



Office Of Health Care Access Certificate of Need Application

Final Decision

Hospital: Greenwich Hospital

Docket Number: 04-30329

Project Title: Replacement of Mobile Position Emission Tomography Scanner and Single Slice Computed Tomography Scanner with a fixed PET-CT Scanner

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

Filing Date: November 19, 2004

Decision Date: February 14, 2005

Default Date: February 17, 2005

Staff Assigned: Laurie Greci

Project Description: Greenwich Hospital (“Hospital”) proposes to replace its mobile Position Emission Tomography Scanner (“PET”) service and a single slice Computed Tomography (“CT”) Scanner with a fixed PET-CT Scanner, at a total capital cost of \$2,704,590.

Nature of Proceedings: On November 19, 2004, the Office of Health Care Access (“OHCA”) received a completed Certificate of Need (“CON”) application from Greenwich Hospital to replace its mobile PET scanner and a single slice CT scanner with a fixed PET-CT scanner, at a total capital cost of \$2,704,590. The Hospital is a health care facility or institution as defined by Section 19a-630 of the Connecticut General Statutes (“C.G.S.”).

A notice to the public regarding OHCA’s receipt of the Hospital’s Letter of Intent (“LOI”) to file its CON application was published in the *Greenwich Time* on July 11, 2004, pursuant to Section 19a-639, C.G.S. as amended by Section 1 of Public Act 03-17. OHCA received no comments from the public concerning the Hospital’s LOI.

Pursuant to C.G.S. Section 19a-639, and as amended by Public Act 03-17, a public hearing regarding the CON application was held on January 27, 2005. The Hospital was notified of the date, time and place of the hearing, and a notice to the public was published in *The Greenwich Time* on December 21, 2004. Commissioner Cristine A. Vogel served as Presiding Officer for this case. The public hearing was conducted as a contested case in accordance with the provisions of the Uniform Administrative Procedure Act (Chapter 54 of the Connecticut General Statutes) and C.G.S. Section 19a-639.

The Presiding Officer heard testimony from the Hospital and, in rendering this decision, considered the entire record of the proceeding. 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 the 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. Greenwich Hospital ("Hospital") is a nonprofit acute care hospital located at 5 Perryridge Road, Greenwich, Connecticut. (*September 30, 2004, CON Application, page 169*)
2. The Hospital's cancer program is an accredited Comprehensive Community Cancer Program of the American College of Surgeon's Commission on Cancer. The clinical program includes specialists in pathology, radiology, medicine, surgery, oncology, and radiation oncology. Its programs span the full continuum of care from prevention and education to early detection diagnosis, treatment, and ongoing support. (*September 30, 2004, CON Application, page 33*)
3. The Hospital has been providing mobile PET services through its participation in the Fairfield County Mobile PET Collaborative ("FCMPC"). The FCMPC received approval to contract with a vendor to provide mobile PET services under OHCA Docket Number 00-509. Under OHCA Docket Number 02-584 the FCMPC received approval to upgrade the mobile PET scanner to a mobile PET-CT scanner. Under Docket Number 04-22953-MDF FCMPC was granted an extension from August 11, 2004, to May 6, 2005, by which date the scanners would need to be upgraded. (*September 30, 2004, CON Application, page 9*)
4. The Hospital received accreditation for its oncological PET services from the American College of Radiology on June 29, 2004. The accreditation is valid through June 29, 2007. (*September 30, 2004, CON Application, page 151*)

5. The Hospital proposes to purchase a fixed PET-CT scanner and discontinue the current mobile PET service. *(September 30, 2004, CON Application, page 9)*
6. The Hospital intends to acquire and operate a General Electric Medical Systems Discovery ST PET-CT System with 16 slice CT *(September 30, 2004, CON Application, page 191)*
7. The proposed fixed PET-CT will be placed within the Hospital's Radiology Department on the main campus at 5 Perryridge Road in Greenwich. *(July 2, 2004, Letter of Intent, Attachment IV)*
8. The Hospital currently has both a multi-slice and a single-slice CT scanner. The multi-slice CT scanner is in operation seven days a week while the single slice scanner is used for selective studies, for overflow, and as a back-up for the existing multi-slice system. *(July 2, 2004, Letter of Intent, Attachment IV)*
9. Scans on the Hospital's single slice CT scanner take longer to conduct than on a multi-slice scanner making it no longer suitable for the Hospital's current needs. The proposed PET-CT scanner will allow the Hospital to utilize the incorporated 16-slice CT scanner to perform CT scans that more time-consuming. *(September 30, 2004, CON Application, pages 9 and 22)*
10. The manufacturer of the PET-CT scanner, GE Medical Systems, in a letter to Mr. Ralph Sgambato, Director of Radiology for the Hospital, stated that the CT scanner integrated into the PET-CT has all of the same capabilities as a GE Lightspeed standalone CT Scanner with the exception of the gantry tilt. The software, however, is capable of providing the same level of patient care and image quality as a standalone CT scanner. *(January 19, 2005, Responses to Interrogatories, page 20)*
11. As part of the Hospital's Watson Pavilion project, the mobile pad will be eliminated. *(November 19, 2004, Completeness Responses, page 10)*
12. The mobile trailer has limited space, no bathrooms, and is located far from the Hospital's Radiology Department. *(January 19, 2005, Response to Interrogatories, page 1)*
13. The Hospital listed several advantages of merged PET-CT images as compared to PET alone:
 - a. PET-CT scanning equipment enhances the accuracy of tumor location;
 - b. PET-CT scanners produce superior images for localizing head and neck malignancies;
 - c. PET-CT scanning results determine the responsiveness of tumors to cancer treatment regimens; and
 - d. PET-CT scanner images assist in diagnosing cardiac and neurological conditions.*(September 30, 2004, CON Application, pages 11, 12, and 33)*
14. PET scanning volume is expected to continue to grow due to:
 - a. Overall prevalence of cancer;
 - b. Increase in volume due to the aging population;
 - c. Incidence of many cancers approved for PET has been increasing in Connecticut;

- d. Expected expanded coverage by Medicare to new uses for PET; and
- e. Growing acceptance and emerging demand for PET cardiac imaging. *(September 30, 2004, CON Application, pages 13 and 14)*

- 15. The Hospital's primary service area ("PSA") includes Greenwich, Stamford, Darien, Norwalk, and New Canaan. *(September 30, 2004, CON Application, page 15)*
- 16. The Hospital's actual PET scan volume for patients within the PSA, other towns in Connecticut, and towns in New York for Fiscal Year ("FY")2004 are reported in the following table:

Table 1: PET scanning Volume by Town, FY 2004

Town	Number of Scans in FY 2004
Greenwich	248
Stamford	50
Darien	15
Norwalk	10
New Canaan	8
Other Connecticut Towns	26
New York Towns	122
Total	479

(November 9, 2004, Fairfield County Mobile PET Collaborative Quarterly Report, Mobile PET scanning Utilization Statistics October 1, 2003 through September 30, 2004)

- 17. There are currently no providers offering PET-CT scanning in the PSA. Stamford Hospital and Norwalk Hospital, both members of the FCMPC, will provide PET-CT service once the mobile vendor has upgraded the equipment. *(September 30, 2004, CON Application, page 17)*
- 18. The Hospital stated that the mobile PET service will soon be unable to accommodate the Hospital's PET volume. The mobile scanner is only at the Hospital on Wednesdays and Saturdays. *(September 30, 2004, CON Application, page 9)*
- 19. The current capacity of nine (9) scans per day, two days a week, and 52 weeks per year equals a maximum of 936 scans per year. There is no allowance for down time, equipment failure, or patient cancellations on the day of the scan. *(November 19, 2004, Completeness Responses, page 7)*
- 20. To date, the mobile PET scanner has been primarily used for oncology patients. With the introduction of cardiac and more neurological patients, it will be difficult to schedule these diverse patient populations with a service offered on only two days per week. *(January 19, 2005, Completeness Responses, page 9)*

21. Oncology and neurology scans use F18DG¹ as the radiopharmaceutical. On the day of an examination a technician performs one hour of quality control, including coincidence timing, singles calibration and a blank scan. Cardiac scans utilize Rubidium 87 as the radiopharmaceutical and a separate quality control routine would be required. *(January 19, 2005, Completeness Responses, pages 10 and 11)*
22. The CT scans done in association with an invasive procedure, such as a biopsy, and those performed for radiation therapy treatment planning will be performed on the proposed PET-CT scanner. The total number of CT scans performed in FY 2004 for invasive procedures was 119; for radiation therapy the number performed was 214. It is expected that these figures will remain fairly constant. *(September 30, 2004, CON Application, page 21)*
23. The Hospital's projected PET-CT scan volume for patients within the PSA, other towns in Connecticut, and towns in New York for FY 2005, FY 2006, and FY 2007 is as follows:

Table 2: Projected PET-CT Scans for FYs 2005, 2006 and 2007

Scan Type	FY 2005	FY 2006	FY 2007
Oncology	526	579	637
Cardiac MPI	119	166	218
Cardiac FDG	15	15	15
Neurological, including Alzheimers	22	26	32
Simulations	60	60	60
Total	742	846	962

(November 19, 2004, Completeness Responses, page 6)

24. The Hospital based the number of oncological scans to be performed on the tumor registry data of the Hospital as well as its historical scan volume. To date, almost all scans performed at the Hospital have been for oncology patients. The cardiac scans have been based on the number of nuclear cardiac scans performed using the SPECT camera. The neurological scans have been based on the assumption that 6 – 8% of Alzheimer patients seen for evaluation will be appropriate candidates for a PET-CT scan. *(September 30, 2004, CON Application, pages 17-20)*
25. In addition to the PET-CT scans, the Hospital proposes to perform an additional 334 CT scans in each of FYs 2005, 2006, and 2007. *(November 19, 2004, Completeness Responses, page 6)*
26. The Hospital will provide PET-CT scanning services five days per week on Monday through Friday from 7:30 a.m. to 4:30 p.m. The hours of operation will be expanded as patient demand increases. *(September 30, 2004, CON Application, page 8)*
27. As the fixed PET-CT services will be offered five days a week, the wait period for oncological patients to be diagnosed, staged, and begin treatment will be shortened. *(January 19, 2005, Response to Interrogatories, page 11)*

¹ 2-[F-18] Fluoro-D-Glucose

28. The physical advantages of a fixed PET-CT scanner for the Hospital's patients include the relocation of the scanner within the Radiology Department of the Hospital, reduced radiation exposure by using the "Angelshield" dose delivery system, and immediate access to restrooms. In addition those patients that require oxygen, intravenous lines, or stretchers will no longer be limited from lack of space. *(January 19, 2005, Response to Interrogatories, pages 11 and 12)*
29. The F18DG is filtered by the kidneys. Hydration and frequent voiding promotes increased urine production helping to decrease the radiation dose to the genitourinary tract of the patient. *(September 30, 2004, CON Application, page 53)*
30. Solucient, a healthcare information company, projected large growth in PET volume in the Hospital's service area between 2003 and 2008. The analysis included the Hospital's Connecticut and New York service area towns. Solucient used a variety of data sources, including claims, surveys, and Medicare filings to perform its analysis. Solucient's projections could not be verified due to the claimed propriety nature of the information. *(January 19, 2005, Response to Interrogatories, pages 3 and 14)*
31. Quinton Friesen, the Chief Operating Officer of Greenwich Hospital, testified at the hearing the following:
 - a. The Hospital must improve its PET service, otherwise it will lose patients to other providers;
 - b. PET-CT scans increase the quality of care and the accuracy of the imaging results;
 - c. Volumes will grow due to the ability to offer the service more than two days a week;
 - d. The hospital will be able to expand the types of PET and PET-CT scans that can be performed, such as cardiac and neurological exams;
 - e. Significant growth in the clinical use of PET-CT is expected; and
 - f. None of the other collaborative members will be harmed as supported by the minutes of the collaborative meetings.
 - g. The main campus of the Hospital has no space for relocating the mobile pad.
 - h. The Hospital will need to make a multi-year commitment to the mobile vendor within the next few months in order to continue to offer the mobile PET services.
 - i. The Hospital believes that the mobile scanner no longer offers the appropriate level of care for its patients.*(Hearing Testimony, Quinton Friesen, January 27, 2005)*
32. Mr. Friesen stated that as a member of the Yale New Haven Health Heart Institute the Hospital will have cardiac coverage 24 hours per day, seven days per week. It is the Hospital's expectation that the growth in cardiology services will increase the demand for cardiac PET-CT scans. *(Prefiled Testimony, Quinton Friesen, January 19, 2005, page 24)*

**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**

33. The CON proposal's total capital cost of \$2,704,590 includes the fair market value of the fixed PET-CT scanner and the equipment options plus the cost of the required facility renovations of \$235,645. *(September 30, 2004, CON Application, page 27)*
34. The construction costs consist of the following:

Table 3: Construction Costs

Item	Cost
Building Work	\$160,145
Architectural and Engineering	25,000
Contingency	24,000
Information System, Telecommunications, Furniture, Artwork, and Signage	26,500
Total Construction Costs	\$235,645

(September 30, 2004, CON Application, pages 28 and 29)

35. The proposal's total capital cost will be financed by funded depreciation. *(September 30, 2004, CON Application, page 30)*
36. The Hospital's cash equivalent balance on September 30, 2004, was \$47,611,206. *(September 30, 2004, CON Application, page 30)*
37. The Hospital projects incremental revenue from operations, total operating expense and gains from operations associated with the CON proposal as follows:

Table 4: The Hospital's Incremental Financial Projections for FY 2005, FY 2006, and FY 2007

Description	FY 2005	FY 2006	FY 2007
Incremental Revenue from Operations	\$156,000	\$1,118,000	\$1,455,000
Incremental Total Operating Expense	192,000	454,000	556,000
Incremental Gain/(Loss) from Operations	\$ (36,000)	\$98,000	\$221,000

(September 30, 2004, CON Application, page 187)

38. The Hospital's current and projected payer mix for each of the first three years of implementation and operation of the proposed fixed PET-CT scanner is as follows:

Table 5: Hospital's Three-Year Projected Payer Mix with the CON Proposal

Description	Percent (%)
Medicare	29
Medicaid	1
TriCare (CHAMPUS)	0
Total Government	30%
Commercial Insurers	61
Self-Pay	7
Workers Compensation	2
Total Non-Government	70%
Uncompensated Care	0
Total	100%

(September 30, 2004, CON Application, page 31)

39. The Hospital estimates that the proposed PET-CT scanning services would be able to commence operation on May 1, 2005, subsequent to the completion of the Hospital's related facility renovations *(September 30, 2004, CON Application, page 29)*

Consideration of Other Section 19a-637, C.G.S. Principles and Guidelines

The following findings are made pursuant to the principles and guidelines set forth in Section 19a-637, C.G.S.:

40. There is no State Health Plan in existence at this time. *(September 30, 2004, CON Application, page 10)*
41. The Hospital has adduced evidence that the proposal is consistent with the Hospital's long-range plan. *(September 30, 2004, CON Application, page 10)*
42. The Hospital has improved productivity and contained costs by undertaking energy conservation, group purchasing and activities involving the application of new technology. *(September 30, 2004, CON Application, page 22)*
43. The proposal will not result in any significant change to the Hospital's teaching and research responsibilities. *(September 30, 2004, CON Application, page 23)*
44. There are no distinguishing or unique characteristics of the Hospital's patient/ physician mix related to the proposal. *(September 30, 2004, CON Application, page 23)*

45. The Hospital has sufficient technical, financial and managerial competence and expertise to provide efficient and adequate service to the public. (*September 30, 2004, CON Application, Attachment 11, Pages 458 - 498*)

Rationale

Greenwich Hospital ("Hospital") proposes to replace its vendor-provided mobile PET scanning service and a single slice CT scanner with a fixed PET-CT scanner, at a total capital expenditure of \$2,704,590. The Hospital intends to acquire and operate a GE Medical Systems Discovery ST 16 slice fixed PET-CT scanner.

The Hospital's primary service area includes the towns of Greenwich, Stamford, Darien, Norwalk, and New Canaan in Connecticut. Solucient provided the Hospital with an analysis of the projected growth in the volume of PET scans with the Hospital's service area. The analysis by Solucient included the expected demand in Connecticut, as well as towns within the Hospital's service area that are located in the State of New York. However, the data were not verifiable by OHCA. By FY 2007, the Hospital projects that the demand for PET-CT scans will exceed the capacity available with the two-day a week mobile service.

The Hospital listed several advantages of merged PET-CT images as compared to PET alone as follows: PET-CT scanning equipment enhances the accuracy of tumor location; PET-CT scanners produce superior images for localizing head and neck malignancies; PET-CT scanning results determine the responsiveness of tumors to cancer treatment regimens; and PET-CT scanner images assist in diagnosing cardiac and neurological conditions. A fixed unit available on a daily basis will enhance the Hospital's diagnostic and treatment planning services for cancer patients and allow more flexibility in scheduling the different types of exams to be performed. By 2007, the Hospital estimated that the number of cardiac scans to be performed will be double the number performed in 2005. Furthermore, the use of the PET-CT scanner for CT scans only will provide the Hospital with a second multi-slice CT scanner on site. Based on the foregoing reasons, OHCA finds that the CON proposal will improve both the quality and accessibility of PET, PET-CT, and CT scans for the Hospital's patients.

The CON proposal's total capital cost of \$2,704,590 will be financed from the Hospital's funded depreciation. The Hospital projects a loss of \$36,000 in FY 2005 and modest gains of \$98,000 and \$221,000 in FY 2006 and 2007, respectively, due to the acquisition of the fixed PET-CT scanner and the discontinuation of the mobile PET service. The Hospital'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 Greenwich Hospital to replace its mobile PET scanning service and its existing single slice CT scanner with a fixed PET-CT scanner, at a total capital cost of \$2,704,590, is hereby GRANTED.

Order

Greenwich Hospital (“Hospital”) is hereby authorized to replace its existing CT scanner and a mobile PET scanner with a fixed PET-CT scanner, at a total capital cost of \$2,704,590, subject to the following conditions:

1. This authorization shall expire on February 14, 2006. Should the Hospital’s fixed PET-CT scanner not be acquired and operational 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 total capital expenditure of \$2,704,590. In the event that the Hospital learns of potential cost increases or expects that final project costs will exceed those approved, the Hospital shall file with OHCA a request for approval of the revised CON project budget.
3. The Hospital shall terminate the contract for the mobile PET scanner after the fixed PET-CT scanner has commenced operation. Furthermore, the Hospital shall provide evidence to OHCA of the termination of the contract for the mobile PET scanner by no later than two months after the fixed PET-CT scanner has commenced operation.
4. This authorization requires the removal of the single slice CT scanner from Greenwich Hospital’s main campus at 5 Perryridge Road, Greenwich. The Hospital will provide evidence to OHCA of the disposition of the scanner by no later than six months after the new PET-CT scanner has become operational.
5. The Hospital shall file with OHCA utilization statistics for the fixed PET-CT scanner on a quarterly basis for two full years of operation. Each quarterly filing shall be submitted to OHCA by no later than one month following the end of each reporting period (e.g., January, April, July and October). The initial report shall list the date on which the fixed PET-CT scanner commenced operation. The quarterly reports shall include the following information:
 - a. Total number of scans scheduled for the fixed PET-CT scanner;
 - b. Total number of scans performed by the fixed PET-CT scanner;
 - c. Average patient waiting time from the scheduling of the scan to the performance of the scan;
 - d. Number of scans by patient zip code;
 - e. Hours and days of operation for each week and in total; and
 - f. Number of scans by Medicare diagnostic code.

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

February 14, 2005

Signed by Cristine A. Vogel
Commissioner

CAV: lkg