**

While new technology is not the driver of this project, as previously discussed, DCOPN contends that increasing timely access to VCUMC’s surgical services and reducing the need for surgeries to be performed in the late afternoon and evening will lead to enhanced quality and more cost-effective delivery of services. In addition to serving inpatients, VCU Medical Center’s Main Hospital and CCH GPORs also serve outpatients, many of which are at risk for complications

and have medically complex conditions. This project will expand GPOR capacity to better serve these higher-risk outpatients by reducing the extent to which outpatient surgical cases are bumped from the schedule due to emergency surgical cases. DCOPN again notes that the proposed project would address a calculated deficit of GPORs within PD 15 while simultaneously alleviating the overutilization of the applicant's existing GPOR inventory. DCOPN did not identify any other relevant factors to bring to the Commissioner's attention.

**8. In the case of a project proposed by or affecting a teaching hospital associated with a public institution of higher education or a medical school in the area to be served, (i) the unique research, training, and clinical mission of the teaching hospital or medical school and (ii) any contribution the teaching hospital or medical school may provide in the delivery, innovation, and improvement of health care services for citizens of the Commonwealth, including indigent or underserved populations.**

VCUHS owns and operates MCV, the teaching hospital associated with Virginia Commonwealth University. The applicant asserts that approval of the project would have great benefit to the training of residents and to the enhancement of university missions, stating:

*“To advance the services VCUHS provides to the Commonwealth, meet the continued growth in demand for surgical services, and fulfill its role as the only academic medical center in HPR IV, VCUHS must attract and retain the leading clinicians, educators, researchers, residents, and fellows in surgical specialties. It is not feasible to attract and retain the top surgical talent without the surgical capacity required to meet their patient need. Continued growth in surgical services at VCUHS will directly benefit the numerous training programs that rely heavily on VCU Medical Center's operating rooms...”*

**DCOPN Staff Findings and Conclusions**

VCUHS proposes to increase its existing GPOR capacity by two GPORs, resulting in a total inventory of 39 GPORs. One of the requested GPORs will be located at the Main Hospital and one at the CCH. The proposed addition will optimize the use of existing space within VCUMC's Perioperative Services Department, thus requiring only minor construction. The projected capital costs of the proposed project total \$1,548,000, the entirety of which will be funded using the accumulated reserves of the applicant. Accordingly, there are no financing costs associated with this project. DCOPN concludes that these costs are reasonable when compared to previously approved projects similar in clinical scope. The applicant has provided a projected opening date of August 15, 2021. If approved, schedule allowances may need to be made in order to accommodate the applicant's response to the COVID-19 pandemic.

The applicant's proposal would add two additional GPORs to the existing PD 15 inventory, addressing the calculated deficit of six GPORs for the 2025 planning year. DCOPN further notes that the applicant has adequately demonstrated an institutional need to expand its existing GPOR inventory and that no reasonable alternatives to the proposed project exist. DCOPN finds that the proposed project will prove financially feasible both in the immediate and in the long-term. However, should the Commissioner approve the proposed project, DCOPN recommends a

charity care condition equal to at least 3.7% of gross patient services revenues derived from surgical services, which is consistent with the HPR IV average for 2018.

### **DCOPN Staff Recommendation**

The Division of Certificate of Public Need recommends **conditional approval** of the proposed project to add to general-purpose operating rooms at VCU Medical Center for the following reasons:

1. The proposed project is generally consistent with the applicable criteria and standards of the State Medical Facilities Plan and the Eight Required Considerations of the Code of Virginia.
2. The capital costs are reasonable.
3. The proposed project appears economically viable both in the immediate and in the long-term.
4. No reasonable alternatives to the proposed project exist.
5. The applicant has adequately demonstrated a unique institutional need for the addition of the requested two general-purpose operating rooms.
6. There is no known opposition to the proposed project.
7. Approval of the proposed project is not likely to have a significant negative impact on existing providers of surgical services.
8. The proposed project will address a calculated deficit of general-purpose operating rooms in PD 15.

DCOPN's recommendation is contingent upon Virginia Commonwealth University Health System Authority's agreement to the following charity care condition:

Virginia Commonwealth University Health System Authority will provide surgical services to all persons in need of this service, regardless of their ability to pay, and will provide as charity care to all indigent persons free services or rate reductions in services and facilitate the development and operation of primary care services to medically underserved persons in an aggregate amount equal to at least 3.7% of Virginia Commonwealth University Health System Authority's total patient services revenue derived from surgical services provided at the VCU Medical Center as valued under the provider reimbursement methodology utilized by the Centers for Medicare and Medicaid Services for reimbursement under Title XVIII of the Social Security Act, 42 U.S.C. § 1395 et seq. Compliance with this condition will be documented to the Division of Certificate of Public Need annually by providing audited or otherwise appropriately certified financial statements documenting compliance with the preceding requirement. Virginia Commonwealth University Health System Authority will accept a revised percentage based on the regional average after such time regional charity care data valued under the provider reimbursement methodology utilized by the Centers for Medicare and Medicaid Services for reimbursement under Title XVIII of the Social Security Act, 42 U.S.C. § 1395 et seq. is available from Virginia Health Information. The value of charity care provided to individuals pursuant to this condition shall be based on the provider reimbursement methodology utilized by the Centers for Medicare

and Medicaid Services for reimbursement under Title XVIII of the Social Security Act, 42 U.S.C. § 1395 et seq.

Virginia Commonwealth University Health System Authority will provide surgical services to individuals who are eligible for benefits under Title XVIII of the Social Security Act (42 U.S.C. § 1395 et seq.), Title XIX of the Social Security Act (42 U.S.C. § 1396 et seq.), and 10 U.S.C. § 1071 et seq. Additionally Virginia Commonwealth University Health System Authority will facilitate the development and operation of primary and specialty medical care services in designated medically underserved areas of the applicant's service area.