Health Systems Agency of Northern Virginia

**3040 Williams Drive, Suite 200**

**Fairfax, Virginia 22030**

# Phone: 703-573-3100 Fax 703-573-3101

**Email: hsanv@aol.com**

#### June 12, 2024

### TO: Board of Directors, HSANV

**Interested Parties**

**FROM: Dean Montgomery**

### SUBJECT: Certificate of Public Need Applications

**IFRC, Establish CT Scanning Service (COPN Request VA-8757)**

**SSHC, Establish CT Scanning Service (COPN Request VA-8761)**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**I. Background and Summaries of the Proposals**

Two medical care providers filed certificate of public need (COPN) applications in the current review cycle to establish computed tomography (CT) services in northern Virginia (PD 8). IFRC seeks COPN authorization to establish a CT service in Woodbridge, Virginia.[[1]](#footnote-1) StoneSprings Hospital Center (SSHC) proposes to establish a CT service in a satellite emergency department the hospital plans to develop in Chantilly, Virginia.

Under Virginia law COPN applications filed in the same review cycle for the same or similar services are deemed competing proposals, requiring comparative review and evaluation. The discussion below places the IFRC and SSHC applications in the context of Northern Virginia CT scanning service development and use and assesses them relative to required regional planning considerations.

1. **IFRC Woodbridge, Establish CT Service (COPN Request VA-8757)**

IFRC, a joint venture of Inova Health Care Services and Fairfax Radiological Consultants, proposes to establish a CT scanning service in Woodbridge, VA. The service would do business as FRC at Inova Health Center—Woodbridge. It would be located with other diagnostic imaging services in an outpatient care center Inova Health System is developing in Woodbridge.[[2]](#footnote-2) Table 1 shows current CT capacity and recent CT service volumes at authorized Northern Virginia services. IFRC is authorized to operate ten CT scanners in eight locations. Eight of the scanners were in service in 2022, the most recent year for which vetted region wide data is available. Average use of these scanners is above the nominal Virginia SMPF service volume standard of 7,400 patient visits per scanner per year.

Estimated capital costs are $ 1,564,576, about 36% ($570,876) of which would be for the scanner and related equipment. The remainder ($993,700) would be for lease interest costs, construction and site acquisition and development expenses. Capital costs would be from operations (64%) and the capital lease (36%).

IFRC Woodbridge justifies the proposal on the grounds that:

* IFRC CT services are heavily used. Average caseloads are above the Virginia SMFP minimum service volume threshold of 7,400 scans per scanner per year.
* CT scanning capability is needed at the health center being developed in Woodbridge.
* Projected capital costs are reasonable, within the range seen for similar projects locally and statewide.
* There is no unused CT capacity within IFRC, Inova Health System, or Fairfax Radiology Consultants that could be relocated to Woodbridge.
* The project is consistent with the public need provisions of the Virginia SMFP.

If authorized on schedule, the new CT service should open in early 2025.

1. **SSHC, Establish CT Scanning Service (COPN Request VA-8761)**

StoneSprings Hospital Center (SSHC) seeks COPN authorization to establish a CT scanning service in

Fairfax County. The scanner would be in a freestanding emergency department and outpatient services center the hospital plans to develop in Chantilly, Virginia. The project entails repositioning the recently authorized CT scanner authorized for the SSHC campus. The scanner, which is yet to be installed, would be placed in a satellite emergency department the hospital plans to establish in Chantilly. Table 1 shows current CT capacity and recent CT service volumes at SSHC and other services regionwide.

Estimated capital costs are $1,900,000 for the scanner and related equipment. All equipment and related capital costs would be paid with internal Hospital Corporation of America (HCA) funds.[[3]](#footnote-3) There would be no direct long-term financing expense.

StoneSprings Hospital Center justifies the proposal on the grounds that:

* The project, which is inventory neutral, would permit more effective use of the second CT scanner already authorized for SSHC.
* Repositioning of the CT scanner is necessary to permit development of the satellite emergency department, permitting the project to improve access to both diagnostic imaging and emergency care in southwest Fairfax County and southeastern Loudoun County.
* The project will not affect operations of other emergency departments and imaging services.
* The project is consistent with applicable provisions of the Virginia State Medical Facilities Plan.
* The project is consistent with applicable provisions of the Virginia State Medical Facility Plan (SMFP).

If authorized on schedule, the CT scanner acquired is likely to be operational in about four years, presumably in late 2028.

#### II. Discussion

1. **Northern Virginia CT Scanning Capacity, Use, Trends**

There are 74 CT scanners in Northern Virginia authorized for use in diagnostic imaging.[[4]](#footnote-4) They are distributed widely in hospitals, in satellite hospital emergency department services, and in nonhospital freestanding imaging centers. Distribution by setting is as follows:

* Thirty-six are in hospitals or in buildings on a hospital campus,
* Ten are in freestanding hospital emergency departments,
* Five are hospital services in off-campus sites with other imaging services, and
* Twenty-three are in freestanding settings not linked to a hospital.

Given the number, distribution and service volumes of local CT scanning services, most approvals of additional CT scanning capacity over the last two decades have been at hospital-based services with high service volumes and increasing demand.

CT capacity has increased by about two-thirds (65%) during the last decade. In addition to the increase in the number of scanners, replacement of older, slower, and less capable equipment with newer, faster, and more capable scanners that accommodate larger numbers of patients has significantly increased the functional capacity at most CT scanning services.[[5]](#footnote-5)



Region wide, average CT service caseloads, an estimated 10,784 scans per scanner in 2022, are above the *minimum* Virginia State Medical Facilities Plan (SMFP) target levels (7,400 scans per scanner per year), but there is wide variation among CT programs and substantial unused capacity, principally in nonhospital freestanding services. The average service volumes in hospital and hospital-affiliated settings

was 14,251 procedures per scanner in 2022, about 93% above the nominal planning standard. Average volumes in freestanding imaging centers are relatively low, 6,699 procedures per scanner in 2022, about 9% below the recommended minimum service volume caseload.

Thus, the average 2022 service volume of hospital CT services was about 2.1 times the average volume of nonhospital freestanding services, and nearly twice the Virginia SMFP minimum volume standard. Most hospital-based services routinely operate at annual service volumes much higher than the SMFP standard.

As these data suggest, the Virginia SMFP CT service volume standard of 7,400 scans per scanner per year is a recommended *minimum* operating threshold, not a measure of capacity or an operating level that in and of itself justifies adding capacity. Most of the unused CT scanning capacity in the region is in chronic low volume freestanding services. There is little unused capacity among hospital and hospital affiliated services.

Though demand for CT scanning continues to increase at a higher rate of growth than most other medical services, it is worth noting that Northern Virginia resident CT scanning use rates are lower than those reported nationally, in the Washington metropolitan area, and elsewhere in Virginia. The local 2022 use rate was about 15% lower than the statewide Virginia rate and about 20% lower than the average rate elsewhere in the state (Table 2).



CT scanning service volumes are likely to continue to increase statewide with population growth and greater reliance on diagnostic imaging in medical practice these regional patterns and variations are longstanding and not likely to change soon.

***Consistency with Planning Guidelines and Principles***

The Virginia State Medical Facilities Plan (SMFP) provides guidance in assessing COPN proposals seeking authorization to establish new CT services or to expand existing services: The applicable provisions, sections 12VAC-230-100 and 12VAC5-230-110, read:

**“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.

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

**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.” **Virginia State Medical Facilities Plan, P. 9.**

The IFRC proposal calls for the establishment of a new CT scanning service, section 12VAC-230-100.A applies. The SSHC application calls for a change in location of a recently authorized (2022) yet to be installed scanner. Under governing regulations, it is classified as the establishment of a new service and, hence, subject to COPN review.[[6]](#footnote-6)

With the sharp reported increase in CT scanning caseloads in 2021 and 2022, application of the SMFP public need determination guidance, as interpreted and applied in recent years, suggests a regional public need for between 71 and 83 CT scanners.[[7]](#footnote-7) Including the CT scanners authorized between 2022 and 2024, the authorized regional complement is now 74 diagnostic scanners. Application of the public need determination formula specified in the Virginia SMFP suggests that up to nine additional CT scanners may be authorized.

.

1. **Cost Considerations**

The SSHC proposal calls for the repositioning of the CT scanner authorized for the hospital campus in 2022. The capital cost of that project was $1,006,864. About two-thirds ($694,734) of that was for the scanner and related equipment. The projected capital cost for the scanner and related equipment in the current proposal is $1,900,000. All equipment and related capital costs would be paid with internal Hospital Corporation of America (HCA) funds.[[8]](#footnote-8) There would be no direct long-term financing expense.

IFRC proposes to acquire a CT scanner for use at an Inova Health System it is developing in Woodbridge, Virginia. The estimated cost of the project is $1,564,576. About one-third of the outlay ($570,876, 36%) of which would be for the scanner and related equipment. The remainder ($993,700) would be for lease interest costs, construction and site acquisition and development expenses. The imaging equipment and technology would be obtained from a vendor under a six-year capital lease, with ownership conveying to FRC at the end. Other capital costs would be paid from operations. Other than the lease interest expense, there would be no financing cost.

There is nothing inherently problematic about the capital cost of either project. Both are within the capital expenditure range seen for similar projects locally and statewide.

Operational costs and charges will be higher with the SSHC project than the IFRC service. The SSHC would be billed under SSHC’s emergency department. The IFRC service would be categorized as an independent diagnostic testing facilities (IDTFs) and reimbursed at a lower rate by Medicare and other insurers.

The projects are economically viable as described. The *pro forma* budgets for the initial two years of operations indicate that the applicants expected the projects to be profitable. Projected operating returns are between 36% (SSHC) and 47% (IFRC). Operating returns are profit margins are likely to increase quickly and significantly over the useful lives of the scanners, as depreciation and amortization costs decrease, and expenses are allocated to larger service volumes. The marginal cost of providing a scan will decrease as demand and service volumes increase.

Both applicants commit to providing a reasonable amount of charity care and to serving the medically indigent equitably. Both have a local history of doing so.

##### Access Considerations

With 38 CT service delivery sites and 74 widely distributed scanners, Northern Virginians have ready geographic access to CT scanning. All residents in Northern Virginia have access within less than 30 minutes driving time. Neither additional services nor additional scanning capacity are necessary to ensure reasonable access. Both projects would be located within two to four miles, and about 10 minutes’ travel

time, of existing CT services. Of course, new services and additional capacity necessarily increase potential physical access by adding new service delivery sites and making scheduling more convenient.

Both applicants commit to providing a reasonable amount of charity care and to serving the medically indigent equitably. There is no reason to doubt these assurances. Economic access to care is not likely to change appreciably with the approval or denial of either.

**D. Health System Considerations**

The Virginia SMFP public need determination formulation suggests that there is a regional need for additional CT scanning capacity, more than the additional CT scanner proposed by IFRC. That project is consistent with the public need determination provision of the plan (Section 12VAC5-230-100) as that guidance has been interpreted and applied in recent years.

Though not necessary to respond to a local health care system deficiency, there is no indication of likely negative health system effects from either proposal.

. **III. Conclusions and Alternatives for Agency Action**

**A. Summary Conclusions and Findings**

The IFRC and SSHC applications, and the related data and information gathered, support the following findings and conclusions.

1. Though northern Virginia CT scanning use rates are low, recent increases in demand, and higher service use rates, suggest additional CT capacity is needed.
2. The Virginia SMFP public need determination formulae suggests that there is a regional need for several additional CT scanners over the next three to five years.
3. The applicants have acceptable charity care policies and practices.
4. The capital costs of the proposals are within the capital cost range commonly seen for similar projects locally and elsewhere in Virginia.
5. There is no indication of potential or likely unacceptable negative health system effects.

**B. Alternatives for Agency Action**

* 1. The Health Systems Agency of Northern Virginia may recommend to the Commissioner of Health that a Certificate of Public Need authorizing the projects be granted. Support for the proposals could be based on concluding that:

* + There is a regional need for additional CT scanners within the planning horizon, over the next three to five years.
  + The SSHC proposal is inventory neutral, and the CT scanner is likely to be used more effectively in a satellite emergency department than on the SSHC campus.
  + Projected capital outlays are within the range commonly seen ranges for similar projects.

2. The Health Systems Agency of Northern Virginia may recommend to the Commissioner of Health that a Certificate of Public Need not be granted to one of the applicants or both.

An unfavorable recommendation for one or more of the proposals could be based on concluding that:

* Average regional use of freestanding CT services is low. Additional freestanding capacity is not necessary to maintain or improve access to care.
* There is no indication of a need for an additional satellite emergency department in northern Virginia.
* Neither project is necessary to assure or improve access to care.
* The projects may affect negatively, reduce caseloads and limit growth, of nearby competing services, e.g., Sentara Health and Rayus Radiology services.

**IV. Checklist of Mandatory Review Criteria**

* + 1. **Maintain or Improve Access to Care**

Northern Virginia residents have ready access to diagnostic imaging services, including CT scanning. All are within 30 minutes travel time of a CT service. With more than two dozen service delivery sites most residents have access to multiple CT services within a 15 to 20 minutes commute. Although the proposed services would help maintain ready access to care, neither is necessary to address a geographic barrier to care or otherwise improve access.

1. **Meet Needs of Residents**

There is no indication that either applicant, and their parent corporation, do not try to meet the needs of the patients and communities they serve. The projects described should permit each to continue to respond to the clinical needs of their patients and service area populations.

1. **Consistency with Virginia State Medical Facilities Plan (SMFP)**

Both proposals are consistent with the Virginia SMFP public need criteria and standards and the planning principles in which the plan is grounded.

1. **Beneficial Institutional Competition while Improving Access to Essential Care**

Though the services proposed are not essential, arguably both would contribute to maintaining or improving access to care in some respect. There is no indication or expectation that either project would generate measurable price or quality competition.

1. **Relationship to Existing Health Care System**

The applicant organizations are successful operators of multiple CT scanning services locally. Neither poses a significant health system conflict or problem.

1. **Economic, Financial Feasibility**

The capital outlays proposed are reasonable, within the ranges commonly seen for similar projects locally and statewide. Each is financially feasible and is likely to be profitable directly and indirectly.

**7. Financial, Technological Innovations**

Neither project entails innovative technologies, practices or economic aspects that warrant special consideration.

**8. Research, Training Contributions and Innovations**

Neither project has significant research or training elements that warrant special consideration.

1. IFRC, also seek COPN approval to establish an MRI service at the site. The IFRC MRI application, and a competing proposal, are examined separately in an accompanying report. [↑](#footnote-ref-1)
2. [↑](#footnote-ref-2)
3. Projected capital costs of the ambulatory care center described total $23,808,000. The expected cost of the CT scanner is $1,900,000. Only the CT scanner element of the project \is subject to COPN review. Hospital Corporation of America is SSHC’s parent corporation. [↑](#footnote-ref-3)
4. This count includes ten scanners authorized recently that were not in service in 2022 and not included in the Virginia Health Information inventory data presented in Table 1. It excludes CT scanners dedicated to radiation therapy treatment planning and operating room use. It includes one “extra-legal” scanner, Fair Oaks Imaging Center (FOIC), which does not have, and has not sought, COPN authorization. FOIC, established by Reston Radiology Associates, the professional radiology group now known as Reston Radiology Consultants (RRC), provides professional radiology services at Reston Hospital Center. FOIC reported 2,864 scans in 2022, higher than several authorized services. Though never authorized, the service is in the Virginia Department of Health inventory and reports its service volumes as part of the annual licensing survey. [↑](#footnote-ref-4)
5. Onsite replacement of existing diagnostic imaging equipment is not subject to COPN review. Replacement equipment is registered with the Virginia Department of Health. Services usually replace dated scanners with higher equipment that serves a wider array and larger number of patients. High speed CT services are commonplace in Northern Virginia. They are added to the regional inventory as older equipment is retired. Replacement scanners usually are state-of-the-art equipment that minimizes exposure to ionizing radiation. Most CT scans in Northern Virginia are from such services.

   [↑](#footnote-ref-5)
6. Virginia COPN projects, as authorized, are site specific, so a change in location constitutes a new service. [↑](#footnote-ref-6)
7. Recent reported service volume increases are unusually large. The regional compound annual growth rate (CAGR) between 2018 and 2022 was 9.93%. The reported 2022 service volume (657,815 scans) was about 36% higher than the 2019 service volume (482,783 scans), the year for the COVID-19 induced service disruptions. These are unusually large increases, not sustainable over the long run. They may prove anomalous.

   The lower need estimate (71 scanners) is based on the reported service volumes of the last five years (2018-2022). The high estimate (83 scanners) is based on the average volume over the last two years (2021-2022). [↑](#footnote-ref-7)
8. Projected capital costs of the ambulatory care center described total $23,808,000. The expected cost of the CT scanner and associated technology is $1,900,000. Only the CT scanner element of the project is subject to COPN review. Satellite hospital emergency departments are not subject to review. Hospital Corporation of America is SSHC’s parent corporation. [↑](#footnote-ref-8)