



Office Of Health Care Access Certificate of Need Application

Final Decision

Applicant: Waterbury Hospital

Docket Number: 03-30135

Project Title: Replacement of Hospital Information System

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

Filing Date: October 30, 2003

Hearing: Waived

Decision Date: January 21, 2004

Default Date: January 28, 2004

Staff Assigned: Harold M. Oberg

Project Description: Waterbury Hospital (“Hospital”) proposes to replace its existing hospital information system with a new information system, at a total capital expenditure of \$10,925,881. The Hospital’s proposal addresses issues related to HIPAA security requirements becoming law in April 2005, aging existing equipment and operating systems from the 1980’s for which vendor support ends within two years, and six major software applications that are at or near their end of life cycle.

Nature of Proceedings: On October 30, 2003, the Office of Health Care Access (“OHCA”) received a Certificate of Need (“CON”) application from Waterbury Hospital seeking authorization to replace its existing hospital information system with a new information system, at a total capital expenditure of \$10,925,881. 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 November 18, 2003, the Hospital was informed that the CON application was eligible for consideration of waiver of hearing, and a notice to the public was published in the *Waterbury Republican American*. OHCA received no comments from the public concerning the Hospital's request for a waiver of hearing during the public comment period, and therefore on December 1, 2003, OHCA granted the Hospital's request for a waiver of hearing. Susan Cole England, Certificate of Need Supervisor, was designated by Commissioner Cristine A. Vogel to render a final decision in this matter.

OHCA's authority to review and 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

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. Waterbury Hospital ("Hospital") is an acute care general hospital located at 64 Robbins Street in Waterbury, Connecticut. The Hospital's total licensed bed capacity of 393 beds and bassinets consists of 357 licensed beds and 36 licensed bassinets. (*October 30, 2003 CON Application, Page 92*)
2. The Hospital's existing hospital information system is unable to address issues related to HIPAA security requirements becoming law in April 2005, aging equipment and operating systems from the 1980's for which vendor support ends within two years, and six major software applications that are at or near their end of life cycle. (*July 7, 2003 Letter of Intent, Project Description*)
3. The Hospital proposes to acquire a Cerner Millennium information system to replace its existing hospital information system, at a total capital expenditure of \$10,925,881. (*October 30, 2003 CON Application, Pages 1 and 10*)
4. The HIPAA privacy requirements mandate that the hospital information system provide an audit trail for every access to patient data. In addition, the HIPAA security requirements mandate strong access controls. The implementation of the proposed information system will result in centralized network login control, and the security officer will be able to audit the systems and applications. (*October 30, 2003, CON Applications, Pages 10 and 11*)
5. The Hospital's existing Allegra (HIS) and Cerner (Lab) equipment and operating systems are antiquated, and vendor support will end for some of the Hospital's most mission critical systems within two years. (*July 7, 2003 Letter of Intent, Project Description*)

6. The Hospital identified six major software applications that are at or near their end of life cycle and will be unsupported by their vendors that will be replaced by the proposed information system as follows: (*October 30, 2003 CON Application, Page 77*)
 - a. Allegra - Registration, patient accounting, orders management and billing applications – 13 year old software was sunset and maintenance ends in 2004;
 - b. RMS – Radiology application – 13 year old software was sunset and maintenance ends after December 31, 2003;
 - c. Cerner Pathnet – Laboratory application – 17 year old software was sunset and hardware is at end of life cycle;
 - d. Logicare – Emergency Department work flow application – DOS system software and hardware are at end of life cycle;
 - e. Lanier Medical Record System – IBM OS2 dictation system is at end of life cycle and transcription will not be supported after December 31, 2003; and
 - f. Mediware Pharmacy Application – Underlying database will not be supported after December 31, 2003.
7. The Hospital currently does not have a clinical documentation or physician order entry information system. These types of functionality will be required to meet the demand for the delivery of quality care that is evolving for the future. The proposed information system will provide a clinical decision support system and will bring point of care clinical data support and analysis to all of the Hospital's care providers. (*July 7, 2003 Letter of Intent, Project Description*)
8. The Hospital has identified "measure of success" categories based on the demonstrated and/or anticipated functionality of the replacement information system. These categories include reductions in patient falls, adverse drug events, duplicate laboratory tests and duplicate radiology tests as well as improvements to patient access and the revenue cycle. These categories were selected based on their ability to improve patient quality, improve patient safety and provide financial savings from the operation of the replacement information system. (*October 30, 2003 CON Application, Pages 11 through 14*)
9. The Hospital anticipates that the installation of the replacement information system will occur over a thirty-two month period commencing in April 2004 with the full implementation of the CON proposal to be completed by the end of November 2006. (*November 14, 2003 Supplemental CON Application Filing, Page 2*)

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 Payers for Such Services

10. The Hospital's total capital expenditure of \$10,925,881 for the CON proposal includes the following capital expenditure components: (*October 30, 2003 CON Application, Pages 6, 154, 155 and 156*)

Table 1: Hospital's Total Capital Expenditure for the CON Proposal

Description	Amount
Hardware Costs (Purchase)	\$ 3,099,524
Software Costs (Purchase)	3,358,415
Professional Services (Installation Costs)	4,467,942
Total Capital Expenditure	\$10,925,881

11. The Hospital proposes to fund the total capital expenditure of \$10,925,881 for the CON proposal entirely by debt financing through either a conventional loan or through financing from the Connecticut Health and Educational Facilities Authority ("CHEFA"). *(November 14, 2003 Supplemental CON Application Filing, Pages 1, 3 and 4)*
12. Alternatively, the Hospital could fund the CON proposal's total capital expenditure of \$10,925,881 through federal grant funds of \$3,000,000 and through debt financing from CHEFA of \$7,925,881. If the Hospital does not receive the federal grant funds applied for, the Hospital would then fund the total capital expenditure entirely through debt financing. *(October 30, 2003 CON Application, Page 7)*
13. The Hospital projects the following incremental revenue from operations, total operating expense and (loss) from operations associated with the CON proposal during the first three years of the implementation and operation of the replacement information system: *(October 30, 2003 CON Application, Page 115)*

Table 2: Hospital's Incremental Financial Projections for FY 2004, FY 2005 and FY 2006

Description	FY 2004	FY 2005	FY 2006
Incremental Revenue from Operations	\$ 0	\$ 0	\$ 0
Incremental Total Operating Expense	2,179,958	5,855,311	3,255,315
Incremental Gain/(Loss) from Oper.	\$(2,179,958)	\$(5,855,311)	\$(3,255,315)

14. The Hospital projects the following incremental revenue from operations, total operating expense and gain/(loss) from operations associated with the CON proposal during the fourth and fifth years of the implementation and operation of the replacement information system: *(October 30, 2003 CON Application, Page 115)*

Table 3: Hospital's Incremental Financial Projections for FY 2007 and FY 2008

Description	FY 2007	FY 2008
Incremental Revenue from Operations	\$ 0	\$ 0
Incremental Total Operating Expense	820,365	(10,977)
Incremental Gain/(Loss) from Oper.	\$(820,365)	\$ 10,977

15. The projected incremental losses from operations during the period from FY 2004 through FY 2007 are primarily due to related information system costs, which include staff training, education, travel and consulting work required to build, test and install the replacement information system's hardware and software. *(October 30, 2003 CON Application, Page 9)*

16. Upon the completion of the full installation of the replacement information system, the anticipated financial savings that would accrue to the Hospital would offset the incremental costs associated with the CON proposal. The Hospital projects the following financial savings resulting from the CON proposal: *(October 30, 2003 CON Application, Pages 9 and 153)*

Table 4: Projected Hospital Financial Savings resulting from the CON Proposal

Description	New System Financial Savings	Current System Savings	Total Financial Savings
FY 2004 - Projected Financial Savings	\$ 0	\$ 0	\$ 0
FY 2005 - Projected Financial Savings	490,200	21,937	512,137
FY 2006 - Projected Financial Savings	1,310,430	459,741	1,770,171
FY 2007 - Projected Financial Savings	1,950,375	600,096	2,550,471
FY 2008 - Projected Financial Savings	2,463,247	600,096	3,063,343
FY 2009 - Projected Financial Savings	2,793,935	600,096	3,394,031
FY 2010 - Projected Financial Savings	2,962,463	600,096	3,562,559
Total Projected Financial Savings	\$11,970,650	\$2,882,062	\$14,852,712

17. The Hospital's projected payer mix during the first three years of implementation and operation of the replacement information system is as follows: *(October 30, 2003 CON Application, Page 8)*

Table 5: Hospital's Three-Year Projected Payer Mix

Payer Source	Year 1	Year 2	Year 3
Medicare	45.04%	45.04%	45.04%
Medicaid	15.38%	15.38%	15.38%
TriCare	.11%	.11%	.11%
Total Government	60.53%	60.53%	60.53%
Commercial Insurers	34.52%	34.52%	34.52%
Self-Pay	1.88%	1.88%	1.88%
Workers Compensation	1.60%	1.60%	1.60%
Total Non-Government	38.00%	38.00%	38.00%
Uncompensated Care	1.47%	1.47%	1.47%
Total Payer Mix	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.:

18. There is no State Health Plan in existence at this time. *(October 30, 2003 CON Application, Page 2)*

19. The Hospital has adduced evidence that the proposal is consistent with the Hospital's long-range plan. *(October 30, 2003 CON Application, Page 2)*
20. The Hospital has implemented various activities to improve productivity and contain costs that include energy conservation, reengineering of its operations, the application of new technology and group purchasing. *(October 30, 2003 CON Application, Page 4)*
21. The Hospital has no teaching or research responsibilities that would be affected as a result of the proposal. *(October 30, 2003 CON Application, Page 5)*
22. There are no distinguishing or unique characteristics of the Hospital's patient/physician mix related to the proposal. *(October 30, 2003 CON Application, Page 5)*
23. The Hospital has sufficient technical, financial and managerial competence and expertise to provide efficient and adequate service to the public. *(October 30, 2003 CON Application, Pages 78 through 91)*

Rationale

Waterbury Hospital ("Hospital") proposes to replace its existing hospital information system with a Cerner Millennium information system, at a total capital expenditure of \$10,925,881. The Hospital's proposal addresses three major issues concerning HIPAA security requirements becoming law in April 2005, aging equipment and operating systems from the 1980's for which vendor support will end within two years, and six major software applications that are at or near their end of life cycle.

The Hospital currently does not have a clinical documentation or physician order entry information system. These types of functionality will be required to meet the demand for the delivery of quality care that is evolving for the future. The proposed information system will provide a clinical decision support system and will bring point of care clinical data support and analysis to all of the Hospital's care providers. The Hospital anticipates that the installation of the replacement information system will occur over a thirty-two month period commencing in April 2004 with the full implementation of the CON proposal to be completed by the end of November 2006.

The Hospital has identified "measure of success" categories based on the demonstrated and/or anticipated functionality of the replacement information system. These categories include reductions in patient falls, adverse drug events, duplicate laboratory tests and duplicate radiology tests as well as improvements to patient access and the revenue cycle. These categories were selected based on their ability to improve patient quality and patient safety and provide financial savings from the operation of the replacement information system.

The CON proposal's total capital expenditure of \$10,925,881 will be funded entirely by debt financing through either a conventional loan or through financing from the Connecticut Health and Educational Facilities Authority ("CHEFA"). Alternatively, the Hospital could fund the CON proposal's total capital expenditure of \$10,925,881 through federal grant funds of \$3,000,000 and through debt financing from CHEFA of \$7,925,881. If the Hospital does not receive the federal grant funds applied for, the Hospital would then fund the total capital expenditure entirely through debt financing.

The Hospital is projecting incremental losses from operations of \$(2,179,958), \$(5,855,311), \$(3,255,315) and \$(820,365) during FY 2004, FY 2005, FY 2006 and FY 2007 respectively, due to the implementation and operation of the proposed information system. In FY 2008, the Hospital projects a small gain from operations of \$10,977. The projected incremental losses from operations during the period from FY 2004 through FY 2007 are primarily due to related information system costs, which include staff training, education, travel and consulting work required to build, test and install the replacement information system's hardware and software.

Upon completion of the full installation of the replacement information system, the anticipated financial savings that would accrue to the Hospital would offset the incremental costs associated with the CON proposal. The Hospital projects total financial savings due to the proposal of \$14,852,712 over a six-year period associated with its "measure of success" categories as well as operational savings from replacing its current information system. Assuming that the projected total financial savings is accurate, the financial projections appear to be reasonable and achievable. Therefore, OHCA finds that the CON proposal will not only improve the quality of the Hospital's patient care services but that the CON proposal would be both financially feasible and cost effective.

Based upon the foregoing Findings and Rationale, the Certificate of Need application of Waterbury Hospital to replace its existing hospital information system with a new information system, at a total capital expenditure of \$10,925,881, is hereby GRANTED.

Order

Waterbury Hospital (“Hospital”) is hereby authorized to replace its existing hospital information system with a new information system, at a total capital expenditure of \$10,925,881, subject to the following conditions:

1. This authorization shall expire on January 31, 2007. Should the Hospital’s replacement information system project not be fully implemented 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 \$10,925,881. 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

Date

Susan Cole England
Certificate of Need Supervisor

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