



Office Of Health Care Access Certificate of Need Application

Final Decision

Applicant: Yale-New Haven Hospital

Docket Number: 06-30901-CON

Project Title: Acquisition and Operation of a 64-Slice
Computed Tomography Scanner in Hamden

Statutory Reference: Sections 19a-638 & 19a-639 of the
Connecticut General Statutes

Filing Date: August 14, 2007

Decision Date: September 20, 2007

Default Date: November 2, 2007

Staff Assigned: Alexis G. Fedorjaczenko
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Project Description: Yale-New Haven Hospital ("Hospital") proposes to acquire and operate a 64-slice Computed Tomography scanner for its health center in Hamden, at an estimated total capital cost of \$1,969,502.

Nature of Proceedings: On August 14, 2007, the Office of Health Care Access ("OHCA") received a Certificate of Need ("CON") application from Yale-New Haven Hospital ("Hospital") seeking authorization to acquire and operate a 64-slice Computed Tomography scanner for its health center in Hamden, at an estimated total capital cost of \$1,969,502. The Hospital is a health care facility or institution as defined by Section 19a-630 of the Connecticut General Statutes ("C.G.S.").

Pursuant to Sections 19a-638 and 19a-639, C.G.S., a notice to the public concerning OHCA's receipt of the Hospital's Letter of Intent was published in *The New Haven Register* on January 22, 2007.

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 September 4, 2007, 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 received no hearing requests from the public.

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 this section, 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. Yale-New Haven Hospital ("Hospital" or "YNHH") is an acute care, teaching hospital located at 20 York Street in New Haven. *(December 27, 2006, Letter of Intent, pages 1 and 8)*
2. The Hamden Temple Radiology Center currently offers the following imaging modalities: CT scanning; general radiography (x-ray); digital mammography; and ultrasound. *(May 24, 2007, Initial CON Submission, page 9)*
3. The Hospital proposes to replace an existing single-slice Computed Tomography ("CT") scanner with a GE 64-Slice Lightspeed CT Scanner at the Hospital's Temple Radiology location ("Center") at 3000 Dixwell Avenue, Hamden, and to renovate existing space to accommodate the scanner. *(May 24, 2007, Initial CON Submission, pages 10 and 14; and December 27, 2006, Letter of Intent, page 8)*
4. The current CT scanner was acquired as a refurbished machine in December, 2000 by Yale-New Haven Ambulatory Services Corporation. There was no CON-authorization as the existing scanner was purchased under the \$400,000 threshold amount applicable at the time of purchase. The scanner was transferred to the Hospital under CON Determination request 06-30709-DTR. *(May 24, 2007, Initial CON Submission, page 12)*
5. According to the Hospital, the proposal to replace its single-slice CT scanner with a 64-slice CT scanner is the result of several key factors:
 - The current fully depreciated single slice scanner is outdated, cannot be upgraded, cannot perform the full range of requested and desired scans, and produces image quality and resolution that do not meet the current standards of practice;
 - The need to meet projected demand due to trends such as rising disease prevalence, expanded use of imaging for early disease detection, rising demand for less invasive procedures, and the convergence of imaging with other clinical disciplines.*(May 24, 2007, Initial CON Submission, pages 10-11)*

6. According to the Hospital, routine CT scans that cannot currently be performed at the Center include scans for thoracic spine, cervical spine, lumbar spine, orbits (eye sockets), facial bones, temporomandibular joint, extremities (e.g. hands and feet), aortic dissection, and vascular studies. *(May 24, 2007, Initial CON Submission, page 11)*
7. The Hospital indicated that the 64-slice CT scanner was selected over other multi-slice scanners due to the following factors:
 - YNHH has been approached by multiple specialists to offer multi-slice cardiac and vascular exams, for which the 64-slice technology currently offers the best enhanced studies;
 - The ability to perform CT angiography and coronary CT exams that address conditions such as thrombus in the veins of the pelvis and legs, pulmonary embolism, coronary artery disease, renal artery stenosis, aneurisms, chronic dissections of the aorta, and intracranial vascular abnormalities;
 - CT enterpgraphy and CT colonpgraphy are best performed with 64-slice; and
 - Allow for better 3-D applications such as musculoskeletal/orthopedic studies and complex fractures*(August 14, 2007, Completeness Response, page 3 and May 24, 2007, Initial CON Submission, page 14)*
8. The Hospital indicated that the proposed primary service area (“PSA”) consists of Cheshire, Hamden, North Haven, and Wallingford, and that the proposed secondary service area (“SSA”) consists of Bethany and Woodbridge. *(May 24, 2007, Initial CON Submission, page 11)*
9. The Hospital currently operates the following CT scanners:

Table 1: Hospital’s Existing CT Scanners

Facility and Location	CT Description
YNHH-Temple Radiology, New Haven	4-slice
YNHH-Temple Radiology, Hamden	Single slice
YNHH-Temple Radiology, Shoreline Medical Center, Guilford	16-slice
YNHH, 20 York Street, New Haven	64-slice
YNHH, 20 York Street, New Haven	16-slice
YNHH (ED), 20 York Street, New Haven	4-slice
YNHH, Long Wharf Medical Center, New Haven	4-slice

(May 24, 2007, Initial CON Submission, pages 15-16)

10. The Hospital indicated that the following are the existing CT providers in the proposed service area:

Table 2: Existing CT Providers in the Proposed PSA and SSA

Provider Name and Location	Description of Service
Whitney Imaging Center Hamden, CT	4-slice
Wallingford Diagnostic Imaging Center (idstate Radiology Associates) Wallingford, CT	CT Scan

(May 24, 2007, Initial CON Submission, page 20)

11. Scan volumes for the current single-slice CT scanner in Hamden are provided in the following table, along with scan volume for residents of the PSA and SSA receiving CT scans at the Hospital's other Temple Radiology facilities.

Table 4: Actual CT Volume

Description	FY 2004	FY 2005	FY 2006	FY 2007*
Single Slice CT, Hamden	1,774	1,476	1,480	1,563
PSA, New Haven	857	464	410	263
PSA, Shoreline	6	35	72	78
SSA, New Haven	192	170	144	78
SSA, Shoreline	1	1	4	2
Total	2,830	2,146	2,110	1,984

**Annualized based on 10/1/06 to 5/31/07 data*

(May 24, 2007, Initial CON Submission, page 1; July 27, 2007, Completeness Response, page 1; and August 14, 2007, Completeness Response, page 2)

12. In 2006, patients receiving CT scans on the single slice machine in Hamden came from the following towns:

Table 5: Hamden CT Exams by Town

Town	Volume	Percent
Hamden ¹	532	36%
North Haven ¹	277	19%
New Haven	134	9%
Wallingford ¹	112	8%
East Haven	74	5%
Cheshire ¹	68	5%
North Branford	55	4%
West Haven	42	3%
Woodbridge ²	33	2%
Bethany ²	21	1%
Other	132	9%
Total	1480	100%

1. PSA towns

2. SSA towns

(May 24, 2007, Initial CON Submission, page 32)

13. The Hospital's projected CT volumes for fiscal years ("FYs") 2008 through 2010 with the proposed scanner is presented in the following table:

Table 3: Projected CT Volume for FYs 2008 - 2010

FY 2008	FY 2009	FY 2010
2,400	2,640	2,900

Note: Projections are based on existing use.

(May 24, 2007, Initial CON Submission, page 19)

14. The Hospital will meet the ACR guidelines through clinical policies and procedures, medical staff credentialing, and quality assurance processes. *(May 24, 2007, Initial CON Submission, page 21)*

**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**

15. The estimated total capital cost of the CON proposal is \$1,969,502. The capital costs are itemized as follows:

Table 6: Total Capital Cost

Non-Medical Equipment (PACS Storage)	\$50,000
Construction/Renovation	\$246,000
Total Capital Expenditure	\$297,000
Medical Equipment Lease	\$1,672,502
Total Capital Cost	\$1,969,502

(May 24, 2007, Initial CON Submission, page 25)

16. The proposed project would renovate approximately 900 gross square feet in the existing CT Suite in order to replace the existing unit, and would be phased to ensure that the overall facility remains operational at all times during construction. (May 24, 2007, Initial CON Submission, page 26)
17. The proposed building work is scheduled to begin immediately after CON approval, with commencement of the CT service approximately 9 months later. (May 24, 2007, Initial CON Submission, page 26)
18. The project will be financed through \$59,400 of the Hospital's equity, \$237,600 of funded depreciation, and \$1,672,502 of lease financing. (May 24, 2007, Initial CON Submission, pages 27-8)
19. The Hospital will bill for the technical component of the charge. The professional component will be billed separately by the physicians. (July 27, 2007, Completeness Response, page 2)
24. The Hospital's projected incremental revenue from operations, total operating expense, and gain from operations associated with the CON proposal are as follows:

Table 7: Financial Projections Incremental to the Project

Description	FY 2008	FY 2009	FY 2010
Incremental Revenue from Operations	\$357,301	\$499,748	\$642,457
Incremental Total Operating Expense	\$273,225	\$451,499	\$444,416
Incremental Gain from Operations	\$84,076	\$48,249	\$198,041

(May 24, 2007, Initial CON Submission, pages 172-4)

25. There is no State Health Plan in existence at this time. (May 24, 2007, Initial CON Submission, page 10)
26. The Hospital has adduced evidence that the proposal is consistent with its long-range plan. (May 24, 2007, Initial CON Submission, page 10)

28. The Hospital has improved productivity and contained costs through energy conservation, group purchasing, reengineering, and application of new technologies. *(May 24, 2007, Initial CON Submission, page 23)*
29. The Hospital's three year projected payer mix for the proposed CT scanner in Hamden, based on Net Patient Revenue, is as follows:

Table 8: Three-Year Projected Payer Mix with the CON Proposal

Payer Mix	Year 1	Year 2	Year 3
Medicare	13%	13%	13%
Medicaid	2%	2%	2%
Champus and TriCare	0%	0%	0%
Total Government	15%	15%	15%
Commercial Insurers	85%	85%	85%
Uninsured	0%*	0%*	0%*
Workers Compensation	0%	0%	0%
Total Non-Government	85%	85%	85%
Total Payer Mix	100%	100%	100%

*Note: * The Applicant projects Gross Revenue from the Uninsured population of \$38,110 in year 1, \$64,931 in Year 2, and \$84,656 in Year 3 but is writing the total amount off as charity care and bad debt, resulting in 0% based on Net Revenue.*

(May 24, 2007, Initial CON Submission, pages 172-4)

30. The proposal will not result in any change to the Hospital's current patient/physician mix. *(May 24, 2007, Initial CON Submission, page 23)*
31. The Hospital possesses sufficient technical, financial and managerial competence and expertise to provide efficient and adequate service to the public. *(May 24, 2007, Initial CON Submission, pages 22 and 77-149)*
32. The Hospital's rates are sufficient to cover the proposed capital expenditures and operating costs associated with the proposal. *(May 24, 2007, Initial CON Submission, pages 170-6)*

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.

Yale-New Haven Hospital (“Hospital” or “Applicant”) is an acute care teaching hospital located at 20 York Street in New Haven, Connecticut. The Hospital proposes to replace an existing single-slice Computed Tomography (“CT”) scanner at the Hospital’s Temple Radiology Center (“Center”) at 3000 Dixwell Avenue, Hamden with a GE 64-Slice Lightspeed CT Scanner. The Applicant also proposes to renovate existing space to accommodate the scanner.

The Hamden Temple Radiology Center currently offers CT scanning, general radiography (x-ray), digital mammography, and ultrasound services. The current single-slice CT scanner was acquired as a refurbished machine in December, 2000. The Center performed 1,744 scans on this CT scanner in FY 2004, 1,476 scans in FY 2005, and 1,480 scans in FY 2006. The Applicant projects that 1,563 scans will be performed in Hamden in FY 2007. The Hospital states that the decline in volume after 2004 is due to diverting patients to other Temple Radiology locations that can provide specific scans and needed studies with multi-slice scanners.

According to the Applicant, the proposal to replace the single-slice CT scanner with a 64-slice CT scanner is based on the current CT scanner being fully depreciated, outdated, and unable to be upgraded. The Applicant stated that the proposal will be cost effective by reducing the need for repeat scans, increasing patient throughput, and decreasing the number of invasive procedures for patients. OHCA finds that the replacement of an outdated single-slice CT scanner with a 64-slice CT scanner will improve both access and quality of care for patients in need of imaging services in the service area.

The total capital cost for the CON proposal is \$1,969,502, financed through the Hospital’s equity, funded depreciation, and lease financing. The Applicant projects incremental gains from operations with the proposal of \$84,076, \$48,249, and \$198,041 in fiscal years 2008, 2009, and 2010 respectively. The Applicant’s financial projections, and volumes upon which they are based, appear to be reasonable and achievable. Therefore, OHCA finds that the CON proposal is cost effective and will improve access to quality CT scanning services.

Order

Based upon the foregoing Findings and Rationale, the Certificate of Need application of Yale-New Haven Hospital ("Hospital" or "Applicant") to replace an existing single-slice Computed Tomography ("CT") scanner at the Hospital's Temple Radiology Center at 3000 Dixwell Avenue, Hamden with a 64-slice CT scanner at a total capital cost of \$1,969,502, is hereby GRANTED.

1. This authorization shall expire on September 20, 2008. Should the Applicant's CT imaging project not be completed by that date, the Applicant must seek further approval from OHCA to complete the project beyond that date.
2. The Applicant shall not exceed the approved total capital cost of \$1,969,502. In the event that the Applicant learns of potential cost increases or expects that final project costs will exceed those approved, the Applicant shall notify OHCA immediately.
3. This authorization requires the removal of the Applicant's existing single-slice CT scanner for certain disposition, such as sale or salvage, outside of and unrelated to the Applicant's service provider locations. Furthermore, the Applicant will provide evidence to OHCA of the final disposition of the existing single-slice CT scanner, by no later than six months after the new scanner has become operational.
4. The Applicant shall notify OHCA in writing of the following information by no later than one month after the new scanner becomes operational:
 - a) The name of the CT scanner manufacturer;
 - b) The model name and description of the scanning unit; and
 - c) The initial date of the operation of the CT scanner.

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 Cristine A. Vogel on September 20, 2007

Date

Cristine A. Vogel
Commissioner

CAV:agf:swl