



Office Of Health Care Access Certificate of Need Application

Final Decision

Applicant: Connecticut Children's Medical Center

Docket Number: 07-31026-CON

Project Title: Proposal To Establish a Satellite Ambulatory Radiology Center for Infants, Children, and Adolescents in Farmington, Connecticut

Statutory Reference: Section 19a-638 of the Connecticut General Statutes

Filing Date: January 28, 2008

Decision Date: April 25, 2008

Default Date: April 27, 2008

Staff Assigned: Jack A. Huber

Project Description: Connecticut Children's Medical Center ("Hospital") is proposing to establish a satellite ambulatory radiology center in Farmington that will provide diagnostic radiology services for infants, children, and adolescents, at an estimated total capital expenditure of \$396,595. The Hospital is a health care facility or institution as defined by Section 19a-630 of the Connecticut General Statutes ("C.G.S.").

Nature of Proceedings: On January 28, 2008, the Office of Health Care Access ("OHCA") received the Certificate of Need ("CON") application from the Hospital seeking authorization to establish a satellite ambulatory radiology center in Farmington that will provide diagnostic radiology services for infants, children, and adolescents, at an estimated total capital expenditure of \$396,595. 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 on November 5, 2007, in the *Hartford Courant*. OHCA received no responses from the public concerning the Hospital's proposal. Pursuant to Section 19a-638, C.G.S., three individuals or an individual representing an entity with five or more people had until February 18, 2008, the twenty-first calendar day following the filing of the Hospital's

CON application, to request that OHCA hold a public hearing on the Hospital's proposal. OHCA did not receive any requests to hold a public hearing.

OHCA's authority to review and approve, modify or deny the CON application is established by Section 19a-638, 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. Connecticut Children's Medical Center ("Hospital") is a freestanding pediatric hospital located at 282 Washington Street in Hartford, Connecticut. *(August 29, 2007, Letter of Intent, pages 9 and 11)*
2. The Hospital provides a full array of primary, secondary and tertiary children's services to individuals between birth and 18 years of age who reside in all of Connecticut's 169 towns. *(August 29, 2007, Letter of Intent, page 9)*
3. The Hospital provides diagnostic radiology services, including general radiography and ultrasound studies, for outpatients, inpatients, and Emergency Department ("ED") patients. The Hospital also provides computed tomography ("CT") and magnet resonance imaging ("MRI") services. *(January 28, 2007, Completeness Letter Response, page 1)*
4. The Hospital operates three general radiologic rooms for outpatient and inpatient exams. There is a fourth general radiologic room dedicated to ED patients. ED and inpatient exams are available twenty-four hours a day, seven days a week. Outpatient imaging hours are between 8:00 a.m. and 5:00 p.m., Monday through Friday. *(January 28, 2007, Completeness Letter Response, page 1)*
5. The Hospital has two units that perform ultrasound examinations. The units are used for outpatient examinations between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. In addition, there are two other ultrasound units: one unit serving the neonatal intensive care unit and the other portable unit serving for bedside inpatient examinations. *(January 28, 2007, Completeness Letter Response, page 1)*
6. The Hospital is proposing to establish and operate a satellite ambulatory radiology center ("Radiology Center") that will provide diagnostic radiology and ultrasound services to infants, children, and adolescents who have been referred to pediatric medical and surgical specialists on the staff of the Hospital. These specialists are members of the Hospital's Faculty Practice Plan ("FPP"). *(August 29, 2007, Letter of Intent, pages 3 and 9 and December 14, 2007, Initial CON Submission, page 6)*

7. The Radiology Center will be located at 399 Farmington Avenue in Farmington, Connecticut. The center is being co-located with the Farmington FPP site in order to serve patients who reside in the Farmington and already use the Hospital's services. With the service available in Farmington patients will be able to obtain basic radiologic and ultrasound evaluations at the same time that their specialty visits are provided. Currently, these patients are being referred to the Hospital's Hartford campus for their examinations. *(December 14, 2007, Initial CON Submission, page 6)*
8. FPP physicians who see patients in Farmington will refer their patients who need radiology and ultrasound services to the Radiology Center. The following specialty services are currently provided at 399 Farmington Avenue practice site:

Table 1: Medical Services Available in Farmington Practice Site

Service	Frequency of Availability
Center for Motion Analysis	daily
Gastroenterology	1 day per week
Hematology and Oncology	1 half day per week
Neurology	2 days per week
Occupational Therapy	daily
Orthopaedics	3 days per week
Physical, Speech, & Occupational Therapies	daily
Pulmonology	1 half day per week
Radiology*	daily
Surgery	1 day per month
Urology	1 day per week

Note: *The radiology service offered at the Farmington FPP is for general diagnostic studies, available only for orthopaedic and sports medicine patients. Approximately, 5,000 exams were performed at the service in fiscal year ("FY") 2007, of which approximately 500 exams were for adults being seen at the orthopaedic and sports medicine practice. The Hospital estimates that approximately 90% of the existing volume currently performed by this specialty group will have their examination performed at the proposed Radiology Center. The orthopaedic and sports medicine specialty group will continue to provide radiology services, albeit at a reduce caseload.
(December 14, 2007, Initial CON Submission, page 25 April 18, 2008, Additional Information from the Hospital, pages 2 and 3)

9. Farmington site is projected to serve the pediatric population that lives in Avon, Farmington, Simsbury, Granby, Canton, West Hartford, Bristol, Burlington, Southington and Torrington, as well as a smaller number of patients from other towns proximate to Route 44/202 and I-84 west of Hartford. *(August 29, 2007, Letter of Intent, pages 9)*
10. The Hospital stated that there are four areas where the performance of radiological and ultrasound examinations between pediatric and adult populations differ:
 - a. Exams are customized based upon the age, size, and developmental level of the child so that the risks of radiation exposure are minimized;
 - b. Anxiety, lack of cooperation, fear of the exam, and use of positioning devices each complicate the procedure for children; and
 - c. Radiologic staff is trained to understand the different age groups and is able to provide information and education appropriate for the age of the child.
(December 14, 2007, Initial CON Submission, page and January 28, 2008, Completeness Letter Response, page 2)

11. The radiologic services performed as a percentage of Hospital patients by major service category are as follows:

- a. Outpatient Services: 40.1%
- b. Inpatient Services: 34.8%
- c. Emergency Department: 25.1%

(January 28, 2008, Completeness Letter Response, page 2 and Attachment 1, page 5)

12. The ultrasound services performed as a percentage of Hospital patients by major service category are as follows:

- a. Outpatient Services: 51.1%
- b. Inpatient Services: 25.0%
- c. Emergency Department: 21.9%

(January 28, 2008, Completeness Letter Response, page 2 and Attachment 1, page 5)

13. The Hospital reported that the current wait time for a non-emergent ultrasound study is approximately 6 weeks. The wait time has been six weeks for the past year. The Hospital's target wait time is one week. *(December 14, 2007, Initial CON Submission, page 5)*

14. The following table provides the number of Hospital-based outpatient radiologic and ultrasound examinations by service area town, all other towns and total area served, by fiscal year:

Table 2: Outpatient Imaging Volume* by Service, Town and Fiscal Year

Town	Radiologic Exams				Ultrasound Exams			
	2004	2005	2006	2007	2004	2005	2006	2007
Avon	129	124	88	102	27	42	36	102
Barkhamsted	1	0	4	0	0	0	1	0
Berlin	172	116	145	152	20	29	29	27
Bristol	244	308	321	360	98	99	137	145
Burlington	76	67	59	67	20	13	12	67
Canton	81	56	47	40	22	23	13	
Farmington	201	167	167	146	42	51	71	60
Granby	94	53	80	73	21	29	19	32
Hartland	15	7	9	4	6	3	2	3
Harwinton	18	18	22	11	6	3	2	11
New Hartford	20	13	15	13	18	21	7	7
Plainville	79	92	132	99	29	31	28	32
Simsbury	132	134	130	121	78	76	56	77
Southington	218	187	244	199	36	48	49	85
Torrington	71	82	134	125	29	40	36	43
West Hartford	629	613	690	653	155	163	146	187
Winchester	29	31	37	45	13	7	5	13
All Other Towns	10,470	11,021	12,237	12,325	2,177	2,324	2,366	2,843
Total Exams*	12,679	13,089	14,561	14,535	2,795	3,008	3,018	3,665

Note: *Presentation of the annual outpatient radiologic and ultrasound exams by service area town, all other towns and total area served excludes the following exam categories: Observation, Clinic/Other and Ambulatory Surgery.

(January 28, 2008, Completeness Letter Response, page 3 and Attachment 3, pages 7 and 8)

15. In FY 2007 the Hospital completed the following number of Hospital-based radiologic exams (for all categories of examinations) and ultrasound studies:

Table 3: FY 2007 Radiologic and Ultrasound Exams by Time and by Patient Category

Type of Study	Exam Times and Days of Week	Patient Type*	Number of Exams	Average # Exams per Day
Radiologic	8 am thru 5 pm; M-F	OP	19,500	90*
		IP and ED	3,900	
	Other than Above	OP, IP, and ED	16,163	
	Total Number of Radiologic Studies		39,563	
Ultrasound	8 am thru 5 pm; M-F	OP, IP, and ED	5,890	22.7^
			310	
	Total Number of Ultrasound Studies		6,200	

Notes: * OP = outpatient; IP = inpatient; and ED = emergency department.

♦ (19,500 + 3,900) / (52 weeks/5)

^ 5,890/260

(January 28, 2008, Completeness Letter Response, page 2)

16. The Hospital estimates that its Hospital-based radiologic service is operating at 90% of capacity. The estimate is based on the number of staff available, the approximate time duration of 15 to 20 minutes per examination and number of general radiologic rooms in use (i.e. three rooms). The parameters result in a potential for 100 radiologic examinations per day, where a day is defined as the time between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. (January 28, 2008, Completeness Letter Response, page 2)
17. The Hospital estimates that its Hospital-based ultrasound service is operating at 94.6% of its predicted maximum capacity. The estimate is based on the number of staff available, the approximate time duration of 40 minutes per examination and number of ultrasound rooms in use (i.e. two rooms). The parameters result in a potential for 24 radiologic examinations per day, where a day is defined as the time between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday. (January 28, 2008, Completeness Letter Response, page 2)
18. The Hospital projects the following units of service at the proposed Radiology Center:

Table 4: Projected Units of Service at the Proposed Center

Service	Fiscal Year		
	2008	2009	2010
Radiologic	5,000	6,000	7,500
Ultrasound	1,248	2,400	2,880

(December 14, 2007, Initial CON Submission, page 7 and April 18, 2008, Additional Information from the Hospital, page 2)

19. The first year volume in Farmington for general radiologic studies is based upon the current volume of radiology studies, approximately 5,000 exams, accomplished at the existing FFP orthopaedic and sports medicine practices in Farmington. The projection assumes a shift of approximately 500 studies from the Hospital site to the Farmington location or with no growth in FFP volume. *(April 18, 2008, Additional Information from the Hospital, page 2)*
20. The radiologic growth projections were developed with the subspecialty practices and are based on their growth targets, as well as information developed for additional market share and exam capacity for the radiology unit. Estimates of 20% and 25% growth are anticipated from FYs 2008 to 2009 and from FYs 2009 to 2010, respectively. *(April 18, 2008, Additional Information from the Hospital, page 3)*
21. The first year volume in Farmington for ultrasound studies is based upon a projected shift in patients from the Hospital site to the Farmington location based on patient location and growth in volume based on the access that the site affords. *(April 18, 2008, Additional Information from the Hospital, page 3)*
22. The ultrasound growth projections over the three year period were developed with the subspecialty practices and are based on the number of ultrasound exams and days of use. The first year's volume growth projection is based on utilization of the ultrasound equipment 3 days per week with 8 exams per day. The second year's volume growth projection is based on utilization of the ultrasound equipment 3 days per week with 9 to 10 exams per day or approximately 2,400 annually. The third year's volume growth projection is based on utilization of the ultrasound equipment 5 days per week with 10 to 12 exams per day or approximately 2,860 annually. *(April 18, 2008, Additional Information from the Hospital, page 3)*
23. The Hospital projects the following volume capacity for each proposed service:
 - a. Radiologic Service: One imaging unit will be able to perform a maximum of 30 exams per day, 150 exams per week or a total of 7,800 exams per year.
 - b. Ultrasound Service: One imaging unit will be able to perform a maximum of 11 exams per day, 55 exams per week or a total of 2,860 exams per year. *(January 28, 2008, Completeness Letter Response, page 3)*
24. The Hospital indicates that in order to make slots available at its Harford site for daytime inpatient studies generated by increasing inpatient and ED volumes, the Hospital will slowly begin to refer a proportional number of basic studies for outpatients to the proposed Farmington site based on family preference and first available appointment. *(January 28, 2008, Completeness Letter Response, page 2)*
25. The Hospital indicates that as a result of implementing the proposal, the number of general radiologic and ultrasound studies performed at the Hospital's Hartford site will remain unchanged. The Hartford site will remain operating at its current 90% capacity. *(January 28, 2008, Completeness Letter Response, page 2 and Attachment 2, page 6)*

26. The radiologic equipment will employ digital picture archiving communication system (“PACS”) technology and will be linked to the Hospitals’ system in Hartford facilitating comparison to films previously obtained as part of an inpatient admission and /or other ambulatory evaluation. *(August 29, 2007, Letter of Intent, page 9)*
27. Timothy Brown, MD, will be the Medical Director at the Radiology Center. He is also the Medical Director of the Department of Radiology at the Hospital. *(December 14, 2007, Initial CON Submission, page 9)*

**Financial Feasibility and Cost Effectiveness of the Proposal and its Impact on the Hospital’s Rates and Financial Condition
 Impact of the Proposal on the Interests of Consumers of Health Care Services and Payers for Such Services
 Consideration of Other Section 19a-637, C.G.S.
 Principles and Guidelines**

28. The total capital expenditure for the proposal is \$396,595. The components of the capital expenditure are presented in the following table:

Table 5: Capital Expenditure Components

Description	Cost
Ultrasound System	\$167,200
Computed Radiography Equipment	108,462
Radiographic Equipment	78,650
Diagnostic Workstation/Monitor	19,300
PacsCube	14,996
Support Equipment: aprons, gloves & table mats	3,000
Server	2,988
Computer	2,000
Total Capital Expenditure	\$396,595

(January 28, 2007, Completeness Letter Response, pages 3 and 4 and Attachment 4, page 9)

29. The proposal’s total capital expenditure will be financed entirely through operating funds. *(December 14, 2007, Initial CON Submission, page 14)*
30. The staffing of the Radiology Center will require the following types of individuals in full-time equivalents (“FTE”) during the first three years of operation:

Table 6: Staffing Requirements

Position Description	Number of FTEs in		
	Year 1	Year 2	Year 3
Radiology Technician	1.00	2.0	2.0
Ultrasound Technician	0.35	1.0	1.0
Radiology Technician Assistant	0	1.0	1.0
Total FTEs	1.35	4.0	4.0

(December 14, 2007, Initial CON Submission, page 17)

31. The Hospital’s incremental revenue from operations, incremental operating expense, and incremental gain from operations during the first three operating years of the proposal are as follows:

Table 7: Financial Projections by Fiscal Year

Description	Fiscal Year		
	Year 1	Year 2	Year 3
Incremental Revenue from Operations	\$383,477	\$952,521	\$1,273,006
Incremental Operating Expense	193,063	482,770	595,014
Incremental Gain from Operations	\$190,414	\$469,751	\$677,992

(December 14, 2007, Initial CON Submission, page 19)

32. The Hospital will establish a new cost center, which will be named “Farmington Radiology”. The units of service will be defined as radiology or ultrasound studies performed. *(December 14, 2007, Initial CON Submission, page 12)*
33. The Hospital will bill for the institutional services. The specialists or radiologists will bill for professional services. *(August 29, 2007, Letter of Intent, page 10)*
34. The Hospital’s current and projected payer mix percentages for the first three years of the Center’s operation is presented in the following table:

Table 8: Current and Projected Payer Mix Percentages

Payer	Current	Year 1	Year 2	Year 3
Medicare	0.2%	0.2%	0.2%	0.2%
Medicaid	35.6%	35.6%	35.5%	35.4%
TriCare	1.1%	1.1%	1.1%	1.1%
Total Government	36.9%	36.9%	36.8%	36.7%
Commercial Insurers	61.3%	61.3%	61.4%	61.6%
Uninsured	1.8%	1.8%	1.8%	1.8%
Total Non-Government	63.1%	63.1%	63.2%	63.3%
Total All Payers	100.0%	100.0%	100.0%	100.0%

(December 14, 2007, Initial CON Submission, page 16)

35. There is no State Health Plan in existence at this time. *(December 14, 2007, Initial CON Submission, page 2)*
36. The Hospital has adduced evidence that the proposal is consistent with its long-range plans. *(December 14, 2007, Initial CON Submission, page 2)*
37. The Hospital has improved productivity and contained costs through energy conservation, the application of technology, and group purchasing. *(December 14, 2007, Initial CON Submission, page 10)*
38. The Hospital has no teaching or research responsibilities that would be affected as a result of the proposal. *(December 14, 2007, Initial CON Submission, page 10)*

39. The Hospital's unique characteristic of its patient/physician mix is that it is the only freestanding hospital in the state devoted solely to the care of children. *(December 14, 2007, Initial CON Submission, page 11)*
40. The Hospital has sufficient technical, financial, and managerial competence and expertise to provide efficient and adequate service to the public. *(December 14, 2007, Initial CON Submission, page 9 and Attachment 3, pages 48 through 81)*
41. The Hospital's rates are sufficient to cover the proposed capital cost and operating expense. *(December 14, 2007, Initial CON Submission, page 17 and Attachment 9)*

Rationale

The Office of Health Care Access ("OHCA") approaches community and regional need for the proposed service on a case by case basis. Certificate of Need ("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 proposed services.

Connecticut Children's Medical Center ("Hospital") is located at 282 Washington Street in Hartford, Connecticut. The Hospital provides general diagnostic radiology services, including x-ray and ultrasound studies, for outpatients, inpatients, and Emergency Department ("ED") patients. Exams are customized based upon the age, size, and developmental level of the child so that the risks of radiation exposure are minimized. The Hospital has three general radiologic rooms for outpatient and inpatient exams and two ultrasound units for outpatient examinations. ED and inpatient exams are available twenty-four hours a day, seven days a week. Outpatient services are scheduled between the hours of 8 a.m. and 5 p.m., Monday through Friday. The Hospital proposes to establish a satellite ambulatory radiology center ("Radiology Center") at 399 Farmington Avenue in Farmington, CT, to provide diagnostic radiology and ultrasound services for infants, children, and adolescents.

The Hospital has a Faculty Practice Plan ("FPP") with one of its practice sites located at 399 Farmington Avenue in Farmington. The Radiology Center is being co-located with the FPP site in order to serve patients who reside in that area and already use the Hospital's services. There are ten medical specialties and one surgical specialty available through the FPP physicians at the site. General radiology services have been provided in the past by the site's orthopaedic and sports medicine specialists. With the proposed radiologic and ultrasound services to be made available in Farmington, patients will be able to utilize those services at the same time they visit with their FPP physicians. These patients are currently being referred to the Hospital's Hartford campus to obtain their radiologic evaluations.

Since FY 2004, the number of radiologic and ultrasound studies performed at the Hartford campus has been increasing. With increasing inpatient and ED volumes, the Hospital will begin to refer a proportional number of outpatients needing a basic study to the new Radiology Center. The referrals will be based on family preference and first available appointment. Based on the foregoing reasons, OHCA finds that the Hospital has provided evidence to support the need for the proposed service and that the proposal will improve the accessibility of radiologic and ultrasound services for infants, children, and adolescents in the greater Farmington region.

The proposed total capital expenditure of \$396,595 will be financed entirely through operating funds. The Hospital projects an incremental gain from operations related to the proposal of \$190,414, \$469,751 and \$677,992 in operating years one through three, respectively. Although OHCA cannot draw any conclusions, the Hospital's financial projections appear to be reasonable and achievable. Therefore, OHCA finds that the CON proposal is both financially feasible and cost effective.

Order

Based on the foregoing Findings and Rationale, the Certificate of Need application of Connecticut Children's Medical Center ("Hospital") to establish a satellite ambulatory radiology center at 399 Farmington Avenue in Farmington and provide diagnostic radiology services for infants, children, and adolescents, at an estimated total capital expenditure of \$396,595, is hereby GRANTED, subject to conditions.

1. This authorization shall expire on April 1, 2009. Should the Hospital not have established the satellite ambulatory radiology center and begun operations 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 \$396,595. In the event that the Hospital learns of potential cost increases or expects that final project costs will exceed those approved, the Hospital shall notify OHCA immediately.
3. Should the Hospital propose to terminate and/or add any services or programs to be provided at 399 Farmington Avenue, Farmington, the Hospital shall file with OHCA appropriate documentation regarding its intent, including either a Certificate of Need Determination Request or a Certificate of Need Letter of Intent.

Should the Hospital fail to comply with any of the aforementioned conditions, OHCA reserves the right to take additional action as authorized by law.

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

Signed by Commissioner Vogel on April 25, 2008

Date

Cristine A. Vogel
Commissioner

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