## VIRGINIA DEPARTMENT OF HEALTH

# Office of Licensure and Certification

### **Division of Certificate of Public Need**

### **Staff Analysis**

March 21, 2023

**RE:** COPN Request No. VA-8686 Chippenham & Johnston-Willis Hospitals, Inc. Chesterfield, Virginia Establish a Specialized Center with One CT Scanner

### **Applicant**

Chippenham & Johnston-Willis Hospitals, Inc. (CJWH), located at 7101 Jahnke Road, Richmond, Virginia 23225, would be the sole owner of the proposed Chesterfield ER. CJWH also has ownership in CJW Wound Health Center, LLC, Crewe Outpatient Imaging, LLC, and Imaging Services of Richmond, LLC. CJWH is under the corporate umbrella of HCA Healthcare, Inc.

The proposed project is to be located at Chesterfield ER (CER) at 9630 and 9640 Iron Bridge Road, Chesterfield, Virginia 23832. CER is situated in Planning District (PD) 15, located within Health Planning Region (HPR) IV.

### **Background**

VHI reported data on 42 computed tomographic (CT) scanners in PD 15 for 2021, the latest year for which such data are available. Thirty-one of these were reported by acute care hospitals (one was a long-term care acute care hospital) and 11 were freestanding facilities. The hospital-based scanners averaged 10,015 procedures per CT scanner, 135% of the State Medical Facilities Plan (SMFP) threshold, and freestanding scanners averaged 3,246 procedures per scanner (44% of the SMFP threshold). In aggregate, CT scanners in PD 15 reported volumes equal to 111% of the SMFP standard in 2021 (**Table 1**).

There are a total of 59 CT scanners now authorized in PD 15 (**Table 2**). Five of these are used for CT simulation only and two are intraoperative scanners such that their restricted use should remove their volume from consideration. Only the 52 diagnostic scanners are included in this analysis (**Table 2**). There are six authorized CT sites in PD 15 that are freestanding emergency departments (FSEDs) (**Table 3**). Their volumes are reported to VHI with the hospitals with which they are affiliated. FSEDs do not require a Certificate of Public Need (COPN); however, CT scanners allow for more robust services at this type of facility and do require a COPN. This analysis is to determine need for the CT service.

Table 1. PD 15 CT Scanners, 2021

Facility Name	Total Stationary Units	Total CT Procedures	Procs. per Scanner	% of Utilization Threshold
Acute Hospital				
Bon Secours Memorial Regional Medical Center	3	36,693	12,231	165%
Bon Secours Richmond Community Hospital	1	5,566	5,566	75%
Bon Secours St. Francis Medical Center	2	26,099	13,050	176%
Bon Secours St. Mary's Hospital	4	43,597	10,899	147%
Chippenham Hospital	4	43,744	10,936	148%
Henrico Doctors' Hospital - Forest	4	33,354	8,339	113%
Henrico Doctor's Hospital - Parham Doctors' Hospital	1	12,836	12,836	173%
Henrico Doctor's Hospital - Retreat	1	4,093	4,093	55%
Johnston-Willis Hospital	3	30,834	10,278	139%
VCU Medical Center	7	73,359	10,480	142%
Vibra Hospital of Richmond LLC (LTAC)	1	288	288	4%
Acute Hospital Total	31	310,463	10,015	135%
Freestanding				
Bon Secours Imaging Center Innsbrook	1	1,213	1,213	16%
Bon Secours Westchester Imaging Center	1	6,687	6,687	90%
Chesterfield Imaging	1	5,281	5,281	71%
Independence Park Imaging	1	3,265	3,265	44%
MEDARVA Imaging	1	192	192	3%
NOW Neuroscience, Orthopaedic and Wellness Center	1	3,761	3,761	51%
Richmond Ear Nose and Throat	1	0	0	0%
VCU Medical Center at Stony Point Radiology	1	7,518	7,518	102%
Virginia Cancer Institute - Discovery Drive	1	6,509	6,509	88%
Virginia Cancer Institute - Harbourside	1	3,912	3,912	53%
Virginia Cardiovascular Specialists / Forest Medical Plaza	1	4,214	4,214	57%
Virginia Ear Nose & Throat - Chesterfield	1	528	528	7%
Virginia Ear Nose & Throat - Henrico	1	514	514	7%
Virginia Urology	2	8,554	4,277	58%
Freestanding Total	11	35,702	3,246	44%
PD 15 Totals and Percent of Threshold	42	346,165	8,242	111%

Source: VHI 2021

Table 2. Inventory of Authorized CT Scanners in PD 15

Facility	Total Authorized Scanners	Total Diagnostic Scanners
Bon Secours Chester Emergency and Imaging Center <sup>1</sup>	1	1
Bon Secours Imaging Center at Reynolds Crossing <sup>2</sup>	1	1
Bon Secours Memorial Regional Medical Center	3	3
Bon Secours Richmond Community Hospital	1	1
Bon Secours Short Pump Emergency/Imaging Center	1	1
Bon Secours St. Francis Medical Center	2	2
Bon Secours St. Mary's Hospital <sup>3</sup>	4	3
Bon Secours Westchester Imaging Center	1	1
Buford Road Imaging <sup>4</sup>	1	1
Chester Imaging Center <sup>5</sup>	1	1
Chesterfield Imaging	1	1
Chippenham Hospital	3	3
Hanover Emergency Center <sup>6</sup>	1	1
Henrico Doctor's Hospital - Parham Doctors' Hospital	1	1
Henrico Doctor's Hospital - Retreat	1	1
Henrico Doctors' Hospital - Forest	3	2
Independence Park Imaging	1	1
Virginia Cardiovascular Specialists	1	1
Johnston-Willis Hospital <sup>7</sup>	4	3
Richmond Ear, Nose & Throat	1	1
Richmond Eye & Ear Healthcare Alliance d/b/a Medarva Healthcare	1	1
Richmond Radiation Oncology Center	1	0
Scott's Addition ER 8	0	0
Short Pump, LLC <sup>9</sup>	0	0
Swift Creek ER	1	1
VCU Health Neuroscience, Orthopedic and Wellness Center	1	1
VCU Massey Cancer Center at Hanover Medical Park	1	0
VCU Health System <sup>10</sup>	10	8
VCU Medical Center Adult Outpatient Pavilion <sup>11</sup>	1	1
VCU Medical Center at Stony Point Radiology	1	1
VCU Health Emergency Center at New Kent	1	1
Vibra Hospital of Richmond LLC	1	1
Virginia Cancer Institute - Harbourside	1	1
Virginia Cancer Institute - Discovery Drive	1	1
Virginia Ear Nose & Throat - Chesterfield	1	1
Virginia Ear Nose & Throat - Henrico	1	1
Virginia Urology	2	2
West Creek Medical Center <sup>12</sup>	1	1
Total PD 15 CT Scanners	59	52

Source: DCOPN Records

<sup>&</sup>lt;sup>1</sup> COPN No. VA-04656, operational 5/12/2022.

<sup>&</sup>lt;sup>2</sup> COPN No. VA-04743, operational 5/3/2021; relocated CT from Bon Secours Imaging Center Innsbrook.

<sup>&</sup>lt;sup>3</sup> COPN No. VA-04683; added intraoperative CT Scanner 3/9/2021.

<sup>&</sup>lt;sup>4</sup> Did not report data to VHI in 2021.

<sup>&</sup>lt;sup>5</sup> COPN No. VA-04655; not yet operational.

<sup>&</sup>lt;sup>6</sup> Did not report data to VHI in 2021.

<sup>&</sup>lt;sup>7</sup> COPN No. VA-04657; 3rd CT Scanner added at Brain and Spine Center on JWH campus, operational 5/1/2021.

<sup>&</sup>lt;sup>8</sup> COPN No. VA-04811; to relocate CT Scanner from West Creek Medical Center; not yet operational.

<sup>&</sup>lt;sup>9</sup> COPN No. VA-04823; to relocate CT Scanner from Independence Park Imaging; not yet operational.

<sup>&</sup>lt;sup>10</sup> COPN No. VA-04760; additional CT Scanner dedicated to pediatric care; not yet operational.

<sup>&</sup>lt;sup>11</sup> COPN No. VA-04717; not yet operational.

<sup>&</sup>lt;sup>12</sup> COPN No. VA-04179; operational and relocating to Scott's Addition ER.

**Table 3. Freestanding Emergency Departments, PD 15** 

Facility	Total Scanners	COPN No.	Notes	Affiliated Hospital
Bon Secours Chester Emergency and Imaging Center	1	VA- 04656	opened 5/12/2022	Bon Secours St. Francis
Bon Secours Short Pump Emergency/Imaging Center	1			Bon Secours St. Mary's
Hanover Emergency Center	1			Henrico Doctor's Hospital
Scott's Addition ER		VA- 04811	Relocating CT from West Creek; expected completion 11/30/2024.	Henrico Doctor's Hospital
Swift Creek ER	1			Chippenham & Johnston-Willis
VCU Health Emergency Center at New Kent	1			VCU Health System

Source: DCOPN Documentation

### **Proposed Project**

CJWH proposes to establish a specialized center for CT imaging with one CT scanner at CER. The proposed building will be a newly constructed 12,860 square foot building at 9630 and 9640 Iron Bridge Road, Chesterfield, Virginia. Ownership would be via a 10-year ground lease, renewable every 5 years after the initial term, recorded in **Table 4** as site acquisition costs. The estimated capital cost for the proposed project is \$16,010,208 of which 55.7% would be for direct construction costs. The funding would be through internal resources of HCA Healthcare, Inc., so there are no financing costs associated with the proposed project. Should the proposed project be approved, the CT scanner would be operational July of 2025.

**Table 4. Projected Capital Costs** 

	******
Direct Construction Cost	\$8,914,000
Equipment Not Included in Construction Contract	\$3,205,000
Site Acquisition Costs	\$2,493,208
Site Preparation Costs	\$650,000
Off-Site Costs	\$322,000
Architectural and Engineering Fees	\$426,000
Total Capital Cost	\$16,010,208

Source: COPN Request No. VA-8686

### **Project Definition**

Section 32.1 of the Code of Virginia defines a project, in part as, "The establishment of a medical care facility"; A medical care facility includes "...Specialized centers or clinics or that portion of a physician's office developed for the provision of...computed tomographic (CT) scanning..."

### 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 service or facility will provide or increase access to needed services for residents of the area to be served, and the effects that the proposed service or facility will have on access to needed services in areas having distinct and unique geographic, socioeconomic, cultural, transportation, and other barriers to access to care.

The proposed site of CER is near the intersection of Routes 10 and 288, well-traveled thoroughfares in Chesterfield County. It is not, however, served by public transportation. The proposed site is ten minutes from the closest CT scanner, Bon Secours Chester Emergency and Imaging Center. **Figure 1** shows the proposed site relative to other CT providers in PD 15 and it is in an area of the PD that is not highly concentrated with CT providers.

Table 5. Statewide and PD 15 Total Population Projections and age 65+, 2010-2030

Locality	2010	2020	% Change	2030	% Change	2010-2030 % Change
Virginia	8,001,024	8,655,021	8.17%	9,331,666	7.82%	16.63%
Charles City	7,256	6,982	(3.8%)	6,941	(0.6%)	(4.3%)
Chesterfield	316,236	353,841	11.9%	396,647	12.1%	25.4%
Goochland	21,717	23,547	8.4%	26,702	13.4%	23.0%
Hanover	99,863	109,244	9.4%	119,360	9.3%	19.5%
Henrico	306,935	332,103	8.2%	363,259	9.4%	18.4%
New Kent	18,429	23,474	27.4%	28,104	19.7%	52.5%
Powhatan	28,046	29,909	6.6%	33,440	11.8%	19.2%
Richmond City	204,214	232,533	13.9%	245,483	5.6%	20.2%
TOTAL PD 15	1,002,696	1,111,633	10.9%	1,219,936	9.7%	21.7%

65+

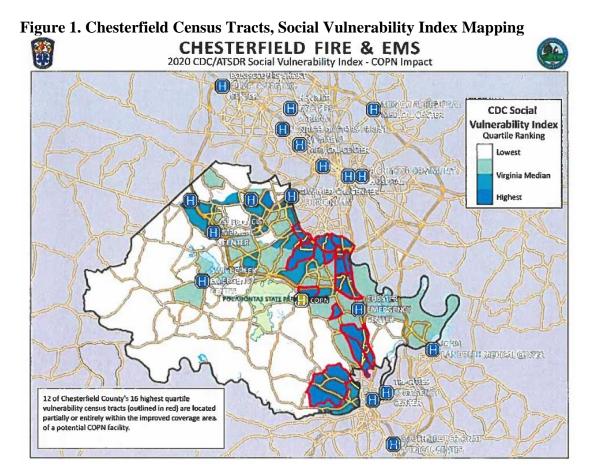
Locality	2010	2020	% Change	Avg Ann % Chg	2030	% Change	Avg Ann % Chg
Charles City	1,214	1,773	46.08%	3.77%	2,189	23.44%	2.13%
Chesterfield	32,878	55,297	68.19%	5.20%	72,476	31.07%	2.74%
Goochland	3,237	5,420	67.43%	5.16%	7,421	36.92%	3.19%
Hanover	13,104	19,807	51.15%	4.11%	27,456	38.62%	3.32%
Henrico	37,924	53,255	40.42%	3.37%	68,003	27.69%	2.47%
New Kent	2,226	4,303	93.32%	6.64%	6,663	54.84%	4.47%
Powhatan	3,407	6,041	77.33%	5.75%	8,552	41.55%	3.54%
Richmond City	22,619	26,352	16.50%	1.50%	31,657	20.13%	1.85%
Total PD 8	116,609	172,249	47.72%	3.88%	224,417	30.29%	2.68%
Virginia	976,937	1,352,448	38.44%	3.22%	1,723,382	27.43%	2.45%

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

In contrast to CT availability, Chesterfield County is the locality with the largest population in PD 15 and is projected to grow 25.4% between 2020 and 2030. That is the second highest growth rate projected among municipalities in the PD, but Chesterfield will increase by the highest number of people, nearly 43,000 during the decade. Virginia overall is expected to grow 16.6% in that same timeframe (**Table 5**).

An assessment of the population aged 65 and older shows that Chesterfield also has the largest population of localities in PD 15 that falls within this age group. Though its average annual change has the third highest projected growth between 2020 and 2030, again, the number of people aged 65 and older projected to be added to Chesterfield County is the highest, 22,419.

Along with its letter of support for the proposed project, Chesterfield Fire & EMS provided a map showing quartile rankings of the Center for Disease Control (CDC)/Agency for Toxic Substances and Disease Registry's (ATSDR) social vulnerability index in the area surrounding the proposed CER (**Figure 1**). From the ATSDR website: "A number of factors, including poverty, lack of access to transportation, and crowded housing may weaken a community's ability to prevent human suffering and financial loss in a disaster. These factors are known as social vulnerability." The map shows that twelve of the sixteen census tracts in Chesterfield County with the highest social vulnerability ratings are in the geography that would be impacted by the proposed CER.



- 2. The extent to which the project will meet the needs of the residents of the area to be served, as demonstrated by each of the following:
  - (i) The level of community support for the project demonstrated by citizens, businesses, and governmental leaders representing the area to be served.

DCOPN received ten letters of support for the proposed project from area physicians, Fire and EMS service providers, the Chesterfield chief of police, Chesterfield Board of Supervisors, the County Administrator and a member of the House of Delegates. These letters referenced reasons for their support, including the following:

- Chesterfield has a large and growing population.
- The population that would most benefit from services is the 65 and older population, also large and fast-growing in Chesterfield.
- Additional infrastructure is needed as the population grows.
- The proposed project would provide access in the area to services related to cardiac events, stroke, psychiatric episodes, and accidents.
- EMS leadership described the increase in demand for emergency transport services in the area and noted that closer access means shorter transport times and better availability for emergency crews.
- The proposed project would provide access to residents at "highest risk" (highest social vulnerability index).

DCOPN also received a letter from an existing provider, VCU Health. The letter does not oppose the proposed project, per se, but it expresses concerns: "...CJW's proposal represents HCA's fifth FSED in PD 15, on the heels of its Scott's Addition FSED, approved just four months ago." DCOPN does not authorize or regulate FSEDs but does authorize CT services that are often located within them. Inasmuch as these facilities offer CT services, they are included in the assessment of the proposed project. There are three authorized CT scanners in PD 15 that are or will be located within FSEDs that are affiliated with HCA subsidiaries: Hanover Emergency Center, Swift Creek ER and Scott's Addition ER, where the CT scanner at West Creek Medical Center will relocate.

The letter also expresses concern that the application did not provide enough detail for public comment. For example, a breakdown of inpatient, outpatient and emergency CT volumes and patient origins that would allow for the assessment by existing providers of the risk of impact the proposed project would have on existing providers is not included. This level of detail is not specifically a requirement for the assessment of public need for CT services. The applicant provided data to substantiate that the proposed project would be within the primary service area of Chippenham Hospital's CT services, which is a requirement.

A concern was also expressed about the proximity of the proposed project to VCUHS's Courthouse Landing Pavilion, but that facility does not offer CT services and is not part of the analysis of public need for CT imaging.

Section 32.1-102.6 B of the Code of Virginia directs DCOPN to hold one public hearing on each application 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-8686 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.

DCOPN posted a public notice on January 13, 2023, inviting public comment on the proposed project. The public comment period closed on February 27, 2023. The above-referenced letters of support and letter of concern were received prior to the close of the public comment period.

(ii) The availability of reasonable alternatives to the proposed service or facility that would meet the needs of the population in a less costly, more efficient, or more effective manner.

Both Chippenham Hospital and Johnston-Willis Hospital have demonstrated CT volumes above the SMFP threshold for the addition of a CT scanner, so status quo would result in increased utilization of already highly utilized CT services. Adding another scanner on either of the hospital campuses (Chippenham Hospital or Johnston-Willis Hospital) would further increase the number of patients that need to seek care on the hospital campuses. Locating the proposed additional CT scanner in a fast-growing area of Chesterfield County that is in Chippenham Hospital's primary service area is reasonable.

(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  $\S$  32.1-102.6.

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

(iv) Any costs and benefits of the project.

The projected capital costs of the proposed project are \$16,010,208 (**Table 3**). These costs equate to \$1245 per square foot and are comparable to similar projects recently authorized. COPN No. VA-04823 authorized a CT scanner at Short Pump Imaging, LLC, also in PD 15, in January 2023 with a projected capital cost of \$16, 855,536 (\$1940 per square foot); and VA-04803 approved in August 2022, authorized a CT scanner to be placed in a FSED in PD 4 with a projected capital cost of \$14,130,000 (\$1107 per square foot).

The proposed project would support medical infrastructure in a highly populated, high growth and well-traveled area of PD 15, shortening some patient transport trips for emergency and other services, and improving the availability of those services in their community. The proposed project would be beneficial particularly for emergency, cardiac and stroke events that require CT imaging to diagnose, in a county that has a large and growing older population.

(v) The financial accessibility of the project to the residents of the area to be served, including indigent residents.

The applicant states that CER and the supporting CT scanner will accept all patients, regardless of ability to pay or payment source. CJW Medical Center provided charity care in 2020, the latest year for which data are available, in the amount of 1.15% of gross patient revenue. This is less than the average of 1.3% that year for HPR IV hospitals (**Table 6**).

**Table 6. HPR IV 2020 Charity Care Contributions** 

2020 Charity Care Contributions at or below 200% of Federal Poverty Level				
Hospital	Gross Patient Revenues	Adjusted Charity Care Contribution	Percent of Gross Patient Revenue	
Bon Secours St. Francis Medical Center	\$909,600,664	\$28,930,399	3.18%	
Bon Secours Richmond Community Hospital	\$916,350,189	\$28,612,659	3.12%	
Bon Secours St. Mary's Hospital	\$2,028,786,995	\$51,459,409	2.54%	
Bon Secours Memorial Regional Medical Center	\$1,425,167,696	\$28,386,279	1.99%	
Centra Southside Community Hospital	\$324,125,273	\$5,447,210	1.68%	
Sentara Halifax Regional Hospital	\$279,469,170	\$3,668,115	1.31%	
CJW Medical Center	\$7,560,037,769	\$86,592,596	1.15%	
VCU Health System	\$6,172,966,084	\$69,698,687	1.13%	
John Randolph Medical Center	\$1,032,491,952	\$10,903,791	1.06%	
Henrico Doctors' Hospital	\$4,859,466,138	\$51,444,601	1.06%	
VCU Community Memorial Hospital	\$317,168,977	\$1,932,837	0.61%	
Bon Secours Southern Virginia Regional Med Center	\$183,898,466	\$1,059,319	0.58%	
Bon Secours Southside Regional Medical Center	\$1,875,804,250	\$5,837,542	0.31%	
Vibra Hospital of Richmond LLC	\$145,408,947	\$0	0.00%	
Cumberland Hospital for Children and Adolescents	\$54,279,874	\$0	0.00%	
Total Facilities			15	
Median			1.1%	
Total \$ & Mean %	\$28,085,022,444	\$373,973,444	1.3%	

Source: VHI

The pro forma provided by CJWH (**Table 7**) projects charity care for the proposed project would be 1.3%, consistent with the average percent of gross patient revenue provided as charity care across facilities in HPR IV in 2020. 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. Should the proposed project be approved, CJWH would be subject to a charity care condition of the 1.3%, in addition to any new requirements as found in the revised § 32.1-102.4B of the Code of Virginia.

Table 7.	Pro Forma	, CT Services,	CER

	Year 1	Year 2
Gross Revenue	\$ 22,913,452	\$ 24,684,782
Contractual Adjustments	\$ 20,622,107	\$ 22,216,304
Charity	\$ 297,875	\$ 320,902
Bad Debt	\$ 311,623	\$ 335,713
Deductions	\$ 21,231,605	\$ 22,872,919
Net Revenue	\$ 1,681,847	\$ 1,811,863
Operating Expenses	\$ 1,072,777	\$ 1,124,060
Net Income	\$ 609,070	\$ 687,803

Source: COPN Request No. VA-8686

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

DCOPN did not identify any other factors not discussed elsewhere in this staff analysis report that may be relevant.

### 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, DCOPN will consider the consistency of the proposed project with the predecessor of the SHSP, the State Medical Facilities Plan (SMFP).

# 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.

The heavy black line in **Figure 2** identifies the boundary of PD 15. The labeled, blue icon with the white "H" marks the location of the proposed project. The white icons with blue "H" icons mark the locations of all other existing CT services located in PD 15. The light blue shaded area illustrates the area of PD 15 and the surrounding area that is currently within a 30-minute drive of existing CT services. The area that would be within 30 minutes of the proposed CER fall within the existing 30-minute drive of PD 15 CT services.

Referencing **Table 8** and **Figure 2**, the most populated localities in PD 15 are completely accessible within 30 minutes to CT services within the planning district. The municipalities of Chesterfield, Henrico and Richmond City account for 82.6% of the PD 15 population. There are small areas on the edges of PD 15 that are within 30 minutes of CT sites in surrounding planning districts, shown

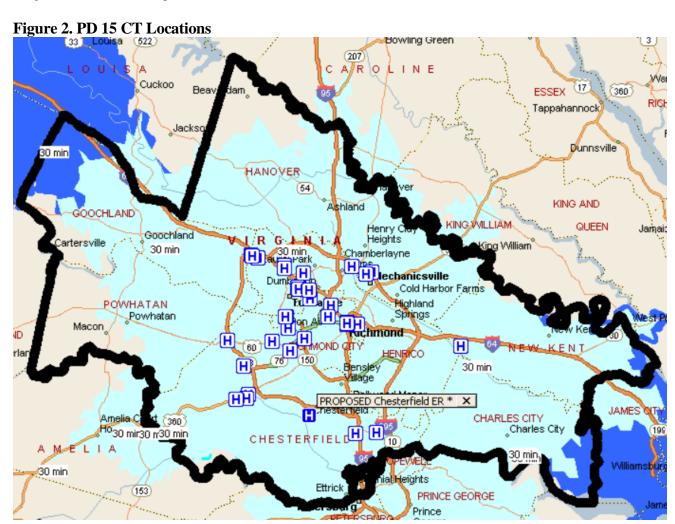
by the darker blue shaded area. It is reasonable to assert that CT services are available within a 30-minute drive for at least 95% of the population of PD 15 and the proposed project would not provide additional access within a 30-minute drive within PD 15.

Table 8. Population by Municipality in PD 15

Locality	2020	Percent of Total PD 15 Population
Charles City	6,982	0.6%
Chesterfield	353,841	31.8%
Goochland	23,547	2.1%
Hanover	109,244	9.8%
Henrico	332,103	29.9%
New Kent	23,474	2.1%
Powhatan	29,909	2.7%
Richmond City	232,533	20.9%
Total PD 15	1,111,633	100.0%

**Source:** U.S. Census, Weldon Cooper Center Projections

(August) and DCOPN (interpolations)



### 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.

VHI data reports that the then-authorized PD 15 CT inventory performed a collective CT volume of 346,165 CT procedures (8,242 procedures per scanner) in 2021 (**Table 1**). Based on these data, and considering subsequent additions to the PD 15 CT inventory, DCOPN has calculated a current surplus of 5 CT scanners in PD 15 as follows:

Needed CT units =  $346,165 \div 7,400 = 47$ 

Utilization Percentage in 2021: 111.4% (excludes CT scanners used for CT simulation or dedicated intraoperative scanners)

Current number of PD 15 authorized CT scanners: 52 (excluding CT scanners used for CT simulation or dedicated intraoperative scanners)

### CT scanner surplus = 5

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 scanner sin such health planning district.

DCOPN has excluded existing CT scanners used solely for simulation prior to the initiation of radiation therapy and restricted use intraoperative only CT scanners from its inventory and average utilization of diagnostic CT scanners in PD 15 with respect to the proposed project.

### 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.

Chippenham Hospital reported CT volumes to VHI that equated to 148% and Johnston-Willis Hospital reported volumes equal to 139% of this SMFP threshold in 2021. CJWH proposes to expand its CT services at a separate location within its primary service area consistent with this standard. CJWH notes that the proposed site is closer to many residents that currently seek CT services at Chippenham Hospital. CJWH proposes to establish CER as a FSED with one CT

scanner to help address the need to expand the CT service at Chippenham Hospital as well as providing CT imaging support for emergency patients.

CJWH has provided Chippenham Hospital's CT patient origins and a map of the primary service area from where patients reside that seek CT imaging at Chippenham Hospital. The proposed CER site falls well inside its primary service area boundaries. There are five CT sites within 15 minutes of the proposed CER and the nearest provider of CT services ten minutes from the proposed site such that the proposed project is not likely to impact any single existing provider significantly.

### 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.
- 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.

This standard is not applicable since the proposed project will not add or expand mobile CT services or convert a mobile service to a fixed site service.

### 12VAC5-230-130. Staffing.

CT services should be under the direction or 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 service or facility fosters institutional competition that benefits the area to be served while improving access to essential health care services for all persons in the area to be served.

The proposed project would be located in a highly populated and growing area of PD 15 that has a relatively low density of CT providers. There are several existing CT sites within a 30-minute drive time of the proposed site that are affiliated with HCA, Bon Secours, VCU and independent specialty practices. No monopoly exists and competition appears to be healthy. The proposed project may foster beneficial institutional competition, as well as decant volumes from over-utilized CJWH facilities; however, it is not likely to decrease utilization of other existing CT providers substantially.

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

CJWH reported volumes to VHI in 2020 and 2021 well over the SMFP threshold for their CT scanners, even as COVID restrictions were in place. The proposed project is likely to decant volumes from these highly utilized hospital-based sites. HCA Healthcare, Inc. is the parent company of the applicant and operates hospitals and FSEDs in PD 15, including Swift Creek ER, also in Chesterfield, about 11 miles/15 minutes from the proposed project.

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

The estimated capital cost of \$16,010,208 (**Table 4**) is comparable to other similar projects authorized recently. The applicant would fund the proposed project through internal resources of its parent company, so no financing costs are associated with the proposed project. The pro forma provided in the application indicates the expectation of a positive net income the first year. The proposed project would require an additional 4.7 FTEs. Though this is a relatively small number, DCOPN notes challenges exist in recruitment of staff and may create competition among area providers for human resources.

- 7. The extent to which the project provides improvements or innovations in the financing and delivery of health services, as demonstrated by:
  - (i) The introduction of new technology that promotes quality, cost effectiveness, or both in the delivery of health care services.

The proposed project does not offer 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 services on an outpatient basis.

The proposed project is an outpatient center for the provision of CT imaging. It would support emergency services at a FSED and is likely to decant hospital-based CT services at CJWH.

(iii) Any cooperative efforts to meet regional health care needs.

No such cooperative efforts are identified.

(iv) At the discretion of the Commissioner, any other factors as may be appropriate.

DCOPN did not identify any other factors not discussed elsewhere in this staff analysis report that may be relevant.

- 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.

(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.

Not applicable. The applicant does not describe affiliations with a medical school or public institution of higher education with regard to the proposed project.

### **DCOPN Staff Findings and Conclusions**

CJWH proposes to establish a specialized center with one CT Scanner at Chesterfield ER. Though CT services are already accessible within 30 minutes of 95% of the population of PD 15, placement of an additional CT in an accessible area of this highly populated, high-growth county will improve geographic access. It would also increase access for socially vulnerable populations.

CJWH demonstrates high utilization and currently has patients coming to its hospitals for CT services from Chesterfield County, such that the proposed new service would not likely significantly reduce utilization of existing providers.

The proposed project is generally consistent with the 8 Required Considerations of the Code of Virginia and the relevant provisions of the State Medical Facilities Plan.

There is substantial community support for the proposed project, and generally for improving health care infrastructure in Chesterfield County due to its high population, growth and growing 65 and older population. There is no known opposition to the request.

The status quo is not sustainable due to demonstrated high utilization at CJWH and no reasonable alternative to the proposed project is identified. The proposed project is more beneficial than the status quo.

Capital costs are reasonable for the proposed project and the benefits to the community are considerable. The proposed project appears feasible in the short- and long-term.

Services provided would be financially accessible to the population served by the proposed project.

### **DCOPN Staff Recommendations**

The Division of Certificate of Public Need recommends the **conditional approval** of Chippenham & Johnston-Willis Hospitals, Inc.'s COPN Request number VA-8686 to establish a specialized center for the provision of CT services with one CT scanner for the following reasons:

1. The proposed project will improve access for socially vulnerable populations.

- 2. The proposed project is generally consistent with the 8 Required Considerations of the Code of Virginia and the relevant provisions of the State Medical Facilities Plan.
- 3. There is substantial community support for the proposed project, and no known opposition.
- 4. The status quo is not sustainable due to demonstrated high utilization the applicant's hospital-based sites. No reasonable alternative to the proposed project is identified.
- 5. The proposed project appears feasible in the short- and long-terms, capital costs are reasonable and benefits to the community considerable.
- 6. Services would be financially accessible to the population served by the proposed project.

DCOPN's recommendation is contingent upon Chippenham & Johnston-Willis Hospitals, Inc.'s agreement to the following charity care condition:

Chesterfield ER will provide CT services to all persons in need of this service, regardless of their ability to pay, and will facilitate the development and operation of primary medical care services to medically underserved persons in PD 15 in an aggregate amount equal to at least 1.3% of Chesterfield ER's gross patient revenue derived from CT services. 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. Chesterfield ER 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 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.

Chesterfield ER will provide CT 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, Chesterfield ER will facilitate the development and operation of primary and specialty medical care services in designated medically underserved areas of the applicant's service area.