VIRGINIA DEPARTMENT OF HEALTH

Office of Licensure and Certification

Division of Certificate of Public Need

Staff Analysis

October 19, 2020

COPN Request No. VA-8518
University of Virginia Medical Center
Charlottesville, Virginia
Add 84 Inpatient Beds at University Hospital

Applicant

The University of Virginia Medical Center (UVAMC) is a state-owned, academic health care center operated under the authority of The Rector and Visitors of the University of Virginia. UVAMC is located in Charlottesville, Virginia, Planning District (PD) 10, Health Planning Region (HPR) I.

Background

UVAMC is a comprehensive tertiary teaching hospital. The medical center is composed of an integrated network of primary and specialty services that include the Emily Couric Clinical Cancer Center, the UVA Children's Hospital, the Heart and Vascular Center, the Digestive Health Center of Excellence, a Level I Trauma Center, the Blue Ridge Poison Center, and more than 60 outpatient clinics located on the main hospital campus and in surrounding Albemarle County. As demonstrated in the tables below, the medical/surgical bed inventory of PD 10 consists of 803 medical/surgical beds (**Table 1**), of which 141 are intensive care (ICU) beds. For 2018, the PD 10 medical/surgical inventory operated at a collective occupancy of 74.7%, and the ICU inventory operated at a collective occupancy of 89.4%.

On August 10, 2015, the Division of Certificate of Public Need (DCOPN) received a registration for capital expenditure from UVAMC to build a six-story patient bed tower adjacent to the existing hospital[1]. In the registration, UVAMC stated that they experienced an average of 33 blocked beds per day resulting from semi-private bed mix limitations. The applicant stated that rising patient acuity levels, coupled with institutional goals for increasing efficiency and improving patient safety, were better addressed in a private room environment. The applicant has since stated that, informed by the overall increasing acuity of patients at UVAMC, the applicant has acquired a new perspective on its need for beds. The bed tower was initially constructed with three fit-out patient floors and three shell floors. Each of the fit-out patient floors house 28 beds, for a total of 84 beds on the first through third floors.

[1] Capital expenditure registration VA-E-11-15

On March 22, 2020, Governor Ralph Northam (Governor) issued Executive Order 52 (EO 52), which allowed the State Health Commissioner (Commissioner) to authorize the temporary increase in beds at any general hospital or nursing home as determined necessary by the Commissioner to respond to increased demand for beds resulting from the COVID-19 pandemic. On March 27, 2020, UVAMC submitted a request that the Commissioner authorize the temporary addition of 84 acuity adaptable medical/surgical beds to prepare for a possible increase in COVID-19 cases in PD 10. These 84 beds would be placed on the fourth through sixth floors of the patient tower that were initially built as shell floors for future expansion. On April 3, 2020, the Commissioner approved UVAMC's request to add, temporarily, 84 medical/surgical beds. These beds were placed into service by April 28, 2020. As of October 14, 2020, there have been 4,049 COVID-19 cases in the Blue Ridge Health District, where UVAMC is located, 204 hospitalizations, and 74 deaths[2].

Table 1. PD 10 Medical/Surgical Bed Inventory[3]: 2018

Facility	Licensed Beds	Staffed Beds	Available Days[4]	Patient Days	Occupancy Rate
Sentara Martha Jefferson Hospital	176	150	64,240	35,206	54.8%
University of Virginia Medical Center	587	536	195,640	152,317	77.9%
UVA Transitional Care Hospital	40	40	14,600	10,326	70.7%
TOTAL/Average	**803**	**726**	**274,480**	**197,849**	**72.1%**

Source: VHI (2018) and DCOPN Records

Table 2. PD 10 ICU Bed Inventory: 2018

Facility	Licensed Beds	Staffed Beds	Available Days	Patient Days	Occupancy Rate
Sentara Martha Jefferson Hospital	12	12	4,380	3,242	74.0%
University of Virginia Medical Center	129	104	37,960	34,622	91.2%
TOTAL/Average	**141**	**116**	**42,340**	**37,864**	**89.4%**

Source: VHI (2018) and DCOPN Records

Proposed Project

UVAMC proposes to add permanently the 84 beds temporarily authorized by the Commissioner in anticipation of a potential COVID-19 outbreak in the area as 50 medical/surgical beds and 34 ICU beds. These beds would remain in the fourth, fifth, and sixth floors of the patient tower. The applicant asserts that they have an institutional need to expand both their medical/surgical and ICU bed inventories. As the beds were already temporarily approved to treat COVID-19 patients, and placed into service by April 28, 2020, they would be able to be placed into service immediately.

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[2] https://www.vdh.virginia.gov/coronavirus/covid-19-in-virginia/

[3] The Adjudication Officer's case decision for COPN No. VA-04682 held that DCOPN was in error by including obstetric, intensive care, and pediatric patient days in its calculations for medical/surgical bed need, despite those beds being fungible and accordingly, able to convert to medical/surgical beds without COPN authorization. However, because obstetric, intensive care, and pediatric beds can be easily converted to medical/surgical beds, thereby changing the medical/surgical inventory without first obtaining COPN authorization, DCOPN maintains that obstetric, intensive care, and pediatric beds should be included in the medical/surgical inventory and the corresponding patient days used for medical/surgical bed need calculations. As noted by the applicant on p. 19 of their application, this occurred in 2019 when 8 obstetric beds were reallocated to hematology oncology, resulting in a decrease of obstetric beds to 31 and an increase in medical/surgical beds to 372.

[4] The available days in VHI's data were calculated incorrectly in some cases by using the number of staffed beds rather than the number of licensed beds. DCOPN has corrected this error where necessary.

The projected capital costs of the proposed project total $4,973,492 (**Table 3**). The applicant will fund the entire project using operating cash. Accordingly, there are no financing costs associated with this project.

Table 3. UVAMC Projected Capital Costs

Equipment Not Included in Construction Contraction	$4,973,492
TOTAL Capital Costs	**$4,973,492**

Source: COPN Request No. VA-8518

Project Definitions

Section 32.1-102.1:3 of the Code of Virginia (the Code) defines a project, in part, as "an increase in the total number of beds…in an existing medical care facility." Section 32.1-3 of the Code defines a medical care facility, in part, as "any institution…,whether or not licensed or required to be licensed by the Board…, whether operated for profit or nonprofit, and whether privately owned or privately operated or owned or operated by a local governmental unit, (i) by or in which health services are furnished, conducted, operated, or offered for the prevention, diagnosis, or treatment of human disease, pain, injury, deformity, or physical condition, whether medical or surgical, of two or more nonrelated persons who are injured or physically sick…"

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

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

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

The applicant proposes to expand their medical/surgical and ICU bed capacity by making the temporarily approved COVID-19 beds housed on floors four through six of the new bed tower permanent through the issuance of a certificate. As discussed in greater detail below, UVAMC has claimed an institutional need to expand its medical/surgical and ICU bed inventories. As such, approval of the project will increase access to inpatient services to residents of the applicant's primacy service area (PSA).

Geographically, UVAMC is readily accessible from I-64, US-29 and US-250. Additionally, public transportation is readily available via a Charlottesville Transit Service and Jefferson Area United Transit, Inc. Finally, the applicant states that there is ample public parking at UVAMC in hospital owned parking garages.

The most recent Weldon-Cooper data projects a total PD 10 population of 287,829 residents by 2030 (**Table 4**). This represents an approximate 22.6% increase in total population from 2010 to 2030. Comparatively, Weldon-Cooper projects the total population of Virginia to increase by approximately 16.6% for the same period. With regard to the City of Charlottesville specifically, Weldon-Cooper projects a total population increase of approximately 20.5% from 2010 to 2030.

With regard to the 65 and older age cohort, Weldon-Cooper projects a much more rapid increase among PD 10 as a whole than for the City of Charlottesville. Specifically, Weldon-Cooper projects an increase of approximately 90% in residents age 65 and over for PD 10 as a whole from 2010 to 2030, while an increase of only 57% is projected among the same age cohort for the City of Charlottesville (**Table 5**). UVAMC notes in their application, however, that only 32.7% of their patient days in 2019 were generated by residents of PD 10, and provides data to support these assertions. An additional 33% were generated from residents of other planning districts within HPR I, 29.1% from other areas of Virginia, and 5.2% from outside the state.

DCOPN did not identify any additional geographic, socioeconomic, cultural, transportation, and other barriers to access to care.

Table 4. PD 10 and Statewide Total Population Projections, 2010-2030

Locality	2010	2020	% Change	2030	% Change	2010-2030 % Change
Albemarle	98,970	111,039	12.2%	125,718	13.2%	27%
Charlottesville City	43,475	50,714	16.7%	52,376	3.3%	20.5%
Fluvanna	25,691	26,965	5.0%	30,258	12.2%	17.8%
Greene	18,403	20,348	10.6%	22,669	11.4%	23.2%
Louisa	33,153	36,737	10.8%	41,959	14.2%	26.6%
Nelson	15,020	14,828	-1.3%	14,850	0.1%	-1.1%
Total PD 10	**234,712**	**260,631**	**11.0%**	**287,829**	**10.4%**	**22.6%**
Virginia	8,001,024	8,655,021	8.2%	9,331,666	7.8%	16.6%

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

Table 5. PD 10 Population Projections for 65+ Age Cohort, 2010-2030

Locality	2010	2020	% Change	2030	% Change	2010-2030 % Change
Albemarle	14,124	21,417	51.6%	27,028	26.2%	91.4%
Charlottesville City	4,017	4,711	17.3%	6,306	33.9%	57%
Fluvanna	4,022	5,799	44.2%	7,366	27%	83.1%
Greene	2,345	3,836	63.6%	5,442	41.9%	132.1%
Louisa	4,796	7,826	63.2%	10,691	36.6%	122.9%
Nelson	2,988	4,124	38%	4,525	9.7%	51.4%
Total PD 10	**32,292**	**47,712**	**47.8%**	**61,357**	**28.6%**	**90%**
Virginia	976,937	1,352,448	38.4%	1,723,382	27.4%	76.4%

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

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 over ninety letters of support from members of the public, physicians associated with UVAMC, State Senator R. Creigh Deeds, State Delegate Sally Hudson, the president and CEO of Mary Washington Healthcare, Dr. Michael McDermott, and the president and CEO of Augusta Health, Mary N. Nammix. Collectively, these letters stated

that UVAMC has an institutional need for the additional beds. Moreover, these letters express that these beds are necessary should another health emergency arise. Finally, these letters express that these beds will assist and advance UVAMC's teaching and research missions by creating additional direct patient care experiences.

Public Hearing
DCOPN provided notice to the public regarding this project on August 10, 2020. The public comment period closed on September 24, 2020. No public hearing was requested by the applicant, the Commissioner, an interested party, or member of the public, so none was held.

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

Neither DCOPN nor the applicant identified a reasonable alternative to the proposed project. The status quo is not a reasonable alternative to the proposed project. As discussed in greater detail below, UVAMC has an institutional need to increase its medical/surgical and ICU bed inventories. Additionally, as UVAMC plans to bring four new operating rooms (ORs) online in 2021, the need for both types of beds is likely to continue to grow. Finally, as discussed below, there are no beds within the UVA Health System that could be transferred to UVAMC without creating a deficit at the facility. As such, DCOPN concludes that the status quo is not a reasonable alternative to the proposed project.

(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 I designated by the Virginia Department of Health to serve as the Health Planning Agency for PD 10. Therefore, this consideration is not applicable to the review of either proposed project.

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

The total capital and financing cost for the project is $4,973,492 (**Table 3**). The costs for the project are significantly less than previously approved projects to add new acute care beds. The applicant asserts that this is because the proposed beds would be placed in the top three floors of the bed tower that, as part the capital expenditure to build the bed tower, were constructed as shell space to eventually house these beds. However, the sole capital expense associated with the project is the necessary equipment and furnishings for the rooms in which the beds are located. Based on these costs, DCOPN is led to conclude that much more than mere shell space was constructed as part of the original capital expenditure. As such, DCOPN finds the costs associated with the proposed project cannot be accurately compared to other projects where beds are added to a hospital.

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

The applicant asserts that there are no restrictions or limitations for patients to use UVA Health System services, and that UVAMC treats all patients regardless of their ability to pay. As **Table 6** below demonstrates, UVAMC provided 5.88% of its gross patient revenue in the form of charity care in 2018. This percentage was the highest level of charity care provided by all reporting facilities in HPR I in 2018. In accordance with section 32.1-102.4.B of the Code of Virginia, should the proposed project be approved, UVAMC is expected to provide a level of charity care for total gross patient revenues that is no less than the equivalent average for charity care contributions in HPR I.

Table 6: HPR I 2018 Charity Care Contributions

Health Planning Region I 2018 Charity Care Contributions at or below 200% of Federal Poverty Level			
Hospital	**Gross Patient Revenues**	**Adjusted Charity Care Contribution**	**Percent of Gross Patient Revenue**
University of Virginia Medical Center	$5,458,582,571	$320,837,238	5.88%
Culpeper Regional Hospital	$353,170,660	$20,212,457	5.72%
Carilion Stonewall Jackson Hospital	$111,421,225	$6,377,158	5.72%
Sentara RMH Medical Center	$936,446,646	$49,668,275	5.30%
Augusta Medical Center	$950,090,570	$43,074,941	4.53%
Shenandoah Memorial Hospital	$133,239,115	$5,104,392	3.83%
Warren Memorial Hospital	$144,458,311	$5,453,245	3.77%
Martha Jefferson Hospital	$680,999,557	$24,602,596	3.61%
Page Memorial Hospital	$61,523,920	$2,121,843	3.45%
Spotsylvania Regional Medical Center	$509,827,047	$16,733,022	3.28%
Mary Washington Hospital	$1,395,008,159	$41,522,514	3.03%
Stafford Hospital Center	$295,274,352	$8,357,218	2.83%
Winchester Medical Center	$1,489,750,189	$37,306,401	2.50%
Fauquier Hospital	$444,728,304	$10,241,560	2.30%
Bath Community Hospital	$22,027,611	$471,192	2.14%
UVA Transitional Care Hospital	$72,568,503	$1,273,051	1.80%
Total $ & Mean %	**$12,986,548,237**	**$592,084,052**	**4.5%**

Source: 2018 VHI Data

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

Within the application, UVAMC discusses the transition of the current pandemic into an endemic state. To the degree to which the applicant is arguing that the proposed project should be approved based on the potential resurgence of COVID-19, or that another health emergency might occur, as suggested in the letters of support received, DCOPN rejects this assertion as a valid reason to request additional beds. The approach of approving and staffing beds for a highly uncommon worst case scenario flies in the face of several of the guiding principles of SMFP expressed in 12VAC5-230-30. The first principle listed in this section states that "[t]he COPN program is based on the understanding that excess capacity or underutilization of medical facilities are detrimental to both cost effectiveness and quality of

medical services in Virginia." Moreover, the final principle listed in this section states the "[t]he COPN program discourages the proliferation of services that would undermine the ability of essential community providers to maintain their financial viability." Maintaining and staffing beds in anticipation of another health emergency that may never come is directly contrary to both of these principles.

Additionally, using the possible resurgence of COVID-19 or another health emergency to justify making beds temporarily approved under EO 52 sets a dangerous precedent that DCOPN strongly rejects. The Governor, by limiting the approval of these beds contingent on the duration of EO 52, clearly did not intend for these temporarily approved beds to exist past EO 52's expiration. As such, use of a potential resurgence to justify approval would run contrary to the clear intent of the Governor's Executive Order creating these beds. Approval of this project must be in spite of the beds' current temporary approval to address the COVID-19 crisis, rather than because of it, and should be based solely on the clear need within the planning district established under the Eight Considerations.

3. The extent to which the proposed project is consistent with the State Health Services Plan;

Section 32.1-102.2:1 of the Code of Virginia calls for the State Health Services Plan Task Force to develop, 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).

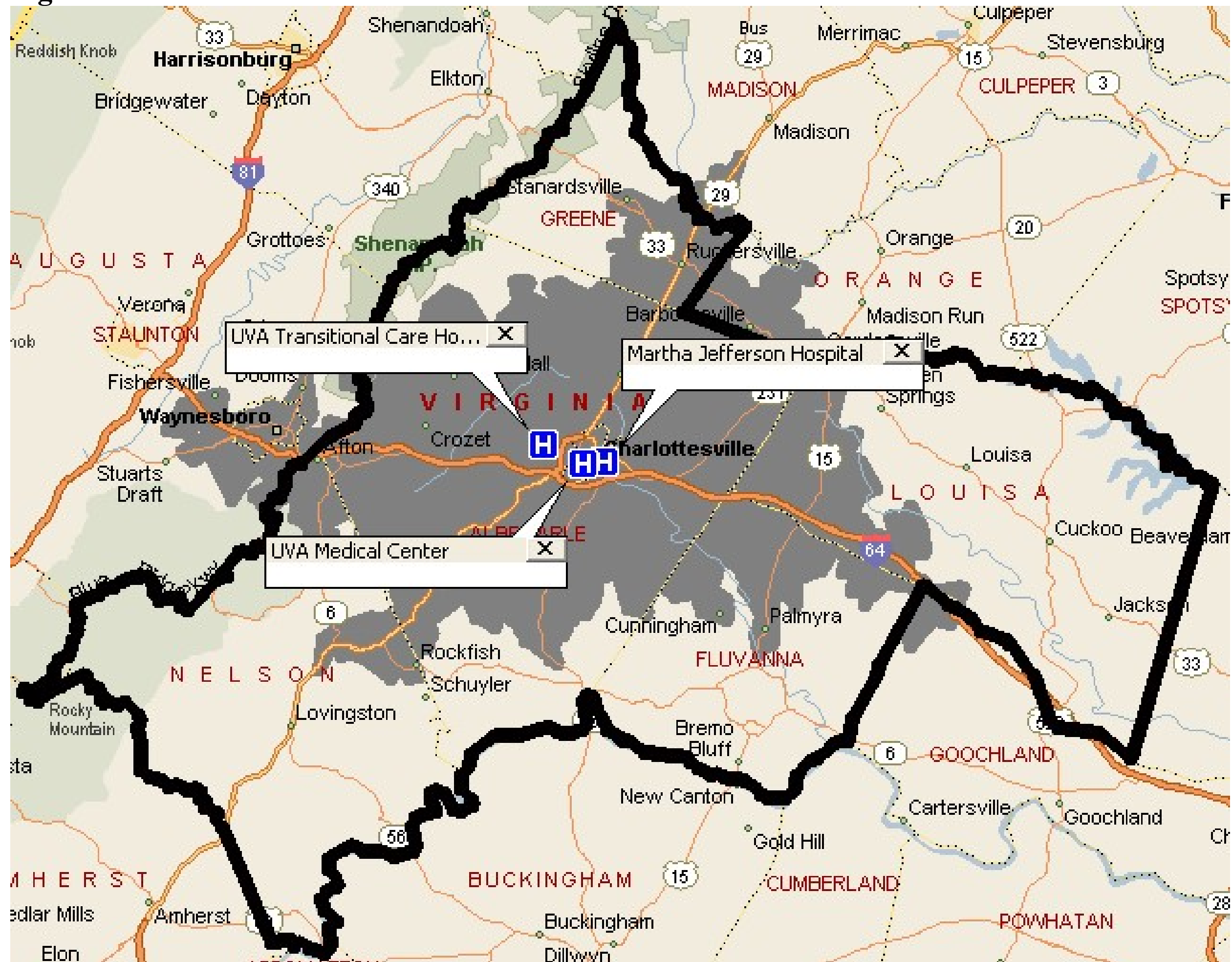
The State Medical Facilities Plan (SMFP) contains the criteria and standards for the addition of medical/surgical beds. They are as follows:

Part VI. Inpatient Bed Requirements

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

The heavy dark line in **Figure 1** identifies the boundary of PD 10. The grey shaded area includes all locations that are within a 30-minute drive one way under normal conditions of inpatient bed services in PD 10. Given the amount of shaded area, it is reasonable to conclude that medical/surgical and ICU services are not currently available within 30-miniutes normal driving time, one way, under normal conditions of 95% of the population of PD 10. However, as the provider of the substantial majority of beds within the planning district, approval of the project will not increase the accessibility of medical/surgical and ICU bed services for those residents within the planning district that are currently outside the 30-minute drive one way under normal circumstances.

Figure 1.



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

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

1. **The resulting number of beds for each bed category contained in this article does not exceed the number of beds projected to be needed for that health planning district for the fifth planning horizon year; and**
2. **The average annual occupancy based on the number of beds in the health planning district for the relevant reporting period is:**
    a. **80% at midnight census for medical/surgical or pediatric beds;**
    b. **65% at midnight census for intensive care beds.**

B. For proposals to convert under-utilized beds that require a capital expenditure with an expenditure exceeding the threshold amount as determined using the formula contained in subsection C of this section, consideration may be given to such proposal if:

1. **There is a projected need in the applicable category of inpatient beds; and**
2. **The applicant can demonstrate that the average annual occupancy of the converted beds would meet the utilization standard for the applicable bed category by the first year of operation.**

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

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

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

Where:
A = the capital expenditure threshold amount for the previous year; and
B = the percent increase for the expense category "Medical Care" listed in the most recent year available of the CPI-U of the U.S. Bureau of Labor Statistics.

Not applicable. The applicant is an existing provider of inpatient bed services.

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

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

$$BUR = (IPD / PoP)$$

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

Step 1. PD 10 SMFP Medical/Surgical Bed Use Rate

IPD 2014-2018 Sum of Patient Days Last 5 Years	**Pop** 2014-2018 Sum Population Age 15+ Last 5 Years	**BUR** 2014-2018 Bed Use Rate
956,174	1,035,491	0.9234

Table 6. PD 10 Inpatient Utilization of General Medical/Surgical Services[5] (2014-2018)

	2014	2015	2016	2017	2018	TOTAL & Average
Authorized Beds	803	803	803	803	803	**4,015**
Available Patient Days[6]	293,095	293,095	293,898	293,095	274,480	**1,447,663**
Patient Days	181,974	189,847	191,909	194,595	197,849	**956,174**
Occupancy	62.1%	64.8%	65.3%	66.4%	72.1%	**66.0%**

Source: VHI (2014-2018) and DCOPN interpolations

Table 7. PD 10 Historical and Projected Population (Ages 18+)

	2014	2015	2016	2017	2018	TOTAL 2014-2018	2025 (Projected)
Population	202,486	204,693	206,998	209,403	211,912	**1,035,491**	228,091

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

The medical/surgical bed use rate for 2014-2018 in PD 10 was 0.9234 per capita for the population age 15[7] and over.

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

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

Where:

ProBed = The projected number of medical/surgical beds needed in the health planning district for five years from the current year.
BUR = the bed use rate for the health planning district determined in subdivision 1 of this section.
ProPop = the projected population 18 years of age and older of the health planning district five years from the current year as reported by a demographic program as determined by the commissioner.

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[5] DCOPN again notes that the Adjudication Officer's case decision for COPN No. VA-04682 held that DCOPN was in error by including obstetric, intensive care and pediatric patient days in its calculations for medical/surge bed need, despite these beds being fungible and accordingly, able to convert to medical/surgical beds without COPN authorization. However, because obstetric, intensive care and pediatric beds can be easily converted to medical/surgical beds, thereby changing the medical/surgical inventory without first obtaining COPN authorization, DCOPN maintains that obstetric, intensive care and pediatric beds should be included in the medical/surgical inventory and the corresponding patient days used for medical/surgical bed need calculations.
[6] The available days in VHI's data were incorrectly calculated in some cases by using the number of staffed beds rather than the number of licensed beds. DCOPN has corrected this error where necessary
[7] The Weldon Cooper Center for Public Service projects Virginia population on an annual basis by county/city broken down by age in five-year increments. As such, the calculations above include data for those persons age 15-17.

$$\text{ProBed} = \frac{((0.9234 \times 228{,}091) / 365)}{0.80}$$

ProBed = 721.3

At a medical/surgical average utilization of 80%, there is a need for 722 medical/surgical beds in PD 10 for five years from the current year.

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

NewBed = ProBed – CurrentBed

Where:

NewBed = the number of new medical/surgical beds that can be established in a health planning district, if the number is positive. If NewBed is a negative number, no additional medical/surgical beds should be authorized for the health planning district.
ProBed = the projected number of medical/surgical beds needed in the health planning district for five years from the current year determined in subdivision 2 of this section.
CurrentBed = the current inventory of licensed and authorized medical/surgical beds in the health planning district.

New Bed = 722 – 803
New Bed = (81)

At a medical/surgical average utilization of 80%, there is a calculated **surplus of 81 medical/surgical beds** in PD 10.[8] The applicant's calculations differ from DCOPN in several ways, including, but not limited to, calculating population as 20+ rather than 15+, only counting beds classified by VHI as medical/surgical beds, and not including UVA Transitional Care Hospital, but the applicant still shows a surplus of 16 medical/surgical beds in the planning district.

The applicant states that the SMFP formula adequately calculates need when the planning district has multiple hospitals in a planning district that share relatively similar primary service areas and secondary service areas and offer relatively comparable services, but not for planning districts with unique circumstances such as PD 10. DCOPN notes that far more planning districts do not meet the

[8] The Adjudication Officer's case decision for COPN No. VA-04682 held that "When the PD 15 computational surplus of 380 medical/surgical beds identified by St. Francis is adjusted by the 355 unstaffed medical/surgical beds, the computational surplus is reduced to 25 medical/surgical beds." DCOPN notes that in order for a medical care facility to maintain COPN authorization for an unstaffed bed, the facility must be capable of staffing the bed and putting it back online within a 24-hour period. For this reason, DCOPN maintains that unstaffed beds should be included in the total inventory for medical/surgical beds as well as the total number of available patient days.

criteria detailed by UVAMC in their argument than those that do. As such, application of this exception would invalidate the use of the SMFP formula for the majority of the state. As this could not have been the legislative intent behind the creation of these sections of the SMFP, DCOPN rejects UVAMC's argument that the SMFP formula should be set aside in the calculation of need in PD 10.

12VAC5-230-550. Need for Pediatric Beds.
The number of pediatric beds projected to be needed in a health planning district shall be computed as follows:

1. **Determine the use rate for pediatric beds for the health planning district using the formula:**

   PBUR = (PIPD/PedPop)

   Where:

   PBUR = The pediatric bed use rate for the health planning district.
   PIPD = The sum of total pediatric inpatient days in the health planning district for the most recent five years for which inpatient days data has been reported by VHI; and
   PedPop = The sum of population under 18 years of age in the health planning district for the same five years used to determine PIPD as reported by a demographic program as determined by the commissioner.

2. **Determine the total number of pediatric beds needed to the health planning district in five years from the current year using the formula:**

   $$\text{ProPedBed} = \frac{((\text{PBUR} \times \text{ProPedPop})/365)}{0.80}$$

   Where:

   ProPedBed = The projected number of pediatric beds needed in the health planning district for five years from the current year.
   PBUR = The pediatric bed use rate for the health planning district determined in subdivision 1 of this section.
   ProPedPop = The projected population under 18 years of age of the health planning district five years from the current year as reported by a demographic program as determined by the commissioner.

3. **Determine the number of pediatric beds needed within the health planning district for the fifth planning horizon year as follows:**

   NewPedBed – ProPedBed – CurrentPedBed

   Where:

   NewPedBed = the number of new pediatric beds that can be established in a health planning district, if the number is positive. If NewPedBed is a negative

number, no additional pediatric beds should be authorized for the health planning district.
ProPedBed = the projected number of pediatric beds needed in the health planning district for five years from the current year determined in subdivision 2 of this section.
CurrentPedBed = the current inventory of licensed and authorized pediatric beds in the health planning district.

Not applicable. The applicant is not seeking to expand the number of intensive care beds.

12VAC5-230-560. Need for Intensive Care Beds.
The projected need for intensive care beds in a health planning district shall be computed as follows:

1. **Determine the use rate for ICU beds for the health planning district using the formula:**

$$ICUBUR = (ICUPD / Pop)$$

Where:
ICUBUR = the ICU bed use rate for the health planning district.
ICUPD = The sum of total ICU inpatient days in the health planning district for the most recent five years for which inpatient day data has been reported by VHI; and
Pop = The sum of population 18 years of age or older for adults or under 18 for pediatric patients in the health planning district for the same five years used to determine ICUPD as reported by a demographic program as determined by the commissioner.

Step 1. PD 10 SMFP Medical/Surgical Bed Use Rate

ICUPD 2014-2018 Sum of Patient Days Last 5 Years	**Pop** 2014-2018 Sum Population Age 15+ Last 5 Years	**ICUBUR** 2014-2018 Bed Use Rate
168,402	1,035,491	0.1626

Table 8. PD 10 Inpatient Utilization of Intensive Care Services (2014-2018)

	2014	**2015**	**2016**	**2017**	**2018**	**TOTAL & Average**
Authorized Beds	140	140	140	141	141	**702**
Available Patient Days	51,100	51,100	51,240	51,465	42,340	**247,245**
Patient Days	31,240	33,875	32,865	32,558	37,864	**168,402**
Occupancy	61.1%	66.3%	64.1%	63.3%	89.4%	**68.1%**

Source: VHI (2014-2018) and DCOPN interpolations

The ICU bed use rate for 2014-2018 in PD 10 was 0.1626 per capita for the population age 15[9] and over.

[9] The Weldon Cooper Center for Public Service projects Virginia population on an annual basis by county/city broken down by age in five-year increments. As such, the calculations above include data for those persons age 15-17.

2. **Determine the total number of ICU beds needed for the health planning district, including bed availability for unscheduled admissions, five years from the current year using the formula:**

ProICUBed = ((ICUBUR x ProPop) / 365) / 0.65

Where:

ProICUBed = The projected number of ICU beds needed in the health planning district for five years from the current year;
ICUBUR = The ICU bed use rate for the health planning district as determined in subdivision 1 of this section;
ProPop = The projected population 18 years of age or older for adults or under 18 for pediatric patients of the health planning district five years from the current year as reported by a demographic program as determined by the commissioner.

$$\text{ProICUBed} = \frac{((0.1626 \times 228{,}091) / 365)}{0.65}$$

ProBed = 156.4

At an average utilization of 65%, there is a need for 157 ICU beds in PD 10 for five years from the current year.

3. **Determine the number of ICU beds that may be established or relocated within the health planning district for the fifth planning horizon year as follows:**

NewICUBed = ProICUBed – CurrentICUBed

Where:

NewICUBed = The number of new ICU beds that can be established in a health planning district, if the number is positive. If NewICUBed is a negative number, no additional ICU beds should be authorized for the health planning district.
ProICUBed = The projected number of ICU beds needed in the health planning district for five years from the current year as determined in subdivision 2 of this section.
CurrentICUBed = The current inventory of licensed and authorized ICU bed sin the health planning district.

NewICUBed = 157 – 141

NewICUBed = 16

At an average utilization of 65%, there is a calculated **deficit of 16 ICU beds** in PD 10.

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

A. Proposals to relocate beds to a location not contiguous to the existing site should be approved only when:
  1. **Off-site replacement is necessary to correct life safety or building code deficiencies;**
  2. **The population currently served by the beds to be moved will have reasonable access to the beds at the new site, or to neighboring inpatient facilities;**
  3. **The number of beds to be moved off-site is taken out of service at the existing facility;**
  4. **The off-site replacement of beds results in:**
     a. **A decrease in the licensed bed capacity;**
     b. **A substantial cost savings, cost avoidance, or consolidation of underutilized facilities; or**
     c. **Generally improved operating efficiency in the applicant's facility or facilities; and**
  5. **The relocation results in improved distribution of existing resources to meet community needs.**

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

Not applicable. The applicant is not seeking to relocate beds from an off-site location.

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

A. LTACHs will not be considered as a separate category for planning or licensing purposes. All LTACH beds remain part of the inventory of inpatient hospital beds.

B. A LTACH shall only be approved if an existing hospital converts existing medical/surgical beds to LTACH beds or if there is an identified need for LTACH beds within a health planning district. New LTACH beds that would result in an increase in total licensed beds above 165% of the average daily census for the health planning district will not be approved. Excess inpatient beds within an applicant's existing acute care facilities must be converted to fill any unmet need for additional LTACH beds.

C. If an existing or host hospital converts existing beds for use as LTACH beds, those beds must be delicensed from the bed inventory of the existing hospital. If the LTACH ceases to exist, terminates its services, or does not offer services for a period of 12 months within its first year of operation, the beds delicensed by the host hospital to establish the LTACH shall revert back to that host hospital.

If the LTACH ceases operation in subsequent years of operation, the host hospital may reacquire the LTACH beds by obtaining a COPN, provided the beds are to be used exclusively for their original intended purpose and the application meets all other applicable project delivery requirements. Such an application shall not be subject to the standard batch review cycle and shall be processed as allowed under Part VI (12VAC5-

220-280 et seq.) of the Virginia Medical Care Facilities Certificate of Public Need Rules and Regulations.

D. The application shall delineate the service area for the LTACH by documenting the expected areas from which it is expected to draw patients.

E. A LTACH shall be established for 10 or more beds.

F. A LTACH shall become certified by the Centers for Medicare and Medicaid Services (CMS) as a long-term acute care hospital and shall not convert to a hospital for patients needing a length of stay of less than 25 days without obtaining a certificate of public need.

1. **If the LTACH fails to meet the CMS requirements as a LTACH within 12 months after beginning operation, it may apply for a six-month extension of its COPN.**
2. **If the LTACH fails to meet the CMS requirements as a LTACH within the extension period, then the COPN granted pursuant to this section shall expire automatically.**

Not applicable. The applicant is not seeking to introduce LTACH beds.

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

The applicant is an established provider of inpatient services and have provided assurances that the beds will remain under the direction of one or more qualified physicians.

Part 1.
Definitions and General Information

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

A. Notwithstanding any other provisions of this chapter, the commissioner may grant approval for the expansion of services at an existing medical care facility in a health planning district with an excess supply of such services when the proposed expansion can be justified on the basis of a facility's need having exceeded its current service capacity to provide such service or on the geographic remoteness of the facility.

The applicant states that there is an institutional need to expand both its medical/surgical beds and its ICU bed needs. In support of this, the applicant presents its own calculations that differ from those presented above. Additionally, the applicant presents several additional reasons why UVAMC has exceeded its current service capacity. DCOPN will address each of these assertions below.

First, the applicant asserts that UVAMC has an institutional need to expand its ICU bed inventory. UVAMC calculated that their ICU beds operated at approximately 70% utilization in 2019. As discussed in detail above, for 2018, VHI data showed that UVA operated at 91.2% utilization with 25 beds being considered temporarily out of service because of construction at

UVA. The applicant has provided assurances that these beds are all currently active and staffed, which may account for the differences between the 2018 and 2019 numbers. In both cases, UVAMC's ICU beds clearly exceed the 65% utilization threshold discussed in 12VAC5-230-560. Moreover, the applicant has presented significant evidence showing that they are responsible for 70% of the tertiary care in their extremely large primary service area, which they assert covers the entirety of HPR I and beyond. As such, DCOPN concludes that the applicant has established an institutional need for the requested 34 ICU beds.

UVAMC additionally assets that they have an institutional need to expand their medical/surgical bed inventory. The applicant asserts that they operated at 82.5% occupancy in 2018 and 83.7% occupancy in 2019. The applicant notes that this would include days on which medical/surgical beds were used as observational beds. While the adjudication officer has, in a recent decision[10], accepted the argument that days that medical/surgical beds are used as observation beds should be included in the calculations for medical/surgical occupancy, DCOPN does not adopt this approach. 12VAC5-230-30 states that "[t]he COPN program is based on the understanding that excess capacity or underutilization of medical facilities are detrimental to both cost effectiveness and quality of medical services in Virginia." Observation beds are not regulated by DCOPN and may be added by a hospital without seek DCOPN approval. As such, encouraging the misuse of important medical services, in this case the use of medical/surgical beds as observation beds, runs contrary to the express stated goals of the COPN program and should not be encouraged by including this misuse in the calculation of the need for additional beds. This is especially true in this case, as UVAMC had a short stay unit for observation patients that was closed June of 2019 and not reopened. For the reasons above, DCOPN does not adopt the calculated utilized presented by UVAMC and will rely on the data provided by VHI. In 2018, the last year for which DCOPN has received data from VHI, UVAMC's medical/surgical beds showed a collective utilization of 77.9%.

While the 2018 utilization is insufficient, on its own, to justify a need for additional medical/surgical beds, there are several additional factors that must be addressed before determining if UVAMC has exceeded its current service capacity. As shown in **Table 9** below, at UVAMC, there has been a steady growth in occupancy over the past five years. Moreover, this trend is highly likely to continue as four additional ORs will become operational at UVAMC in 2021[11]. As such, DCOPN concludes that, while it is unable to rely on the numbers provided by UVAMC, it is extremely likely that UVAMC has already exceeded the 80% threshold and will continue to see a large increase in utilization in subsequent years. Based on the additional factors discussed above, DCOPN concludes that UVAMC has established an institutional need for the requested 50 medical/surgical beds.

[10] COPN No. VA-04682
[11] COPN No. VA-04471

Table 9. UVAMC Medical Surgical Utilization Occupancy Changes (2014-2018)

	Authorized Beds	Available Patient Days	Patient Days	Occupancy	Occupancy Change from Prior Year
2014	587	214,255	141,007	65.8%	N/A
2015	587	214,255	145,478	67.9%	2.1%
2016	587	214,842	146,248	68.1%	0.2%
2017	587	214,255	149,304	69.7%	1.6%
2018	587	195,640	152,317	77.9%	8.2%

Source: VHI (2014-2018) and DCOPN interpolations

B. If a facility with an institutional need to expand is part of a health system, the underutilized services at other facilities within the health system should be reallocated, when appropriate, to the facility with the institutional need to expand before additional services are approved for the applicant. However, underutilized services located at a health system's geographically remote facility may be disregarded when determining institutional need for the proposed project.

UVA Health System has one additional facility located in PD 10. This location, UVA Transitional Care Hospital, has 40 medical/surgical beds that, in 2018, operated at a 70.7% occupancy rate. At this level of occupancy, even the loss of 5 beds would create a deficit at the facility. As such DCOPN concludes that reallocation of beds from another facility within the health system is not a viable alternative to the proposed project.

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

The applicant is not seeking to use institutional need to add nursing beds.

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

The applicant is not seeking to use this section to justify a need to establish a new service.

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;

UVAMC is one of two providers of inpatient medical services in PD 10. Of the 803 beds detailed in **Table 1**, 627 beds, or 78% of the medical/surgical bed inventory in PD 10, are located at a facility within the University of Virginia Health System. Moreover, 587, or 73% of the medical/surgical bed inventory in PD 10, are located at UVAMC. As such, DCOPN concludes that approval of the project will not foster institutional competition that benefits the area to be served.

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

As previously discussed, approval of the proposed project would resolve the calculated deficit of ICU beds within the planning district while also addressing the applicants' demonstrated institutional need. With regard to the requested medical/surgical beds, approval of the proposed project would add to the large existing PD 10 surplus, but, as discussed above, UVAMC has established that it has exceeded its current service capacity and that no beds within the UVA Health System could be transferred to alleviate this burden without causing a deficit at that facility. Accordingly, DCOPN contends that the applicant has adequately demonstrated an institutional need to increase its medical/surgical and ICU inventories to properly care for its patient population. Additionally, as addressed in the letter of support from the CEO and president of Augusta Health, approval of the project would improve bed availability and increase the ability of hospitals such as Augusta Health to transfer high acuity cases to UVAMC for treatment.

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

As already discussed, the total capital costs for the proposed project are $4,973,492 (**Table 3**). These costs will be paid for using UVAMC's operating cash. Accordingly, there are no financing costs associated with this project. As such, DCOPN concludes that the proposed project is financially feasible.

With regard to staffing, UVAMC anticipates the need to hire an additional 247 full-time employees in order to staff the proposed project, including 113 registered nurses and 43 nursing aides. DCOPN also notes that the applicant is an established provider of inpatient bed services with a robust employee retention plan. Additionally, UVAMC has instituted a variety of recruitment strategies that have proven effective in the past that they will continue to employ for this project including a UVAMC expansion micro site, digital media strategies, job boards, and other recruitment strategies such as college recruitment, virtual job fairs, and external headhunters. Finally, UVAMC, as a hospital affiliated with the University of Virginia, has a large group of graduates from which it can recruit for vacancies. Accordingly, DCOPN concludes that the applicant will successfully be able to staff the proposed project or that doing so will have a significant negative impact on existing providers of this service.

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 does not provide improvements or innovations in the financing and delivery of health services as demonstrated by the introduction of new technology that promotes quality,

cost effectiveness, or both in in the delivery of health care services, nor does it provide for the provision of services on an outpatient basis. The applicant provides several cooperative efforts made by UVAMC, but DCOPN did not find that these examples provided improvements or innovations in the financing and delivery of health services. DCOPN acknowledges that the temporary approval of COVID-19 beds throughout the state, including at UVAMC, represents a cooperative effort to provide improvements in the delivery of health care throughout the state, the transition of these beds from temporary to permanent beds does represent a cooperative effort to meet regional health care needs. However, DCOPN again notes that the proposed project would ultimately address the calculated deficit of ICU beds in PD 10. With regard to medical/surgical beds specifically, DCOPN further concludes that although the approval of the proposed project would add to the existing PD 10 bed surplus, approval would address an institutional need adequately demonstrated by UVAMC. DCOPN did not identify any other relevant factors to bring to the Commissioner's attention.

8. **In the case of a project proposed by or affecting a teaching hospital associated with a public institution of higher education or a medical school in the area to be served,**
   (i) The unique research, training, and clinical mission of the teaching hospital or medical school.
   (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.

UVAMC is a state owned academic medical center. UVAMC asserts that they have a tripartite mission to provide research, training, and clinical care to benefit the citizens of the Commonwealth. The applicant additionally asserts that approval of the project inherently enhance their ability to carry out their clinical mission. Moreover, UVAMC asserts that their research and teaching missions will aided and enhanced. Finally, the applicant states that innovations that are inpatient services are intended to reach indigent and underserved populations and that the research, training, and clinical care at UVAMC will undoubtedly lead to innovation in the provision of healthcare for all citizens of the Commonwealth.

DCOPN Staff Findings and Conclusions

DCOPN finds that the proposed project to add 84 inpatient beds, consisting of 50 medical/surgical beds and 34 ICU beds, is consistent with the applicable criteria and standards of the SMFP and the Eight Required Considerations of the Code of Virginia. DCOPN concludes that the applicant has established a clear institutional need for ICU beds that would additionally ultimately address the calculated deficit of ICU beds in the planning district. Additionally, with regard to medical/surgical beds specifically, DCOPN further concludes that, although the approval of the proposed project would add to the existing medical/surgical bed surplus in the planning district, approval would address an institutional need adequately demonstrated by UVAMC.

Moreover, DCOPN finds that the status quo is not a viable alternative to the proposed project. Maintenance of the status quo would not resolve the high utilization of UVAMC's medical/surgical and ICU beds. Moreover, with the addition of 4 new ORs in 2021 is likely to exacerbate the already high utilization of inpatient beds. Furthermore, DCPON finds that the project has no opposition from

other providers, health care professionals or community representatives and has received letters of support from two health care providers within the HPR I.

Finally, DCOPN finds that the total capital costs of $4,973,492 (**Table 3**) for the proposed project, which would be paid through the use of UVAMC operating cash, are financially feasible.

DCOPN Staff Recommendations

The Division of Certificate of Public Need recommends the **conditional approval** of Virginia Commonwealth University Health System Authority's COPN Request No. VA-8518 to add 50 adult medical/surgical beds and 34 intensive care unit beds. DCOPN's recommendation is based on the following findings:

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 applicant has adequately demonstrated an institutional need to expand its existing inventory of medical/surgical and intensive care unit beds.

3. There is a calculated deficit of intensive care unit beds in PD 10.

4. There is no known opposition to the proposed project.

5. The project is financially feasible.

DCOPN's recommendation is contingent upon The Rector and Visitors of University of Virginia on Behalf of the University of Virginia Medical Center's agreement to the following charity care condition:

The Rector and Visitors of University of Virginia on Behalf of the University of Virginia Medical Center will provide inpatient bed services to all persons in need of these services, regardless of their ability to pay, and will provide as charity care to all indigent persons free services or rate reductions in services and facilitate the development and operation of primary care services to medically underserved persons in an aggregate amount equal to at least 4.5% of The Rector and Visitors of University of Virginia on Behalf of the University of Virginia Medical Center's total patient services revenue derived from inpatient bed services provided at the University of Virginia Medical Center as valued under the provider reimbursement methodology utilized by the Centers for Medicare and Medicaid Services for reimbursement under Title XVIII of the Social Security Act, 42 U.S.C. § 1395 et seq. Compliance with this condition will be documented to the Division of Certificate of Public Need annually by providing audited or otherwise appropriately certified financial statements documenting compliance with the preceding requirement. The Rector and Visitors of University of Virginia on Behalf of the University of Virginia Medical Center 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. § 1et seq.

The Rector and Visitors of University of Virginia on Behalf of the University of Virginia Medical Center will provide inpatient bed 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 The Rector and Visitors of University of Virginia on Behalf of the University of Virginia Medical Center will facilitate the development and operation of primary and specialty medical care services in designated medically underserved areas of the applicant's service area.