Analysis of the Reasonableness of Assumptions Used For and

Feasibility of Projected Financials of:

UMass Memorial Heath Care, Inc.

For the Years Ending September 30, 2025

Through September 30, 2030

March 12, 2025

UMass Memorial Healthcare, Inc.

Brian Huggins

Sr. VP of Finance & Corporate Controller

UMass Memorial Health Care, Inc.

100 Front Street

Worcester, MA 01608

**RE: Analysis of the Reasonableness of Assumptions and Projections Used to Support the Financial Feasibility and Sustainability of the Proposed Merger**

Dear Mr. Huggins :

Enclosed is a copy of our report on the reasonableness of assumptions used for and feasibility of the financial projections for UMass Memorial Healthcare, Inc. Please contact me to discuss this report once you have had an opportunity to review.

Sincerely,

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March 12, 2025

UMass Memorial Healthcare, Inc.

Brian Huggins

Sr. VP of Finance & Corporate Controller

UMass Memorial Health Care, Inc.

306 Belmont Street

Worcester, MA 01605

**RE: Analysis of the Reasonableness of Assumptions and Projections Used to Support the Financial Feasibility and Sustainability of the Proposed Merger**

Dear Mr. Huggins:

We have performed an analysis related to the reasonableness and feasibility of the financial projections (the “Projections”) of UMass Memorial Healthcare, Inc. (“UMass Memorial Healthcare”, “UMMHC” or “the Applicant”), related to the proposed transfer of ownership of Marlborough Hospital (“Marlborough” or “MH”). The transfer will be effectuated by a corporate merger of UMass Memorial Medical Center (“UMMMC”) and MH, whereby MH shall become a licensed campus of UMMMC (the “Proposed Merger”). This report details our analysis and findings regarding the reasonableness of assumptions used in the preparation of the Projections and feasibility of the projected financial results prepared by the management of UMMHC (“Management”). This report is to be used by UMMHC in connection with its Determination of Need (“DON”) Application – Factor 4(a) and should not be distributed or relied upon for any other purpose.

# EXECUTIVE SUMMARY

The scope of our review was limited to an analysis of UMMHC’s six-year financial projections for the Applicant for the fiscal years ending September 30, 2025 through 2030 prepared by Management and the supporting documentation in order to render an opinion as to the reasonableness of assumptions used in the preparation and feasibility of the Projections.

The Projections exhibit a cumulative operating EBIDA surplus of approximately 4.5 percent of cumulative projected revenue for UMMHC for the six years from FY 2025 through 2030. Based upon our review of the relevant documents and analysis of the Projections, we determined the anticipated operating EBIDA surplus is a reasonable expectation and based upon feasible financial assumptions. Accordingly, we determined that the Projections are reasonable and feasible, and not likely to have a negative impact on the Applicant’s patient panel or result in a liquidation of UMMHC’s assets. A detailed explanation of the basis for our determination of reasonableness and feasibility is contained within this report.

# RELEVANT BACKGROUND INFORMATION[[1]](#footnote-1)1

The Applicant is a Massachusetts nonprofit corporation that owns and operates an integrated health care system comprised of a network of hospitals, including one academic teaching hospital and four community hospitals, including Marlborough Hospital (MH), as well as other health care providers that serve the residents of Central Massachusetts. UMMHC is the sole corporate member of UMass Memorial Community Entities, Inc. (“UMMCE”) and certain other affiliates.

Marlborough Hospital is a small, 79-bed community hospital located in Central Massachusetts along Interstate 495. It joined the UMass Memorial system in 1995, continuing its mission to provide high-quality, comprehensive care in the community. Since 2014, MH is also the site of the UMass Memorial Cancer Center, a satellite of UMMMC.

UMMMC and MH are proposed to enter into a merger agreement, pursuant to which MH will become a licensed campus of UMMMC. The Proposed Merger will allow the Applicant to ensure continued access to specialty care not only at MH, but to also improve timely access to specialty consults affording patients the ability to remain at MH for their care.

Moreover, the Proposed Merger represents a more effective use of resources to better manage patient care, improve health outcomes, and drive quality improvement initiatives. The Proposed Merger will eliminate costs required to maintain a separate hospital license and corporate entity, as well as separate governing bodies, leadership structures and medical staff infrastructure. Furthermore, MH will be fully integrated into the UMMMC quality, patient safety and regulatory oversight functions, allowing MH to participate in UMMMC’s long-term planning around quality and outcomes. With these potential savings, UMMMC will be able to explore additional ways to reduce operational costs and maximize services across campuses though investments in the most needed services at MH.

The Proposed Merger aims to enhance the Applicant's service to its Patient Panel by improving access and health outcomes by re-investing cost savings to further improve access to care in the communities served by MH. Additionally, the merger will optimize the resources available at both MH and UMMMC, ensuring the long-term sustainability of hospital services in Marlborough and providing MH patients with access to tertiary care at UMMMC. In summary, the Proposed Merger satisfies the criteria for determining need.

# SCOPE OF REPORT

The scope of this report is limited to an analysis of the six-year Projections for the fiscal years ending September 30, 2025 through 2030, prepared by Management, and the supporting documentation in order to render an opinion as to the reasonableness of assumptions used in the preparation and feasibility of the Projections. Reasonableness is defined within the context of this report as supportable and proper, given the underlying information. Feasibility is defined as based on the assumptions used, the Proposed Merger is not likely to result in a liquidation of the underlying assets or the need for reorganization.

This report is based on prospective financial information provided to us by Management. BDO understands the prospective financial information was developed as of January 28, 2025 and is still representative of Management’s expectations as of the drafting of this report. BDO has not audited or performed any other form of attestation services on the projected financial information related to the operations of UMMHC.

If BDO had audited the underlying data, matters may have come to our attention that would have resulted in our using amounts that differ from those provided. Accordingly, we do not express an opinion or any other assurances on the underlying data or projections presented or relied upon in this report. We do not provide assurance on the achievability of the results forecasted by the Applicant because events and circumstances frequently do not occur as expected, and the achievement of the forecasted results is dependent on the actions, plans, and assumptions of Management. We reserve the right to update our analysis in the event that we are provided with additional information.

# SOURCES OF INFORMATION UTILIZED

In formulating our conclusions contained in this report, we reviewed documents produced by Management as well as third party industry data sources. The documents and information upon which we relied are identified below or are otherwise referenced in this report:

1. Financial Model for UMMHC & MRMC individually and on a combined basis for the periods ending September 30, 2025 through September 30, 2030;
2. Proposed fiscal year 2024 and 2025 UMMHC Budget Presentation dated as of September 24, 2024;
3. Final fiscal year 2025 budget for MRMC dated as of September 30, 2024;
4. Draft DON Narrative report as of January 31, 2025;
5. Audited Financial Statements for both UMass Memorial Healthcare, Inc. and Milford Regional Medical Center, Inc. for Fiscal Years Ended September 30, 2021 through 2024;
6. Definitive Healthcare data as of January 2024;
7. Data obtained from Integra Information, A Division of Microbilt Corporation as of February 5, 2025; and,
8. IBISWorld Industry Report, Hospitals in the US, dated October 2024.

# REVIEW OF THE PROJECTIONS

This section of our report summarizes our review of the reasonableness of the assumptions used and feasibility of the Projections.

The following table presents the Key Metrics, as defined below, which compare the forecasted operating results of the performance of UMMHC after the affiliation to market information from Integra Reports (“Integra”), IBISWorld, and Definitive Healthcare to assess the reasonableness of the Projections.

**Projected Key Financial Metrics and Ratios**

| UMMH & MRMC Combined  | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
| --- | --- | --- | --- | --- | --- | --- |
| **Profitability**: Operating Margin (%) | 0.2% | 0.2% | 0.4% | 0.4% | 0.4% | 0.5% |
| **Profitability**: Excess Margin (%) | 1.0% | 0.9% | 1.1% | 1.1% | 1.1% | 1.2% |
| **Profitability**: Debt Service Coverage Ratio (x)  | 1.97x | 3.25x | 3.38x | 3.54x | 4.44x | 4.62x |
| **Liquidity**: Days Available Cash and Investments on Hand (#) | 123 | 119 | 118 | 117 | 117 | 117 |
| **Liquidity**: Operating Cash Flow (%) | 4.0% | 3.6% | 3.8% | 3.8% | 3.9% | 3.9% |
| **Solvency:** Ratio of Long-Term Debt to Total Capitalization (%) | 31.6% | 30.0% | 28.7% | 27.4% | 26.3% | 25.1% |
| **Solvency:** Ratio of Cash Flow to Long Term Debt (%) | 21.6% | 20.6% | 22.3% | 23.3% | 24.1% | 25.2% |
| **Solvency:** Unrestricted Net Assets ($ in million) | $1,741 | $1,795 | $1,858 | $1,922 | $1,988 | $2,056 |
| **Solvency:** Total Net Assets($ in million) | $1,875 | $1,932 | $1,999 | $2,068 | $2,138 | $2,210 |

**Historical Data and Industry Data Key Financial Metrics and Ratios**

| UMMH  | 2021 | 2022 | 2023 | 2024 | Integra - General Medical and Surgical Hospitals | IBIS - Hospitals in the US (3-year) | Definitive Healthcare |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Profitability**: Operating Margin (%) | 2.0% | -1.1% | 3.9% | 0.6% | 2.5% | 11.8% | -10.7% |
| **Profitability**: Excess Margin (%) | 6.6% | -4.7% | 5.7% | 4.1% | 0.8% | NA | -3.7% |
| **Profitability**: Debt Service Coverage Ratio (x)  | 3.96x | -0.03x | 6.52x | 4.71x | 1.5x | 8.1x | NA |
| **Liquidity**: Days Available Cash and Investments on Hand (#) | 187 | 135 | 149 | 147 | NA | NA | NA |
| **Liquidity**: Operating Cash Flow (%) | 5.5% | 2.5% | 4.0% | 8.9% | 4.2% | 55.0% | NA |
| **Solvency:** Ratio of Long-Term Debt to Total Capitalization (%) | 31.2% | 39.4% | 33.0% | 30.4% | 43.4% | NA | NA |
| **Solvency:** Ratio of Cash Flow to Long Term Debt (%) | 26.4% | 10.2% | 18.6% | 50.6% | 15.0% | NA | NA |
| **Solvency:** Unrestricted Net Assets ($ in million) | $1,337 | $1,239 | $1,544 | $1,609 | NA | NA | NA |
| **Solvency:** Total Net Assets($ in million) | $1,458 | $1,340 | $1,650 | $1,734 | NA | NA | NA |

Footnote:

* Industry data ratios based on each data source's respective definitions and may differ from the ratio definitions listed below.
* Net income margin from Integra and Definitive Healthcare data treated as an equivalent to excess margin.
* The historical data for UMMHC does not include the financial performance of Milford Regional Medical Center (“MRMC”). However, the forecasted metrics for UMMHC do incorporate MRMC's financial performance.

The Key Metrics fall into three primary categories: profitability, liquidity, and solvency. Profitability metrics are used in the evaluation of management performance in how efficiently resources are utilized. Liquidity metrics, including common ratios such as “days of available cash and investments on hand”, measure the quality and adequacy of assets to meet current obligations as they come due. Solvency metrics measure the company’s ability to take on and service debt obligations. Additionally, certain metrics can be applicable to multiple categories. The table below shows how each of the Key Metrics is calculated.

 **Ratio Definitions for Key Financial Metrics and Ratios**

| Ratio | Definitions |
| --- | --- |
| **Profitability**: Operating Margin (%) | Operating Profit (Loss) Divided by Total Operating Revenue |
| **Profitability**: Excess Margin (%) | Excess of Revenue Divided by (Total Operating Revenue + Total Nonoperating Gains) |
| **Profitability**: Debt Service Coverage Ratio (x)  | (Excess of Revenue + Depreciation and Amortization + Interest) Divided by (Interest + Scheduled Debt Repayment) |
| **Liquidity**: Days Available Cash and Investments on Hand (#) | (Cash and Cash Equivalents) Multiplied by 365 Divided by (Total Operating Expenses Less Depreciation and Amortization) |
| **Liquidity**: Operating Cash Flow (%) | (Operating Profit (Loss) + Depreciation and Amortization + Changes in working capital) Divided by Total Operating Revenue |
| **Solvency:** Ratio of Long-Term Debt to Total Capitalization (%) | (Long Term Debt + Long Term Lease Obligations) Divided by Total Capitalization (Long Term Debt + Long Term Lease Obligations + Total Net Assets) |
| **Solvency:** Ratio of Cash Flow to Long Term Debt (%) | (Operating Profit (Loss) + Depreciation and Amortization + changes in working capital) Divided by (Long Term Debt + Long Term Lease Obligations) |
| **Solvency:** Unrestricted Net Assets ($ in million) | Total Unrestricted Net Assets |
| **Solvency: Total Net Assets** ($ in million) | Total Net Assets |

1. **Revenue**

We analyzed the projected revenue within the Projections. Revenue for the Applicant includes patient service revenue and other operating revenue. We note that the cumulative patient service revenue comprises 95.0 percent of the cumulative total operating revenue from FY 2025 through FY 2030. Projected patient service revenue for UMMHC is expected to grow by 12.0 percent in FY 2025 when compared to FY 2024. We note that nominal growth in patient service revenue was projected by Management from FY 2026 and FY 2030. The total operating revenue for FY 2025 aligns with the budget that was presented to and approved by the UMMHC Finance Committee. Based on the budget presentation and discussions with Management, several factors are expected to drive projected revenue growth in FY 2025. Management emphasized that the successful integration of MRMC is expected to add 9.7 percent in patient service revenue in 2025. This growth is further supported by the opening of the North Pavilion, which added seventy-two new beds to UMMMC, enhancing capacity going forward. Additionally, an annual system price increase, influenced by inflation and other factors, contributes to the revenue boost. The hospital's strengthened reputation and its ability to retain higher acuity patients are also anticipated to play a crucial role in sustaining this upward trend.

In order to determine the reasonableness of the projected revenue, we reviewed the underlying assumptions upon which Management relied. Based upon our review of the information provided and the discussions noted above, we understand Management relied upon historical operating results and anticipated demographic trends in the UMMHC service area. The consolidated total operating revenue growth for UMMHC anticipated for FY 2025 is slightly below the three-year compounded annual growth rate (“CAGR”) and within the range of annual revenue growth rates for the Applicant between FY 2022 and FY 2024 as indicated in the table below. The consolidated total operating revenue growth for UMMHC for the remainder of the Projection Period (FY 2026 to FY 2030) are anticipated to be mostly flat.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Annual Growth Range (2022 – 2024) | CAGR (2021 – 2024) | 2025 Growth | Annual Growth Range (2026-2030) |
| Revenue Projection |  | 7.9% – 12.9% | 10.7% | 10.1% | 0.0% – 0.2% |

Based upon the foregoing, it is our opinion that the revenue growth projected by Management reflects a reasonable estimation of future revenue of UMMHC.

1. **Operating Expenses**

We analyzed each of the categorized operating expenses for reasonableness and feasibility related to the Projections. The operating expenses in the analysis include salaries and wages, employee benefits, professional fees, purchased services, pharmacy, medical supplies, non-medical supplies, utilities, insurance, rental leases, other direct expenses, system allocation expenses, medical education services, depreciation and amortization, and interest expenses. Total consolidated expenses within the Projections are projected to grow by 10.5 percent and 0.1 percent in FY 2025 and FY 2026, respectively, which is in-line with projected revenue growth. Thereafter, starting in FY 2026, Management held total operating expenses relatively flat, assuming nominal growth for FY 2027 through FY 2030, except for interest expense which is projected based on UMMHC’s projected level of debt and current terms, depreciation and amortization, and other direct expenses. According to the budget presentation, the primary factors influencing changes in operating expenses in the initial years of the projections are the staffing costs associated with the North Pavilion and the transition from temporary contractors to permanent employees.

The following table indicates the growth in FY 2025 is slightly below the three-year CAGR and within the range of annual expense growth rate between FY 2022 and FY 2024. The additional factors other than those mentioned above for the change in expense growth are inflation impact which in turn will affect the recruitment and retention and supply chain, integration of MRMC, and continued strategic investments while maintaining fiscal discipline.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Annual Growth Range (2022 – 2024) | CAGR (2021 – 2024) | 2025 Growth | Annual Growth Range (2026-2030) |
| Expense Projection |  | 2.6% - 16.8% | 11.3% | 10.5% | 0.0% - 0.1% |

Based upon the foregoing, it is our opinion that the operating expenses within the Projections reflect reasonable estimation of future expenses of the Applicant. We note that the projected total expenses for UMMHC as a percentage of total revenue range from 99.5 percent to 99.8 percent from FY 2025 to FY 2030. We further note that this level of total expenses is consistent with the historical UMMHC’s total expenses as a percentage of total revenue which ranged from 96.1 percent to 101.1 percent from FY 2021 to FY 2024.

1. **Capital Expenditures**

Management indicated there is no significant investment or growth capital expenditures in the Projections related to the Proposed Merger, except the plan to transition MRMC to EPIC and Workday which is expected to require a total capital expenditure of approximately $65.0 million from FY 2025 to FY 2026. Our understanding is the forecasted capital expenditures budget was approved by UMMHC’s finance committee and that UMMHC plans to fund the capital expenditure through their current operations and unrestricted funding. For FY 2027 through FY 2029, the capital expenditures were projected to be relatively consistent with the capital expenditure levels in FY 2024. Based upon the foregoing, it is our opinion that the capital expenditures projected by Management reflect reasonable estimation of future capital outlay of UMMHC.

# FEASIBILITY

We analyzed the Projections and Key Metrics for the Proposed Merger. In preparing our analysis we considered multiple sources of information including industry metrics, historical results, and Management expectations. It is important to note that the Projections do not account for any anticipated changes in accounting standards. These standards, which may have a material impact on individual future years, are not anticipated to have a material impact on the aggregate Projections.

Within the projected financial information, the Projections exhibit a cumulative operating EBIDA surplus of approximately 4.5 percent of cumulative projected operating revenue for the six years from FY 2025 through FY 2030. Based upon our review of the relevant documents and analysis of the Projections, we determined the anticipated EBIDA surplus is a reasonable expectation and based upon feasible financial assumptions. Accordingly, we determined that the Projections are reasonable and feasible, and not likely to have a negative impact on the patient panel or result in a liquidation of assets of UMMHC.

Respectively submitted,

BDO USA

1. 1 Portions of this section of the report were adapted directly from the Project Description section of the Draft UMMHC DON Narrative as of February 2, 2024, provided by the Applicant. [↑](#footnote-ref-1)