



Office Of Health Care Access Certificate of Need Application

Final Decision

Hospital: Greenwich Hospital

Docket Number: 04-30269-CON

Project Title: Acquire a 3.0 Tesla Magnetic Resonance Imaging scanner at Greenwich Hospital

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

Filing Date: August 10, 2004

Decision Date: September 30, 2004

Default Date: November 8, 2004

Staff Assigned: Paolo Fiducia

Project Description: Greenwich Hospital (“Hospital”) proposes to acquire a 3.0 Tesla Magnetic Resonance Imaging (“MRI”) unit at a total capital expenditure of \$3,225,079.

Nature of Proceedings: On August 10, 2004 the Office of Health Care Access (“OHCA”) received a Certificate of Need (“CON”) application from Greenwich Hospital (“Hospital”) for the acquisition of a 3.0 Tesla MRI unit at a total capital expenditure of \$3,225,079. 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 Applicant’s Letter of Intent (“LOI”) to file its CON Application was published on March 20, 2004 in the *Greenwich Times* (Greenwich). OHCA received no responses from the public concerning the Applicant’s proposal.

OHCA's authority to review, approve, modify or deny this proposal 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 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 an acute care hospital located at 5 Perryridge Road in Greenwich, Connecticut. *(March 15, 2004, Letter of Intent, page 2)*
2. The Hospital has been offering MRI services for more than fifteen years. The Hospital currently operates one fixed 1.5 Tesla magnet MRI scanner and one mobile 1.5 Tesla magnet MRI scanner. Both MRI scanners offer services seven (7) days a week. The existing and proposed hours of operation for the MRI scanners are Monday through Friday from 7:30am to 10:00pm and Saturday and Sunday from 8:00am to 6:00pm. *(August 10, 2004 CON Application, page 20)*
3. The Hospital proposes to acquire a General Electric Signa Excite 3.0 Tesla MRI unit, at a total capital expenditure of \$3,225,079. Upon implementation of this proposal, the Hospital will operate two fixed and one mobile MRI machines in the trailer at the main campus. *(August 10, 2004, Letter of Intent page 20)*
4. The proposed 3.0T MRI technology is state of the art equipment that offers the following features and enhancements:
 - Improved image quality and resolution which is required for new applications such as advanced neurological and cardiovascular imaging;
 - Faster image acquisition time, which will minimize motion artifact and can improve patient throughput and overall productivity;
 - Improved musculoskeletal imaging due to superior bone-muscle and bone-cartilage contrast and better visibility of ligaments and nerves; and
 - Improved brain imaging.*(September 7, 2004 Correspondence, page 4)*
5. Several technological advances have made 3-T imaging clinically possible:
 - Specific Absorption Rate (SAR) management: newer, more efficient Radio Frequency (RF) transmission, and more sophisticated software now allow for far more imaging of the body and maintain FDA SAR limitations;
 - Smaller magnets: newer compact magnet technology allows for more patient-friendly systems while maintaining large imaging areas or Field of View;

- Installation: the smaller magnets are easier to site and require near 1.5T footprints and room sizes;
 - Surface coils: surface coils and specialized RF antennae are becoming more available through numerous 3rd party coil manufacturers; and
 - Cost: more efficient manufacturing and use of off-the self hardware are making the cost of a 3-T lower.
- (September 7, 2004 Correspondence, page 46)*

6. The 3.0 Tesla magnet MRI scanner has numerous well-documented advantages over the 1.5 Tesla magnet MRI scanner:
- Higher signal-to noise ratio
 - Greater chemical shift
 - Higher susceptibility effects
 - Greater T1 contrast
 - Faster body imaging
 - Extremity imaging
- (August 10, 2004 CON Application, pages 46-54)*
7. The Hospital based the need for a second fixed MRI unit on the following:
- Increased inpatient volume;
 - Decreased exam time; and
 - Existing backlog of MRI patients.
- (August 10, 2004 CON Application, page 21)*
8. The Hospital stated that both inpatient and outpatient volume have increased 65% from FY 2000 to FY 2004 (estimated). *(August 10, 2004 CON Application, page 20)*

Table 1: Historical MRI Volume

MRI Scans	2000	2001	2002	2003	2004 (estimated)
Total	5,341	6,998	7,965	8,225	8,828

9. According to the Hospital, this project will not affect other area providers as the Hospital will use this equipment to serve its existing patient base. *(August 10, 2004 CON Application, page 23)*
10. The addition of a second fixed MRI will allow Greenwich Hospital to meet patient demand for services through increased access and elimination of backlogs which at present time for outpatient services is three to five days. *(August 10, 2004 CON Application, pages 20 & 21)*
11. The Hospital states that the addition of a second fixed site MRI scanner would enhance health care services available to communities in the Greenwich Hospital service area. In addition the Hospital would be able to provide patients with state-of-the-art, easily accessible, excellent quality care when they need it, as soon as they need it. *(August 10, 2004 CON Application, page 23)*

12. The Hospital's projected total MRI procedure volume for FY 2005, FY 2006 and FY 2007 is as follows: *(August 10, 2004 Attachment 11, page 101)*

Table 2: Hospital's Projected MRI Procedures for FY 2005, FY 2006 and FY 2007

Description	FY 2005	FY 2006	FY 2007
Projected MRI Procedures: With the CON Proposal	9,346	11,879	13,746
Projected MRI Procedures: Without the CON Proposal	9,093	9,760	9,760
Projected MRI Procedures: Incremental to CON Prop.	253	2,119	3,986

13. The Hospital stated that outpatient MRI volume in the service area is expected to grow over 73% from FYs 2002 to 2007, a growth rate of approximately 14% each year. Inpatient volume is projected to grow 1% per year. Projected total volume is expected to be 13,746 by FY 2007. *(August 10, 2004 CON Application, pages 22 & 23)*

Table 3: FY 2007 Projected Total MRI Volume

Projected Outpatient-Service Area Volume	10,959
Projected Outpatient-Outside Service Area Volume	1,930
Projected Inpatient	857
Total MRI Volume –FY 2007	13,746

Financial Feasibility and Cost Effectiveness of the Proposal and its Impact on the Hospital's Rates and Financial Condition

14. The CON proposal's total capital expenditure of \$3,225,079 includes \$2,240,079 for the 3.0 T MRI unit and \$985,000 for building renovations. *(August 10, 2004 CON Application, page 7)*

15. The CON proposal consists of the following capital expenditure components:

Table 4: Capital Expenditure Components

Description	Amount
Imaging Equipment MRI Scanner	\$2,240,079
Construction/Renovations	\$985,000
Total Capital Expenditure	\$3,225,079

(August 10, 2004 CON Application, pages 13 & 96)

16. The original CT scan room will be demolished and reconfigured in place to house the new 3.0 T MRI. The new location will allow both the existing 1.5 T MRI and the new 3.0 T MRI to directly adjacent to one another. The entire renovation encompasses approximately 1,320 square feet of space. *(August 10, 2004, CON Application, page 13)*

17. The anticipated schedule of the proposal is as follows:

Table 5: Project Schedule

Activity	Date
Construction Commencement	November 15, 2004
Construction Completion	March 1, 2005
DPH Licensure	NA
Operations Date	August 1, 2005

(August 10, 2004 CON Application, page 14)

18. The Hospital proposes to acquire the new 3.0 Tesla MRI unit through funded depreciation at a total capital expenditure of \$3,225,079. *(August 10, 2004 CON Application, page 15)*

19. The Hospital projects incremental revenue from operations, total operating expense and (loss)/gains from operations associated with the CON proposal for FY 2005, FY 2006, and FY 2007 as follows: *(August 10, 2004 CON Application, page 101)*

Table 6: Hospital's Incremental Financial Projections for FY 2005 through FY 2007

Description	FY 2005	FY 2006	FY 2007
Incremental Revenue from Operations	\$164,000	\$1,400,000	\$2,684,000
Incremental Total Operating Expense	\$517,000	\$1,272,000	\$1,372,000
Incremental Gain/(Loss) from Operations	\$(353,000)	\$128,000	\$1,312,000

20. The Hospital's projected payer mix for the first three years of operation associated with the CON proposal is as follows: *(August 10, 2004, CON Application, page 16)*

Table 7: Payer Mix Percentages

Payer Source	Current Payer Mix	Year One	Year Two	Year Three
Medicare	29%	29%	29%	29%
Medicaid	1%	1%	1%	1%
Commercial Insurers	61%	61%	61%	61%
Self-Pay	7%	7%	7%	7%
Workers Compensation	2%	2%	2%	2%
Total Payer Mix	100.00%	100.00%	100.00%	100.00%

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.:

21. There is no State Health Plan in existence at this time. (*August 10, 2004 CON Application, page 6*)
22. The proposal is consistent with Hospital's long-range plan. (*August 10, 2004 CON Application, page 6*)
23. The Hospital's proposal will not change the Hospital's teaching or research responsibilities. (*August 10, 2004 CON Application, page 10*)
24. There are no distinguishing characteristics of the patient/physician mix. (*August 10, 2004 CON Application, page 10*)
25. The Hospital has improved productivity and contained costs through energy conservation, and group purchasing. (*August 10, 2004 CON Application, page 9*)
26. The Hospital has sufficient technical and managerial competence to provide efficient and adequate service to the public. (*August 10, 2004 CON Application, page 9*)
27. The Hospital's rates are sufficient to cover the proposed capital expenditure and operating costs. (*Financial Pro-forma, Question 15B*)

Rationale

Greenwich Hospital (“Hospital”) proposes to acquire a new 3.0 Tesla Magnetic Resonance Imaging (“MRI”) scanner. The Hospital’s actual MRI scan volume was 5,341 scans in FY 2000, 6,998 scans in FY 2001, 7,965 scans in FY 2002, 8,225 scans in FY 2003, and 8,828 scans in FY 2004. The Hospital based its need on its increasing demand for MRI services, increased inpatient volume, decreased exam time, and existing backlog for outpatient services. The addition of a new 3.0 Tesla MRI will allow Greenwich Hospital to meet patient demand for services through increased access and elimination of backlogs. The proposed 3.0 Tesla MRI unit is state of the art equipment that offers several clinical benefits in the areas of cardiology, abdominal, and orthopedic imaging, including improved image quality and resolution and faster image acquisition time. The 3.0 Tesla magnet MRI scanner has numerous advantages over the 1.5 Tesla magnet MRI scanner including higher signal-to noise ratio, greater chemical shift, higher susceptibility effects, greater T1 contrast, faster body imaging, and extremity imaging. The Hospital will use this equipment to serve its existing patient base, the health care delivery system in Connecticut will benefit from this proposal as patients will be able to be served on state of the art equipment. Upon implementation of this proposal, the Hospital will operate two fixed and one mobile MRI units. Therefore, improving the accessibility of health care delivery in the region.

The Hospital projects incremental volume increases of 253 MRI scans in FY 2005, 2,119 MRI scans in FY 2006, and 3,986 MRI scans in FY 2007 due to the increased operating capacity and new clinical applications that are associated with the CON proposal. Based on the foregoing reasons, OHCA finds that there is a clear public need for the CON proposal.

The original CT scan room will be demolished and reconfigured in place to house the new MRI. The new location will allow both the existing 1.5 T MRI and the new 3.0 T MRI to directly adjacent to one another. OHCA finds that this proposal will improve the quality of the MRI service provided by the Hospital by expanding the Hospital’s MRI capability.

The CON proposal’s total capital expenditure of \$3,225,079 will be funded by the Hospital’s funded depreciation. The Hospital projects an incremental loss from operations of \$(353,000) in FY 2005 due to start-up costs and non-cash expenses. The Hospital projects incremental gains from operations of \$128,000 in FY 2006 and \$1,312,000 in FY 2007 due to volume increases associated with the CON proposal. If volumes are achieved, these projections appear to be both reasonable and achievable. Therefore, OHCA concludes that the CON proposal is financially feasible and cost effective.

Based upon the foregoing Findings and Rationale, the Certificate of Need application of Greenwich Hospital to acquire a new 3.0 Tesla MRI unit, at a total capital expenditure of \$3,225,079, is hereby GRANTED.

Order

Greenwich Hospital is hereby authorized to acquire a new 3.0 Tesla MRI unit, at a total capital expenditure of \$3,225,079, subject to the following conditions:

1. This authorization shall expire on September 30, 2005. Should the Hospital's new 3.0T fixed MRI unit not commence operation 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 \$3,225,079. 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 project budget.

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

September 30, 2004

Signed by Cristine A. Vogel
Commissioner

CAV:pf