



Office Of Health Care Access Certificate of Need Application

Final Decision

Applicant: Saint Francis Hospital and Medical Center

Docket Number: 01-543

Project Title: Replacement of Clinical Information System

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

Filing Date: February 28, 2002

Hearing: Waived

Decision Date: April 4, 2002

Default Date: May 29, 2002

Staff Assigned: Harold M. Oberg

Project Description: Saint Francis Hospital and Medical Center (“Hospital”) proposes to replace its existing clinical information system, at a total capital expenditure of \$16,158,136.

Nature of Proceedings: On February 28, 2002, the Office of Health Care Access (“OHCA”) received a Certificate of Need (“CON”) application from Saint Francis Hospital and Medical Center to replace its existing clinical information system, at a total capital expenditure of \$16,158,136. 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 March 12, 2002, 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 *Hartford Courant* and the *Northeast Minority News*. OHCA received no comments from the public concerning the Hospital's request for waiver of hearing during the public comment period, and therefore on April 1, 2002, OHCA granted the Hospital's request for waiver of hearing.

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. Saint Francis Hospital and Medical Center ("Hospital") is an acute care general hospital located at 114 Woodland Street in Hartford, Connecticut. (*October 10, 2001 Letter of Intent, pages 1 and 2*)
2. In the early 1990s, the Hospital implemented its first clinical information system. At the time the system was installed, it was the most sophisticated clinical information system available, and it provided capabilities required to implement computerized physician order entry. Saint Francis Hospital and Medical Center was one of the first hospitals in the country to implement computerized physician order entry, and the Hospital remains today one of the few hospitals to have successfully accomplished this implementation. (*February 1, 2002 CON Application, page 2*)
3. The Hospital's physicians currently interact directly with the clinical information system to enter their patients' treatment orders and to review test results. This system has served the Hospital very well over the past decade, and as a result of using the system, the medical staff has developed a sophisticated understanding of the capabilities of clinical information systems and their ability to improve care. The medical staff now expects the clinical information system to provide advanced decision support capabilities, which will assist them in making decisions about diagnostic and treatment orders. (*February 1, 2002 CON Application, page 2*)
4. The Hospital is proposing to replace its existing clinical information system, the ECLIPSYS 7000 system, with a new clinical information system from IDX at a total capital expenditure of \$16,158,136. (*February 1, 2002 CON Application, pages 1, 2 and 4*)

5. After a Hospital task force completed an extensive multi-disciplinary assessment of the Hospital's clinical information system needs, the Hospital determined that its clinical information system needed to be replaced for the following reasons: *(October 10, 2001 Letter of Intent, page 5)*
 - a. The existing clinical information system utilizes obsolete technology. It is not being enhanced by the vendor and support for the product is being phased out.
 - b. The current system is inflexible and difficult to use as a result of the limitations of the old technology. Clinicians require a system that streamlines their workflow and supports the patient care process.
 - c. Clinical decision support tools (drug interactions, allergy alerts, medication dosing calculations, etc.) are required to improve the quality of care and reduce medical errors. The existing clinical information system cannot provide the sophisticated tools required to support the Institute of Medicine's recommendations to reduce medical errors.
6. The multi-disciplinary Hospital task force identified the requirements for a new clinical information system that would replace the ECLIPSYS 7000 system. The following were identified as the high-level priority requirements for a new clinical information system: *(February 1, 2002 CON Application, page 3)*
 - a. An intuitive user interface that could be easily understood by clinicians,
 - b. Access to longitudinal patient information across the continuum of care,
 - c. Clinical decision support capabilities that would provide clinical alerts and warnings to clinicians through the establishment of "rules" that would be triggered during the online order entry process. (The system must allow the clinicians to continuously create and refine rules.),
 - d. Clinical knowledge sources that would be immediately accessible online to clinicians, while they were interacting with the system and making decisions about patient care,
 - e. The ability to support best practice standards of care (to improve quality and contain costs) through automated clinical pathways and documentation,
 - f. The ability to trend and graph clinical test results over time and across the care continuum, and
 - g. Secure Internet access to the clinical information system.
7. The Hospital has selected IDX as the vendor for its new clinical information system proposal for the following reasons: *(February 1, 2002 CON Application, page 4)*

- a. The IDX system acquisition and ongoing support costs for the product were lower than those of other vendors, yet IDX provided the functions identified as high priorities by the selection committee.
 - b. The IDX system performance was consistently demonstrated to be significantly better. This was especially important to the clinical staff that will be using the new system and was one of the critical factors in the final decision.
 - c. The IDX system architecture was less complex, more reliable and easier to support.
8. All clinical departments within the Hospital will benefit from the new clinical information system including physicians, nursing, laboratory, radiology, pharmacy, dietary, and other clinical support departments but the primary beneficiaries of the new system will be the Hospital's patients. The new IDX system will facilitate the implementation of best medical practices and the evaluation of patient outcomes when the best practices are followed. *(October 10, 2001 Letter of Intent, page 5)*
 9. Physicians will benefit from the new IDX system by having immediate access to comprehensive patient information and medical databases, while making patient care decisions. More importantly, the new system will proactively alert the physician before an error is made. The automated medication administration function will not only reduce the time required for nurses to complete documentation but will dramatically reduce errors that are frequently made when drugs are administered by alerting nurses to a potential error before the drug is given to the patient. *(February 1, 2002 CON Application, page 4)*
 10. An additional benefit of the new IDX system is that it will provide functionality and tools that will assist the Hospital in complying with the requirements of the Health Insurance Portability and Accountability Act ("HIPAA"). The new system will provide the ability to limit access to patient information based upon the role of the person accessing the data. It also maintains an audit trail of all system access so that the Hospital can perform retrospective studies to ensure that patient information is not being retrieved inappropriately. *(February 1, 2002 CON Application, pages 4 and 5)*
 11. The Hospital anticipates beginning the process of project planning and work plan development by the end of March 2002. Hardware and software installation is projected to take place during Spring 2002, with targeted go - live dates projected to occur during September 2003 through December 2003, for a total implementation period for the new clinical information system of approximately eighteen months. *(February 1, 2002 CON Application, page 5)*
 12. The new IDX clinical information system will be implemented at Saint Francis Hospital and Medical Center and also at the Rehabilitation Hospital of Connecticut. The implementation plan also includes the option of installing the new system at

Bristol Hospital, if Bristol Hospital chooses to have the new system installed. There would be no additional capital cost to the Hospital or its affiliates, if a decision is made to install the new system at any one of the Hospital's existing affiliated organizations. *(February 28, 2002 Completeness Responses, pages 2 and 3)*

13. Using the same clinical information system and a standardized electronic medical record at all facilities ensures that relevant clinical information will be available to all healthcare providers, when patients receive their care at multiple facilities. Providing access to a common electronic record will reduce the probability of medical errors occurring because the patient's record is fragmented, and the physician does not have complete information about the patient's medical condition. *(February 28, 2002 Completeness Responses, page 3)*

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

14. The CON proposal consists of the following capital expenditure components: *(March 11, 2002 Supplemental Completeness Response, page 1)*

Description	Amount
Software Costs (Purchase)	\$5,041,344
Hardware Costs (Purchase)	2,209,382
Implementation Costs	8,907,410
Total Capital Expenditures	\$16,158,136

15. The CON proposal's total capital expenditure of \$16,158,136 will be funded entirely by the Hospital's funded depreciation. *(February 1, 2002 CON Application, page 8)*
16. The Hospital projects the following revenue from operations, total operating expense and gain/(loss) from operations associated with the CON proposal during the first three years of implementation and/or operation of the new replacement clinical information system: *(February 1, 2002 CON Application, page 108)*

Description	Year 1	Year 2	Year 3
Revenue from Operations	\$370,095,134	\$380,134,033	\$391,860,027
Total Operating Expense	366,833,743	376,918,777	389,558,721
Gain/(Loss) from Operations	\$3,261,391	\$3,215,256	\$2,301,306

17. The CON proposal's incremental depreciation costs and maintenance costs (net of savings associated with the elimination of the Hospital's current maintenance costs) will not require additional net revenue from any price increases and will result in greater operating costs that are only approximately 0.5% of the Hospital's total operating expenses for FY 2004. *(February 1, 2002 CON Application, pages 9, 108 and 114)*
18. The Hospital's projected payer mix during the first three years of implementation and/or operation of the replacement clinical information system is as follows: *(February 1, 2002 CON Application, page 9)*

Payer Source	Year 1	Year 2	Year 3
Medicare	42.76%	42.76%	42.76%
Medicaid	15.43%	15.43%	15.43%
TriCare	.05%	.05%	.05%
Commercial Insurers	34.90%	34.90%	34.90%
Self-Pay	3.33%	3.33%	3.33%
Workers Compensation	.74%	.74%	.74%
Uncompensated Care	2.79%	2.79%	2.79%
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.:

19. There is no State Health Plan in existence at this time. *(February 1, 2002 CON Application, page 2)*
20. The Hospital has adduced evidence that the proposal is consistent with the Hospital's long-range plan. *(February 1, 2002 CON Application, page 2)*
21. The Hospital has no teaching or research responsibilities that would be affected as a result of the proposal. *(February 1, 2002 CON Application, page 6)*
22. There are no distinguishing or unique characteristics of the Hospital's patient/physician mix related to the proposal. *(February 1, 2002 CON Application, page 6)*
23. The Hospital has implemented various activities to improve productivity and contain costs. *(February 1, 2002 CON Application, page 6)*
24. The Hospital has sufficient technical, financial and managerial competence to provide efficient and adequate service to the public. *(February 1, 2002 CON Application, pages 101 - 106)*
25. The Hospital's rates are sufficient to cover the proposed capital expenditure and operating costs. *(February 1, 2002 CON Application, page 108)*

Rationale

Saint Francis Hospital and Medical Center ("Hospital") proposes the replacement of its existing clinical information system, at a total capital expenditure of \$16,158,136. The

Hospital proposes to replace its existing clinical information system, the ECLIPSYS 7000 system that was implemented in the early 1990s, with a new clinical information system from IDX, the vendor selected by the Hospital for the proposal.

The Hospital stated that in comparing potential vendors for the proposal, the IDX system acquisition and ongoing support costs were lower than those of other vendors, yet IDX provided the functions identified as high priorities by the Hospital. In addition, the IDX system performance was consistently demonstrated to be significantly better, and the IDX system architecture was less complex, more reliable and easier to support.

All clinical departments within the Hospital will benefit from the use of the new clinical information system including physicians, nursing, laboratory, radiology, pharmacy, dietary, and other clinical support departments. The new IDX system will facilitate the implementation of best medical practices and the evaluation of patient outcomes when the best practices are followed. Physicians will benefit from the new IDX system by having immediate access to comprehensive patient information and medical databases, while making patient care decisions. More importantly, the new system will proactively alert the physician before an error is made. The automated medication administration function will dramatically reduce errors that are frequently made when drugs are administered by alerting nurses to a potential error before the drug is given to the patient.

An additional benefit of the new IDX clinical information system is that it will provide functionality and tools that will assist the Hospital in complying with the requirements of HIPAA. The new system will provide the ability to limit access to patient information based upon the role of the person accessing the data. It also maintains an audit trail of all system access so that the Hospital can perform retrospective studies to ensure that patient information is not being retrieved inappropriately.

The CON proposal's total capital expenditure of \$16,158,136 will be funded entirely by the Hospital's funded depreciation. The Hospital is projecting annual gains from operations of \$3,261,391, \$3,215,256 and \$2,301,306 during the first three years of implementation and/or operation of the new replacement clinical information system. Since the CON proposal will result in additional operating costs that are only approximately 0.5% of the Hospital's total operating expenses, the financial projections appear to be both reasonable and achievable. Therefore, OHCA finds that the CON proposal will not only improve the quality and accessibility of the Hospital's patient care services but that the CON proposal is also both financially feasible and cost effective.

Based upon the foregoing Findings and Rationale, the Certificate of Need application of Saint Francis Hospital and Medical Center to replace its existing clinical information system, at a total capital expenditure of \$16,158,136, is hereby GRANTED.

Order

Saint Francis Hospital and Medical Center ("Hospital") is hereby authorized to replace its existing clinical information system, at a total capital expenditure of \$16,158,136, subject to the following conditions:

1. This authorization shall expire on December 31, 2003. Should the Hospital's clinical 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 \$16,158,136. 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

April 4, 2002
Date

Signed by
Raymond J. Gorman
Commissioner

RJG/ho