

# **BRIEFING MEMO**

## **Eastern Maine Medical Center** **Expansion/Relocation of Diagnostic Outpatient Imaging Services** **To Union Street In Bangor, Maine**

**TO:** Brenda M. Harvey, Commissioner, DHHS

**THROUGH:** Catherine Cobb, Director, Division of Licensing and Regulatory Services

**FROM:** Phyllis Powell, Manager, Certificate of Need Unit  
Steven R. Keaten, Healthcare Financial Analyst

**SUBJECT:** Proposal by Eastern Maine Medical Center to expand and relocate its diagnostic outpatient imaging services to the EMH Mall on Union Street in Bangor, Maine at an estimated capital cost of \$11,456,269.

**DATE:** August 2, 2007

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**ISSUE ACTIVATED BY:** The referenced proposal requires Certificate of Need approval as defined in "The Maine Certificate of Need Act of 2002," 22 MRSA Section 326 et seq., as amended.

**REGISTERED AFFECTED PARTIES:** Magnetic Resonance Technologies of Maine, L.P

### **BACKGROUND:**

- Eastern Maine Medical Center (EMMC) is a not-for-profit corporation and is a subsidiary of Eastern Maine Healthcare Systems (EMHS), a not-for-profit profit corporation. EMMC is licensed for 411 beds. EMMC has a transfer agreement for referral services with 12 critical access hospitals in the region. EMMC is verified as a Level II trauma center by the American College of Surgeons and is one of three state designated trauma centers in Maine. EMMC serves the largest geographic service area of any referral center in the State of Maine.
- The project involves the expansion and relocation of diagnostic outpatient imaging services to be moved from EMMC's State Street Campus to the EMH Mall located on Union Street in Bangor, Maine. The proposed EMMC outpatient imaging center will be located in 33,200 square feet of renovated space. No new services are proposed for this application. Existing imaging services at the EMH Mall are CT, MRI, Radiography and Ultrasound. Proposed services to be moved to the EMH Mall are Ultrasound, Echocardiography and Flouroscopy. Proposed imaging services to be moved and expanded would be CT, Ultrasound, MRI, Digital Mammography, Diagnostic Cardiology and Flouroscopy.
- The *Division of Licensing and Regulatory Services, Medical Facilities Unit*, confirms that Eastern Maine Medical Center is a fully licensed acute care hospital licensed in the State of Maine and is MaineCare and Medicare certified. EMMC is certified by the Joint Commission.

***The CONU has determined that the applicant is fit, willing and able to manage this project and continue to provide services at the proper standard of care.***

- The applicant has determined that the capital cost for this project is \$11,456,269, resulting in third year operating costs of \$3,976,790. EMMC has proposed financing 86 % of this project with MHHEFA tax-exempt bond financing and a 15 % equity contribution.
- The CONU concluded in the prelim that it could not determine from the information provided that the economic feasibility of the project had been demonstrated. Pro-forma financial statements provided by the applicant on an entity wide basis were not complete and did not appear to accurately reflect recent submissions from prior approved CON projects.
- The CONU concluded in the prelim that the public need for this project had not been established. The applicant failed to provide quantifiable data on what health problems in the area need to be served. The applicant failed to demonstrate that this project would provide demonstrable improvements in quality and outcome measures. In addition, the applicant did not address the MQF commissioned study on advanced imaging use in Maine for the diagnoses of abdominal/pelvic pain and back pain that showed the Bangor region was above the state average with CT and MRI imaging 7% and 10% respectively.
- The CONU concluded in the prelim that because the applicant failed to address the MQF study on over scanning in the Bangor Region, we were unable to determine whether this project will result in inappropriate increases in service utilization.
- The CONU concluded in the prelim that the applicant failed to provide us with data in order for us to determine if the project ensures high-quality outcomes and that it will not affect the quality of care by existing service providers.

**HIGHLIGHTS:**

Letter of Intent dated September 8, 2006  
Subject to CON review letter issued September 14, 2006  
Technical Assistance Meeting held on October 17, 2006  
Application filed and certified as complete on December 19, 2006  
Application placed in review cycle on January 1, 2007  
Applicant's public informational meeting held on January 22, 2007  
A public hearing was not requested  
Preliminary analysis released on June 20, 2007  
Preliminary analysis published in newspapers on June 25, 2007  
Record closed on July 10, 2007

**Comments From Public:**

Numerous sets of public comments were received following release of the Preliminary Analysis, all in support of the project. We received a number of letters of support for the project from medical organizations, physicians and Legislators. The following addresses the comments we received from the applicant (EMMC) via a submission on July 5, 2007 by Deborah Carey Johnson, President & CEO, Eastern Maine Medical Center:

### **Capital Expenditures, Financing and Compliance**

The applicant provided updated financial pro-formas for each year through 2011, the 3rd year of operation for the project. In addition, the applicant provided the CONU with a copy of the Standard and Poor's Credit Rating of its parent corporation EMHS.

#### **CONU Comment:**

The additional data indicates the limited pro-forma provided to the CONU prior to the prelim was prepared when the applicant was experiencing a shift in payor mix from commercial payors to government payors which typically reimburse less. This explains why the limited pro-formas did not reflect actual historical data from FY 2004-FY 2006. Since that time EMMC, has undertaken cost savings and operational efficiency efforts. New pro-formas reflect those cost savings and operational efficiency efforts.

The operating margin, as projected by the applicant, will increase from .92 % to 2.24% during the first three years of operation (2009-2011) as compared to the prior pro-forma submission that reflected a .18% profit margin in 2011. EMMC now shows an adequate operating margin to proceed with this project. This project is projected to be profitable for the applicant and will continue to increase the operating margin of the hospital.

Days cash on hand, as projected by the applicant, will increase from 42.47 to 84.20 days during the first three years of operation (2009-2011) as compared to the prior pro-forma submission that reflected 50.06 days cash on hand in 2011. This project will not have a substantial impact on EMMC's ability to meet its cash demand and EMMC should be able to adequately support this project. The applicant continues to assert a need to finance approximately 85 % of this project citing that the number of days cash on hand is below the threshold to maintain their A+ rating by Standard and Poor's. Standard and Poor's affirmed their A+ Issuer Credit Rating to EMHS, the parent of EMMC, on December 22, 2005 citing among other factors their credit strength with unrestricted cash and investments totaling \$172.4 million at fiscal year end 2005 combined with low debt leverage. For fiscal year end 2006 CONU calculates this number to be \$171.6 million.

The debt service coverage ratio, as projected by the applicant, will increase from 4.01 to 5.03 during the first three years of operation (2009-2011) as compared to the prior pro-forma submission that reflected a debt service coverage ratio of 3.81 in 2011. EMMC demonstrates adequate debt service coverage to take on additional debt financing for this project.

The fixed asset financing ratio, as projected by the applicant, will decrease from 49 % to 45 % during the first three years of operation (2009-2011) as compared to the prior pro-forma

submission that reflected a fixed asset financing ratio of 44% in 2011. The applicant's projections follow the trend exhibited nationally and expected to continue through the time period considered. In 2004, EMMC's fixed asset financing ratio was in the 50<sup>th</sup> percentile for the State of Maine. As a comparison Maine Medical Center's fixed asset financing ratio is projected to be 31 % in 2011 considerably lower than EMMC's.

The total asset turnover ratio, as projected by the applicant, will increase from 1.34 to 1.38 during the first three years of operation (2009-2011) as compared to the prior pro-forma submission that reflected a total asset turnover ratio of 1.53 in 2011. The TAT ratio indicated it is consistent with the past TAT of the applicant.

*The CONU has determined that the applicant could financially support the project.*

### **Needs to be Met**

The applicant provided additional quantifiable data on need. EMMC has engaged Avatar International since October 2001 to measure, report and assist EMMC's efforts to improve patient satisfaction. During the past 18 months, EMMC through surveys, has had 955 patients complain about inadequate parking and over 100 have complained that an imaging appointment was unavailable when the patient needed it. EMMC's patient relations department has recorded 128-wait-related patient complaints in the medical imaging department over the same period. From 2006 to 2007, scheduled visits to the Imaging Center have increased from 77,446 to 97,804, a rise of 26.3%. Rescheduled appointments have increased from 15,838 to 20,963, a rise of 32.4% over the same time span. EMMC estimates that eliminating the need to reschedule appointments would result in an estimated \$29,300 savings in staff wages. In addition, EMMC estimates that an additional \$385,700 in nursing salaries would be saved from inpatients having to wait for scheduled exams before being discharged.

### **CONU Comment:**

EMMC has demonstrated a problem with a congested imaging department. Imaging studies at EMMC's State Street campus encompass both inpatient and outpatient. The area has a parking problem as evidenced by the number of complaints they received on satisfaction surveys as noted above. Complaints about not having available imaging appointments when needed are also on the rise. The applicant is experiencing continued increases in the number of rescheduled appointments and canceled imaging studies. Inpatients waiting for discharge have to wait for imaging studies prior to being discharged and this is costing additional money for nurse's time as noted above. The applicant has conservatively projected imaging will continue to grow through out the next few years as the population continues to age. The applicant has shown the current situation where outpatient and inpatient patients are competing for the limited imaging services and space at EMMC's campus is no longer the best plan for the hospital or its patients. EMMC is already performing some imaging at the EMH Union Street facility. Approving this project would alleviate the overcrowding in the imaging department at the State Street campus creating better through put for inpatients and creating efficiencies regarding scheduling and nursing time. Current imaging locations for outpatients are located all over the State Street campus often times

making it difficult for patients to find the way to the right building. Imaging is located in the Haskell, Webber, Grant and Kagan buildings. Moving this service to the new location as proposed would allow patients to enter through one reception area. This proposal will allow EMMC to do the same thing MMC in Portland has been doing over the last few years, moving outpatient services away from the main hospital campus so the hospital can concentrate on emergency and inpatient care at its State Street Campus.

*The CONU has determined the EMMC has demonstrated a need for the proposed project.*

### **Alternatives Considered**

The applicant states they have considered all the possibilities to the project and continues to believe it is the best and least costly approach to the overcrowding being experienced in the imaging department. Alternatives considered include expanding at main campus, locating outpatient imaging services elsewhere or developing joint venture with radiologists and other. These were not considered to be viable alternatives as costs would be greater than the project that is proposed.

### **CONU Comment:**

*Maine Bureau of Insurance* estimated that the maximum impact of this CON project on private health insurance premiums in EMMC's service area for the project's third year of operation will be approximately \$0.408 per \$100 (0.408%) of premium. They further estimate that this project, in its third year of operation, will have a maximum impact on statewide private health insurance premiums of approximately \$0.108 per \$100 (0.108%) of premium. This is considered a minimal financial impact to third party payors.

Total approved 3rd year operating costs are projected to be \$3,976,79 and of that amount MaineCare's 3rd year cost is \$676,054 ( $\$3,976,790 \times 17.0\%$ ), which is both the Federal and State portions combined. Currently the impact to the Maine budget per year would be approximately \$236,619 ( $\$676,054 \times 35\%$  (State Portion)). This is net of the savings claimed from operating efficiencies. Funds should be available to cover these additional funds.

This project appears to be the best approach to the imaging problems within the State Street campus. The applicant will be relocating outpatient imaging services to a location that offers existing space with minimal construction on an existing outpatient campus.

*The CONU has determined that the proposed services are consistent with the orderly and economic development of health facilities and health resources for the State.*

### **State Health Plan**

The applicant believes this project will protect public health and safety. Patients are experiencing unsatisfactory delays for procedures that may impact outcome and do impact length of stay in the hospital. Walking distances for outpatient tests are longer at EMMC's main campus and presents a risk to patients. Sick patients are waiting in the hallways for their tests to

be completed. Emergency department patients are waiting for disposition pending tests. A new rule included in the imaging ordering system will flag certain patients who are at risk of excess imaging.

EMMC has developed the most far-reaching PACS service in the State, a program based in telemedicine. PACS and telemedicine is an integral element of the Outpatient Imaging Project. Telemedicine will be used extensively in this project since there will only be a general radiologist on site. Sub-specialty radiation consults for breast, neuron imaging and MRI will be available to the generalist through use of our regional PACS. EMMC and EMHS are currently working in cooperation with Maine Health to combine the two organizations' PACS systems, thus further increasing the investment in statewide teleradiology.

**CONU Comment:**

EMMC has provided additional quantifiable information on satisfaction complaints regarding parking, imaging appointments not available when needed and increase in number of canceled and rescheduled visits which the CONU felt was missing in the original application regarding patient safety.

*The CONU has determined that the project would be consistent with the State Health Plan.*

**Outcome and Community Impact**

EMMC commented that current population-based market share for outpatient imaging services is not readily available and they do not have access to patient origin data from other CT and MRI providers. The MQF study was unable to identify specific providers in its analysis of geographic variations of imaging services. EMMC, in its additional comments, concurs that utilization of advanced imaging services needs to be monitored but feel they have in place the necessary protocols to ensure imaging tests are appropriate.

EMMC has continued to randomly review CT imaging exams for appropriateness using the American College of Radiology ACR appropriateness criteria and have found that the random review shows 100 % of all Abd/Pelvic CT's and 100 % of all Lumbar/Spine CT's were appropriately ordered for the period April-June 2007.

Computer Physician Order Entry will be going live at EMMC in pilot mode the first week of August and throughout the remainder of inpatient units in November 2007. Imaging specialists have been heavily involved in the department of clinical definitions to assist the ordering physicians on choosing the most appropriate exam. Based off of the ACR appropriate criteria and the Royal College of Radiology standards, EMMC, with help of Spectrum Radiology (an independent radiology group not affiliated with EMMC) has spent hundreds of hours in the past 6 months, building imagery order sets to assist the providers in efficient and safe use of imaging.

**CONU Comment:**

The applicant has provided additional information on the appropriateness and the protocols they will be initiating to ensure that ordered imaging studies are appropriate and will be performed using professional standards and guidelines. Delays in imaging may result in delays in treatment and produce outcomes for patients that are not up to industry standards.

*The CONU has determined that this project would ensure high-quality outcomes and does not negatively affect the quality of care delivered by existing service providers.*

### **Service Utilization Impact**

EMMC has provided the CONU with detailed documentation of how they intend to ensure that inappropriate imaging studies are not processed as noted in the application and extra information as provided above. EMMC has stated that imaging procedures in the Bangor service area are on average with the country as a whole. EMMC has stated they believe the MQF study was performed not using all the data or excluded certain data which may have skewed the study.

### **CONU Comment:**

The applicant has demonstrated the steps they have in place to ensure inappropriate utilization will not take place. This application does not involve the addition of an additional MRI unit, just the replacement of the current mobile unit to a fixed based unit that will be placed inside the facility. EMMC has just the one MRI out of several located in the Bangor region. The application projects a need for an additional CT but not until the second year of operation. EMMC has offered not to add the additional CT until it has notified the CONU that it is needed which may or may not still be in the second year (2010). See condition # 1.

*The CONU has determined that this project would not result in inappropriate increases in service utilization.*

### **Other**

The Certificate of Need Unit has determined that this project can be funded within the Capital Investment Fund. An amount of \$1,727,276 would be charged against the Capital Investment Fund from the hospital large review cycle for FYE 2007 and \$1,727,275 for FYE 2008 for a total of \$3,454,551. The total recommended capital cost for this project will be \$11,456,269 (\$11,017,957 plus contingency fee of \$438,312).

*The CONU has determined that this project could be funded within the Capital Investment Fund.*

### **CONU Conclusion:**

The Preliminary Review by CONU staff, dated June 20, 2007, concluded that this application failed the following criteria: economic feasibility, public need, orderly and economic development of health facilities and resources for the state, low priority relative to the State

Health Plan, ensuring high-quality outcomes and not negatively affecting quality of care delivered by existing service providers, and inappropriate increases in service utilization.

*For all the reasons set forth in the Preliminary review and considering the clarifying information provided by the applicant, we now conclude that the review criteria have been satisfied and recommend the approval of their CON application with conditions.*

- The applicant is fit, willing and able to provide the proposed services at the proper standard of care.
- The economic feasibility of the proposed services has been demonstrated.
- A public need for the proposed services has been demonstrated.
- The proposed services are consistent with the orderly and economic development of health facilities and health resources for the State.
- The proposed project is consistent with the State Health Plan.
- The proposed project ensures high-quality outcomes and does not negatively affect the quality of care delivered by existing service providers.
- The proposed project does not result in inappropriate increases in service utilization.
- The proposed project can be funded within the Capital Investment Fund.

**RECOMMENDATION:** The Certificate of Need Unit recommends this proposal be **Approved with the following conditions:**

- 1) The applicant should not be allowed to add the second CT until the applicant has demonstrated to the MQF and CONU that imaging studies using this type of technology on patients in the Bangor area are more in line with the average of other parts of the State.
- 2) The applicant should be required to report outcomes on throughput in regards to outpatient and inpatient imaging for the first three full years of operation of this project.

Capital Costs

\$ 11,017,957

\$ 438,312

\$ 11,456,269

Capital Costs As Proposed

Contingency

Total Approved Capital Costs

## Incremental

3<sup>rd</sup> Year Costs

\$ 3,976,790

Approved Incremental Costs as Proposed

Capital Investment Fund

\$ 3,454,551

Approved CIF as Proposed

\$ 1,727,276

Charge for FYE 2007

\$ 1,727,275

Charge for FYE 2008

\$ 3,454,551

Total CIF Approved