



Office of Health Care Access Certificate of Need Application

Final Decision

Hospital: Middlesex Hospital

Docket Number: 04-30230-CON

Project Title: Acquisition of a 1.5 Tesla Magnetic Resonance Imaging System

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

Filing Date: April 22, 2004

Decision Date: April 30, 2004

Default Date: July 21, 2004

Staff Assigned: Laurie Greci

Project Description: Middlesex Hospital (“Hospital”) proposes to acquire a fixed 1.5 Tesla Magnetic Resonance Imaging System at a total capital expenditure of \$2,500,000.

Nature of Proceedings: On April 22, 2004, the Office of Health Care Access (“OHCA”) received a Certificate of Need (“CON”) application from Middlesex Hospital (“Hospital”) for the acquisition of a fixed 1.5 Tesla Magnetic Resonance Imaging System at a total capital expenditure of \$2,500,000.

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 was published on April 3, 2004, in the *Middletown Press*. OHCA received no responses from the public concerning the Applicants’ 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. Middlesex Hospital (“Hospital”) is an acute care hospital located at 28 Crescent Street, Middletown, Connecticut. *(January 8, 2004, Letter of Intent, page 2)*
2. The Hospital has the following satellite sites in the State of Connecticut:

Table 1: Middlesex Hospital’s Satellite Sites

Site Name	Site Abbrev	Address
Middlesex Outpatient Center	OPC	534 Old Saybrook Road, Middletown
Middlesex Medical Center, Shoreline	MMC-S	260 Westbrook Road, Essex
Middlesex Medical Center, Marlborough	MMC-M	14 Jones Hollow Road, Marlborough

(January 8, 2004, Letter of Intent, page 2)

3. The Hospital proposes to acquire a Siemens Symphony 1.5 Tesla Magnetic Resonance Imaging System (“fixed MRI”), under a lease arrangement. Upon implementation of this proposal, the Hospital will operate one fixed and two mobile MRI systems (“mobile MRI”). *(January 8, 2004, Letter of Intent, Attachment B)*
4. In 1998, the Hospital received authorization from the Office of Health Care Access (“OHCA”) to offer MRI service at its sites in Essex, Marlborough, and Middletown. In 1999, OHCA authorized Open MRI service at the Hospital. The service at the Hospital is provided by a contracted vendor, Insight. *(March 30, 2004, CON Application, page 13)*
5. The following table summarizes the current MRI services that the Hospital offers:

Table 2: Middlesex Hospital’s Current MRI Services

MRI Equipment	Owner	Location(s)	Day(s)	Hours of Operation
1.5 Tesla, mobile	Hospital	OPC	Monday – Friday Saturday	6:15 a.m. to 9:00 p.m. 7:15 a.m. to 7:00 p.m.
1.5 Tesla, mobile	InSight	MMC-S, Hospital	Wednesday, Friday Saturday Monday	7:15 a.m. to 7:00 p.m. 7:15 a.m. to 5:30 p.m. 7:00 a.m. to 7:00 p.m.

(March 30, 2004, CON Application, page 23)

6. Under Docket Number 02-533, the Hospital was authorized to consolidate its two service locations in Marlborough into a single new facility located at 14 Jones Hollow Road. The original Marlborough location was not equipped to handle an MRI system. The new facility has a pad and dock that can accommodate any type of mobile imaging. *(April 22, 2004, Completeness Response, page 2)*
7. There are no fixed MRI units at the Hospital. Inpatients are sent to the OPC by ambulance. The Hospital's expense for the use of ambulances is approximately \$60,000 per year. *(March 30, 2004, CON Application, page 3)*
8. The Hospital discontinued the use of the open MRI service provided by Insight due to quality reasons on November 24, 2003. *(January 8, 2004, Letter of Intent, Attachment B and March 30, 2004, CON Application, page 23)*
9. The utilization statistics for the past three fiscal years is given in the following table:

Table 3: MRI Utilization in FYs 2001, 2002, and 2003

	MRI Procedure Volume		
Location	FY 2001	FY 2002	FY 2003
OPC	4,786	5,299	5,298
MMC-S	2,110	2,682	2,535
Hospital	-	-	821
Total	6,896	7,981	8,654

(March 30, 2004, CON Application, page 23)

10. The following towns are in the Hospital's primary service area:

Chester	East Haddam	Marlborough
Clinton	East Hampton	Middlefield
Colchester	Essex	Middletown
Cromwell	Haddam	Old Saybrook
Deep River	Killingworth	Portland
Durham	Madison	Westbrook

(March 30, 2004, CON Application, page 16)

11. The Hospital's secondary service area is comprised of the towns of Guilford, Lyme, Old Lyme, Rocky Hill, and Salem. *(March 30, 2004, CON Application, page 16)*
12. Since implementing MRI services, the demand for outpatient MRI services has grown at approximately 18% per year. Inpatient services have increased at an even faster rate. *(March 30, 2004, CON Application, page 2)*
13. During FY 2003, the scheduling backlog for non-emergent MRI exams at the Hospital was 7 to 10 days. Scheduling backlogs refer to the next available regular appointment time with at least two slots in one day. Ideally, the goal is for patients to receive a routine procedure within 5 days. At other locations, the backlog varied from 4 to 17 days. *(March 30, 2004, CON Application, page 19)*

14. Currently, the Hospital performs all routine MRI studies of the brain, chest, abdomen, spine, joints, and extremities with and without contrast. The Hospital also performs Magnetic Resonance Angiography and peripheral vascular imaging. *(January 8, 2004, Letter of Intent, Attachment B)*
15. The proposed fixed MRI has state of the art technology that supports patient diagnoses in the areas of cardiology, neurology, obstetrics, and many other specialties. It will be able to perform cardiac MRI and whole body imaging. *((January 8, 2004, Letter of Intent, Attachment B and March 30, 2004, CON Application, page 5)*
16. The Hospital will move its own mobile MRI to the MMC-S and add an additional day of service at the MMC-S. This will provide 942 scans per year or 18 scans per day. *(March 30, 2004, CON Application, page 4)*
17. The mobile unit owned by the Hospital will be utilized at the Hospital two days per week. This will result in 821 additional scans per year or 16 scans per day. Inpatient MRI scans usually require more time to perform than outpatient scans. *(March 30, 2004, CON Application, page 4)*
18. The following table summarizes the locations and number of days per week for each MRI system after implementation of the proposal:

Table 4: Middlesex Hospital's Proposal MRI Service

MRI System	Owner	Location(s)	Day(s)	Hours of Operation
1.5 Tesla, fixed	Hospital	OPC	Monday through Friday Saturday	6:15 a.m. to 9:00 p.m. 7:15 a.m. to 3:00 p.m.
1.5 Tesla, mobile	Hospital	Hospital	Monday and Friday	7:00 a.m. to 7:00 p.m.
1.5 Tesla, mobile	Hospital	MCC-S	Tuesday, Wednesday, Friday, and Saturday	7:15 a.m. to 7:00 p.m.
1.5 Tesla, mobile	InSight	MMC-M	Monday and Thursday	7:15 a.m. to 7:00 p.m.

(March 30, 2004, CON Application, page 23)

19. According to the Hospital, this project will not affect other area providers as the Hospital will use the new MRI system to fill the unmet need within its own patient base. *(March 30, 2004, CON Application, page 4)*

20. The projected utilization is given in the following table by location for FYs 2004, 2005, 2006, and 2007:

**Table 6: Projected Utilization in Number of Scans
for FYs 2004, 005, 2006, and 2007**

Location	FY 2004	FY 2005	FY 2006	FY 2007
OPC	5,395	5,915	5,951	5,915
MMC-S	2,535	2,827	3,769	3,769
Hospital	821	1,642	1,800	1,900
MMC-M	-	400	800	1,600
Total	9,430	11,726	12,284	13,184

(March 30, 2004, CON Application, page 5)

21. The Hospital's contract with InSight for the mobile MRI scanner will expire in April 2005.
(March 30, 2004, CON Application, page 3)

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

22. The CON proposal consists of the following capital expenditures:

Table 7: Capital Expenditure Components

Description	Amount
Fixed MRI System (lease)	\$2,000,000
Construction/Renovations	500,000
Total Capital Expenditure	\$2,500,000

(March 30, 2004, CON Application, page 10)

23. The Hospital proposes to acquire the fixed MRI through lease financing. *(March 30, 2004, CON Application, page 4)*
24. The useful life of the lease equipment is five years. There will be no residual value at the end of the lease term. *(March 30, 2004, CON Application, page 10)*
25. The construction and renovations will be funded with the Hospital's equity. *(April 22, 2004, Completeness Response, page 2)*
26. The Hospital will replace the existing mobile MRI trailer by enclosing the existing 1,350 square foot open air dock with a permanent structure. The new area will be configured with a computer room, imaging room, technologist control booth and work area, two patient changing rooms, a small office, and a covered ambulance bay. *(April 22, 2004, Completeness Response, page 2)*

27. The Hospital projects the following incremental revenue, expense and gain from operations:

Table 8: Incremental Revenue, Expense and Gain from Operations for FYs 2005, and 2006

Incremental	FY 2005	FY 2006
Revenue from Operations	\$ 2,353,000	\$ 2,423,590
Operating Expense	319,920	329,920
Gain from Operations	\$ 2,033,080	\$ 2,093,670

(March 30, 2004, CON Application, page 98)

28. Hospital's current and projected payer mixes are given in the following table:

Table 9: Current and Projected Payer Mixes

Payer Description	Payer Percent (%)	
	Current	Projected
Medicare	42.7	42.7
Medicaid	6.1	6.1
TriCare (CHAMPUS)	0.3	0.3
Total Government	49.1	49.1
Commercial Insurers	46.6	46.6
Self-Pay	0.6	0.6
Workers Compensation	3.7	3.7
Total Non-Government	50.9	50.9
Uncompensated Care	0.0	0.0
Total Percent (%)	100.0	100.0

(March 30, 2004, CON Application, page 12)

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.:

29. There is no State Health Plan in existence at this time. *(March 30, 2004, CON Application, page 1)*
30. The proposal is consistent with Hospital's long-range plan. *(March 30, 2004, CON Application, page 1)*
31. The Hospital's proposal will not change the Hospital's teaching or research responsibilities. *(March 30, 2004, CON Application, page 8)*
32. There are no distinguishing characteristics of the patient/physician mix with regard to its diagnostic imaging center. *(March 30, 2004, CON Application, page 8)*

33. The Hospital has improved productivity and contained costs through energy conservation, application of technology, and group purchasing. In 2003, the Hospital implemented a major cost reduction initiative. *(March 30, 2004, CON Application, page 7 and 8)*
34. The Hospital has sufficient technical and managerial competence to provide efficient and adequate service to the public. *(March 30, 2004, CON Application, Attachment F)*
35. The Hospital's rates are sufficient to cover the proposed capital expenditure and operating costs. *(March 30, 2004, CON Application, page 98)*

Rationale

Middlesex Hospital ("Hospital") proposes to acquire a fixed Magnetic Resonance Imaging System ("MRI system") for its Middlesex Outpatient Center in Middletown, Connecticut. The Hospital based its need on its increasing demand for outpatient and inpatient MRI services and existing backlog of MRI patients. The proposed 1.5 Tesla MRI system is state of the art equipment that supports patient diagnoses in the areas of cardiology, neurology, obstetrics, and many other specialties. This project will not affect other area providers as Middlesex Hospital will use this equipment to serve its existing patient base. The Hospital currently operates fixed and mobile MRI units, and is operating at full capacity.

Upon implementation of this proposal, the Hospital will operate one fixed and two mobile MRI systems. Middlesex Hospital has authorization to operate MRI systems at the following locations:

- Middlesex Hospital, 28 Crescent Street, Middletown
- Middlesex Outpatient Center, 534 Old Saybrook Road, Middletown
- Middlesex Medical Center – Shoreline, 260 Westbrook Road, Essex
- Middlesex Medical Center – Marlborough, 14 Jones Hollow Road, Marlborough

One of the mobile MRI systems has been vendor-provided. Currently, the low strength open MRI system is not being used by the Hospital due to quality issues. The addition of a new fixed MRI system at the Hospital Outpatient Center in Middletown will allow for expanded capacity of its mobile MRI systems and allow patients move flexibility in where, and when, they may receive their exam. OHCA finds that this proposal will improve the quality and accessibility of MRI units and services provided by the Hospital by creating efficiencies and expanding the Hospital's MRI capability.

The CON proposal's total capital expenditure of \$2,500,000 will be funded by the Hospital's equity funds and lease financing. The volume of MRI exams is increasing at an average of 18% per year. The Hospital projects that it will perform an additional 3,054 scans during the first two full years of the proposal. 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 Middlesex Hospital to acquire a fixed 1.5 Tesla Magnetic Resonance Imaging System for its

Middlesex Outpatient Center at 534 Old Saybrook Road, Middletown, at a total capital expenditure of \$2,500,000, and is hereby GRANTED.

Order

Middlesex Hospital Center is hereby authorized to acquire a fixed 1.5 Tesla Magnetic Resonance Imaging System for its Middlesex Outpatient Center at 534 Old Saybrook Road, Middletown, at a total capital expenditure of \$2,500,000, subject to the following conditions:

1. This authorization shall expire on April 30, 2005. Should the Hospital's new 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 \$2,500,000. 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.
3. The Hospital continues to be authorized to offer mobile MRI services at the main campus in Middletown as well as its satellite locations in Middletown, Marlborough, and Essex. The Hospital or its contracted vendor may offer MRI services at these locations. The contracted vendor must have authorization to operate the mobile MRI scanner.

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

April 30, 2004

Signed by Cristine A. Vogel
Commissioner

CAV:lkj