Office Of Health Care Access
Certificate of Need Application

Final Decision

Hospital:	**Hartford Hospital**
Docket Number:	**06-30769-CON**
Project Title:	**Establishment and Operation of a Satellite Radiation Oncology Center in Avon**
Statutory Reference:	**Sections 19a-638 and 19a-639 of the Connecticut General Statutes**
Filing Date:	**November 8, 2006**
Decision Date:	**February 6, 2007**
Default Date:	**February 6, 2007**
Staff Assigned:	**Laurie K. Greci**

Project Description: Hartford Hospital ("Hospital") proposes to establish and operate a satellite radiation oncology center in Avon, Connecticut at a total capital expenditure of $3,314,562.

Nature of Proceedings: On November 8, 2006, the Office of Health Care Access ("OHCA") received a Certificate of Need ("CON") application from the Hospital seeking authorization to establish and operate a satellite radiation oncology center in Avon, Connecticut at a total capital expenditure of $3,314,562.

Pursuant to Sections 19a-638 and 19a-639 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 Hartford Courant* on June 24, 2006. Pursuant to Public Act 05-75, three individuals or an individual representing an entity with five or more people had until

November 29, 2006, 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 received no hearing requests from the public.

OHCA's authority to review and approve, modify or deny the CON application is established by Sections 19a-638 and 19a-639, C.G.S. The provisions of these sections, 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. Hartford Hospital ("Hospital') is an 867-bed acute care hospital located at 80 Seymour Street and 200 Retreat Avenue, Hartford, Connecticut. *(September 27, 2006, Initial CON Submission, page 217)*

2. The Hospital has a comprehensive oncology program that offers cancer screening, diagnosis, surgical, medical, and radiation therapy services. In addition to the services provided on the Hospital's main campus, the Hospital and its physicians manage radiation oncology facilities in Enfield and Manchester. The two facilities are under the control of the Northeast Regional Radiation Oncology Network ("NRRON") established in 1995 with CON approval granted under Docket Number 95-534.[1] *(September 27, 2006, Initial CON Submission, page 8)*

3. The Hospital is seeking to establish and operate a satellite radiation oncology center ("Center") at 80 Fisher Drive, Avon, Connecticut. The Hospital proposes to provide cancer treatment technology and expertise to patients in their community where medical oncologists and other cancer specialists are located to facilitate collaborative, multidisciplinary care. *(September 27, 2006, Initial CON Submission, page 8 and November 8, 2006, Completeness Response, page 1)*

4. The Hospital is also seeking to acquire a linear accelerator and a computed tomography ("CT") simulator to provide radiation treatments. *(June 16, 2006, Letter of Intent, page 8)*

5. The Hospital based the need for the satellite radiation oncology Center on the following:
   - Rising incidence of cancer;
   - Increasing use of radiation as a treatment modality for cancer;
   - Limited capacity on the campus in Hartford; and
   - Increasing demand requiring a fourth linear accelerator.

   (September 27, 2006, Initial CON Submission, page 2)

[1] NRRON is a non-profit, joint venture of Hartford Hospital, Johnson Memorial Hospital, Manchester Memorial Hospital, and Rockville General Hospital.

6. Due to population growth and aging, the number of cancer patients nationwide is expected to double between 2000 and 2050. The American Cancer Society estimated that Connecticut would have 17,320[2] new cancer cases in 2006. *(September 27, 2006, Initial CON Submission, pages 32 and 96)*

7. The National Cancer Institute estimates that about half of all cancer patients receive some type of radiation therapy. Radiation therapy may be used to treat almost every type of solid tumor. It can also be used to treat leukemia and lymphoma. Radiation therapy may also be given to help reduce symptoms, such as pain, from cancer that has spread to the bones or other parts of the body. For some types of cancer, radiation may be given to areas that do not have evidence of cancer, a technique called prophylactic radiation therapy. Radiation therapy may be used alone or in combination with other cancer treatments, such as chemotherapy and surgery. *(September 27, 2006, Initial CON Submission, page 33)*

8. Improvements in radiation therapy simulator and linear accelerator technology, including the development of intensity modulated radiation therapy and image guided radiation therapy, have improved the ability of physicians to deliver higher amounts of radiation to tumors in a more exactly defined area of the body, reducing the impact on healthy tissue. These improvements have increased the effectiveness of radiation oncology and led to its increased use as treatment modality. *(September 27, 2006, Initial CON Submission, pages 2 and 33)*

9. The Hospital's Radiation Oncology Department currently has three linear accelerators: a Varian Clinac 2100CD; a Varian Clinac 2100EX; and a Varian Clinac 2300 Trilogy[3]. *(September 27, 2006, Initial CON Submission, pages 2 and 6)*

10. The three linear accelerators accommodated almost 21,000 patient visits during Fiscal Year ("FY") 2005, resulting in approximately 7,000 patient visits per machine. To ensure sufficient capacity to treat its patients, the Hospital stated that an additional linear accelerator will be needed. *(September 27, 2006, Initial CON Submission, pages 2 and 6)*

11. The Hospital does not have a dedicated CT simulator but uses the capabilities of the CT scanners operated by the Radiology Department. Over 70% of radiation therapy patients at the Hospital require a planning CT scan to begin their course of radiation therapy. *(November 8, 2006, Completeness Response, page 2)*

12. CT simulation is considered fundamental to the treatment planning of radiation therapy because it enables the clinician to assure that the radiation dose is focused specifically, and as exclusively as possible, on the tumor site, with minimal overlap onto healthy tissue. Over 70% of radiation therapy patients at the Hospital require a planning CT scan to begin their course of therapy. *(November 8, 2006, Completeness Response, pages 2 and 3)*

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[2] Excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder. Estimates based on incidence rates from 1979 to 2002, National Cancer Institute's Surveillance, Epidemiology, and End Results program. Source: American Cancer Society, Cancer Facts and Figures, 2006

[3] Authorized under OHCA Docket Numbers 92-580, 01-571, and 05-30550 (as a replacement for one previously authorized under DN 86-504), respectively.

13. The Inter-Society Council of Radiation Oncology ("ISCRO") established a planning target for linear accelerator capacity in 1991.[4] According to ISCRO, the standard for linear accelerator treatment demand is 6,544 patient visits annually per machine. The report based the calculation on four (4) standard treatments per hour, seven (7) hours per day, five (5) days per week, and fifty-one (51) weeks per year. An allowance of 596 treatments was made to reflect initial treatments of five (5) patients per week and one (1) day per month downtime for equipment maintenance and repair. *(September 27, 2006, Initial CON Submission, page 6)*

14. The Hospital identified the following towns to be within the service area for the Center:

Table 1: The Center's Proposed Service Area Towns

Service Area	Towns
Primary	Avon, Bristol, Burlington, Canton, Farmington, Harwinton, New Britain, Plainville, Plymouth, and Simsbury.
Secondary	Barkhamsted, Bloomfield, East Granby, Granby, Hartford, Hartland, New Hartford, Southington, Torrington, West Hartford, Windsor, Windsor Locks, Winchester, and Wolcott.

(September 27, 2006, Initial CON Submission, page 11)

15. Cancer patients being treated with radiation oncology therapy receive their treatments five days each week for between three and eight weeks for a total of between 15 to 40 radiation oncology treatments. *(September 27, 2006, Initial CON Submission, page 8)*

16. The following table reports the number of radiation therapy patients and radiation treatments and CT planning scans performed at the Hospital during Fiscal Years ("FY") 2004, 2005, and 2006 for those patients that reside within the State of Connecticut.:

Table 2: Actual Radiation Therapy Patients, Radiation Therapy Visits, and CT Planning Scans for FYs 2004, 2005, and 2006

Number of:	FY 2004	FY 2005	FY 2006*
Inpatient Radiation Patients	145	171	170
Inpatient Radiation Visits	685	947	826
Outpatient Radiation Patients	909	939	833
Outpatient Radiation Oncology Visits	19,689	19,837	18,513
CT Planning Scans	534	633	656
Total Radiation Patients	**1,054**	**1,110**	**1,003**
Total Radiation Visits	**20,374**	**20,784**	**19,339**

* Based on the first nine months of the fiscal year and annualized.
Note: The data presented by the Hospital could not be verified by OHCA.
(September 27, 2006, Initial CON Submission, Appendix E and November 8, 2006, Completeness Response, Attachment 3)

[4] "Radiation Oncology in Integrated Cancer Management". *Report of the Inter-Society Council for Radiation Oncology* (December 1991), Section VII: Criteria for Utilization of Equipment and Facilities.

17. Using the total number of radiation therapy patients and radiation therapy visits in FY 2005 calculated in Table 2 of 20,784 visits, the Hospital made the following calculations to determine the number of patients per thousand persons of the general population that received radiation therapy at the Hospital in FY 2005:

Table 3: Number of Radiation Therapy Patients Per Thousand Population in FY 2005

Service Area	FY 2005 Total Visits	FY 2005 Visits/Patient	Popu-lation	Patients Per 1,000 Population
Avon	448	23.6	16,812	1.13
Bristol	225	17.3	60,875	0.21
Burlington	90	18.0	8,688	0.58
Canton	165	27.5	9,466	0.63
Farmington	113	16.1	24,739	0.28
Harwinton	28	28.1	5,565	0.18
New Britain	421	26.3	72,395	0.22
Plainville	61	20.3	23,859	0.67
Plymouth	75	37.5	12,223	0.16
Simsbury	325	20.3	23859	0.67
Subtotal	**1,951**	**22.2**	**252,408**	**0.35**
Secondary	6,664	21.6	382,127	0.809
Other	12,169	20	2,899,745	0.210
Total	**20,784**	**20.7**	**3,534,280**	**0.284**

(September 27, 2006, Initial CON Submission, page 137)

18. The Hospital applied the rate of radiation therapy patients per 1,000 population calculated in Table 3 to project the number of radiation therapy treatments the Hospital may provide during FYs 2006 to 2010:

Table 4: Projected Number of Radiation Therapy Treatments to be Provided by Hartford Hospital by Fiscal Year

Service Area	Fiscal Year				
	2006	2007	2008	2009	2010
Primary	2,027	2,100	2,176	2,258	2,345
Secondary	6,888	7,119	7,365	7,619	7,880
Other	12,617	13,091	13,580	14,084	14,606
Total	**21,532**	**22,310**	**23,121**	**23,961**	**24,831**

Note: The FY 2005 ratios of patients/1000 population reported in Table 3 were incremented per town by 2% per year to reflect the expected increases in cancer patients, increased by the projected growth in each town's population and increased by 1% to reflect the expectation that radiation therapy will be increasingly employed as a treatment modality.

(September 27, 2006, Initial CON Submission, pages 137 to 139)

19. Applying the projected number of radiation therapy treatments calculated in Table 4, the Hospital projects the following visits and procedures for the Center in Avon for FYs 2008, 2009, and 2010:

Table 5: Projected Number of Radiation Therapy Treatments and Other Procedures to be provided at the Center in Avon by Fiscal Year

Number of:	**FY 2008**	**FY 2009**	**FY 2010**
Radiation Therapy Treatments	**1,554***	**3,862**	**4,531**
Additional Procedures:			
Simulations	164	379	456
Treatment Planning	144	340	413
Device Fabrications	511	1,182	1,428
Physics Consultations	692	1,641	2,050
Port Films	1,239	2.937	3,672
Total Procedures	**4,304**	**10,341**	**12,550**
Average Number of Procedures per Visit	**2.77**	**2.68**	**2.77**

Note: The Hospital estimated, by town, the percentage of patients that would seek care at the satellite based the distance from the town to the Hospital and to the Center in Avon. A patient visit is defined as an occasion of service to a patient on a single day during which a radiation oncology treatment is provided; and patients may also receive one or more of several other procedures at that time.
***** Reflects that the Center in Avon will operate for six months in FY 2008; Hospital based projection on 3,089 patient visits for a full year ((3,089/12)*6=1,554).
(November 8, 2006, Completeness Response, page 10)

20. The Hospital stated that locating the fourth linear accelerator in a newly constructed vault in the new building in Avon is simpler and less costly than developing sufficient space on the Hospital's campus in Hartford. Renovations to, and re-engineering of, the existing buildings would not be cost-effective. *(September 27, 2006, Initial CON Submission, page 23)*

21. The Hospital stated that the Center's patients will have access to the same technologies a patient would receive at the Hospital's main campus. The team of providers will function in both centers and can utilize the more specialized services in Hartford as needed. These services include low or high dose rate brachytherapy, stereotactic radiosurgery, and other specialized techniques of radiation therapy. *(September 27, 2006, Initial CON Submission, page 8)*

22. Patients that require concomitant chemotherapy may receive their chemotherapy through the medical oncology practice, Oncology Associates, which will be located in the same building as the Center. Currently, there are four oncologists that provide services at Hartford Hospital and in Avon. *(September 27, 2006, Initial CON Submission, page 8 and http://www.harthops.org/prs/query_listdocs.asp)*

23. The Hospital is accredited by the Committee for Radiation Oncology Practice of the American College of Radiology ("ACR") and follows the ACR's Standard of Practice Guidelines. The Hospital also complies with the guidelines recommended by the Inter-Society Council for radiation Oncology. *(September 27, 2006, Initial CON Submission, pages 13, 16 and 51)*

24. The Center in Avon will operate on the same schedule as the Hospital's Radiation Oncology Department, 7:30 a.m. to 4:00 p.m., Monday through Friday. *(September 27, 2006, Initial CON Submission, page 10)*

25. The Applicant stated that the other providers within the service area include Bristol Radiation Oncology Center, P.C., Charlotte Hungerford Hospital's Center for Cancer Care, John Dempsey Hospital, Middlesex Memorial Hospital, MidState Medical Center, the Hospital of Central Connecticut, the Northeast Regional Radiation Oncology Network, and Saint Francis Hospital and Medical Center. The Hospital stated that the proposal will not adversely affect these existing providers as it for the Hospital's existing patient population. *(September 27, 2006, Initial CON Submission, page 11)*

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 the Payers for Such Services
Consideration of Other Section 19a-637, C.G.S. Principles and Guidelines

26. The estimated total capital expenditure of the CON proposal is $3,314,562 and includes the following components:

Table 6: Expenditure Components for the Proposal

Item	Cost
Varian Clinac iX Linear Accelerator	$1,870,360
CT Scanner, refurbished	$500,000
Medical Equipment	331,416
Non-medical Equipment	612,786
Total	**$3,314,562**

(September 27, 2006, Initial CON Submission, pages 278 to 281)

27. The Varian Clinac iX Linear Accelerator will utilize conventional, three dimensional conformal, and intensity modulated radiation therapies. *(September 27, 2006, Initial CON Submission, page 8)*

28. The proposed equipment will be installed within a newly constructed vault in a new medical office building. The Hospital will lease space in an investor-owned building. The lease will provide a build-out allowance and excess build-out costs will be expensed as an operating expense over the life of the lease. *(November 8, 2006, Completeness Response, page 7)*

29. The proposal will be financed with the Hospital's funded deprecation account. *(September 27, 2006, Initial CON Submission, page 20)*

30. The operation of the Center has been scheduled to commence in April 2008. *(September 27, 2006, Initial CON Submission, page 21)*

31. The Hospital projects that with the proposal the following incremental revenues and expenses will be realized:

Table 7: The Hospital's Projected Revenues and Expenses with the Proposal

Description	FY 2008	FY 2009	FY 2010
Incremental Net Revenue from Operations	$856,864	$2,081,156	$2,637,418
Total Operating Expense	854,706	1,894,817	2,033,639
Gain from Operations	**$ 2,158***	**$ 186,339**	**$ 603,779**

Note: Based on six months of operations.

(September 27, 2006, Initial CON Submission, page 94)

32. The Hospital's current and projected payer mix during the first three years of the proposal is presented in the following table and has been based on actual payer mix of patients receiving specific radiation therapy treatments at the Hospital's Helen & Harry Gray Cancer Center in FY 2005.

Table 8: Current and Projected Payer Mix with the CON Proposal

Payer Mix	Current %	FY 2008 %	FY 2009 %	FY 2010 %
Medicare	46.2	46.2	46.2	46.2
Medicaid	9.9	9.9	9.9	9.9
TriCare (CHAMPUS)	0.1	0.1	0.1	0.1
Total Government	56.2	56.2	56.2	56.2
Commercial Insurers	37.4	37.4	37.4	37.4
Uninsured	6.4	6.4	6.4	6.4
Workers Compensation	0	0	0	0
Total Non-Government	43.8	43.8	43.8	43.8
Total Payer Mix	**100**	**100**	**100**	**100**

(September 27, 2006, Initial CON Submission, page 21)

33. There is no State Health Plan in existence at this time. *(September 27, 2006, Initial CON Submission, page 2)*

34. The Hospital has adduced evidence that the proposal is consistent with its long-range plan. *(September 27, 2006, Initial CON Submission, page 2)*

35. The Hospital has improved productivity and contained costs with group purchasing, energy conservation, and the application of new technologies. *(September 27, 2006, Initial CON Submission, page 15)*

36. The proposal will not result in any change to the Hospital's teaching and research responsibilities. *(September 27, 2006, Initial CON Submission, page 16)*

37. The proposal will not result in any change to the Hospital's patient/physician mix. *(September 27, 2006, Initial CON Submission, page 16)*

38. The Hospital has sufficient technical, financial, and managerial competence and expertise to provide efficient and adequate service to the public. *(September 27, 2006, Initial CON Submission, Appendix K)*

39. The Hospital's rates are sufficient to cover the proposed capital and operating costs associated with the proposal. *(September 27, 2006, Initial CON Submission, pages 299 and 309 to 311)*

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.

Hartford Hospital ("Hospital'), located in Hartford, Connecticut, is an acute care hospital with a comprehensive program of cancer treatments. The Hospital offers cancer screening, diagnosis, surgical, medical, and radiation therapy services. In addition to the services provided on the Hospital's main campus, the Hospital and its physicians manage radiation oncology facilities in Enfield and Manchester under its joint venture, the Northeast Regional Radiation Oncology Network ("NRRON").

The Hospital is seeking to establish and operate a satellite radiation oncology center ("Center") at 80 Fisher Drive in Avon to provide radiation oncology therapy to its patients in the greater Avon community. The Hospital is also proposing to acquire a linear accelerator and a computed tomography ("CT") simulator to support the planning and delivery of the proposed services. The Hospital based the need for the satellite radiation oncology Center on the rising incidence of cancer, the increasing use of radiation as a treatment modality for cancer, the limited capacity on the campus in Hartford, and the increasing demand for radiation therapy.

Both the increase in the incidence of cancer and the increasing effectiveness and utility of radiation therapy to treat cancer has increased the number of radiation oncology treatments provided at the Hospital. The Hospital's Radiation Oncology Department currently operates three linear accelerators. Using the standard treatment demand of 6,544 patient visits per year, the following table summarizes the number of radiation oncology treatments and the total capacity of the Hospital's linear accelerators to provide the treatments:

Table A: Capacity of the Hospital's Existing Linear Accelerators

	FY 2004	FY 2005	FY 2006
Radiation Oncology Treatments	20,374	20,784	19,339
Linear Accelerator Capacity	19,632	19,632	19,632
% of Capacity	104%	106%	99%

In the past three fiscal years the Hospital's linear accelerator capacity has been at, or near, full capacity.

The Hospital supported the placing of an additional linear accelerator in Avon by analyzing its existing patient population and acknowledging the desire of patients to receive their care closer to home and in a non-hospital setting. The Hospital stated that

locating the fourth linear accelerator in a newly constructed vault in the new building in Avon is simpler and less costly than developing sufficient space on the Hospital's campus in Hartford.

The additional CT simulator is required to support the patient care demand associated with the additional linear accelerator being located at the Center. Having a CT scanner immediately adjacent to the linear accelerator will remove the need for patients to travel to the main campus to obtain a CT scan to plan their radiation therapy treatments. Patients will also have access to medical oncologists and other cancer specialists who will be have offices in the same building as the Center.

Based on the foregoing reasons, OHCA finds that the Hospital has provided sufficient evidence to support the establishment of the Center in Avon and equip it with a linear accelerator and a CT scanner. The Hospital's proposal will improve both the accessibility and quality of radiation oncology treatment for the Hospital's patients located in the greater Avon service area.

The total capital expenditure for the CON proposal is $3,314,562. The linear accelerator accounts for $1,870,360. The Hospital proposes to acquire a refurbished CT scanner at $500,000 with the balance of the costs for other medical and non-medical equipment. As the Center will be located in a leased facility, any construction or renovations required will be done with a build-out allowance or expensed. With the proposal the Hospital projects that it will realize net operating gains of $2,158, $186,339, and $603,779 in FYs 2008, 2009, and 2010, respectively. Although OHCA cannot draw any conclusions, the Hospital's volume and financial projections upon which they are based appear to be reasonable and achievable.

Based upon the foregoing Findings and Rationale, the Certificate of Need application of Hartford Hospital to establish and operate a satellite radiation oncology center at 80 Fisher Drive, Avon, Connecticut, and to acquire a linear accelerator and a computed tomography simulator to provide the services, is hereby GRANTED, subject to conditions.

Order

Hartford Hospital ("Hospital") is hereby authorized to establish and operate a satellite radiation oncology center at 80 Fisher Drive, Avon, Connecticut, and to acquire a linear accelerator and a computed tomography simulator to provide the services, subject to the following conditions:

1. This authorization shall expire on February 6, 2009. Should the Hospital's satellite radiation oncology center 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 $3,314,562. 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. The Hospital shall notify OHCA, in writing, of the following information concerning the linear accelerator by no later than one month after the linear accelerator becomes operational:
    a) The manufacturer;
    b) The model name and description; and
    c) The initial date of operation.

4. The Hospital shall notify OHCA, in writing, of the following information concerning the computed tomography simulator by no later than one month after the computed tomography simulator becomes operational:
    d) The manufacturer;
    e) The model name and description; and
    f) The initial date of operation.

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

February 6, 2007

Signed by Cristine A. Vogel
Commissioner

CAV: lkg