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# Boston Medical Center HEALTH SYSTEM

## Interrogating (Racial Health) Equity at Boston Medical Center Health System

Thea James, M.D.  
Vice President of Mission  
Associate Chief Medical Officer

Princeton Conference  
October 14, 2021

# Who We Are

As the largest safety-net hospital in New England with 1 million patient visits annually, we have an incredibly diverse patient population and are deeply rooted in our community:

- More than 80% of our patients are publicly insured or uninsured
- One in four of our patients report housing insecurity
- 77% of BMC patients identify as non-White
- We have a history of deep partnership with local community organizations

We are a leader in models of care that address upstream drivers of health...

... and in delivering care designed with and for our community

▪ **What is the role of a safety net hospital? Charity? Or Equity?**

# We have decades of experience developing models of care that address upstream drivers of health



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

**MLP | Boston**

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, services and opportunities to make positive changes in their lives and their communities



Building a national movement to incorporate financial wellbeing into healthcare



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

Center for the Urban Child  
and Healthy Family

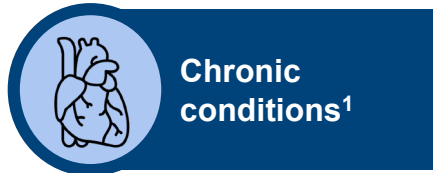
## No change in outcomes

### Rationale



**Mother and child**

In Boston, **infant mortality is 4.1x higher for Black infants and 3.4x higher for Latinx infants** than white infants  
In the US, **pregnancy-related deaths are 3.2x higher for Black women than white women**



**Chronic conditions<sup>1</sup>**

In Boston the **diabetes mortality rate is 1.6x higher for Latinx residents and 2.3x higher for Black residents** compared to white residents  
**Sickle cell disease** impacts almost exclusively Black patients



**Oncology**

In Boston, Black residents are **1.5x more likely to suffer premature death from cancer**  
In Boston, Black residents are **2.6x more likely to die from prostate cancer**  
In Boston, Black residents are **1.2x more likely to die from breast cancer**



**Infectious diseases**

In Boston, **COVID-19 cases are 1.5x higher in Black communities<sup>2</sup> and 2.2x higher in Latinx communities**  
In Boston, **HIV incidence is 3.3x higher in Black communities**



**Behavioral health**

In Boston, Black residents are **1.4x more likely** and Latinx residents are **1.7x more likely to suffer persistent sadness**  
In the US, Black residents are **1.8x more likely to attempt suicide**



**Violence and trauma**

In Boston, **the homicide by firearm rate is 50x higher for Black males**  
Boston Accountable Care Organization's Black child members are **1.8x as likely to be identified as having experienced abuse or neglect**

<sup>1</sup> Focus: diabetes, hypertension, heart disease, asthma, and sickle cell disease. <sup>2</sup> As of 1/27/21.

## Why Healthcare? Why do we care?

- Correlations between health and wealth: *we are ineffective*
- Patients cannot prioritize health: *prioritizing survival*
- Vicious cycle of instability (not ideal investment and business model)
- Lower income and lower health status
- Lower education (> 25 years old)
- Life expectancy
- Median net wealth gap (BOSTON)



...and despite the fact that they do not differ greatly on geographic closeness to health services



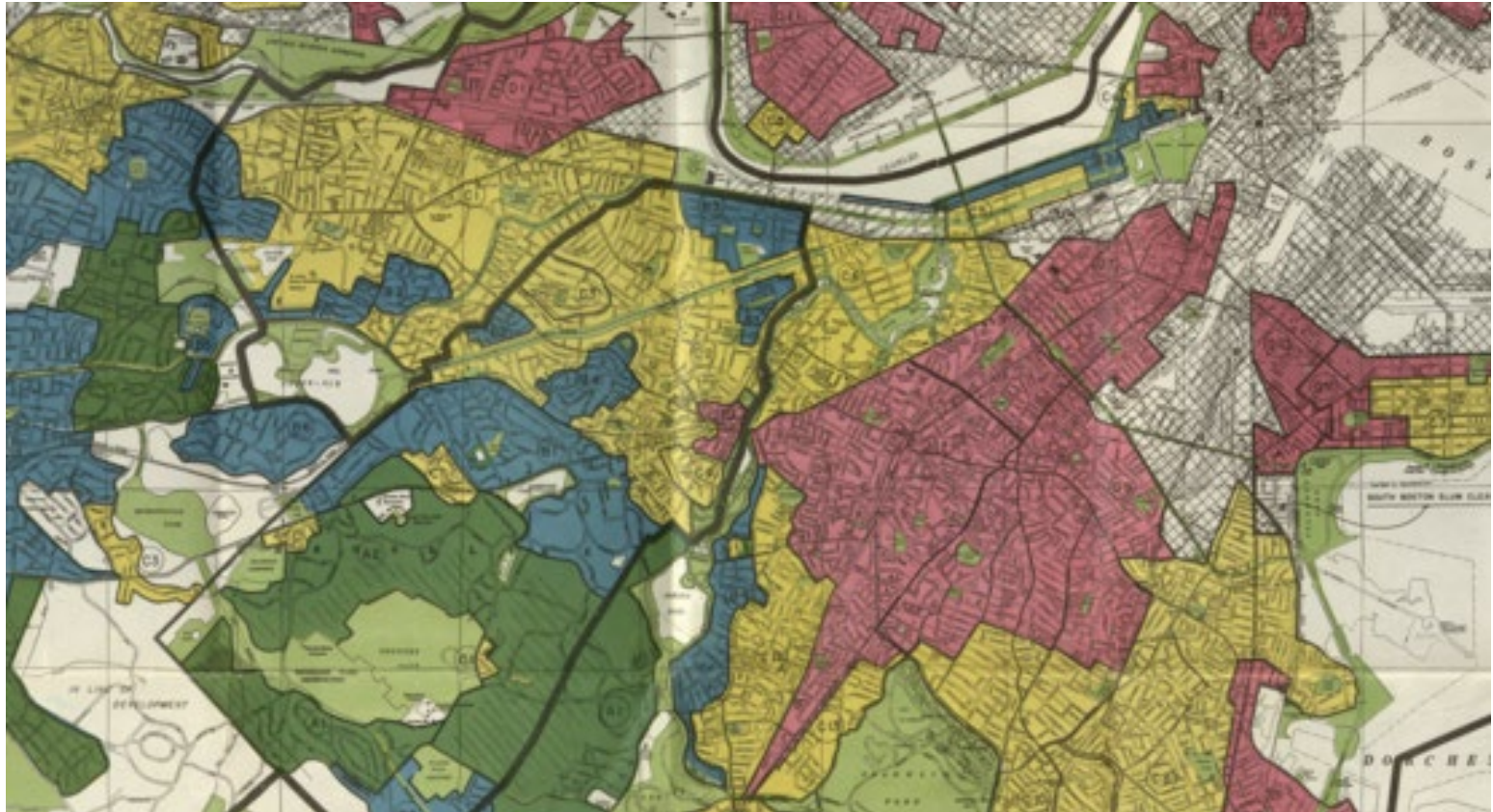
- Lower income
- Premature death
- Lower education
- Lower life expectancy
- Homicide rates

Google Maps <<https://www.google.com/maps/>> Accessed March 17, 2015.



# Understanding how disparities have been created is the foundation for seeking long term solutions

Federal Housing Authority practice of redlining denied mortgages to African American and Low Income Populations



Best



Still  
Desirable



Definitely  
declining



Hazardous

From the start, the pandemic has had a disproportionate impact on the patients we serve

## Inside Boston Medical Center: The heart of the coronavirus storm

In the city's safety-net hospital, seven out of 10 admitted patients are sickened by COVID-19

By Felice J. Freyer Globe Staff, Updated April 18, 2020, 2:40 p.m.

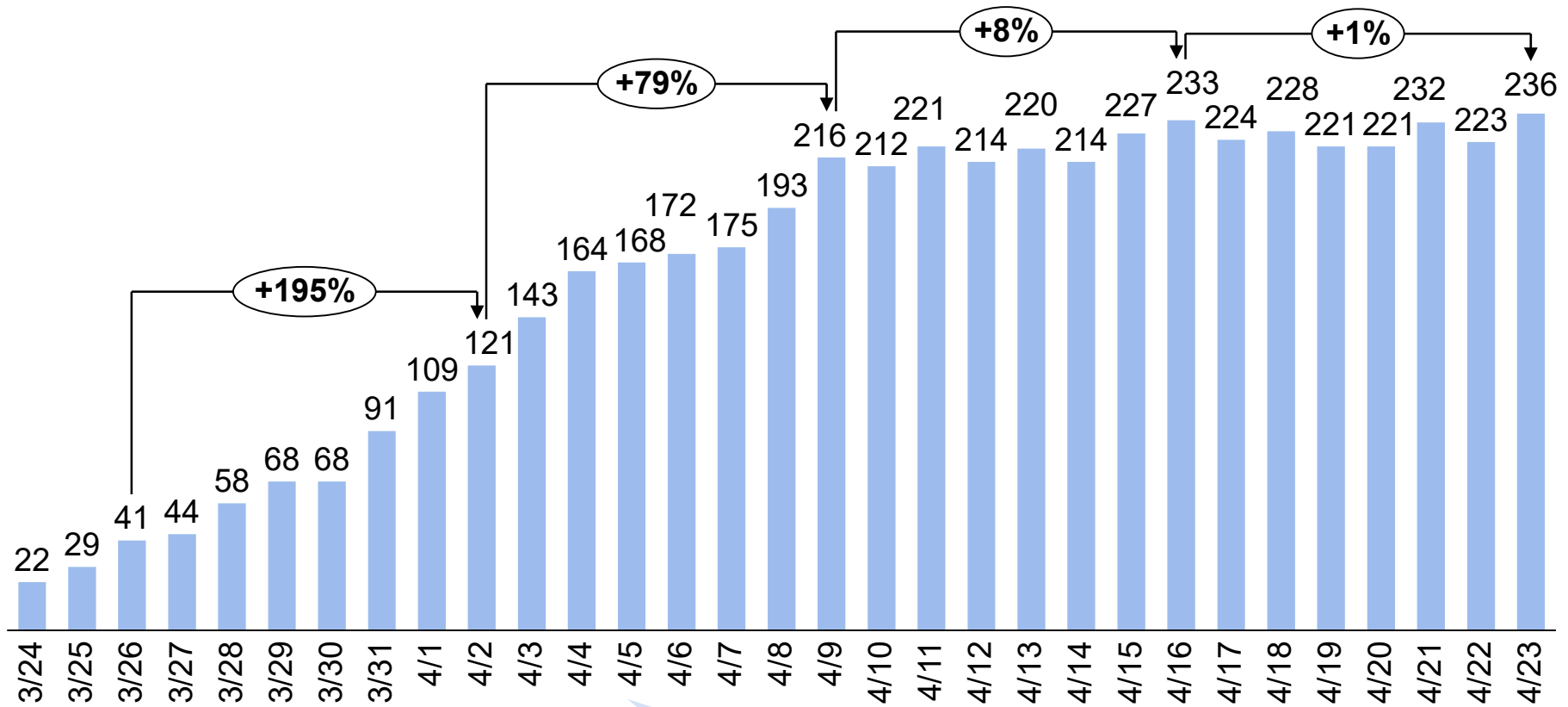


A nurse wore full personal protective gear while caring for an intubated COVID-19 patient at Boston Medical Center. ERIN CLARK/GLOBE STAFF

“For more than 150 years, the hospital at the edge of Boston’s South End has taken pride in caring for the city’s most vulnerable patients. But now as the coronavirus ravages the communities BMC serves, **the city’s safety net hospital by necessity has become essentially a COVID-19 hospital. The pandemic hit here first and hit here hardest.**”<sup>1</sup>



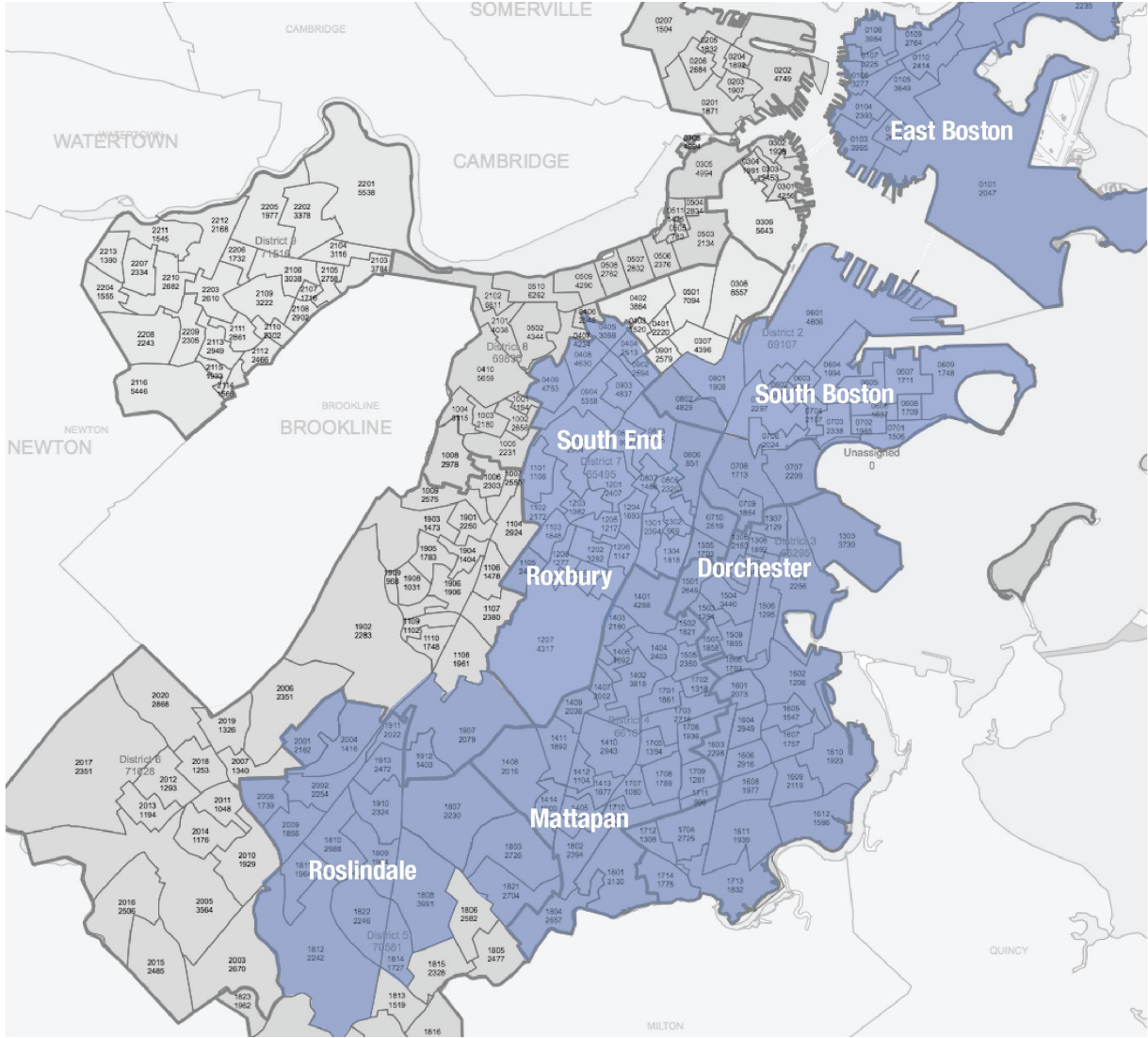
# Our COVID positive census grew to 236 patients in 30 days in the first surge – BMC had the highest percent of Covid positive patients in Boston



Impacted by 9 transfers

1. Assumes 100% of pending results are positive.
2. Includes patients admitted but who are in ED awaiting bed

# National Model Health System's Patient Catchment Area



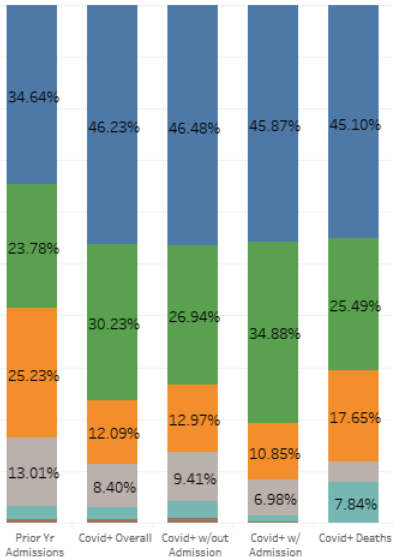
# Boston Medical Center Health System COVID-19 Weekly Data Report 4-22-20

Data current as of: 4/23/2020 12:00:00 AM  
Source: BMC Data Warehouse

## Demographics Breakdown (Covid+ with Prior Year Averages)

MEDICAL

### Race/Ethnicity



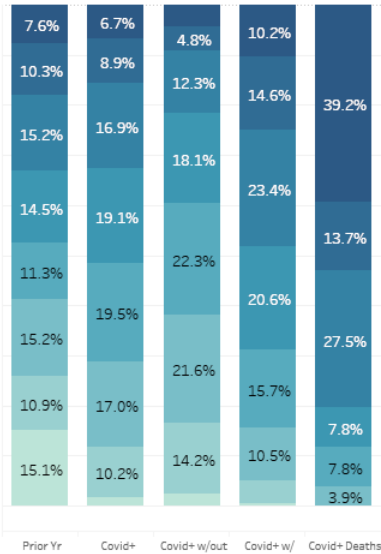
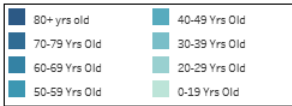
### Cohort Sizes (Unique Patients)

Cohort	# Pts	Avg Age	Deaths
Prior Yr Admissions	25,782	45	832
Covid+ Overall	1,869	51	51
Covid+ w/out Admission	1,095	46	9
Covid+ w/ Admission	774	58	42
Covid+ Deaths	51	71	51

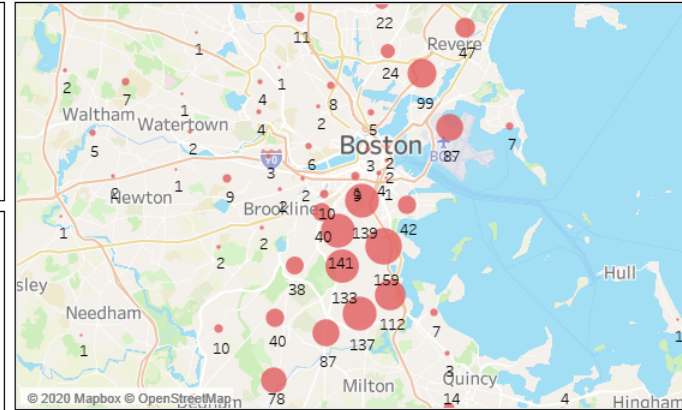
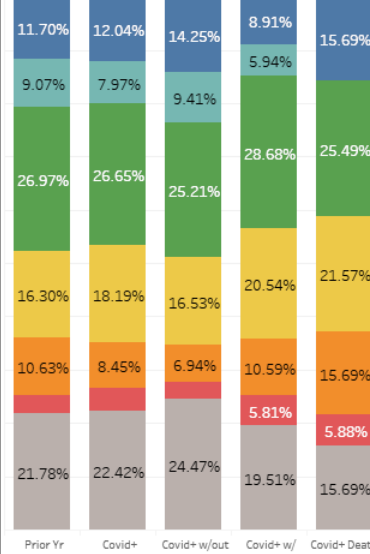
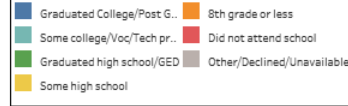
### Gender

	F	M
Prior Yr Admissions	54.9%	45.1%
Covid+ Overall	52.0%	48.0%
Covid+ w/out Admission	58.5%	41.5%
Covid+ w/ Admission	42.6%	57.4%
Covid+ Deaths	33.3%	66.7%

### Age Brackets



### Level of Education



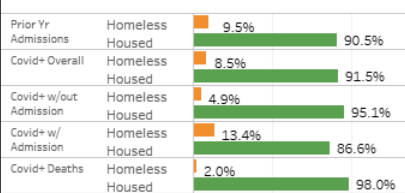
### Neighborhood - Compare

Neighborhood	Covid+ w/ Admission		Covid+ w/out Admission		Prior Yr Admissions	
	Count	% Cohort	Count	% Cohort	Count	% Cohort
BOSTON (DORCHESTER)	174	22.48%	230	21.00%	3,619	14.04%
BOSTON (ROXBURY)	73	9.43%	68	6.21%	1,541	5.98%
BOSTON (SOUTH END)	71	9.17%	68	6.21%	1,690	6.55%
CHELSEA	62	8.01%	37	3.38%	813	3.15%
BOSTON (EAST BOSTON)	54	6.98%	33	3.01%	1,206	4.68%
BOSTON (DORCHESTER CENTER)	49	6.33%	88	8.04%	1,829	7.09%
BOSTON (MATTAPAN)	38	4.91%	49	4.47%	960	3.72%
BOSTON (HYDE PARK)	34	4.39%	44	4.02%	710	2.75%
BOSTON (SOUTH BOSTON)	24	3.10%	19	1.74%	753	2.92%

### Comorbidities

Cohort	Obesity	Hypertens..	Diabetes	CADs	CKD	CHF	COPD/Ast..	Cancer
Prior Yr Admissions	60.2%	30.5%	17.3%	46.3%	16.7%	7.4%	5.0%	9.0%
Covid+ Overall	69.9%	35.2%	22.1%	44.9%	14.6%	5.2%	3.6%	5.4%
Covid+ w/out Admiss.	66.8%	26.0%	15.0%	37.4%	8.9%	2.1%	1.4%	3.1%
Covid+ w/ Admission	74.4%	48.2%	32.2%	55.6%	22.7%	9.6%	6.7%	8.7%
Covid+ Deaths	68.6%	72.6%	43.1%	74.5%	47.1%	39.2%	13.7%	13.7%

### % Homeless in the Last Year





# BOSTON MEDICAL CENTER

## COVID-19 Response:

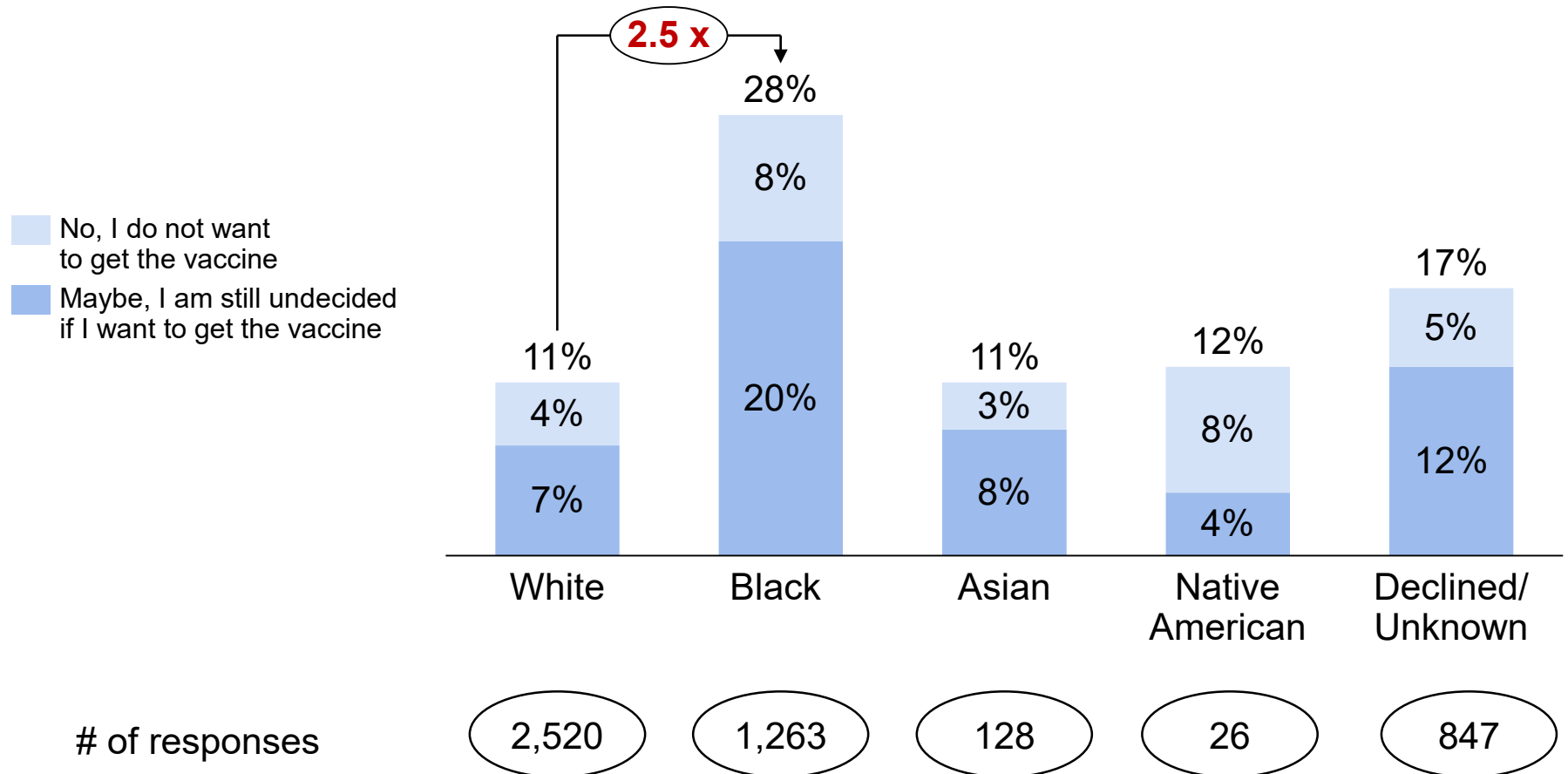
### Inequity in plane site

- Hesitancy
- Access



# Patient survey: vaccine hesitancy – Black patients are 2.5x more likely to be undecided or negative about the COVID-19 vaccine

## Question 1: Will you get the COVID-19 vaccine when it is available to you?



# In our employee data we saw how significant a challenge we faced in supporting vaccine acceptance in Black and Latino/a communities

## NMHS employees by vaccination status, 1<sup>st</sup> dose

Includes employees, LIPs, Residents, per-diem and contingent workers, as of 1/13/21

Race	Total offered	Scheduled	Vaccinated	Total scheduled + vaccinated	No response	Refused
White	3,245	2%	71%	72%	19%	9%
Black or AA (Not Hispanic or Latino)	1,824	2%	34%	36%	48%	16%
Blank	1,501	1%	67%	69%	25%	6%
Asian (Not Hispanic or Latino)	691	2%	74%	76%	17%	7%
Hispanic or Latino	678	1%	52%	53%	35%	12%
2+ Races	159	2%	53%	55%	35%	11%
American Indian or Alaska Native	13	0%	77%	77%	8%	15%
Native Hawaiian or Other Pacific Islander	5	0%	40%	40%	60%	0%
<b>Grand Total</b>	<b>8,116</b>	<b>1%</b>	<b>60%</b>	<b>62%</b>	<b>28%</b>	<b>10%</b>

# We are partnering with community leaders to ensure an equitable distribution of the COVID vaccine...

While state website crashed, a Mattapan Church opened to 'a huge line' on first day as a vaccination site

The Boston Globe



## Religious leaders work to build trust in COVID-19 vaccine in communities of color

*Many communities of color are distrustful of government and health institutions.*

abc NEWS

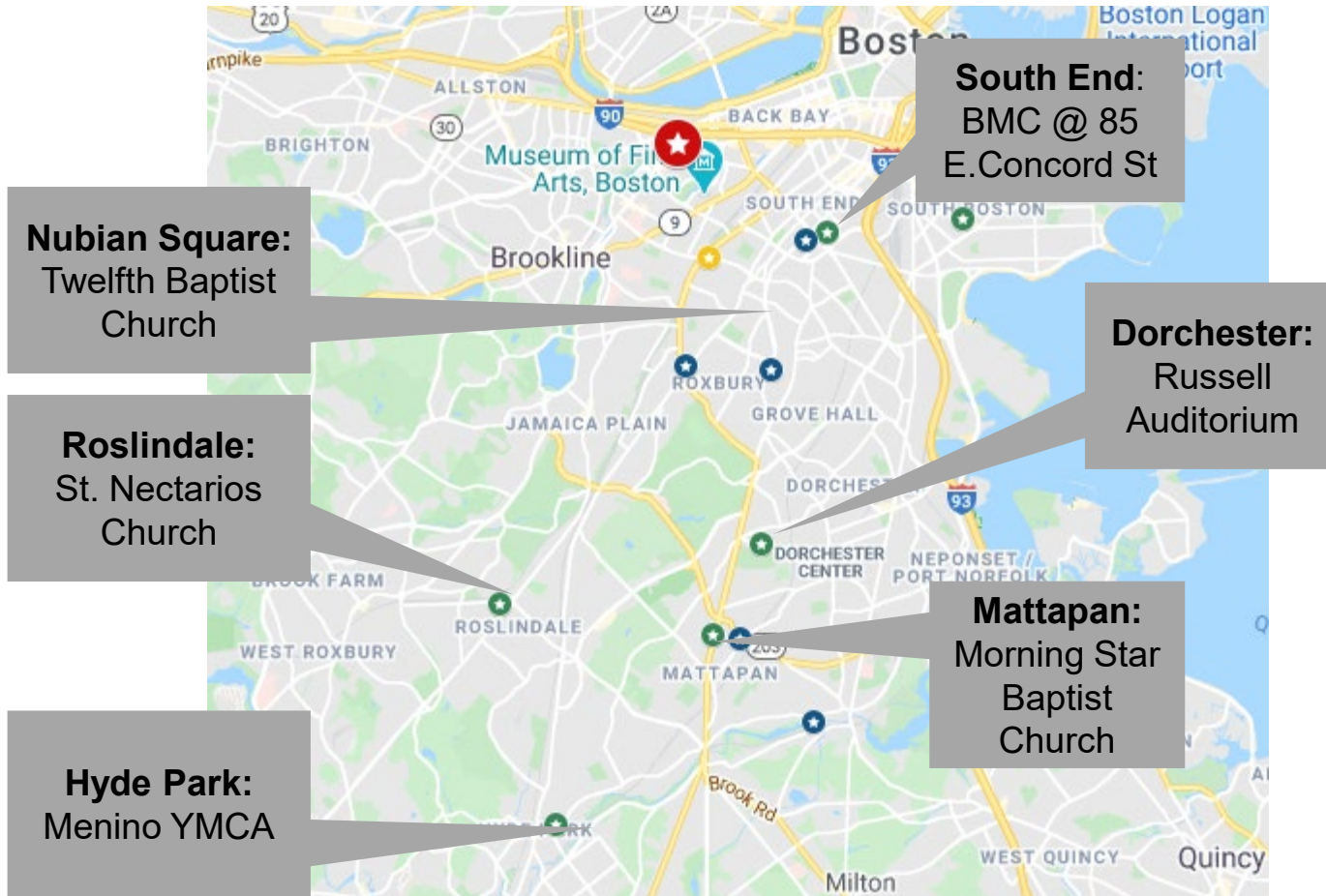


ABC  
Bishop John Borders runs Morning Star Baptist Church, located in a... [Read More](#)

## How BMCHS is working towards equitable COVID vaccine distribution

- **Operating 6 sites around BMC** to ensure a site < 2 miles from target population
- **Partnering with leaders of Black and Hispanic / Latino communities** (e.g., ministers, social activists, school leaders) to share vaccine information, learn about key concerns from the community, and connect those interested with appointments
- **Proactive outreach** to eligible patients (including ahead of pre-scheduled visits), health plan members, and other lists of community members generated by community partners
- **Community scheduling / outreach** including 'door to door' campaign and volunteers at high traffic areas (e.g., grocery stores)
- **Sharing information from diverse clinicians and in multiple languages** directly with the public (e.g., FAQs on BMC's website, physician testimonials on social media, "Zoom with a Doc")
- **Media campaign** in multiple languages and media (e.g., radio, television, posters, social media)

# We evaluated neighborhood populations and existing health system capacity to identify “vaccine deserts” that we could fill in with our network



**We established 6 New Community Vaccination Sites**

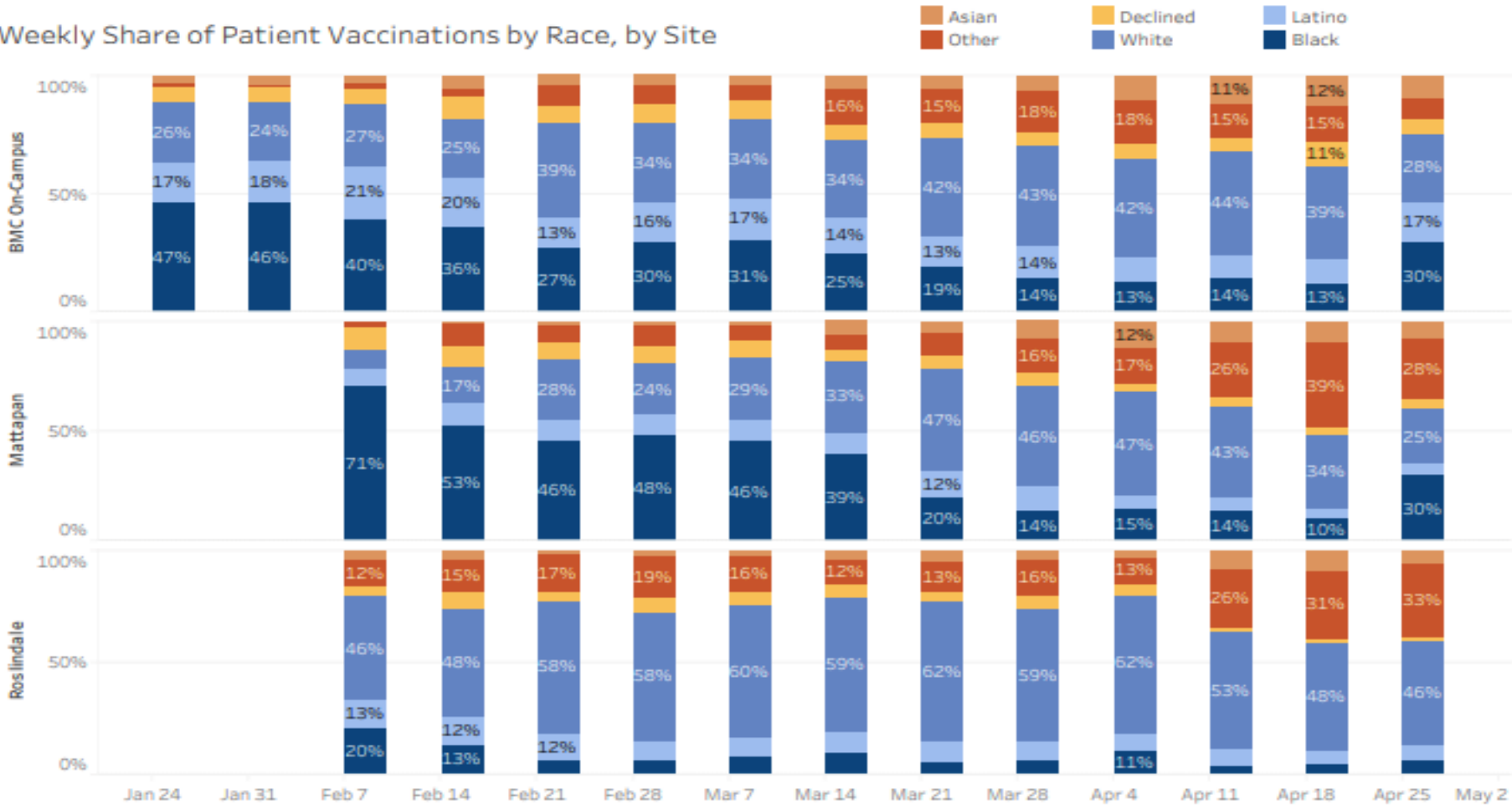


# Weekly Vaccinations By Race and Site

BMC Patient Vaccination Dashboard  
 April 30, 2021

15/40

Weekly Share of Patient Vaccinations by Race, by Site

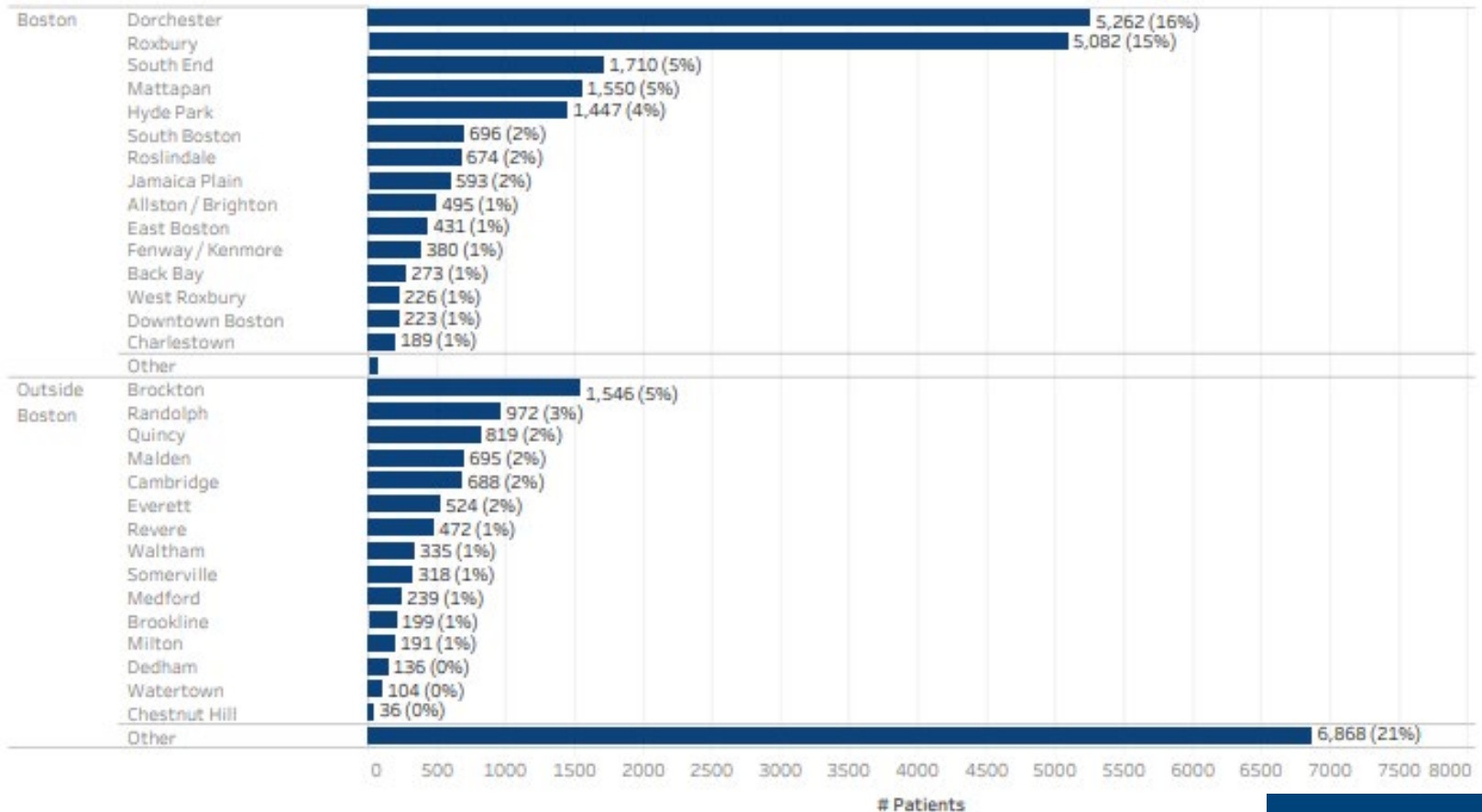


# Non-vaccinated by neighborhood

BMC Patient Vaccination Dashboard  
April 30, 2021

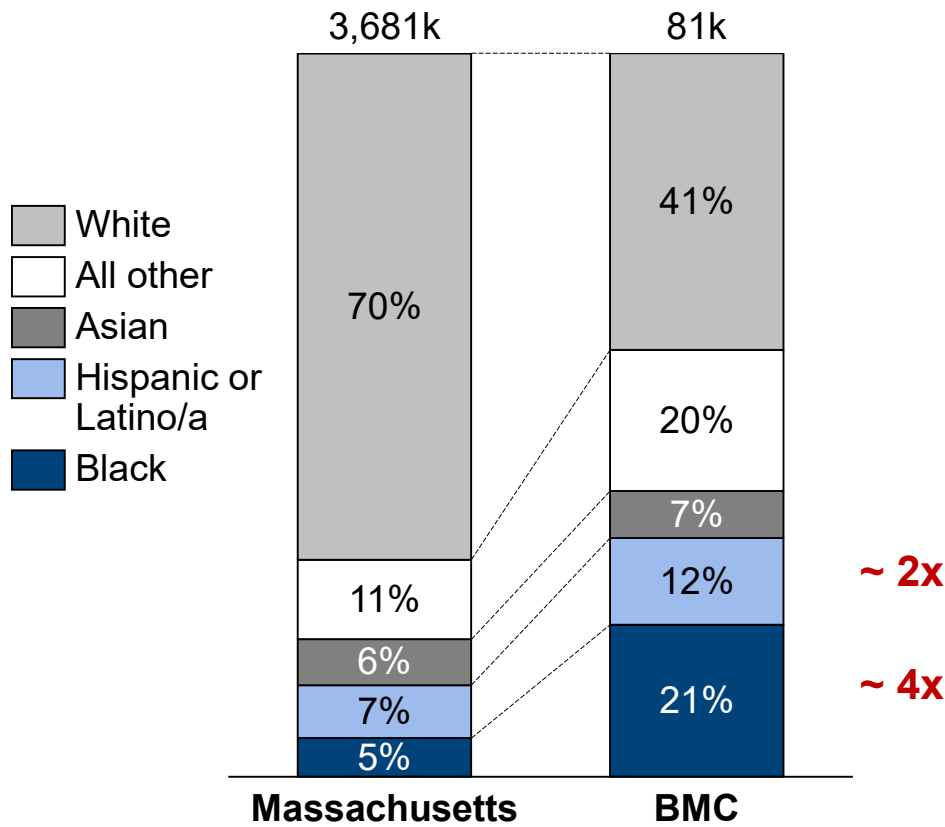
38/40

Non-Vaccinated BMC Patients >= 16 by Neighborhood



# ... and our efforts have shown that we can make progress towards equity when we focus on addressing racial inequities: Intentionality

**Vaccinations by race / ethnicity<sup>1</sup>**  
 MA through 4/27, BMC through 4/27



**Local leaders visited our community vaccination sites, including:**



Governor Charlie Baker at Morning Star Baptist Church



Attorney General Maura Healy at Russell Auditorium



Marty Martinez at the Menino YMCA

<sup>1</sup> Reflects first doses administered. For MA, "All other" includes multi-race, NH/PI, AI/AN, and unknown / other. For BMC, "All other" includes declined and other.

SOURCE: Mass.gov, BMC data

# We are engaging patients and the community through multiple channels to support vaccine adoption and access to appointments

## Trauma, COVID-19 Vaccine Concerns, and the Way Forward

Communities who have suffered most from COVID-19 also stand to benefit most from vaccination, says Anthony Fauci.



## Why We Should Prioritize People with Substance Use Disorder for COVID-19 Vaccination

Practical challenges and stigma must be overcome for such an effort to succeed, but success could yield a blueprint for future care.



By Sandra Larson January 20, 2021

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## Fighting Vaccine Hesitancy in Groups Hardest Hit by COVID-19

Transparency and culturally appropriate communication are key to counteracting the hesitancy that could diminish the impact of a COVID-19 vaccine.



By Jazmin Holiday December 11, 2020

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El Planeta  
January 24 at 3:23 PM  
El doctor Pablo Buitron de Boston Medical Center te invita a que revise toda la información sobre COVID-19 que recibas para confirmar  
See Translation



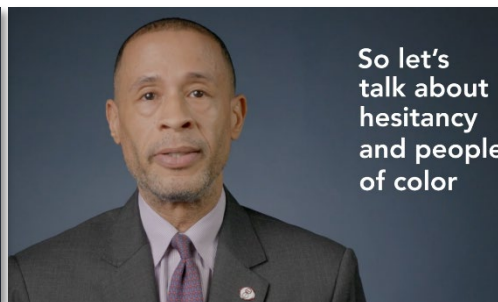
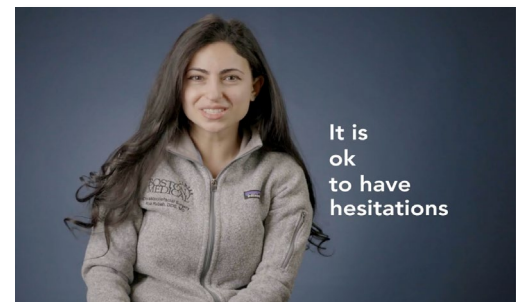
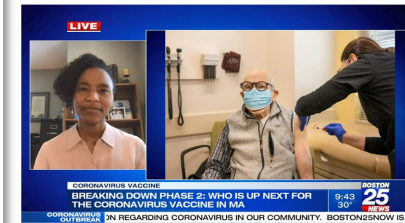
## The Boston Globe

ADRIAN WALKER  
BMC's Dr. Thea James is working to persuade communities of color to get the vaccine

By Adrian Walker | Globe Columnist | Updated January 31, 2021, 5:19 pm

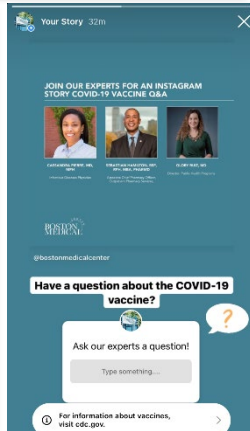


BMC infectious disease doc on what's ahead for vaccine rollout in Mass.



At BMC, your health is our top priority. questions about the COVID-19 vaccine available to you. Our experts have been to vaccinate our patients when we are guidelines.

In the meantime, you can find answer COVID-19 vaccines – such as how the information for people with specific h <https://bit.ly/2Kha4G7>, which is being





# Multilingual, geo-targeted digital campaign to further engage key audiences

## Goals:

- Address hesitancy and provide educational resources
- Showcase resiliency of the community and our path forward together
- Build momentum and encourage vaccine uptake

## Tactics:

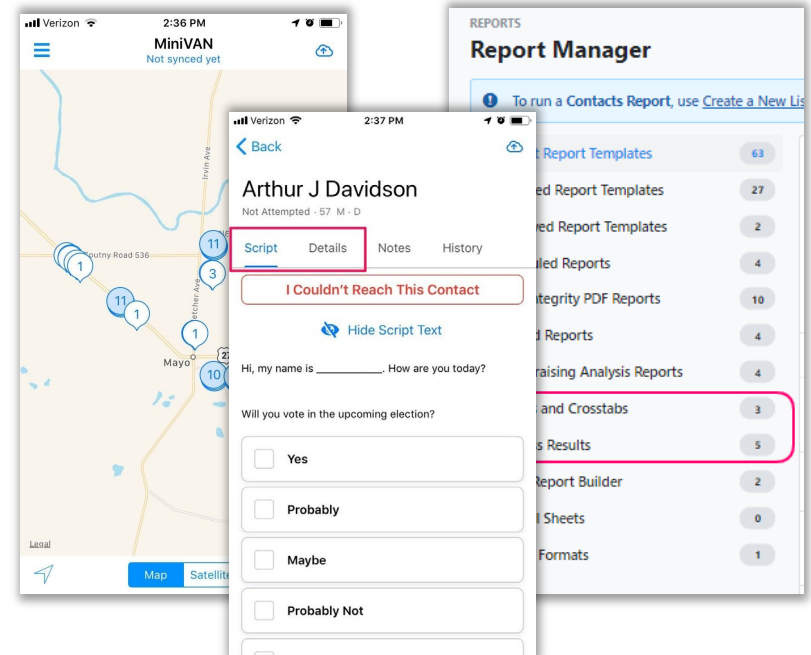
- Campaign landing page
- Social media ads
- Testimonial and educational videos
- Radio, print and media ads on niche community stations/outlets
- Community toolkits and educational materials



# We are working to improve access to information and appointment registration through direct field work

## Community Outreach

- Bilingual **canvassers** from target communities will utilize EveryAction & MiniVAN technology to go door-to-door
  - They will answer questions about the vaccine and sign people up for appointments/waitlists (socially distanced) and/or point individuals to town halls and additional **educational materials**
  - They will also distribute **door hangers, bodega signs**, etc. with local businesses and community members
- Champion groups (faith leaders, fraternities/sororities, elected officials, etc.) will engage our community for “**weekends of action**” and other events

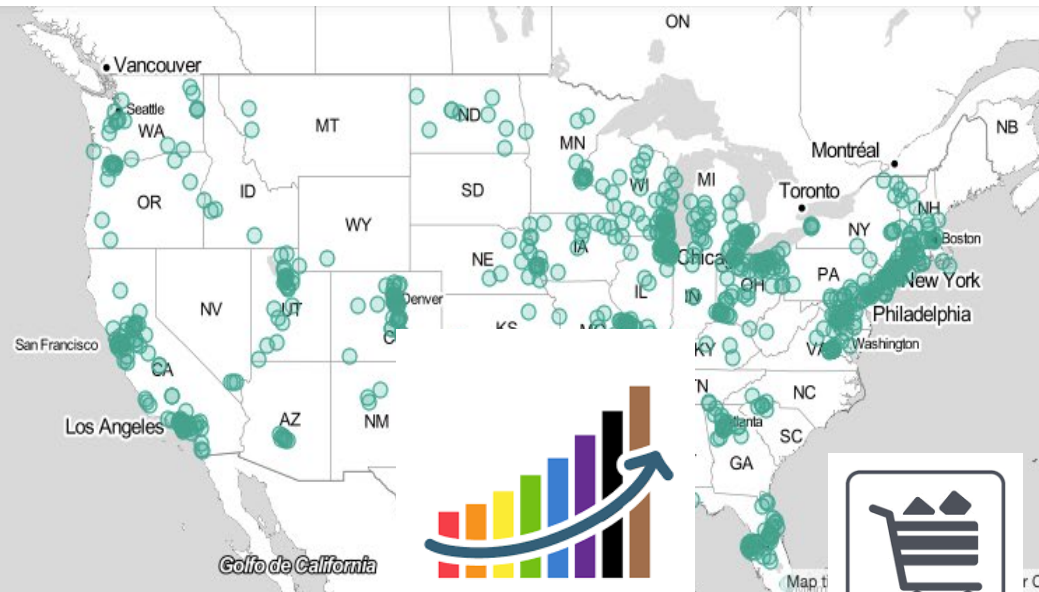


# The Healthcare Anchor Network

*“Building more inclusive, sustainable, local economies...”*

With 60 health systems (and counting) represented in the Network, we bring together anchor institutions from across the country that together employ more than 1.5 million people, purchase over \$50 billion annually, and have over \$100 billion in investment assets.

YCFIC  
N



CAREER



PROCUREMENT



## Determination of Need: Raise the Bar on What is Possible



### Press Releases

## **Boston Medical Center to Invest \$6.5 Million in Affordable Housing to Improve Community Health and Patient Outcomes, Reduce Medical Costs**

December 07, 2017



# Investment: Bartlett Place





# Innovative Stable Housing Initiative



# Our Journey: Began with principles and intentionality

We are building on our decades of health equity programming with a new intentionality to address gaps in health outcomes by race explicitly



## Move Upstream

Invest in eliminating systemic barriers for minorities to economic mobility and access to other social determinants of health in partnership with our community



## Advance Racial Health Equity

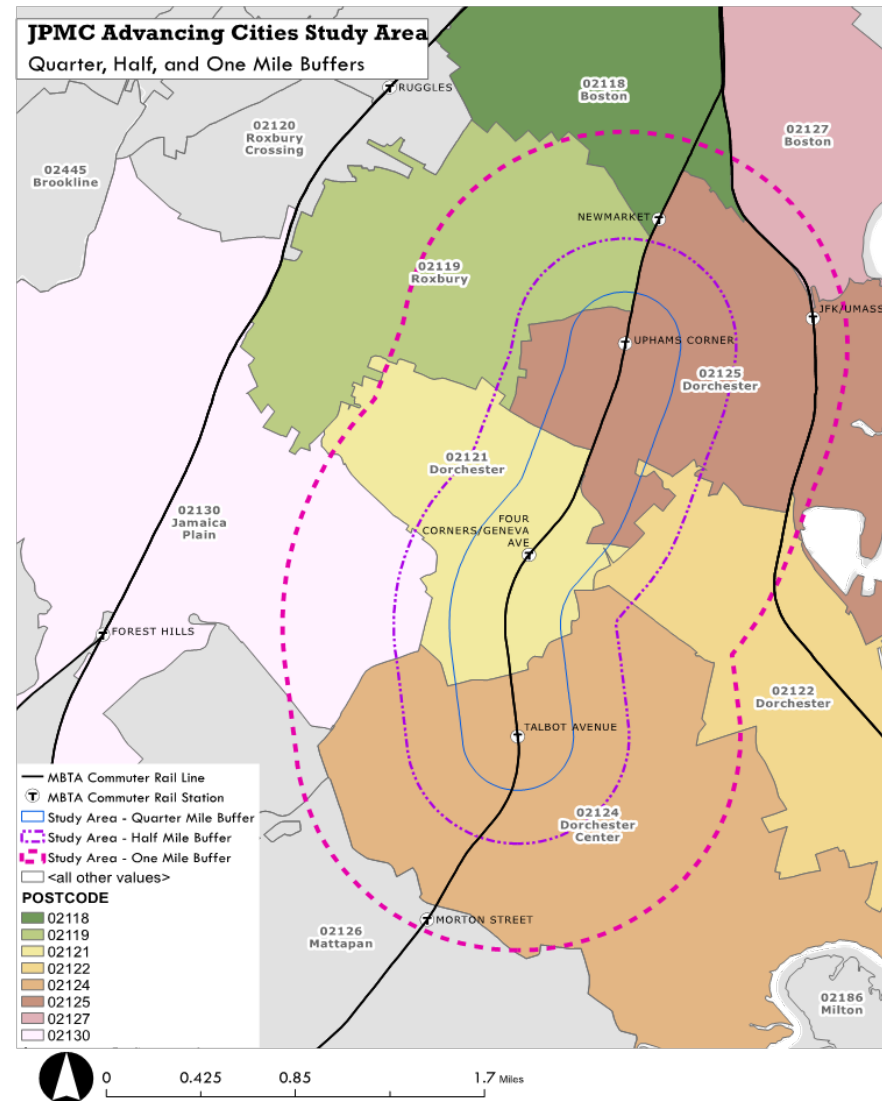
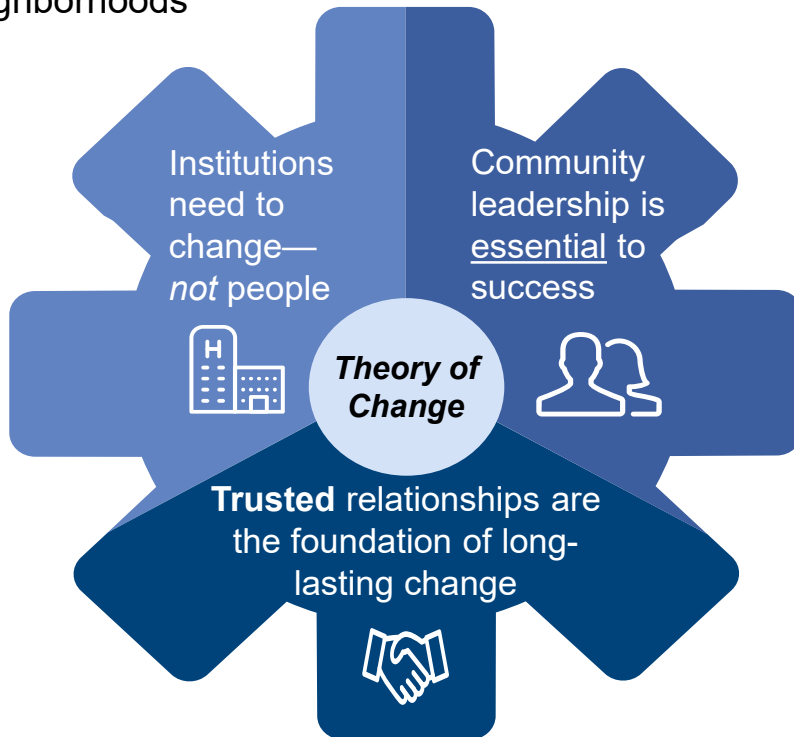


## Ensure Equitable Care

Revise use of race in protocols  
Adapt care to cultural / social context  
Eliminate impact of unconscious bias  
Create a trustworthy environment and correct for historical bias

# The BOS Collaborative is testing a *Systems Change* approach in a place-based way (JPMC \$5m Grant)

Beginning in the Bowdoin-Geneva, Codman Square, Upham's Corner, and Nubian Square neighborhoods of Boston and expanding to other adjacent neighborhoods, The BOS Collaborative is working to **address systemic problems that drive differences in economic opportunity** within segregated neighborhoods, while leveraging vibrant social connections within those neighborhoods



# Good Food Markets: *Rethinking Equity with Intentionality*

- Original plan
- True Equity

