# VIRGINIA DEPARTMENT OF HEALTH

# Office of Licensure and Certification

## Division of Certificate of Public Need

## Staff Analysis

October 21, 2024

**COPN Request No. VA-8774**
Carilion Medical Center d/b/a Carilion Roanoke Community Hospital
Roanoke, Virginia
Add 12 medical-surgical beds

**Applicant**

Carilion Medical Center (CMC) is a 501(c)(3) Virginia non-stock corporation. CMC is a tertiary care center located in Roanoke, Virginia, Planning District (PD) 5, Health Planning Region (HPR) III. CMC's campus has two hospitals – Carilion Roanoke Memorial Hospital (CRMH) and Carilion Roanoke Community Hospital (CRCH). CMC is a wholly owned subsidiary of Carilion Clinic, a 501(c)(3) Virginia non-stock corporation located in Roanoke, Virginia.

**Background**

DCOPN notes that pursuant to COPN Request No. VA-8763, Carilion Clinic proposed to establish a new freestanding medical rehabilitation hospital, Carilion Rehabilitation Hospital (CRH), through the relocation of 34 medical rehabilitation beds from CRCH and proposes to add 16 new medical rehabilitation beds, bringing the total licensed bed count at CRH to 50 medical rehabilitation beds. DCOPN recommended approval of the establishment of the medical rehabilitation hospital through relocation of the 34 medical rehabilitation beds and denial of the addition of 16 medical rehabilitation beds. The applicant delayed review of the project before an Informal Fact Finding Conference (IFFC). As such, the State Health Commissioner (Commissioner) has not yet made a decision on COPN Request No. VA-8763.

The Division of Certificate of Public Need (DCOPN) notes that nearly all acute care hospital beds in Virginia can be classified as "medical-surgical" beds, with the exception of psychiatric, substance abuse treatment, and rehabilitation beds. As long as the total licensed bed complement is not exceeded, hospitals may configure and use medical-surgical beds, as circumstances require. For this reason, DCOPN has included obstetric (OB), pediatric, and intensive care unit (ICU) beds in the total count of licensed medical-surgical beds (**Table 1**). According to DCOPN records, and as demonstrated by **Table 1** below, the medical- surgical bed inventory of PD 5 consists of 1,183 beds.

**Table 1. Medical-Surgical Bed Inventory[1] in PD 5**

| Facility | Licensed Beds | 2022 Occupancy Rate |
|---|---|---|
| Carilion Roanoke Memorial Hospital | 652 | 67.84% |
| LewisGale Hospital - Alleghany | 190[2] | 7.56% |
| LewisGale Medical Center | 341 | 55.90% |
| **Total** | **1,183** | **54.72%** |

**Source:** DCOPN Records and VHI (2022)

## Proposed Project

The applicant proposes to add 12 medical-surgical beds at CRCH to be used for post-surgical recovery and related inpatient services. On October 15, 2024, the applicant provided additional information indicating that, if the Commissioner approves the proposed project, it will relocate six of the requested medical-surgical beds from CRMH to CRCH. Therefore, the applicant proposes to add six new medical-surgical beds to the PD 5 inventory and to relocate six existing medical-surgical beds from CRMH. The beds will be located in existing patient rooms, which currently house medical rehabilitation beds and services. The applicant explains that pursuant to COPN No. VA-04636, CRCH added four general purpose operating rooms, for a total complement of eight general purpose operating rooms. As of February 2024, CRCH has opened the four additional operating rooms and shifted as many surgeries as possible from CRMH to CRCH. However, the applicant asserts that it is currently limited in the type of surgeries it can shift to CRCH because there are no medical-surgical beds for post-surgery inpatient stays at CRCH. The applicant explains that approval of the proposed project will allow it to shift additional cases that are more complex and require post-surgical inpatient stays from CRMH to CRCH.

As previously discussed, if the Commissioner approves COPN Request No. VA-8763, the medical rehabilitation beds and services will be moved to CRH and the space at CRCH will be vacant. To accomplish the addition of medical-surgical beds, the applicant will perform minor renovations on the existing patient rooms to meet architectural and design requirements for medical-surgical inpatient units. According to the applicant, if both COPN Request No. VA-8763 and COPN Request No. VA-8774 are approved by the Commissioner, the addition of the medical-surgical beds will be completed in two phases. In "Phase I," six of the 12 medical-surgical beds will open at CRCH in July 2026. After CRH opens in Fall 2026 and all 34 existing medical rehabilitation beds are relocated from CRCH, "Phase II" will begin, whereby CRCH will undergo additional renovations beginning in October 2026 to allow the remaining six medical-surgical beds to open at CRCH in March 2026.

[1] The Adjudication Officer's case decision for COPN No. VA-04682 held that DCOPN was in error by including obstetric, intensive care and pediatric patient days in its calculations for medical-surgical bed need, despite those beds being fungible and accordingly, able to convert to medical-surgical beds without COPN authorization. However, because obstetric, intensive care and pediatric beds can be easily converted to medical-surgical beds, thereby changing the medical-surgical inventory without first obtaining COPN authorization, DCOPN maintains that obstetric, intensive care and pediatric beds should be included in the medical-surgical inventory and the corresponding patient days used for medical-surgical bed need calculations.

[2] COPN No. VA-04722 authorized LewisGale Hospital Allegheny to expand inpatient psychiatric services by converting 14 medical-surgical beds to psychiatric beds. The project was expected to be completed by October 31, 2023.

The projected capital costs for the proposed project total $2,47,500, all of which represents direct construction costs (**Table 2)**. The applicant will fund the project using accumulated reserves. Accordingly, there are no financing costs associated with this project.

**Table 2. Projected Capital Costs**

| | |
|---|---|
| Direct Construction Costs | $247,500 |
| **Total Capital Costs** | **$247,500** |

**Source**: COPN Request No. VA-8774

Construction for the proposed project is expected to begin in January 2025 and is to be completed in February 2027. The applicant anticipates an opening date in July 2026 for Phase I and March 2027 for Phase II.

## Project Definition

§32.1-102.1:3 of the Code of Virginia defines a project, in part, as "[a]n increase in the total number of beds…in an existing medical care facility described in subsection A" and "[r]elocation of beds from an existing medical care facility described in subsection A to another existing medical care facility described in subsection A." §32.1-123 defines a medical care facility as "Any facility licensed as a hospital."

## 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;**

Geographically, the CMC campus is located off Interstate 581. According to the applicant, "the hospital campus and surrounding outpatient clinics are easily accessed by residents of Southwest Virginia and surrounding communities, which comprise the broad geographic and health planning region." Additionally, the CMC campus is accessible by Valley Metro, the public transportation provider for the Roanoke Valley and the SmartWay bus, which links the Roanoke Valley and the New River Valley. Furthermore, the Star Line-Trolley Services has a stop at CRCH.

The population of PD 5 is projected to be 284,571 by 2030 and it is projected to grow by 1% during the 2020 to 2030 decade, a significantly lower rate of growth than the projected growth for Virginia which is 5.8% during the same period (**Table 3**). The population over age 65 is projected to grow faster than the overall population, approximately 45%, in PD 5 during the same decade, compared with 26.3% across Virginia (**Table 3**).

**Table 3. Population by Locality, PD 5**

| Locality | 2020 Population | 2030 Projected Population | Projected Growth 2020-2030 | Percent Growth 2020-2030 | 65+ 2020 Population | Projected 65+ 2030 Population | Projected Growth 65+ | Percent Growth 65+ |
|---|---|---|---|---|---|---|---|---|
| Alleghany | 15,223 | 13,993 | (1,230) | -8.08% | 3,933 | 5,271 | 1,338 | 34.02% |
| Botetourt | 33,596 | 33,556 | (40) | -0.12% | 7,882 | 11,786 | 3,904 | 49.53% |
| Craig | 4,892 | 4,528 | (364) | -7.44% | 1,124 | 1,652 | 528 | 46.95% |
| Roanoke County | 96,929 | 100,027 | 3,098 | 3.20% | 21,449 | 31,009 | 9,560 | 44.57% |
| Covington city | 5,737 | 5,434 | (303) | -5.28% | 1,201 | 1,688 | 487 | 40.54% |
| Roanoke city | 100,011 | 101,514 | 1,503 | 1.50% | 17,899 | 26,059 | 8,160 | 45.59% |
| Salem city | 25,346 | 25,519 | 173 | 0.68% | 5,328 | 7,653 | 2,325 | 43.64% |
| **PD 5** | **281,734** | **284,571** | **2,837** | **1.01%** | **58,816** | **85,118** | **26,302** | **44.72%** |
| **Virginia** | **8,631,393** | **9,129,002** | **497,609** | **5.8%** | **1,395,291** | **1,762,641** | **367,350** | **26.3%** |

**Source**: United States Census Bureau at https://data.census.gov/ and Weldon Cooper Center for Public Service, August 2023.

Regarding socioeconomic barriers to access to the applicant's services, according to regional and statewide data regularly collected by VHI, for 2022, the most recent year for which such data is available, the average amount of charity care provided by HPR III facilities was 0.6% of all reported total gross patient revenues (**Table 4**). Pursuant to § 32.1-102.4B of the Code of Virginia DCOPN must now place a charity care condition on every applicant seeking a COPN. Accordingly, should the Commissioner approve the proposed project, DCOPN recommends a charity care condition of no less than the 0.6% HPR III average, in addition to any new requirements as found in the revised § 32.1-102.4B of the Code of Virginia.

**Table 4. HPR III Charity Care Contributions**

| 2022 Charity Care Contributions at or below 200% of Federal Poverty Level | | | |
|---|---|---|---|
| **Hospital** | **Gross Patient Revenues** | **Adjusted Charity Care Contribution** | **% of Gross Patient Revenue:** |
| Rehabilitation Hospital of Bristol, LLC | $17,981,903 | $504,759 | 2.8% |
| Centra Specialty Hospital | $48,716,727 | $1,120,485 | 2.3% |
| Carilion Franklin Memorial Hospital | $216,535,912 | $4,076,850 | 1.9% |
| Carilion Tazewell Community Hospital | $84,561,982 | $1,031,972 | 1.2% |
| Carilion Giles Memorial Hospital | $182,762,966 | $2,056,398 | 1.1% |
| Carilion Medical Center | $4,626,293,362 | $48,146,682 | 1.0% |
| Carilion New River Valley Medical Center | $908,326,659 | $8,974,962 | 1.0% |
| LewisGale Hospital-Montgomery | $945,286,546 | $6,043,431 | 0.6% |
| LewisGale Hospital - Alleghany | $259,238,606 | $1,552,971 | 0.6% |
| LewisGale Hospital Pulaski | $465,079,395 | $2,565,485 | 0.6% |
| Lewis-Gale Medical Center | $2,945,087,457 | $16,161,621 | 0.5% |
| Centra Health | $3,023,784,179 | $10,182,695 | 0.3% |
| Smyth County Community Hospital | $214,723,312 | $630,654 | 0.3% |
| Bedford Memorial Hospital | $175,626,005 | $474,228 | 0.3% |
| Norton Community Hospital | $291,775,554 | $767,018 | 0.3% |
| Russell County Medical Center | $135,556,168 | $330,439 | 0.2% |

**Table 4. HPR III Charity Care Contributions**

| 2022 Charity Care Contributions at or below 200% of Federal Poverty Level | | | |
|---|---|---|---|
| Dickenson Community Hospital | $28,125,420 | $68,308 | 0.2% |
| Johnston Memorial Hospital | $826,084,738 | $1,856,940 | 0.2% |
| Wellmont Lonesome Pine Mountain View Hospital | $779,003,003 | $1,458,898 | 0.2% |
| Lee County Community Hospital | $35,910,227 | $49,714 | 0.1% |
| Buchanan General Hospital | $116,385,318 | $140,702 | 0.1% |
| DLP Twin County Regional Healthcare | $255,330,355 | $293,349 | 0.1% |
| Sovah Health-Martinsville | $677,045,264 | $349,080 | 0.1% |
| Clinch Valley Medical Center | $656,673,348 | $293,630 | 0.0% |
| Sovah Health-Danville | $932,808,724 | $86,078 | 0.0% |
| Wythe County Community Hospital | $292,907,698 | $18,259 | 0.0% |
| Ridgeview Pavilion (Bristol Region) | $7,807,715 | $ - | 0.0% |
| Total Facilities Reporting | | | 27 |
| Median | | | **0.3%** |
| **Total $ & Mean %** | $19,149,418,543 | $109,235,608 | **0.6%** |

**Source**: VHI (2022)

DCOPN notes that according to the most recent U.S. Census data, the City of Roanoke, the location of the proposed project, has a poverty rate of 19.9% - well above the statewide average of 10.3%, and higher than every other locality within PD 5 (**Table 5**). Furthermore, the poverty rate of PD 5, at 12.53%, is higher than that of Virginia. Additionally, the applicant has indicated that its service area includes all of PD 5, including Alleghany, with a poverty rate of 13.5%, Botetourt, with a poverty rate of 7%, Craig, with a poverty rate of 11.8%, Covington City, with a poverty rate of 16.5% and Salem City, with a poverty rate of 10.9%.

**Table 5. Statewide and PD 5 Poverty Rates[3]**

| Locality | Poverty Rate |
|---|---|
| Virginia | 10.3% |
| | |
| Alleghany | 13.5% |
| Botetourt | 7% |
| Craig | 11.8% |
| Roanoke County | 7.5% |
| Covington City | 16.5% |
| Roanoke City | 19.9% |
| Salem City | 10.9% |
| PD 5 | 12.53% |

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

[3] https://www.census.gov/data-tools/demo/saipe/#/?s_state=51&s_county=51005,51023,51045,51770,51161,51580,51775&s_district=&s_geography=county

**2. The extent to which the proposed project will meet the needs of 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;**

DCOPN received two letters in support of the proposed project. Collectively, these letters addressed:

- The additional beds will expand patient access to Carilion's medical-surgical services.
- The proposed additional beds will also relieve pressure at CRMH, allowing Carilion to continue serving patients throughout its service region and beyond.
- The additional beds will be placed in renovated inpatient rehabilitation rooms, creating an updated inpatient unit that will serve the hospital's recently expanded operating rooms.

DCOPN did not receive any letters in opposition to the proposed project.

Public Hearing

Section 32.1-102.6 B of the Code of Virginia directs DCOPN to hold one public hearing on each application in a location in the county or city in which the project is proposed or a contiguous county or city in the case of competing applications; or in response to a written request by an elected local government representative, a member of the General Assembly, the Commissioner, the applicant, or a member of the public. COPN Request No. VA-8774 is not competing with another project in this batch cycle and DCOPN did not receive a request to conduct a public hearing for the proposed project. Thus, no public hearing was held.

**(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;**

The applicant asserts that adding 12 medical-surgical beds at CRCH is a way to cost effectively address an institutional need by renovating existing space at CRCH, which is relatively low-cost and can be paid from CMC's accumulated reserves. In support of its assertion that is has a compelling institutional need for the proposed addition, the applicant argues that "[e]ffective patient flow plays a pivotal role in influencing hospital quality of care, staff workload and retention, and patient outcomes. Post-pandemic demand has created ongoing capacity issues from overutilizing adult medical-surgical beds at CRMH, creating operational concerns at CMC overall." With regard to the addition of six new beds to the PD 5 inventory and as will be discussed in greater detail in this staff analysis report, the medical-surgical beds at CRMH operated at 67.84% in 2022. Additionally, as shown in **Table 9** below, the medical-surgical beds at CRMH have not exceeded 70% utilization in the past five years. Furthermore, according to VHI data for 2022, the most recent year for which such data is available, the medical-surgical bed inventory of PD 5 operated at a collective occupancy of 54.72%. Finally, the calculation below demonstrates that there is a projected surplus of 385 medical-surgical beds in PD 5 for the five-year

planning horizon. Accordingly, adding beds to the PD 5 medical-surgical bed inventory would be an unnecessary duplication of existing services and would exacerbate both the underutilization of existing beds and the calculated surplus in PD 5.

With regard to the transfer of six underutilized medical-surgical beds from CRMH, as will be discussed in greater detail later in this staff analysis report, transferring six medical-surgical beds from CRMH is the most prudent and cost-effective way to accomplish the proposed project and to be able to support CRCH's eight GPORs. Furthermore, the relocation portion of the proposed project is unlikely to have a significant negative impact on the staffing or utilization of existing PD 5 providers of medical surgical services.

**(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;**

Currently there is no organization in HPR III designated by the Virginia Department of Health to serve as the Health Planning Agency for PD 5. Therefore, this consideration is not applicable to the review of the proposed project.

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

As demonstrated by **Table 2**, the projected capital costs of the proposed project are $247,500 or $20,625 per bed, all of which represents direct construction costs. DCOPN concludes that these costs are low when compared with recently approved projects similar in scope. For example, COPN No. VA-04887 issued to Centra Health, Inc. to add 52 beds, including 16 ICU beds and 36 medical-surgical beds at Centra Lynchburg General Hospital which cost $2,730,977 or $52,518 per bed, and COPN No. VA-04725 issued to The Rector and Visitors of University of Virginia on Behalf of the University of Virginia Medical Center to add 50 medical-surgical beds and 34 ICU beds cost $4,973,492 or $59,208 per bed.

The applicant identified numerous benefits of the proposed project, including:

- Approval of this project will address overutilization of services and patient throughput problems currently occurring at CMC's main hospital building – CRMH.

- Approval of this project will allow CMC to better serve an expansive territory covering nearly 1 million people that encompasses PD 5, along with areas from the neighboring states of West Virginia and North Carolina.

- This COPN application and COPN Request No. VA-8763 represent Carilion Clinic's strategic plan to efficiently allocate existing resources and facilities within its health system to continue meeting the needs of the community, while simultaneously modernizing and expanding its service offerings.

- The proposed project will create an inpatient medical-surgical unit that will serve CMC's recently expanded operating rooms located at CRCH as well as broader medical-surgical needs.

- Post pandemic demand has created ongoing capacity issues from overutilizing adult medical-surgical beds at CRMH, creating operational concerns at CMC overall. These critical issues include:

    - Need to expand medical-surgical bed capacity at CMC to meet patient demand;
    - Need for expanded medical-surgical bed capacity at CMC to decrease Emergency Department (ED) boarding times and improve ED patient throughput;
    - Need for expanded medical-surgical bed capacity at CMC to address overutilization of ICU/PCU beds at CMC; and
    - Need to shift more complex surgeries from CRMH to CRCH, which will help to decompress overutilized ORs at CRMH.

- CMC proposes to cost-effectively address this institutional need by renovating existing space at CRCH. Consequently, this is a relatively low-cost COPN project to be paid for with CMC's accumulated reserves.

- Volume growth is also impacted by the additional expansion of services with the new Tower opening at CMC and ongoing efforts to improve patient flow in the hospital. Carilion is projecting that Med Surg occupancy at CRCH will be 71.2% occupancy in 2028.

- This proposed project is not anticipated to significantly impact staffing of other facilities in the service area.

- In FY23, Carilion Medical Center's adult Medical-Surgical beds (non-PCU and non-ICU) were at surge capacity (over 100% demand census) 91% of the time (331 days out of 365 days). In FY24, this number increased to 95% during the first six months (beds were at surge capacity 174 days out of 183 days).

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

The Pro Forma Income Statement provided by the applicant anticipates the provision of charity care in the amount of 0.5% of CRCH's gross revenue from medical-surgical services (**Table 6**). As previously discussed, according to regional and statewide data regularly collected by VHI, for 2022, the most recent year for which such data is available, the average amount of charity care provided by HPR III facilities was 0.6% of all reported total gross patient revenues (**Table 4**). § 32.1-102.4B of the Code of Virginia requires DCOPN to place a charity care condition on every applicant seeking a COPN. DCOPN notes that, if approved, the proposed project should be subject to a charity care condition no less than the 0.6% HPR III average, in addition to any new requirements as found in the revised § 32.1-102.4B of the Code of Virginia.

**Table 6. CRCH Pro Forma Income Statement**

| | Year 1 | Year 2 |
|---|---|---|
| **Total Gross Patient Revenue** | **$39,769,512** | **$40,962,597** |
| Contractual Allowances | ($27,597,287) | ($28,425,206) |
| Charity Care | ($202,825) | ($208,909) |
| **Net Revenue** | **$11,969,400** | **$12,328,482** |
| Total Expenses | $8,064,612 | $8,306,055 |
| **Net Income** | **$3,904,788** | **$4,022,427** |

**Source**: COPN Request No. VA-8774

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

DCOPN did not identify any other discretionary factors, not discussed elsewhere in this staff analysis report, to bring to the attention of the Commissioner as may be relevant to determining a public need for the proposed projects.

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

Section 32.1-102.2:1 of the Code of Virginia calls for the State Health Services Plan Task Force to develop recommendations for a comprehensive State Health Services Plan (SHSP). In the interim, DCOPN will consider the consistency of the proposed project with the State Medical Facilities Plan (SMFP), predecessor of the SHSP.

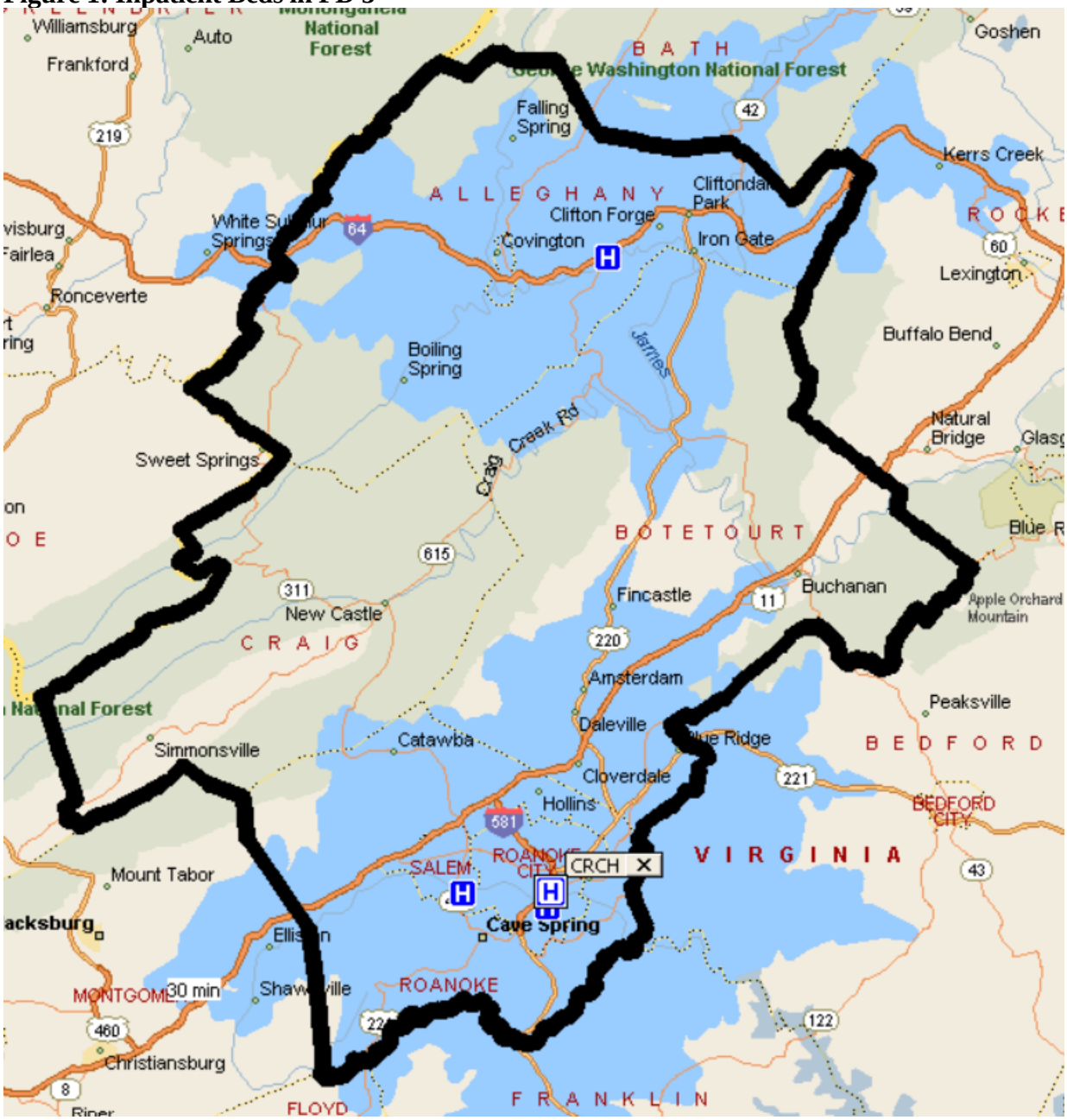
The SMFP contains criteria/standards for the addition of inpatient beds. They are as follows:

**Part VI**
**Inpatient Bed Requirements**

**12VAC5-230-520. Travel Time.**
**Inpatient beds should be available within 30 minutes driving time one way under normal conditions of 95% of the population of a health planning district using mapping software as determined by the commissioner.**

The heavy black line in **Figure 1** represents the boundary of PD 5. The white "H" symbol marks the location of the proposed project. The blue "H" symbols mark the locations of all other existing inpatient bed services in PD 5. The light blue shaded area represents the area of PD 5 that is within 30 minutes' drive time of existing inpatient bed services. Given the amount of shaded area, it is not immediately evident that inpatient bed services currently exist within a 30-minute drive for a least 95% of the population of PD 5. However, the applicant proposes to add medical-surgical beds at a location only one mile from, and on the same campus as CRMH, which already provides these services. Therefore, DCOPN concludes that approval of the proposed project would not improve geographic access to inpatient bed services for persons in PD 5 in any meaningful way.

**Figure 1: Inpatient Beds in PD 5**




**12VAC5-230-530. Need for New Service.**

**A. No new inpatient beds should be approved in any health planning district unless:**

1. **The resulting number of beds for each bed category contained in this article does not exceed the number of beds to be needed for that health planning district for the fifth planning horizon year; and**
2. **The average annual occupancy based on the number of beds in the health planning district for the relevant reporting period is:**

**a. 80% at midnight census for medical-surgical and pediatric beds;**

**b. 65% at midnight census for intensive care beds.**

**B. For proposals to convert under-utilized beds that require a capital expenditure of $15 million or more, consideration may be given to such proposals if:**
   **1. There is a projected need in the applicable category of inpatient beds; and**
   **2. The applicant can demonstrate that the average annual occupancy of the converted beds would meet the utilization standard for the applicable bed category by the first year of operation.**

**For purposes of this part, "utilization" means less than 80% average annual occupancy for medical-surgical or pediatric beds, when the relocation involves such beds and less than 65% average annual occupancy for intensive care beds when the relocation involves such beds.**

**C. The capital expenditure threshold referenced in subsection B of this section shall be adjusted annually using the percentage increase listed in the Consumer Price Index for All Urban Consumers (CPI-U) for the most recent year as follows:**

$$A \times (1 + B)$$

**Where:**

**A = the capital expenditure threshold amount for the previous year; and**

**B = the percent increase for the expense category "Medical Care" listed in the most recent year available of the CPI-U of the U.S. Bureau of Labor Statistics.**

With regard to the addition of six new beds to the PD 5 inventory, according to VHI data for 2022, the most recent year for which such data is available, and as demonstrated by **Table 7** below, the medical-surgical bed inventory of PD 5 consisted of 1,183 medical-surgical beds for that year. Additionally, in 2022, the PD 5 medical-surgical bed inventory operated at a collective occupancy of 54.72%. Finally, the calculation below demonstrates that there is a projected surplus of 385 medical-surgical beds in PD 5 for the five-year planning horizon. This standard is not satisfied and the addition of new beds to the PD 5 inventory would be an unnecessary duplication of existing services and would exacerbate the calculated surplus.

**Table 7. Medical-Surgical Bed Inventory and Utilization[4] in PD 5: 2022**

| Facility | Licensed Beds | Staffed Beds | Available Days | Patient Days | Occupancy % |
|---|---|---|---|---|---|
| Carilion Roanoke Memorial Hospital | 652 | 477 | 237,980 | 161,452 | 67.84% |
| LewisGale Hospital - Alleghany | 190 | 95 | 69,350 | 5,241 | 7.56% |
| LewisGale Medical Center | 341 | 192 | 124,465 | 69,578 | 55.90% |
| **Total/Average** | **1,183** | **764** | **431,795** | **236,271** | **54.72%** |

**Source:** VHI (2022)

[4] The Adjudication Officer's case decision for COPN No. VA-04682 held that DCOPN was in error by including obstetric, intensive care and pediatric patient days in its calculations for medical-surgical bed need, despite those beds being fungible and accordingly, able to convert to medical-surgical beds without COPN authorization. However, because obstetric, intensive care and pediatric beds can be easily converted to medical-surgical beds, thereby changing the medical-surgical inventory without first obtaining COPN authorization, DCOPN maintains that obstetric, intensive care and pediatric beds should be included in the medical-surgical inventory and the corresponding patient days used for medical-surgical bed need calculations.

**12VAC5-230-540. Need for Medical-surgical Beds.**
**The number of medical-surgical beds projected to be needed in a health planning district shall be computed as follows:**

1. **Determine the use rate for medical-surgical beds for the health planning district using the formula:**

$$BUR = (IPD/PoP)$$

**Where:**

**BUR = the bed use rate for the health planning district.**
**IPD = the sum of the total inpatient days in the health planning district for the most recent five years for which inpatient day data has been reported to VHI; and**
**PoP= the sum of the total population 18 years of age and older in the health planning district for the same five years used to determine IPD as reported by a demographic program as determined by the commissioner.**

**Table 8: PD 5 Medical – Surgical Beds Occupancy (2018-2022)**

| Year | Licensed Beds | Staffed Beds | Available Days | Patient Days | Occupancy Rate |
|---|---|---|---|---|---|
| **2018** | 1,183 | 793 | 431,795 | 233,626 | 54.1% |
| **2019** | 1,183 | 818 | 431,795 | 234,549 | 54.3% |
| **2020** | 1,183 | 765 | 432,978[5] | 216,641 | 50.0% |
| **2021** | 1,183 | 761 | 431,795 | 228,158 | 52.8% |
| **2022** | 1,183 | 764 | 431,795 | 236,271 | 54.7% |
| **Total** | **5,915** | **3,901** | **2,160,158** | **1,149,245** | **53.2%** |

Source: VHI (2018-2022) and DCOPN Interpolations

**Step 1. PD 5—SMFP Medical-Surgical Use Rate**

| IPD<br>PD 2018-2022<br>Sum of Patient Days<br>Last 5 Years | Pop<br>2018-2022<br>Sum Population Age 15+<br>Last 5 Years | 2018-2022<br>Bed Use Rate |
|---|---|---|
| 1,149,245 | 1,156,670 | 0.9936 |

**Note:** While the SMFP requires population data for ages 18+, Weldon Cooper data is broken into age groups by 5-year increments. As such, the calculations above include data for persons aged 15-17 years of age.

$$BUR = (1,149,245/1,156,670)$$

2. **Determine the total number of medical-surgical beds needed for the health planning district in five years from the current year using the formula:**

$$ProBed = \frac{(BUR \times ProPop) / 365}{0.80}$$

**Where:**

**ProBed = the projected number of medical-surgical beds needed in the health**

[5] DCOPN notes that the available days for medical-surgical beds at LewisGale Hospital – Allegheny were calculated using 365 days for 2020 in the VHI data for that year. Because 2020 had 366 days, DCOPN corrected the calculation.

**planning district for five years from the current year.**

**BUR = the bed use rate for the health planning district determined in subdivision 1 of this section.**

**ProPop = the projected population 18 years of age and older of the health planning district five years from the current year as reported by a demographic program as determined by the commissioner.**

$$\text{ProBed} = \frac{((0.9936 \times 234{,}502) / 365)}{0.80}$$

**ProBed = 797.9 (798)**

**3. Determine the number of medical-surgical beds that are needed in the health planning district for the five-year planning horizon year as follows:**

**NewBed = ProBed – CurrentBed**

**Where:**

**NewBed = the number of new medical-surgical beds that can be established in a Health planning district, if the number is positive. If NewBed is negative, No additional medical-surgical beds should be authorized in the health Planning district.**

**ProBed = the projected number of medical-surgical beds needed in the health Planning district for five years from the current year as determined in Subdivision 2 of this section.**

**CurrentBed = the current inventory of licensed and authorized medical-surgical Beds in the health planning district.**

NewBed = 798 (ProBed) – 1,183 (CurrentBed)
NewBed = --385

DCOPN has calculated a surplus of 385 medical-surgical beds in PD 5. The applicant asserts that this standard is not applicable because "[a]pproval of the proposed project is justified based on an institutional need for medical-surgical bed expansion at CMC." DCOPN disagrees and concludes that the addition of six new medical-surgical beds to the PD 5 inventory would be an unnecessary duplication of existing services and would exacerbate the calculated surplus. Additionally, as discussed in greater detail below, the applicant has not shown an institutional need to expand.

**12VAC5-230-550. Need for Pediatric Beds.**

In the interest of brevity, this calculation has been omitted from this DCOPN staff analysis report as the applicant is not proposing to add pediatric beds.

**12VAC5-230-560. Need for Intensive Care Beds.**

In the interest of brevity, this calculation has been omitted from this DCOPN staff analysis report, as the applicant is not proposing to add new ICU beds to PD 5.

**12VAC5-230-570. Expansion or Relocation of Services.**

**A. Proposals to relocate beds to a location not contiguous to the existing site should be approved only when:**

**1. Off-site replacement is necessary to correct life safety or building code deficiencies;**

The proposed relocation of six medical-surgical beds from CRMH to CRCH is not due to life safety or building code deficiencies.

**2. The population currently served by the beds to be moved will have reasonable access to the beds at the new site, or to neighboring inpatient facilities;**

Given the proximity of CRCH to CRMH of approximately one mile, DCOPN concludes that the population currently served at CRMH will continue to have reasonable access to the six medical-surgical beds if they are relocated to CRCH.

**3. The number of beds to be moved off-site is taken out of service at the existing facility;**

The applicant has provided assurances that the six medical-surgical beds to be moved from CRMH to CRCH will be taken out of service at CRMH when they become licensed at CRCH.

**4. The off-site replacement of beds results in:**

**a. A decrease in the licensed bed capacity;**

**b. A substantial cost savings; cost avoidance, or consolidation of underutilized facilities; or**

**c. Generally improved efficiency in the applicant's facility or facilities; and**

The relocation of six medical-surgical beds from CRMH to CRCH will be inventory neutral and therefore, there will be no change to the licensed bed inventory of PD 5. The purpose of the proposed project is to provide medical-surgical beds for post-surgery inpatient stays to support the eight GPORs at CRCH. The applicant explains that approval of the proposed project will allow it to shift additional cases that are more complex and require post-surgical inpatient stays from CRMH to CRCH. As shown in **Table 9** below, the medical-surgical beds at CRMH operated at 67.84% in 2022. Furthermore, the medical-surgical beds at CRMH have not exceeded 70% utilization in the past five years. Therefore, the redistribution of CMC's existing resources represents a better alternative than adding to the PD 5 inventory.

**5. The relocation results in improved distribution of existing resources to meet community needs.**

The relocation of six medical-surgical beds from CRMH to CRCH is approximately a one-mile move, which is unlikely to have any effect on the geographic distribution of existing resources.

**B. Proposals to relocate beds within a health planning district where underutilized beds are within 30 minutes driving time one way under normal conditions of the proposed relocation should be approved only when the applicant can demonstrate that the proposed relocation will not materially harm existing providers.**

LewisGale Medical Center is located approximately 15 minutes from CRCH. In 2022, LewisGale Medical Center's 341 medical-surgical beds operated at a utilization of 55.9%. Because the six medical-surgical beds already exist in the PD 5 inventory, and the move is on the CMC campus, approximately one mile away, it is unlikely that the requested relocation of the six medical-surgical beds will have any effect on LewisGale Medical Center's utilization.

Therefore, DCOPN concludes that the relocation of six medical-surgical beds from CRMH to CRCH represents a prudent use of existing resources.

**12VAC5-230-580. Long-Term Acute Care Hospitals (LTACHs)**

In the interest of brevity, this standard has been omitted, as the applicant is not proposing to add LTACH beds or to convert existing beds to LTACH beds.

**12VAC5-230-590. Staffing.**
**Inpatient beds should be under the direction of one or more qualified physicians.**

The applicant is an established provider of inpatient services and has indicated that physician coverage will come from CMC's hospitalist group.

## Part I
## Definitions and General Information

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

**A. Notwithstanding any other provisions of this chapter, the commissioner may grant approval for the expansion of services at an existing medical care 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.**

**C. This section is not applicable to nursing facilities pursuant to § 32.1-102.3:1 of the Code of Virginia.**

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

The applicant has cited an institutional need to expand its current medical-surgical services by 12 beds, to be accomplished by adding six new medical-surgical beds to the PD 5 inventory and by relocating six existing medical-surgical beds from CRMH. The applicant explains "CMC's

campus has two separately licensed acute care hospitals [CRMH and CRCH] …. While CRMH and CRCH are separately licensed by the Virginia Department of Health, they are considered a single hospital (CMC) for Medicare certification purposes. As such, the two hospitals are fully integrated with one another." In support of the assertion of an institutional need, the applicant contends that "[i]n FY23, Carilion Medical Center's adult Medical-Surgical beds (non-PCU and non-ICU) were at surge capacity (over 100% demand census) 91% of the time (331 days out of 365 days). In FY24, this number increased to 95% during the first six months (beds were at surge capacity 174 days out of 183 days)." The applicant calculated this need using "the sum of occupied beds, assigned beds from the ED/PACU, and requested beds from transferring facilities over the number of available beds." However, bed utilization is determined by evaluating the sum of inpatient days divided by the available days of licensed beds (as calculated by multiplying the number of licensed beds by the number of days in the applicable year), not as the applicant describes. As shown in **Table 7** above, when examining the utilization of the applicant's medical-surgical beds using licensed bed capacity, the medical-surgical beds at CRMH operated at 67.84% in 2022. Additionally, as shown in **Table 9** below, the medical-surgical beds at CRMH have not exceeded 70% utilization in the past five years.

**Table 9: CRMH Medical – Surgical Beds Occupancy (2018-2022)**

| Year | Licensed Beds | Staffed Beds | Available Days | Patient Days | Occupancy Rate |
|---|---|---|---|---|---|
| **2018** | 652 | 538 | 237,980 | 166,646 | 70.0% |
| **2019** | 652 | 544 | 237,980 | 163,781 | 68.8% |
| **2020** | 652 | 495 | 238,632 | 148,430 | 62.2% |
| **2021** | 652 | 480 | 237,980 | 159,446 | 67.0% |
| **2022** | 652 | 477 | 237,980 | 161,452 | 67.8% |
| **Total/Average** | **3,260**[6] | **2,534** | **1,190,552** | **799,755** | **67.2%** |

Source: VHI (2018-2022) and DCOPN Interpolations

Furthermore, as shown in **Table 9**, CRMH has not fully staffed its licensed medical-surgical bed complement for at least the last five years. In 2022, 477 of the 652 medical-surgical beds at CRMH were staffed. With regard to the staffing and availability of medical-surgical beds, the applicant asserts:

> The medical-surgical bed occupancy rates reported by CMC to VHI do not accurately convey medical-surgical bed utilization at CMC. The data reported to VHI represents a small snapshot in time. Currently, CMC staffs 416 of its 458 licensed medical-surgical beds. CMC's current physical plant makes it difficult to staff all 458 licensed medical-surgical beds. Growing demand for nonclinical/administrative spaces within the hospital has created limitations in the physical plant. However, CMC is finalizing construction on a new tower (Crystal Spring Tower) at CRMH. Once completed, the 42 unstaffed

[6] The Adjudication Officer's case decision for COPN No. VA-04682 held that DCOPN was in error by including obstetric, intensive care and pediatric patient days in its calculations for medical-surgical bed need, despite those beds being fungible and accordingly, able to convert to medical-surgical beds without COPN authorization. However, because obstetric, intensive care and pediatric beds can be easily converted to medical-surgical beds, thereby changing the medical-surgical inventory without first obtaining COPN authorization, DCOPN maintains that obstetric, intensive care and pediatric beds should be included in the medical-surgical inventory and the corresponding patient days used for medical-surgical bed need calculations.

> medical-surgical beds (along with other existing licensed beds) will be opened in the tower to accommodate cardiovascular ICU and PCU inpatients. While completion of the Crystal Spring Tower will enable CMC to staff its full licensed bed compliment, it will not address the overutilization of adult medical-surgical beds since the Crystal Spring Tower will house patients requiring specialized cardiovascular care.

DCOPN notes that the applicant's statement above regarding "416 of its 458 licensed medical-surgical beds" references only those beds categorized as medical-surgical beds as reported to VHI for 2022. However, as previously discussed, nearly all acute care hospital beds in Virginia can be classified as "medical-surgical" beds, with the exception of psychiatric, substance abuse treatment, and rehabilitation beds. As long as the total licensed bed complement is not exceeded, hospitals may configure and use medical-surgical beds, as circumstances require. For this reason, DCOPN has included obstetric (OB), pediatric, and intensive care unit (ICU) beds in the total count of licensed medical-surgical beds. Therefore, DCOPN has included obstetric (OB), pediatric, and intensive care unit (ICU) beds in the total count of licensed medical-surgical beds. As previously discussed, the medical-surgical beds at CRMH operated at 67.84% in 2022. Additionally, as shown in **Table 9** below, the medical-surgical beds at CRMH have not exceeded 70% utilization in the past five years. DCOPN concludes that the applicant cannot seek to add beds when it is not fully staffing or utilizing its existing complement, despite the applicant's assertion that "growing demands for nonclinical/administrative spaces within the hospital" have created space limitations and that the unstaffed beds will be staffed and utilized when its new tower opens in 2025.

Finally, as previously discussed, DCOPN has calculated a surplus of 385 medical-surgical beds in PD 5 and approval of the proposed project would add to this surplus and unnecessary duplicate existing services.

In conclusion, the applicant has not shown an institutional need to expand and does not satisfy this standard. Therefore, it should not be permitted to add medical-surgical beds to the PD 5 inventory. However, as previously discussed, DCOPN concludes that the relocation of six medical-surgical beds from CRMH to CRCH represents a prudent use of existing resources.

## Required Considerations Continued

**4. The extent to which the proposed project 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;**

The applicant is one of two existing providers of inpatient medical-surgical services in PD 5. Of the 1,183 medical-surgical beds shown in **Table 1**, 652 beds, or 55% of the medical- surgical bed inventory in PD 5, are located at a facility within CRMH. The proposed project is unlikely to foster institutional competition.

**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;**

As previously discussed, the existing medical-surgical beds in PD 5 operated at 54.72% utilization in 2022 (**Table 1**) and DCOPN has calculated a surplus of 385 medical-surgical beds

in PD 5 for the 2029 planning year. If approved, the proposed project would add to this calculated surplus. Accordingly, as previously discussed, the status quo is a preferable alternative adding to the surplus of medical-surgical beds which would unnecessarily duplicate existing services already available in surplus in PD 5. However, relocation of medical-surgical beds from CRMH is a superior, inventory-neutral option.

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

As already discussed, DCOPN concludes that when compared to similar projects, the costs are low. The applicant will fund the project using accumulated reserves. Accordingly, there are no financing costs associated with this project. The Pro Forma Income Statement provided by the applicant (**Table 6**) projects a net profit of $3,904,788 from in the first year of operation, and a net profit of $4,022,427 in the second year of operation.

Regarding staffing, the applicant anticipates the need to hire 19.4 Full Time Equivalent (FTE) to staff the proposed project. These FTEs include:

- 2.5 Administration/Business Office FTEs;
- 9.2 Registered Nurse FTEs; and
- 7.7 Nurses' Aides, Orderlies, Attendants FTEs.

According to the applicant, "Carilion Clinic has a robust talent acquisition team that uses its resources (including internal and external landing pages) to post jobs and recruit internal and external applicants to these positions. As needed, outside recruiting agencies are used for key positions that are difficult to recruit." The applicant also explained that existing resources at CRCH, such as pharmacy, imaging, case management, respiratory and therapy services would also cover the added patient population. Because of the limited number of employees needed for this project, DCOPN concludes that the applicant will not have difficulty filling the required position or that doing so will have a negative impact on other area healthcare providers.

**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; and**

The proposed project would not introduce any new technologies, or any services that could be offered on an outpatient basis, nor are there any cooperative efforts to meet healthcare needs. DCOPN did not identify any other discretionary 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 for citizens of the Commonwealth, including indigent or underserved populations.**

The applicant indicates that its medical school affiliations include the Virginia Tech Carilion School of Medicine (VTCSOM), 28 accredited resident and fellow training programs, and the Via College of Osteopathic Medicine (VCOM). Additionally, Radford University Carilion educates and trains students in 20 health science programs from associates to doctoral levels including nursing and other ancillary health services.

## DCOPN Findings and Conclusions

DCOPN finds that portion of Carilion Medical Center d/b/a Carilion Roanoke Community Hospital's COPN Request No. VA-8774 to relocate six medical-surgical beds from Carilion Roanoke Memorial Hospital to Carilion Roanoke Community Hospital is generally consistent with the applicable criteria and standards of the SMFP and the eight Required Considerations of the Code of Virginia. Moreover, DCOPN concludes that the relocation portion of the proposed project is more favorable than maintaining the status quo and is the most prudent and cost-effective way to accomplish the proposed project and be able to offer support to CRCH's eight GPORs. Furthermore, DCOPN concludes that approval of the relocation portion of the proposed project is not likely to have a significant negative impact on the staffing or utilization of existing PD 5 providers of medical surgical services. Finally, DCOPN finds that the total capital and financing costs for the project are reasonable.

DCOPN finds that portion of Carilion Medical Center d/b/a Carilion Roanoke Community Hospital's COPN Request No. VA-8774 to add six new medical-surgical beds at CRCH is generally inconsistent with the applicable criteria and standards of the SMFP and the Eight Required Considerations of the Code of Virginia. There is a surplus of 385 medical-surgical beds in PD 5, and the existing 1,183 medical-surgical beds in PD 5 were underutilized at only 54.72% in 2022. More specifically, the medical-surgical beds at CRMH operated at 67.84% in 2022 and have not exceeded 70% utilization in the past five years. Therefore, the applicant has not demonstrated an institutional need to expand. Finally, DCOPN finds that the addition of six medical-surgical beds to the PD 5 inventory is an unnecessary duplication of existing services in PD 5.

## DCOPN Staff Recommendation

The Division of Certificate of Public Need recommends **partial conditional approval** of that portion of Carilion Medical Center d/b/a Carilion Roanoke Community Hospital's Certificate of Public Need request to add six medical-surgical beds at Carilion Roanoke Community Hospital by relocation from Carilion Roanoke Memorial Hospital for the following reasons:

1. The 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 relocation of the six medical-surgical beds is more advantageous than the status quo.

3. The capital cost of the proposed project is reasonable,

4. The proposed project appears financially viable in the short- and long-term.

DCOPN's recommendation is contingent upon Carilion Medical Center d/b/a Carilion Roanoke Community Hospital's agreement to the following charity care condition:

Carilion Medical Center d/b/a Carilion Roanoke Community Hospital will provide medical surgical services to all persons in need of these services, 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 0.6% of Carilion Medical Center d/b/a Carilion Roanoke Community Hospital's total patient services revenue derived from medical surgical services 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. Carilion Medical Center d/b/a Carilion Roanoke Community Hospital 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.

Carilion Medical Center d/b/a Carilion Roanoke Community Hospital will provide medical surgical care 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 Carilion Medical Center d/b/a Carilion Roanoke Community Hospital will facilitate the development and operation of primary and specialty medical care services in designated medically underserved areas of the applicant's service area.

The Division of Certificate of Public Need recommends **denial** of that portion of Carilion Medical Center d/b/a Carilion Roanoke Community Hospital's COPN Request No. VA-8774 to add six new medical-surgical beds at CRCH for the following reasons:

1. The proposed project is not consistent with the applicable criteria and standards of the State Medical Facilities Plan and the Eight Required Considerations of the Code of Virginia.

2. There are less costly and more efficient alternatives to proposed project, including maintenance of the status quo.

3. The proposed project unnecessarily duplicates existing services already available in surplus in PD 5.

4. There is a calculated surplus of medical-surgical beds in PD 5.