

**Department of Health and Human Services  
Division of Licensing and Regulatory Services  
State House, Augusta, ME  
Preliminary Analysis**

**Date:** May 9, 2011

**Project:** Linear Accelerator Replacement

**Proposal by:** Central Maine Medical Center

**Prepared by:** Steven R. Keaten, Health Care Financial Analyst  
Larry D. Carbonneau, Health Care Financial Analyst  
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Phyllis Powell, Assistant Director, Planning, Development and Quality

**Directly Affected Party:** None

**Recommendation:** Approve

	<b>Proposed Per Applicant</b>	<b>Approved CON</b>
Estimated Capital Expenditure	\$ 3,358,682	\$ 3,358,682
Maximum Contingency	\$ 0	\$ 0
Total Capital Expenditure with Contingency	\$ 3,358,682	\$ 3,358,682
Third Year Incremental Operating Costs	\$ 467,205	\$ 467,205

## I. Abstract

### A. From Applicant

**“This project involves the replacement of one (1) linear accelerator that is currently in operation three years beyond its useful life and subject to frequent breakdowns. Complete failure of either of the two existing linear accelerators would create an emergency situation, thus the urgent reason for filing this application.”**

“Since 1982 the two (2) existing linear accelerators have been replaced only twice due to equipment age and changes in technology. The current linear accelerators were installed May, 2001 and November, 2001 respectively. The manufacturer notified CMMC that they would no longer support the portal imaging system on the accelerators due to age and outdated technology as of December 31, 2009. Service calls on these accelerators have increased due to age of the equipment. Breakdowns requiring either the cancellation of patient cancer treatments or transferring patients to the second accelerator have increased from 2% in prior years to the current 16% downtime. Not all treatment plans can be transferred between each accelerator, but more importantly, it is very disconcerting for a cancer patient when changes in their course of treatment and equipment occur. A quote for replacing the portal imaging system is \$300,000 per accelerator. It would be a very poor business decision to replace any component of this ten years old clinical equipment when it has a useful life of seven (7) years.”

“The two primary reasons for moving forward for approval to replace one linear accelerator at this time are:

- A.) Real concern that a major failure could occur at any time for equipment the manufacturer can no longer support;
- B.) Waste of resources to spend \$300,000 to replace the portal imaging system for a linear accelerator that is ten years old.”

“The estimated capital cost of this project is \$3,358,682.”

## II. Fit, Willing and Able

### A. From Applicant

#### PROFILE OF THE APPLICANT

**1. “The name and principal address of the applicant”**

“Central Maine Medical Center  
300 Main Street  
Lewiston, Maine 04240”

**2. “The type of legal organization of the applicant (nonprofit/proprietary corporation/partnership, etc.)”**

“501(c) 3 non-profit corporation”

**3. “The current primary and secondary service area (inpatient and outpatient, as applicable) of the applicant and the methodology/data source for determining the validity of those areas.”**

“Primary Service Area: Androscoggin County”

“Secondary Service Area: Oxford, Franklin, Kennebec, Sagadahoc, and northern Cumberland.”

**4. “The current capacity (e.g., the number of licensed beds, number of full time equivalents) of the applicant.”**

“250 licensed beds and 1,977 FTE (s)”

**5. “The names, locations, and relationships of all affiliated entities/related parties.”**

“Central Maine Medical Center is a non-profit subsidiary of Central Maine Healthcare Corporation (CMHC). CMHC is an integrated healthcare delivery system that provides a wide range of inpatient, ambulatory and other healthcare services primarily in central and western Maine. Central Maine Medical Center’s (CMMC) principal affiliates and the addresses are”:

**“CMHC Sister Hospitals”**

“Bridgton Hospital - Bridgton  
Rumford Hospital- Rumford”

**“Residential and Long Term Care Facilities”**

“Bolster Heights- Auburn  
Rumford Community Home – Rumford”

**“CMMC Medical Departments (Hospital-owned medical practices)”**

“Please refer to the current CMMC license included in Attachment #2 in the Appendix at the end of this section.”

**“Professional Education”**

“Family Practice Residency Program - Lewiston  
Central Maine Medical Center College of Nursing – Lewiston  
School of Radiology and Nuclear Medicine – Lewiston”

“The balance of the affiliated organizations can be found on the CMHC consolidated organizational chart that is included as Attachment #1 in the Appendix of this section of the application.”

6. **“A listing of all health care facilities and services in which the applicant, one of its principals, or an affiliate has been involved within the previous twenty-four months.”**

“Central Maine Medical Center accepts patient referrals and transfers from multiple physicians, long term care facilities and other hospitals in Maine and elsewhere so it is very difficult to describe all patient care relationships. However, CMMC’s significant other contractual relationships not shown on the CMHC organization chart would include: Care-Tech (IT outsource) and Comprehensive Pharmacy Services (Pharmacy management).”

7. **“Current licenses, accreditations and certifications of the applicant”**

“Please refer to Attachment #2 in the Appendix at the end of this section.”

8. **“State licensing authority “Statements of Deficiencies” and site visit reports from the previous three years for all health care facilities and services in which the applicant, one of its principals, or an affiliate has been involved (See Maine Certificate of Need Manual, Chapter 6).”**

“There are no deficiencies.”

9. **“Financial statements and key financial measures”**

“The audited financial statement for the most current fiscal year is included as Attachment #3.”

**10. “The names and qualifications of the principals, directors, administrators, and key individuals involved in the project.”**

“Sue Mandell, M.D. – Radiation Oncologist  
Courtney Jensen, M.D. – Radiation Oncologist  
Diane Mulkhey – Manager of Radiation Oncology”

“The curriculum vitae of the key individuals involved in this project are included as Attachment #4 in the Appendix at the end of this section.”

**11. “Radiation Oncology Outcome System”**

“Please refer to the Radiation Oncology Department Performance Improvement Plan included as Attachment #5.”

**B. CONU Discussion**

**i. CON Criteria**

Relevant criteria for inclusion in this section are specific to the determination that the applicant is fit, willing and able to provide the proposed services at the proper standard of care as demonstrated by, among other factors, whether the quality of any health care provided in the past by the applicant or a related party under the applicant's control meets industry standards.

**ii. CON Analysis**

Central Maine Medical Center (CMMC) has submitted a proposal to replace one of two linear accelerators. The Division of Licensing and Regulatory Services (DLRS), Medical Facilities Unit confirms that CMMC is a fully licensed acute care hospital in the State of Maine and is MaineCare and Medicare certified. The Medical Facilities Unit of DLRS completed their most recent Federal Validation site survey on January 30, 2009. CMMC was found to be in substantial compliance with the “Medicare Condition of Participation of Hospitals”. CMMC’s current license is valid through September 30, 2011. The applicant is accredited by the Joint Commission and numerous other professional accreditation entities including the American College of Radiology (Mammography and Stereotactic Breast Biopsies) (Nuclear Medicine) and the American College of Surgeons (Cancer Care Program).

The applicant has shown a long-standing ability to provide hospital-based services within licensing standards according to information on file with the Licensing Unit of DLRS.

**iii. Conclusion**

CONU recommends that the Commissioner find that Central Maine Medical Center is fit, willing and able to provide the proposed services at the proper standard of care as demonstrated by, among other factors, whether the quality of any health care provided in the past by the applicant or a related party under the applicant's control meets industry standards.

### III. Economic Feasibility

#### A. From Applicant

##### “Economic Feasibility Narrative Summary”

“Central Maine Medical Center [CMMC], through this CON application, proposes to replace an aged linear accelerator that has exceeded its useful life by three years and is at risk of extended disservice to the community and patients served.”

“From an operational impact, CMMC is not anticipating any in volume or increased service from the replacement/upgrade of this particular unit. As such revenue and expenses, other than depreciation are as depicted in the table below, are not expected to change as it relates to this proposed project.”

#### Sources & Uses of Funds:

Replacement/upgrade Technology

		Useful Life	Depreciation Estimate			
			1st yr	2nd yr	3rd yr	
Linear accelerator	Varian Trilogy	\$ 2,581,182.00	7 year	184,370.15	368,740.29	368,740.29
Server/hardware		\$ 100,000.00	5 year	10,000.00	20,000.00	20,000.00
Physics equipment and immobilization		\$ 250,000.00	7 year	17,857.15	35,714.29	35,714.29
Renovations		\$ 427,500.00	10 year	21,375.00	42,750.00	42,750.00
		<b>\$ 3,358,682.00</b>		<b>233,602.30</b>	<b>467,204.58</b>	<b>467,204.58</b>

“Project funding is anticipated to be through entity equity, it shall not be financed thereby no financing costs shall be associated with this proposed project. Other than the capital outlay, no additional cash burden to the entity shall be incurred for the proposed project.”

“Following are the Scope and budget detail for the renovations associated to the proposed project can be found in Attachment #1 of this section.”

“We foresee no changes in federal or state law or local licensure that would impede our ability to operate the radiation therapy services in compliance with relevant statutes or regulations.”

**B. CONU Discussion**

**i. CON Criteria**

Relevant criteria for inclusion in this section are specific to the determination that the economic feasibility of the proposed services is demonstrated in terms of the:

- Capacity of the applicant to support the project financially over its useful life, in light of the rates the applicant expects to be able to charge for the services to be provided by the project; and
- The applicant's ability to establish and operate the project in accordance with existing and reasonably anticipated future changes in federal, state and local licensure and other applicable or potentially applicable rules.

**ii. CON Analysis**

Total capital expenditures for the project are projected by CMMC to be \$3,358,682. Third year operating costs of \$467,205 are a result of depreciation costs for the equipment. This project is for the replacement of a linear accelerator and does not include an expansion of services or an increase in service capacity. CMMC does not plan to borrow any funds to finance this project. The project would be funded solely by CMMC through their cash reserves.

As proposed, the applicant can financially support the project. The hospital has shown current earnings which are not expected to be significantly impacted by this project.

**Changing Laws and Regulations**

CONU staff is not aware of any imminent or proposed changes in laws and regulations that would impact the project. CMMC presently has the organizational strength to adjust to reasonable changes in laws and regulations.

**iii. Conclusion**

CONU recommends that the Commissioner determine that Central Maine Medical Center has met their burden to demonstrate the economic feasibility of the proposed services in terms of: (1) the capacity of the applicant to support the project financially over its useful life, in light of the rates the applicant expects to be able to charge for the services to be provided by the project; and (2) the applicant's ability to establish and operate the project in accordance with existing and reasonably anticipated future changes in federal, state and local licensure and other applicable or potentially applicable rules.



## IV. Public Need

### A. From Applicant

#### A. Project Overview

**“This project involves the replacement of one (1) linear accelerator that is currently in operation three years beyond its useful life and subject to frequent breakdowns. Complete failure of either of the existing linear accelerators would be an emergency situation and is the urgent reason for filing this application.”**

“Since 1982 the two (2) existing linear accelerators have been replaced only twice due to equipment age and changes in technology. The current linear accelerators were installed May, 2001 and November, 2001 respectively. The manufacturer notified CMMC that they would no longer support the portal imaging system on the accelerators due to age and outdated technology as of December 31, 2009. Service calls on these accelerators have increased due to age of the equipment. Breakdowns requiring either the cancellation of patient cancer treatments or transferring patients to the second accelerator have increased from 2% in prior years to the current 16% downtime. Not all treatment plans can be transferred between each accelerator, but more importantly, it is very disconcerting for a cancer patient when changes in their course of treatment and equipment occur.”

“A quote for replacing the portal imaging system is \$300,000 per accelerator. It would be a very poor business decision to replace any component of this ten years old clinical equipment that has a useful life of seven (7) years.”

“The two primary reasons for moving forward for approval to replace one linear accelerator at this time are:

A.) Real concern that a major failure could occur at any time for equipment the manufacturer can no longer support;

B.) Waste of resources to spend \$300,000 to replace the portal imaging system for a linear accelerator that is ten years old.”

### **B. Cancer Incidence and Mortality in Maine**

“Cancer is the second leading cause of death in Maine behind heart disease. Maine’s age-adjusted cancer incidence rates for all cancer sites are significantly higher than the national average. Maine’s age-adjusted cancer mortality rates are also significantly higher than the national average – see attachment #1. Maine CDC divides the state into public health districts. The Western Maine District cancer incident rate is comparable to the Maine average, but the cancer mortality rate is higher. Lung and prostate cancer incidence and mortality are higher than the state average in the Western Maine District.”

**“The key takeaway from these statistics is cancer is a major healthcare problem in Maine.”**

### **C. Central Maine Medical Center Cancer Program**

“Central Maine Medical Center is accredited by the American College of Surgeons Commission on Cancer as a Community Hospital Comprehensive Cancer Program, the highest level of accreditation afforded to a community hospital.”

“Central Maine Medical Center’s cancer program offers a regional, multi-disciplinary approach to cancer management. Physician specialists in medical oncology (chemotherapy), surgery and radiation oncology provide ongoing support services to referring physicians, hospitals and patients throughout the tri-county area (Androscoggin, Oxford and Franklin) as well as to northern Cumberland county and Sagadahoc County. The oncology specialists regularly attend 10 cancer conferences in five hospitals in CMMC’s service areas.”

“Multiple sub-specialists in oncology are active participants in patient care and cancer program activities. Additionally, oncology nurses, radiation therapists, physicists,

oncology social workers, cancer registrars, dieticians, and support personnel provide direct and indirect support to the entire CMMC cancer program.”

“There are ongoing multi-disciplinary team approaches for breast, GI and thoracic cancer. CMMC participates in clinical trials for various cancer treatment modalities. The Central Maine Comprehensive Cancer Center 2010 Annual Report summarizes the program in some detail. See Attachment #2.”

“The Patrick Dempsey Center for Hope and Healing is the Cancer Center’s resource for support to patients and families living with cancer. The Dempsey Center provides support groups, integrative medicine programming, cancer outreach and education programs, wellness services as well as ongoing programming.”

#### **D. Radiation Oncology at CMMC**

“Some 60% of cancer patients receive radiation therapy during their course of treatment. Over 550 new patient referrals are made to the two radiation oncologists every year. In addition, minimally another 175 patients are re-treated. 11,951 radiation treatments were delivered in fiscal year 2010.”

“FY 10 volumes were lower than the two prior years (FY 09 treatments delivered 13,680; FY 08 treatments delivered 12,301), but reflect national trends. Overall, fewer cancers are being diagnosed nationally. The speculation is higher co-pays, higher deductibles and the lack of insurance forces people to avoid screenings for cancer and/or be in active therapy unless they are symptomatic. In long term, we anticipate treating sicker patients in more advanced stages of cancer as a result. However, the two existing linear accelerators are operating efficiently (when breakdowns are not occurring) and at the high end of capacity with some 25-30 patients are treated per day on each machine.”

“Presently the cancer center houses two Siemens linear accelerators with Intensity Modulated Radiation Therapy, (IMRT). The center also offers prostate brachytherapy services.”

“CMMC has been providing radiation oncology services since at least the 1970’s. In 1982 the Cynthia A. Rydholm Cancer Treatment Center was opened as a comprehensive cancer care center which is the site for the radiation oncology department. The radiation oncology staff includes two board certified or board eligible radiation oncologists, one physicist and 14.32 FTEs - nurses, radiation techs and other support staff.”

“Over 192 providers refer patients for radiation therapy from over 140 towns – see Attachment #3.”

#### **E. Public Need Addressed by this Project**

1. “This project addresses the major health problem of the high cancer incidence and mortality in Maine and the central and western Maine region. Radiation therapy is one of the three major treatment modalities for cancer treatment. CMMC is the only radiation therapy provider for Androscoggin and Oxford County. Over 550 new patient referrals are made to the two radiation oncologists every year. In addition, minimally another 175 patients are re-treated. Over 192 providers refer patients for radiation therapy from over 140 towns. **Failure of a ten (10) year old linear accelerator that is subject to a major failure at any time will have a negative impact on the timeliness of cancer care in this region of Maine.**”
2. “CMMC is devoting substantial resources to cancer prevention and screening which will have a positive impact on the health status of the population service. These initiatives are outlined in Section II and Section VI of this Application.”
3. “Radiation therapy services are accessible to all residents of the area served.”

“Radiation therapy often requires patients to have multiple treatments for an extended period of time. Geographic proximity is crucial for patient safety as many of the patients are ite ill and travel is burdensome both for the patient and their care givers. CMMC is committed to providing cancer care close to home. For those patients who live in the surrounding area, minimal travel is necessary to

access state of the art therapy. For those patients who live a distance from CMMC, we offer the Arbor House. This is a free home-like environment where patients and love ones can stay during weeks of therapy.”

“Central Maine Medical Center is a major MaineCare provider and has a liberal free care policy. The Central Maine Medical Group of over 250 providers is one of, if not the largest MaineCare providers in Maine.”

4. “The anticipated benefits to the public associated with this project are:

A. Improved operational performance

Avoidance of the frequent breakdowns previously discussed which create significant operational problems and interrupt patient care.

B. Patient safety enhancement

The key patient safety enhancement is the provision of radiation therapy services on continually reliable equipment.

C. Performance Improvement

Continued operation of the linear accelerator equipment accordance to the Performance Improvement Plan as outlined in Section I.”

**B. CONU Discussion**

**i. CON Criteria**

Relevant criteria for inclusion in this section are specific to the determination there is a public need for the proposed services as demonstrated by certain factors, including, but not limited to:

- Whether, and the extent to which, the project will substantially address specific health problems as measured by health needs in the area to be served by the project;
- Whether the project will have a positive impact on the health status indicators of the population to be served;
- Whether the services affected by the project will be accessible to all residents of the area proposed to be served; and
- Whether the project will provide demonstrable improvements in quality and outcome measures applicable to the services proposed in the project.

**ii. CON Analysis**

Presently CMMC operates a comprehensive cancer care program that utilizes two Siemens linear accelerators with Intensity Modulated Radiation Therapy (IMRT) for radiation treatment. These two linear accelerators were placed in service in 2001. According to the American Hospital Association, the useful life of a linear accelerator is 7 years. CMMC recognized in the Public Informational Meeting on April 6, 2011 that both linear accelerators are due to be replaced. CMMC is replacing them in phases due to their order of priorities in their Facility Master Plan.

CMMC has demonstrated that it is essential to keep two linear accelerators for radiation therapy treatment. CMMC has demonstrated the organization would not be able to handle the volume of radiation therapy treatment with just one linear accelerator in service. CMMC is the only radiation therapy provider for the service area that includes Androscoggin and Oxford Counties. CMMC states that “failure of a ten (10) year old linear accelerator that is subject to a major failure at any time will have a negative impact on the timeliness of cancer care in this region of Maine.”

The applicant has a free care policy that enables all residents of the service area to receive treatment regardless of their ability to pay.

**iii. Conclusion**

CONU recommends that the Commissioner find that Central Maine Medical Center has met their burden to show that there is a public need for the proposed project as

demonstrated by certain factors, including, but not limited to: (1) Whether, and the extent to which, the project will substantially address specific health problems as measured by health needs in the area to be served by the project; (2) Whether the project will have a positive impact on the health status indicators of the population to be served; (3) Whether the services affected by the project will be accessible to all residents of the area proposed to be served; and (4) Whether the project will provide demonstrable improvements in quality and outcome measures applicable to the services proposed in the project.

## V. Orderly and Economic Development

### A. From Applicant

1. “The impact on total healthcare expenditures of replacing one linear accelerator for a total project cost of \$3.58 million is miniscule. CMMC is not anticipating any increase in volume or increased service from the replacement/upgrade of this particular unit. As such revenue and expenses, other than depreciation (see Section III) are not expected to change as it relates to this proposed project. Project funding is anticipated to be through entity equity, it shall not be financed thereby no financing costs shall be associated with this proposed project. Other than the capital outlay, no additional cash burden to the entity shall be incurred for the proposed project.”
2. “The impact on MaineCare expenditures is almost insignificant as there is no anticipated volume increases or increased service above current utilization level.”
3. “There is no replacement technology on the horizon for radiation therapy in the treatment of cancer patients or less costly alternative to replacing a linear accelerator in operation beyond its useful life. CMMC is the sole provider on this service in our local region.”



**B. CONU Discussion**

**i. CON Criteria**

Relevant criteria for inclusion in this section are specific to the determination that the proposed services are consistent with the orderly and economic development of health facilities and health resources for the State as demonstrated by:

- The impact of the project on total health care expenditures after taking into account, to the extent practical, both the costs and benefits of the project and the competing demands in the local service area and statewide for available resources for health care;
- The availability of state funds to cover any increase in state costs associated with utilization of the project's services; and
- The likelihood that more effective, more accessible or less costly alternative technologies or methods of service delivery may become available.

**ii. CON Analysis**

The applicant is not projecting an increase in service capacity or service utilization due to the replacement of this linear accelerator.

Total 3<sup>rd</sup> year incremental operating costs are projected by the applicant to be \$467,205 and of that amount MaineCare's 3<sup>rd</sup> year cost is \$74,099 ( $\$467,205 \times 15.86\%$ ) (MaineCare payor mix as projected by the applicant), which is both the Federal and State portions combined. The impact to the State portion of the budget by the third year of operation (2014) would be approximately \$25,935 ( $\$74,099 \times 35\%$ ).

CONU is not aware of any radiation cancer treatment methods that would provide treatment services at a lower cost than a linear accelerator.

**iii. Conclusion**

CONU recommends that the Commissioner find that Central Maine Medical Center has met their burden to demonstrate that the proposed project is consistent with the orderly and economic development of health facilities and health resources for the State.

## VI. State Health Plan

Relevant criterion for inclusion in this section are specific to the determination that the project is consistent with the State Health Plan.

**The applicant is redirecting resources and focus toward population based health and prevention.**

a. **Applicant's Discussion on Priority**

A. **New Prevention and Education Initiative**

1. "The Patrick Dempsey Center for Cancer Hope and Healing provides **free** cancer health education programs, counseling/oncology social work, financial resource counseling, a helpline and integrative medicine services. Some services are provided on site in Lewiston and others in Bridgton, Rumford and Brunswick. One example of cancer screenings is a skin cancer event held in January 2011. The attendance was so large a second event is being planned for later this spring."

"The Center had nearly 8,000 patient and caregiver contacts in 2009 and the number increased in 2010. The Center has a paid staff of ten employees and a pool of nearly 200 volunteers."

"The Dempsey Center 2009 Annual Report is included as Attachment #1 and for more information, please go to [www.dempseycenter.org](http://www.dempseycenter.org)"

2. "Central Maine Healthcare launched a new program in 2010 called "Saving Lives Through Evidence-Based Medicine" designed to improve the rates of compliance with established screening guidelines. Age-specific screening protocols (Mammography, colonoscopy, abdominal aortic aneurysm, etc.) were first adopted. A team of nurses and support staff now run computer programs that check compliance with the established screening protocols by reviewing patient information contained in the Central Maine Medical Group physician EMR. Patients not in compliance are notified and tracked in an effort to identify disease at its earliest stages when it is most treatable. There have been a number of success stories to date including finding breast tumors, pre-cancerous colon polyps, asymptomatic colon cancers and patients at high risk for often fatal aneurysms."

B. **Existing Prevention and Education Initiatives**

1. "**Cardiac** – The Central Maine Heart and Vascular Institute has been providing prevention, screening and community outreach since it opened in May 2003. The Central Maine Heart and Vascular Institute offers a comprehensive approach to

cardiovascular health promotion, detection, and disease prevention. Integral to CMHVI's Prevention and Outreach program is a software program called ScoreKeeper™. ScoreKeeper™ analyzes an individual's cardiovascular disease risk factors and produces a personalized health status report. The program is unique because it enhances patient, physician, and nurse/health counselor interactions and provides the patient with guidelines for modifying risky health behaviors and improving chronic disease self-management skills. Those who complete the ScoreKeeper™ evaluation are provided individually tailored recommendations for lowering the identified risks, and educational materials about cardiovascular disease and its management. When appropriate, the CMHVI healthcare professionals who administer ScoreKeeper™ screenings arrange follow-up appointments to provide further education and monitor the patient's progress in reducing his or her risk for developing cardiovascular disease. A report identifying risk factors and outlining plans for modifying health risks is mailed to the patient's primary care provider. This tool has been deployed in physician practices, at community worksites, community health fairs and on a mobile van that stops at regularly scheduled screening sites in central and western Maine.”

“The Central Maine Heart and Vascular Institute (CMHVI) is also the sponsor of the annual “Heart to Heart” conference for women each February. This event is held at CMMC and is telecast via videoconference to Rumford and Bridgton.”

“All of the informational messages about CMHVI include an educational component such as the warning signs of a heart attack, stop smoking messages, etc.”

2. **“Cancer** - CMMC has been a leader in cancer prevention, education and screening programs particularly for breast cancer. CMMC co-sponsors the “Buddy to Buddy” monthly breast cancer awareness messages with WCSH Channel 6. Prostate screenings targeted at “high risk” men over the age of 50 were also conducted in late October.”

“Most recently, CMMC is an active participant in the colon cancer awareness initiatives. CMMC is an active participant in the Maine Colorectal Cancer Screening Program. This is an initiative funded by Maine and the federal CDC with the goal to significantly impact the burden of colorectal cancer in Maine by eliminating financial barrier to providing access to services throughout the state for the identified population.”

3. **“Central Maine Institute for Injury Prevention** – Participation in injury prevention is a requirement of all designated trauma centers. The Central Maine Institute for Injury Prevention is a coalition of members of the community interested in injury prevention including: elementary and high schools and colleges; police, sheriff and fire departments; Bureau of Highway Safety, Department of Transportation; Advocates for Children, Maine Injury Prevention Program; Lewiston-Auburn Safe Communities; and various EMS groups. CMMC’s role in the Institute is to be a resource and clearing house for injury

prevention information. Quarterly newsletters are sent to all members and include information regarding injury prevention activities at the local, state and national levels. The Trauma program manages the Maine Child Safety Seat Voucher Program for CMMC which provides free car seats to families with financial need and incorporates orientation programs for families for safe usage of the car seats. CMMC also participates in the development of a playground safety project with Emergency Medical Services for Children. Creating a safer Maine will reduce the need for hospitalization and critical care related to motor vehicle accidents, falls and other forms for traumatic injury.”

4. “**CMH Chronic Care Model** – The affiliated Central and Western Maine Physician Hospital Organization which is composed of the Medical Staffs of CMMC, Rumford, Bridgton, Parkview and Franklin Memorial Hospital are actively involved in the management of chronic disease. To understand what the PHO is engaged in regarding the chronic care model, one must visualize the elements of the model. These elements are the community, the health system, self-management support, delivery system design, decision support and clinical information systems. Evidence-based change concepts under each element, in combination, foster productive interactions between informed patients who take an active part in their care and providers with resources and expertise. The model can be applied to a variety of chronic illnesses, health care settings and target populations. The bottom line is healthier patients, more satisfied providers, and cost savings.”

“The following is specific PHO activities related to the model elements individually:

- 1) **Community** – The regional PHO is proactive in promotion of the chronic care model in its **five local PHO communities**: Central Maine Medical Center, Bridgton Hospital, Rumford Hospital, Parkview Adventist Medical Center in Brunswick, and Franklin Memorial Hospital. In addition **the regional PHO is involved on the state level** with active participation in the Maine Health Management Coalition’s “Pathways to Excellence.”
- 2) **Health System** – The regional PHO currently works with the professional quality department at all five local PHO levels on safety issues. Specifically as liaison between our PHO member hospitals, Anthem, and Qualidyme (the QIO for Anthem in the Q-HIP initiative).
- 3) **Self Management Support** – The regional PHO is a pioneer in advocating for implementation of the chronic care model as evidenced by the progressive three year “Pay for Performance” contract with Anthem. This successful contract measured success in implementation of a) Establishing a baseline level of care treatment efficacy b) Implementing diabetes registries within primary care practices and c) Measuring diabetes control outcomes over the three year period. The contract was designed around the principle of the chronic care model.

- 4) **Delivery System Design** – The regional PHO took the lead during the three year Anthem contract to define roles and distribute tasks among the members of 5 local PHO entities. The medical management team provided onsite and telephonic support to practices in all of the local PHO to reinforce the chronic care model. In the way of clinical case management for complex patients, the PHO collaborated with diabetic educators for telemedicine ADEF (Adult diabetic education and follow up) in the rural town of Rumford where no such classes existed. That program still exists today and is supported by the regional PHO and the diabetes education specialists at CMMC.
- 5) **Decision Support** – The regional PHO continues to provide decision support to the local PHO entities through the medical management structure. The chronic care model is supported in each local community depending upon the individual needs that exist. Reporting efforts to the Maine Health Management Coalition’s Pathways to Excellence initiative is based upon measuring the elements of the chronic care model in each community and reporting it to the appropriate agency, generally the Maine Health Information Center.
- 6) **Clinical Information Systems** – The regional PHO has funded individualized clinical information support to the local PHO entities for the purpose of expanding the role of technology in chronic disease management. For LAPA, BH, and RH we have developed a chronic disease dashboard that has the ability to mine data from Centricity in order to promote callback systems for Mammography, Diabetes care, and Cardio-Vascular disease. In Farmington and Livermore we have funded and actively implemented the Maine Health chronic information registry known as C.I.R. on a beta testing basis. In Rumford we fund telemedicine for ADEF classes and diabetic case management for the community through that effort on an ongoing basis. In Brunswick at Parkview Adventist Medical Center we have worked with local PHO and administration to form a quality committee with focus on reporting outcomes of chronic disease to the various agencies requiring data.”

“We believe that the continued efforts of the regional PHO to provide implementation and oversight of the chronic care model in our population results in an informed activated patient having productive interactions with a prepared proactive practice team to improve functional and clinical outcomes.”

**b. CONU Discussion**

CMMC has identified several prevention and education initiatives that are centered on population-based health and prevention. The applicant has met this priority.

**2. The applicant has a plan to reduce non-emergent ER use.**

**a. Applicant's Discussion on Priority**

“CMMC has been able to reduce non-emergent ER use by expanding the number of employed primary care providers and the capacity of these practices. CMMC ER volumes has gone down consistent with projections included in the CMMC ED/Lab construction and renovation project approved in 2009 and currently under construction.”

**b. CONU Discussion**

CMMC is expecting ED use to decline in the future due to the addition of several new primary care providers in CMMC's service area. The applicant has met this priority.

**The applicant demonstrates a culture of patient safety, that it has a quality improvement plan, uses evidence-based protocols, and/or has a public and/or patient safety improvement strategy for the project under construction and for other services throughout the hospital.**

**a. Applicant's Discussion on Priority**

“The Radiation Oncology Department has embraced a culture of patient safety as outlined in the Performance Improvement Plan that can be found in Section I – Attachment #5.”

“It is important to note the CMMC cancer program is accredited by the American College of Surgeons and the hospital has no deficiencies.”

**b. CONU Discussion**

The applicant has provided a copy of their performance improvement plan. The applicant has met this priority.

**The project leads to lower costs of care/increased efficiency through such approaches as collaboration, consolidation, and/or other means.**

**a. Applicant's Discussion on Priority**

“CMMC is the sole provider of radiation therapy services in our region. However, the radiation oncologists participate in multiple hospital tumor boards to facilitate the best possible patient care. The tumors boards are: CMMC, Stephens, St. Mary's, Parkview Adventist Medical Center and Franklin Memorial Hospital.”

**b. CONU Discussion**

The applicant collaborates with several tumor boards at other regional hospitals. The applicant has met this priority.

**The project improves access to necessary services for the population.**

**a. Applicant's Discussion on Priority**

“Radiation therapy services are accessible to all residents of the area served. Radiation therapy often requires patients to have multiple treatments for an extended period of time. Geographic proximity is crucial for patient safety as many of the patients are quite ill and travel is burdensome both for the patient and their care givers. CMMC is committed to providing cancer care close to home. For those patients who live in the surrounding area, minimal travel is necessary to access state of the art therapy. For those patients who live a distance from CMMC, we offer the Arbor House. This is a free home-like environment where patients and love ones can stay during weeks of therapy.”

“Central Maine Medical Center is a major MaineCare provider and has a liberal free care policy. The Central Maine Medical Group of over 250 providers is one of, if not the largest MaineCare providers in Maine.”

**b. CONU Discussion**

The proposed project is replacing an existing piece of equipment; it is not being proposed to improve access to services. CMMC has a free care policy that guarantees access to care regardless of a person's ability to pay. The applicant has met this priority.

**The applicant has regularly met Dirigo voluntary cost control targets.**

**a. Applicant's Discussion on Priority**

“CMMC has met and will continue to meet the voluntary price and cost targets established by the Dirigo Reform Act, PL 469.”

**b. CONU Discussion**

The applicant has not submitted any documentation to demonstrate that this priority has been met.

**The impact of the project on regional and statewide health insurance premiums, as determined by BOI, given the benefits of the project, as determined by CONU.**

**a. Applicant's Discussion on Priority**

“Minimal to insignificant.”

**b. CONU Discussion**

CONU did not request that the Bureau of Insurance provide an analysis for this project because an analysis is not required for a simplified review.

**Applicants (other than those already participating in the HealthInfoNet Pilot) who have employed or have concrete plans to employ electronic health information systems to enhance care quality and patient safety.**

**a. Applicant's Discussion on Priority**

“CMMC was a founding member and continues to play an active role in HealthInfoNet.”

**b. CONU Discussion**

The applicant has met this priority.

**Projects done in consultation with a LEEDS certified-architect that incorporate "green" best practices in building construction, renovation and operation to minimize environmental impact both internally and externally.**

**a. Applicant's Discussion on Priority**

“Internal renovation of a linear accelerator vault, but best practices will be incorporated in this project.”

**b. CONU Discussion**

This priority is not applicable to this project.

**iii. Conclusion**

CONU recommends that the Commissioner find that the applicant has demonstrated that the project is consistent with the State Health Plan.



## VII. Outcomes and Community Impact

### A. From Applicant

“The Radiation Oncology Department has embraced a culture of patient safety as outlined in the Performance Improvement Plan that can be found in Section I – Attachment #5.”

“It is important to note the CMMC cancer program is accredited by the American College of Surgeons and the hospital has no deficiencies.”

“Since CMMC is the sole provider of radiation therapy services in the region, we believe this project will have no impact on other providers.”

### B. CONU Discussion

#### i. CON Criteria

Relevant criteria for inclusion in this section are specific to the determination that the project ensures high-quality outcomes and does not negatively affect the quality of care delivered by existing service providers.

#### ii. CON Analysis

According to CMMC, linear accelerator breakdowns requiring “cancellation of patient cancer treatments or transferring patients to the second accelerator have increased from 2% in prior years to the current 16% downtime.” The manufacturer has notified CMMC that they will no longer support the portal imaging system of its accelerators due to the age of the equipment. A quote for replacing the portal imaging system is \$300,000 per accelerator. Given that each machine is beyond its useful life, such a large expenditure for each machine can not be justified from a cost-benefit standpoint. In order for CMMC to maintain its current patient service level and to continue to provide access to its cancer patients, it is necessary to remedy the increasing downtime by replacing a linear accelerator.

CMMC is the sole provider of radiation therapy services in its service area. The replacement of this existing linear accelerator is not expected to have any effect on the quality of care delivered by CMMC or other service providers.

**iii. Conclusion**

CONU recommends that the Commissioner find that Central Maine Medical Center has met their burden to demonstrate that this project will ensure high-quality outcomes and does not negatively affect the quality of care delivered by existing service providers.

## **VIII. Service Utilization**

### **A. From Applicant**

“This is an equipment replacement project. We are not projecting any increase in service utilization.”

### **B. CONU Discussion**

#### **i. CON Criteria**

Relevant criterion for inclusion in this section are specific to the determination that the project does not result in inappropriate increases in service utilization, according to the principles of evidence-based medicine adopted by the Maine Quality Forum.

#### **ii. CON Analysis**

The applicant is not projecting any increase in service capacity or service utilization. Replacing this linear accelerator will allow CMMC to maintain their current level of service utilization.

#### **iii. Conclusion**

CONU recommends that the Commissioner find that the Central Maine Medical Center has met their burden to demonstrate that the project does not result in inappropriate increases in service utilization, according to the principles of evidence-based medicine adopted by the Maine Quality Forum.

## **IX. Capital Investment Fund**

### **A. From Applicant**

“We foresee a minimal to insignificant impact on the Capital Investment Fund.”

### **B. CONU Discussion**

#### **i. CON Criteria**

Relevant criteria for inclusion in this section are related to the needed determination that the project can be funded within the Capital Investment Fund.

#### **ii. CON Analysis**

This review criteria is not applicable to a simplified review.

## **X. Timely Notice**

### **A. From Applicant**

“Letter of Intent filed on December 21, 2010”

“Technical Assistance meeting held on March 2, 2011”

### **B. CONU Discussion**

Letter of Intent filed:	December 21, 2010
Technical Assistance meeting held:	March 2, 2011
CON application filed:	March 21, 2011
CON certified as complete:	March 21, 2011
Public Information Meeting Held:	April 6, 2011
Public comment period ended:	May 5, 2011

## **X. CON Findings and Recommendations**

Based on the preceding analysis, including information contained in the record, the CONU recommends that the Commissioner make the following findings and recommendations subject to the conditions below:

- A. That the applicant is fit, willing and able to provide the proposed services at the proper standard of care as demonstrated by, among other factors, whether the quality of any health care provided in the past by the applicant or a related party under the applicant's control meets industry standards.
- B. The economic feasibility of the proposed services is demonstrated in terms of the:
1. Capacity of the applicant to support the project financially over its useful life, in light of the rates the applicant expects to be able to charge for the services to be provided by the project; and
  2. The applicant's ability to establish and operate the project in accordance with existing and reasonably anticipated future changes in federal, state and local licensure and other applicable or potentially applicable rules;
- C. The applicant has demonstrated that there is a public need for the proposed services as demonstrated by certain factors, including, but not limited to;
1. The extent to which the project will substantially address specific health problems as measured by health needs in the area to be served by the project;
  2. The project has demonstrated that it will have a positive impact on the health status indicators of the population to be served;
  3. The project will be accessible to all residents of the area proposed to be served; and
  4. The project will provide demonstrable improvements in quality and outcome measures applicable to the services proposed in the project;
- D. The applicant has demonstrated that the proposed services are consistent with the orderly and economic development of health facilities and health resources for the State as demonstrated by:
1. The impact of the project on total health care expenditures after taking into account, to the extent practical, both the costs and benefits of the project and the competing demands in the local service area and statewide for available resources for health care;

2. The availability of State funds to cover any increase in state costs associated with utilization of the project's services; and

3. The likelihood that more effective, more accessible or less costly alternative technologies or methods of service delivery may become available was not demonstrated by the applicant;

In making a determination under this subsection, the commissioner shall use data available in the state health plan under Title 2, section 103, data from the Maine Health Data Organization established in chapter 1683 and other information available to the commissioner. Particular weight must be given to information that indicates that the proposed health services are innovations in high quality health care delivery, that the proposed health services are not reasonably available in the proposed area and that the facility proposing the new health services is designed to provide excellent quality health care.

E. The applicant has demonstrated that the project is consistent with and furthers the goals of the State Health Plan;

F. The applicant has demonstrated that the project ensures high-quality outcomes and does not negatively affect the quality of care delivered by existing service providers;

G. The applicant has demonstrated that the project does not result in inappropriate increases in service utilization, according to the principles of evidence-based medicine adopted by the Maine Quality Forum; and

H. That the project need not be funded within the Capital Investment Fund.

**RECOMMENDATION:** For all the reasons contained in the preliminary analysis and in the record, CONU recommends that the Commissioner determine that this project should be **approved**.