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The Health Equity Accelerator at Boston Medical Center

As 2023 was coming to an end, the Health Equity Accelerator team at Boston Medical Center (BMC) had much of which to be proud. The initiatives they had driven and supported in the last two years were showing impressive reductions in health care outcomes racial and ethnic disparities among pregnant women and patients with diabetes. This was evidence that the innovative strategic approach underpinning the Accelerator's activities was a path worth pursuing at scale.

BMC's approach could become an example that other institutions, across the country and beyond, could follow to improve health equity. However, scaling this model did not come without challenges, which included financial sustainability issues, compatibility with incentive programs and new payment models, organizational change management, and, more generally, striking a balance between scaling replicable and standardized solutions and exporting a methodology that would enable other institutions to explore and identify solutions appropriate for their organizational context.

A Long-Standing Involvement in Health Equity

Boston City Hospital (BCH) opened in 1864 and was the first municipal hospital established in the United States. Boston Medical Center (BMC) resulted from the merger between Boston University Medical Center Hospital and Boston City Hospital in 1996.¹ As the primary teaching hospital for Boston University School of Medicine, BMC's commitment to education and research complemented their mission to provide accessible and exceptional care for all, regardless of their ability to pay.²³

By 2022, the hospital counted 514 beds,⁴ making BMC the largest safety net hospital and the busiest trauma center in New England. About 80% of its patient population was publicly insured or uninsured. 40% of MassHealth members^a received care at BMC. 57% of BMC's patients came from underserved communities, including low-income individuals and families, elderly community members, people

^a MassHealth was a program that combined Medicaid and the Children Insurance Plan (CHIP) for the residents of the Commonwealth of Massachusetts. Source: <https://www.mass.gov/topics/masshealth>, accessed January 1, 2024.

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with disabilities, and immigrants.⁵ About one third do not speak English as their primary language.⁶ Seven out of ten patients identified as Black or Hispanic/Latinx.

BMC was committed to fulfill its mission not only through clinical care, but also through programs and services addressing patients' health related social needs (HSRNs).⁷ The hospital had a long tradition of developing programs offering wrap-around services to complement medical care (see **Exhibit 1**). Known for its entrepreneurial spirit and organizational culture fostering innovation and experimentation, BMC was often recognized as a leader in this space and enjoyed great trust in the community.

A Rude Awakening

In 2020, media reporting of manifestations of violence against Black Americans and the disproportionate consequences of COVID-19 experienced by communities of color in the US sparked renewed attention toward racial inequalities.⁸ In Boston, despite the concentration of prestigious healthcare and academic institutions, Black residents were still 1.5 times more likely to die of COVID-19 than white ones, and COVID-19 infections were more than double among Latinx compared to non-Latinx. These statistics were only a piece of a larger picture showing communities of color consistently experiencing health outcomes that were materially and systematically worse than their white neighbors (see **Exhibit 2**). Additionally, the data showed that most of the health disparities across racial groups persisted after controlling for socio-economic status and other known drivers of variation in health outcomes.⁹ Prompted by these results, in the Fall of 2020, BMC performed an extensive analysis of their patient data across all clinical areas, to validate whether and to what extent these disparities may manifest among its patients' population.

BMC combined data from their electronic medical records systems and claims data from members of BMC's accountable care organization (ACO) with public health data from the Boston area (where most BMC patients lived) and publicly available reports such as the 2019 Community Health Needs Assessment from the Boston CHNA-CHIP Collaborative. The results were humbling. Elena Mendez-Escobar, Co-Executive Director of the BMC Health Equity Accelerator, recalled, "Despite the fact that BMC had spent decades to invest in inequities and social determinants of health (SDoH), when you cut the data by race and ethnicity, we had the same gaps that everyone else had. Whatever we were doing was not making a difference for our Black and Hispanic patients."

Hannah Leaver, Senior Director of Ambulatory Operations, described her surprise in finding that their efforts to improve diabetes care were not as successful as everyone thought.

We had worked on A1C^b control for years. In 2019, it was even part of our ACO contract. We made a huge effort and we hit the goal. We were so proud. And then, a year later, the data basically showed that despite hitting the goal, we had made the disparity in race worse. It was such a horrible pill to swallow. We really felt that we did not have the answers and we needed a much more in-depth quantitative and qualitative approach. We needed to hear from our patients, and specifically from our Black patients.

Part of the problem stemmed from how the data had been traditionally analyzed. "Insisting on methodological rigor can sometimes keep you away from uncovering the problem," added Mendez-Escobar, "For example, a significant effect of addiction may cancel out the effect of race, because most

^b Hemoglobin A1C was a commonly performed test to measure sugar levels in the blood, which would help in the diagnosis and management of prediabetes and diabetes. Source: <https://www.cdc.gov/diabetes/managing/managing-blood-sugar/a1c.html#:~:text=The%20A1C%20test%20also%20known,care%20team%20manage%20your%20diabetes>, accessed January 2, 2024.

of the patients we have with opioid use disorder are white. Means are blind to bias. When the percentage of the population that is non-white is much less than 50%, you need to work harder to isolate the issue. If you try to get a p-value that is too high, you end up discounting these effects, but that should not mean that they are not important.”

“We decided to look inside our own house and see what was going on here,” said Thea James, VP of Mission, Associate Chief Medical Officer, and Co-Executive Director of the Health Equity Accelerator, “We looked at the data, our entire enterprise. I mean, clinical areas, inpatients, outpatients, research, education, human resources, even public safety. And we found tons of disparities across the enterprise. It was a reckoning.”

The Health Equity Accelerator

BMC’s leadership elevated equity to a top organizational priority and acted to mobilize the entire enterprise to develop a new approach to address racial health inequities. The focus on race as the main driver of health disparities was a natural choice for BMC, given the make-up of their patient population and what they had learned from their extensive data investigation. Nina Kalluri, Senior Strategy Implementation Manager, explained,

When we talk about health equity, there are many socio-demographic criteria that important, including race, gender, sexual orientation, immigration status, etc. But if you don’t pick something to focus on, then it is very difficult to be specific about implementation strategies. As every healthcare system, we have limits on what we can do, what we can provide, what our bandwidth is. The core tenet of any type of meaningful clinical or non-clinical intervention is to be tailored to the patient population. When you are not specific about your patient population, you can’t be specific about your interventions, and your results are only as specific as your intervention is. Our approach mandates that we really put the patients at the center of our model and identify what their assets are, what barriers they encounter, what our role is in perpetuating or exacerbating those barriers, and identify where opportunities for intervention and remediation are.”

In the Fall of 2020, six working groups involving about 80 leaders from across the organization, were formed to study opportunities for improvement in (1) clinical operations, (2) specific areas of high inequity already identified, (3) community engagement and SDoH, (4) research and education, (5) policy and advocacy, and (6) diversity, equity, inclusion, and belonging among the workforce.¹⁰ “The goal was to identify four or five disparities that we were going to make significant progress in closing over the next 12 to 24 months,” recalled James. “The meeting cadence was onerous. We met every single week and everybody had to report out. We also had to report out monthly on Zoom to a big oversight committee [i.e., the Equity Oversight Group – see **Exhibit 3**]. You could not just come up with something that looked like what you’ve always done, which is identify gaps with no intentionality to close them.” Any proposed solution would need to be transformational, scalable, long-term, and sustainable.¹¹

Kalluri recalled “We started with an enormous set of potential gaps to address, including substance use disorder, interpersonal and community violence, infectious diseases including COVID-19 and sexually transmitted infections, behavioral health more broadly, pediatric asthma, all sort of conditions exhibiting significant racial disparities in outcomes, both at BMC and more broadly in Massachusetts.” Three criteria determined the prioritization among the identified gaps: (1) what mattered to BMC’s patient population, (2) where did BMC have the expertise to inform the development of a solution, and (3) where could BMC actually make a difference. Kalluri explained,

We had to assess what our institutional capabilities were, where did we have clinical operational leadership to really own and push forward an aggressive and unprecedented kind of rapid quality improvement, agile iteration of work. We also needed to actually think about what our patients care about. You can't be patient-centered without engaging with the patients and their families. You have to ask yourself 'does anybody want this?' Finally, we needed to select metrics that were movable in a relatively short period of time.

The working groups identified five key clinical areas that offered opportunities for significant improvement in racial disparities: (1) maternal and child health, (2) infectious diseases, (3) behavioral health, (4) chronic conditions, (5) Oncology and end-stage renal disease (ESRD) – see **Exhibit 4**. The focus on clinical areas was consistent with the competitive advantage that BMC could offer in addressing racial inequities in patient outcomes. Mendez-Escobar explained, "The type of inequity is setting the call. This is what you are actually trying to change. Then you pull back from that and identify how you are best positioned to contribute. Had we chosen to focus LGBTQ+ as the source of inequity, maybe we would not have enough numbers among our patients to make a difference through changes in clinical care. In that case, we may have chosen to focus on research, because we have a few nationally renowned experts on transgender health that are prolific producers of research. The "how" needs the "what" for guidance, so the "what" needs to be chosen first."

A Hub-and-Spoke Model

The BMC Health Equity Accelerator was formalized in the Fall of 2021 (see **Exhibit 5**). The term "accelerator" was deliberately chosen to highlight the nature of the new entity and its innovative approach to addressing the gaps identified by the working groups. Mendez-Escobar explained,

We chose to adopt a operational approach instead of an academic approach. We don't want to wait ten years for the results of randomized control trials telling us what the perfect answer is that will work 100% of the times. We start from the information that we have right now and do what we feel might work. We run diagnostic processes for 3-6 months to fine-tune our solutions. Of course, we are not going to solve diabetes in six months, but we are going to know enough to prioritize concrete actions for the next 2-5 years. The information we have comes from interviewing our patients, clinicians, community leaders, looking at the data, literature reviews, identifying barriers, design thinking, and understanding what we can do. With this information we can come out of the 3-6 months process with 5-10 concrete initiatives at scale that we are willing to try out. It takes being comfortable taking the risk on the basis of information that suggests that something is going to work.

Kalluri stated, "Most days, I feel I am working at a startup and not at a major integrated payer-provider. Our mindset is that we cannot continue to think like a healthcare institution of the past. We have to have that entrepreneurial startup-esque mindset to move at a speed that can really meet our patients. It has been exciting and different."

Each initiative championed by the Accelerator had a senior sponsor and was performed in the clinical departments that would normally interact with the corresponding patients. Mendez-Escobar explained, "The work does not happen within the Accelerator. For example, in our Equity in Pregnancy initiative, the sponsor is in OB/GYN and the work is done in OB/GYN. The Accelerator is not going to change how babies are delivered, the OB/GYN team is. It is fundamental that the initiative is embedded in existing workflows and in the broader context of the patients' needs if we really want the broader ecosystem to change and be transformed." Kalluri added, "Instead of embedding these people in the Accelerator team, I feel we have embedded ourselves in every department at BMC. That's what it takes to get everybody on board." The Accelerator team worked to support the leaders and front-line

staff, who were doing the work every day. “The role of the Accelerator is to be the hub and to provide the framework for the spokes,” said James.

Additionally, the Accelerator supported each initiative with real resources. Continuing with the Equity in Pregnancy example, Mendez-Escobar said, “Not only we partner with OB/GYN in the design of the intervention, the management of the project, and the data analyses, but we use grant money to pay for 20% of their operations director, 20% of two doctors, a full-time program manager, a full-time nurse, a full-time patient navigator, a full-time analyst, a post-doc, and a research analyst. So, it is not just giving people tasks with no resources.” This was particularly appreciated, as Leaver explained, “we’re always asking docs to do a little bit of this on the side or managers to do a little bit of that on the side. [The Accelerator team] brings project management resources, which is helpful. When we’re running a clinic it’s really helpful to have somebody who is just like project managing and pushing things through.”

As an entity, the Accelerator reported directly to the CEO of the hospital. Kalluri explained, “The accelerator is a core business function, just like you have HR, finance, legal, your clinical departments, you now also have health equity, which cuts across all those core business functions.” The direct reporting line to the C-suite also aided in the Accelerator’s responsiveness. “They have power in the organization, so they are able to bring people along,” said Leaver. Mendez-Escobar added, “The whole leadership is completely committed and aligned. When Thea [James] writes an email to HR to move something along, they respond immediately, and it is moved along.” She further described:

In our pregnancy work, when we were working with postpartum pre-eclampsia, we realized that a lot of our patients were not able to pick up their hypertension medication fast enough after their blood pressure was going up, as our remote monitoring indicated. Having a newborn at home made it really hard for them to go and collect their medication. We raised this issue in our Equity Oversight Group and our Chief Pharmacy Officer immediately mobilized his team to create a workflow to home deliver those medications to patients in our program in the same day. This new workflow was developed within a matter of days and applied to all the patients in the program.

The organizational positioning of the Accelerator was also instrumental in maintaining focus and accountability across the enterprise. Mendez-Escobar explained, “To make progress in health equity we need to change how we deliver babies, how we prescribe insulin, how we train our people, etc. The required effort is very fragmented and distributed. Each of these things is not likely to make it into the top priorities for any one department or team. Overall, it is big, but it may not be big for each department. You need a governance structure that reminds everyone that all these things together are important.” To foster the alignment of health equity goals across departments and functions, the Equity Oversight Group included executive, clinical, and operational leaders, most of whom were sponsors of at least one initiative (see **Exhibit 3**). This board met monthly to review progress of all projects and initiatives affiliated with the Accelerator.

Community Engagement

Patient-centeredness was a fundamental tenet of the Accelerator’s strategy not only with respect to identifying the gaps in health equity, but also in the design and development of solutions. James stressed the importance of involving the patients all along the process, “The most efficient way to get an answer is to ask them, ‘what would it take for you to be in a better position to take care of yourself?’ Medicine is traditionally paternalistic. We assume we know what is best for the patient. It is almost disrespectful.”

Patient advisory boards were common in hospitals and health systems in the US. In some cases, patient representation was mandated through local or national policies and regulations. While BMC abided by these regulatory requirements, there were concerns about the effectiveness of these provisions. “You can’t put two patients on a board of thirty medical professionals. The power dynamic is such that they can never participate to the discussion. People working in health care have had entire careers and degrees to be able to follow that discussion. It is an unreasonable expectation that someone who doesn’t work in healthcare just because they’re a patient would be able to engage in that in any thoughtful way.” BMC preferred to engage with large patient focus groups, where patients were in the majority and were being asked questions that were truly relevant for them.

At the outset, BMC hired experts to help with the collection and analysis of qualitative data, captured via survey, focused groups, one-on-one interviews with patients. Results often portrayed patients’ poor perception of their experiences with BMC and its members. “It was hard to read these comments, and what they were saying about us,” recalled James, “but we needed that discomfort. We needed to be vulnerable to stop guessing about what the data meant and start co-creating solutions with them. We aim to create a system that works for the consumer.”

Kalluri added, “Sometimes you design something you think is so innovative and new, and it checks all the boxes, and the clinicians are excited about it, and you take that thing to a patient, to a community setting, and people say there’s no way they would or could do that. So, it’s been a humbling and iterative process, and you have to bring a lot of humility to how you do this work.”

Sheila Phicil, Director of Innovation, described how, in the Equity in Diabetes initiative, patients reported that dealing with a large number of team members, including endocrinologists, nutritionists, primary care physicians, etc. was often overwhelming and they would rather have one person that they trusted (for example, the pharmacist) as their main interface with the multidisciplinary team. “Our knee-jerk reaction in a multi-disciplinary disease is to build a wrap-around team for the patient. But that can be a barrier for some.”

The Accelerator interfaced with the broader community through a number of community boards, built around specific patient needs, such as a maternal child health community board, a mental health community board, etc. Board members included community members, religious leaders, and representatives of community-based organizations. These boards were under the umbrella of a higher level board, called the Equity Partnership Network (EPN). BMC met quarterly with the EPN, partnered with them on strategic decisions, and reported out to them on the progress of existing initiatives. Trina Martin Cherry, VP of Community Engagement and External Affairs, explained,

We bring them choices. Let’s say that we think there are 5 things that we can move the needle on, but, within a specific span of time we can only do one. What we would do is bring data on those 5 things [to the community board]. If it’s diabetes, we’ll bring them the statistics about how many Black and Hispanic/Latino people by neighborhood have a high A1C’s. We’ll give them the information. What we want from them is to know about their experience. What are you hearing from your church members? What are you hearing from other community members and other community leaders? What have been some of the experiences that you yourself have had? And then, how do you see us being able to move the needle? What are some of the programs that you would like to see put in place? So there is some exchange. We’re giving them information. But then we’re listening to them. And then that helps inform us. And then it might come down to a vote – literally, we’re having the council vote. Here’s the vote. This is what they’re thinking. And that’s what they bring back to us. And that’s how we move forward with it.

Community engagement was also instrumental to involve community members in research endeavors, including clinical trials. Martin Cherry stressed the importance of partnering with the community boards to engage and educate community members about a set of activities and processes that historically had enjoyed very little to no trust among communities of color. She explained,

Our approach is to always educate the community on research in general. What it is, why it's important, how it changes, how medicines are made, how their voice is very important. It's giving them a choice. So, when we have opportunities for community based research, when we have opportunities for clinical trials, they've been educated, and they have a choice of whether they want to participate in. It is critical to make sure that we are really, really committed to coming back to them. This is what we learned from the study in which you participated. This is how your contributions have helped.

BMC's community engagement team worked closely and up-front with the companies running the clinical trials "to make sure that they're just not popping into a community with a clipboard and popping out," said Martin Cherry, "We're making sure that the companies that we're working with are making an investment in these communities, whether it's in stem education, whether it's in facilities. No matter what it is, we want to make sure that the communities feel like they are contributing, but not being used.

Funding

Funding for the initiatives championed by the Accelerator came predominantly from three sources. In addition to contributions to the mission from philanthropy and foundations, the growing attention to health equity issues had originated funding opportunities for health equity programs from commercial payers, such as Blue Cross Blue Shield, as well as city and state programs through grants. Moreover, to the extent that the work on health equity contributed to improving patient outcomes and reducing the cost of care, value-based payment models, such as accountable care organization contracts and MassHealth would award quality-based rewards and shared savings.

Internally, the Accelerator would allocate grant or donation resources to an initiative only on a temporary basis. Mendez-Escobar explained, "We use grant money or philanthropy to fund the proof of concept phase of an initiative. After that, if the tested solution works, it becomes embedded into our system as the current care delivery model." This approach encouraged initiative proponents to think about operational and financial sustainability from the very beginning. "Even when we apply for a grant, we always have in mind how this is going to be funded in the long term. We think this piece may become reimbursable, this piece will save us some costs elsewhere, this piece will improve outcomes in a way that we will be able to advocate for reimbursement," added Mendez-Escobar.

Creating Connective Tissue

Despite the new approach espoused by the Health Equity Accelerator, BMC had not discontinued its efforts directed to other health related social needs. The concern about the risk of duplicating efforts or misaligning priorities across the organization gave rise to a robust set of communication channels. Mendez-Escobar explained,

One of the objectives the accelerator team is charged with is building connective tissue. A lot of the Accelerator's core team's time is spent facilitating different forums, to give visibility of what's happening from one place to another. Some are very large forum. We have a monthly completely open door equity innovation forum, where anyone interested in health equity joins. We give periodic updates on what the accelerator teams are doing. But we also invite people across BMC that may not be part of the core

accelerator who are doing anything connected to health equity to present. We also have an SDoH working group meeting monthly, where everybody who is doing SDoH related activities, whether it's housing or economic mobility or HSRN screening, all of those people meet monthly and share updates on what they're doing.

We also have all the program managers of the Accelerator meet weekly. So the program manager of equity in pregnancy, the program manager of equity in diabetes or cancer, but also the program manager of our housing work, the director and the manager of THRIVE, community engagement board, engagement meet periodically to sync on specific activities. We actually invest a lot of time and effort in building our connective tissue, and that didn't exist before. It was part of the Accelerator strategy to build that intentionally.

Signs of Success

In the two years of its existence, the Accelerator had already achieved important results (see **Exhibit 7** for a summary). For example, the Equity in Pregnancy initiative, which focused on issues associated with maternal mortality and severe morbidity, had reduced postpartum intervention readmissions by almost 20%. This result emerged from standardizing the process underlying the decision to perform a c-section on a patient presenting with preeclampsia (see **Exhibits 8a – 8c**). The process standardization applied to all patients, independently from their demographics. Additionally, the Accelerator had supported the development of a suite of monitoring, communication, and education solutions co-created with members of BMC's patient population to support the improvement of pre-natal care delivery (see **Exhibit 9**)

The Equity in Diabetes Initiative aimed to reduce the disparities in the prevalence of uncontrolled diabetes and diabetes distress. The implementation included the creation of registries of diabetic and pre-diabetic patients, which population health specialists could use to identify patients that needed screening or prompt interventions. These staff members would use the registries to perform outreach calls and appointment reminders, arrange visits with pharmacists, administer standardized surveys, including screening for diabetes-related depression. In addition, BMC offered patient education on nutrition through their teaching kitchen and their therapeutic food pantry. Finally, patients could obtain continuous glucose monitoring devices to maintain their insulin levels more consistent and understand potential causes of variation (see **Exhibit 10a**).¹² These interventions led to an improvement in the A1C measures for Black, Hispanic, and Latinx patients amounting to a reduction of 50% of the original gap with white patients (see **Exhibit 10b**)

In some cases, the intervention of the Health Equity Accelerator drove a structural change in the task allocation among members of the healthcare team. Phicil explained how, in addition to changing the way certain questions were asked in the THRIVE SDoH screener, and the way certain resource guides were offered to patients interested in learning more about available resources (e.g., patients subject to domestic violence), the workflow was modified to save time to the physician by assigning more responsibilities over the administration of the screener to medical assistants. She recalled, "This was new to them because now they have to sign the order in the system. Many are uncomfortable with the idea, as they believe that only doctors sign orders."

The Future of the Health Equity Accelerator

Many challenges and opportunities awaited the Health Equity Accelerator team in the years ahead. Many were financial in nature. Kalluri described, "A lot of interventions for equity actually just expose gaps in our reimbursement system. They expose [the lack of reimbursement for] things like navigation,

high touch support, non-clinical support.” At the same time, however, evidence that certain innovations were beneficial to patients and/or could improve the cost of care would support advocacy programs. “Take, for example, access to doulas, or midwifery for patients during their prenatal care, which is something that really has disproportionate benefits for racial and ethnic minorities, and were not previously covered by MassHealth. Now they are covered by MassHealth in large part due to a lot of great advocacy, by awesome folks who work with the accelerator and work with OB/GYN at BMC, who made a strong case to the legislators.”

At an institutional level, BMC needed to identify the best ways to scale the Accelerator’s efforts. Kalluri asked,

How do you scale sustainably and in a way that doesn't eat you from the inside out? How do you support the folks who do this work in a way that makes people want to stay in this space and have a career in this space? Equity is currently sort of a side of the desk thing, an extracurricular. But I think that, over the next 10 to 15 years you're going to have an exciting development in major healthcare systems, where you will have people developing careers dedicated to mitigating the effects of all kinds of [sources of inequities, like] systemic racism in the healthcare system. And so we need to figure out what should a health equity department look like? What are our core business activities? What sorts of expertise are we developing in our people? And what are our goals?”

Phicil reflected on the Accelerator’s commitment to health equity, which, in many cases involved providing tailored solutions to the needs of a small group of patients, if not an individual. She said,

When you build something in the healthcare space, you think about, staff, technology, and everything else. All those things cost money, and it's hard to flex. We're just not good at it. When you think about an inpatient hospital, your census might be 98% one day, 60% the next day. We have not yet figured out how to flex quickly and absorb capacity in healthcare. And the tension exists because protocolization or standardization does improve quality and equity in some instances, for example, in our equity in pregnancy program. But in other instances, like diabetes, maybe because it's a chronic condition that's requiring major adjustments or lifestyle changes for patients, we might have to think about it differently. So, where systemization and standardization works, yes, let's do it. Where it doesn't, let's think differently. And it's hard to switch your brain between the two, [especially] when you get good at doing it one way. So, what are we scaling? Are we scaling a specific protocol for how we engage patients with a specific condition, or are we scaling a model for how hospitals, health systems, can design contextualized care?

Exhibit 1 Examples of BMC Programs Addressing Health Related Social Needs

Improving children's health in America by informing policies that address and alleviate economic hardships



Extending tangible outreach to patients' families such as nutritious foods, clothing, transportation, proper housing and other necessities



Integrating the expertise of lawyers into healthcare settings to help clinicians address structural problems at the root of health inequities



Equipping patients with the skills, access and opportunities to make positive changes in their lives and their communities; change life course trajectory

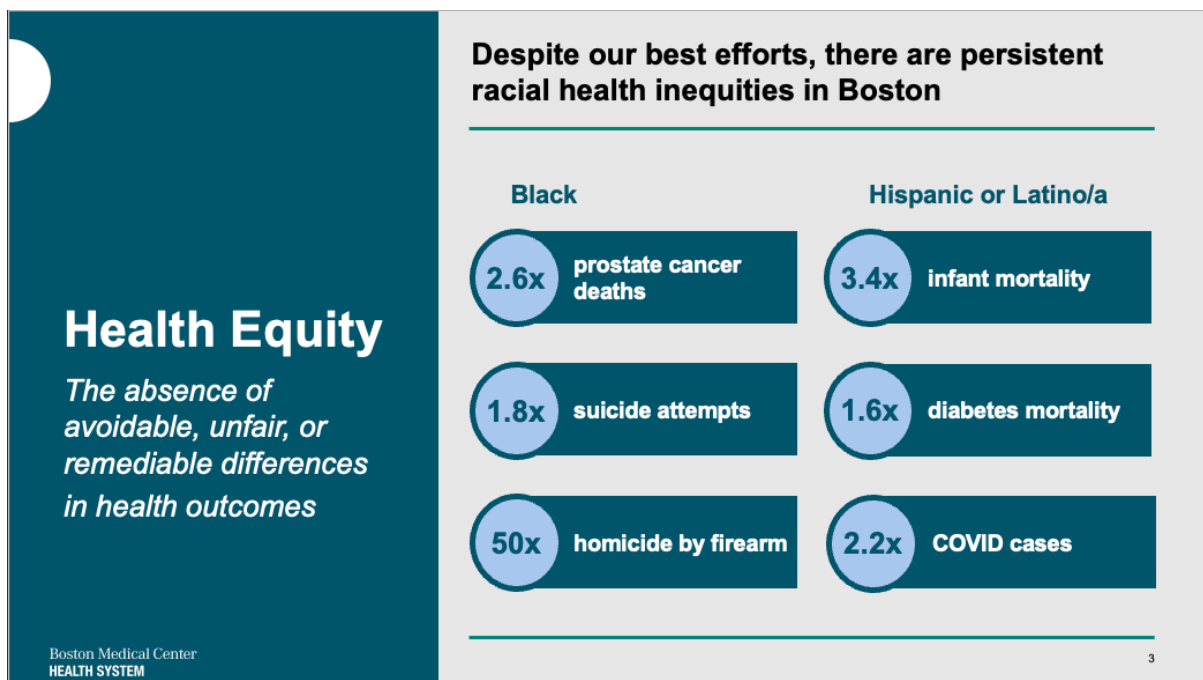


Building a national movement to incorporate financial wellbeing into healthcare, starting with tax preparation support and returning of child tax income credit to families



Empowering families to define their health priorities and design their own care

Source: Company Documents

Exhibit 2 Examples of Statistics on Health Disparities Across Racial Groups in 2020

Source: Company Documents

Exhibit 3 BMC Equity Oversight Group

BMCHS' Equity Oversight Group includes all executive leaders of the system and the Chiefs of the largest clinical departments



Thea James, MD
Executive Director



Elena Mendez-Escobar, PhD, MBA
Executive Director

Equity Oversight Group

- Alastair Bell, MD, President & CEO, BMCHS
- Diana Cruz, Chief Operating Officer, WellSense Health Plan
- Ellen Ginman, VP Population Health
- Heather Thiltgen, President & CEO, WellSense Health Plan
- Jodi Larson, MD, VP and Chief Quality Officer
- Joe Camillus, Chief Operating Officer
- John Goldie, VP System Analytics
- Lisa Kelly-Croswell, SVP and Chief Human Resource Officer
- Megan Bair-Merritt, MD, VP & Chief Scientific Officer
- Melissa Shannon, VP Government Affairs
- Nancy Gaden, DNP, RN, SVP Clinical Operations, Chief Nursing Officer
- Rachel Felix, SVP, Chief Marketing & Growth Officer
- Ravin Davidoff, MD, Executive Medical Director
- Sebastian Hamilton, PharmD, Chief Pharmacy Officer
- Aviva Lee-Parritz, MD, Chair, Obstetrics and Gynecology
- Bob Vinci, Chair and Chief of Pediatrics
- Christian Arbelaez, MD, Chair, Emergency Medicine
- David Henderson, MD, Chief, Psychiatry
- Jennifer Tseng, MD, Surgeon-in-Chief
- Michael Fischer, MD, Chief, General Internal Medicine
- Renee Crichlow, MD, Chief Medical Officer, Codman Square Health Center
- Stephen Wilson, MD, Chair, Family Medicine

Boston Medical Center
HEALTH SYSTEM


1

Source: Company Documents


Exhibit 4 Five Clinical Areas Prioritized by the Health Equity Accelerator

We are doing work on priority clinical areas and building out system enablers to enhance our equity work


Multidisciplinary teams address priority clinical areas




Equity in Pregnancy




Equity in Diabetes



Behavioral health



Equity in Cancer



Covid Vaccine

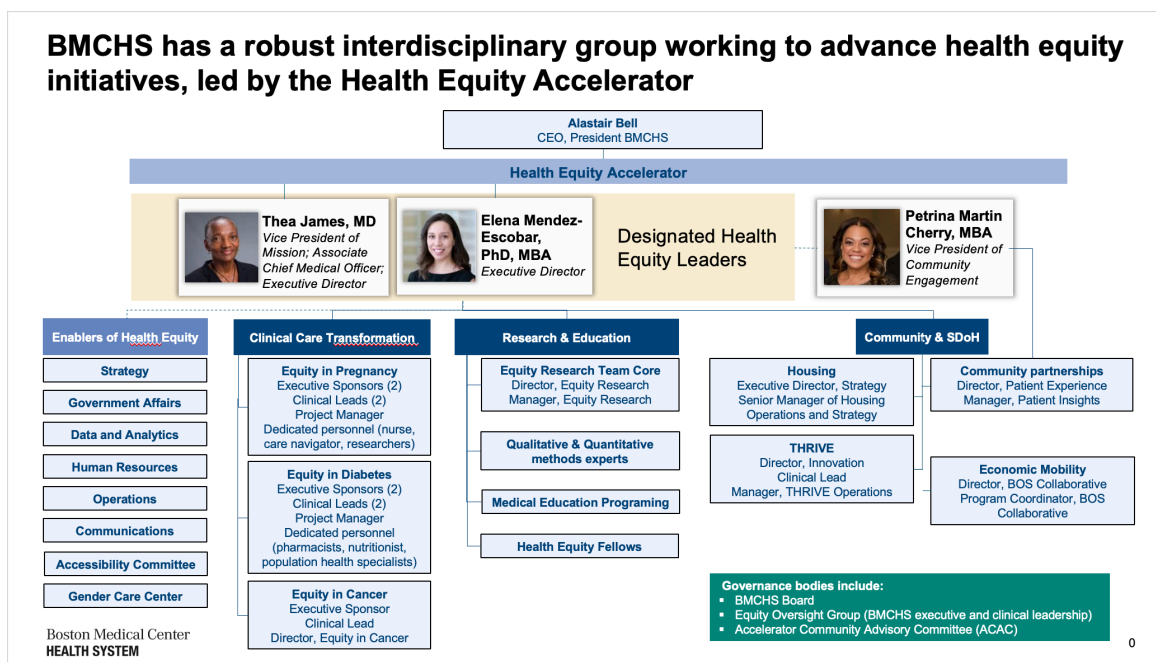
ENABLERS	Data	Culture	Community	SDoH	Research	Education	Advocacy
	Data collection, reporting, and infrastructure	DEI training and workforce development	Community and patient engagement	HRSN screener and referrals (THRIVE) Anchor network infrastructure Climate resiliency	Equity Research Team	Equity Fellowship (next generation equity leaders)	National and state level equity priorities 1115 waiver, ACO program, and other procurements

Boston Medical Center
HEALTH SYSTEM

6

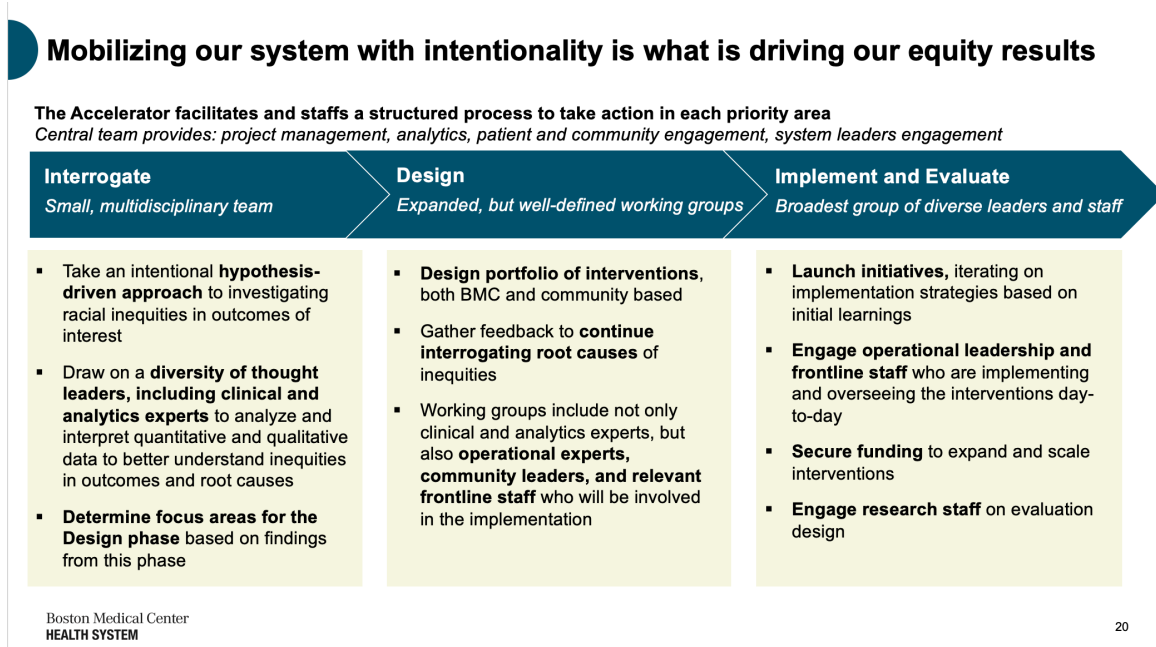
Source: Company Documents

Exhibit 5 Organizational Chart of the Health Equity Accelerator



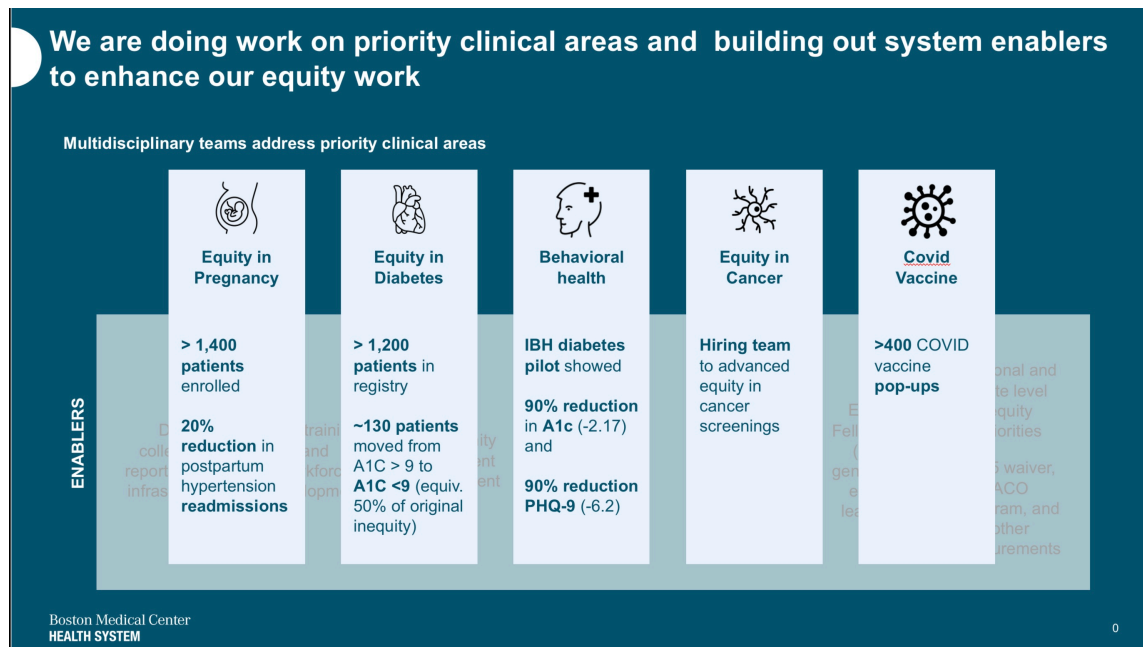
Source: Company Documents

Exhibit 6 BMC Health Equity Accelerator Approach



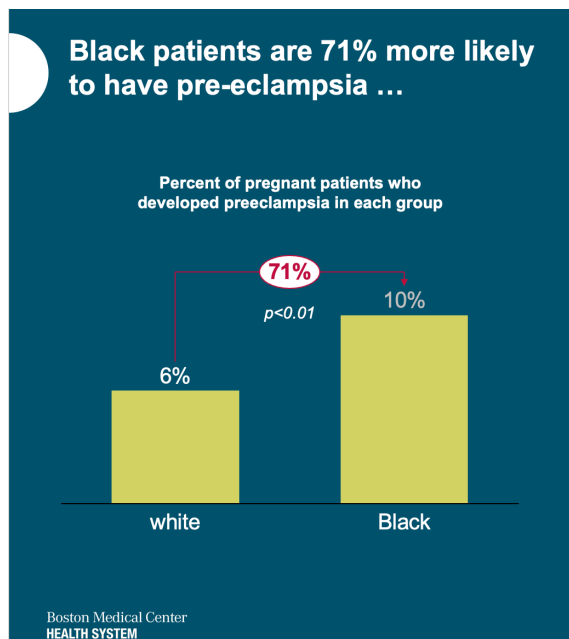
Source: Company Documents

Exhibit 7 Summary of Results Across the Five Clinical Areas

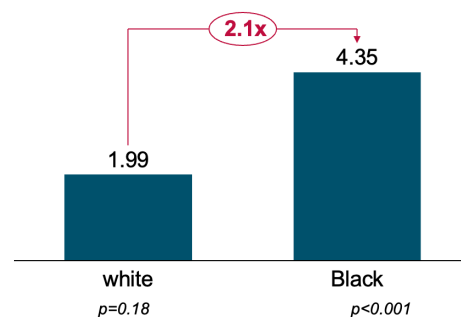


Source: Company Documents

Exhibit 8a Racial Disparities in the Incidence and Consequences of Pre-eclampsia

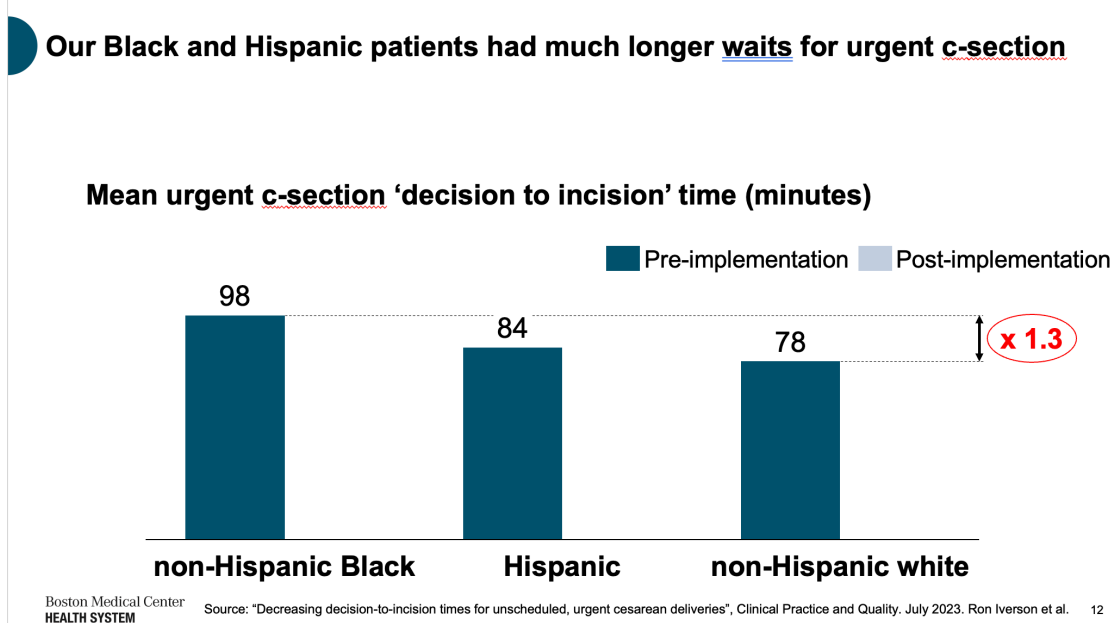


... and when they do, they have 2.1x higher risk to develop SMM



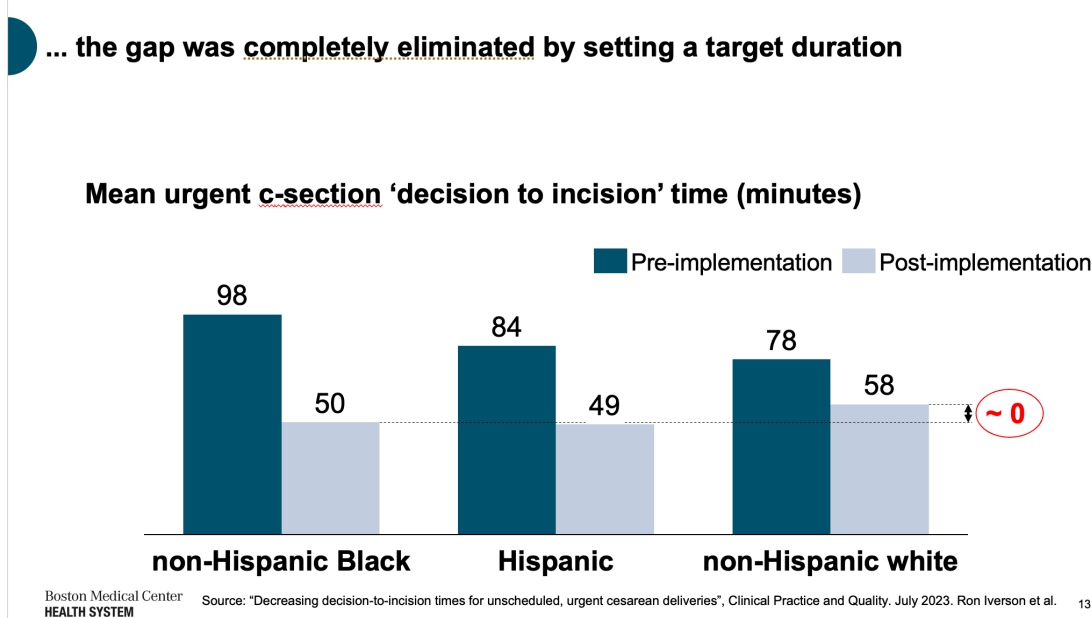
Source: Company Documents

Exhibit 8b Racial Disparities in the Wait Times for Urgent C-Sections



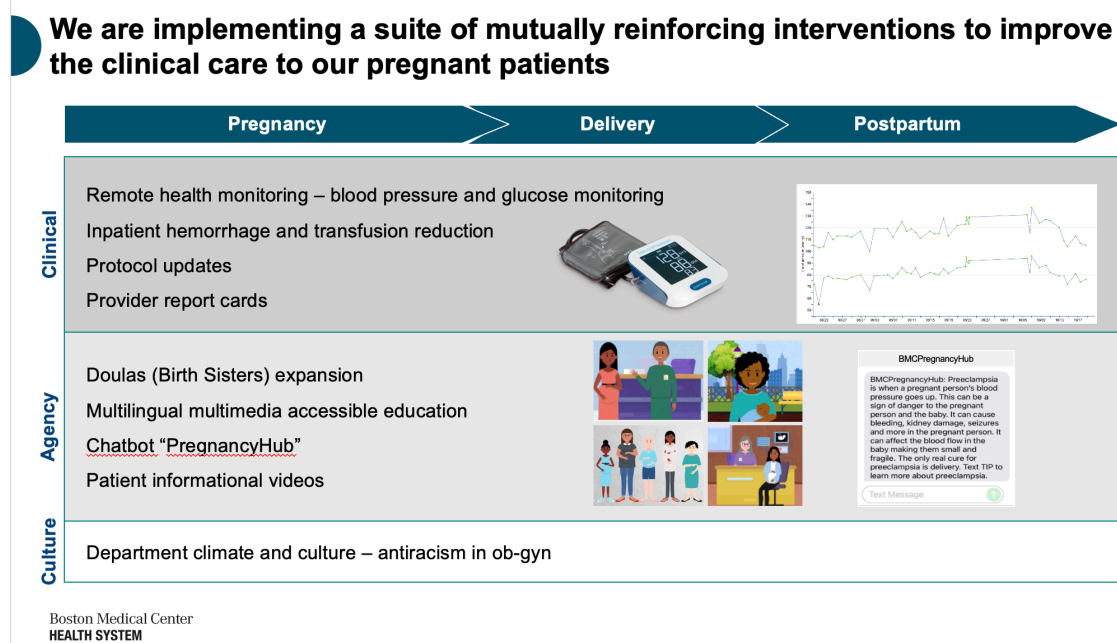
Source: Company Documents

Exhibit 8c Results of the Process Standardization Improvement



Source: Company Documents and "Decreasing decision-to-incision times for unscheduled, urgent cesarean deliveries", Clinical Practice and Quality. July 2023. Ron Iverson et al.

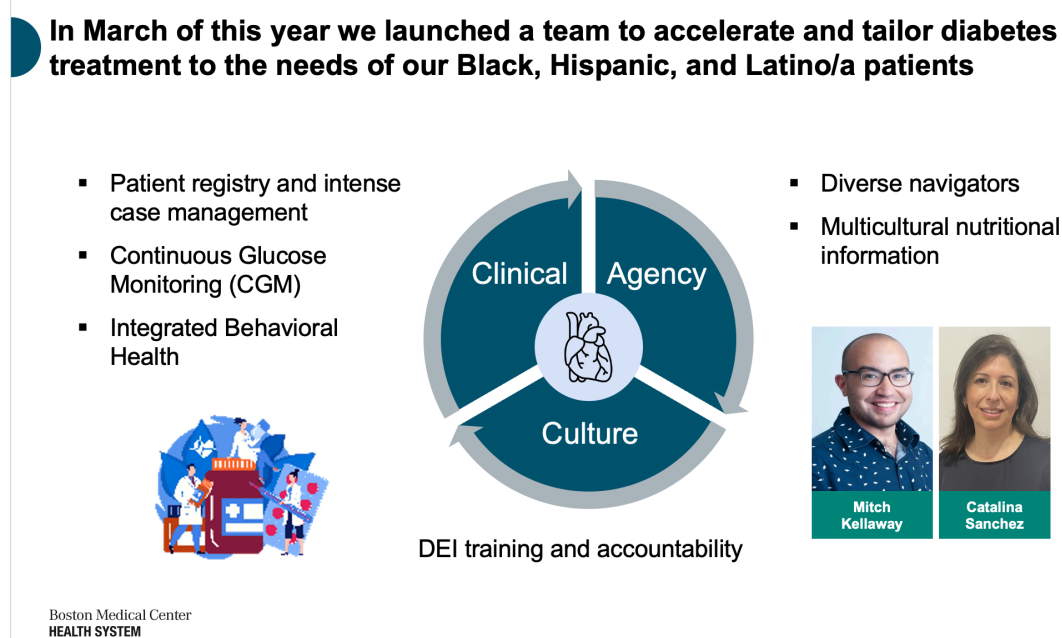
Exhibit 9 Additional Intervention in Pre-natal Care



14

Source: Company Documents

Exhibit 10a Equity in Diabetes Initiative



Source: Company Documents

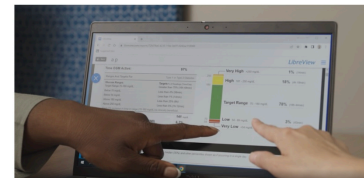
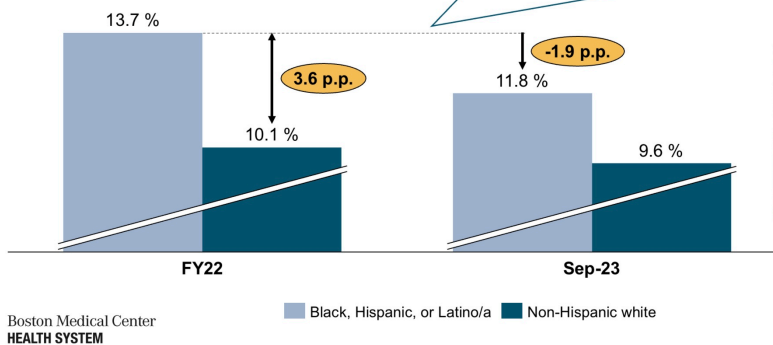
Exhibit 10b Early Results of the Interventions to Improve Equity in Diabetes Outcomes

The original diabetes inequity gap has been significantly reduced

% of patients with diabetes who have A1C > 9

(A1C is a measure of average glucose in the blood over the last 3 months)

- The percent of Black, Hispanic, or Latino/a patients with A1c > 9 has decreased by 1.9 p.p., representing ~130 patients
- As a result, the equity gap has been reduced by 39% (from 3.6 p.p. to 2.2 p.p.)
- Given the non-Hispanic white population also improved their A1c control, it is also helpful to compare the 1.9 p.p. to the original inequity gap of 3.6 p.p. (a 53% reduction)



1

Source: Company Documents

Endnotes

¹ https://www.ahajournals.org/pb-assets/migration/Circulation/Hospitals%20History/HoH_Boston_Medical_Center%20PDF%209.7-1631125917.pdf, accessed January 1, 2024.

² <https://www.bmc.org/mission>, accessed January 1, 2024.

³ [https://www.aha.org/case-studies/2022-10-21-boston-medical-center-massachusetts#:~:text=Boston%20Medical%20Center%20\(BMC\)%20is,Boston%20University%20School%20of%20Medicine,](https://www.aha.org/case-studies/2022-10-21-boston-medical-center-massachusetts#:~:text=Boston%20Medical%20Center%20(BMC)%20is,Boston%20University%20School%20of%20Medicine,) accessed January 1, 2024.

⁴ [https://www.aha.org/case-studies/2022-10-21-boston-medical-center-massachusetts#:~:text=Boston%20Medical%20Center%20\(BMC\)%20is,Boston%20University%20School%20of%20Medicine,](https://www.aha.org/case-studies/2022-10-21-boston-medical-center-massachusetts#:~:text=Boston%20Medical%20Center%20(BMC)%20is,Boston%20University%20School%20of%20Medicine,) accessed January 1, 2024.

⁵ <https://www.bmc.org/family-medicine/education/residency/application/why-bmc-vp-mission-speaks>, accessed January 1, 2024.

⁶ https://www.ahajournals.org/pb-assets/migration/Circulation/Hospitals%20History/HoH_Boston_Medical_Center%20PDF%209.7-1631125917.pdf, accessed January 1, 2024.

⁷ <https://www.bmc.org/mission>, accessed January 1, 2024.

⁸ <https://www.pewresearch.org/social-trends/2020/10/06/amid-national-reckoning-americans-divided-on-whether-increased-focus-on-race-will-lead-to-major-policy-change/>, accessed January 2, 2024.

⁹ Walsh, K. (2022). Equity Rx: Boston medical center's work to accelerate racial health justice. *Frontiers of Health Services Management*, 39(2), 4-16.

¹⁰ Mendez-Escobar, E., Adegoke, T.M., Lee-Parritz, A., Spangler, J., Wilson, S.A., Yarrington, C., Xuan, Z., Bell, A. and James, T., 2022. Health equity accelerator: a health system's approach. *NEJM Catalyst Innovations in Care Delivery*, 3(3).

¹¹ Mendez-Escobar, E., Adegoke, T.M., Lee-Parritz, A., Spangler, J., Wilson, S.A., Yarrington, C., Xuan, Z., Bell, A. and James, T., 2022. Health equity accelerator: a health system's approach. *NEJM Catalyst Innovations in Care Delivery*, 3(3).

¹² <https://www.bmc.org/health-equity-accelerator>, accessed January 2, 2024.