Office Of Health Care Access
Certificate of Need Application

Final Decision

Applicant:	**William W. Backus Hospital**
Docket Number:	**04-30390-CON**
Project Title:	**Acquisition of a Second Linear Accelerator with IMRT Technology**
Statutory Reference:	**Section 19a-639 of the Connecticut General Statutes**
Filing Date:	**March 15, 2005**
Decision Date:	**May 23, 2005**
Default Date:	**June 13, 2005**
Staff Assigned:	**Steven W. Lazarus** **Ronald A. Ciesones**

Project Description: William W. Backus Hospital ("Hospital") proposes to acquire a second linear accelerator with Intensity Modulated Radiation Therapy ("IMRT") technology, at a total capital expenditure of $4,482,495, plus $222,000 for capitalized financing costs, for a total capital cost of $4,704,495.

Nature of Proceedings: On March 15, 2005, the Office of Health Care Access ("OHCA") received a Certificate of Need ("CON") application from William W. Backus Hospital to acquire a second linear accelerator with IMRT technology, at a total capital expenditure of $4,482,495, plus $222,000 for capitalized financing costs for a total capital cost of $4,704,495. 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 concerning OHCA's receipt of the Hospital's Letter of Intent was published in the *Norwich Bulletin (Norwich*), on November 19, 2004, pursuant to Section 19a-639, C.G.S. OHCA received no response from the public concerning the Hospital's proposal.

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. William W. Backus Hospital ("Hospital") is an acute care general hospital located at 326 Washington Street, Norwich, Connecticut. *(October 25, 2004, Letter of Intent)*

2. The Hospital proposes to acquire a second linear accelerator with Intensity Modulated Radiation Therapy ("IMRT") technology, at a total capital expenditure of $4,482,495, plus $222,000 for capitalized financing costs for a total capital cost of $4,704,495. *(March 15, 2005, CON Application, pages 1 and 18)*

3. The Hospital's primary service area includes the towns and boroughs of Bozrah, Canterbury, Franklin, Griswold/Jewett City, Lisbon, Norwich, Preston, Sprague and Voluntown. *(March 15, 2005, CON Application, page 2)*

4. The Hospital currently operates a Clinac 2100 C/D linear accelerator with 6&10 MeV and Group III electron capability and a Ximatron CX simulator. Both were manufactured by Varian Associates Inc. and were authorized by the Office of Health Care Access ("OHCA") under Docket Number 96-514. *(Agreed Settlement under Docket Number 96-541)*

5. The Hospital's Radiation Therapy Program ("RTP") is offered at the Hospital's Medical Office Building located at 330 Washington Street, Norwich, CT. *(October 25, 2004, Letter of Intent, March 15, 2005, CON Application, page 2)*

6. The Hospital's RTP offers conventional radiation therapy treatments in a series averaging twenty-eight sessions per patient over a six-week period. *(October 25, 2004, Letter of Intent)*

7. The Hospital proposes to expand its RTP by adding IMRT technology as part of its comprehensive community cancer program, based on program utilization and current radiation therapy standard of practice for cancer care. *(March 15, 2005, CON Application, page 2)*

8. The Hospital plans to purchase and install a Varian Medical Systems Clinac 21 EX linear accelerator with IMRT technology. *(October 25, 2004, Letter of Intent, page 4)*

9. The Hospital based the need for the proposed second linear accelerator on the following:

    - Increased Utilization,
    - Scheduling Backlogs,
    - Improved Accessibility, and
    - Improved Technology.

    (March 15, 2005, CON Application, pages 4-7)

10. The Hospital stated that the general operational standards for linear accelerators have been a capacity of 30 patients per day. This is based on one treatment every fifteen minutes. *(March 15, 2005, CON Application, page 6)*

11. The Hospital stated the existing program with one linear accelerator is an overburdened service. Since 2000, the Hospital's RTP has had to operate extended shifts (9.5 hours) and double shifts (12.5 hours) to accommodate patient access. The extended shifts allowed for up to 50 treatments sessions per day. *(March 15, 2005, CON Application, pages 5&6)*

12. The Hospital stated that the waiting times for the patients from initial consult to first treatment exceeds 30 days and has ranged as high as 50 days in the past year. *(March 15, 2005, CON Application, pages 5&6)*

13. The Hospital stated the existing linear accelerator is limited in the types of radiation treatments it can offer to patients. IMRT technology is now the standard practice in cancer care. *(March 15, 2005, CON Application, pages 5&6)*

14. The proposed linear accelerator with IMRT technology has the following advantages:

    a. Customizes each of the patient's treatment by the oncologist, taking into account tumor size, tumor depth, vital organs surrounding the tumor and each patient's individual anatomy.

    b. Delivery of focused radiation doses to tumor sites, with improved precision in tumor targeting. It is the most advanced approach to three dimensional conformal radiation therapy resulting in improvements in the treatments of cancers of the brain, breast, head and neck, lung prostate, and rectum.

    c. Decreases co-morbidities of radiation such as damage to surrounding healthy tissue, damage to vital organs, and burning/redness of skin. *(March 15, 2005, CON Application, page 3)*

15. The benefits of the proposed second linear accelerator with IMRT are as follows:

    a. Improved access to the proposed IMRT technology for the residents of Eastern Connecticut and the Hospital's service area,

    b. Reduction in waiting time from consultation to first treatment,

    c. Elimination of potential staffing difficulties from extended work schedule,

    d. Decrease usage of current linear accelerator to within manufacturers standards, and

    e. Treatment of deep-seated tumors more efficiently compared to the Hospital's existing accelerator due to higher levels of radiation.
    (March 15, 2005, CON Application, Page 4)

16. The Hospital's actual radiation therapy treatments utilizing its existing linear accelerator for FYs 2000-2004 were as follows:

Table One: Total Radiation Therapy Treatments FY 2000-2004

Year	2000	2001	2002	2003	2004
Total Treatments	8,731	8,970	10,097	8,725	10,054
Working Days	254	254	254	254	254
Treatments Per Day	34	35	40	34	40

(March 15, 2005, CON Application, Page 6)

17. The Hospital's projected IMRT treatments for FY 2006 though FY 2008 proposal are as follows: *(March 15, 2005, CON Application, Page 13)*

Table Two: Projected RTP Volumes for FY 2005 through FY 2008

Year	FY 2005	FY 2006	FY 2007	FY 2008
Existing (Conventional) Linear Accelerator*	9315	9315	9315	9315
Proposed Linear Accelerator with IMRT*	0	1008	3155	3155
Totals	9,315	10,323	12,470	12,470
Treatments Per Day	37	41	49	49

***** Projected volumes are based on chart reviews, historical volumes and trending historical utilization
(May 19, 2005, Additional information received from William W. Backus Hospital)

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

18. The Hospital's total capital cost for the proposal is as follows:

Table Three: Proposed Capital Cost

Component	Cost
Medical Equipment	$2,078,149
Non-Medical Equipment	$15,000
Construction/Renovation	$2,389,346
Total Capital Expenditure	**$4,482,495**
Capitalized Financing Costs	$222,000
Total Capital Cost	**$4,704,495**

(March 15, 2005, CON Application, page 18)

19. The Hospital will finance the proposal entirely though Connecticut Health and Education Facilities Authority.
(March 15, 2005, CON Application, page 21)

20. The Hospital projects gains from operations associated with the CON proposal as $277,813, $444,598, and $444,598 for FYs 2006, 2007 and 2008, respectively.
(March 15, 2005, CON Application, Page 134)

21. The Hospital will expand the existing radiation therapy space on the ground floor of the existing Medical Office Building. This expansion includes a 2,450 gross square foot addition to house the linear accelerator. *(March 15, 2005, CON Application, Page 19)*

22. The Hospital provided the following schedule for the construction/renovation for the proposal:

Table Four: Proposed Schedule for Construction/Renovation

Stage	Date
Construction Commencement Date	July 4, 2005
Construction Completion Date	April 7, 2006
Commencement of Operation Date	May 1, 2006

(March 15, 2005, CON Application, page 20)

23. There is no State Health Plan in existence at this time. *(March 15, 2005, CON Application, Page 2)*

24. The Hospital has adduced evidence that the proposal is consistent with the Hospital's long-range plan. *(March 15, 2005, CON Application, Page 2)*

25. The Hospital has improved productivity and contained costs by undertaking energy conservation, group purchasing and activities involving the application of new technology. *(March 15, 2005, CON Application, Page 16)*

26. The proposal will not result in any change to the Hospital's teaching and research responsibilities. *(March 15, 2005. CON Application, Page16)*

27. The Hospital stated that there are distinguishing and/or unique characteristics of the Hospital's patient/physician mix related to the proposal. The Hospital has an agreement with Yale-New Haven School of Medicine and Yale-New Haven Hospital to share the radiation oncologists for the RTP. (*March 15, 2005, CON Application, Pages 16&17)*

28. The Hospital has sufficient technical, financial and managerial competence and expertise to provide efficient and adequate service to the public. *(March 15, 2005, CON Application, page 15 and Attachment 2)*

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 the existing services, the specific types of services proposed to be offered, the current utilization of services and the financial feasibility of the proposal.

William W. Backus Hospital ("Hospital") is an acute care general hospital located at 326 Washington Street, Norwich, Connecticut. The Hospital proposes to acquire a second linear accelerator with Intensity Modulated Radiation Therapy ("IMRT") technology. The Hospital's primary service area includes the towns and boroughs of Bozrah, Canterbury, Franklin, Griswold/Jewet City, Lisbon, Norwich, Preston, Sprague and Voluntown.

The Hospital currently operates a Clinac 2100 C/D linear accelerator with 6&10 MeV and Group III electron capability and a Ximatron CX simulator. The Hospital's radiation therapy program is being offered at the Hospital's Medical Office Building located at 330 Washington Street, Norwich, CT. The Hospital's current program offers conventional radiation therapy treatments in a series averaging twenty-eight sessions per patient over a six-week period. The Hospital stated that its existing radiation therapy program is overburdened, and the existing linear accelerator is limited in the types of radiation treatments it can offer. Also, according to the Hospital, the waiting times for the patients from initial consult to first treatments currently ranges between 30 and 50 days and performed up to 50 treatments per day. This utilization exceeds industry standards of 30 treatments per day. The Hospital historical utilization for the existing linear accelerator was 8,731, 8,970, 10,097, 8,725 and 10,054 for FYs 2000 though 2004, respectively.

The Hospital based the need of its proposal on increased utilization, scheduling backlogs, increased accessibility and improved technology. The Hospital proposes to expand its radiation therapy program by adding IMRT technology. The Hospital plans to purchase and install a Varian Medical Systems Clinac 21 EX linear accelerator with IMRT technology. The advantages of acquiring the proposed linear accelerator with IMRT technology include customizing treatments per individual patient, delivery of higher quality of radiation doses to tumor sites and decreasing co-morbidities of radiation such as damage to surrounding healthy tissue or vital organs. The proposed IMRT technology will improve access of residents of Eastern Connecticut, reduce waiting times from consultation to first treatment, eliminate potential staffing difficulties due to extended work schedule and decrease the usage of the existing linear accelerator to within manufacturer's standards. The proposed newer IMRT technology is now the standard practice in cancer care. The Hospital projects the IMRT treatments of 1,008, 3,155 and 3,155, for FYs 2006, 2007 and 2008, respectively. The combined total treatments for both existing and proposed linear accelerator is projected to be 10,323, 12,470 and 12,470 for FYs 2006-2008, respectively. The Hospital bases these projections on chart reviews, historical volumes and a trending of historical utilization. The Hospital will expand space and construct addition on the ground floor of the existing Medical Office Building. The proposed additions provide for a room for the proposed linear accelerator. Based on the

above, OHCA finds that the Hospital's acquisition of the second linear accelerator with IMRT technology will improve accessibility and quality of health services in the region.

This proposal has a total capital expenditure of $4,482,495, plus $222,000 for capitalized financing cost for a total capital cost of $4,704,495. The proposed capital cost will be funded entirely through Connecticut Health and Education Facilities Authority. The Hospital projects incremental gains from operations of $277,813, $444,598 and $444,598 for FYs 2006, 2007 and 2008. The Hospital's projected volume and financial projections upon which they are based appear to be reasonable and achievable. Therefore, OHCA finds that the CON proposal will not only improve the access to care for the community it serves, but the Hospital's proposal is also financially feasible and cost effective.

Based upon the foregoing Findings and Rationale, the Certificate of Need application of William W. Backus Hospital to acquire a second linear accelerator with IMRT technology, at a total capital expenditure of $4,482,495, plus $222,000 for capitalized financing cost for a total capital cost of $4,704,495, is hereby GRANTED.

Order

William W. Backus Hospital ("Hospital") is hereby authorized to acquire a second replacement linear accelerator with Intensity Modulated Radiation Therapy ("IMRT") technology, at a total capital expenditure of $4,482,495, plus $222,000 for capitalized financing cost for a total capital cost of $4,704,495, subject to the following conditions:

1. This authorization shall expire on December 31, 2007. Should the Hospital's linear accelerator 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 total capital expenditure of $4,482,495. 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.

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

May 23, 2005

Signed by Cristine A. Vogel
Commissioner

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