



## Office Of Health Care Access Certificate of Need Application

### Final Decision

**Applicant:** The Stamford Hospital

**Docket Number:** 05-30570-CON

**Project Title:** Acquisition and Replacement of a Multi-Slice Computed Tomography Scanner

**Statutory Reference:** Section 19a-639 of the Connecticut General Statutes

**Filing Date:** December 15, 2005

**Decision Date:** January 11, 2006

**Default Date:** March 15, 2006

**Staff Assigned:** Tillman Foster

**Project Description:** The Stamford Hospital (“TSH”) proposes to acquire a multi-slice computed tomography (“CT”) scanner and replace an existing CT scanner, at a total capital cost of \$1,305,000.

**Nature of Proceedings:** On December 15, 2005, the Office of Health Care Access (“OHCA”) received the Certificate of Need (“CON”) application from The Stamford Hospital (“TSH”) seeking authorization to acquire a replacement multi-slice computed tomography (“CT”) scanner, at a total capital cost of \$1,305,000. TSH is a health care facility or institution as defined by Section 19a-630 of the Connecticut General Statutes (“C.G.S.”).

Pursuant to Section 19a-639, C.G.S., a notice to the public concerning OHCA’s receipt of TSH’s CON application was published in the *The Advocate*, Stamford on September 8, 2005. OHCA received no responses from the public concerning TSH’s proposal. Pursuant to Public Act 05-75, three individuals or an individual representing an entity with five or more people had until January 5, 2006, the twenty-first calendar day following the filing of TSH’s CON Application, to request that OHCA hold a public hearing on TSH’s proposal. OHCA received no hearing requests from the public by January 5, 2006.

OHCA's authority to review and approve, modify or deny the CON application is established by Section 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 TSH'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 Stamford Hospital ("TSH") is an acute care general hospital located at 30 Shelbourne Road in Stamford, Connecticut. TSH's total licensed bed capacity of 330 beds and bassinets includes 305 licensed general hospital beds and 25 licensed bassinets and is a Level II Trauma Center. As a Level II Trauma Center it is imperative that it must be capable of providing consistently correct diagnostic results immediately at all times with the least amount of complications to the patient as possible. *(November 15, 2005, CON Application, Pages 3,9,10 & Exhibit E)*
2. CT Scanning services at TSH's main campus location are currently provided through the operation of a General Electric Lightspeed, Four-Slice CT Scanner and a General Electric High Speed Advantage, Single-Slice CT scanner. *(November 15, 2005, CON Application, Page 2 and 6)*
3. TSH proposes to acquire and operate a Toshiba Aquilion 64 Fast Whole Body CT Scanner System which will replace its single-slice CT scanner, the existing four-slice CT scanner will continue to be operated as the back-up. *(August 15, 2005, Letter of Intent, Project Description Attachment - November 15, 2005, CON Application, Page 2 - December 15, 2005, Completeness Responses, Attachment)*
4. TSH listed its Connecticut primary and secondary service area towns as follows:
  - Primary: Stamford and Darien; and
  - Secondary: Old Greenwich, Riverside, Cos Cob, Greenwich, New Canaan, Norwalk, Westport and Wilton.*(November 15, 2005, CON Application, Page 3)*
5. The single-slice CT scanner purchased by TSH in 1991 is scheduled for replacement is almost fifteen years old, is fully depreciated, and its functionality has been surpassed by newer technologies. *(November 15, 2005, CON Application, Page 2)*
6. TSH based the need to replace the existing single-slice CT scanner on the following factors: *(November 15, 2005, CON Application, Pages 2,3 and 6)*
  - Technological limitations of the single-slice unit, specifically it is not able to complete the full range of diagnostic scans and requires prolonged procedure times for the patient (i.e., Chest CT Scan requires 45 seconds of breath-hold time);

- It is operationally unreliable and goes down 1-2 times per month; and
  - Replacement parts for the existing single-slice CT scanner are hard to locate.
7. In addition, TSH stated that the four-slice CT scanner goes down 3-4 times a year. If this occurs at the same time as the single slice, it must go on "trauma diversion" status. At "best" case, when only the 4-slice goes down, all scans must be done on the single slice, which causes a trauma CT of chest, abdomen and pelvis to take approximately one hour to image. *(November 15, 2005, CON Application, Page 3)*
8. TSH stated that it is circumstances such as those that would not only jeopardize the operating parameters of its Level II Trauma Center status but also bring its entire CT operations to a standstill so that any other CT cases from its ED or other departments would be delayed and potentially diverted. *(November 15, 2005, CON Application, Pages 3)*
9. The other CT Scanning providers in TSH's Primary Service area are the following:

**Table 1: Other CT Scanning Services in TSH's Primary Service Area**

<b>Location</b>	<b>Address</b>	<b>CT Equipment/Service</b>	<b>Hours and Days of Operation</b>
Advanced Radiology Imaging Center	1315 Washington, Blvd., Stamford, CT	8-Slice CT	8:00 am – 4:30 pm Monday-Friday
Greenwich Hospital Diagnostic Center	2015 West Main Street, Stamford, CT	8-Slice CT	8:00 am – 4:00 pm Monday-Friday
Tully Health Center	32 Strawberry Hill Court, Stamford, CT	16-Slice CT	8:00 am – 4:00 pm Monday-Friday

*(December 15, 2005 Completeness Responses, Page 2)*

10. The proposed replacement CT scanner will provide:
- Capabilities that will permit the performance of the entire array of CT imaging procedures with enhanced speed and resolution;
  - Enhanced imaging of vascular structures including the heart, coronary arteries, and other anatomy not currently possible on its existing equipment;
  - Myocardial infarction, pulmonary embolism (PE) and/or an aortic dissection could be ruled out in seconds scanning patients for patients coming into the ED with chest pain;
  - Dose of radiation that the patients receives is minimized and less contrast medium is used; and
  - Ability to provide CT scans for difficult to treat cases such as morbidly obese patients. *(November 15, 2005, CON Application, Pages 2 and 3)*
11. The actual CT scan volume from FY 2003 through FY 2005 for TSH's existing CT scanners and the percentage increase were as follows: *(November 15, 2005, CON Application, Pages 5 & 17)*

**Table 2: Actual CT Volume for FY 2003 through FY 2005**

CT Scanner Description <sup>1</sup>	FY 2003	FY 2004	FY 2005
CT Scans <sup>2</sup>	18,764	19,737	20,193
<b>Total % Increase from FY 2003</b>			<b>7.6%</b>

Note: The data presented by TSH could not be verified by OHCA

12. TSH estimated that the proposed CT Scanner would be able to accommodate 80% of the current Emergency Department (ED)/Trauma volume, 60% of its Inpatient volume and 60% of its Outpatient volume. *(November 15, 2005, CON Application, Page 5)*
13. TSH's projected CT scan volume for FY 2006 through FY 2008 with the proposed CT scanner replacement is as follows: *(November 15, 2005, CON Application, Pages 5,16 & 17 December 15, 2005, Completeness Responses, Page 2) Completeness Responses, Page 2)*

**Table 3: Projected CT Volume for FY 2006 through FY 2008 with the Proposal**

CT Scanner Description	FY 2006	FY 2007	FY 2008
CT Scans <sup>3</sup>	20,602	21,535	22,963
<b>Incremental Volume Between FYs (See Note A)</b>	<b>409<sup>4</sup></b>	<b>933</b>	<b>1,428</b>

Note: The data presented by TSH could not be verified by OHCA

Note A: Projections for FYs 2006-2008 based on the following assumptions:

- ED/Trauma, Inpatient, and Outpatient Growth was compounded 3% per year to the base year volume (FY 2005), additional scans 320 (FY 2006), 747 (FY 2007) and 1174 (FY 2008);
- Incremental volume for Cardiac Calcium Scores and Lung Screening represents an average of one (1) scan per week for each type of scan or approximately 100 scans/year (only 75 scans FY 2006, operational only nine months), increases to one and one half (1.5) scans/week for FY 2007 and two (2) scans for FY 2008, for 150 and 200 additional scans for FY 2007 and 2008, respectively; and
- Incremental volume for Cardiac Angiography represents 10% of negative diagnostic cath that are currently done in TSH's Catheterization Lab that will be done via the proposed CT scanner. This represents 14, 36 and 54 additional scans for fiscal years 2006, 2007 and 2008, respectively.

**Financial Feasibility and Cost Effectiveness of the Proposal and its Impact on the TSH'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**

14. The estimated total capital expenditure of the CON proposal is \$1,305,000. Component project costs include \$1,265,000 for the replacement CT unit, plus \$60,000 for installation work and \$20,000 for a trade-in rebate for the single-slice CT Scanner. *(November 15, 2005, CON Application, Page 11)*

<sup>1</sup> TSH volumes only, excludes the Tully Health Center volumes.

<sup>2</sup> Actual volume generated from the existing single and four-slice CT Scanners

<sup>3</sup> Projected volume calculated from the existing four-slice and the proposed 64-Slice CT Scanners.

<sup>4</sup> FY 2006 Incremental scan volume increase based on 9 Months, only.

15. The total capital cost of \$1,305,000 for the CON proposal will be financed through an equity contribution from TSH. *(November 15, 2005, CON Application, Page 22)*
16. TSH projects incremental revenue from operations, total operating expense and losses/gains from operations associated with the CON proposal for FY 2006 through FY 2008 as follows: *(November 15, 2005, CON Application, Page 110)*

**Table 4: Incremental Financial Projections for FY 2006 through FY 2008**

Description	FY 2006	FY 2007	FY 2008
Incremental Revenue from Operations	\$204,000	\$482,000	\$767,000
Incremental Total Operating Expense	\$238,000	\$460,000	\$446,000
<b>Incremental (Loss)/Gain from Operations</b>	<b>(\$34,000)</b>	<b>\$22,425</b>	<b>\$321,000</b>

17. TSH's projected incremental loss in FY 2006 is primarily due to there being only nine-months of revenue from operations to offset the associated startup costs for the new replacement CT scanner *(November 15, 2005, CON Application, Page 14)*
18. TSH has recovered from a FY 2003 operating loss of \$11.8 million to post an FY 2004 operating gain of \$4.57 million and an FY 2005 estimated operating gain of \$8.5 million. The improvement in operations was due to the implementation of various revenue and service initiatives, staffing changes and non-salary expense management. *(November 15, 2005, CON Application, Page 14)*
19. TSH's projected payer mix during the first three years of implementation and operation of the replacement CT scanner is as follows: *(November 15, 2005, CON Application, Page 12)*

**Table 5: Three-Year Projected Payer Mix with the CON Proposal**

Payer Mix	Year 1	Year 2	Year 3
Medicare	38.0%	38.0%	38.0%
Medicaid	9.0%	9.0%	9.0%
TriCare (CHAMPUS)	0.0%	0.0%	0.0%
<b>Total Government</b>	<b>47.0%</b>	<b>47.0%</b>	<b>47.0%</b>
Commercial Insurers	48.0%	48.0%	48.0%
Uninsured	5.0%	5.0%	5.0%
Workers Compensation	0.0%	0.0%	0.0%
<b>Total Non-Government</b>	<b>53.0%</b>	<b>53.0%</b>	<b>53.0%</b>
<b>Total Payer Mix</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

20. There is no State Health Plan in existence at this time. *(November 15, 2005, CON Application, Page 3)*
21. TSH has adduced evidence that the proposal is consistent with TSH's long-range plan. *(November 15, 2005, CON Application, Page 3)*
22. TSH has improved productivity and contained costs by energy conservation, employing group purchasing practices, reengineering and the application of new technology. *(November 15, 2005, CON Application, Page 9)*

23. The proposal will not result in any change to TSH's teaching and research responsibilities. *(November 15, 2005, CON Application, Page 9)*
24. The proposal will not result in any change to TSH's patient/physician mix. *(November 15, 2005, CON Application, Page 9)*
25. TSH has sufficient technical, financial and managerial competence and expertise to provide efficient and adequate service to the public. *(November 15, 2005, CON Application, Pages 25 to 74)*

## **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 an existing service(s), the specific types of services proposed to be offered, the current utilization of services and the financial feasibility of the proposal.

The Stamford Hospital, (“TSH”) is an acute care general hospital located at 30 Shelbourne Road in Stamford, Connecticut. The Hospital’s total licensed bed capacity of 330 beds and bassinets includes 305 licensed general hospital beds and 25 licensed bassinets and is a Level II Trauma Center. TSH proposes to acquire a replacement computed tomography (“CT”) scanner, a Toshiba Aquilion 64 Fast Whole Body CT Scanner System to replace its General Electric High Speed Advantage, single-slice CT scanner.

CT scanning services are currently provided by TSH with a General Electric Light Speed, Four-Slice CT Scanner and the aforementioned single-slice CT scanner in Stamford. TSH is proposing to replace its existing almost fifteen year-old single slice scanner which is fully depreciated, and its functionality has been surpassed by new technologies.

TSH determined the need to replace the existing single-slice CT scanner based on several factors. Technological limitations of the single-slice unit, specifically it is not able to complete the full range of diagnostic scans and requires prolonged procedure times for the patient, it is operationally unreliable and replacement parts for the existing single-slice CT scanner are hard to locate. It is imperative for TSH to have reliable CT scanner equipment in order to maintain its Level II Trauma Center status.

In addition, TSH stated that the four-slice CT scanner goes down 3-4 times a year. If this occurs at the same time as the single slice, TSH must go on "trauma diversion" status. At "best" case, when only the 4-slice goes down, all scans must be done on the single slice, which causes a trauma CT of chest, abdomen and pelvis to take approximately one hour to image.

TSH stated as a Level II Trauma Center it is imperative that it must be capable of providing consistently correct diagnostic results immediately at all times with the least amount of complications to the patient as possible. The length of procedure time of the single slice unit, combined with a possibility of the single-slice and four- slice CT scanners being inoperable, TSH would have to go on diversion for all traumas and routine work would stop, jeopardizing the operating parameters of its Level II Trauma Center status and bringing its entire CT operations to a standstill.

The proposed CT scanner has capabilities that will permit the performance of the entire array of CT imaging procedures with enhanced speed and resolution. It will provide enhanced imaging of vascular structures including the heart, coronary arteries, and other anatomy not currently possible on its existing equipment. Myocardial infarction, pulmonary embolism (PE) and/or an aortic dissection could be ruled out in seconds for the

scanning of patients coming into the ED with chest pain. The dose of radiation that the patient receives is minimized and less contrast medium is used. It has the ability to provide CT scans for difficult to treat cases such as morbidly obese patients, also. Based on the foregoing reasons, OHCA finds that there is a clear public need for the CON proposal, and that the CON proposal will improve both the quality and accessibility of existing computed tomography services in the Stamford region.

The total capital cost for the CON proposal is \$1,305,000. The project will be financed through an equity contribution from TSH of \$1,305,000. TSH projects an incremental loss from operations of (\$34,000) in FY 2006 and incremental gains from operations of \$22,425 in FY 2007 and \$321,487 in FY 2008 associated with the project. TSH's projected incremental loss in FY 2006 is primarily due to there being only nine-months of revenue from operations to offset the associated startup costs for the new replacement CT scanner. The FY 2006 operating loss is not considered to be significant based on the overall scope of the project. Although OHCA cannot draw any conclusions, TSH's volume projections and the financial projections upon which they are based appear to be reasonable and achievable. Therefore, OHCA finds that the CON proposal is both financially feasible and cost effective.

Based upon the foregoing Findings and Rationale, the Certificate of Need application of The Stamford Hospital to acquire a replacement computed tomography scanner at a total capital cost of \$1,305,000, is hereby GRANTED.

## **Order**

The Stamford Hospital ("TSH") is hereby authorized to acquire a replacement computed tomography ("CT") scanner at a total capital cost of \$1,305,000, subject to the following conditions:

1. This authorization shall expire on July 31, 2007. Should TSH's CT scanner replacement project not be completed by that date, TSH must seek further approval from OHCA to complete the project beyond that date.
2. TSH shall not exceed the approved total capital cost of \$1,305,000. In the event that TSH learns of potential cost increases or expects that final project costs will exceed those approved, TSH shall file with OHCA a request for approval of the revised CON project budget.
3. This authorization requires the removal of TSH's single-slice CT scanner for certain disposition, such as sale or salvage, outside of and unrelated to TSH's service provider locations. Furthermore, TSH will provide evidence to OHCA of the final disposition of said CT scanner, by no later than three months after the replacement CT scanner has become operational.

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

January 11, 2006

Signed by Cristine A. Vogel  
Commissioner

CAV: tf