

Office Of Health Care Access Certificate of Need Application

Final Decision

Applicant:	The Hospital for Central Connecticut
Docket Number:	07-31020-CON
Project Title:	Acquisition and Operation of a New 64-Slice PET/CT Scanner at the Hospital's New Britain General Campus
Statutory Reference:	Sections 19a-638 and 19a-639 of the Connecticut General Statutes
Filing Date:	February 14, 2008
Decision Date:	May 8, 2008
Default Date:	May 14, 2008
Staff Assigned:	Jack A. Huber

Project Description: The Hospital for Central Connecticut proposes to acquire and operate a new 64-slice positron emission tomography/computed tomography scanner for its New Britain General campus, at a total capital cost of \$4,314,622.

Nature of Proceedings: On February 14, 2008, the Office of Health Care Access ("OHCA") received the Certificate of Need ("CON") application from The Hospital for Central Connecticut ("Hospital") seeking authorization to acquire and operate a new 64-slice positron emission tomography/computed tomography scanner for its New Britain General campus, at a total capital cost of \$4,314,622. The Hospital is a health care facility or institution as defined in Section 19a-630 of the Connecticut General Statutes ("C.G.S.").

A notice to the public concerning OHCA's receipt of the Hospital's Letter of Intent to file its CON application was published in *The Herald* of New Britain on August 28, 2007, pursuant to Sections 19a-638 and 19a-639 of the Connecticut General Statutes ("C.G.S."). OHCA received no responses from the public concerning the Hospital's proposal. Pursuant to Sections 19a-638 and 19a-639, C.G.S., three individuals or an individual representing an entity

with five or more people had until March 6, 2008, the twenty-first calendar day following the filing of the Hospital's CON application, to request that OHCA hold a public hearing on the Hospital's proposal. OHCA did not receive any requests to hold a public hearing.

OHCA's authority to review and approve, modify or deny the CON application is established by Sections 19a-638 and 19a-639, C.G.S. The provisions of these sections, as well as the principles and guidelines set forth in Section 19a-637, C.G.S., were fully considered by OHCA in its review.

Findings of Fact

Clear Public Need

Impact of the Proposal on the Hospital's Current Utilization Statistics Proposal's Contribution to the Quality of Health Care Delivery in the Region Proposal's Contribution to the Accessibility of Health Care Delivery in the Region

- 1. The Hospital for Central Connecticut ("Hospital") is a 414-bed teaching hospital that is affiliated with the University of Connecticut, School of Medicine. The Hospital provides acute care services at the following locations:
 - The New Britain General ("NBG") campus at 100 Grand Street in New Britain; and
 - The Bradley Memorial ("BM") campus at 81 Meriden Avenue in Southington. (*August 10, 2007, Letter of Intent, page 5 and Attachment B, page 13*)
- 2. The Hospital initiated the following imaging services after receiving Certificate of Need ("CON") authorization from the Office of Health Care Access ("OHCA"):
 - On February 5, 2001, a mobile-based positron emission tomography ("PET") service under Docket Number ("DN"): 00-541; and
 - On April 18, 2006, a mobile-based positron emission tomography/computed tomography ("PET/CT") service under DN: 05-30562-CON, which replaced the existing mobile-based PET service. The Hospital was authorized to operate the PET/CT service one-day per week.

(February 5, 2001, Final Decision, DN: 00-541, page 10; April 18, 2006, Final Decision, DN: 05-30562-CON, page 10; and November 15, 2007, Initial CON Submission, pages 3-9)

- 3. The Hospital proposes to augment its current imaging capabilities at its NBG campus by accomplishing the following:
 - Acquiring and operating a new fixed-based, 64-slice General Electric, Discovery PET/CT scanner that will reside in the Radiology Department ("RD");
 - Renovating RD space to accommodate the proposed PET/CT scanner;
 - Relocating its 4-slice, fixed-based Lightspeed CT scanner currently located in the RD to the newly expanded and modernized ED with accompanying upgrades to the unit's computer so that the scanner will have the same interface and software capabilities as the new fixed-based, 64-slice PET/CT scanner;
 - Initiating cardiac CT angiography ("CTA") services; and
 - Discontinuing the arrangement in place with Insight Corporation for the one-day per week mobile PET/CT service contract. (*November 15, 2007, Initial CON Submission, pages 3 through 9*)

- 4. The Hospital provides the following oncology services through its various programs originating at its NBG campus:
 - The George Bray Cancer Center as a center of excellence the center provides medical, radiation and surgical oncology and has achieved accreditation as a Teaching Hospital Cancer Center by the American College of Surgeons, Committee on Cancer.
 - American Savings Foundation Oncology Treatment Center provides radiation oncology services.
 - The Wolfson Palliative Care Program assists with the ongoing care needs of patients with chronic and life-threatening illness. (November 15, 2007, Initial CON Submission, pages 3 through 9 and The Hospital of Central Connecticut Website, www.thocc.org/cancer)
- 5. Services offered within the ASF oncology treatment center are as follows:
 - 3D conformal radiation therapy;
 - Intensity modulated radiation therapy ("IMRT");
 - Image guided radiation therapy ("IGRT");
 - High dose rate ("HDR") brachytherapy;
 - Low dose rate ("LDR") brachytherapy; and
 - PET/CT scanning. (January 7, 2008, Hospital's First Completeness Response, pages 4 and 5)
- 6. The Hospital indicates that its proposal to acquire a new fixed-based, 64 slice PET/CT scanner is base on the following factors:
 - **Increasing CT Volume**: Each campus of the Hospital has experienced an increase in the number of CT scans performed in the last three fiscal years. The volume of CT scanning at NBGC has not only been affected by the overall increase in utilization, but by the growth attributable to increasing ED service volume. The Hospital indicates the current utilization has pushed the existing complement of CT scanning equipment to its maximum, resulting in increased wait times for ED patients as well as other Hospital patients.
 - **CT Technology Advancements**: Current CT technology allows for faster scan times and captures more image data when compared to earlier generations of CT scanners. The image quality, data acquired and speed of this technology has resulted in the technology becoming a viable option for cardiac imaging. The Hospital believes that at one-sixth the cost of a cardiac catheterization a CT scanner with current technology allows for a noninvasive procedure to be performed with same diagnostic quality as a cardiac catheterization procedure.

• Availability, Accessibility and Care Considerations

- The current mobile-based, PET/CT arrangement is for every Monday throughout the year, which equates to 46 days of operation in FY 2007.
- Accessibility for the current mobile-based PET/CT scanner has proven to be difficult for inpatients as the scanner is located in an outside trailer. The Hospital expresses reservations for accommodating inpatient and nursing home patients in relationship to maintaining appropriate standards of care. Having the PET/CT service within the hospital proper would assist in assuring that quality standards are maintained.

- **Financial Considerations**: The cost of the additional capital expenditure to acquire a 64-slice CT scanner with PET capability is approximately the same as the capital expenditure to continue with the operation of the mobile-based, one-day per week PET/CT service arrangement and to acquire a 64-slice CT scanner. Prices of 64-slice PET/CT scanners have been dropping due to the increase in adopting this modality as the standard of care. The Hospital believes the improved climate in acquisition costs make purchasing the fixed-based, 64-slice PET/CT scanner a prudent option at this time. (*November 15, 2007, Initial CON Submission, pages 3 and 4*)
- 7. On August 16, 2007, under DN: 06-30882-CON the Hospital received CON authorization from OHCA to acquire and operate the Novalis Stereotactic Radiosurgery ("Novalis") system. The use of the Novalis system, will allow the Hospital to treat cancer patients with a highly precise shaped beam of radiation. The current mobile-based PET/CT scanner does not provide sufficient quality scans that Hospital oncologists can use without going through timely simulations. (*August 16, 2007, Final Decision, Docket Number: 06-30882-CON and November 15, 2007, Initial CON Submission, page 8*)
- 8. The Hospital indicates that the proposed fixed-based, 64-slice PET/CT scanner will provide data currently needed to best utilize the Novalis system and that having the proposed PET/CT services on a daily basis will better serve the Hospital's oncology treatment center. (*November 15, 2007, Initial CON Submission, page 10*)
- 9. The Hospital indicated that acquiring the fixed-based PET/CT scanner would accomplish the following:
 - Improved access for outpatients and allow the recapture of patients currently being lost to other facilities due to the mobile unit being available one-day per week;
 - Increase the accessibility of rapid diagnosis for radiation oncology patients resulting in quicker treatment, and provide more timely staging of cancer;
 - Increase availability of CT angiography ("CTA") adding another diagnostic tool in treatment of cardiovascular disease; and
 - Increase availability for inpatients and nursing home patients with assurance that appropriate inpatient care standards can be met. (*November 15, 2007, Initial CON Submission, pages 9 and 10*)
- 10. The Hospital indicated that relocating the existing 4-slice CT scanner to the ED would accomplish the following:
 - Decrease wait times for ED patients who would no longer need to travel to the Radiology Department for their scan;
 - Address increased demand for imaging created by the 11 treatment bed ED expansion, approved by OHCA under DN: 05-30637-CON; and
 - Allow ED staff to perform "triple rule outs" of patients who suffer from chest pain, more quickly triaging these cases by screening with the PET/CT to rule out pulmonary embolisms, aortic dissections, and myocardial infarctions. (*November 15, 2007, Initial CON Submission, pages 9 and 10*)

- 11. The Hospital indicates its primary service area is comprised of the following towns: Berlin, Plainville, New Britain, and Southington. Its secondary service area is comprised of the following towns: Bristol, Burlington, Cheshire, Cromwell, Farmington, Meriden, Newington, and West Hartford. The Hospital states the area served by its CT and PET/CT's services is the same as its overall hospital service area. (November 15, 2007, Initial CON Submission, page 5)
- 12. The Hospital has the following scanning equipment at each of its locations:

• New Britain General Campus

- Fixed-based, 4-slice Lightspeed CT scanner considered the Hospital's main CT scanning unit, approved under DN: 01-1505;
- Single-slice CTi Scanner provides CT fluoroscopy for performing biopsies and acts as the backup unit to the Lightspeed CT scanner, approved under DN: 99-502; and
- Mobile-based PET/CT Scanner provides service one-day per week.

Bradley Memorial Campus

- Fixed-base, 16-slice CT scanner.
- Bradley patients requiring PET/CT services are referred to NBGC for their scans.

(November 15, 2007, Initial CON Submission, pages 7 and 8; April 1, 1999, New Britain General Hospital Final Decision, DN: 99-520 page 5; and July 31, 2001, New Britain General Hospital CON Waiver Letter, page 2)

13. The Hospital's utilization statistics for fiscal years ("FYs") 2005 through 2007 are as follows:

	FY 2005	FY 2006	FY 2007		
NBGC CT Scans (both 4- & 1-slice scanners)	21,786	26,192	30,057		
NBGC PET Scans	259	228	25		
NBGC PET/CT Scans	0	38	280		
BMC 16-slice CT Scans	6,306	6,482	7,455		

Table 1: Actual Utilization, FYs 2005 through 2007

(November 15, 2007, Initial CON Submission, page 6 and Attachment A, page 22; January 7, 2008, Hospital's First Completeness Response, page 2; and February 14, 2008, Hospital's Second Completeness Response, pages 1 and 2)

14. The Hospital's percentage utilization for each of its existing scanners is as follows:

Table 2: Percentage Utilization by Scanner

Scanner Description	Current Volume	Volume Capacity*	Percentage Utilization
NBGC 4-slice CT Scanner	19,189	21,632	88.7%
NBGC PET/CT Scanner	305	690	44.2%
NBGH CTi Scanner	10,868	10,920	99.5%
BMC 16-slice CT Scans	7,455	9,776	76.3%

Note: *Volume capacity for each scanner is affected by scanner throughput and technician staffing patterns. It is primarily based on scan time per procedure, number of procedures per week by work shift per weekday or weekend day, times 52 weeks per year.

(February 14, 2008, Hospital's Second Completeness Response, pages 1 through 4)

15. The Hospital projects new scan volumes for operating years 1 through 3 with the proposed 64-slice PET/CT scanner as follows:

Description	Incremental Change*	Year 1	Year 2	Year 3	
PET/CT Scans					
Inpatient PET/CT	+15 scans/month	180	185	191	
New PET	+52 scans/year	52	54	55	
Novalis Related Cases	+3 scans/month	36	37	38	
Neurosurgery Head & Neck	+3 scans/month	36	37	38	
4-D Respiratory Gating	+5 scans/month	60	62	64	
Oncology Referrals	+20 scans/year	20	21	21	
Total Proposed New PET Volume	·	384	396	407	
CT Scans					
CTA Emergent	+61 scans/month	732	754	777	
CTA Elective	+21.66 scans /month	260	268	276	
MRI Diverted to CT	+4 scans/month	48	49	51	
Reconfigured ED CT Scanner	+16 scans/bed/month	2,112	2,175	2,241	
Total Proposed New CT Volume		3,152	3,247	3,344	
Total Proposed New PET/CT Volume		3,536	3,642	3,751	

Table 3: Projected New Scans for the Proposed PET/CT Scanner, '	Years 1-3

Notes: *Derivation of each incremental factor is highlighted in Finding 17.

16. The Hospital offered the following information regarding the aforementioned line items describing the nature of the incremental change attributable to its scan projections:

PET/CT Scans

- Inpatient PET/CT has not been offered due to the service's mobile set-up and the inpatient standard of care requirements. Many inpatients are discharged and then return to the Hospital to have their PET scan. The proposed scanner inpatient usage is estimated to be 15 new scans per month or 180 scans per year. Included in that number are 2 scans per month attributable to referrals coming from the Bradley Memorial Campus.
- The existing mobile-based PET/CT offers service one day per week. With the scanner availability extended Monday through Friday, the Hospital estimates it will reclaim one referral a week or 52 referrals annually that has been going to other providers of the service.
- **Novalis System Related Cases** The Hospital projects 3 scans per month or 36 scans per year as a direct result of the introduction of the Novalis system in 2008. These scans are for follow-up assessments of the treatments performed with the system.
- Neurosurgery Head & Neck The Hospital projects 3 scans per month or 36 scans per year as a direct result of the expansion of neurosurgical services. With 2 new affiliated neurosurgeons performing more advanced head and neck surgeries such as artificial disk replacements, the physicians will require increased image resolution that a 64-slice CT scanner can provide. The neurosurgeons will also utilize the Novalis system in treating neuralgia cases in conjunction with the proposed 64-slice PET/CT scanner.

- **4-D Respiratory Gating** The Hospital projects 5 scans per month or 60 scans per year as a direct result of imaging lesions which are affected by a patient's breathing. Lesions located near the diaphragm that are to be radiated, will shift location as a patient's chest expands and contracts while breathing. 4-D gating will provide the necessary range of movement to track the lesion so that the linear accelerators can better pinpoint the lesion without radiating surrounding healthy tissue and organs.
- **Oncology Referrals** The Hospital projects 20 scans per year as a result from the adoption of PET/CT in staging cancer. Hospital oncologists are expected to find it easier to refer their patients to the new fixed-based scanner versus sending their patient cases elsewhere.

CT Scans Only

- **Cardiac CTA– Emergent** As CT angiography gains acceptance as an alternative to cardiac catheterization, more physicians may begin to order this type of scan as a noninvasive alternative. Emergent cardiac CTA will augment the Hospital's current cardiac service compliment. The Hospital projects the growth in emergent cardiac CTA cases to be 61 scans per month or 732 scans per year.
- **Cardiac CTA- Elective** As with emergent CTA, elective cardiac CTA will augment the Hospital's current cardiac compliment. The Hospital projects the growth in elective cardiac CTA cases to be one scan/weekday at 260 weekdays per year for 260 scans per year.
- **MRI Diverted to CT** There is a certain group of renal compromised patients that the MRI intravenous contrast injection is now contraindicated. Once identified by MRI, these orders will be converted to CT orders. These diversions from MRI, caused by the newly established link between IV gadolinium contrast and nephrogenic systemic fibrosis, will result in 48 new CT scans per year.
- **Reconfigured CT scanner** The CT scan rate per bed at NBGC's ED is 16 scans per month. The ED expansion project will add eleven new beds, which would result in 2,112 new CT scans annually.

(November 15, 2007, Initial CON Submission, page 8 and Attachment B, page 24 and January 7, 2008, Hospital's First Completeness Response, pages 7 and 8)

17. The Hospital projects the annual scan volume for the proposed fixed-based PET/CT scanner and relocated CT scanner as follows:

Table 4:	Proje	ected	Scanner	Volume*

Description	FY 2009	FY 2010	FY 2011
New PET/CT Scanner - CT Scans Only	25,117	26,942	28,854
New PET/CT Scanner – PET/CT Scans	708	729	750
Relocated ED CT Scanner	8,836	11,276	13,855

Note: *Projections begin with FY 2009 as the first full fiscal year with scanners in operation. ED scanner activity reflects 16 exams per ED treatment bed per month. CT scans for the PET/CT unit reflect transfer of existing 4-slice unit volume to new PET/CT scanner coupled with a combined CT growth rate of 13% for both CT scanners. Growth rate of the combined CT scanners at the NBG campus equates to a 19% annual increase. PET/CT growth attributable to incremental growth in FY 2009, plus 3% projected growth between remaining fiscal years.

(May 2, 2008, Additional Hospital Information, pages 3 through 4)

18. The Hospital projects the annual scan capacity for the proposed fixed-based PET/CT scanner and relocated CT scanner as follows:

Table 5: Project	ted Capacit	ty by Scanner
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me Capacity
17,888
780
16,640

Note: *Volume capacity for each scanner is affected by scanner throughput and technician staffing patterns. It is primarily based on scan time per procedure, number of procedures per week by work shift per weekday or weekend day, times 52 weeks per year.

(February 14, 2008, Hospital's Second Completeness Response, pages 1 through 4)

19. The existing providers of PET/CT services within the Hospital's service area are as follows:

Table 6: Existing Providers in the Hospital's Service Area

Description of Service	Provider Name and Location	Hours and Days of Operation	PET/CT Volume*
Mobile PET Scanner	Bristol Hospital Bristol, CT	Unknown	495
Mobile PET/CT Scanner	MidState Medical Center Meriden, CT	One Day Per Week 7:00 AM to 6:00 PM	331
Mobile PET/CT Scanner	John Dempsey Hospital Farmington, CT	One Day Per Week** 7:00 AM to 6:00 PM	300

Notes: * Number of scans performed for the most recent 12 month period. ** Service has been expanded to two days per week.

(November 15, 2007, Initial CON Submission, page 9 and the Respective Hospitals' FY 2006 12 Months Actual Filing, Supplemental Schedule 500)

20. The Hospital indicates that the proposal will have minimal effect on other existing PET/CT providers as the fixed-based PET/CT scanner will be addressing the increased volume at the Hospital resulting from the reclaiming of one referral per week lost due to lack of available accommodations, the implementation of Novalis SRS services and accommodations for other oncology referrals, 4-D respiratory gating and neurosurgical procedures. (*November 15, 2007, Initial CON Submission, page 8*)

- 21. The physician referral patterns for the CT, PET and PET/CT imaging are presented by the Hospital as follows:
 - Physicians are referring patients for CT scans in areas such as head, chest, abdomen and pelvis. With the fixed-based PET/CT scanner, referral patterns are not expected to change, as the Hospital will continue to offer all of the same CT services with the exception of cardiac CTA. The Hospital expects cardiac CTA referrals from its ED physicians and cardiologists.
 - Previously physicians would refer suspect cases of cancer for PET scanning. By combining the advantages of each technology current PET/CT scanners offer increased resolution and improved imaging.
 - Oncologists currently utilize PET/CT for staging cancer. This modality provides improved results in diagnosing and staging of cancerous growths. The Hospital's oncologists refer patients to the existing mobile PET/CT unit at NBGC. With the proposed scanner available 7 days a week, patients from the Hospital's service area can be seen in a timely fashion at NBGC rather than waiting until Mondays or having their scans performed by other providers. (*November 15, 2007, Initial CON Submission, pages 3 through 5*)
- 22. The proposed hours of operation for the new and relocated scanners are as follows:
 - The 64-slice PET/CT scanner operating hours by shift are:
 - First shift Monday through Sunday 7:00 am to 3:30 pm;
 - Second shift Monday through Sunday 3:30 pm to 11:00 pm; and
 - Third shift The scanner is not expected to be used during this shift.
 - The 4-slice CT scanner will operate seven days a week, twenty-four hours a day in the Emergency Department. (*November 15, 2007, Initial CON Submission, page 7*)
- 23. The Hospital's Radiology Department adheres to the standard and practice guidelines set forth by the American College of Radiology. Compliance with the practice parameters is validated through the ACR accreditation process and revalidated on an on-going basis through the ACR re-accreditation process. (*November 15, 2007, Initial CON Submission, page 11*)

Financial Feasibility and Cost Effectiveness of the Proposal and its Impact on the Hospital's Rates and Financial Condition Impact of the Proposal on the Interests of Consumers of Health Care Services and the Payers for Such Services Consideration of Other Section 19a-637, C.G.S. Principles and Guidelines

24. The total capital cost of the project is \$4,314,622. The costs are itemized as follows:

Description	Component
	Cost
Capital Expenditure	
Building Work	\$500,000
Non-Medical Equipment Purchase	\$63,000
Total Capital Expenditure	\$563,000
Capital Cost	
Fair market value of the PET/CT scanner	\$3,751,622
otal Capital Cost	\$3,751,622
Fotal Project Cost	\$4,314,622

Note: *"Other" Costs include contingency, consulting fees, legal fees and permits. (*November 15, 2007, Initial CON Submission, pages 15*)

- 25. The project will be financed through a Connecticut Health and Educational Authority lease arrangement. (*November 15, 2007, Initial CON Submission, pages 15*)
- 26. During the planning stages for this proposal, the Hospital performed a cost benefit analysis by comparing the prospective acquisition and operating expenses between the fixed-based 64-slice PET/CT scanner ("scenario 1") verses the combined use of the existing mobile PET/CT and acquiring a new 64-slice CT scanner ("scenario 2"). While the Hospital determined the capital and operating costs of the two scenarios to be approximately the same, the capabilities of each modality were determined to be different. This capability difference between the two scenarios was the deciding factor in the Hospital's selection of the current proposal. (*February 14, 2008, Hospital's Second Completeness Response, pages 3 and 4*)
- 27. The following illustrates the anticipated costs/expenditures for each scenario:
 - Scenario 1- acquiring a new fixed-based 64-slice PET/CT scanner.
 - Capital Cost: The scanner cost is \$3.7 million with building work and non-medical equipment costs of \$0.6 million for a total project cost of \$4.3 million.
 - Operating costs include all of the normal equipment maintenance, staffing and depreciation and interest expenses at \$1.1 million.
 - Scenario 2 acquiring a new fixed-based 64-slice CT scanner with the continued arrangement for the mobile PET/CT scanner over 5 years.
 - Capital Cost: The CT scanner cost is \$2.4 million and the Hospital would need to continue its 5 year contract for the mobile PET/CT

scanner at a total cost of \$1.3 million. Building work and non-medical equipment costs for the 64-slice CT scanner would be \$0.5 million for a total project cost of \$4.2 million. Total cost for scenario 2 is estimated to cost about \$100,000 less than scenario 1.

- Operating costs for the CT scanner would be the same as scenario 1 in that the expense components of each scenario are the same.
 (*February 14, 2008, Hospital's Second Completeness Response, pages 3 and 4*)
- 28. The Hospital projects incremental revenue from operations, total operating expense and losses/gains from operations associated with the CON proposal for FY 2007 through FY 2009 as follows:

Table 6: Incremental Financial Projections for FTS 2006-2010				
Description	FY 2008	FY 2009	FY 2010	
Incremental Revenue from Operations	\$549,493	\$1,665,130	\$1,716,000	
Incremental Total Operating Expense	\$320,225	\$1,075,732	\$1,108,675	
Incremental (Loss)/Gain from Operations	\$229,268	\$589,398	\$607,325	

 Table 8: Incremental Financial Projections for FYs 2008-2010

(November 15, 2007, Initial CON Submission, page 19 and Attachment J, pages 117 and 118)

- 29. There is no State Health Plan in existence at this time. (*November 15, 2007, Initial CON Submission, page 2*)
- 30. The Hospital has adduced evidence that the proposal is consistent with its long-range plan. (*November 15, 2007, Initial CON Submission, page 2*)
- 25. The Hospital has improved productivity and contained costs by undertaking energy conservation measures, employing group purchasing practices in its procurement of supplies and equipment and by participating in activities involving the application of new technologies. (*November 15, 2007, Initial CON Submission, pages 12 through 14*)
- 26. The proposal will not result in any change to the Hospital's teaching and research responsibilities. (*November 15, 2007, Initial CON Submission, page 14*)
- 27. The Hospital's payer mix for its PET/CT service is as follows:

Table 9: Three-Year Projected Payer Mix with the CON Proposal				
Payer Mix	Current	Year 1	Year 2	Year 3
Medicare	45.50%	45.50%	45.50%	45.50%
Medicaid	1.02%	1.02%	1.02%	1.02%
Total Government	46.53%	46.53%	46.53%	46.53%
Commercial Insurers	52.22%	52.22%	52.22%	52.22%
Uninsured	1.18%	1.18%	1.18%	1.18%
Workers Compensation	0.07%	0.07%	0.07%	0.07%
Total Non-Government	53.47%	53.47%	53.47%	53.47%
Total Payer Mix	100.00%	100.00%	100.00%	100.00%

 Table 9: Three-Year Projected Payer Mix with the CON Proposal

(November 15, 2007, Initial CON Submission, page 18)

28. The Hospital indicates the proposal will not result in any change its patient/physician mix. (*November 15, 2007, Initial CON Submission, page 14*)

- 29. The Hospital possesses sufficient technical, financial and managerial competence and expertise to provide efficient and adequate service to the public. (*November 15, 2007, Initial CON Submission, pages 11 and 12 and Attachment E, pages 54 through 69*)
- 31. The Hospital's rates are sufficient to cover the proposed capital and operating costs associated with the proposal. (*November 15, 2007, Initial CON Submission, page 19 and Attachment J, pages 117 and 118*)

Rationale

The Office of Health Care Access ("OHCA") approaches community and regional need for Certificate of Need ("CON") proposals on a case by case basis. CON applications do not lend themselves to general applicability due to a variety of factors, which may affect any given proposal; e.g. the characteristics of the population to be served, the nature of the existing services, the specific types of services proposed to be offered, the current utilization of services and the financial feasibility of the proposal.

The Hospital for Central Connecticut ("Hospital") is an acute care hospital, providing comprehensive inpatient and outpatient services at its campuses in New Britain and Southington. The Hospital seeks to undertake a project to improve the imaging services offered at its New Britain General ("NBG") campus. The components of the proposal are as follows: acquire and operate a new fixed-based, 64-slice positron emission tomography /computed tomography ("PET/CT") scanner; renovate existing Radiology Department space to accommodate the proposed PET/CT scanner; relocate an existing fixed-based, 4-slice computed tomography ("CT") scanner from the Radiology Department ("RD") to the Emergency Department ("ED"); initiate cardiac CT angiography services; and discontinue the contract that is in place with InSight Corporation for the one day per week mobile PET/CT service. The proposal to acquire a new fixed-based, 64-slice PET/CT scanner is predicated on the Hospital's increasing CT volume; technological advancements in CT imaging; cost considerations in the procurement of a new CT scanner with PET capabilities; and availability, accessibility and care considerations with regard to the Hospital's plan to provide PET/CT scanning services on a weekday basis. The relocation of the existing 4-slice CT scanner to the ED is based on the Hospital's plan to implement measures improving the care of those patients seen in the ED that require CT imaging services.

The Hospital's NBG campus offers CT imaging services utilizing two scanners. The Hospital's primary scanner is a fixed-based, 4-slice Lightspeed CT unit. The scanner was acquired in 2001 and performed approximately 19,200 scans in fiscal year ("FY") 2007 at a percentage utilization factor of 88.7%. A single-slice CTi scanner provides CT fluoroscopy and acts as a back-up to the Lightspeed unit. The scanner was acquired in 1999 and performed approximately 10,900 scans in FY 2007 at a percentage utilization factor of 99.5%. The Hospital has experienced an average 19% annual growth in the number of CT scans performed at the NBG campus between FYs 2005 and 2007. OHCA recognizes that scanners with current CT technology allow for faster scan times and capture more image data when compared to earlier generations of CT scanners. Based on the age and service volumes experienced by each of the existing CT scanners, OHCA finds that the addition of a new fixed-based, 64-slice CT unit to take the place of the existing primary CT scanner is reasonable and appropriate.

The Hospital established its mobile-based PET service in 2001. The Hospital's mobilebased PET/CT service began operation in 2006, on a one day per week schedule. The mobile-based PET/CT scanner performed 25 PET scans and 280 PET/CT scans in FY 2007. The Hospital's combined PET and PET/CT service has experienced an average 9% annual growth rate in the number of scans performed at the NBG campus between FYs 2005 and 2007.

In its consideration of adding the PET component to the acquisition of the fixed-based 64slice CT scanner, the Hospital examined the following topics: its current complement of oncology and other health services; the availability, accessibility and care considerations of its PET/CT scanning service; as well as the financial feasibility and cost effectiveness of pursuing the PET option. One of the recognized centers of excellence at the Hospital is the George Bray Cancer Center ("Center"). Oncology treatment options include radiation therapy through the American Savings Foundation Oncology Treatment Center, chemotherapy services, clinical research trial opportunities, as well as educational and support services. The Center is also home to the Novalis Stereotactic Radiosurgery program, where stereotactic image guided radiation therapy procedures for treating cancers are performed. Additionally, the Center has been designated a Teaching Hospital Cancer Program by the Commission on Cancer of the American College of Surgeons. In conjunction with these programs, the proposed fixed-based PET/CT scanner will produce superior images that will enhance the accuracy of tumor location and whose results will determine the responsiveness of tumors to cancer treatment regimens. The proposed scanner will also improve the timely diagnosis of radiation oncology patients, resulting in quicker treatment and more timely staging of cancer. The weekday availability of the proposed fixed-based PET/CT service will insure that inpatients will receive timely imaging services that meet appropriate Hospital inpatient care standards. The images produced by the new fixed-based PET/CT scanner will additionally assist in diagnosing cardiac as well as neurological conditions. OHCA finds the proposed fixed-based, weekday PET/CT service will enhance the Hospital's diagnostic and treatment planning services for cancer patients and allow greater flexibility in scheduling of all the various types of scans to be performed.

With respect to the financial feasibility and cost effectiveness of the proposal, the total capital cost for the CON project is \$4,314,622. The project will be financed through a Connecticut Health and Educational Authority lease arrangement. The Hospital projects incremental gains from operations of \$229,268, \$589,398 and \$607,325, respectively, in the first three years of operation. From a financial perspective, the Hospital believes its proposal to acquire a fixed-based, 64-slice CT with PET capability is a cost effective and prudent decision. There is a \$100,000 variance in the capital cost between acquiring a fixed-based, 64-slice CT scanner with PET capability (i.e. approximately \$4,300,000) and acquiring the same scanner without PET capability and maintaining the current PET/CT vendor contract for one day per week service over 5 years (i.e. approximately \$4,200,000). OHCA finds that the Hospital can either incur a capital expenditure of \$4,300,000 for the 64-slice CT scanner with PET capability now or ultimately spend about the same on similar equipment later. Following this scenario, however, will not address PET/CT availability concerns, the inability to treat all Hospital inpatients and accessibility factors inherent in the current mobile set-up. Although OHCA can not draw any conclusions, the Hospital's volume and financial projections upon which they are based appear to be reasonable. Therefore, OHCA finds that the CON proposal is financially feasible, cost effective and will improve

availability to quality PET/CT scanning services to Hospital patients at a minimal cost increase.

Rather than acquiring a new CT scanner for use in the NBG campus Emergency Department, the Hospital has chosen to relocate its existing 4-slice CT scanner from the Radiology Department. With a dedicated CT scanner in the ED, a number of benefits emerge. The first is that wait times for conducting scans and receiving results are expected to decrease, as patients no longer have to be transported out of the ED to the RD. Secondly, the relocated scanner will address the increased demand that has been generated from the recent addition of eleven treatment beds to the expanded and modernized ED service. Lastly, when the relocated CT scanner is upgraded, the improvements will allow the ED scanner to have the same interface and software capabilities as the proposed fixed-based, 64-slice PET/CT scanner. This capability will allow for compatibility and the easy sharing of imaging data between Hospital services and its physicians. Additionally, with the functional capabilities of the fixed-based, PET/CT scanner, ED staff will be able to perform "triple rule outs" of patients who suffer from chest pain. Rather than being put into an observation bed or admitted, a patient will be screened by the 64-slice PET/CT scanner to rule out pulmonary embolisms, aortic dissections, and myocardial infarctions. With the proposed scanner, a chest pain case in the ED can quickly be seen and triaged, therefore increasing the department throughput and decreasing ED wait times. Based on the above information, OHCA finds that the relocation of the fixed-based, 4-slice CT scanner from the RD to the ED is reasonable and appropriate.

Based on the foregoing reasons, OHCA concludes that the Hospital has demonstrated the need for the proposal and that the acquisition of the proposed fixed-based, 64-slice PET/CT scanner is a financially feasible and cost effective option for the Hospital to pursue in its efforts to improve the imaging services at its NBG campus. While the proposal is needed to meet the current and future requirements of the Hospital's imaging services, the proposal will also improve both the quality and accessibility of scanning services for Hospital patients. Lastly, OHCA concludes the relocation and upgrading of the fixed-based, 4-slice CT scanner from the RD to the ED will improve the care received by patients seen in the ED who require CT scanning services.

Order

Based upon the foregoing Findings and Rationale, the Certificate of Need application of The Hospital for Central Connecticut ("Hospital") to acquire and operate a new fixedbased, 64-slice positron emission tomography/computed tomography ("PET/CT") scanner and to relocate and upgrade its existing fixed-based, 4-slice Lightspeed CT scanner to the newly expanded Emergency Department, at a total capital cost of \$4,314,622, is hereby GRANTED.

- 1. This authorization shall expire on October 1, 2009. Should the Hospital's project not be completed by that date, the Hospital must seek further approval from OHCA to complete the project beyond that date.
- 2. The Hospital shall not exceed the approved capital expenditure of \$4,314,622. In the event that the Hospital learns of potential cost increases or expects that final project costs will exceed those approved, the Hospital shall notify OHCA immediately.
- 3. The Hospital shall terminate the contract for the mobile-based PET/CT scanner after the new fixed-based, 64-slice PET/CT scanner has commenced operation. Furthermore, the Hospital shall provide evidence to OHCA of the termination of the contract for the mobile-based PET/CT scanner by no later than two months after the new fixed-based, 64-slice PET/CT scanner has commenced operation.
- 4. This authorization grants the relocation of the Hospital's existing fixed-based, 4-slice CT scanner from the Radiology Department to the Emergency Department, at the New Britain General campus and the proposed upgrade to the scanner. Furthermore, the Hospital will provide evidence to OHCA of the relocation by no later than one month after the relocated CT scanner has become operational.
- 5. With respect to the acquisition of the new fixed-based, 64-slice PET/CT scanner, the Hospital shall submit to OHCA in writing the following information by no later than one month after the new PET/CT scanner has become operational:
 - The name of the equipment manufacturer;
 - The model name and description of the equipment; and
 - The initial date of equipment operation.
- 6. Should the Hospital propose any change in the array of health care services offered or a change in its complement of existing major medical or imaging equipment, the Hospital shall file with OHCA appropriate documentation regarding its change, including either a Certificate of Need Determination Request or a Certificate of Need Letter of Intent.

Should the Hospital fail to comply with any of the aforementioned conditions, OHCA reserves the right to take additional action as authorized by law.

All of the foregoing constitutes the final order of the Office of Health Care Access in this matter.

By Order of the Office of Health Care Access

Signed by Commissioner Vogel on May 8, 2008

Date

Cristine A. Vogel Commissioner

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