Strategies to Promote Equity in the BWH COVID-19 Recovery Center

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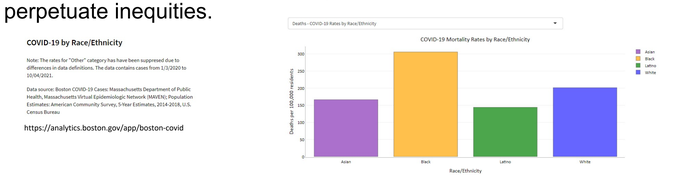
HARVARD MEDICAL SCHOOL

INTRODUCTION

Background of COVID-19 Disparities

An ongoing challenge remains persistent inequities related to care for vulnerable patient groups who are more likely to contract severe forms of COVID. COVID-19 has disproportionately impacted historically disadvantaged communities of color and patients from socioeconomically disadvantaged backgrounds. African American and LatinX individuals suffer more infections and higher mortality.[1,2] These inequities reflect legacies of structural racism, unequal resource investment and the impact of systems that perpetuate health disparities.[3] Even in the pre-COVID-19 era, non-white patients had less reliable access to specialty care[4] and to post-intensive care unit (ICU) care.[5] Without targeted interventions to address these systemic issues, we fear that the challenges of post-COVID care may further perpetuate inequities.



Our work is funded through the Department of Medicine Health Equity Innovation Pilot Program (HEIP) as of July 2021.

Here we present targeted interventions to address these systemic issues and how we intentionally work to promote equity through direct community engagement, leveraging data analytics, with a robust system of monitoring, that will ultimately improve our healthcare delivery and ensure that the patients whom we serve in our recovery center reflect those who have borne a disproportionate burden of this disease.

Population

Patients referred to the BWH COVID-Recovery Center who have a documented COVID test, and persistent symptoms. Patients do not have had to be hospitalized nor primarily seen in the Brigham system. CRC began seeing patients April 8, 2021 and so far there have been 709 referrals. 556 patients have been seen, 212 thus far in pulmonary clinic.

METHODS

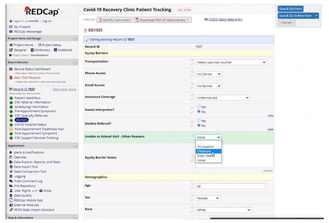
Intervention Data Elements and Analyses

Below are examples of key metrics and indicators we are following and in the process of monitoring for our equity efforts

Measures and Analysis: Metrics and Indicators, interval assessments q1 month

Metric	Indicators of Performance
Demographic assessment: Compare the race, ethnicity, and ADI for patients seen in the CRC versus those hospitalized with COVID in the prior year	**CRC Outreach Indicator:** cumulative number of previously hospitalized BWH patients 3/2020-3/2021 contacted by CRC patient navigator / total number of referred patients **Proportional Visit Indicator:** cumulative number of patients seen in CRC who were hospitalized 3/2020-3/2021 at BWH/ total number of CRC patients
Community outreach: Monitor community outreach events, including advertising, clinic visits conducted at community health centers, and collaboration with primary care providers.	**Community Engagement Indicator**: number of patients referred to clinic from community outreach/ total number of referred CRC patients
Community care: Monitor number of patients seen in the community or referred to services.	**Direct Community Care Indicator:** number of patients seen in community health settings / total number of all CRC patients **Community Referral Indicator:** number of patients referred to additional community resources for social needs (food and housing assistance, transportation assistance).

We work with the Department of Medicine Quality Team to enhance our ability to track patient clinical data, equity needs/barriers and use of resources we provide such as social work referral or transportation assistance. We also work with the team to build an EPIC Workbench report of hospitalized patients that we start to contact and triage.

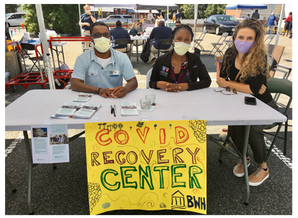


We are designing a **simple unweighted stratification tool** using 8 items to create a 4 category score that will allow us to better prioritize access to clinic visits, referrals to social work and use of resources such as transportation reimbursement.

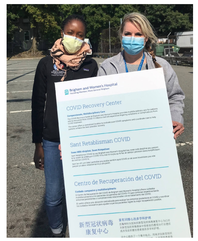
Component	Positive Screen
Age	>65
Sex	Male
Race/Ethnicity	Black or African American, Hispanic or Latino/American Indian or Alaska Native
Neighborhood ADI	4-7 Medium 8-10 High
English preferred language	No
Smoking Status	Current or Former
Access to Transportation	No
Health Insurance Access	Uninsured or Mass Health Limited

Community Partnerships

We are working on building several trustworthy community partnerships, currently, the most advanced partnership is with the Mattapan Food and Fitness Coalition (MFFC). We engage through several mechanisms: electronic communication, the Saturday Farmer's Market and Monthly public meeting to broaden connections and trust within the community. We reached around 100 participants each farmer's market.



We had significant improvement between our first and second community events



RESULTS

	March	April	May	June	July	August	September
Average Age		49	47.5	46	46	47.5	45
Female %		70%	71%	71%	71	75%	66%
Male %		30%	29%	29%	28%	25%	33%
NB %					1%		
Race/Ethnicity							
- White		74%	72%	72%	79%	74%	73%
- LatinX		12%	13%	13%	7%	12%	13%
- Black		7%	7%	8.5%	11%	9%	8%
- Asian		4.5%	5%	4.2%	3%	2%	3%
- Other		2%	2%	1.7%	-	3%	3%
Language							
- English		91%	91%	90%	90%	94%	93%
- Spanish		6%	7%	8%	6.5%	4.5%	5.5%
- Other		3%	2%	2%	3.5%	1.5%	1%
Insurance							
- Managed		76%	76%	76%	79%	74%	83%
- Medicare		11%	12%	13%	13%	9%	5.5%
- MassHealth		13%	12%	11%	8.6%	17%	12%
% Hospitalized		23%	23%	20%	16%	22%	20%
Hospitalization with ICU stay		42%	26%	40%	40%	36%	28%
% of hospitalized pts who were at an MGB hospital		60%	55%	62%	50%	80%	44%
Top 3 Zip Codes		02132	02026	02130	02131	02131	02130
		02124	02131	02124	02124	02043	02126
		02136	02130	01970	02136	02124	02131
Average ADI		4.28	4.24	4.63	4.22	4.1	4.53

After the first quarter of the HEIP grant, we are below our indicators for CRC outreach and thus the proportion of previously hospitalized patients; community engagement and direct care. However, we our social worker on the team, we have now had n=55 social work referrals as of 10/1/21.

CONCLUSIONS

Interval data analysis demonstrates that we have successfully met our data collection indicator. However, as noted, we have room for improvement in other indicators. We continue to advance in our rewarding partnership with MFFC. As we monitor our indicators, we are making adjustments for new strategies.

FUTURE WORK

The CRC offers an opportunity to expand community access to specialized pulmonary care at BWH. By recognizing barriers to care and providing more care and services in the outpatient setting to disadvantaged populations, we can both improve health outcomes for individual patients and improve the quality and equity of care across the hospital system. We will begin to work on the outreach indicator using our stratification tool and Workbench reports to prioritize clinic visits.

Now with available social work resources we will be able to better provide comprehensive care. We are re-evaluating ways to leverage existing system resources to meet our indicators of care and expand access.

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