Department of Health and Human Services Division of Licensing and Regulatory Services State House 11, Augusta, ME Preliminary Analysis

Date: September 2, 2009

Project: Renovations of P-6 Medical/Geriatric Psychiatry Inpatient Unit at

Bramhall Campus, Portland, Maine

Proposal by: Maine Medical Center

Prepared by: Phyllis Powell, Certificate of Need Manager

Steven R. Keaten, Health Care Financial Analyst Larry D. Carbonneau, Health Care Financial Analyst Richard F. April, Health Care Financial Analyst

Directly Affected Party: None

Recommendation: Approved with conditions

	Propo	osed	App	roved
	Per <i>A</i>	Applicant	CON	N
Estimated Capital Expenditure Maximum Contingency Total Capital Expenditure with Contingency Third Year Incremental Operating Costs	\$ \$ \$	5,136,500 0 5,136,500 368,790	\$ \$ \$	5,136,500 0 5,136,500 368,790
Capital Investment Fund (CIF) Impact:	\$	315,255		315,255
CIF debit 2009	\$	315,255		315,255

Bureau of Insurance Regional Impact Estimate

.003 %

I. Abstract

A. From Applicant

Overview

"Maine Medical Center (MMC) proposes renovating its P-6 Medical / Geriatric Psychiatry Inpatient Unit located at its 22 Bramhall Street, Portland, Maine campus. P6 is the only Medical / Geriatric Psychiatry inpatient program in Maine and is one of only 50 in the nation."

"The renovation is necessary to address existing space constraints, including those related to the present 4-beds-per-patient-room architecture, that are significant barriers to patients' access to care and safe mobility for patients, staff, and visitors. The project also involves activating 4 licensed beds."

"Conversion of 4-bed patient rooms to semiprivate patient rooms will reduce the Unit's bed closures due to Drug Resistant Organisms and Highly Agitated Patients. Currently 4 to 6 beds are closed daily due to these two infection control and patient safety concerns."

"For the unit's medical-psychiatry patients, the renovation will reduce average length of stay in the MMC Emergency Department and other such departments across the state of Maine due to bed closures."

"The renovations will also reduce the present wait time for services on Maine's only such hospital unit from an average of 17 days. Without these renovations, gero-psychiatry patients who suffer behavioral discontrol, such as aggression, combativeness, or self-injurious behaviors, will continue to experience unnecessarily long wait times for inpatient treatment, thus compromising their own safety as well as that of their family members, in-home aides, nursing home and assisted living staff, and other caregivers."

Inpatient Medical / Geriatric Psychiatry

"Medical / geriatric psychiatry inpatient treatment involves combining the provision of intensive medical / psychiatry services on a psychiatrically safe, secure medical unit with the provision of involuntary inpatient gero-psychiatry services. This integrated model is designed to evaluate, diagnose, and treat both patients with active medical and psychiatric illness or with acute psychiatric diagnoses and non-acute, yet active, medical disorders common to the elderly. Location of patients with these conditions in medical beds facilitates access to the full range of medical and psychiatric services."

"Exhibit 1-A provides for an overview of medical / geriatric psychiatry inpatient treatment."

MMC's Inpatient Medical / Geriatric Psychiatry Treatment Unit (P-6)

"Current and proposed bed capacity for the Unit is":

	Current	Proposed
Licensed Bed Capacity	26	26
Staffed Bed Capacity	21	25

Proposed Project

"The project program calls for 9,400 square feet of renovation and 500 square feet of new construction. The majority of the renovations will occur on the Unit's Pavilion C space. Pavilion C renovations involve conversion of the patient rooms to semi-private and one private room, bathroom facilities, a consultation / visiting area and an upgraded nursing station. The Unit's Pavilion A renovation involves a second consultation / visiting area and general refurbishment. Two small roof-top additions between the Unit's Pavilion A & C spaces will create two semi-private patient rooms."

"The estimated capital expenditure is \$5,136,500. Annual depreciation expense of \$368,790 is the only incremental operating expense. The project's Capital Investment Fund debit is \$368,790."

"The proposed project involves:

- 1. Twelve (12) semi-private patient rooms and one (1) private patient room.
- 2. Centralized nursing station for optimal patient observation.
- 3. Private bathrooms in each patient room, including seven (7) handicap-accessible patient bathrooms
- 4. Two patient & family consultation / visiting areas for the provision of patient- and family-centered care
- 5. One new handicap-accessible staff restroom."

"The proposed design also calls for renovations to:

- 1. HVAC system.
- 2. Existing roof structure."

"The project also involves installing "psych safe" features (wander guards, secure ceilings, safe hardware, etc.) to an existing nursing unit to safely house P6 patients during the renovation."

"Please refer to Exhibit 1-B for the existing facility plan."

"Please refer to Exhibit 1-C for the proposed facility schematic design."

Preliminary Project Schedule

"The project schedule anticipates that the newly renovated P-6 Unit would be ready to be reoccupied during September 2010."

"Please refer to Exhibit 1-D for the preliminary project schedule."

Compliance with Applicable Zoning, Building and Life Safety Requirements

"MMC and the City of Portland have entered into a Contract Zone agreement for MMC's Bramhall campus. Inpatient services are an allowable use in the contract zone."

"MMC will be submitting plans to the City of Portland Code Enforcement Office, Maine Division of Licensing and Regulatory Services, and the Maine State Fire Marshall for their respective reviews. MMC will accept as a condition of approval of this application building and life safety approvals by the appropriate authorities."

II. Fit, Willing and Able

A. From Applicant

Overview

"Maine Medical Center (MMC) is a voluntary non-profit 501 (c) (3) organization and is a subsidiary of MaineHealth, a nonprofit organization located in Portland, Maine. MMC is licensed for 637 beds and 30 newborn bassinettes. MMC is a State-licensed, Federally-certified, Joint Commission on Accreditation of Healthcare Organizations (JCAHO) accredited hospital located in Portland, Maine."

"Please refer to Exhibit 2-A: MaineHealth"

"Maine Medical Center

22 Bramhall Street Portland, Maine 04102"

"http://www.mmc.org"

Mission:

"The Maine Medical Center is dedicated to maintaining and improving the health of the communities it serves by:

- caring for the community by providing high quality, caring, cost effective health services;
- educating tomorrow's care givers; and
- researching new ways to provide care."

MMC Service Area:

"Primary: Cumberland and York counties;

Secondary: Androscoggin, Franklin, Kennebec, Knox, Lincoln, Oxford, Sagadahoc,

Somerset and Waldo counties;

Tertiary: Aroostook, Hancock, Penobscot, Piscataquis and Washington counties."

Licenses, Certifications & Accreditations

"MMC is licensed by the State of Maine, certified to participate in Medicare and accredited by JCAHO."

"MMC's "Statements of Deficiencies" and site visit reports from the previous three years are on file with the Department of Health and Human Services' Division of Licensing and Regulatory Services."

"Please refer to Exhibit 2-B: MMC Quality of Care."

"Please refer to Exhibit 2-C: MMC's General Hospital License issued by the Maine Department of Health and Human Services."

"Please refer to Exhibit 2-D: MMC's JCAHO Certificate of Accreditation."

"MMC's P-6 Medical/Geriatric Psychiatry Unit is the only inpatient unit of its kind in Maine, serving individuals and their families from across the state with acute mental health diagnoses accompanied by medical complications or behavioral dysregulation."

"Please refer to Exhibit 2-E: Profile of MMC P-6 Medical/Geriatric Psychiatry Unit."

MMC's Board-Certified Psychiatry Physicians

"100% of the psychiatrists on the P-6 Unit at MMC are board certified by the American Board of Psychiatry. To be certified a candidate must finish a prescribed and approved period of training and study, and pass computer-based and oral examinations, demonstrating an adequate level of knowledge and ability in psychiatry in accordance with American Board of Psychiatry standards."

MMC's Certified Registered Nurses

"Eighteen percent of the P-6 Unit's RNs are certified registered nurses, and 12% are psychiatry-certified nurses. These nurses have met or exceeded requirements for practice in psychiatry, completed education in psychiatry nursing, and possess a tested knowledge of the specialty. Certification in psychiatry nursing is based on current professional practice, so it validates a nurse's knowledge is up-to-date."

Key Personnel and Organizational Chart

"Dennis P. King, MMC Vice President of Behavioral Health, oversees the MMC Department of Psychiatry, which includes the P-6 Medical/Geriatric Psychiatry Unit, Acute Psychiatry Services, Outpatient Services, Inpatient & Outpatient Consultation and Liaison Services, and Vocational Services. Mr. King also serves as President of Maine Mental Health Partners, the newly established integrated mental healthcare delivery system of MaineHealth, and as Chief Executive Officer (CEO) of Spring Harbor Hospital and Spring Harbor Community Services, which are part of southern Maine's largest network of psychiatric and neurodevelopmental disorders treatment programs. He was the founding CEO of The Acadia Hospital in Bangor, northern Maine's largest provider of psychiatric treatment services, as well as CEO of the former Jackson Brook Institute in the early 1980's. Mr. King's experience as an administrator in the field of behavioral health in Maine spans more than 35 years."

- "Girard E. Robinson, MD, MMC Chief of Psychiatry, oversees the medical care provided within MMC's Department of Psychiatry, including treatment delivered on the P-6 Medical/Geriatric Psychiatry Unit. Dr. Robinson also serves as Vice President of Medical Affairs of Maine Mental Health Partners and as Chief Medical Officer of Spring Harbor Hospital and Spring Harbor Community Services, which are part of southern Maine's largest network of psychiatric and neurodevelopmental disorders treatment programs. Dr. Robinson is the previous Medical Director of the MMC P-6 Medical/Geriatric Psychiatry Unit, a position he held for five years. Board-certified in Psychiatry, Dr. Robinson trained at the SUNY at Buffalo School of Medicine, the New York Hospital, and the Payne Whitney Clinic."
- "John J. Campbell, III, MD, Medical Director, MMC P-6 Medical/Geriatric Psychiatry Unit, is Board-certified in Psychiatry and NeuroPsychiatry / Behavioral Neurology and has been medical director of the P-6 Unit since 2003. He trained at the University of Vermont College of Medicine, the Brown University School of Medicine, and Butler Hospital. The former geriatric psychiatry director of the Henry Ford Hospitals in Detroit, Michigan, Dr. Campbell has established a reputation in Maine for his expertise treating individuals with various neurobehavioral disorders and rare conditions, such as cerebral amyloid angiopathy, traumatic brain injury, Gerstmann-Straussler-Scheinker syndrome, encephalitides, Pick complex, and lenticulostriate disorders such as Wilson's disease."
- "Mary Jane Krebs, APRN, BC, MMC Psychiatric Nursing Director, provides nursing and clinical oversight to staff of the P-6 Unit. Ms. Krebs is a board-certified psychiatric nurse and has more than 30 years of experience in the field of psychiatric nursing, half of those in nursing administration for psychiatric hospitals in New England. Ms. Krebs also serves as the VP of Nursing & Clinical Services for Maine Mental Health Partners and as the Chief Nursing & Clinical Officer of Spring Harbor Hospital."
- "Mary Jean Mork, LCSW, Administrator, MMC P-6 Medical/Geriatric Psychiatry Unit, is a licensed psychiatric clinical social worker. In addition to her role as Administrator of the P-6 Unit, Ms. Mork serves as Program Manager for the Mental Health Integration in Primary Care Project at MaineHealth, and as Manager of Social Work Services within the MMC Psychiatric Emergency Department."
- "Donna Libby, MSN, RN, CNA, BC, Nurse Manager, MMC P-6 Medical/Geriatric Psychiatry Unit, is board certified in Nursing Administration and has worked on the P-6 Unit for more than five years. A 25-year veteran of MMC, Ms. Libby was formerly Director of the Nursing Staffing Office and Float Pool."

[&]quot;Please refer to Exhibit 2-F: MMC's organizational chart."

B. CONU Discussion

i. 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. Analysis

Maine Medical Center (MMC) has submitted a proposal to renovate and expand their P-6 Medical/Geriatric Psychiatry Inpatient Unit located at Bramhall Campus in Portland, Maine. This proposal includes renovating 9,400 square feet of existing space in the Unit's Pavilion C & A areas and constructing 500 square feet of new space between the Unit's Pavilion C & A areas. Current licensed bed capacity will remain the same at 26 beds; however, staffed bed capacity will increase from 21-25 beds.

The Division of Licensing and Regulatory Services, Medical Facilities Unit confirms that Maine Medical Center is a fully licensed acute care hospital in the State of Maine and is MaineCare and Medicare certified. The Division's most recent survey was completed on July 10, 2006. No major deficiencies were cited that would affect licensure. MMC was cited for numerous standard level life safety code deficiencies. A plan of correction was not required; however, MMC submitted a plan of correction on October 31, 2006. The last Joint Commission report was completed in August 2008. MMC was fully accredited by the Joint Commission on August 13, 2008.

The applicant has shown a long-standing ability to provide hospital-based services within licensing standards.

iii. Conclusion

CONU recommends that the Commissioner find that 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

Capital Costs

P6 Renovation Project Estimated Capita Construction Costs:	al Expenditure
P6 Renovations	\$3,020,000
Interim Unit Renovations	\$1,000,000
Subtotal	\$4,020,000
Asbestos Abatement	\$50,000
Total Construction Costs	\$4,070,000
Associated Construction Costs:	
A/E Fees	\$482,400
A/E Reimbursables	\$36,200
General Expenses/Permits	\$122,100
Commissioning	\$17,300
Total Associated Costs	\$658,000
Owner Associated Costs	
Furniture	\$109,200
Security System Upgrade	\$31,200
Telecommunications	\$153,100
Signage	\$4,000
Project Manager Fee	\$29,000
Purchasing Department Fee	\$5,000
I.S. Telecomm Fee	\$5,000
Nurse Call System	\$72,000
Total Owner Associated Costs	\$408,500

Total Project Costs

"These capital expenditure estimates have been developed by MMC Departments of Psychiatry, Facilities Development, Planning, Purchasing, Information Services and Financial Planning in cooperation with Morris – Switzer Environments for Health Architects (project architect and design engineers), and Hebert Construction (project construction manager)."

\$5,136,500

Depreciation Expense

Basis for Estimates

"The project's annual depreciation expense for building, improvements, equipment and furniture is based on American Hospital Association's <u>Estimated Useful Lives of Depreciable Hospital Assets</u> (American Hospital Publishing, Chicago, 2004)."

"Annual depreciation is estimated to be \$368,790."

Sources & Uses

Uses

Construction, Fees & Equipment \$5,136,500

Sources

Debt	\$0
Equity	\$5,136,500
TOTAL	\$5,136,500

[&]quot;This project will be funded through MMC equity reserves. MMC's most recent audited financial statements clearly demonstrate MMC's ability to support the capital project as proposed in this application."

Staffing

"No additional staff positions are proposed."

"As one of the largest private employers in Maine, MMC has a full-service Human Resources department to recruit staff. MMC recruits over 800 new/replacement staff each year. MMC annually reviews its employee compensation and benefit plans and makes the adjustments necessary to remain competitive in the relevant labor market."

Operating Expenses

"\$368,790 in annual depreciation expense is the only operating expense associated with this proposed renovation."

Capital Investment Fund Impact

"MMC estimates the Capital Investment Fund impact associated with this project to be \$368,790."

"The CONU Financial Module has been completed in accordance with instructions provided by the CON unit staff. It contains calculations that are derived as a function of the forms. This application represents the renovations of P6 at MMC Bramhall Campus. FY08 numbers presented in the module are projected, but include some revised estimates based on preliminary drafts of audited financial statements. The projected years of 2011-2013 are based on MMC's Strategic Financial Plan developed in May 2008."

"Please refer to Exhibit 3-B for the completed CONU Financial Module for this Project."

[&]quot;Please refer to Exhibit 3-A for MMC's most recent audited financial statements."

B. <u>CONU Discussion</u>

i. 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:

- a. 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
- b. 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. Analysis

The applicant worked with Morris-Switzer Environments for Health Architects and Hebert Construction to develop a construction schedule and cost estimate based on the specific nature of the project, which involves a significant amount of renovation to critical hospital areas as well as new construction.

Financial Ratio Analysis

In an effort to sustain readability, additional financial ratios, as well as the financial projections are on file with CONU. The following discussion relies on the information presented by the applicant. At the technical assistance meeting held in January 2009, the applicant was presented a format to complete significant financial projections, including construction timelines and operating expenses. Fourteen ratios were developed with the applicant's submission to help elucidate the current financial position of the hospital and the impact of the proposed project on its operating and financial feasibility.

The years presented are 2003 through 2007 (audited) and 2008 through 2013 (projected). Also, since the third operating year of the proposed project is 2013, that year is presented as modified for the effects of the CON on hospital operations. A final column related to the difference between the third year with CON compared to third year results without the CON project is also presented. The source for Maine Industry Medians and Northeast Regional Medians is the 2009 Almanac of Hospital Financial and Operating Indicators. We are presenting 2007 reported numbers for comparison to the project.

There are four areas of financial ratio analysis related to the ability of the project to be successful. These ratios are profitability, liquidity, capital structure and activity ratios.

Profitability ratios attempt to show how well the hospital does in achieving an excess of revenues over expenditures or providing a return. Generating revenue in excess of expenditures is important to secure the resources necessary to update plant and

equipment, implement strategic plans, or respond to emergent opportunities for investment. Losses, on the other hand, threaten liquidity, drain other investments, and may threaten the long-term viability of the organization. The profitability ratios reported here include the operating margin, which measures the profitability from operations alone, the net margin (called total margin in some sources), which measures profitability including other sources of income, and the return on total assets.

Financial Performance Indicators

Profitability	2007	2010	2013	2007 ME State Median	2007 Northeast US Median
Operating Margin	7.94 %	6.61 %	6.95 %	1.97 %	1.88 %
Net Margin	11.66 %	9.99 %	11.16 %	4.30 %	2.70 %
Return on Total Assets	6.81 %	6.38 %	6.69 %	3.94 %	3.62 %

The only expenditure related to this project is depreciation of \$368,790 annually. In the financial module MMC projected \$1 billion in revenue in 2009 and \$1.5 billion in revenue in 2013. This project, as presented, does not materially impact the profitability of the hospital. One of the reasons for this project is to better utilize the beds on the floor to maximize revenue. CONU estimates that the additional expenditure would be more than offset by additional revenues.

All three margins indicate that if the proposed project occurs then Maine Medical Center would remain profitable. Comparing operating year 2006 and 2007 indicates that operating margins were decidedly higher in 2007 (7.94%) than in 2006 (6.00%). Maine Medical Center has continued to outperform hospitals in the largest peer group in profitability. The 2008 operating margin was expected to be 6.24%. A projected operating margin of 6.99% without this project in 2013 is reasonable given the range that Maine Medical Center has operated in from 2004 through 2007. Maine Medical Center has the means to take on additional expenses based upon excess of revenues over expenditures.

The CONU financial analysis considers information contained in the <u>2009 Almanac of Hospital Financial and Operating Indicators</u> and generally accepted accounting standards in determining the financial capability of a hospital to support a proposed project.

The review of financial indicators is important because they can present a fair and equitable representation of the financial health of an organization and assist in presenting appropriate comparisons. This provides a sound basis for a determination of whether the hospital has the ability to commit the financial resources to develop and sustain the project. While there are a number of indicators that are used in the industry, the ones applied to this review have been selected due to their direct relevance to the financial health of the applicant. The following analysis is based upon information provided by

the applicant in its application. One item of terminology needs to be defined. Throughout the analysis a comparison of high-performance and low-performance hospitals is referenced. These groups are based on the uppermost and lowermost quartiles of hospitals based on their return on investments. This analysis does not specifically discuss return on investment but instead uses that ratio to group all hospitals to compare a particular project to an applicant.

Non-profit hospitals need to perform at financially sustainable levels in order to carry out their public missions. An adequate operating margin is a key indicator of the financial health of a hospital. CONU considers the reasonableness of the methodology the applicant has used to determine the appropriateness of the timing and scope of the project. Over time, capital expenditures can and need to be made in order to meet the goals expressed in the State Health Plan.

Operating margins in the high performing hospital group have seen greater improvements in margins while hospitals in the low performing group continue to shift further apart. High performing hospitals are doing better now than five years ago. Over the same time, lower performing hospitals are generally doing worse than five years ago. There is a widening gap between high and low performing hospitals. Improvement in median operating profits for high-performing hospitals drives this widening performance gap. Larger hospitals tend to have an increasing ability to perform at a near profitable level. Even the lowest 25 percentile large revenue hospitals had a positive operating margin unlike any of the other peer groups based on operating revenues. As a comparison, operating margins in the Northeast Region continue to be considerably lower than in other regions.

The Maine state average for operating margin in 2007 was 1.97%. Maine Medical Center in 2007 was 7.94%, which puts them in the 90th percentile of hospitals in Maine.

The trend for operating margin in Maine has been improving from a low of 1.33% in 2003 to the high of 3.52% in 2006 but the trend lowered to 1.97% in 2007 for the reporting hospitals. Maine Medical Center, for the past four operating years, including 2007, averaged above 7.0%. 2005 was 11.51% which helped to offset the 4.41% Maine Medical Center reported in 2004. Over the course of the projection through 2013, it is projected that the hospital will have an operating margin rising to 6.99% from 6.24% in 2008 (6.95% in 2013 if the project is approved).

The effect of this project on operating margins, as projected by the applicant, is a decrease from 6.99% to 6.95% in 2013. This project is not expected to cause a significant impact on the operating margin on the hospital.

Financial Performance Indicators

Profitability	2006	2007 2008		2010	2013	
Operating Surplus	\$ 33,413,000	\$ 46,577,000	\$ 39,101,000	\$ 48,948,000	\$ 60,285,210	
Total Surplus	\$ 52,547,000	\$ 68,394,000	\$ 25,109,000	\$ 73,979,000	\$ 96,809,210	

This table validates that Maine Medical Center has the capacity to financially support this project as this project only encumbers 0.50% of the total surplus in 2010.

Liquidity: Current ratios and acid test ratios are indicators of the ability of a hospital to meet its short-term obligations. The acid test ratio is generally considered to be a more stringent measure because it recognizes only the most liquid assets as resources available for short-term debt; the current ratio assumes that inventory and accounts receivable can be liquidated sufficiently to meet short-term obligations. Days in accounts receivable and average payment period also are used to monitor liquidity. Respectively, they indicate the average length of time the hospital takes to collect one dollar of receivables or pay one dollar of commercial credit. Together, they can provide a cursory indication of cash management performance.

Financial Performance Indicators

Liquidity	2007	2010	2013	2007 ME State Median	2007 Northeast US Median				
Current Ratio	2.42	2.64	3.64	1.93	1.53				
Days in Patient	20.27	24.51	22.97	50.3	46.8				
Accounts Receivable	Days	Days	Days	Days	Days				
	247.04	216.47	319.39	87.0	68.9				
Days Cash on Hand	Days	Days	Days	Days	Days				
Average Payment	117.01	90.44	82.44	48.4	60.7				
Period	Days	Days	Days	Days	Days				

In terms of liquidity, Maine Medical Center currently (2007) has adequate liquidity, with a payment lag of 97 days between being paid and paying for services. It is interesting to note that the projection indicates a decreasing lag over the forecasted period. The average payment period expanded in 2007 to 117 days from a low in 2004 of 86 days. Forecasted average payment periods are 82 days with or without the project, this strengthens the assurance that cash needs can be met as this hospital has shown significant payment lags in its reported figures before. Days in accounts receivable increased by 4 days in the same period. Days cash on hand was in a range of 202-247 days in the 2003-2007 periods and is projected to increase significantly to more than 322 days by 2013 (319 days if the project is approved).

Liquidity measures a hospital's ability to manage change and provide for short-term needs for cash. This liquidity alleviates the need for decision making to be focused on short-term goals and allows for more efficient planning and operations of a hospital.

Days Cash On Hand is a ratio that is an industry accepted, easily calculated, method to determine a hospital's ability to meet cash demands.

The year 2007 marked an increase of cash on hand nationally. Hospitals with revenue of greater than \$150 million have 107 days cash on hand. Maine Medical Center with net patient service revenue of \$600 million and days cash on hand of 247 days in 2007 clearly has significantly more cash on hand than the average hospital in its peer group. Interestingly, S & P Bond ratings showed no clear distinction between ratings and days cash on hand for investment grade ratings. This may mean that high performing hospitals do attempt to control excess levels of on-hand cash.

In 2007, the average days cash on hand for all sources for hospitals in the State of Maine was 87 days. Calculated days cash on hand for Maine Medical Center in 2007 was approximately 247 days indicating that Maine Medical Center was in the 90-100th percentile.

According to the 2009 Almanac, between 2003 and 2007 the average days cash on hand remained about 78 days in the Northeast. In 2007, days cash on hand improved from 2006. Between 2003 and 2013 average days cash on hand for Maine Medical Center is projected to increase by 120 days. In 2004, Maine hospitals had 5 less days cash on hand than the Northeast Region at 79 days. In 2007, Maine hospitals had increased their days cash on hand by 14 days in three years to be 18 days above the regional average.

The impact of the proposed project is calculated to be a decrease of 2 days cash on hand in the third operating year as compared to the non-CON operating projection (with and without this project). This is a minor decrease in days cash on hand. According to the 2009 Almanac, this hospital is projected to be in greater than the 90th percentile for days cash on hand, compared to today's industry averages, with or without the project. This project will not have a substantial impact on Maine Medical Center's operating ability to meet its cash demands. Even if actual cash on hand is lower, based on additional investments in programs and technology, Maine Medical Center should be able to adequately support this project.

Activity and Capital Structure: Activity ratios indicate the efficiency with which an organization uses its resources, typically in an attempt to generate revenue. Activity ratios can present a complicated picture because they are influenced both by revenues and the value of assets owned by the organization. The total asset turnover ratio compares revenues to total assets. Total assets may rise (or fall) disproportionately in a year of heavy (dis)investment in plant and equipment, or decrease steadily with annual depreciation. Thus, it is helpful to view total asset turnover at the same time as age of

plant. Debt service coverage is reviewed in greater detail. Debt Service coverage measures the ability of a hospital to cover its current year interest and balance payments.

Financial Performance Indicators

Solvency	2007	2010	2013	2007 ME State Median	2007 Northeast US Median
Equity Financing	64.7 %	71 %	75 %	59.7 %	48.3 %
Debt Service					
Coverage	10.86	8.86	11.68	3.34	3.52
Cash Flow to Total					
Debt	28.4 %	38 %	47 %	22.1 %	17.8 %
Fixed Asset					
Financing	54.7 %	35 %	39 %	56.9 %	64.0 %

Many long term creditors and bond rating agencies evaluate capital structure ratios to determine the hospital's ability to increase its amount of financing. During the past 20 years, the hospital industry has radically increased its percentage of debt financing. This trend makes capital structure ratios important to hospital management because these ratios are widely used by outside creditors. Values for these ratios ultimately determine the amount of financing available for a hospital. Debt service coverage is the most widely used capital structure ratio. DSC minimums are often seen as loan requirements when obtaining financing. DSC is the ratio of earnings plus depreciation and interest expense to debt service requirements. In 2007, the median Maine hospital's debt service coverage (DSC) was 3.34x.

Maine Medical Center had a DSC ratio in 2007 of 10.86x which places it in the range of 90-100th percentile of Maine hospitals. The trend statewide for 2003-2007 has been increasing with a low of 3.07 in 2003 and a high of 3.71 in 2004. The trend for Maine Medical Center has been increasing faster than the state wide average for the last 5 years from 5.57x in 2003 to 10.86x in 2007. Economic conditions caused DSC to be comparatively only 4.18x in 2018. The trend as projected in the financial forecast module is that DSC is expected to increase from 4.18x to 11.68x. Maine Medical Center has the capacity and the ability to have adequate DSC.

According to the 2009 Almanac: "We expect fixed asset financing ratios to continue to remain stable during the next five years as hospitals curtail their growth in new capital expenditures and reduce their reliance on long term debt."

The Northeast has considerably higher rates in financing fixed assets than other regions. The 2007 average for hospitals in the State of Maine was 57%. In 2007, Maine Medical Center was at 55%, which is in the 25th-50th percentile for the state of Maine. For the years 2003-2007, for hospitals with revenues similar to Maine Medical Center, 67% is about the average. The fixed asset financing ratio over the past five years has remained relatively consistent in the state of Maine.

The proposed financing is consistent with the way Maine Medical Center is spending its funds on fixed assets. It appears that MMC is expecting a significant portion of its fixed asset growth to be financed through equity. Total debt in year three of the project (2013) is expected to be approximately the same as 2006.

Efficiency Ratios: Efficiency ratios measure various assets and how many times annual revenues exceed these assets.

Financial Performance Indicators

Efficiency	2007	2010	2013	2007 ME State Median	2007 Northeast US Median
Total Asset Turnover	0.58	0.64	0.60	1.16	1.14
Fixed Asset Turnover	1.67	1.49	1.71	2.73	2.86
Current Asset Turnover	1.49	1.77	1.44	3.88	4.25

Total asset turnover (TAT) provides an index of the number of operating revenue dollars generated per dollar of asset investment. Higher values for this ratio imply greater generation of revenue from the existing investments of assets. Larger hospitals usually have lower values for turnover than smaller hospitals. This can be attributed to two factors: (1) larger hospitals are most likely to have newer physical plants; and (2) capital intensity is often greater in larger hospitals due to more special services and higher levels of technology.

In 2007, according to the 2009 Almanac, Maine hospitals had a TAT of 1.16 while Maine Medical Center had a TAT of 0.58. This is indicative of the capital intensive procedures that occur at MMC, its status as the largest most comprehensive medical facility in the state and as a teaching hospital.

In the period of 2004 - 2007 there has been a steady increase in the TAT for Maine hospitals. The expected trend for Maine Medical Center is for TAT to remain stable during the time frame of this project 2009 - 2013. This is reflective of a hospital planning to spend significant funds for capital improvements or investments in technology. This project is not a capital intensive project and has no impact on the hospital's asset turnover.

Operating costs in the third operating year are expected to increase by \$368,790. For the Bureau of Insurance this amount is adjusted to a current value of \$318,115 in order to calculate the impact of this project on commercial insurance premiums. The impact on the CIF, if approved, would be \$315,225. The \$368,790 is additional depreciation costs.

In completing this section of the analysis, the CONU concludes that, as proposed, the applicant meets this criterion. Demands on liquidity and capital structure are expected to be adequate to support projected operations. Financing and turnover ratios show little impact on the organization as a whole from successfully engaging in this project. The

hospital has shown current earnings which are not expected to be significantly impacted by this project.

The annual operating costs of this project are driven entirely by \$368,790 in depreciation costs. The applicant did not ask for a contingency within the capital budget.

Changing Laws and Regulations

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

iii. Conclusion

CONU recommends that the Commissioner determine that 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

Overview

"P6, once a general psychiatric care unit, began concentrating on the gero-psychiatric patient population in 2003. Infrastructure, suitable for a highly mobile, general psychiatric patient population, severally hampers the gero-psychiatric population's access to the Unit as well as the Unit's ability to provide the desired level of care."

"The proposed renovation project improves timely access to P6 by converting the Unit's 4-bed rooms to semiprivate rooms, improves patient privacy and infection control efforts for drug resistant organisms by providing patient bathrooms, improves patient safety concerns by improving the Nursing Station patient observation, and provides additional consulting space to improve family involvement in treatment."

"Changes in Maine's population, the increase in the geriatric population's numbers and the higher proportion of the geriatric population that is 75 and older, most likely will increase the prevalence of Alzheimer's and other dementias, and will assure the ongoing need to address the distinct clinical needs of this patient population. This population is over 3 times as likely to require inpatient care as the age 65 and older population without these conditions."

"Maine Mental Health Partners and P6 are also increasing efforts to support community-based treatment of this population to mitigate the need for inpatient care."

Background

"When the P-6 unit first began serving psychiatric patients, the unit offered general psychiatry services for highly ambulatory adults and adolescents who exhibited psychiatric symptoms with few if any medical complications. The unit architecture included four-bed rooms to assist with socialization among patients. Private bathroom facilities in each room were not deemed necessary due to ample public / community bathrooms on P-6. ADA-accessible facilities were not considered crucial, as there were no geriatric patients served on the unit at that time."

"In 2003, the mission of P-6 changed as a result of two major changes in the environment: 1) MMC's purchase of the former Jackson Brook Institute and consolidation of all general psychiatry services at that location (now Spring Harbor Hospital); and 2) MMC's increasing need to better serve patients who exhibited psychiatric symptoms and co-morbid medical complexities or behavioral disturbances like those accompanying age-related dementias. An extensive study conducted by the joint Spring Harbor Hospital and MMC Department of Psychiatry Senior Management Team determined that the best and highest use of the P-6 space was for the provision of Medical / Geriatric Psychiatry."

"Within a short time of the unit's conversion to a Medical / Geriatric Psychiatry service, staff of P-6 found that the same physical attributes that made the P-6 layout acceptable for the provision of general psychiatry services hampered P-6's provision of geropsychiatry. While several operational improvements were made, the infrastructure limitations remained a serious impediment to the provision of the safe, timely, respectful, patient- and family-centered care for which MMC is known."

"Four-bed rooms became overcrowded with medical equipment and wheelchairs, resulting in patient mobility and safety concerns. The lack of private, ADA-accessible bathrooms in each room presented patient transport, safety, and privacy issues for the most frail and immobile elderly individuals."

"The rise in the number of patients treated on the unit for drug-resistant organisms (DROs) seriously compromised full access to the 4-bed patient rooms, thus limiting the unit's ability to serve patients."

"The absence of in-room bathrooms exacerbated the infection control concerns related to treating this patient population. In-room bathrooms eliminate the need to carry commodes and/or bed pans from patient rooms to the Dirty Utility Rooms to empty them. The increased number of sinks will make hand hygiene compliance more convenient for staff. These features enable staff to more efficiently contain the risk of spreading DROs."

"The proposed renovations include the following improvements to current major deficiencies:

- Removal of 4-beds-per-room architecture in favor of semi-private rooms,
- Private bathrooms in every patient room,
- Seven new handicap-accessible baths on the unit,
- A centralized nursing station for optimal patient observation,
- Added family consult and visiting space to help ensure patient- and family-centered care.
- New roof additions that allow for a total capacity of 25 beds (current is 21 beds)."

Area to be Served

"MMC identifies its P-6 Medical / Geriatric Psychiatry Unit's service area in the following manner:

• Primary: Cumberland and York Counties.

- Secondary: Androscoggin, Franklin, Kennebec, Knox, Lincoln, Sagadahoc Oxford, Somerset and Waldo Counties.
- Tertiary: Aroostook, Hancock, Penobscot, Piscataquis and Washington Counties."

Health Need to be Addressed

"Alzheimer's disease is the 7th leading cause of death in Maine, according to 2005 data from the National Center for Health Statistics, with nearly 500 Maine families losing a loved one to Alzheimer's disease each year. That number is expected to increase dramatically as Maine's population ages in the coming decade. The Alzheimer's Association reports that more than 26,000 Mainers over the age of 65 (one in eight or 13%) are challenged each year by Alzheimer's disease and its debilitating effects. Over the next decade, that number is expected to swell to at least 37,000 Maine people. As Maine's population ages, the outlook is more ominous. With increasing age being the leading risk factor for Alzheimer's disease, the National Institute on Aging predicts that the prevalence of the disease doubles every five years beyond age 65."

Population's Need for Service

"Inpatient care is a major need of individuals with Alzheimer's disease and other agerelated dementias. In fact, the 2008 Alzheimer's Disease Facts and Figures report from the Alzheimer's Association notes that older people with these conditions are more reliant on hospital care than their peers. In 2000, Medicare claims data showed that Medicare beneficiaries age 65 and older with Alzheimer's and other dementias were 3.4 times more likely than same-age Medicare beneficiaries without dementia to have a hospital stay (1,091 hospital stays per 1,000 beneficiaries with Alzheimer's and other dementias compared with 318 hospital stays per 1,000 beneficiaries for all other Medicare beneficiaries)."

"According to data compiled by the Maine Health Data Organization, there were 855 hospital discharges for individuals 65 and older with a primary diagnosis of geriatric mental illness in 2007, including individuals experiencing Alzheimer's disease and other dementias. This equates to a rate of hospitalization of 4.53 per 1,000 Maine residents of at least 65 years of age."

"Not surprisingly, patients from the MaineHealth 11-county service area comprised 74% of all statewide geriatric psychiatry hospital discharges in 2007, as the following table demonstrates."

Maine Hospital Discharges for Patients Ages 65 and Older with Primary Psychiatry Diagnosis, 2007

N=855	5
Cumberland County:	254
York County:	84
Androscoggin / Oxford/Franklin Counties:	110

Knox/Lincoln/Sagadahoc/Waldo Counties: 78 Kennebec/Somerset Counties: 109

Total Discharges from MaineHealth Service Area 635 (74% of Statewide Discharges)

Source: Maine Health Data Organization

Maine Mental Health Partners and P6's Role

"Maine Mental Health Partners' mission is to build and sustain integrated regional mental health networks in the MaineHealth service area that rely on vibrant community services such as day treatment, assisted living, and nursing home programs as well as hospital inpatient care, all linked to high-quality psychiatric expertise via telemedicine, and all sharing a common electronic medical record. P6 and its psychiatrists are an integral component of Maine Mental Health Partners, and provide valuable support to community providers to mitigate the need for inpatient care."

"Primary-care providers, nursing homes and assisted living centers across the state receive telephone consultation from P6's psychiatrists on a regular basis. Using this form of tele-psychiatry, P-6 specialists discuss patient symptoms and help providers better manage individuals in the community setting. The medical team of P-6 expects to continue providing these consults to help assist community providers in managing their patients successfully in the non-acute settings."

"The ultimate goal of Maine Mental Health Partners is to build a network of providers to treat individuals in a timely, coordinated manner, in the least restrictive setting, and as close as possible to a person's home. It is expected that such an integrated system will not only provide better quality care but also the most cost-conscious treatment to Maine people."

Population's Demand on MMC for Service

"MMC's P-6 unit is the only one of its kind in the state that serves the unique psychiatric needs of the geriatric population within an integrated inpatient medical service. Of the 855 inpatients served by Maine hospitals in 2007 for geriatric psychiatry diagnoses, 70% were treated on the P-6 unit."

"The service has continually had a wait list since opening its doors in 2003. The wait for semi-private rooms averages between 17 and 30 days; the wait for a private room averages 3 to 4 months. Individuals from throughout Maine come to the unit for care."

Forecast

"MMC's service need forecast is conservative. The need for inpatient geriatric psychiatry treatment will continue to rise due to the growth of Maine's 65 and older population. In addition this age cohort will become older; that is, an increasingly higher proportion of the 65 and older population will be 75 and older. As noted above, the prevalence of Alzheimer's and other forms of dementia increases with age."

"MMC's forecast uses a constant rate of hospitalization of 4.53 per 1,000 individuals aged 65 and older throughout the forecast period. MMC assumes that Maine Mental Health Partners' efforts will help maintain patients in their community settings, thus helping to sustain the current hospitalization rate even as the Maine population ages."

"The need for inpatient gero-psychiatric care will exceed P6's capacity, demonstrating there is a continuing need for this service. MMC does not have the physical space to expand beyond its 26-bed capacity due to the demand for other inpatient services. Maine Mental Health Partners will work with other providers in the state to address this demand."

	Maine Ages 65	and Older	Population Projection	2010 - 2020
--	---------------	-----------	------------------------------	-------------

Service Area	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Primary	73,000	75,400	77,600	81,400	84,200	87,700	90,500	93,900	97,600	101,500	105,900
Secondary	83,900	85,700	88,500	91,000	94,000	97,700	101,000	104,000	107,500	110,900	113,400
Tertiary	48,300	<u>49,300</u>	51,000	52,600	<u>54,400</u>	55,800	57,100	<u>59,000</u>	60,100	61,900	63,600
TOTAL	205,200	210,400	217,100	225,000	232,600	241,200	248,600	256,900	265,200	274,300	282,900

Projected Need for Inpatient Geriatric Psychiatry Treatment 2010 – 2020

(based on constant hospitalization rate 4.53 per 1,000 individuals ages 65 and older)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Discharges	929	951	983	1,019	1,055	1,091	1,127	1,164	1,200	1,241	1,282

B. CONU Discussion

i. <u>Criteria</u>

Relevant criterion 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. Analysis

The applicant is proposing a reconfiguration of their P6 Medical/Geriatric Psychiatry Inpatient Unit at their Bramhall Campus. No new licensed beds are proposed, although an increase in staffed beds will occur. This project involves 500 square feet of new construction and renovation of 9,400 of existing square feet.

This proposal is not a new service for MMC as they currently provide medical/psychiatry inpatient services. This proposed project will address existing space constraints caused by the current 4-bed-per-patient-room configuration that cannot be used to its full capacity when bed closures occur due to Drug Resistant Organisms and Highly Agitated Patients.

P6 was originally designed for General Psychiatry services. In 2003 the target patient concentration changed to Geriatric patients. This shift in target patients requires different needs that MMC has not been able to meet through operational changes alone. The design does not allow for private bathrooms which can increase patient safety risks by having to move physically challenged patients to community bathrooms. This also increases risks for spreading drug-resistant organisms (DROs). The unit's current layout also lacks ADA-accessible bathrooms making it challenging for the geriatric patients to easily access the bathrooms. The current 4-bed room configuration limits the number of beds that can be staffed if a patient has DROs and needs to be separate from other patients to avoid spreading the DROs.

The Maine CDC District Health Profiles released December 2007 addresses mental health issues only in terms of depression in adults and suicide rates age 10 and above. These District Health Profiles do not address hospital admissions for mentally ill in any age group.

Accessibility

Currently, MMC is considered a preferred hospital under the state employee insurance plan, effective February 1, 2009. MMC has previously provided CONU with information regarding their Free Care Policy and 990 forms. MMC admits patients regardless of their availability to pay.

MMC has asserted that there is a need for additional staffed beds for this service as new patients are currently experiencing admission wait times of 17-30 days for semi-private rooms and 3 to 4 months for private rooms.

Consultation

CONU consulted with Donald Chamberlain from the Office of Adult Mental Health Systems, who provided the following:

"MMC is not the only provider of this kind of unit but clearly the only one which specializes exclusively. St. Mary's unit also serves a geriatric population but is open to others as well. MMC is more specialized and provides excellent services. I do not know about their wait period specifics but do know it is difficult to get in. Adding additional capacity is probably good; however, they also have folks stuck because of problems getting them accepted back in the facilities from which they came. While I would not want to stand in the way, I have limited information on details which makes it hard to support the project. For instances, what is the length of stay and how many consumers are beyond their need for hospitalization and awaiting placements. If more through put was possible and the placement resources existed would the additional beds be necessary? In a time of limited resources and cuts in other services I do not know that MaineCare has the resources to cover 4 additional beds."

In addition to reviewing comments presented by Mr. Chamberlain, CONU staff reviewed several articles relative to geropsychiatric inpatient length of stay.

According to "Determinants of Geropsychiatric Inpatient Length of Stay" (Blank and Hixon, 2005) factors associated with longer lengths of stays were:

- receiving electroconvulsive therapy (ECP);
- higher brief psychiatric rating scale (BPRS) positive symptom scores;
- Falling:
- pharmacology complications:
- multi-prior psychiatric hospitalizations which lead to court proceedings for continued hospitalization or medicate against will orders;
- consultation delays; and
- schedule procedures only on weekdays.

Interestingly, according to this article, neither demographics nor diagnoses alone had influence on length of stay.

The article suggests that incorporation of length of stay predictors would improve the medicare payment system.

Wilkins and Lund (2009) in an article titled "Clinical Utility of the Hopkins Competence Assessment Test on an Inpatient Geropsychiatry Unit" stated that certain difficulties in treating this type of patient were related to the psychiatrist confidence in the assessment of a patient's competence. It appears that identifying potential dementia among patients who are exhibiting mental health problems is a key component in meeting standard length of stay for particular conditions.

The Palo Alto VA Healthcare System, Menlo Park Division, located in California, identifies specific goals of their acute inpatient geropsychiatric unit residency program. These goals indicate that specific additional factors affect need. As mentioned in the articles above, the legal aspects of geropsychiatry, the identification and staging of dementia, agitation, delirium, psychoses of late life, depression, and manias. Frequently, as the information suggests, the difficulties arise from the slow development of pharmaceutical affect and the likelihood of differentiated side effects.

All three articles speak to the compounding difficulties of having interaction between different patients. Modifications to the floor plan suggested by the applicant appear to be a necessary step to lessen these complicating factors that increase the length of stay.

According to the applicant, Maine Mental Health Partners will work with other providers in the state to address this demand for geriatric/psychiatric care. The applicant did not explain how this will be achieved. In order for CONU to monitor these concerns, CONU recommends the following condition: The applicant be required to report annually for a 3-year period following the implementation of this project the following: the average length of stay of patients, average number of days a patient awaiting placement outside the P6 unit after a discharge is warranted, and what resources are being allocated to expedite placement.

CONU has determined that this project is not likely to have a significant impact on health needs in the area. This project is primarily a renovation project that corrects HIPAA concerns, patient safety and infection control. This project also upgrades and modernizes the facility to more efficiently utilize the beds available for patient use.

iii. Conclusion

CONU recommends that the Commissioner find that 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

Impact on Total Health Care Expenditures

"As noted in the economic feasibility section of this application, MMC is financing the project with equity, so there is no interest expense. The only increase in annual costs is annual depreciation expense estimated to be \$368,783."

Availability of State Funds

"MaineCare, Maine's Medicaid program, currently reimburses MMC for inpatient services at a rate that is below MMC's current cost of providing care. Additional costs as a result of this project will not be reimbursed by MaineCare. MaineCare's rate setting is independent of MMC's fee schedule and costs of care."

Alternatives Considered

1. THE PROPOSED ALTERNATIVE: Complete substantial renovations to the existing P-6 Unit on the MMC Bramhall Campus

"As the only inpatient treatment unit dedicated to the care of individuals with serious medical or gero-psychiatric illnesses, the P-6 Unit is relied upon by patients, families, and nursing homes throughout the State of Maine to provide safe, high-quality, accessible care. Updating the unit's current psychiatry-grade construction is the best, most economical, and user-friendly alternative to ensure that safe, dependable access to the services of P-6 are available to the people of Maine, particularly as the state prepares for the growth of its senior population over the coming decade."

2. Maintain Current Operations

"Maintaining the current operations of MMC's P-6 Medical / Geriatric Psychiatry Unit presents unacceptable patient safety risks."

"One risk of maintaining current operations arises from the inadequate treatment spaces on the unit itself. With the current 4-beds-per-patient-room architecture—the only remaining 4-bed rooms at MMC—the P-6 Unit architecture already lacks sufficient space for placing necessary medical equipment within patient rooms, let alone for enabling the safest possible patient, staff, and family mobility."

"Another risk arises from a patient's delayed access to appropriate treatment on Maine's only medical / geriatric psychiatry unit. Delays in accepting geriatric patients with serious behavioral dysregulation (e.g., aggressive, combative, and self-injurious behavior) create

an unnecessary risk of injury to not only patients, but also to their family members, fellow nursing home residents, and nursing home staff."

3. Adopt a Less Extensive Plan of Renovation

"MMC explored making less extensive renovations to the present P-6 space. None of those options addressed the current 4-beds-per-patient-room architecture and or the complete absence of private, handicap-accessible bathrooms within patient rooms."

"Patient and family satisfaction data suggest that a lesser plan of renovation would also not address families' greatest objections to the current unit architecture, specifically that 4-bed rooms and a lack of private bath facilities greatly compromise patient dignity."

4. Defer Renovations

"Deferring this project continues the existing patient safety and dignity issues noted above."

B. CONU Discussion

i. Criteria

Relevant criterions 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. Analysis

Complete substantial renovations to the existing P-6 Unit on the MMC Bramhall Campus: This is the project that the applicant is proposing with their application. The applicant states that this is the most effective way to meet the needs of their patients. During the staff tour, CONU observed the conditions as described by the applicant. CONU concurs with the applicant's assertion that this project will address space constraints, patient safety and privacy issues.

Maintain Current Operations: The applicant states that maintaining current operations will not met the needs of their patients. The current layout does not allow space for necessary medical equipment or room for family members/visitors. The current layout

constricts the number of patients that MMC can currently accept and patients are often placed on a waiting list for admission. This places not only patients at unnecessary risk, but also family members, and nursing home staff.

Adopt a Less Extensive Plan of Renovation: MMC did explore moderating the changes to the unit to a lesser scale. MMC stated that this would not address the ADA-accessible rooms or patient privacy issues. As part of patient satisfaction, MMC decided that building their current proposed plan would better meet patient expectations and needs.

Defer Renovations: MMC states that the deferral of renovations is equivalent to maintaining current operations and will not meet patient needs.

Based on the alternatives considered by Maine Medical Center, CONU has determined the proposed project will most effectively meet the needs of the patients. MMC's method of treatment includes providing patients with a safe, controlled, relaxed environment, and does not involve technology; it is unlikely alternative methods of treatment will become available to this area of the population. It is expected as Maine's population ages than a greater need for these services will become increased.

Based on staffed beds being increased from 21 to 25 beds as a result of this renovation, CONU calculates that at a constant demand, wait times for admission to the unit would decrease from 17-30 days to 13.5-24 days. Since the applicant did not calculate any reduction in wait times, or a reduction in length of stay, is it incumbent upon the applicant to provide this information for a period of three years. CONU recommends including this as a condition for approval.

Availability of State Funds

Total 3rd year operating costs are projected to be \$368,790 and of that amount MaineCare's 3rd year cost is \$40,973 (\$368,790 x 11.11%), which is both the Federal and State portions combined. Currently the impact to the Maine budget per year would be approximately \$14,341 (\$40,973 x 35% (State Portion)). If approved the State must fund the costs associated with this project.

iii. Conclusion

CONU recommends that the Commissioner find that 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.

Please indicate which State Health Plan goals are being met. Please ONLY complete the description sections on the priorities that pertain to your application/project.

State Health Plan goals targeted by Applicant \boxtimes The applicant is redirecting resources and focus toward population-based health and prevention. \boxtimes The applicant has a plan to reduce non-emergent ER use. \boxtimes 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 consideration and for the other services throughout the hospital. \boxtimes The project leads to lower costs of care / increased efficiency through such approaches as collaboration consolidation, and/or other means. \boxtimes The project improves access to necessary services for the population. \boxtimes The applicant has regularly met the Dirigo voluntary cost control targets. \boxtimes 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. \boxtimes 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. \boxtimes 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.

The Maine CDC/DHHS did not provide an assessment on individual priorities. On July 17, 2009, Dr. Dora A. Mills provided the following: "At this time, I do not see any significant health impact [this application has]."

A. From Applicant

Overview

"MMC as an applicant and the proposed project to renovate MMC's P6 Unit are consistent with the intent, goals and objectives of Maine's 2008 – 2009 State Health Plan."

Maine's 2008 – 2009 State Health Plan

"The Governor's Office of Health Planning and Finance's <u>Maine's 2008 – 2009 State</u> <u>Health Plan</u> (pp. 78-80) declares that projects that meet more of the following attributes shall receive higher priority than projects that meet fewer of these attributes in the Certificate of Need review process."

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

a. Applicant's Discussion on Priority

"Maine Medical Center actively participates in MaineHealth initiatives in chronic disease and case management. The mission of MaineHealth is "Working together so our communities are the healthiest in America". We have made financial and human resource commitments to this mission, which are based on the following beliefs:

- Health care costs in Maine(and nationally) will continue to increase due to demographic, technological and normal inflation factors which are generally beyond our control;
- If healthcare is to remain affordable to the vast majority of our citizens, changes will need to be made to the manner in which we currently provide and finance that care;
- The long-term solution to balancing increased utilization is to improve the health of the people of Maine;
- The "health care challenge" requires short-term solutions which improve the quality (both care delivery and outcomes), cost-efficiency (both clinical and administrative) and access to health care."

[&]quot;MaineHealth's approach to improving the health of its communities focuses on two major types of initiatives:

- <u>Health status improvement initiatives</u> which address a health issue which is amenable to intervention based on specific, scientifically based programs
- <u>Clinical integration initiatives</u> which seek to improve the delivery of coordinated, integrated services to selected populations, particularly those with chronic diseases or for conditions where clinical guidelines and protocols have been demonstrated to improve outcomes."

"Management of populations with chronic diseases has become a major focus of our clinical integration initiatives. In the next 15 years, the population in Maine over the age of 65 will double. Based on national studies we can expect that 60% of the population will have at least one chronic condition and 40% will have two or more. A recent study by researchers at Johns Hopkins, the US HHS Agency for Health Research and Quality and the University of Pennsylvania predicts that by 2030, 87% of the population will be overweight, 51% will be obese and the prevalence of overweight children will nearly double. For the past 10 years, MaineHealth has been building health status improvement and clinical integration initiatives to address these challenges, funding them through a combination of MaineHealth dues, investment income and grants. Below are the MaineHealth budgets for these initiatives for FY 2008 and 2009."

	<u>FY 2008</u>	FY 2009
Clinical Integration	\$3,325,000	\$4,597,000
Health Status Improvement	2,736,000	3,055,000
Community Education	<u>1,041,000</u>	1,242,000
Total	\$7,102,000	\$8,894,000
% of MaineHealth Total Budget	32%	32%

"Beginning in FY 2006, MaineHealth began providing partial support for these initiatives through fund balance transfers from member organizations. At the time, a limit for such transfers was set at 0.4% of each organization's net assets. The actual amounts provided through this process increased from \$385,000 in FY 2006 to \$1,058,000 in FY 2007 and FY 2008 (representing 0.06%, 0.14% and 0.12% respectively of members' net assets). We have not asked for more than we thought could be well used and we have continued to be successful in securing other support through grants. As part of a recently completed strategic planning process, MaineHealth adopted a strategy that recognized that, while it has been reasonably successful in its initiatives, MaineHealth must step up the scope and pace of these initiatives by committing over the next several years up to 1% of its net assets annually to support these initiatives. At present, 1% of members' net assets would represent a commitment of \$7 million which would be added to commitments of dues revenue, investment income and grant support."

"Presented below are brief summaries of the major health status improvement and clinical integration initiatives supported by these resources. Detailed descriptions of these initiatives and the outcomes they have produced to date to improve the health of communities we serve are on file with the Certificate of Need Unit as part of the public

record associated with MaineHealth and Waldo County Healthcare certificate of need application for WCHI Membership in MaineHealth and are included in this application by reference."

"Two of these initiatives, <u>Caring for ME</u> and <u>Mental Health Integration</u>, demonstrate MaineHealth's commitment to clinical improvement related to mental health care.

- Caring for ME designed to improve the ability of primary care providers to care for patients with depression and to educate patients and families on their roles in self management; Caring for ME helps people with depression and those who care for and about them. The program trains primary care providers in the diagnosis and treatment of patients, and many physicians use an electronic registry to track outcome measures. In 2006, the program was chosen as one of only 20 nationwide to participate in a year-long project focused on increasing patient and family involvement in chronic disease self-management.
- Mental Health Integration MaineHealth, in partnership with Spring Harbor Hospital, MMC Mental Health Network, and Maine Medical Center Department of Psychiatry, developed a pilot program to improve the integration of mental healthcare into the primary care setting. The program conducts a collaborative "Learning Community" that is enhancing the effectiveness, efficiency, and cost/benefit of this integration with six paired primary care/mental health partners.

Please refer to Exhibit 6-A: Maine PHO's Mental Health Clinical Improvement Initiative.

- AH! Asthma Health a comprehensive patient and family education and care management program targeting childhood asthma initially and now expanded to include adults;
- Target Diabetes a comprehensive diabetes education and care management program;
- Healthy Hearts designed to improve the care of patients with congestive heart failure and to educate patients and families on their roles in self management;
- Clinical Improvement Registry a computer based system provided to primary care
 practices in the MMC Physician-Hospital Organization and several other hospital
 physician organizations. The Registry provides patients and physicians with data on
 the management of chronic illnesses including asthma, diabetes, cardiovascular
 disease, depression and heart failure;
- MMC Physician Hospital Organization Clinical Improvement Plan the Plan includes funding 23 practice based registered nurse care managers which support 265 physicians in 71 primary care practices, currently they are focusing on diabetes,

depression and asthma;

- Raising Readers a health and literacy project that provides books to all Maine Children from birth to age five at their Well Child visits;
- Care Partners provides free physician and hospital care, drugs and care management to over 1,000 adults in Cumberland, Kennebec and Lincoln counties who do not qualify for federal and state programs.
- Center for Tobacco Independence MaineHealth through a contract with the State manages the statewide smoking cessation program.
- Acute Myocardial Infarction/Primary Coronary Intervention Project collaborative effort of 11 southern, central and western Maine hospitals, and their medical staffs that standardizes and improves the care of patients experiencing a heart attack.
- Stroke Program assures that all patients with stroke receive the most up to date, high quality, efficient care; provides a coordinated system of care for stroke patients who must be transferred to another facility.
- Emergency Department Psychiatric Care follows a medical clearance protocol for patients seen in the ED who need hospitalization; follows medication recommendations for agitated patients; and decreases the need for restraints and seclusion, including training ED staff how best to work with agitated patients.
- Healthy Weight Initiative addresses adult and youth obesity, including a 12 step action plan ("Preventing Obesity: A Regional Approach to Reducing Risk and Improving Youth and Adult Health").
- Youth Overweight MaineHealth and MMC have joined with several other organizations including Hannaford, United Way, Unum, Anthem and TD Banknorth, to design and implement a 5 year initiative on youth overweight."

"MaineHealth believes that these initiatives are entirely consistent with the goals of the State Health Plan regarding how to approach chronic disease. Evidence from our programs demonstrates that the Chronic Care Model can and does work."

"Please refer to Exhibit 6-B: Letourneau, Korsen, Osgood, Schwartz, "Rural Communities Improving Quality through Collaboration," <u>Journal for Healthcare Quality</u>, (National Association for Healthcare Quality, Vol. 28, No. 5, pp. 15-27)."

b. CONU Findings

The applicant has provided information on its numerous initiatives. No new initiatives are planned as a part of this project.

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

a. Applicant's Discussion on Priority

"Portland Hospital Service Area Emergency Service Utilization"

"The available evidence indicates that Portland Hospital Service Area (HSA) exhibits appropriate emergency services utilization. MMC provided the Certificate of Need Unit a series of analyses in its Bramhall Emergency Department Expansion certificate of need application, which demonstrate that Portland HSA residents' utilization of Emergency Medical Services visits per capita rate is comparable to the national per capita rate; and is significantly below the rates for New England, Maine and other Maine HSAs. The results are summarized in the accompanying table."

Comparison of 2003 Emergency Visit Per Capita Use RatesGeographic AreaPer Capita Use RatePortland HSA384.2Total United States382.0

US Census Division 1: New England 441.9 Maine 542.5

"Sources: American Hospital Association, <u>AHA Hospital Statistics</u>, <u>2006</u> <u>Edition</u>, (Health Forum, Chicago, 2006) Table 3, p. 11; Table 5, p. 31, Table 6, p. 87; Maine Health Data Organization's hospital inpatient database; and Maine Health Information Center's Outpatient Hospital Utilization Report Package, Report # 4."

"MaineHealth and MMC Initiatives Influencing Emergency Service Utilization"

"Long term reductions in use of emergency services are directly related to: (1) the development of initiatives to improve the health status of the population and control chronic disease: and (2) ensure there is convenient, timely and affordable access to physicians. As described above, MaineHealth has developed and is implementing across the region a broad base of health status improvement and chronic disease management initiatives, to address such conditions as asthma, diabetes, depression, congestive heart failure and obesity. Expansion of these programs into all of MaineHealth's elevencounty service area is a priority and will be funded through the net asset transfer mechanism described above."

"MaineHealth has also implemented its CarePartners Program which provides primary care, referrals to specialists and care management to low income adults who are not eligible for state and federal programs. The program currently serves residents of Cumberland, Lincoln and Kennebec Counties and has demonstrated its ability to reduce emergency services utilization."

[&]quot;Please refer to Exhibit 6-C: MMC's Bramhall Emergency Department Expansion CON Application Excerpts."

"MMC's participation in MaineHealth disease and care management initiatives, and MMC's community access initiatives appear to be having a positive effect on local emergency services utilization."

<u>"Maine's 2008 – 2009 State Health Plan</u> identifies the following as some of the issues likely to be influencing the over-utilization of emergency services:

- Unavailability of primary care doctors after office hours.
- Patients without a primary care doctor.
- Availability of full service care in one stop imaging, lab, specialists.
- Ease of ED-use no need to make a doctor's appointment.
- Lack of available services for people suffering from alcoholism, drug addiction, and/or mental health problems.
- Ineffective chronic care management, resulting in complications. (SHP, p. 54)"

Primary care physicians' availability after hours

"MMC operates <u>Family Practice Centers</u>, large primary care practices, at two locations: Portland and Falmouth. The Portland Center provides extended evening hours (5 pm to 8 pm) three evenings per week. The Falmouth Center is open until 8 pm Monday through Thursday and from 10 am to 2 pm on Saturday."

Patients without a primary care physician

"CarePartners, made possible through MaineHealth, Maine Medical Center, and volunteer providers throughout the community, is a health care access program for adults in the Greater Portland Area who do not have or are not eligible for any other health care coverage, and meet certain financial guidelines. CarePartners works with volunteer physicians and other service providers to facilitate and coordinate health care services to eligible members, assisting members by completing applications to patient assistance programs through the various pharmaceutical programs, accessing network specialists, and working with patients to access community resources and programs as appropriate."

"MMC's <u>Outpatient Clinics</u> provide comprehensive, primary medical care, as well as specialized care to specific patient populations. These clinics include: Adult Cystic Fibrosis, Infectious Disease, General Pediatric, Enterostomal, International, Pediatric G.I., Endocrine, Lipid, NICU Follow-up, Nerve Block, Primary Care (Medical), Pediatric Continuity, Surgical, Urgent Care, Pediatric Pulmonary, Burn Wound Care, Spina Bifida, Cardiac, Broncho-Pulmonary Dysplasia, TB, Dermatology, Colposcopy, Teen Pregnancy, G.I., Cystic Fibrosis, Teen Clinic, Muscular Dystrophy, Cleft Lip and Palate, Developmental, Spasmodic Sysphonia, Musculoskeletal, and Feeding."

"MMC's <u>Emergency Department Primary Care Linkage Program</u> links ED patients with MMC Physician Hospital Organization and CarePartners primary care providers in the community. Referral to these programs is especially beneficial for ED patients with

chronic conditions; both programs embrace MaineHealth's Chronic Disease Model. This program provides patients with access to community-based services, reducing inappropriate ED utilization."

"Availability of full service care in one stop – imaging, lab, specialists, and Ease of ED-use – no need to make a doctor's appointment."

"MMC's <u>Brighton FirstCare</u> is a Fast Track / Urgent Care Unit, open from 9 a.m. to 9 p.m. every day. This program provides the same features of convenient, one-stop, ondemand service with a less costly charge structure than the Bramhall Emergency Department, further encouraging people to use this service instead of the main Emergency Department. All patient visits to this location are reported as emergency visits."

"Lack of available services for people suffering from alcoholism, drug addiction, and/or mental health problems"

"Caring for ME and Mental Health Integration, demonstrate MaineHealth's commitment to clinical improvement related to mental health care in the primary care setting."

"MMC's <u>Outpatient Psychiatry Department</u> provides a spectrum of psychiatric services to patients of all ages; serves as a training site for psychiatric residents, medical, nursing, social work, and psychology students; and engages in a number of innovative research projects, contributing state of the art knowledge to the field. Services include: the Adult, Child, and Geriatric Divisions at McGeachey Hall; Intensive Outpatient and Partial Hospital Programs at McGeachey Hall; the Anchor Program, PIER Program, and Psychology Division at 932 Congress Street; and the Access and Access Diversion Teams at 576 St. Johns Street."

"MMC's <u>Geriatric Center</u> offers medical and memory impairment assessments. All medical assessments involve a Geriatrician, Occupational Therapist, and Social Worker; memory impairment assessments are conducted by a team involving a Geriatric Psychiatrist, Advanced Practice Psychiatric Nurse, Geriatrician, Occupational Therapist, and Social Worker. The team manages any psychiatric issues relating to the aging process in cooperation with the primary doctor and family. All team members are either Board Certified or licensed."

"Increasing the bed capacity of P6 improves access to this specialized inpatient unit and alleviates the wait periods for patients entering via the Emergency Department. Additionally, the improved access may enable patients to be admitted to the Unit without having deteriorated to the extent that they require admission via the Emergency Department."

Ineffective chronic care management, resulting in complications

"MMC has implemented several major MaineHealth initiatives in chronic disease and care management described elsewhere in this proposal. All of these programs improve the ability of patients to manage these diseases, thereby reducing the need for emergency department visits and hospital admissions where these chronic diseases cause acute episodes. As noted in Exhibit 6-B, evidence from our programs demonstrates that the Chronic Care Model can and does work."

b. <u>CONU Findings</u>

The applicant has provided information on their plan to reduce non-emergent ED use. Even though this is not an ED project, the applicant could have provided information about how this project may have an effect on reducing ED services to this patient population.

The applicant has a plan to reduce non-emergent ED use and therefore meets this priority.

3. 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 consideration and for other services throughout the hospital, as well as a plan – to be specified in the application – to quantifiably track the effect of such strategies using standardized measures deemed appropriate by the Maine Quality Forum.

a. Applicant's Discussion on Priority

Patient Safety

"A primary goal of this project is maintain, if not improve, patient and staff safety while improving access to this service. MMC will be able to provide care to more patients and reduce the number of beds being closed due to drug resistant organisms and patient agitation."

"Please refer to Exhibit 6-D: MMC's 2009 Patient Safety Plan."

Commitment to Quality

"MaineHealth is committed to being recognized by patients, payors and providers as the benchmark for quality and safety, patient and family experience and evidence based use of resources. On a quarterly basis the MaineHealth board reviews quality performance measures for all member and affiliate organizations, including:

• National Quality Forum hospitals measures

- Performance of participants in the MaineHealth Vital Network (electronic ICU monitoring system)
- Home health clinical measures
- Long term care clinical measures"

"In 2007, the MaineHealth Board adopted the following 10 year vision for quality and safety:

In 2017 MaineHealth will be a nationally recognized leader in health care quality and safe patient and family centered care. We will achieve that status not because we seek national prominence for its sake but rather it will be founded on an unwavering system level commitment to quality and safety and continuously improving the health of the communities we serve. Achieving and sustaining excellence starts with our belief that every single patient in the communities we serve deserves the highest quality health care services that we can provide in an efficient and cost effective manner. We will communicate publicly our quality, safety and cost information to aid patients and their families in making informed choices when seeking health care services. The core of our success will be our boards and management teams focusing at all levels on quality and safety as the critical elements driving strategic planning. Across the continuum of care our physicians, nurses, staff, patients and their families will collaborate to set high standards, monitor performance, openly share results and work together to continuously improve quality and safety."

"In order to implement that vision, MaineHealth has established its Center for Quality and Patient Safety under the direction of Dr. Vance Brown, MaineHealth Chief Medical Officer. The Center will focus on:

- Board Engagement All MaineHealth and member board members will complete a core curriculum in quality and safety developed by the Center. That training will enable every board member to better understand quality, safety and performance improvement and enable them to take a greater role in ensuring quality and safety in their organization
- Education and Consultation Center staff will provide support and expertise to member organizations in developing and implementing quality and safety initiatives. Ownership and responsibility for quality improvement and monitoring will remain at the local level
- Performance Measurement and Reporting Member organizations are
 overwhelmed at present by the number of organizations requesting quality and
 safety performance information. The Center will provide support for data
 collection, measurement and reporting allowing members to focus on actual
 quality and performance improvement.

- Accreditation and Regulatory Support The Center will provide the support and expertise to ensure member organizations attain and maintain all appropriate licensure and accreditation standards
- System Wide Performance Targets Working with members, MaineHealth will identify system wide performance targets to ensure consistency and accountability for major clinical processes. Included in these efforts will be clinical decision support systems that facilitate the monitoring of performance."

b. <u>CONU Findings</u>

The applicant has demonstrated a commitment to quality and has a plan to improve upon that commitment.

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

a. Applicant's Discussion on Priority

"Maine Mental Health Partners, MaineHealth's newest subsidiary, is working to connect mental health agencies throughout MaineHealth's 11-county service area. Maine Mental Health Partners is designed to make services more efficient and less costly by bringing community agencies and MaineHealth hospitals that provide mental care under one umbrella."

"Participating agencies will gain access to a whole new network of health care professionals for their clients and a common standard of care. This collaborative approach to coordinating care is expected to reduce reliance on hospital emergency rooms and inpatient care to provide mental health services."

"Improvements in patient care will come through greater emphasis on evidence-based care and through efficiencies such as streamlining medical forms and taking advantage of electronic medical records."

"Operating costs will be reduced through shared accounting, billing and payroll services; and through group purchasing discounts for supplies, utilities, etc."

b. **CONU Findings**

The applicant has demonstrated a commitment to collaboration and consolidation through Maine Mental Health Partners. The applicant did not quantify any cost savings or increased efficiencies created by the collaboration and consolidation. CONU recommends that as a condition for approval that the applicant be required to report any cost savings associated with this collaboration for a period of three years.

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

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

"This project improves access to gero-psychiatric inpatient services. The conversion of P6 4-Bed Rooms to semiprivate and private rooms reduces the impact of drug resistant organisms and/or highly agitated patients on patient access to the existing 21 beds on the Unit. Activating four additional licensed beds further improves access."

"MMC provides access to its gero-psychiatric inpatient program regardless of ability to pay."

b. **CONU Findings**

The applicant has shown a commitment to access. This project will allow greater access to care by providing an increase in staffed medical/geriatric psychiatry inpatient beds thereby reducing the waiting list for patients needing treatment. This service is available to all residents of the service area regardless of their ability to pay.

6. The applicant has regularly met the Dirigo voluntary cost control targets.

a. Applicant's Discussion on Priority

"MMC has responded positively to Governor Baldacci's request that hospitals voluntarily hold the increases in their cost per adjusted discharge to 3.5% and hold their operating margins to less than 3.0%."

b. <u>CONU Findings</u>

The applicant did not provide CONU with the historical data necessary to judge this priority. From the financial forecast module the applicant submitted the 3% limit on operating margins have been exceeded since 2003 and is forecasted to exceed the 3% limit on operating margins through 2013. The applicants Cost Per Adjusted Discharge information was not provided.

Operating margin in 2006 was 6% with an operating surplus of \$33.4 million, if the applicant had achieved the Dirigo ratio of 3%, the applicant would have had realized an operating surplus of \$16.7 million less. In 2013 the applicant projects an operating margin of 6.95% and an operating surplus of \$60.2 million. If the applicant realized an operating margin of 3%, the operating surplus would have been \$26 million. This is a potential savings of \$34 million.

The applicant commented in previous correspondence on this priority. As a teaching hospital and tertiary facility supporting research activities, the hospital needs to be able to support these separate functions.

Dirigo cost targets have been introduced as voluntary limits. The applicant has not demonstrated that it qualifies for this priority.

7. 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

"The Bureau of Insurance (BOI) and the Certificate of Need Unit (CONU) make this determination. MMC is happy to respond to any concern, issue, question or request for additional information to assist BOI and/or CONU in making this determination."

b. Bureau of Insurance Assessment

"The Bureau of Insurance applied an enhanced version of the assessment model that was previously developed internally with support from its consultant, Milliman, Inc., of Minneapolis, MN, in order to develop an estimate of the impact that this CON project is likely to have on private health insurance premiums in Maine Medical Center's service area and in the entire state of Maine. I have worked with you and your staff at the CON Unit, using data and support from the U.S Census Bureau, the Centers for Medicare & Medicaid Services, the State Planning Office, the Office of Integrated Access and Support, the Certificate of Need Unit of the Department of Licensing and Regulatory Services, the Bureau of Insurance, and information submitted by the applicant through your agency to perform this assessment."

"The assessment compares the CON project's Year 3 incremental operating and capital costs per person (adjusted to the year ending December 31, 2009) to the estimated private health insurance average claims cost per person for the same period. Based on the model, I estimate that the maximum impact of this CON project on private health insurance premiums in Maine Medical Center's service area for the project's third year of operation will be approximately 0.003% (\$0.003 per \$100) of premium. I further estimate that this project, in its third year of operation, will have an impact on statewide private health insurance premiums of approximately 0.001% (\$0.001 per \$100) of premium."

c. CONU Findings

The additional impacts to regional and statewide insurance premiums are minimal. The applicant has meet this priority.

8. 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

Inpatient Electronic Medical Record

"MMC is in the sixth year of the implementation of its electronic medical record/patient management system, which includes computerized order entry and results reporting for medication, lab and imaging. It provides clinical decision support, e.g., drug interactions, standing orders/protocol sets. Physicians at the hospital, in their offices and at home have access to an electronic version of the record which is updated after discharge."

Ambulatory Electronic Medical Record

"In 2007, the MaineHealth Board approved a plan recommended by management to make available an ambulatory electronic medical record system to employed and independent physicians on the medical staffs of all MaineHealth member hospitals. The system is also being offered to physicians on the medical staffs of MaineHealth's affiliate hospitals. The plan calls for bringing 400 physicians (180 employed and 220 independent) at Maine Medical Center, Miles Memorial Hospital, St. Andrews Hospital, Stephens Memorial Hospital and Spring Harbor Hospital on to the system by 2010. MaineHealth is investing \$10.4 million, its member hospitals \$2.5 million and the independent physicians \$2.7 million (\$15 million total) to bring these 400 physicians on to the system. First year (FY 2008) implementation is underway at several practice sites."

"MaineHealth has selected Epic, one of the nation's leading information technology organizations, as its strategic partner to implement the MaineHealth ambulatory electronic medical record. Epic allows healthcare providers the ability to address a variety of information needs, and will help MaineHealth, and its member organizations, build strong relationships with patients, facilitate an exchange of information across episodes of care, and allow anytime/anywhere data access for physicians. Epic is consistently ranked as the top EMR in its category by respected industry evaluators. The system allows clinicians to improve care, protect patient safety and enhance financial performance. With Epic, providers have the right information at the right time."

Picture Archiving and Communications System

"MaineHealth has developed a PACS (imaging archiving and retrieval system) project for Maine Medical Center, Stephens Memorial Hospital, Miles Memorial Hospital, St. Andrews Hospital, St. Mary's Regional Medical Center, Southern Maine Medical Center and 12 other sites."

Vital Network (Electronic ICU Monitoring)

"In 2005, MaineHealth began offering to Maine hospitals an electronic system for monitoring real time patients in intensive care units. The system is staffed at a central location by critical care trained/certified physicians and nurses. The Leap Frog Group

has determined that electronic monitoring systems satisfy its quality/safety standard for care of ICU patients by Board Certified critical care physicians. The system provides continuous monitoring of selected patient conditions and has a video system which allows the VitalNetwork Staff to view the patients. Because of its capabilities, the system has proved to reduce ICU mortality and morbidity. MaineHealth was the first health care system in New England to implement the system, and has invested in excess of \$ 4 million in the project."

"Currently, the VitalNetwork is operational for all critical care beds (except neonates) at Maine Medical Center, Miles Memorial Hospital, St. Mary's Regional Medical Center, Waldo County General Hospital, Pen Bay Medical Center and Southern Maine Medical Center. Implementation is in the planning stages at MaineGeneral Medical Center, Mercy Hospital and Franklin Memorial Hospital."

HealthInfoNet

"MaineHealth has supported HealthInfoNet since its inception:

- MaineHealth leaders were active participants in developing the HealthInfoNet.
- MaineHealth has contributed \$ 250,000 over two years to underwrite the project.
- Bill Caron and Frank McGinty MaineHealth's President and Executive Vice President have served on the Board of Directors of HealthInfoNet.
- MaineHealth acted as the guarantor for the initial eighteen-month engagement of the HealthInfoNet's Executive Director.
- MaineHealth is negotiating to make its proprietary MaineHealth information system available to HealthInfoNet."

"OneMaine Health (MaineHealth, MaineGeneral and Eastern Maine Health) selected and funded HealthInfoNet as the data bank for medical records to share statewide patient information such as medications, allergies and health problems regardless of where care is delivered"

b. <u>CONU Findings</u>

MMC and MaineHealth are one of the original founding sponsors of the HealthInfoNet Pilot and have committed significant resources to enhance deployment of electronic medical records.

9. 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

"MMC has engaged SMRT as the project's architectural firm. The Principal-in-Charge and Project Architect are LEEDS-certified. The renovation project is being designed and constructed in manner to minimize environmental impacts."

b. **CONU Findings**

The applicant has hired a LEED-accredited firm committed to designing this project that would address and satisfy this priority.

iii. Conclusion

CONU recommends that the commissioner finds that the project is consistent with and furthers the goals of the State Health Plan.

VII. Outcomes and Community Impact

A. From Applicant

Potential Impact on Other Providers

"Approval of this project does not negatively affect the volume of services, quality of care and/or costs of other existing service providers. P6 is the only gero-psychiatric unit in Maine."

Current and Projected Utilization

"As noted in the Need section of this application, Maine's geriatric population is projected to grow in size and to become proportionally older. The need for this service will continue to grow due to these demographic factors. Maine Mental Health Partners and P6 are increasing their efforts to support community treatment to mitigate the need for inpatient care."

B. CONU Discussion

i. 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. Analysis

The applicant states they are the only provider in the state that has a designated unit for Inpatient Medical/Geriatric Psychiatry. Waiting times to be admitted to a semi-private room in the unit are between 17-30 days. The applicant should be required to report annually for a 3-year period following the implementation of this project the following: the average length of stay of patients, average number of days a patient awaits placement outside the P6 unit and the average days a patient waits to be admitted.

iii. Conclusion

CONU recommends that the Commissioner find that 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 subject to a condition that it reports on quality outcomes.

VIII. Service Utilization

A. From Applicant

"The introduction of the P-6 Medical / Geriatric Psychiatry Unit in 2003 has enhanced patient safety and outcomes, improved patient flow for emergency rooms statewide, and provided an ongoing consultative resource to the medical, nursing, and administrative directors of nursing homes statewide whose residents experience mental illness and behavioral dysregulation."

Quality & Outcome Measures

MMC Institutional Measures

"MMC participates in the following Institutional-wide Patient Safety and Quality Initiatives:

Specific Initiatives at MMC to Prevent Errors

Blame-free reporting: Example: cardiovascular surgeons all receive their own numbers and self-monitor.

Robotics in the Pharmacy: Automated dispensing trial in process; error rate of less than 1%.

Computerized Physician Order Entry: This major investment in information systems achieved 100% of orders entered by physicians by 10/01. Part of \$3 million Sunrise Clinical Manager initiative, also operational by 10/01. Better records, automatic "flags" for problems, physician access from outside hospital for better monitoring of care.

Adverse Drug Event Analysis: 1,200 each year out of 3 million doses

Root Cause Analysis: Determining the actual cause(s) of errors

Nursing Screening of High-Risk Patients: Example: patients at risk for pressure ulcers.

Improved Communications Models in the Operating Rooms: Modeled on lessons learned in the airline industry that have increased safety in the cockpit.

Maryland Quality Indicators Initiative: MMC participates.

Sentinel Events Monitoring and Root Cause Analysis: Part of JCAHO standards."

P-6 Medical / Geriatric Psychiatry Unit-Specific Measures

"All patients receiving medical / geriatric psychiatry are identified through 2 means of positive patient identification. Additionally, patients receiving medical / geriatric

psychiatry treatment receive a minimum of daily consultation during rounds by the unit's interdisciplinary treatment team (psychiatrist, physician assistant, social worker, nurse, occupational therapist, and residents / medical students). Assistance with activities of daily living, therapeutic interventions, and medication adjustments and consultations by other medical specialties are delivered as recommended by the treatment team, patient, and family. Observation of patient safety is ongoing (visual observation for psychiatric safety occurs at a minimum of every 15 minutes). Daily adjustments, if needed, are documented in the patient's treatment record and reviewed by a physician daily."

"Unit-specific quality performance measures include the following:

- Wait time for admission to P-6: averages 17 to 30 days for a semiprivate bed; 4 months for a private bed
- ALOS: 13.39 days for the past 12 months; 12.34 days for January 09
- **Fall Rate per 1,000 patient days**: 11.1/1000 patient days for past 12 months; 8.5/1,000 patient days for January 09
- **Rate of seclusion**: 0/1000 patient days (average <3/month)
- **Rate of behavioral restraint**: 0/1000 patient days (average <3/month)
- **Rate of medical/surgical restraints**: 97.59 orders/1000 patient days"

Background of Practice Innovation

"The unit's "Catch a Falling Star" fall-prevention program has been recognized within MMC as a quality improvement effort that is successfully improving fall rates among the unit's population of seniors. Since 2005, P-6 staff has not only lowered patient fall rates to well below the national average, but employees also achieved this while simultaneously lowering the unit's restraint rate. Unit practices are research-based and have been proven effective year after year. The assessments and interventions are ongoing; due to the advanced age and the acuity of the P-6 population, patients are considered fall risks until excluded as a fall risk. The interdisciplinary approach used on the unit has proven to be essential. Assessments are performed by Nursing, Physical Therapists, Occupational Therapists, PAs, and Medical Residents; documentation is presented in such a way that all teams, including ancillary services, are aware of the patient's fall risk status."

Quality Assurance:

"The P-6 unit follows American Nurses Association and American Psychiatric Association Practice Guidelines. The Medical Director and Nursing Director manage the QA program for the unit, which includes the treatment planning system, treatment delivery system, and the interface between these systems. The interdisciplinary team also participates in review of treatment plans."

Quality Improvement:

"MMC uses National Data Nursing Quality Indicators, which are the national benchmarks required to maintain Magnet status."

"Physician peer review of patient treatment plan, positioning, and documentation occurs at the start of treatment and on an as needed basis throughout the patient's course."

"The Unit's psychiatrists, psychiatric nurses, social workers, and occupational therapists provide patient-specific education to all inpatients in the form of printed and verbal materials."

"MMC's Medical / Geriatric Psychiatry Unit staff performs baseline and subsequent symptom assessments via patient and family satisfaction survey tools."

"A database has been established by the Medical Director and the Nursing Director, both of whom are responsible for gathering and collating data, including clinical quality measures, demographic information, and general data. Monthly reporting in the form of a quality metrics scorecard is provided to the MMC Departments of Psychiatry and Quality."

B. CONU Discussion

i. 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. Maine Quality Forum/DHHS Assessment

Dr. Josh Cutler, Maine Quality Forum, "will not be commenting on the Maine Medical Center CON application concerning P-6 unit renovations."

iii. CONU Findings

This project will increase service utilization as 4 additional staffed beds will be made available once the project is complete. This increased service utilization is not considered to be inappropriate because there is currently a 17-30 day waiting period for this service. The applicant has not indicated what the reduced wait period will be.

iv. <u>Conclusion</u>

The CONU recommends that the Commissioner find that the applicant 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

"Based on the information contained in the completed CONU Financial Module for this project (Exhibit 3-B), the capital investment impact of this project, if approved, is estimated to be \$368,790."

B. <u>CONU Discussion</u>

i. <u>Criteria</u>

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. Analysis

The small hospital project cycle contained only this application; thereby, making this application non-competitive. The CIF has been introduced to limit the development of hospital projects to a level sustainable in regards to its impact on the growth of healthcare costs. The CONU, has determined that, if approved, this project can be funded within the CIF.

iii. Conclusion

CONU has determined that there are incremental operating costs to the healthcare system that will affect the Capital Investment Fund (CIF) dollars needed to implement this application. There are adequate funds available to fund this project.

X. Timely Notice

A. From Applicant

"MMC has incurred and continues to incur obligations for predevelopment activities associated with this project. The total capital obligations for these activities while MMC awaits the Department's decision are estimated to be less than the Maine Certificate of Need threshold currently in effect."

"MMC has followed the appropriate procedures regarding timely submission of the Letter of Intent, scheduling of the mandatory Technical Assistance meeting, submission of the Application and certifying the Application Completeness outlined in the Maine Certificate of Need Procedures Manual for this type of project."

"MMC will cooperate with the Department in arranging the required Public Informational Meeting,"

"MMC is willing and reserves the right to submit information that is responsive to any concern, issue, question or allegation of facts contrary to those in the application made by the department or any other person."

"For informational purposes MMC presents the following schedule based on requirements outlined in the <u>Mane Certificate of Need Manual</u> currently in effect."

Responsible	Task	Due Date	Actual Date
Party			
MMC	File Letter of Intent:	Jan. 1, 2009	Dec. 11, 2008
MMC / DHHS	Hold technical assistance meeting:	Jan. 31, 2009	Jan. 7, 2009
MMC	File and certify as complete application accompanied by filing fee:	Mar. 22, 2009	Mar. 20, 2009
DHHS	Review Cycle commences:	Apr. 1, 2009	Apr. 1, 2009

B. CONU Discussion

Letter of Intent	December 11, 2008	
Technical Assistance Meeting	January 8, 2009	
Application filed	March 20, 2009	
Application certified complete	March 20, 2009	
Public Informational Meeting	April 16, 2009	
Record Closes	May 18, 2009	

XI. 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 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 can be funded within the Capital Investment Fund.

For all the reasons contained herein and in the record, CONU recommends that the Commissioner determine that this project should be **Approved with conditions.**

Condition:

- 1. Report on quality outcomes relative to the P6 unit for a 3-year period following the implementation of this project.
- 2. Report annually for a 3-year period following the implementation of this P6 unit project the following: the average length of stay of patients, average number of days a patient awaits placement outside the P6 unit, and the average days a patient waits to be admitted.
- 3. Report any cost savings associated with the collaboration with Maine Mental Health Partners for a period of three years.