



Office Of Health Care Access Certificate of Need Application

Final Decision

Applicant: Bridgeport Hospital

Docket Number: 03-30096

Project Title: Intensity Modulated Radiation Therapy (IMRT)
System Upgrade

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

Filing Date: September 29, 2003

Hearing: Waived

Decision Date: October 23, 2003

Default Date: December 28, 2003

Staff Assigned: Harold M. Oberg

Project Description: Bridgeport Hospital (“Hospital”) proposes to upgrade its Varian 2300 linear accelerator to accommodate Intensity Modulated Radiation Therapy (“IMRT”) technology, at a total capital expenditure of \$1,370,642. The Hospital’s proposal includes the replacement of certain items of its existing linear accelerator equipment including the multileaf collimator and portal vision retractable arm, the purchase of new treatment planning system computer hardware and software to support the implementation of IMRT technology, with the remainder of the proposal consisting of physics equipment, an immobilization device and minor building renovations.

Nature of Proceedings: On September 29, 2003, the Office of Health Care Access (“OHCA”) received a Certificate of Need (“CON”) application from Bridgeport Hospital to upgrade its Varian 2300 linear accelerator to accommodate IMRT technology, at a total capital expenditure of \$1,370,642. The Hospital is a health care facility or institution as defined by Section 19a-630 of the Connecticut General Statutes (“C.G.S.”).

The Hospital requested a waiver of hearing for the CON application pursuant to Section 19a-643-45 of OHCA's Regulations, and claimed that the CON application is non-substantive as defined in Section 19a-643-95(3) of OHCA's Regulations. On September 30, 2003, the Hospital was informed that the CON application was eligible for consideration of waiver of public hearing, and a notice to the public was published in *The Connecticut Post* of Bridgeport. OHCA received no comments from the public concerning the Hospital's request for waiver of hearing during the public comment period, and therefore on October 17, 2003, OHCA granted the Hospital's request for waiver of hearing.

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 the Applicant'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. Bridgeport Hospital ("Hospital") is an acute care general hospital located at 267 Grant Street in Bridgeport, Connecticut. The Hospital's total licensed bed capacity of 425 beds and bassinets includes 395 licensed beds and 30 licensed bassinets. (*August 18, 2003 CON Application, Page 57*)
2. The Hospital proposes to upgrade its Varian 2300 linear accelerator to accommodate Intensity Modulated Radiation Therapy ("IMRT") technology, at a total capital expenditure of \$1,370,642. The Hospital's proposal includes the replacement of certain items of its existing linear accelerator equipment including the multileaf collimator and portal vision retractable arm, the purchase of new treatment planning system computer hardware and software to support the implementation of IMRT technology, with the remainder of the proposal consisting of physics equipment, an immobilization device and minor building renovations. (*June 10, 2003 Letter of Intent, Pages 6, 7, 25 and 54 and September 29, 2003 Completeness Responses, Page 10*)
3. IMRT, or Intensity Modulated Radiation Therapy, combines two advanced concepts to deliver three-dimensional conformal radiation therapy: (1) inverse treatment planning with optimization by computer and (2) computer-controlled intensity modulation of the radiation beam during treatment. Through the integration of computer systems and diagnostic imaging, IMRT technology spares the normal tissue around the tumor to be treated and improves disease control and advances cure through the escalation of radiation doses precisely delivered to targeted tumor sites. (*August 18, 2003 CON Application, Page 3*)

4. In recent years, IMRT has become widely accepted as the standard for providing external beam radiation therapy for purposes of treating and monitoring cancer patients. Improvements in the design and function of multileaf collimators and treatment planning systems have yielded new radiation therapy capabilities in treatment delivery and treatment planning distinguishing IMRT technology from conventional three-dimensional conformal radiation therapy. *(August 18, 2003 CON Application, Page 3)*
5. The IMRT process requires a coordinated effort between the radiation oncologist, the medical physicist, the dosimetrist and the radiation therapist. The Hospital anticipates that IMRT will primarily be used in the treatment of those Hospital patients receiving treatment for types of cancer related to the prostate, head and neck, breast and brain. *(August 18, 2003 CON Application, Pages 5 and 7)*
6. The Hospital's actual Radiation Therapy procedure volume was 6,533 procedures in FY 2000, 7,060 procedures in FY 2001, 8,111 procedures in FY 2002 and 7,023 procedures in FY 2003. The Radiation Therapy procedure volume for FY 2003 is an estimated number based on eleven months of annualized actual volume. *(September 29, 2003 Completeness Responses, Page 1)*
7. The Hospital's projected Radiation Therapy procedure volume for FY 2004, FY 2005 and FY 2006 is as follows: *(September 29, 2003 Completeness Responses, Page 31)*

Table 1: Hospital's Projected Rad. Ther. Procedures for FY 2004, FY 2005 and FY 2006

Description	FY 2004	FY 2005	FY 2006
Projected RT Procedures: With the CON Proposal	7,600	7,600	7,600
Projected RT Procedures: Without the CON Proposal	7,600	7,600	7,600
Projected RT Procedures: Incremental to the Proposal	0	0	0

8. The Hospital projects that there will be no incremental volume increase in Radiation Therapy procedures associated with the implementation of the CON proposal. *(September 29, 2003 Completeness Responses, Page 4)*
9. The Hospital is projecting 296 inpatient procedures and 7,304 outpatient procedures for a total of 7,600 Radiation Therapy procedures for FY 2004, FY 2005 and FY 2006. The Radiation Therapy procedure volume projections are based on historical volume including inpatient and outpatient procedures as percentages of total volume. *(September 29, 2003 Completeness Responses, Page 2)*
10. The Hospital provides Radiation Therapy services to its patients Monday through Friday, from 7:30 a.m. to 5:00 p.m., with on call coverage provided on weekends. The Hospital currently has no patient backlog related to the provision of its Radiation Therapy services. *(August 18, 2003 CON Application, Page 5)*
11. The Hospital anticipates that the linear accelerator equipment upgrade to accommodate IMRT technology will be completed and the upgraded equipment will commence operation by January 1, 2004. *(August 18, 2003 CON Application, Page 13)*

**Financial Feasibility and Cost Effectiveness of the Proposal and its Impact on the Applicant's Rates and Financial Condition
 Impact of the Proposal on the Interests of Consumers of Health Care Services and the Payers for Such Services**

12. The Hospital's total capital expenditure of \$1,370,642 for the CON proposal includes the following capital expenditure components: *(June 10, 2003 Letter of Intent, Pages 6, 7, 25 and 54 and September 29, 2003 Completeness Responses, Pages 7, 8 and 10)*

Table 2: Hospital's Total Capital Expenditure for the CON Proposal

Description	Total
Replacement Multileaf Collimator	\$ 382,450
Replacement Portal Vision Retractable Arm	308,635
Replacement Treatment Planning System Hardware and Software	396,830
Technology Obsolescence Protection Program	112,085
Immobilization Device and Physics Equipment	110,867
Building Renovations	59,775
Total Capital Expenditure for the CON Proposal	\$1,370,642

13. The total capital expenditure of \$1,370,642 will be financed entirely by an equity contribution from Hospital operating funds. *(August 18, 2003 CON Application, Page 11)*
14. The Hospital projects incremental revenue from operations, total operating expense and gain from operations associated with the CON proposal as follows: *(September 29, 2003 Completeness Responses, Page 31)*

Table 3: Hospital's Incremental Financial Projections for FY 2004, FY 2005 and FY 2006

Description	FY 2004	FY 2005	FY 2006
Incremental Revenue from Operations	\$ 871,000	\$1,196,860	\$1,232,766
Incremental Total Operating Expense	347,130	493,071	499,639
Incremental Gain from Operations	\$ 523,870	\$ 703,789	\$ 733,127

15. The Hospital's projected payer mix during the first three years of implementation and operation of the linear accelerator IMRT upgrade proposal is as follows: *(August 18, 2003 CON Application, Page 13)*

Table 4: Hospital's Three-Year Projected Payer Mix

Payer Mix	Year 1	Year 2	Year 3
Medicare	51.4%	51.4%	51.4%
Medicaid	14.9%	14.9%	14.7%
TriCare (CHAMPUS)	0.0%	0.0%	0.0%
Total Government	66.3%	66.3%	66.3%
Commercial Insurers	31.9%	31.9%	31.9%
Self-Pay	1.8%	1.8%	1.8%
Workers Compensation	0.0%	0.0%	0.0%
Total Non-Government	33.7%	33.7%	33.7%
Uncompensated Care	0.0%	0.0%	0.0%
Total Payer Mix	100.0%	100.0%	100.0%

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.:

16. There is no State Health Plan in existence at this time. *(August 18, 2003 CON Application, Page 2)*
17. The Hospital has adduced evidence that the proposal is consistent with the Hospital's long-range plan. *(August 18, 2003 CON Application, Page 2)*
18. The Hospital has improved productivity and contained costs by undertaking energy conservation, reengineering, group purchasing and application of new technology activities. *(August 18, 2003 CON Application, Page 8)*
19. The proposal will not result in any change to the Hospital's teaching and research responsibilities. *(August 18, 2003 CON Application, Page 9)*
20. There are no distinguishing or unique characteristics of the Hospital's patient/physician mix related to the proposal. *(August 18, 2003 CON Application, Page 9)*
21. The Hospital has sufficient technical, financial and managerial competence and expertise to provide efficient and adequate service to the public. *(August 18, 2003 CON Application, Attachment II, Pages 38 through 55)*

Rationale

Bridgeport Hospital ("Hospital") proposes to upgrade its Varian 2300 linear accelerator to accommodate Intensity Modulated Radiation Therapy ("IMRT") technology, at a total capital expenditure of \$1,370,642. The Hospital's proposal includes the replacement of certain items of its existing linear accelerator equipment including the multileaf collimator and portal vision retractable arm, the purchase of new treatment planning system computer hardware and software to support the implementation of IMRT technology, with the remainder of the proposal consisting of physics equipment, an immobilization device and minor building renovations.

In recent years, IMRT has become widely accepted as the standard for providing external beam radiation therapy for purposes of treating and monitoring cancer patients. Improvements in the design and function of multileaf collimators and treatment planning systems have yielded new radiation therapy capabilities in treatment delivery and treatment planning distinguishing IMRT technology from conventional three-dimensional conformal radiation therapy.

The IMRT process requires a coordinated effort between the radiation oncologist, the medical physicist, the dosimetrist and the radiation therapist. The Hospital anticipates that IMRT will primarily be used in the treatment of those Hospital patients receiving treatment for types of cancer related to the prostate, head and neck, breast and brain. 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 the Hospital's existing Radiation Therapy services.

The proposal's total capital expenditure of \$1,370,642 will be funded entirely by an equity contribution of \$1,370,642 from the Hospital's operating funds. The Hospital projects that there will be no incremental volume increase in Radiation Therapy procedures associated with the implementation of the CON proposal. The Hospital projects incremental gains from operations of \$523,870 in FY 2004, \$703,789 in FY 2005 and \$733,127 in FY 2006 due to the proposal. 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 Bridgeport Hospital to upgrade its Varian 2300 linear accelerator to accommodate Intensity Modulated Radiation Therapy ("IMRT") technology, at a total capital expenditure of \$1,370,642, is hereby GRANTED.

Order

Bridgeport Hospital ("Hospital") is hereby authorized to upgrade its Varian 2300 linear accelerator to accommodate Intensity Modulated Radiation Therapy ("IMRT") technology, at a total capital expenditure of \$1,370,642, subject to the following conditions:

1. This authorization shall expire on October 31, 2005. Should the Hospital's linear accelerator IMRT upgrade project not be completed 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 \$1,370,642. 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. This authorization requires the removal of the Hospital's existing linear accelerator equipment items subject to the IMRT upgrade for certain disposition, such as sale or salvage, outside of and unrelated to the Hospital's service provider locations. Furthermore, the Hospital will provide evidence to OHCA of the disposition of the linear accelerator equipment items to be upgraded, by no later than six months after the new and replacement linear accelerator equipment items upgraded for IMRT technology have 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

Date signed:
October 23, 2003

Singed by:
Mary M. Heffernan
Commissioner

MMH:ho

Table Descriptions

**Bridgeport Hospital
Intensity Modulated Radiation Therapy (IMRT) System Upgrade
CON Final Decision, Docket Number 03-30096**

Table 1

Title: Projected Radiation Therapy Procedures for FY 2004, FY 2005 and FY 2006

The Hospital's projected number of Radiation Therapy procedures with the CON proposal is 7,600 in FY 2004, 7,600 in FY 2005 and 7,600 in FY 2006. The Hospital's projected number of Radiation Therapy procedures without the CON proposal is 7,600 in FY 2004, 7,600 in FY 2005 and 7,600 in FY 2006. The Hospital's projected number of Radiation Therapy procedures incremental to the CON proposal is 0 in FY 2004, 0 in FY 2005 and 0 in FY 2006.

Table 2

Title: Hospital's Total Capital Expenditure for the CON Proposal

The total capital expenditure for the CON proposal is \$1,370,642 and includes \$382,450 for a replacement multileaf collimator, \$308,635 for a replacement portal vision retractable arm, \$396,830 for replacement treatment planning system hardware and software, \$112,085 for a technology obsolescence protection program, \$110,867 for an immobilization device and physics equipment, and \$59,775 for building renovations.

Table 3

Title: Hospital's Incremental Financial Projections for FY 2004, FY 2005 and FY 2006

The projected incremental revenue from operations for the proposal is \$871,000 in FY 2004, \$1,196,860 in FY 2005 and \$1,232,766 in FY 2006. The projected incremental total operating expense for the proposal is \$347,130 in FY 2004, \$493,071 in FY 2005 and \$499,639 in FY 2006. The projected incremental gains from operations for the proposal are \$523,870 in FY 2004, \$703,789 in FY 2005 and \$733,127 in FY 2006.

Table 4

Title: Hospital's Three-Year Projected Payer Mix

The projected payer mix remains constant in each category for the first three years of implementation and operation of the linear accelerator equipment IMRT technology upgrade. Total Government reimbursement is projected to account for 66.3% of total reimbursement with Medicare at 51.4%, Medicaid at 14.9% and TriCare (Champus) at 0.0%. Total Non-Government reimbursement is projected to account for 33.7% of total reimbursement with Commercial Insurers at 31.9%, Self-Pay Patients at 1.8% and Workers Compensation at 0.0%. Uncompensated Care is projected to be 0.0% of total reimbursement.