

VIRGINIA DEPARTMENT OF HEALTH

Office of Licensure and Certification

Division of Certificate of Public Need

Staff Analysis

November 20, 2020

COPN Request No. VA-8506

Virginia Commonwealth University Health Systems Authority

Richmond, Virginia

Establish a specialized center for MRI and CT services with one fixed CT scanner and one fixed MRI scanner

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. VCUHS is based in Richmond Virginia, Planning District (PD) 15, Health Planning Region (HPR) IV.

Background

VCUHS proposes to establish a specialized center for magnetic resonance imaging (MRI) and computed tomography (CT) services with one fixed CT scanner and one fixed MRI unit, as VCU Health Imaging at Southpark Medical Center (VCU Health Imaging). VCU Health Imaging will be located in the City of Colonial Heights in PD 19, HPR IV.

CT Scanners and Utilization in PD 19

According to Virginia Health Information (VHI), in 2018, the most recent year for which such data is available, there were six COPN authorized CT scanners in PD 19, with a cumulative utilization of 105.1% based on the State Medical Facilities Plan (SMFP) threshold of 7,400 CT procedures per CT scanner per year (**Table 1**).

DCOPN notes that in addition to the six CT scanners reported to VHI in 2018, one additional CT scanner was added to the PD 19 inventory subsequent to 2018. COPN No. VA-04714 authorized Appomattox Imaging, LLC to introduce CT imaging with one CT scanner at its outpatient imaging center in Colonial Heights, Virginia. DCOPN further notes that the volume for the additional machine is not included in **Table 1** below, as the unit is not yet operational and this data is not available.

Table 1. PD 19 COPN Authorized CT Scanners: 2018

Facility	Units	Scans	Utilization
John Randolph Medical Center	1	12,372	167.2%
Tricities Emergency Center*	1	5,111	69.1%
Southside Regional Medical Center**	3	22,400	100.9%
Southern Virginia Regional Medical Center	1	6,772	91.5%
Total and Average	6	46,655	105.1%
Grand Total***	7	N/A	N/A

Source: VHI (2018) and DCOPN Records

* HCA combined the scans for TriCities Emergency Center’s CT and JRMC’s CT when reporting to VHI for 2018. Table 1 displays these scans broken out for each facility.

** Although not reported to VHI, Southside Regional Medical Center relocated a CT scanner to Southside Emergency Care Center at Colonial Heights in 2018 pursuant to COPN No. VA-04484.

*** COPN No. VA-04714 authorized Appomattox Imaging, LLC to introduce CT imaging with one CT scanner at its outpatient imaging center in Colonial Heights, Virginia.

MRI Scanners and Utilization in PD 19

According to VHI data for 2018, the most recent year for which such data is available, there were six COPN authorized MRI units in PD 19. These MRI units include four fixed site MRI units and two mobile MRI unit sites. For that year, the four fixed site MRI units had a cumulative utilization of 48.5% based on the SMFP threshold of 5,000 MRI procedures per fixed site MRI unit per year. For the same year, the two mobile MRI sites displayed a cumulative utilization of 18% based on the SMFP mobile threshold of 2,400 MRI procedures per mobile MRI unit per year (**Table 2**).

DCOPN notes that, pursuant to COPN No. VA-04655, Chester Imaging, LLC (Chester Imaging) will relocate the MRI unit from Colonial Heights Imaging Center in PD 19 to a to-be-constructed freestanding diagnostic imaging center in PD 15. Since the issuance of COPN No. VA-04655 in May 2019, Southside Regional Medical Center, the hospital affiliated with Chester Imaging, was sold to Bon Secours Mercy Health (Bon Secours Mercy). This acquisition was effective January 1, 2020. In its most recent annual extension request, submitted April 15, 2020, a representative for Bon Secours Mercy explained that due to its proximity to a to-be-constructed Bon Secours imaging center in PD 15 (pursuant to COPN VA-04656), leadership of Bon Secours Mercy is working to evaluate and coordinate services at the two facilities. Additionally, because of the COVID-19 pandemic, planning for the proposed project is suspended. Bon Secours Mercy plans to open Chester Imaging in the Fall of 2021. In the meantime, Southside Regional Medical Center continues to operate the MRI at Colonial Heights Imaging. Excluding the Colonial Heights Imaging MRI unit increases the cumulative utilization for PD 19 to 57.4% and decreases the MRI unit surplus to one. DCOPN notes, while the proposed site of Chester Imaging is in a different planning district, it will be approximately eight miles from the proposed site of VCU Health Imaging.

Table 2. PD 19 COPN Authorized MRI Units and Site: 2018 Utilization

Facility	Fixed Units	Mobile Sites	Fixed MRI Procedures	Fixed MRI Utilization	Mobile MRI Procedures	Mobile MRI Utilization
Appomattox Imaging Center	1	0	3,907	78.1%	N/A	N/A
Colonial Heights Imaging Center*	1	0	1,102	22.0%	N/A	N/A
John Randolph Medical Center	1	1	2,671	53.4%	587	24.4%
Southside Regional Medical Center	1	0	2,026	40.5%	N/A	N/A
Southern Virginia Regional Medical Center	0	1	N/A	N/A	277	11.5%
Total MRI Units/ Average Utilization	4	2	9,706	48.5%	864	18%

Source: VHI (2018) and DCOPN records

*Moving to PD 15 pursuant to COPN No. VA-04655

Proposed Project

VCUHS proposes to establish a specialized center for MRI and CT services with one fixed CT scanner and one fixed MRI unit, as VCU Health Imaging. VCU Health Imaging will be located in PD 19, HPR IV. The imaging center will also offer ultrasound and mammography. VCU Health Imaging will be located at 325 Charles H. Dimmock Parkway, Colonial Heights, Virginia and will be co-located with VCU Health Orthopaedics at Southpark Medical Center, a multidisciplinary medical center that includes orthopaedic services, podiatry, physical and occupational therapy, radiology (x-ray) and pain medicine. The Southpark Medical Center also houses an independent internal medicine practice and an independent pediatric practice. VCUHS will adapt existing shell space to implement the project, and thus new construction is not required.

VCU Health Imaging will also be proximal to other VCUHS providers of outpatient care in PD 19, including:

- VCU Health at Colonial Square – comprehensive outpatient cardiology and neurology services;
- VCU Health at Temple Avenue – a multidisciplinary clinic providing multiple services, including cardiology, oncology and acute care/trauma surgery; and

- Colonial Orthopaedics – joined with VCUHS in 2019 and operates three locations: (1) VCU Health Orthopaedics at Southpark, (2) VCU Health Orthopaedics at Jennick Drive, and (3) VCU Health Orthopaedics at River’s Bend in PD 15.

The projected capital costs of the proposed project are \$8,000,161, approximately 44% of which are attributed to direct construction costs for renovation of the existing space (**Table 3**). Capital costs will be funded through the accumulated reserves of the applicant. Accordingly, there are no financing costs associated with this project. If the State Health Commissioner (Commissioner) approves the project, construction is expected to begin in July 2021 and is projected to be complete in February 2022. The target date of opening is May 2022.

Table 3: VCUHS Projected Capital Costs

Direct Construction Costs	\$3,522,000
Equipment Not Included in Construction Contract	\$3,220,000
Acquisition Costs	\$354,161
Architectural and Engineering Fees	\$864,000
Other Consultant Fees	\$40,00
Total Capital Costs	\$8,000,161

Source: COPN Request No. VA-8506

Project Definition

Section 32.1-102.1:3 of the Code of Virginia defines a project, in the relevant parts, as the “[e]stablishment of a medical care facility.”

Section 32.1-102.1:3 of the Code of Virginia defines a medical care facility as “[a]ny specialized center or clinic developed for the provision of outpatient...computed tomographic (CT) scanning...magnetic resonance imaging (MRI).”

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

In determining whether a public need for a project exists, the following factors shall be considered:

- 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, VCU Health Imaging will be located at Southpark Medical Center at 325 Charles H. Dimmock Parkway, Colonial Heights, Virginia, which is one mile from Interstate 95. Additionally, Southpark Medical Center is located on the Petersburg Area Transit bus line, at the stop serving the Southpark Mall. Currently, VCUHS patients residing in PD 19 must currently travel to the MCV campus in downtown Richmond (approximately 23 miles) or to VCUHS’

Stony Point location (approximately 28 miles) for imaging services, or obtain imaging services outside the VCUHS system.

The most recent Weldon-Cooper data projects a total PD 19 population of 173,995 persons by 2030 (Table 4). This represents an approximate 0.3% 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 65 and older age cohort in PD 19, Weldon-Cooper projects a much more rapid increase. Weldon-Cooper projects a PD 19 increase of approximately 50.6% among this age cohort from 2010-2030 (Table 4). While this is below the statewide growth of 76.41% for the 65+ cohort, PD 19's growth is still significant, as this age group typically uses health care services at a rate much higher than those under the age of 65, including diagnostic imaging services.

Table 4. Statewide and PD 19 Total Population Projections, 2010-2030

Locality	2010	2020	% Change 2010-2020	Avg Ann % Change 2010-2020	2030	% Change 2020-2030	Avg Ann % Change 2020-2030	2010-2030 % Change
Dinwiddie	28,001	28,669	2.39%	0.23%	30,473	6.29%	0.61%	8.83%
Greensville	12,243	11,340	-7.38%	-0.75%	11,144	-1.72%	-0.17%	-8.98%
Prince George	35,725	37,613	5.28%	0.50%	39,408	4.77%	0.47%	10.31%
Surry	7,058	6,501	-7.89%	-0.80%	6,282	-3.37%	-0.34%	-10.99%
Sussex	12,087	11,370	-5.93%	-0.59%	10,657	-6.27%	-0.65%	-11.83%
Colonial Heights	17,411	17,631	1.26%	0.12%	17,766	0.77%	0.08%	2.04%
Emporia City	5,927	5,462	-7.85%	-0.79%	5,317	-2.65%	-0.27%	-10.29%
Hopewell City	22,591	22,852	1.16%	0.11%	22,781	-0.31%	-0.03%	0.84%
Petersburg City	32,420	31,671	-2.31%	-0.23%	30,166	-4.75%	-0.49%	-6.95%
Total PD 19	173,463	173,109	-0.20%	-0.20%	173,995	0.51%	0.05%	0.31%
PD 19 65+	24,581	30,488	24.03%	2.12%	37,022	21.43%	1.96%	50.61%
Virginia	8,001,024	8,655,021	8.17%	0.77%	9,331,666	7.82%	0.76%	16.63%
Virginia 65+	976,937	1,352,448	38.44%	3.22%	1,723,382	27.43%	2.45%	76.41%

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

Regarding socioeconomic barriers to access to the applicant's services, according to regional and statewide data regularly collected by VHI, for 2018, the most recent year for which such data is available, the average amount of charity care provided by HPR IV facilities was 3.7% of all reported total gross patient revenues (Table 5). In that same year, VCUHS provided 6.28% of its gross patient revenue in the form of charity care. 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. Pursuant to Section 32.1 – 102.4 of the Code of Virginia, should the Commissioner approve the proposed project, DCOPN recommends a charity care condition no less than the 3.7% HPR IV average.

Table 5: 2018 HPR IV Charity Care Contributions

Hospital	Gross Patient Revenues	Adjusted Charity Care Contribution	Percent of Gross Patient Revenue
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 and Adolescents	\$60,602,814	\$0	0.00%
Total Facilities			15
Median			3.2%
Total \$ & Mean %	\$26,118,455,175	\$975,457,005	3.7%

Source: VHI (2018)

DCOPN is not aware of any other distinct and unique geographic, socioeconomic, cultural, transportation, or other barriers to care that this project would address.

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 18 letters of support for the proposed project from members of the VCUHS medical community and 82 signatures on a petition from patients and employees of VCUHS. Collectively, these letters addressed:

- The imaging center will meet a tremendous need for access to coordinated, low-cost imaging services that are easily accessible for VCUHS patients in PD 19.

- VCUHS' health clinics in PD 19 provided over 58,000 patient visits and clinics in nearby Chester delivered over 22,000 patient visits. The physicians in these clinics rely on CT and MRI, and positioning VCU Health Imaging in PD 19 will allow for greater accessibility.
- CT and MRI are integral to the diagnosis and surveillance of most, if not all, diseases.
- Traveling 30-40 minutes to Stony Point or MCV is inconvenient or impossible for some patients.
- Image examinations would be interpreted by subspecialty, fellowship trained, and in many cases, internationally renowned radiologists, affording VCUHS' patients greater continuity and integration of care.
- The ability to provide onsite CT and MRI services at VCU Health Imaging would ensure state of the art imaging and subspecialty image interpretation, expedite care delivery, enable integrated care and significantly improve access to more affordable outpatient imaging for VCUHS' patients.
- Clinicians at the Southpark location ordered more than 3,000 MRI scans and 500 CT scans in 2018.
- VCUHS patients requiring spine surgery require CT, MRI and x-rays to guide surgical decision making. At present, there are no facilities in Colonial Heights that offer all three modalities in one facility. Being able to provide on-site CT and MRI services at Southpark would expedite care delivery, enable integrated care and improve access to affordable outpatient imaging for VCUHS patients.

DCOPN received two letters of opposition to the proposed project from counsel for Appomattox Imaging, LLC, Thomas J. Stallings. Mr. Stallings' first letter of opposition addressed:

- Appomattox Imaging's COPN Request No. VA-8454 is pending before the Commissioner. If approved, there would no longer be a need for an additional CT scanner in PD 19 and the CT service proposed by VCUHS would be inconsistent with the SMFP. DCOPN notes that this request was approved pursuant to COPN No. VA-04714 issued on August 3, 2020, after Mr. Stallings' initial letter.
- If approved, Appomattox Imaging's CT scanner would fulfill the need for low cost imaging in PD 19 (see DCOPN note above).
- There is a significant surplus of MRI scanners in PD 19 and approval of the MRI portion of VCUHS' request would be inconsistent with the SMFP.
- Appomattox Imaging already offers low cost MRI services and its MRI unit is underutilized and has capacity to accommodate additional patients.

- VCUHS' calculations show a surplus of both CT and MRI equipment in PD 19.

Mr. Stalling's second letter of opposition addressed:

- Appomattox Imaging's continued opposition to VCUHS' proposal. Appomattox Imaging believes that VCUHS' proposal is premature in light of the Commissioner's issuance of COPN No. VA-04714, authorizing Appomattox Imaging to establish CT services in PD 19.
- Appomattox Imaging disagrees with VCUHS' assertion in its October 28, 2020 letter that "Appomattox Imaging's newly approved CT scanner will not meaningfully improve financial access."
- Additionally, VCUHS states in its October 28, 2020 letter that Appomattox Imaging does not participate in Magellan's Medicaid managed care program. Mr. Stallings corrects this statement and indicates that Appomattox Imaging has participated in Magellan's Medicaid managed care program and provides an entry from the Magellan Complete Care provider directory showing Appomattox Imaging as a provider.

On November 19, 2020, VCUHS provided a response to Appomattox Imaging's second letter of opposition. VCUHS' letter addressed:

- VCUHS acknowledges that its assertion that Appomattox Imaging does not participate in Magellan's Medicaid managed care program was an unintentional mistake.
- VCUHS explained that to get to its prior understanding that Appomattox Imaging does not participate in Magellan's Medicaid managed care program, it reviewed Appomattox Imaging's website and called the imaging center to inquire. On the call, Appomattox Imaging's representative indicated that it did not participate in Magellan's Medicaid managed care program.
- VCUHS regrets its error but reasserts the need for its requested project and the need for lower cost imaging options in PD 19.

Public Hearing

DCOPN conducted the public hearing on July 9, 2020. A total of 25 individuals participated, including three individuals who spoke in support of the proposed project and two individuals who spoke in opposition of the proposed project. Melinda Hancock, VCUHS Chief Administrative and Financial Officer, presented the project. Dr. Ann Fulcher, VCU Department Chair of Radiology and Dr. Stephen Kates, VCU Department Chair of Orthopaedic Surgery reviewed the benefits of the proposed project, including:

- The lower cost of non-hospital based imaging;
- The state of the art equipment that will be available at VCU Health Imaging - CT – Siemens Somatom Definition Edge and 3T MRI – Siemens Magnetom Lumina;

- The benefits of having subspecialty providers interpret radiology results;
- The continuity and integration of care that VCUHS imaging will offer VCUHS patients in PD 19; and
- The burden imposed on orthopaedic patients who have to travel for imaging services, particularly those patients who are uninsured or underinsured.

Two individuals spoke in opposition to the proposed project, Thomas J. Stallings, counsel for Appomattox Imaging and John Emery, Chief Operating Officer of Bon Secours Southside Regional Medical Center. Mr. Stallings reiterated Appomattox Imaging's opposition as outlined in his July 9, 2020 letter of opposition. Mr. Emery addressed Bon Secours Southside Regional Medical Center's reasons for opposition, including:

- There is available capacity in PD 19;
- Approval of the proposed project will negatively impact the utilization of Bon Secours Southside Regional Medical Center's imaging services;
- Bon Secours was approved to establish Chester Imaging (pursuant to COPN VA-04655) and Chester Imaging will offer CT and MRI services. Chester Imaging will serve SRMC's patient base, which includes areas of both PD 15 and PD 19; and
- The Covid-19 pandemic has caused lower utilization of imaging services. It is premature to add additional capacity at this time.

On October 28, 2020, VCUHS provided a letter and two affidavits in response to those who spoke in opposition at the public hearing. These documents addressed:

- VCUHS' desire to provide imaging services for its existing patient base in PD 19;
- In 2019, 14.5% of PD 19's inpatient discharges were treated at VCU Medical Center. According to Virginia Hospital and Healthcare Association data, more PD 19 inpatients are treated at VCUHS than Southern Virginia Medical Center or John Randolph Medical Center;
- VCUHS treats more high-acuity inpatients from PD 19 than does any other hospital in PD 19;
- Service at existing PD 19 locations or at VCUHS PD 15 locations is very challenging for VCUHS' patients who are mobility-impaired, uninsured or underinsured;
- The proposed project is very similar to VCUHS' proposal to establish the NOW Center in PD 15, which the Commissioner approved notwithstanding a surplus of CT and MRI units;

- Appomattox Imaging's request to add a CT scanner was justified based on an institutional need at John Randolph Medical center. Based on John Randolph Medical Center's 2019 CT volumes, following the implementation of the CT scanner at Appomattox Imaging, John Randolph Medical Center's CT scanner utilization would be 86%;
- VCUHS anticipates that nearly 45% of the proposed facility's patients will be Medicare patients and nearly 19% will be Medicaid, indigent or self-pay patients; and
- VCUHS' proposal will not adversely impact other providers in PD 19 and fosters beneficial institutional competition.

(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;

It can be argued that the status quo is a viable alternative to VCUHS' proposal to add one CT scanner at VCU Health Imaging. As will be discussed in greater detail later in this staff analysis report, there is currently neither a need nor a surplus of CT scanners in PD 19. However, the six CT scanners in PD 19 operated at a cumulative utilization of 105.1% in 2018. Even with the addition of the CT scanner at Appomattox Imaging, which is meant to address the institutional need of John Randolph Medical Center (pursuant to COPN No. VA-04714,) the CT scanners in PD 19 will be highly utilized and approval of VCUHS' request is unlikely to have a significant negative impact on the other providers of CT services in PD 19. Furthermore, VCU Health Imaging will offer an additional non-hospital based, outpatient imaging center. For these reasons, DCOPN concludes that the proposal to add one CT scanner at VCUHS Health Imaging is more advantageous than the status quo. Furthermore, the project warrants approval despite the nominal surplus of one CT scanner that will exist in PD 19 should the Commissioner approve VCUHS' request.

The applicant did not identify any reasonable alternatives to its request to add one MRI unit at VCU Health Imaging. As previously discussed, there is a calculated surplus of two MRI units in PD 19, which may cause decreased utilization and increase the cost per scan for the existing MRI providers in PD 19. DCOPN notes that pursuant to COPN No. VA-04655, Chester Imaging has authorization to relocate the MRI unit at Colonial Heights Imaging Center to PD 15. However, even if the Colonial Heights Imaging MRI unit is excluded, there is a surplus of one MRI unit, and the overall MRI utilization in PD 19 is 57.4%, well below the SMFP threshold for addition of capacity.

The applicant asserts that there is a compelling public need for more accessible, lower cost imaging services in PD 19. The applicant notes that the only freestanding, non-hospital based MRI unit in PD 19 is located at Appomattox Imaging and that this MRI unit is "well utilized." DCOPN concurs that, after the MRI unit at Colonial Heights Imaging is moved to PD 15, the MRI unit at Appomattox Imaging will be the only non-hospital based MRI unit in PD 19. However, according to VHI data, the MRI unit at Appomattox Imaging had over 20% capacity available in 2018. Furthermore, the hospital based MRI units at John Randolph Medical Center and Southside Regional Medical Center were both underutilized in 2018, at 53.4% and 40.5%, respectively.

Finally, DCOPN observes the proximity of the location of the proposed MRI unit to existing MRI services in PD 19. Specifically, the proposed location would be approximately one mile from Appomattox Imaging, approximately seven miles from Southside Regional Medical Center, and approximately nine miles from John Randolph Medical Center.

With respect to the applicant's request to add one MRI unit to the PD 19 inventory, DCOPN concludes that maintaining the status quo is preferable to the proposed project, because maintaining the status quo would not exacerbate an already-existing surplus of MRI units in PD 19. Furthermore, there is excess capacity available from both non-hospital based and hospital based MRI options. Lastly, DCOPN concludes that the proposed project is an unnecessary duplication of existing MRI services in PD 19, because of the proximity to available, underutilized providers of MRI 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 IV designated by the Virginia Department of Health to serve as the regional health planning agency for the Central Virginia region. Accordingly, this consideration is not applicable to this review.

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

As shown in **Table 3**, the estimated capital costs of the proposed project are \$8,000,161. Capital costs will be funded through the accumulated reserves of the applicant. Accordingly, there are no financing costs associated with this project. DCOPN concludes that, when compared with similar projects, these costs are reasonable. For example, COPN No. VA-04700 issued to Kaiser Foundation Health Plan of the Mid-Atlantic States, Inc. to establish a specialized center for CT and MRI imaging services, which cost approximately \$12,895,042.

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

- Improved geographic access to VCUHS imaging services for the many VCUHS patients residing in PD 19;
- Improved financial access to lower cost outpatient imaging services in PD 19. Although VCUHS will operate the proposed imaging center, services provided at the center will not be reimbursed at hospital based outpatient rates but rather at lower freestanding rates;
- Reduced financial and logistical burdens for VCUHS' patients who live in PD 19 and travel outside of PD 19 to receive imaging services from VCUHS providers; and
- Enhanced continuity and integration of care for VCUHS patients.

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

The applicant is considered one of the largest safety net hospitals in the region and asserts that it treats all patients regardless of ability to pay or payment source. The Pro Forma Income Statement (**Table 6**) provided by the applicant includes the provision of 2.5% charity care (reflected in the “Charity Care” line item) based on gross patient services revenue derived from CT and MRI services in Years 1 and 2 of operation. According to regional and statewide data regularly collected by VHI, for 2018, the most recent year for which such data is available, the average amount of charity care provided by HPR IV facilities was 3.7% of all reported total gross patient revenues (**Table 5**). DCOPN notes that for that same year, VCUHS provided 6.28% of its gross patient services revenue in charity care, well above the HPR IV average. Pursuant to Section 32.1 – 102.4 of the Code of Virginia, should the Commissioner approve the proposed project, DCOPN recommends a charity care condition of no less than the 3.7% HPR IV average.

Table 6: VCUHS’ Pro Forma Income Statement

	Year 1	Year 2
Gross Patient Charges	\$16,557,539	\$21,554,801
Charity Care	(\$416,438)	(\$541,370)
Bad Debt	(\$699,617)	(\$909,502)
Contractual Adjustments	(\$12,992,172)	(\$16,849,027)
Net Revenue	\$2,619,312	\$3,354,902
Expenses		
Personnel Expenses	\$963,154	\$992,049
Special Supplies	\$271,961	\$282,839
General Supplies	\$15,195	\$15,803
Purchased Services/Maintenance	\$75,000	\$369,500
Lease Expense	\$31,612	\$31,612
Utilities	\$19,800	\$20,592
Depreciation	\$863,300	\$863,300
Other Direct Expenses	\$33,857	\$35,211
Indirect Expenses	\$234,043	\$277,408
Total Expenses	\$2,507,921	\$2,888,314
Income Contribution	\$111,391	\$466,588

Source: COPN Request No. VA-8506

(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 Medical Facilities Plan;

Section 32.1-102.2:1 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, these regulations provide the best available criteria and DCOPN will consider the consistency of the proposed project with the predecessor of the SHSP, the State Medical Facilities Plan (SMFP).

The SMFP contains standards and criteria for the addition of diagnostic services. They are as follows:

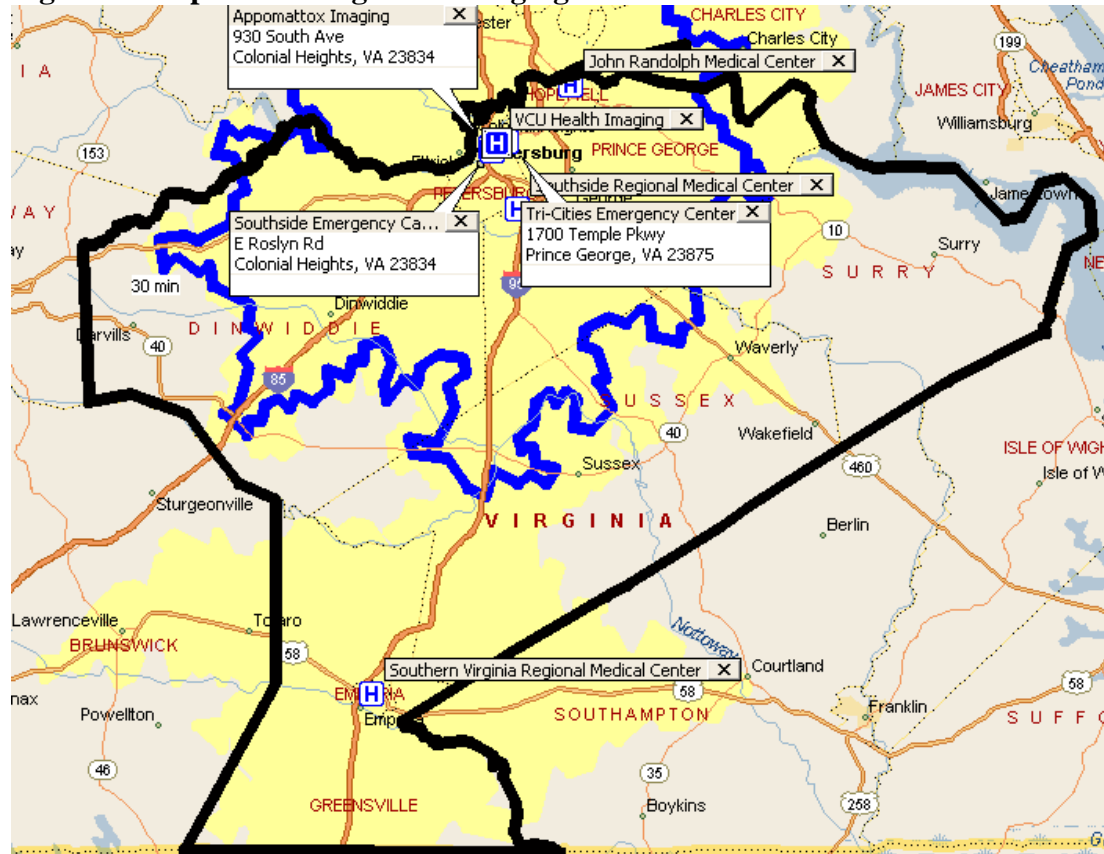
**Part II. Diagnostic Imaging Services
Article 1. Criteria and Standards for Computed Tomography**

12VAC5-230-90. Travel time.

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

Figure 1 shows the location of existing CT scanners in PD 19 (white “H” signs), as well as the location of the proposed project (dark blue “H” sign). The heavy black line is the boundary of PD 19. The yellow shaded area illustrates the area within 30 minutes driving-time one-way under normal traffic conditions of CT diagnostic imaging services currently available in PD 19. The dark blue line illustrates the area within 30 minutes driving-time one-way under normal traffic conditions of the proposed location of VCU Health Imaging. Based on the shaded area in **Figure 1**, it is reasonable to conclude that approximately 95% of the population of PD 19 is within 30 minutes driving-time one-way under normal traffic conditions of CT services. Therefore, DCOPN concludes that approval of the proposed projects will not increase geographic access to CT services in PD 19 because the area within 30 minutes driving-time one-way under normal traffic conditions from the proposed project is already covered by existing CT providers.

Figure 1: Map of CT Diagnostic Imaging Services in PD 19 in 2020



Source: DCOPN Records

12VAC5-230-100. Need for New Fixed Site or Mobile Service.

A. No new fixed site or mobile CT service should be approved unless fixed site CT services in the health planning district performed an average of 7,400 procedures per existing and approved CT scanner during the relevant reporting period and the proposed new service would not significantly reduce the utilization of existing providers in the health planning district. The utilization of existing scanners operated by a hospital and serving an area distinct from the proposed new service site may be disregarded in computing the average utilization of CT scanners in such health planning district.

According to VHI data, in 2018, there were six COPN authorized CT scanners in PD 19, with a cumulative utilization rate of 105.1% (Table 1). However, DCOPN notes that the fixed site CT scanner located at Southern Virginia Medical Center in Emporia is approximately 40 miles south of the location of the proposed project and the other PD 19 CT scanners, and is likely to serve a distinct patient population from those patients who receive treatment in the Tri-Cities area. 12VAC5-230-100 directs “the utilization of existing scanners operated by a hospital and serving an area distinct from the proposed new service site may be disregarded in computing the average utilization of CT scanners in such health planning district.” Disregarding Southern Virginia Medical Center’s utilization from the 2018 cumulative utilization of PD 19’s CT scanners increases the cumulative utilization to 107.8%.

Using 2018 VHI data, based on six authorized fixed CT scanners in PD 19 (**Table 1**) and reported CT volume of 46,655 CT scans (7,775.8 scans per scanner), there is a calculated need in PD 19 as follows:

2018 COPN authorized CT scanners = 6
Needed CT scanners = $46,655 \div 7,400 = 6.3$ (7)
Need = 7
2018 CT Scanner Need: 7-6 = 1 CT scanner

DCOPN notes that, in addition to the six CT scanners reported to VHI, one additional CT scanner was added to the PD 19 inventory subsequent to 2018. COPN No. VA-04714 authorized Appomattox Imaging, LLC to introduce CT imaging with one CT scanner at its outpatient imaging center in Colonial Heights, Virginia. Therefore, at present, there is neither a need nor a surplus of CT scanners in PD 19. However, as previously discussed, DCOPN concludes the project warrants approval despite the nominal surplus of one CT scanner that will exist in PD 19 should the Commissioner approve VCUHS' request.

B. Existing CT scanners used solely for simulation with radiation therapy treatment shall be exempt from the utilization criteria of this article when applying for a COPN. In addition, existing CT scanners used solely for simulation with radiation therapy treatment may be disregarded in computing the average utilization of CT scanners in such health planning district.

Not applicable. VCUHS' proposed scanner will be used for diagnostic imaging.

12VAC5-230-110. Expansion of Fixed Site Service.

Proposals to expand an existing medical care facility's CT service through the addition of a CT scanner should be approved when the existing services performed an average of 7,400 procedures per scanner for the relevant reporting period. The commissioner may authorize placement of a new unit at the applicant's existing medical care facility or at a separate location within the applicant's primary service area for CT services, provided the proposed expansion is not likely to significantly reduce the utilization of existing providers in the health planning district.

Not applicable. The applicant is not proposing to expand an existing facility's CT service.

12VAC5-230-120. Adding or Expanding Mobile Ct Services.

A. Proposals for mobile CT scanners shall demonstrate that, for the relevant reporting period, at least 4,800 procedures were performed and that the proposed mobile unit will not significantly reduce the utilization of existing CT providers in the health planning district.

Not applicable. The applicant is not proposing to add or expand mobile CT services.

B. Proposals to convert authorized mobile CT scanners to fixed site scanners shall demonstrate that, for the relevant reporting period, at least 6,000 procedures were performed by the mobile scanner and that the proposed conversion will not significantly reduce the utilization of existing CT providers in the health planning district.

Not applicable. The applicant is not proposing to convert an authorized mobile CT scanner to a fixed site scanner.

12VAC5-230-130. Staffing.

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

The applicant states that CT services will be under the direction and supervision of one or more qualified physicians.

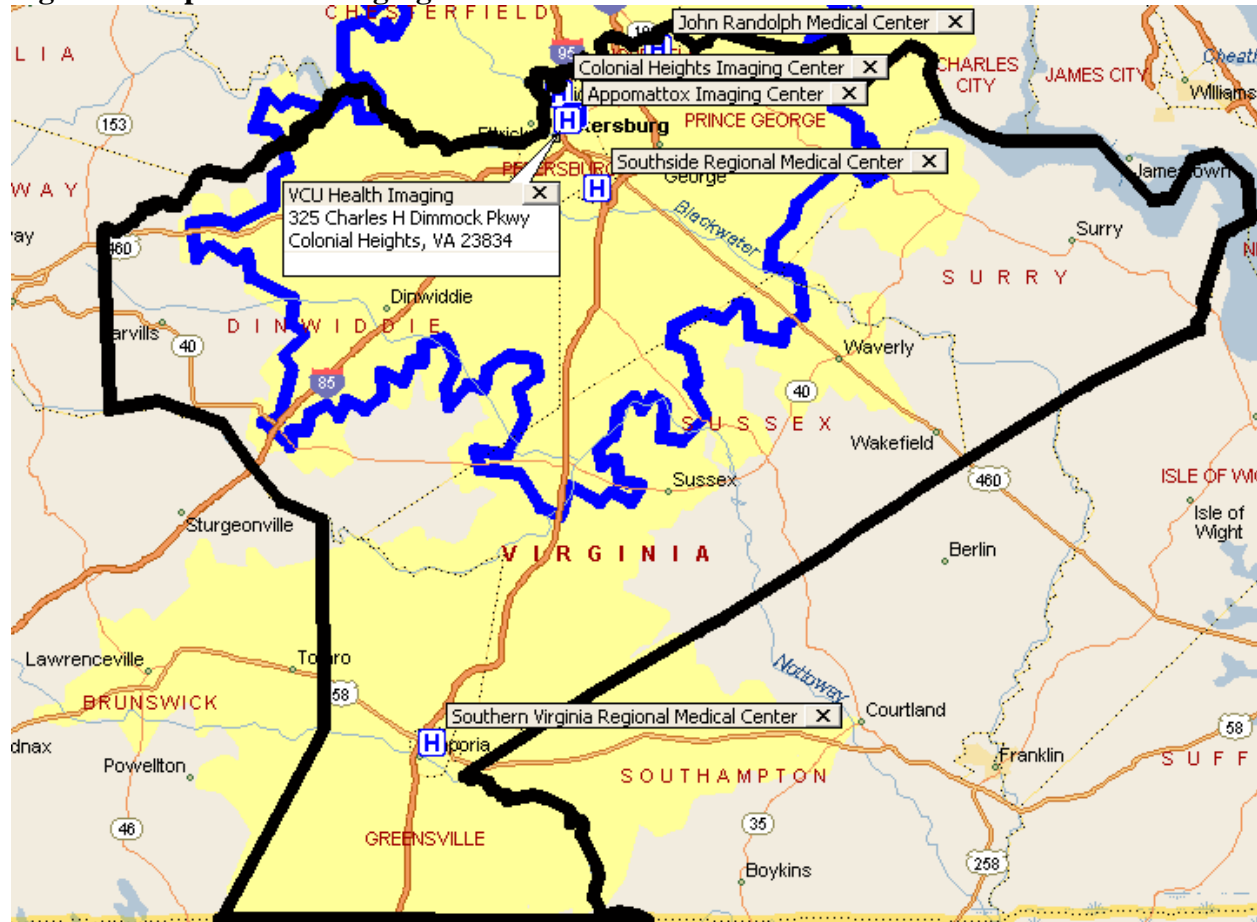
Article 2. Criteria and Standards for Magnetic Resonance Imaging

12VAC5-230-140. Travel Time.

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

The heavy black line in **Figure 2** identifies the boundary of PD 19. The white “H” signs mark the locations of existing COPN approved MRI units located in PD 19. The blue “H” sign marks the location of the proposed project. The yellow shaded area in Figure 1 illustrates the area of PD 19 and the surrounding area that is within a 30-minute drive of existing MRI services. The blue outline illustrates the area of PD 19 and the surrounding area that would be within a 30-minute drive of the proposed new MRI service at VCU Health Imaging. Based on the yellow shaded area in **Figure 2**, it is reasonable to conclude that approximately 95% of the population of PD 19 is within 30 minutes driving-time one-way under normal traffic conditions of MRI services. Therefore, DCOPN concludes that approval of the proposed projects will not increase geographic access to MRI services in PD 19 because the area within 30 minutes driving-time one-way under normal traffic conditions from the proposed project is already covered by existing MRI providers.

Figure 2. Map of MRI Imaging Services in PD 19 in 2020



12VAC5-230-150. Need for New Fixed Site Service.

No new fixed site MRI services should be approved unless fixed site MRI services in the health planning district performed an average of 5,000 procedures per existing and approved fixed site MRI scanner during the relevant reporting period and the proposed new service would not significantly reduce the utilization of existing fixed site MRI providers in the health planning district. The utilization of existing scanners operated by a hospital and serving an area distinct from the proposed new service site may be disregarded in computing the average utilization of MRI scanners in such health planning district.

According to VHI data, in 2018, there were four COPN authorized fixed site MRI units in PD 19, displaying a cumulative utilization of 48.5% (Table 2). Using 2018 VHI data, based on four authorized fixed MRI units in PD 19 with a reported fixed site MRI volume of 9,706 MRI procedures (2,426.5 scans per scanner) there is a calculated surplus of two MRI units in PD 19 as follows:

- 2018 COPN authorized Fixed Site MRI Units = 4
- Needed Fixed Site MRI Units = $9,706 \div 5,000 = 1.9$ (2)
- MRI Surplus: $4-2 = 2$ MRI Units**
- Fixed MRI Unit Utilization = 48.5%

As previously discussed, pursuant to COPN No. VA-04655, Chester Imaging will relocate the MRI unit from Colonial Heights Imaging Center in PD 19 to a to-be-constructed freestanding diagnostic imaging center in PD 15. Excluding the Colonial Heights Imaging MRI unit increases the cumulative utilization for PD 19 to 57.4% and decreases the MRI unit surplus to one.

As previously discussed, the applicant has not demonstrated a public need for additional MRI capacity in PD 19. Specifically the proposed project would exacerbate an already-existing surplus of MRI units in PD 19. Furthermore, there is excess capacity available from both non-hospital based and hospital based MRI providers. Lastly, the proposed project is an unnecessary duplication of existing MRI services in PD 19 because of the close proximity to underutilized providers of MRI services.

12VAC5-230-160. Expansion of Fixed Site Service.

Proposals to expand an existing medical care facility's MRI services through the addition of an MRI scanner may be approved when the existing service performed an average of 5,000 MRI procedures per scanner during the relevant reporting period. The commissioner may authorize placement of the new unit at the applicant's existing medical care facility, or at a separate location within the applicant's primary service area for MRI services, provided the proposed expansion is not likely to significantly reduce the utilization of existing providers in the health planning district.

Not applicable. The applicant is not proposing to expand an existing facility's MRI service.

12VAC5-230-170. Adding or Expanding Mobile MRI Services.

- A. Proposals for mobile MRI scanners shall demonstrate that, for the relevant reporting period, at least 2,400 procedures were performed and that the proposed mobile unit will not significantly reduce the utilization of existing MRI providers in the health planning district.**
- B. Proposals to convert authorized mobile MRI scanners to fixed site scanners shall demonstrate that, for the relevant reporting period, 3,000 procedures were performed by the mobile scanner and that the proposed conversion will not significantly reduce the utilization of existing MRI providers in the health planning district.**

Not applicable. The applicant is not proposing the addition or expansion of a mobile MRI service, nor is the applicant proposing the conversion of a mobile MRI service to a fixed site scanner.

12VAC5-230-180. Staffing.

MRI services should be under the direct supervision of one or more qualified physicians.

The applicant has provided assurances that the proposed project would be under the direction or supervision of one or more qualified physicians.

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 part of the VCUHS, which does not have other facilities providing CT services in PD 19. The proposed project would provide non-hospital based diagnostic imaging, thereby potentially offering services to patients of PD 19 at a lower price point than hospitals. DCOPN contends that approval of the proposed project will likely introduce institutional competition and may have some impact on PD 19's current providers of CT services. However, as previously discussed, even with the addition of a CT scanner at Appomattox Imaging, the CT units in PD 19 will be well utilized. Consequently, the CT portion of the proposed project warrants approval despite the impact it may have on other CT providers in PD 19.

With regard to the MRI portion of the proposed project, approval would add to the calculated surplus of MRI units in PD 19 and exacerbate unused capacity available from both non-hospital based and hospital based MRI providers. Finally, the proposed project would be in close proximity to underutilized providers of MRI services. DCOPN contends that approval is not warranted, despite any beneficial competition that may be introduced.

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 already discussed, the six existing CT scanners in PD 19 operated at a collective utilization of 105.1% in 2018 (**Table 1**). The four existing fixed site MRI units in PD 19 operated at a collective utilization of 48.5% in 2018 and the two mobile MRI sites operated at a utilization of 18% (**Table 2**). Using 2018 VHI data, DCOPN calculated a need for one CT scanner, and calculated a surplus of two MRI units in PD 19. As a proposed new facility, the applicant has no historical diagnostic imaging utilization data to compare to the PD 19 data submitted by VHI for 2018. However, as a component of VCUHS, the services provided at VCU Health Imaging will be fully integrated with VCUHS' existing clinical services in PD 19.

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;

The Pro Forma Income Statement (**Table 6**) provided by the applicant projects excess revenue of \$111,391 by the end of the first full year of operations and excess revenue of \$466,588 by the end of the second full year of operations, indicating that the proposed project is financially feasible in the immediate and long-term. The projected capital costs of the proposed project are \$8,000,161, approximately 44% of which are attributed to direct construction costs (**Table 3**). Capital costs will be funded through the accumulated reserves of the applicant. Accordingly, there are no financing costs associated with this project. As previously discussed, the costs for the project are reasonable and consistent with previously approved projects to establish CT and MRI services. For example, COPN No. VA-04700 issued to Kaiser Foundation Health Plan of

the Mid-Atlantic States, Inc. to establish a specialized center for CT and MRI imaging services, which cost approximately \$12,895,042. As such, DCOPN concludes that these costs are reasonable and that the proposed project is financially feasible.

The applicant anticipates the need to hire 16.9 additional full-time equivalent personnel (FTE) for the proposed project. These FTEs are as follows:

- 12.9 Radiologic Technologists;
- 1 Registered Nurse;
- 1 Administration – Business Office; and
- 2 Other Personnel.

The applicant is an established provider of diagnostic imaging services and has a well-developed and effective recruitment and employee retention program. VCUHS is the clinical affiliate for the VCU School of Radiation Sciences. Historically, students graduating from this program have filled 50% of all VCUHS vacancies for radiologic technologies. DCOPN finds that the applicant will not have difficulty filling the required positions or that doing so will have a negative impact upon 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 provide improvements in the delivery of health services by increasing the provision of services on an outpatient basis. As an outpatient diagnostic imaging center, approval of the proposed project would provide residents of PD 19 with an option for receiving non-hospital based diagnostic imaging services.

DCOPN did not identify any other factors, not previously discussed in this staff report, to bring to the Commissioner's attention with respect to the determination of a public need for the proposed project.

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.

VCUHS is a public research university and academic health center dedicated to preserving and restoring health for all people through innovation in services, research and education, along with Virginia Commonwealth University. VCUHS' clinical trials give patients access to advanced diagnostics and medical treatments and technologies before they are widely available. The applicant

asserts that the proposed project diversifies the traditional academic medical center care delivery framework by establishing an important point of access for high quality, lower cost imaging services in a community served almost exclusively by hospital-based imaging.

DCOPN Staff Findings and Conclusions

DCOPN finds that the CT portion of the proposed project is generally consistent with the applicable criteria and standards of the SMFP and the Eight Required Considerations of the Code of Virginia. Moreover, DCOPN finds that the CT portion of the proposed is more favorable than the status quo. Finally, DCOPN concludes that approval of the CT portion of the proposed project is not likely to have a significant negative impact on the staffing or utilization of existing PD 19 providers of CT services.

With regard to the MRI portion of the applicant's proposal, DCOPN finds the project to be generally inconsistent with the SMFP and the Eight Required Considerations of the Code of Virginia. DCOPN concludes that maintaining the status quo is preferable to the proposed project, because maintaining the status quo would not exacerbate an already-existing surplus of MRI units in PD 19, which may cause a decrease in utilization and an increase in the cost per scan for the existing MRI providers in PD 19. Furthermore, there is excess capacity available from both non-hospital based and hospital based MRI options. Lastly, DCOPN concludes that the proposed project is an unnecessary duplication of existing MRI services in PD 19 because of the close proximity to available, underutilized providers of MRI services.

Opposition to the proposed project was indicated at the public hearing and written opposition was filed with DCOPN. Overall, DCOPN finds that the total capital costs of the proposed project are reasonable and consistent with previously approved projects similar in scope. Furthermore, DCOPN finds that the project appears to be economically feasible both in the immediate and long-term.

DCOPN Staff Recommendation

The Division of Certificate of Public Need recommends **denial** of Virginia Commonwealth University Health System Authority's request to establish a specialized center for magnetic resonance imaging (MRI) for the following reasons:

1. The proposed project is generally inconsistent with the applicable criteria and standards of the State Medical Facilities Plan and the Eight Required Considerations of the Code of Virginia.
2. There is excess capacity and a calculated surplus of MRI units in PD 19.
3. There are reasonable alternatives to the proposed project, including maintaining the status quo.
4. Opposition to the proposed project was indicated at the public hearing and written opposition was filed with DCOPN.

The Division of Certificate of Public Need recommends **conditional approval** of Virginia Commonwealth University Health System Authority's request to establish a specialized center for computerized tomography (CT) imaging 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 cost of the proposed project is reasonable.
3. The proposed project appears economically viable in the immediate and the long-term.
4. The project is more favorable than the alternative of the status quo.

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

Virginia Commonwealth University Health System Authority will provide computed tomography (CT) 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 CT imaging 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 CT imaging services provided at VCU Health Imaging 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 CT 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.