



2022 Pre-Filed Testimony PROVIDERS



**As part of the
*Annual Health Care
Cost Trends Hearing***

Massachusetts Health Policy Commission
50 Milk Street, 8th Floor
Boston, MA 02109

INSTRUCTIONS FOR WRITTEN TESTIMONY

If you are receiving this, you are hereby required under M.G.L. c. 6D, § 8 to submit written pre-filed testimony for the [2022 Annual Health Care Cost Trends Hearing](#).

On or before the close of business on **Monday, October 24, 2022**, please electronically submit testimony to: HPC-Testimony@mass.gov. Please complete relevant responses to the questions posed in the provided template. If necessary, you may include additional supporting testimony or documentation in an appendix. Please submit any data tables included in your response in Microsoft Excel or Access format.

We encourage you to refer to and build upon your organization's pre-filed testimony responses from 2013 to 2021, if applicable. If a question is not applicable to your organization, please indicate that in your response.

Your submission must contain a statement from a signatory that is legally authorized and empowered to represent the named organization for the purposes of this testimony. The statement must note that the testimony is signed under the pains and penalties of perjury. An electronic signature will be sufficient for this submission.

You are receiving questions from both the HPC and the Attorney General's Office (AGO). If you have any difficulty with the templates or have any other questions regarding the pre-filed testimony process or the questions, please contact either HPC or AGO staff at the information below.

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INTRODUCTION

This year marks a milestone anniversary in the Commonwealth's ambitious journey of health care reform. Ten years ago, through the advocacy of a broad coalition of stakeholders, Massachusetts adopted an innovative approach to slowing the rate of health care cost growth by establishing an annual cost growth benchmark and providing oversight authority to the newly established HPC.

In the first several years of benchmark oversight, the Commonwealth made notable progress in driving down health care spending growth. In recent years, however, spending growth has exceeded the benchmark (with the exception of 2020) and appears likely to continue that upward trajectory.

This trend is driven largely by persistent challenges and market failures that have not been adequately addressed in the past ten years. These challenges, which have been consistently identified by the HPC and others, include:

- Excessive provider price growth and unwarranted variation,
- Increased market consolidation and expansion of high-cost sites of care,
- High, rising, and non-transparent pharmaceutical prices, which may not reflect value,
- Steadily increasing health insurance premiums, deductibles, and cost-sharing, resulting in increased costs to businesses and consumers,
- Stalled uptake of value-based payment models and innovative plan offerings, and
- Systemic and persistent disparities in health care access, affordability, and outcomes.

The ongoing impact of the COVID-19 pandemic has only exacerbated many of these dynamics, contributing to greater health disparities, while adding to inflationary headwinds in the form of increasing labor and supply costs.

These challenges are not unique to Massachusetts, and many other states are evolving their cost containment strategies accordingly to respond to them. In order for Massachusetts to continue to be the national leader on health care cost containment, it must similarly adapt. Unless the state's health care cost containment approach is strengthened and expanded by policymakers, the result will be a health care system that is increasingly unaffordable for Massachusetts residents and businesses with growing health inequities.

ASSESSING EFFORTS TO REDUCE HEALTH CARE COST GROWTH, PROMOTE AFFORDABLE, HIGH-QUALITY CARE, AND ADVANCE EQUITY

- a. Reflecting on the past ten years of the Massachusetts health care cost containment effort, and the additional context of ongoing COVID-19 impacts, please identify and briefly describe the top (2-3) concerns of your organization in reducing health care cost growth, promoting affordability, and advancing health equity in future years.

1. **Unique set of policy, economic, and environmental circumstances impacting our system's ability to deliver high-quality, low-cost care.**

- **Workforce Crisis:** As with other health systems across the state and nation, the ongoing healthcare worker shortage hampers efforts to provide low-cost, high-quality care. UMass Memorial Health currently has 1750 open job requisitions across our system, with openings in all job categories. We have a vacancy rate of 13.5% systemwide, with some entity vacancy rates over 20%.

Like many others, we've been forced to turn to the highly inflated and competitive nurse traveler market to supplement our bed-side workforce. Paying these premium prices out of necessity is costing us approximately \$20 million more per month than our pre-COVID staffing costs. We are currently employing about 525 nurse travelers with an average hourly wage of \$130/hour (down, thankfully, from \$180/hour last year). Clearly, this isn't sustainable for the long-term.

The workforce crisis has been impacted by burnout from the pandemic, aging workforce, movement out of the healthcare sector, and a variety of other factors—and we anticipate it continuing for many years to come. More than 630 nurses left their jobs in our system in FY 2022, including 250 who moved to per diem status. Attracting and retaining a skilled, qualified, and stable workforce will require higher wages as we move into the future, further increasing the costs of providing care.

- **Bed shortage in central MA and increasing patient load in UMMH facilities:** Central Massachusetts has 20% fewer beds per-1,000 residents than Western Massachusetts, 15% fewer than Eastern Massachusetts, and is substantially below the national average. (Central Mass 1.90 beds per 1,000 residents; Western Mass 2.31 beds per 1,000; Eastern Mass: 2.19 beds per 1,000; U.S. average 2.40 beds per 1,000). It would take about 300 additional beds in total to level this out. The shortage has further been exacerbated by bed closures at other hospitals in our region.

This shortage of beds in our region can be felt most tangibly in the high occupancy rates of our hospitals. Specifically,

- The Medical Center’s average occupancy rate is consistently above 90 percent, and frequently reaches 100%, not counting patients in alternative care spaces, in recovery rooms or boarding in the ED. This represents a 9% increase from last year.
- Marlborough Hospital’s Med/Surg average occupancy increased by 13% between June of fiscal year 21 and fiscal year 22 year to date.
- HealthAlliance-Clinton Hospital’s Med/Surg average occupancy increased by 8% between June of fiscal year 21 and fiscal year 22 year to date.
- And our newest community hospital that joined our system last year, Harrington Hospital in Southbridge, had a 16% increase in Med/Surg average occupancy between June of fiscal year 21 and fiscal year 22 year to date.

The Medical Center’s Emergency Department (ED) is the second busiest in the Commonwealth and has a high patient acuity level. This is where the bed crisis is most apparent. As a conservative estimate, at any given moment in time there are an average of 157 patients in our ED- a 35% increase over FY 19 levels. Over the last year, non-psychiatric ED patients who require admission (about 28% of patients) spend on average 17 hours as “boarders” in the ED. (Statewide standards label patients as “boarders” 2 hours after admission, so this equates to an average of 19 hours from the time of admission until getting a bed). The average number of non-psychiatric boarder hours at the ED has increased 91% from FY 2018 to FY 2021. Additionally, at the beginning of each typical day, between 50 and 70 patients are boarding in the ED, and sometimes even more.

The bed crisis in central MA has a broader impact than Medical Center ED boarders. As the only one of the state’s six academic medical centers (“AMC”) located outside of the City of Boston, the Medical Center is the sole provider of a wide range of highly specialized care for the 1.5 million people living in central Massachusetts. From February 2021 through February 2022, the Medical Center had to decline 43% of all patient transfer requests from community hospitals due to capacity constraints – this represents over 3000 patients in one year who needed our care, but whom we could not accommodate – many of whom had to leave the region entirely to receive their necessary treatment.

This places incredible strain on the patient and their families served by our community hospitals and other providers in our regions as patients have to travel to receive high acuity care in a Boston AMC, all at a higher cost to them and their insurance company (if they have insurance) since UMass Memorial is consistently among the lowest cost AMC in Massachusetts, according to CHIA’s all payer data.¹ Furthermore, numerous studies have shown that prolonged delays in accessing care for high acuity patients

¹ CHIA’s annual *Massachusetts Hospital Profiles Report* demonstrates that in 4 out of the past 6 reported fiscal years, UMass Memorial’s inpatient rates were the lowest of the six AMCs, and in the other 2 fiscal years it was second lowest.

increases their likelihood of adverse health outcomes (including mortality), increases lengths of stay, and increases the likelihood that patients will need costly post-discharge treatment.² All of these factors drive costs up.

- **Role as clinical partner of the UMass Chan Medical School and regional safety net:**

The Association of American Medical Colleges projects a national physician shortfall by 2034 of between 38,000 to 124,000 physicians.³ Massachusetts is not immune from this national trend, as has been made clear by the workforce challenges presently confronting all hospitals here. The UMass Chan Medical School plays a critical role in addressing this shortfall; unlike other medical schools in Massachusetts, most UMass Chan students are from Massachusetts and most remain here to pursue their careers. They truly are the Commonwealth's future physician workforce.

UMass Chan could not educate the future physician workforce of Massachusetts without the partnership of UMass Memorial Health, the school's non-profit clinical partner. UMass Memorial is a truly unique organization that was created by an act of the legislature in 1997. By statute, UMass Memorial is obligated to do three things: to provide highly specialized clinical services not otherwise available to the people of Central Massachusetts, to provide care to the indigent populations of Central Massachusetts, and to support UMass Chan Medical School through certain contractually specified payments.⁴ It is important to recognize, that while UMass Chan alumni practice in virtually all health systems in the Commonwealth, thus providing a statewide benefit for all providers and patients, UMass Memorial Health is the only provider mandated to help subsidize the costs of their education.

While our system benefits from the innovative research and talented faculty employed by UMass Chan, the partnership cost our system over \$321 million annually in direct payments to the UMass Chan Medical school. As the safety net provider in our region, we provide services to patients covered by Medicaid and other state programs for low-income individuals. Each year, we experience an annual shortfall of more than \$200 million (FY 2021 was \$241M) between both our support of UMass Chan and the provision of care to low-income patients. As such, UMMH is fundamentally subsidizing two important state programs, MassHealth and

² Sources: [Emergency department boarding: a descriptive analysis and measurement of impact on outcomes | Canadian Journal of Emergency Medicine | Cambridge Core](#); [The Association Between Length of Emergency Department Boarding and Mortality - Singer - 2011 - Academic Emergency Medicine - Wiley Online Library](#); [Mortality Associated With Emergency Department Boarding Exposure: Ingenta Connect](#)

³ Source: <https://www.aamc.org/news-insights/press-releases/aamc-report-reinforces-mounting-physician-shortage>

⁴ Chapter 163 of the Actos of 1997

the UMass Chan Medical School. Subsidizing UMass Chan while meeting our obligation as a safety-net provider severely limits our availability to slow down further cost growth for our commercially insured patient populations.

2. **Unequal and unnuanced cost containment policies favor health systems with a higher base cost and more commercially insured patients.** Under the commonwealth’s cost containment law, the Massachusetts Health Policy Commission (HPC) and the Center for Health Information and Analysis (CHIA) monitor commercial spending relative to a percentage-based, year-over-year benchmark, currently set at 3.1%. However, this cost containment strategy favors systems with higher baseline costs, while disadvantaging those who serve low-income and underinsured residents.

UMass Memorial Medical Center (UMMMC) continues to be one of the lowest cost academic medical centers (AMCs) in the state on a net patient service revenue per case mix adjusted discharge (NPSR/CMAD) basis. While one of the lowest Cost AMC’s, the Medical Center maintains the lowest profit margin and the second highest payor mix of the AMC cohort (see table below).

- o **HPC Hospital Profiles Reports for the AMC Cohort list the following:**

Hospital	NPSR/CMAD	CMI	Margin	Public Payer Mix
UMMMC	\$13,893	1.53	2.3%	66.5% DSH
MGH	\$16,145	1.8	5.2%	57.2%
BWH	\$18,590	1.72	2.4%	55%
BIDMC	\$13,581	1.54	4.7%	56.1%
TuftsNEMC	\$16,239	1.8	3.7%	64.4% DSH
BMC	\$16,282	1.36	<u>4.9%</u>	74.5% DSH
Median			4.2%	

The HPC’s narrow focus on the rate of increase year-over-year disregards the fact that UMass Memorial’s baseline rates have been substantially lower than its academic medical center peers in Boston, which can afford lower rates of increase applied to a much higher base and whose payer mix is predominantly commercial. In other words, our higher cost competitors can afford lower rates of increase because they are starting at a higher base rate and a higher percentage of their payer mix is commercial to absorb the losses on a smaller percentage of public payer and specifically Medicaid patients.

Holding UMass Memorial Health to the same rates of increase as the higher cost Boston systems would only freeze the existing commercial rate inequities in place, leaving UMass Memorial without the resources necessary to subsidize its public payor losses and to invest in services to remain competitive in the commercial market. It is difficult to justify holding Mass Health Essential Hospitals to the same cost trend benchmark as hospitals without similar obligations to treat indigent and underinsured patients or, in our case, to bear the unique public burden of subsidizing the Commonwealth’s only public medical school.

Additionally, cost containment in the future must acknowledge changes in acuity of our patient population. Based on trends from the last decade, the acuity of our patients continues to increase, as our population ages and patients present with increasingly complex health conditions. This means that costs will likely increase to ensure the quality provision of care, not only to account for inflation and other forms of increases. Additionally, our system has invested in cost-saving interventions (like steering low acuity patients to urgent care centers, resulting in higher costs cases remaining in the ED and moving outpatient surgical cases to ambulatory surgery centers) that are not accounted for in analyses of CMI and cost trend data.

The reverberations of the COVID pandemic should be taken into consideration when analyzing cost trends. As described in the 2021 Cost Trend Testimony, UMass Memorial Health stood up the state's first field hospital at the DCU Center twice during the pandemic; the \$4 Million price tag of this project was not fully recovered from state and federal relief. Tertiary providers—and DSH hospitals in particular—handled the majority of the COVID inpatients with the greatest acuity. Length of stay increased during and after the pandemic (both from increased severity and in discharge delays from staffing shortages in SNFs); these delays in care have skewed cost trends. Similarly, the ongoing workforce crisis threatens our ability to deliver safe as our staffing levels in key areas sink below established threshold—and we must pay a premium for staffing in this current environment.

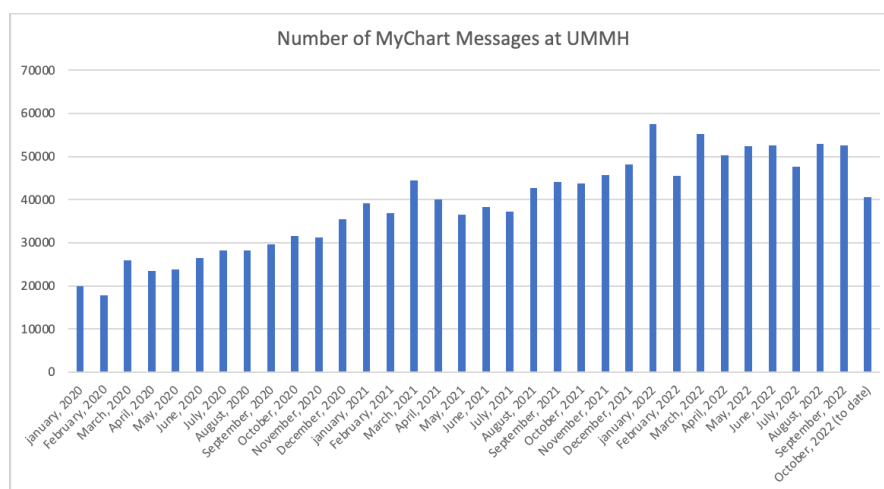
In summary, UMass Memorial shoulders a disproportionate share of the Commonwealth's public payor patients, provides the only Level 1 trauma and Level III NICU services in all of Central Massachusetts, meets its statutory obligations to financially support the public medical school, and operates one of the lowest cost academic medical centers in the Commonwealth. Factors like these necessitate a more comprehensive and nuanced approach to healthcare cost containment in the commonwealth, especially with the increasing focus on providing equitable, high-quality care to all Massachusetts residents.

3. Reimbursement landscape that is not changing to reflect new and innovative care delivery care approaches that improve patient outcomes, address inequity, and reduce costs. Here are a few specific examples:

- Excessive and worsening administrative burden from multiple payers and increasing regulatory reporting requirements, as we and other health systems have reported in past cost trend testimony.
- Lack of sustainable, permanent reimbursement structures for new and innovative ways to provide care in lower-cost ways (Telemedicine, mobile integrated health, hospital at home, SNF at home, etc.). We are investing in these areas without necessarily being reimbursed (therefore, we need to

cover those costs from other parts of our budget and assurance that these programs will continue to be licensed beyond the public health emergency).

- There are inadequate reimbursement systems for meeting health-related social needs through a peer, non-clinical workforce (community health workers, social workers, etc.). Even the effort of gathering a complete listing of social determinants of health is time consuming and is an uncompensated mandate. Health systems are not designed or structured to act as social service organizations, and as such, we have limited staffing and expertise in addressing the social drivers of health problems when they are identified.
- Over the past 2 years, our clinical and IT teams have worked hard to get our patients to use MyChart. As such, our clinical staff have had to spend increasing time responding to and sending MyChart messaging. Nationally among Epic users, there was about a 50% increase in MyChart messaging over the first year of the pandemic. At UMass Memorial, we saw a similar trend: the number of MyChart messages have more than doubled since January 2020 (see the chart below). While this best practice adds value to our patients and increases the efficiency of our care delivery, messaging patients requires increasing time from our caregivers without being reimbursed by payers.



Providing more and more unreimbursed services provides additional drain on our workforce and leads to ongoing burnout of providers. Our primary care workforce is shrinking; there are not enough primary care providers for the patients in our communities who need them, and continuing to push more work downstream to primary care providers will continue to exacerbate this growing shortage.

b. Please identify and briefly describe the top strategies your organization is pursuing to address those concerns.

1. **Investments in Value-Based Care:** In the last few years, we've made significant investments in new value-based programs with a goal of reducing total medical expense and increasing quality of care and overall health, particularly among underserved populations. In the last year, we've launched (or prepared to launch) the following programs:
 - MassHealth ACO with Point32Health to start April 1, 2023.
 - Mass Advantage, a new joint venture, Medicare Advantage Health Plan that began on January 1, 2022.
 - Primary Care First, a voluntary five-year Medicare value-based program that began on January 1, 2021. UMMH is one of the largest participants in PCF in the country, with 53 practices and 26,000 Medicare beneficiaries participating in the program.
 - BPCIA – Medicare Bundled Payment Program, expansion of the voluntary program which we originally joined in 2015. This program cares for patients in four service lines (orthopedics, spine, neurology and gastroenterology) for 90-day periods following a patient's qualifying acute health care event.

2. **Planned Inpatient Bed Expansion:** While a long-term solution to the 300+ bed shortage in central MA would be the building of a new inpatient tower, we are implementing a multipronged strategy to increase the capacity of the Medical Center. The cornerstone of this strategy is to add 91 acute care beds that are the subject of a pending Determination of Need ("DoN") application with the Department of Public Health. (The Medical Center has already implemented other prongs of its strategy, including a variety of bed flow improvement tactics and a new *Hospital at Home* program, through which patients receive acute level inpatient care in their own homes.) Of the 91 inpatient beds included in the DoN application, 19 will be on the Memorial campus. The additional 72 will be single room occupancy beds produced by renovating the former Beaumont Skilled Nursing facility adjacent to the University campus. The former Beaumont facility will essentially become a hospital wing of the University campus.

This inpatient bed expansion is remarkably low cost. The total project cost is expected to be approximately \$140 - \$150 million, which is significantly lower than similar recent DoN bed expansion proposals by other systems. As a result of this low cost, UMass Memorial will be well positioned to remain the most efficient AMC in Massachusetts. These plans represent the most economical and fastest route to gain beds on both campuses and are widely supported by the community. This project will relieve the flow congestion that paralyzes our caregivers today and will allow us to accept patients from this region. And these renovations will create an enhanced patient and family experience, complete with private rooms and technology-enabled patient care innovations.

Consistent with its Anchor Mission, we plan to collaborate with local community organizations to promote job opportunities and training for local residents who face barriers to employment in order to fill the nearly 500 new FTEs that will be

needed to staff these new beds. We also hope to contribute substantially to the local economy through the construction process, with special attention to creating local jobs and partnering with minority and women-owned vendors.

3. **Innovative Interventions:** Despite the challenges we've faced with our bed shortage and the consecutive surges of patients due to the pandemic, our innovative teams at UMass Memorial Health have been able to leverage emerging technologies to create state-of-the-art programs to care for our patients who need us most. These teams have done so out of necessity, not because they've had the luxury of abundant resources to try new ways to treat patients. Here are a few examples of these innovations that have helped address our inpatient capacity constraints:
 - **Hospital at Home (HAH)** is a key part of strategy to expand patient capacity, reduce costs, and improve outcomes for low-income patients. We initiated our program in August 2021 and ramped it up quickly. Health equity has been a major focus of our program roll out; for example, we provide audio/video translation services for non-English speakers and turnkey technology to serve patients who do not have access to the internet or technology, our caregivers focus upon social determinants of health and connect patients to appropriate services, we offer medical meals to all patients, and we ensure there are no incremental costs to patients for receiving care at home versus within a traditional hospital setting. In its first year, 91% of Medical Center HaH patients have been publicly insured: 45% traditional Medicare (one-third of whom were dual-eligible for Medicaid); 22% Medicaid; 19% managed Medicare; and 9% commercial. Compared to brick-and-mortar hospital benchmarks, outcomes have been positive, especially for the lowest-income patients with the most significant SDOH challenges. For dual-eligible patients, the Medical Center HaH 30-day readmission rate has been 7.9%, compared to a 21.5% national brick & mortar benchmark; and for Medicaid patients, the Medical Center's 30-day readmission rate has been 5.7%, compared to a 13.7% national brick & mortar benchmark. These numbers are remarkable and are indicative of reductions in 30-day total medical expense incurred by CMS. The Medical Center is generating savings to public payers in the form of 20-30% reductions in 30-day readmissions and 80-90% reductions in transfers to skilled nursing facilities. Reductions in readmissions and SNF transfers are likely most pronounced among Medicaid and dual-eligible patients due to our caregivers' approach to understanding and addressing social determinants. Read more about our HAH program here: <https://www.ummhealth.org/hospital-at-home>
 - **Mobile Integrated Health** was launched in June of 2021 as a collaboration between the UMass Memorial Medicare ACO (UMMACO) and Worcester EMS to reduce hospital admissions and emergency department admissions by sending paramedics into selected patients' homes to provide healthcare

services and interventions. This program has at its core, the mission of providing excellent care to ACO members in a mobile format using highly skilled prehospital providers, EMS physicians, and with close integration with the ACO Care Management team. In its first year, the MIH program had steadily increasing patient contact and ended the year with almost 1000 encounters. The service has rapidly expanded to include 24/7/365 coverage with four full time MIH paramedics. Preliminary results indicated that patient and provider satisfaction is very high, and that resource utilization has been reduced among users of the service. In the second year of the program, MIH will expand its service area to include all of Worcester County and begin offering mobile x-ray and ultrasound capabilities. The partnership between UMMACO has both proven successful and shows great promise for growth and expansion in the coming year.

- **Road to Care Team** provides substance use disorder and other health services to the homeless population in Worcester and central Massachusetts. This fall, through the kindness of New England Patriots owner Robert Kraft and his family, the new Kraft Community Care in Reach® mobile unit will allow the road to care team to bring on-demand access to addiction care where people need it most and help steer addicts toward long-term services.
 - **The Shields Specialty Pharmacy** is a joint venture between UMMH and Shields Health Solutions to provide integrated solutions to increase adherence to medications and improve the health of patients with complex health conditions. We've saved an estimated \$10 Million by helping our patients adhere to the medications prescribed for them.
 - **Rehab-at-Home** (sometimes referred to as "SNF at Home") model, to be rolled out at UMMH soon in partnership with a Bayada, will create an accelerated path home for patients when discharged from a UMMH member hospital through the provision of skilled and personal care needs that are tailored to meet patient needs. The goal of the program will be to reduce medically unnecessary admissions to an acute care hospital or post-acute facility-based setting following discharge from an acute care hospital. This program will build off the success and processes established through the Hospital-at-Home and Mobile Integrated Health Programs.
 - **ED relief efforts** in our system are building off the successes of the mobile integrated health program. We've developed protocols to allow some patients to return to UMass Memorial Health for a CT scan or other study without needing to go through the ED for assessment, for example.
4. **Administrative Efficiencies:** Our health system is committed to innovation, process improvement, and Lean management—acknowledging the best ideas come from caregivers at all levels within our organization. In 2021, we partnered

with KaiNexus to build out our process improvement platform, called Innovation Station, which enabled us to take our idea systems to the next level. Since its inception in 2013, our idea systems have empowered our caregiver teams to identify and implement more than 107,000 improvements. These ideas help to provide higher quality and more efficient care for our patients, and to be a better workplace for our caregivers.

In 2022, UMass Memorial began the implementation of a new system-wide enterprise resource planning (ERP) platform intended to provide for a better administrative experience for our caregivers, replace numerous antiquated administrative systems and to drive more efficient operations with better data. We anticipate this project to take about 2 years and with an overall cost (combined internal staff time and external contracts) of \$70 to \$85 million.

In the most recent (June 2022) Vizient cost efficiency report, UMass scored above average in terms of efficiency with a score of 54.18 which put the medical center as 46 out of 108 similar size hospitals in the country. This ranking is remarkable given our costs include the unique and sizeable payments we make to the UMass Chan Medical School.

- c. Please describe your progress in the past year on efforts to collect data to advance health equity (i.e., data capturing race, ethnicity, language, disability status, and sexual orientation/gender identity, see 2021 Cost Trends Testimony), including specific metrics and results. Please also describe other specific activities your organization has undertaken to advance health equity.

Data to Advance Health Equity:

As described previously, we undertook a system-wide cleanup of our patient race and ethnicity data stored in EPIC (the system's EMR) resulting in 50,000 updated records. Race, ethnicity, and language data (Spoken Language, Written language, Hispanic Indicator, Ethnic Background, and Race) are now collected as a standard workflow for all patients within all entities utilizing Epic. Over the last year, we've begun the background planning work for Harrington Hospital to migrate to the use of EPIC, including training employees on appropriate race, ethnicity, and language information collection. Currently all Epic users are trained on collecting Race, Ethnicity, and language data as part of Registration 101.

In the last year, we've made significant progress on collecting Sexual Orientation and Gender Identity (SOGI) Data. We rolled out training to all Epic Users on the SOGI fields and how to use and collect this information in patient interactions. As of October 2022, 7.3% of patient had the field for gender identify filled out, up from less than 2% at the start of 2020. There was similar progress for the fields of sexual orientation (6.7%, up from less than 1%), sex assigned at birth (7.04%, up from less than 1%), patient pronouns (1.07%, up from less than 0.5%), and preferred names (5.14% up from less than 0.5%).

For data collection regarding health-related social needs, we've made significant progress in expanding the use of our social determinant of health (SDOH) 14-item screening tool embedded into EPIC. As of October 2022, 80% of primary care practices in the UMMH system (44 practices) are currently conducting health-related social needs screening, and 12 caregiver teams are conducting SDOH screening in varied ambulatory settings such as specialty practices, clinics, and departments including our Diabetes Center of Excellence, Oncology Clinics, Financial Counseling, and all Bundles Programs. This expansion has resulted in 48,421 unique patients screened for health-related social needs to date in CY 2022 as of October 9 resulting in an anticipated 100% annual increase over the 30,182 patients screened in 2021. Additionally, we've begun the work to build health-related social needs screening into EPIC for use in the inpatient, emergency department, and behavioral health settings.

Addressing Identified Health Related Social Needs:

With significant needs in our patient populations related to stress, housing, and food, we've been pursuing both evidence-based and creative strategies to provide closed loop referrals and meet patient health-related social needs. We've invested significant resources into the expansion of the CommunityHELP Platform, in direct partnership with Reliant Medical Group. Since January, we've launched a new CommunityHELP Partner Network and engaged 9 new community-based organizations (CBOs) to date with 12% YTD growth in claimed organizations and 8% YTD growth in claimed programs in CommunityHELP. Starting in August 2022, we invested in hiring a community health worker to pilot the support, referral, and follow-up of patients with identified health-related social needs. In the first month of onboarding this community health worker role, caregiver referrals to CommunityHELP resources increased 142% from 72 connections in the previous month to 174 connections.

In the last year, we've significantly expanded our efforts focused on food insecurity, a top health-related social need among our patient population. Leveraging philanthropic dollars raised to support our new 'Food is Medicine' Initiative, we've launched 4 pilot projects to address food insecurity among our patient population. In both our Cancer Center and Children's Medical Center, we are partnering with About Fresh to provide FreshConnect debit cards so food insecure patients can purchase fresh fruits and vegetables at participating grocers and farmers markets. Similarly, the Health Alliance-Clinton Healthy Food RX Food FARMacy Pilot provides tokens to patients with food insecurity for purchasing produce from Growing Place's mobile food market, along with linkages to other food resources like SNAP and HIP enrollment. Our fourth pilot, in partnership with Community Harvest, supports 10 families at the Benedict Family Medicine Clinic, who identified food insecurity as a need, with a weekly share of fresh produce, and we're currently in the process of expanding this pilot to another practice.

Other Equity-related Efforts

UMass Memorial has made considerable investments in resources to address the racial and ethnic disparities that we see in the overall health care system – not just here in our institution but across the health care industry. This year we created a new Associate Chief Quality Officer for Health Equity position, which will focus on improving the care and treatment we provide to under-represented patients and making sure we do so in a compassionate, culturally sensitive way. This year, we've invested in building out the newly created Office of Diversity, Equity, Inclusion and Belonging as an important resource for all of our employees systemwide, with three new staff members brought on to support the office's work. We also launched a new \$1M 'Equity Seed Fund' to implement our frontline caregiver's ideas for promoting equity in health care delivery and fostering a more equitable and inclusive workplace culture.

Building off the success of last year's True North Metric Health equity project focused on reducing the racial/ethnic gap in child well visit adherence across 53 practices (described in the 2021 Cost Trend Testimony), the cost of parking was identified by Black and Latinx families as a key barrier for completing well-child care visits. In response, we conducted a pilot intervention that provided more than 1,400 free parking vouchers at 4 pediatric practice sites. This year, we focused on increasing osteoporosis screening for non-white women. At baseline, the racial disparity was 13.9% between non-white and white women (50.4% vs 64.3%). At one-year follow-up, the racial disparity was 7.9% between non-white and white women (61.5% vs 69.4%) and the racial gap was closed by almost half (43%) due to health equity promoting strategies including increasing access and outreach.

In 2018, the UMass Memorial Board of Trustees adopted an Anchor Mission for our organization. This is a fundamental reimagining of the role we play in our community. It takes our nationally-recognized community benefits program and puts it on steroids. It does so by leveraging all of our organizational assets (intellectual and economic) in order to address social disadvantage and pervasive inequality in the community. We do so in three primary ways.

- First, we re-allocate 1% of our investment portfolio from stocks and bonds and into community investments. During the last year, we've moved the full 1% allocation—over 4 million dollars—into place-based investments that directly address social determinants of health across our service area. Investments made this year include: a tiny home village for the chronically homeless, an ice cream shop providing employment opportunities to youth with developmental disabilities; and affordable lease-to-own commercial units for minority owned-businesses to counter the effects of gentrification.
- Second, we rethink our hiring practices to specifically target some of our hiring from the most vulnerable neighborhoods in our community. During FY 2021, we hired 30 individuals from the most disadvantaged neighborhoods in central Massachusetts through educational pathways and direct referrals from community partners.

- And third, we transform our purchasing practices to substantially increase our purchases in minority and women-owned businesses. We've committed to tripling our purchases from minority and women owned businesses over the next 5 years. This year we put in place new systems for tracking our spend and identifying diverse and local vendors—and have started to see our spend shift with \$500,000 worth of new purchases from minority and women owned businesses this fiscal year.

We cannot do this alone, and we are partnering with numerous community groups in this work. We believe this approach positions us well to make good choices, working with our community partners, on how best to invest the community investment funds that are required from this project. UMass Memorial Health continues to play a key leadership role in convening the Equity Task Force in partnership with the City of Worcester to address racial disparities related to COVID-19; this group is now expanding to address other health equity issues facing city residents.

Collaboration is essential, but hospitals must continue to step up to show leadership. COVID laid bare the brutal inequities that continue to exist in society and this has enormous implications on health. COVID also uncovered the woeful underinvestment in our public health system. Hospitals around the country, including UMass Memorial Health, stepped up in heroic ways to fill that void, and we must keep doing so. Our UMass Memorial caregivers work tirelessly to provide outstanding care to our community, but we are equally tireless in using all of our resources to get outside our walls to create a more just society. We see that as inherent in our mission.

d. Please identify and briefly describe the top state health policy changes your organization would recommend to support your efforts to address those concerns.

- **Address the Biggest Drivers of Costs:** A 2018 JAMA article examined the disproportionately high costs of healthcare in the US compared to other high-income countries around the world—finding that despite similar utilization rates, the US spent twice as much as others on healthcare. The authors found that the major drivers of this cost differential can be linked to administrative costs, workforce costs, and pharmaceutical costs.⁵ Below are some things that we believe should be prioritized in line with these drivers, along with the other trends and challenges discussed in this testimony.
 - **Reducing Administrative Burden**—While a single payer system would offer transformative cost savings in terms of reduced administrative burden, the state could take more incremental steps to streamline

⁵ Papanicolaos I, Woskie LR, Jha AK. Health Care Spending in the United States and Other High-Income Countries. *JAMA*. 2018;319(10):1024–1039. doi:10.1001/jama.2018.1150

reporting requirements and reduce variations in rules and reporting structures among payers within the current system.

- **Addressing Accelerating Workforce Costs**—Even before the pandemic, workforce costs were a key driver of overall healthcare costs. With the current workforce challenges, we must act collectively and comprehensively to build and maintain a stable workforce. We need government investment into a comprehensive training and development program for all levels of positions within healthcare. This could include expanded training programs, tuition support and reimbursement and other resources that would attract and retain candidates—particularly in the areas where we currently have and expect future vacancies (like nurses, imaging technicians, PCAs, etc.). And, we must explore more sustainable platforms for supporting the education of physicians that won't require taking on hundreds of thousands of debt that necessitates a salary \$200,000 above peers in other countries to make up for this upfront investment. Much like health reform, efforts like this could be tested in Massachusetts to inform a more comprehensive approach to the healthcare workforce across the country.

Successfully building a sustainable workforce requires cross sector partnership involving healthcare, secondary and higher education, workforce development providers, and government. And within government, it would require cross-secretariat coordination and prioritization including, at a minimum, the Executive Offices of Health & Human Services, Labor & Workforce Development, and Education.

- **Further Containment of Pharmacy Costs**—The commonwealth must continue to explore options for controlling costs of medications through cost-setting and other regulatory action.
- **Update the HPC's cost containment approach:** As described in our answer to question A, the current cost containment approach used by the HPC favors systems with higher base costs and more commercial payers; it also doesn't acknowledge the unique role the UMMH plays in building the healthcare workforce of the commonwealth through our subsidy of the UMass Chan Medical School or efforts undertaken to move low acuity patients into lower cost settings. As the HPC moves forward into the future, they should reimagine the approach for containing costs across the commonwealth. One approach would be to set a floor and ceiling rather than a single standard, year over year percentage increase target. The cost containment targets could also be updated uniquely for each system or at minimum allow for changes to the target based on specific factors like

payer mix, serving as a safety net, or subsidizing the state's medical school.

- **Update Reimbursement Structures and Approvals:** In the absence of a comprehensive update to the way our country pays for healthcare services, HPC should work with CMS and others to create additional reimbursement structures to support newer, low-cost ways of providing care, along with ensuring long-term regulatory approval for these activities.

Programs like Hospital at Home, Skilled Nursing/Rehab at home, Mobile Integrated Health, ED diversion, Road to Care are proving to be the right care at the right place for patients and with new telehealth capabilities, providers are able to connect to care teams from the field and provide cost effective care. The additional and necessary benefit of these programs is to reduce pressure on the over-crowded emergency rooms and high-capacity inpatient units across the state. The expansion of risk-based, value-based contracts requires innovative approaches to bring the triple aim to life. These models do just that and, therefore, reimbursement for these programs need to be included via regulation into the budgets and fee schedules for all programs to ensure their longevity.

Congressional extension of the Hospital at Home waiver beyond the expiration of the PHE would advance two critical public health objectives: First, it will help alleviate the ongoing capacity crisis that causes many high-acuity patients in Central Massachusetts to either face serious delays in admission or be transferred to high acuity, tertiary care providers far from their homes and families. And second, it will ensure that low-income, publicly insured patients continue to receive care through a program that has demonstrated superior outcomes for the most medically complex and socioeconomically vulnerable. Failure to extend the authorization creates significant risk that commercially insured patients treated in pre-pandemic HaH programs (most of which were offered by wealthier health systems) will continue to access high quality in-home care, while publicly insured patients will be denied that option. Without extension of the Medicaid and Medicare waivers, commercial providers would be free to reimburse for HaH, but Medicare and Medicaid reimbursement would no longer be authorized under the terms of the waiver. Recognizing that the recently authorized Massachusetts 1115 waiver includes MassHealth participation in HaH, it nonetheless remains ambiguous as to whether the 1115 authorization includes the provision which made the PHE authorization feasible: namely, its waiver of Conditions of Participation for 24-hour on-site nursing. Under the PHE waiver, nurses visit at least twice per-day and are on-call to visit 24/7, but it is not feasible to have them on-site in patients' homes 24/7.

On a state level, fees related to expansion of programs like these (e.g. MIH waivers) should be streamlined and less costly.

While regulation is being developed to require infrastructure development and increased care coordination for patients regarding social determinants of health, little to nothing is being done to reimburse hospital systems to build these necessary services. In particular, community health workers and social workers have been traditionally underpaid thereby reducing the pool of these vital human resources and encouraging high turnover rates. The continued development of low-cost training programs for low income individuals to access as well as required minimum wages would provide the basis for growth in these needed caregivers.

QUESTION FROM THE OFFICE OF THE ATTORNEY GENERAL

Chapter 224 requires providers to make price information on admissions, procedures, and services available to patients and prospective patients upon request. In the table below, please provide available data regarding the number of individuals that sought this information.

Health Care Service Price Inquiries Calendar Years (CY) 2020-2022			
Year		Aggregate Number of Written Inquiries	Aggregate Number of Inquiries via Telephone or In-Person
CY2020	Q1	12	93
	Q2	11	64
	Q3	18	136
	Q4	21	101
CY2021	Q1	24	104
	Q2	21	145
	Q3	14	128
	Q4	14	97
CY2022	Q1	18	130
	Q2	19	119
	TOTAL:	172	1117