HPC QUESTIONS

1. UNDERSTANDING THE IMPACT OF COVID-19:

Please briefly describe how you believe the COVID-19 pandemic has impacted each of the following:

a. Your organization, including but not limited to the impact on your providers and other staff, and any impacts on your ability to recruit and retain staff:

Mass General Brigham cared for 14,000 COVID-19 patients at our hospitals from March 2020 thru October 25, 2021. We cared for an additional 400 patients at Boston Hope – a 1,000 bed field hospital that served post-acute COVID-19 patients and homeless patients. Boston Hope was a partnership of Mass General Brigham, Boston Health Care for the Homeless, the Baker Administration, Boston Mayor Walsh's Office, and local health care workers. Mass General Brigham oversaw much of the clinical care.

With the pandemic approaching its 20th month, burnout and emotional exhaustion are palpable across Mass General Brigham. While the percentage of Mass General Brigham physicians reporting burnout has remained statistically the same between 2019 and 2021 (40% in 2019 vs. 39% in the spring of 2021), we have seen a decline in the percentage of our trainees reporting fulfillment (31% in 2018 vs 28% in spring of 2021).

The nature of the emotional strain is evolving. Earlier on in the pandemic our providers described the emotional exhaustion of caring for so many patients dying without family nearby. Now, many of our patients hospitalized for COVID-19 are unvaccinated, and our providers tell us of the heartbreak of preventable loss, and the all-too-common skepticism when asking patients and families to adhere to infection control protocols for universal masking. At times our providers feel like the very foundation of medicine has been shaken. It is in the face of these circumstances that they continue to push forward, and Mass General Brigham continues to seek new ways to support our providers and our patients.

Given this emotional strain on health care workers throughout the pandemic, it is not surprising that fewer workers are choosing to pursue job opportunities in healthcare. Mass General Brigham is seeing a significant decline in applications. Applications for social work/mental health worker roles declined 18.1% from 2019 through 2021. Applications for nursing roles declined 20.2% from 2019 through 2021. To address the need for nurses at the bedside Mass General Brigham utilizes agency registered nurse (RN) staff. Average agency cost from FY16 through FY18 was \$37.9M per year. Agency RN cost increased 235% (projected) from \$43.6M in FY19 to \$146M (projected) in FY21.

Across the system, turnover is increasing. Turnover in all roles across Mass General Brigham increased from 18.4% at the close of FY19 to 21.2% at the close of FY21. For a system our size that translates into 17,024 employees leaving jobs at Mass General Brigham in FY21 compared to 13,634 in FY19. Turnover among nursing roles increased from 11.0% at the close of FY19 to 15.7% at the close of FY21. For a system our size that translates into 2,678 nursing employees leaving jobs at Mass General Brigham in FY21.

Between FY19 and FY21 open positions increased both across the enterprise and in key areas. All open positions across the enterprise increased 9.3% from 7,004 in FY19 to 7,652 in FY21. Open positions in nursing roles increased 41.3% from 1,279 in FY19 to 1,808 in FY21. Open positions for social service/mental health worker roles increased 55.6% from 239 in FY19 to 372 in FY21.

We have also seen an increase in the number and length of leaves taken by our employees. Employee may take a leave for an extended period of time due to their own illness, family illness, military service, or other special circumstances. From 2019 to 2021, the number of employees taking a leave has increased by 31% and the average length of leave has increased by 18%.

- 2019 the number of employee leaves taken 9,632
 Average length of personal illness leave 44 days
- 2020 the number of employee leaves taken 10,010
 Average length of personal illness leave 44 days
- 2021 (projected) the number of employee leaves taken 12,654
 Average length of personal illness leave 52 days

A similar trend exists among our nursing workforce.

- 2019 the number of nursing employee leaves taken 3,002
 Average length of personal illness leave for nursing employees 43 days
- 2020 the number of nursing employee leaves taken 3,325
 Average length of personal illness leave for nursing employees 45 days
- 2021 (projected the number of nursing employee leaves taken 4,329
 Average length of personal illness leave for nursing employee 50 days

We've implemented various compensation programs to support our employees in light of the impact of COVID.

- The COVID-19 Employee Grant Program to assist individuals employed by Mass General Brigham and its member organizations who experienced financial hardship during the pandemic. The grant was made available to employees earning less than \$55,000 annually. From May through July of 2020, 11,192 applications were approved for assistance and granted \$11 M to our employees. 265 of the applications received were written in a language other than English.
- Colleague Appreciation Bonus thank you and recognition to all our colleague and physicians across the system for their commitment to our patients and community during this unprecedented time
- Market Adjustments we have applied widespread market adjustments for many of our patient-facing colleagues and those who also serve in support roles to ensure the highest quality and safe care for our patient
- Critical Staffing pay we are recognizing our colleagues picking up additional shifts in areas where we are experiencing higher than expected vacancies
- Referral and Sign-on Bonus we are offering bonuses to new colleagues coming into hard to fill roles and referral bonuses to current employees for these same positions
- Low wage earners we have been intentional in targeting market adjustments and starting salaries for lower wage earners to well exceed any required mandates of minimum wages
- Annual raises despite financial pressures on our industry, we have reinstated annual salary increase budgets for our broad employee population

- Where We Work this summer we rolled out a program for leaders and colleagues to continue remote work through various solutions including remote and hybrid (remote and onsite) options
- b. Your patients, including but not limited to the direct health effects of COVID-19 as well as indirect health effects, such as the effects of deferred or cancelled care, exacerbation of behavioral health and substance use conditions, and effects from economic disruption and social distancing (e.g., evictions, food security):

Deferred Care

Our analyses have confirmed care for non-COVID health conditions was deferred, either by patient/family choice or provider judgement (patient was triaged and didn't need to be seen inperson), during the first wave of the pandemic, March through May 2020:

- Admissions to Mass General Brigham facilities related to cardiovascular disease, neurology, gastroenterology, urology, and obstetric related conditions decreased over 30% during this period compared to the same period in 2019.
- Health maintenance and prevention, screening-related imaging and procedures, physical therapy, and other outpatient treatments decreased similarly, having rebounded this summer (2021) approximately 30% from the same period in 2020.

Two-thirds of patients that receive care from Mass General Brigham providers, surveyed in the summer of 2020, reported they were delaying routine care, screenings, and even necessary treatments like chemotherapy and dialysis. Mass General Brigham implemented various approaches to encourage patient engagement in their care, such as technology-enabled patient platforms and virtual care capabilities. Safe, high quality access to care was emphasized and delivered:

- *Teams developed and followed strict infection control standards, and implemented the safe care commitment a policy developed to ensure patient and employee safety*
- Testing for COVID was implemented and patients/employees could be reassured of the safety of in-person care
- Public messaging and provider-to-patient communication was constant after the first wave regarding the importance to seek care for prevention, chronic conditions, and urgent health matters
- Assets quickly returned to full in-person capacity safely once each wave of increased COVID cases and admissions subsided providing access to "catch up" on deferred care

As a greater percentage of the population became fully vaccinated, starting in 2021, patients have been seeking all levels of care and volume has returned. Medicine (non-surgical) inpatient admission volume is similar between the two fiscal years 2019 and 2021 (October – September). Surgical admission remains slightly less than the same period pre-pandemic, not due to demand but capacity. With medicine patients staying in the hospital longer, there has been less capacity for inpatient surgery admissions.

- Case Mix Index (CMI) for inpatient medicine care is greater by 3% and 6% for surgical care in our AMCs 2021 compared to 2019 (1%-2% increase is considered significant). CMI is a measure that reflects the diversity, complexity, and severity of patient illnesses treated at a given hospital or other healthcare facility.
- The Length of Stay has increased ~5%, an effect of the acuity increase.

- Intubations in the AMC ICUs, for non-COVID patients, have increased over 15 percentage points this past summer, another indication of the severe condition of the patients seeking care today.
- Over the past 18 months, behavioral health has also seen a continuous increase in demand throughout the Mass General Brigham system as evidenced by an 8% increase in overall number of inpatient behavioral health admissions. We attribute the increase to the already high pre-pandemic capacity fill rates, as well as a significant increase in the volume of behavioral health patients "boarding" in emergency departments and medical surgical floors.

Deferred care combined with staffing challenges, and a lack of physical bed expansion, has created capacity challenges impacting patients as well as physicians, nurses and care teams trying to provide access to the most advanced, expert care in the highest quality, safest manner, while managing through a pandemic.

The resulting acuity has been driving occupancy levels for the Brigham, Mass General, Newton-Wellesley, Faulkner, and Salem Hospital to levels beyond any experienced prior to the pandemic, and the industry recommended 85% to 90% (depending on the size of the organization), creating significant difficulty in running the hospitals:

- requests for transfers of patients to higher levels of care are denied;
- patients wait in temporary beds and settings in or near the emergency department boarding ("boarders") while waiting for hours/days for an inpatient bed or psychiatric bed;
- medical patients are placed in surgical beds which means the specialized nursing care is not aligned with a common patient condition, surgery patients are "crowded out", operations are canceled and rescheduled further exacerbating the problem;
- patients wait for hours in post recovery units after surgery and procedures while waiting for an inpatient bed;
- managers and clinical leaders spend time hastily re-arranging schedules; and
- *staffing auxiliary spaces and Emergency Departments becomes extremely crowded.*

At our academic medical centers, occupancy has been over 100% <u>many days a week</u> in September and October 2021. At our community hospitals, occupancy has been over 100% <u>at</u> <u>least one day a week</u> in September and October 2021. See attached Tables 1, 2, and 3 that reflect the challenges related to capacity pre pandemic compared to current state.

Operations, clinical, and technical leaders are working to solve for the capacity constrains stemming from deferred care, staffing challenges, and a need for inpatient bed expansion to enable hospitals to operate closer to the target 85-90% occupancy range.

Behavioral Health

The tremendous need for increased mental health services existed prior to the COVID-19 pandemic. It is the #1 cause of disability worldwide, with 50% of mental health disorders arising by age 14, and 75% by age 24. Suicide rates have increased by 35% in the past 20 years, and it is one of the leading causes of death for children and adults, ages 10-34.

These statistics are fueled by a longstanding history of inadequate access to mental health care and longstanding stigma associated with mental health disorders. Fifty-six percent of patients with mental illness in the U.S. did not receive care in 2019 and the systems of care in place are often fragmented and difficult to navigate. In addition, there is a workforce shortage of clinicians nationally due to the under-reimbursement by payors and carve-outs which create obstacles and disincentives to access for both patients and clinicians.

Despite the substantial investment of resources for behavioral health at Mass General Brigham, on any given day in our system, more than 10% of our psychiatric inpatient beds are unable to be used because of staffing shortages. At last survey (October 2021), Mass General Brigham's inpatient psychiatric units had openings for 75 Registered Nurses, 119 Mental Health Workers, 9 Physicians (or prescribers), and 21 Social Workers. Additionally, with high volumes of highly acute patients, more staffing (such as PCAs, sitters, and security) are often needed to meet 1:1 requirements.

The pandemic has only worsened this crisis, driven by factors such as fear, loss, isolation, economic hardships, impaired resilience factors, and special stresses on health care providers. This has not only impacted those with existing mental health needs, but also many with no previously diagnosed mental health disorder. According to the Centers for Disease Control in 2020,

- 40% reported mental health/substance difficulties
- 31% with symptoms of anxiety or depression
- 13% started or increased substance use
- 11% seriously considered suicide

Unfortunately, while the demand for mental health care increased during the pandemic, Mass General Brigham is faced with strained inpatient bed capacity due to workforce shortages, social and physical distancing measures, and inpatient units closed for COVID-19 outbreaks. In addition, residential services, a common disposition plan for patients leaving the inpatient units, were challenged due to congregate settings with limited medical capabilities. Lastly, demand for outpatient services far exceeded supply for those patients in need of mental health support and intervention for less acute conditions.

While solutions to these challenges have been daunting, Mass General Brigham has implemented numerous initiatives and made significant financial investments over the last two years to improve access to both inpatient and outpatient care for our patients.

Mass General Brigham has implemented the following initiatives to address the Emergency Department (ED) boarding crisis and the inpatient access issue:

- Added 92 new inpatient psychiatric beds through McLean Hospital;
- Expanded the psychiatric footprint in the emergency department at Mass General Hospital from 6 to 20 bays, adding significant physician, nursing, and mental health specialists;
- Created a pediatric short-stay pilot program to discharge children and adolescents directly home from the ED/medical floors, rather than boarding for long stays, waiting inpatient disposition;
- Implemented a short-term program at Newton-Wellesley Hospital for pediatric cases in the ED to divert inpatient hospitalization;
- *Implementing a system-wide bridge clinic for pediatric care at home to divert hospitalization;*
- Implemented a daily capacity huddle focused on reviewing and discussing hard to place patients and identifying ways to streamline/improve admission processes and eliminate barriers;

- Created a Virtual Partial Hospitalization Program (PHP) and expanded across the system to support children boarding and to prevent inpatient hospitalization; and
- Increased salaries for many of the behavioral health workforce roles to address workforce shortages, recruitment, and retention.

Prior to the pandemic, there were longstanding, statewide demands for outpatient care that exceeded capacity --- a demand that further increased during COVID. Mass General Brigham rapidly transitioned to telehealth/virtual visits so as not to disrupt the care of existing patients. Because of its convenience and efficiency, our system was able to increase its capacity to also take care of new patients. It has also made a major investment in digital technology to provide alterative solutions to care for patients with lower acuity depression and anxiety.

Nationally and locally there exists a major challenge in recruiting and retaining a sufficient mental health workforce. This crisis impacts all levels of care, from ambulatory to inpatient settings. While these challenges existed prior to Covid-19, they have worsened considerably. Mass General Brigham is not immune to this issue and has engaged in two major behavioral health workforce initiatives.

- Develop a comprehensive 5 to 10 year behavioral health workforce strategic plan to increase the diversity of Mass General Brigham's workforce, implement salary adjustments, create career ladders, and increase doctoral level training programs.
- Support the state's effort to address the behavioral health workforce shortage. Mass General Brigham has made an \$18 M investment in community-based agencies and schools of higher education to increase the pipeline of the behavioral health workforce. Funds will be used to support programming for a variety of job roles, including but not limited to psychiatrist, psychologists, nurses, social workers, recovery coaches, etc. The funds may be used for:
 - Loan repayment programs in exchange for service in community health centers and inpatient psychiatric settings;
 - Needs-based scholarships, specifically for degree programs with a high proportion of diverse students;
 - *Clinical practicum stipends to increase participation in fieldwork (when unrequired) for students who would otherwise need to work; and*
 - Continued learning opportunities, dedicated mentorship, and leadership skills training to support career development so that staff remain in this field, working in community-based setting and in inpatient psychiatric hospitals.

Substance Use Disorders (SUDs)

The overdose crisis nationally and across Massachusetts has only worsened during the COVID pandemic, with rising overdose deaths and worsening racial disparities. The negative impacts of COVID on patients with SUDs includes:

- *Worsening racial disparities in access to opioid use disorder care;*
 - patients who speak a language other than English and Black patients had lower odds of buprenorphine receipt since COVID;
- Increase in alcohol-related morbidity and mortality amongst younger patients;
- Lack of availability of in person, low barrier treatment and harm reduction services;
- Lack of access to supportive housing, which makes treatment and recovery difficult; and
- Limitation in post-acute care resources for hospitalized patients, like skilled nursing facilities and residential addiction settings.

In response to these challenges, Mass General Brigham has made significant investments to addressing SUDs and focusing on improving equitable access to immediate treatment.

- Committed more than \$2 million in FY2022 to build capacity for low threshold treatment through expanding 4 regional Bridge clinics at Mass General, Brigham and Women's, North Shore, and in the Merrimack Valley to offer immediate assessment and treatment initiation for patients across the region, with a particular focus on delivering equitable, culturally relevant SUD care to eliminate racial disparities.
- Implementing universal alcohol use screening and treatment support to enable primary care teams to identify and respond to unhealthy alcohol use and alcohol use disorder.
- Increasing our primary care SUD resources in addition to this new funding.
- In combination with the new Bridge clinics expansion, there will be a total of:
 - o 19 recovery coaches;
 - 2.6 FTE of addiction physician time;
 - o 7 office-based addiction nurse care managers;
 - 5 therapists dedicated to SUD care; and
 - Protected time for an addiction champion physician in each institution.

Healthcare Disparities and Social Determinants of Health

The COVID-19 pandemic laid bare already-dramatic inequities in health outcomes and health care by race, ethnicity, language, and socio-economic status. COVID-19, by its very nature both a social and infectious disease, disproportionately impacted communities of color. In the communities served by Mass General Brigham, rates of positive COVID-19 tests in June 2020 in Chelsea were as high as 44%, in Lynn 29% and in Mattapan 23%, as contrasted with towns such as Wellesley (7%) and Weston (10%). Patients of color and those speaking languages other than English were disproportionately affected and accounted for greater proportions of Mass General Brigham's inpatient admissions for COVID as compared with inpatient distribution prior the pandemic.

Not surprisingly, the populations Mass General Brigham served suffered more food insecurity, with rates as high as 37% in Hyde Park, Mission Hill, Roxbury, and Dorchester, compared with rates of 19% prior to the pandemic in our Medicaid ACO patients living in a similar catchment area. We recognized the differential challenges of technology access when we needed it most during the height of the pandemic, with fewer of our Black and Latinx patients able to access virtual care models and public health and clinical messages delivered through our patient portal for lack of access. Given these barriers faced by some our patients with the greatest need, it was not surprising that we noted changes in care patterns and outcomes that were more prominent among patients of color (e.g., rates of hypertension control that fell from 87% to 76% among White patients, but 85% to 66% among Black patients. Dedicated work is underway to mitigate these disparities exacerbated by COVID-19 and a return to pre-pandemic levels. Once we have returned to normal, we will continue our efforts to make new gains on reducing health care disparities.

c. The health care system as a whole, including but not limited to how you think the health care system will change going forward, and any policies or innovations undertaken during the pandemic that you hope will continue (e.g., telehealth policies, licensure and scope of practice changes):

The Need for Scalability in a Healthcare System

The infrastructure of the healthcare system needs to fully support advances in medical care, including the infection control interventions that have been proven effective in the medical literature, both before and during the COVID-19 pandemic. Healthcare systems of the future must be able to 1) rapidly modulate capacity to accommodate surge incidents, ranging from timelimited increases in ordinary healthcare demand (like a bad flu season) to catastrophic events and 2) support isolation capabilities and single patient rooming when the mass casual incident is infectious in nature, as in a pandemic, in order to prevent avoidable infections and optimize resource utilization during normal operations

Surge Capacity - The recent natural disasters in New Orleans, New York, Puerto Rico, and Houston, as well as the COVID-19 pandemic, have demonstrated the need for hospitals to withstand a disaster and accommodate a rapid and/or a sustained influx of patients when needed. In the event of a future disaster or pandemic, healthcare systems must have the inpatient capacity necessary to care for patients and allow for timely admission from the Emergency Departments to the appropriate care setting.

Creating crisis capacity can be achieved by 1) flexing up a single patient room to accommodate an additional patient, or even two, in times of catastrophic demand/supply mismatch; and 2) utilizing resilient new hospital buildings to serve as medical sites of refuge in case of disaster thereby allowing standing hospitals to continue the needed care for its existing patients. For example, during the pandemic, Brigham and Women's Hospital was able to convert a resilient new building on campus from general medical/surgical care to large-scale intensive care because the single room configuration, and the size of the rooms, supported necessary patient care teams and equipment while containing infection and protecting both staff and patients.

Single Patient Rooms for Health, Healing and Infection Control - Single-bed inpatient rooms are the industry standard in the United States. In Massachusetts, hospitals undergoing new construction are limited to a maximum capacity of one bed per inpatient room. Research shows that the implementation of single-bed rooms:

- *Reduces airborne and contact infection transmission, providing a safer physical environment for inpatients.*
- Provides patients with increased privacy and reduced patient stress, leading to faster recovery.
- Lowers operating costs due to reduction in transfer costs and labor costs, decreased length of stay, and decreased medication errors and costs.
- Significantly improves infection control, as evidenced by decreased rate of nosocomial (i.e., hospital-acquired) infection, decreased patient transfers, and decreased patient length of stay.
- Contributes to better patient health outcomes, higher patient satisfaction, and overall health care cost savings.

Evidence strongly supports provision of care in private rooms to reduce risk for infections, and thereby reducing costs associated with hospital-acquired infections. Hospital-acquired infections are one of the leading causes of death in the United States, costing hospitals approximately \$9.8 billion annually. With a rapidly aging population across the United States, Massachusetts health care providers must plan appropriately for future age-related health care demands of older patients who are more vulnerable to contracting infections.

- The 65+ age cohort is expected to reach 77 million in by year 2034 and grow to 83.7 million by 2050, accounting for approximately 20% of the U.S. population.
- Massachusetts is expecting an even more rapidly aging population.

• The UMass Donohue Institute projects that by year 2035, the 65 and over population will represent 23% of the state's population.

Virtual Health

Telehealth has proven to be a lifeline for ensuring access to necessary medical care during the pandemic for both physical and behavioral health. Since the start of the pandemic Mass General Brigham has conducted over 3.8 million telehealth visits. In February of 2020, Mass General Brigham performed only about 1,500 telehealth visits a month, two months later in April, we were performing over 320,000 visits. Now we have leveled off at about 125,000 visits per month.

The healthcare system of the future will rely increasingly on virtual technologies to deliver care more effectively, more personally and more conveniently while preserving quality and lowering costs. In order for telehealth to continue to be viable it will be critical for Medicare to permanently lift its coverage restrictions. States must address medical licensure reciprocity in some manner, including greater clarity around the scope of practice and activities permitted for many non-physician specialties so as to protect providers and organizations when they try to do the right thing for patients. Permanent reimbursement is also critical for health systems to allow investment in resources to enable virtual care at scale so that total system costs can start shrinking. Lastly, standardization and normalization of policies around prescribing and dispensing medications, as well as establishing a valid physician (or provider)-patient relationship, are needed so that longstanding practices around these domains can be applied more widely without risk of failing to comply with a patchwork of regulations.

Home Hospital

We have proven during the pandemic that the delivery of hospital-level care at home is a substitute for traditional inpatient care and can be a meaningful alternative to alleviating capacity constraints. During the pandemic, we rapidly expanded our home hospital program to free up much needed beds in the hospital and avoided unnecessary exposure for our patients and their loved ones traveling to and from the hospital. This resulted in creating thousands of new bed days with a high safety profile. [Levine DM et al, JGIM, 2021] This was largely made possible by Medicare's Acute Hospital Care at Home Waiver issued in November 2020, as well as continued support by the Massachusetts Department of Public Health and MassHealth. All of which removed regulatory barriers and provided a consistent reimbursement structure. However, we are concerned that we may lose Medicare coverage if Congress does not intervene, as the Medicare waiver will end when the national Public Health Emergency expires.

Prior research at the Brigham and Women's Hospital has shown for acutely ill patients home hospital patients have lower 30-day readmissions, lower cost, and improved patient experience. The cost of care was nearly 40% lower for home hospital patients compared to control patients. Home hospital patients had fewer lab orders, used less imaging, and had fewer consultations. The team also found that home hospital patients spent a smaller portion of their day sedentary or lying down and had 70% lower readmission rates within 30 days than control patients. [Levine DM et al, Ann Intern Med, 2020]

2. EFFORTS TO COLLECT DATA TO ADVANCE HEALTH EQUITY:

a. Comprehensive data capturing race, ethnicity, language, disability status, and sexual orientation/gender identity is foundational to advancing health equity in the Commonwealth. Please describe your current efforts to collect these data on your patients. Please also describe specific barriers your organization faces in collecting such data and what policy changes or support has your organization identified as necessary to overcome such barriers.

At Mass General Brigham, patient demographics are collected at new patient registration, and thereafter updated at the patient's request. We focus on improving both the completeness of data (reducing the percent of data that are missing) and accuracy of the data (increasing the sensitivity and specificity of the data). Current rates of missingness among our adult primary care population are 6% for patient race and 14% for ethnicity. Our sensitivity for identifying Black and Asian patients is less than 90%, and the specificity of identifying Hispanic patients is less than 70%.

Various barriers exist to improving our demographic data, including optimizing the electronic health record build, lack of patient and staff awareness of the value of these data to our equity efforts, and competing priorities for data collection at the time of patient registration. We have optimized our electronic health record build. We are now reaching out to adult primary care patients via mailed survey, patient portal message, and email to improve our data. We are also increasing registrar training, deploying patient awareness materials, and developing workflows for settings with unique data collection workflows, such as for newborns.

AGO QUESTION

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.

See attached Table 4.

| Table 1. Academic Medical Centers | B | Brigham and Women's | | | Mass General | | | |
|-----------------------------------|-----------------|---------------------|-------------|-----------------|-----------------|-------------|--|--|
| | FY19 Jun-Aug | FY21 Jun-Aug | Increase | FY19 Jun-Aug | FY21 Jun-Aug | Increase | | |
| Average Med Surge Occupancy % | 94.5% | 96% | 1.5 pct pts | 98% | 98.7% | 0.7 pct pts | | |
| Average # Daily ED Boarders | 40 | 47 | 18% | 63 | 67 | 6% | | |
| Average ED Boarders Hrs Per Day | 179 | 409 | 129% | 466 | 668 | 43% | | |

Table 2. Capacity Metrics

| | Brigham and Women's and Mass General Combined FY19 Compared to FY21 (June - August) |
|--|--|
| Average Daily Walkouts from ED | Increased from 5 to 8 walkouts per day (about 2% of total) |
| Average Boarders Nightly in Post-Anesthesia Care Units | Increased from 5 to 10 boarders nightly |
| Med/Surge Transfer Declines | Increased by 5 percentage points |
| AMC Redirects to Community Hospitals Declined Due to Capacity Constraints | Increased from 5 to 338 declines |

| Table 3 Community Hospitals | Brigham and Women's Faulkner | | Newton Wellesley | | | Salem | | | |
|---------------------------------|------------------------------|-----------------|------------------|-----------------|-----------------|--------------|-----------------|-----------------|-------------|
| | FY19 Jun-Aug | FY21 Jun-Aug | Increase | FY19 Jun-Aug | FY21 Jun-Aug | Increase | FY19 Jun-Aug | FY21 Jun-Aug | Increase |
| Average Med Surge Occupancy % | 81.2% | 83% | 1.8 pct pts | 87.4% | 97.6% | 10.2 pct pts | 79.5% | 83.1% | 3.7 pct pts |
| Average # Daily ED Boarders | 5 | 12 | 140% | 9 | 23 | 150% | 21 | 40 | 90% |
| Average ED Boarders Hrs Per Day | 10 | 29 | 190% | 25 | 104 | 316% | 37 | 114 | 208% |

Table 4. Health Care Service Price Inquiries

| Health Care Service Price Inquiries | | | | | | |
|-------------------------------------|--------|---------------------------------------|--|--|--|--|
| Calendar Years (CY) 2019-2021 | | | | | | |
| Year | | Aggregate Number of Written Inquiries | Aggregate Number of Inquiries via Telephone or In- Person | | | |
| | Q1 | 0 | 2,459 | | | |
| СҮ2019 | Q2 | 0 | 2,746 | | | |
| | Q3 | 0 | 2,699 | | | |
| | Q4 | 0 | 2,451 | | | |
| | Q1 | 0 | 3,475 | | | |
| СҮ2020 | Q2 | 0 | 1,592 | | | |
| | Q3 | 0 | 3,867 | | | |
| | Q4 | 0 | 4,876 | | | |
| СҮ2021 | Q1 | 0 | 8,835 | | | |
| | Q2 | 0 | 7,525 | | | |
| | TOTAL: | 0 | 40,525 | | | |

Note: Some of the uptick in estimates in 2020 can be attributed to the guest/self-service estimate functionality we introduced that allows patients to create their own estimates via Patient Gateway and a web link. This was one of the CMS price transparency requirements.