

Maimonides Department of Population Health / Community Care of Brooklyn: Driving Collaboration, Engaging Community and Promoting Health Equity During COVID19 Pandemic July 21, 2022

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#Together4Health2022



Today's Topic and Objectives

Topic

Driving Collaboration, Engaging Community and Promoting Health Equity During COVID-19 Pandemic

Objectives

- Provide an example of a successful large scale pandemic response effort and promoting testing/vaccination activity across a culturally diverse community
- Identify and address barriers / delays in care to mitigate the impact of rapidly spreading COVID-19 disease
- Leverage a variety of available technology, including extensive data from Healthix, New York's largest public HIE

Maimonides Department of Population Health and Community Care of Brooklyn (CCB)

The Maimonides Department of Population Health's integrated network of health and social services focus on improving health and wellness in Brooklyn by addressing social determinants of health and improving outcomes.

Managed through the Maimonides Department of Population Health, Community Care of Brooklyn (CCB) is a network of over 1,000 health and social service organizations working with partners to better serve the health care needs of Brooklyn communities.



Community Care of Brooklyn - Who We Are

- A new model of coordinated care for Brooklyn's Medicaid population
- 800+ participant organizations and over 3,000 clinical providers from across the social and clinical service continuum
- Public funding and grant awards invested in designing a clinical and technological infrastructure to establish an integrated system of care
- Goal: Improve care coordination and communication throughout the borough; enhance population health management for complex patients

Community Care of Brooklyn - Who We Serve

- The population of Brooklyn, which is greater than that of 15 U.S. states
- Richly diverse communities with a mix of high, medium and low-income neighborhoods and a broad range of racial and ethnic populations
- Residents who experience barriers to care and delayed care especially in communities with unique needs related to traditions, language, education, and economics
- Areas of Brooklyn which consistently rank poorly in markers of SDOH such as household poverty, unemployment, lack of health insurance, low levels of education and high prevalence of disease

Healthix

Mission

Mobilizing health information
across our communities



Vision

The trusted partner sharing health information
to improve people's lives

Values

Purpose

We are dedicated to improving the health of the community.

Innovation

We are passionate about building innovative and lasting
solutions.

Respect

We respect the strengths that make each of us unique.

Accountability

We own what we do and share our success.

Teamwork

We think independently, speak openly, and act collectively.

Harmony

We foster joy and work-life balance.

Growth

We constantly learn and embrace challenges.



Healthix

New York City and Long Island



Hospitals (81)

OREs (731)

Physicians (27,246)

CBOs/BHOs (159)

Health Plans (19)

IPA, ACO, PPS (15)

Other (33)

Role of Healthix

8,000+ facilities

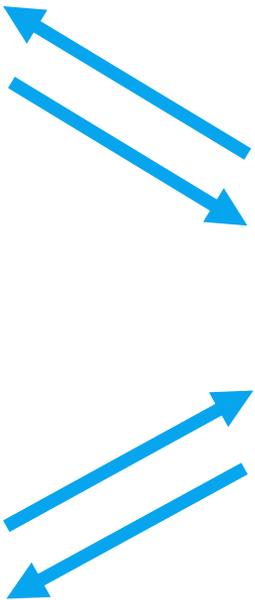


PRIVATE HIEs

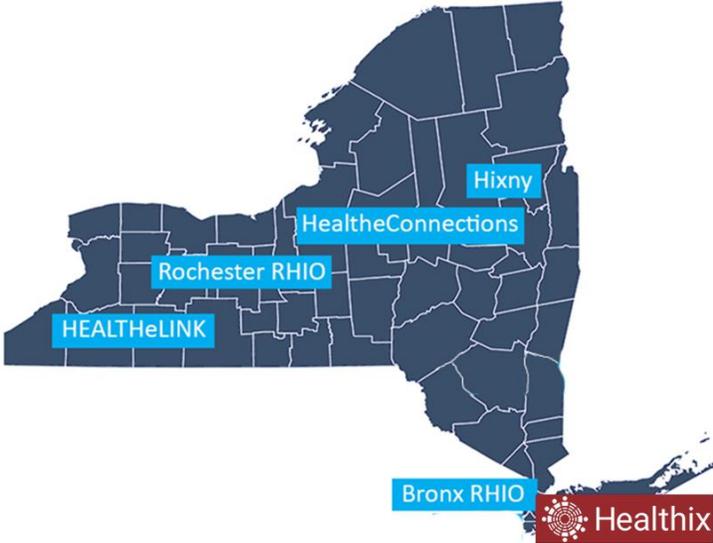


PRIVATE HIEs INCLUDE:

- Health Plans
- Large Provider Systems
- PPSs
- More

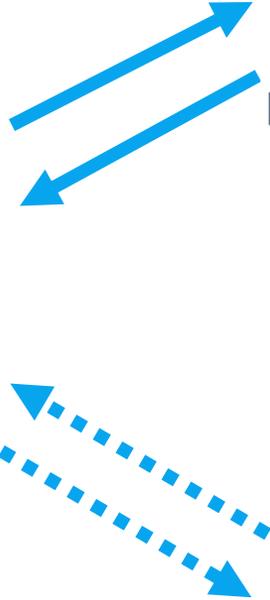
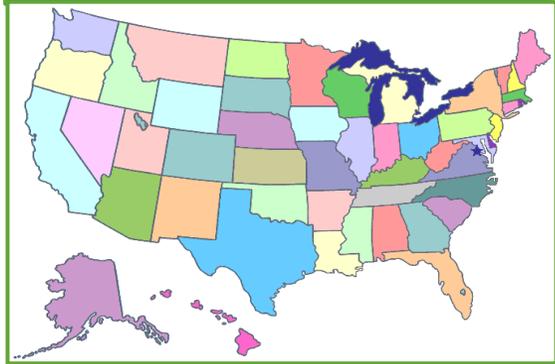


HEALTHIX



HEALTHeLINK
Rochester RHIO
HealtheConnections
Hixny
Bronx RHIO

eHealth exchange and CIVITAS





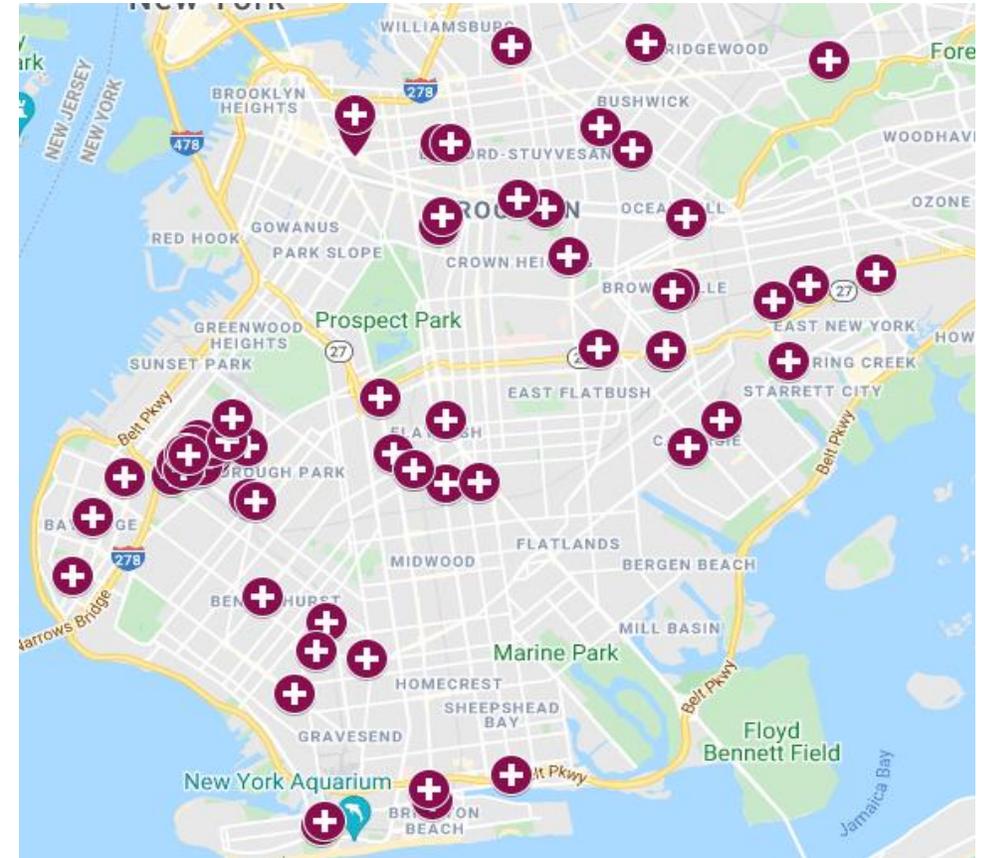
Background

- New York City and its surrounding boroughs quickly emerged as “ground central” for COVID cases, hospitalizations and deaths in the United States
- Overwhelming burden placed upon the health care delivery system – from emergency services to a scarcity of ICU beds, critical shortages of PPE, ventilators and testing
- Brooklyn’s 2.5 Million were among the hardest hit, with a large percentage with high prevalence of obesity, asthma, hypertension and diabetes residing in over 23 Brooklyn zip codes – presented a significant risk for catastrophic COVID 19 illness.

Call to Action

- **June - November 2020:** Baseline period resulted in an average of 17,492 tests performed monthly
- **December 2020:** Maimonides Population Health entered a one-year grant from NYC Department of Health and Mental Hygiene (DOHMH) to expand and increase COVID-19 testing by 20% of the baseline
- **Goal:** Increase COVID-19 tests performed to 20,990 COVID-19 per month
- **Objective:** Launch multi-prong approach engaging provider and community networks, patients; leverage available technology, incl. Healthix

CCB Partner Sites Across Brooklyn



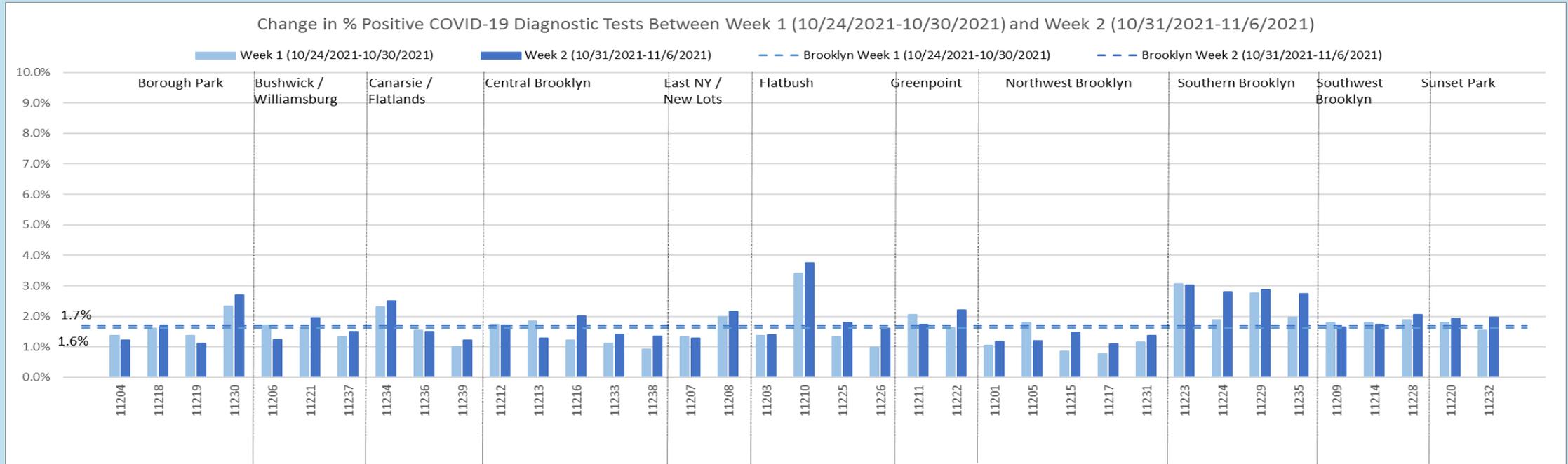
Multi-Pronged Approach: Provider Engagement

- Building upon existing partnerships, 47 provider organizations agreed to engage with CCB in this work including hospitals, FQHCs and private practices; 13 of which had never performed tests before
- CCB received, organized, and distributed PPE and test kits sourced directly from the City stockpile and delivered them directly to our partners. For every test a provider performed, they received another test kit and all associated PPE, free of charge
- CCB assisted in forging relationships between our providers and the Pandemic Response Lab which provided a <24-hour turnaround time for PCR test processing
- Each provider received a stipend to offset additional staffing and administrative support to manage increased numbers of patients tested in this endeavor

Multi-Pronged Approach: Community Engagement

- Activated Participatory Action Research (PAR) youth researchers to survey 1,600 Brooklynites between January 27 and February 2, 2021, to identify concerns, barriers:
 - 40.1% of respondents indicated they planned to be vaccinated
 - 59.9% either did not plan to be vaccinated or were unsure.
 - Findings guided actions and strategies of the COVID response initiatives.
- Financial incentives offered to CBOs to tailor outreach programs to fit the constituents' needs
- Maimonides Population Health's data analytics team ran weekly surveillance of Brooklyn for "hotspots", noting which zip codes fall into the "trifecta of concern", including:
 - Low COVID-19 diagnostic testing saturation
 - High COVID-19 diagnostic test positivity rate
 - Low COVID-19 vaccination rate
- "Hot Spot" data was shared with CBOs and Providers to effectively target appropriate outreach

Multi-Pronged Approach: Community Engagement



Multi-Pronged Approach: Patient Engagement

- Partnering with Amazon Web Services (AWS), to use a “ChatBot” originally developed in 2020 for earlier COVID-19 response efforts
- Over 330,000 text messages were sent, encouraging testing and vaccination to members of the community over the lifetime of the grant.
- High-touch education educational initiatives through telephonic outreach
- The “MMC-AWS ChatBot” was used to engage high risk patients enrolled in various programs beginning in April 2020 for other targeted efforts in response to the COVID-19 crisis.



Multi-Pronged Approach: Leverage Technology

SMS content

Message type

Transactional

Origination phone number

+18337250116

Default sender ID

-

Message body

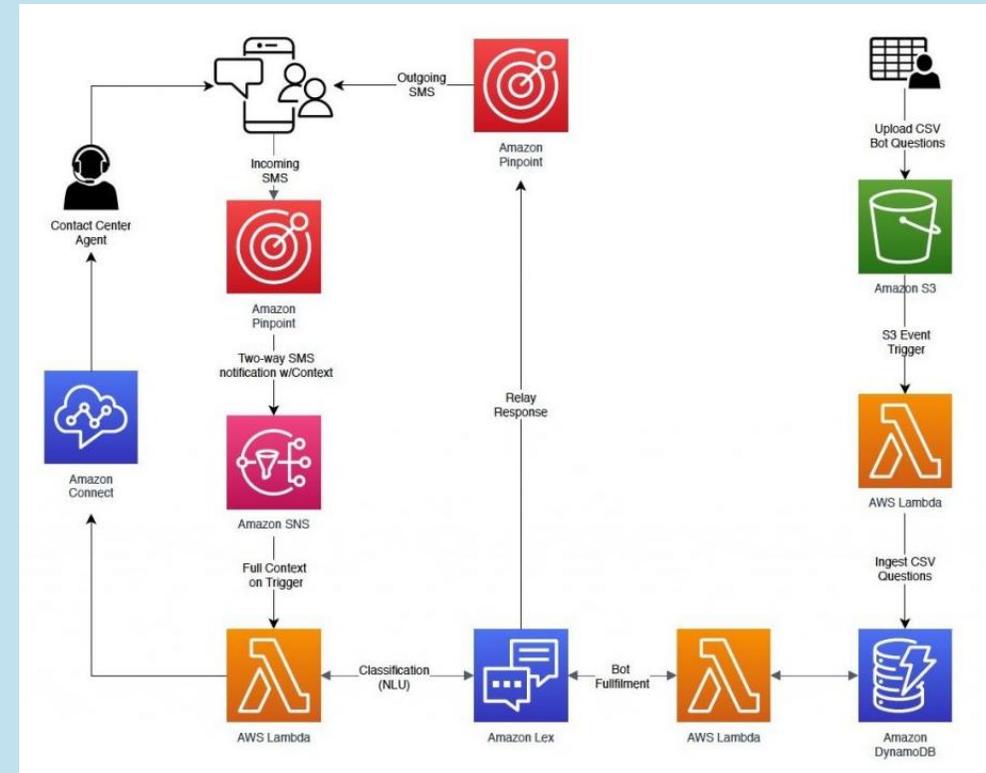
This is Maimonides on behalf of Mercy Med (273 94th St, BK & 718-630-5552) Stay safe...Walk in to get tested fast & vaccinated for COVID here!

Stop2End

Multi-Pronged Approach: Leverage Technology

AWS Professional Services team built-to-suit an **SMS-based chatbot platform** for proactive and light-touch member outreach leveraging in response to the COVID-19 outbreak in early 2020:

- **Amazon Pinpoint**, a highly scalable and globally distributed SMS service
- **Amazon Lex**, a service for building conversational interfaces uses voice and text
- **Amazon Connect**, an omnichannel cloud contact center that directly connected members to managed call centers and other resources
- Deployment steps and set-up guide (including **multi-language support**) available
- Designed as a “Wellness Check In” text, in English or Spanish
- Built to target large groups in varying geographic areas



Multi-Pronged Approach: Leverage Technology

The Value and Challenges of HIE

- Key factors for the success of the program included identifying relationships between the patient cohort and their provider. This data would be used by CCB to formulate their plan for targeting outreach to meet the goals of the grant
- In theory, Healthix could provide those relationships; however, in the early days a standard code set for COVID-19 tests was not available.
- Today the list of COVID-19 tests is expansive, yet not all facilities are using LOINC codes to identify their tests. Our searches resulted in over 100 variants in how items were coded/described, posing our greatest challenge.

Multi-Pronged Approach: Leverage Technology

What Healthix provided

- Patient cohort for outreach based on geographic criteria
- Test results for the cohort
- Patient/Provider relationship table
- **How do we code COVID?**
 - No clear code set in the early days
 - Wild Card Search
 - (SELECT DISTINCT Patient FROM %parallel HSAA.LabResultItem Where ResultTime >= '2021-07-01' AND (TestItemCode_Description LIKE '%COV%' OR TestItemCode_Description LIKE '%SARS%' OR TestItemCode_Description LIKE '%Corona%'))

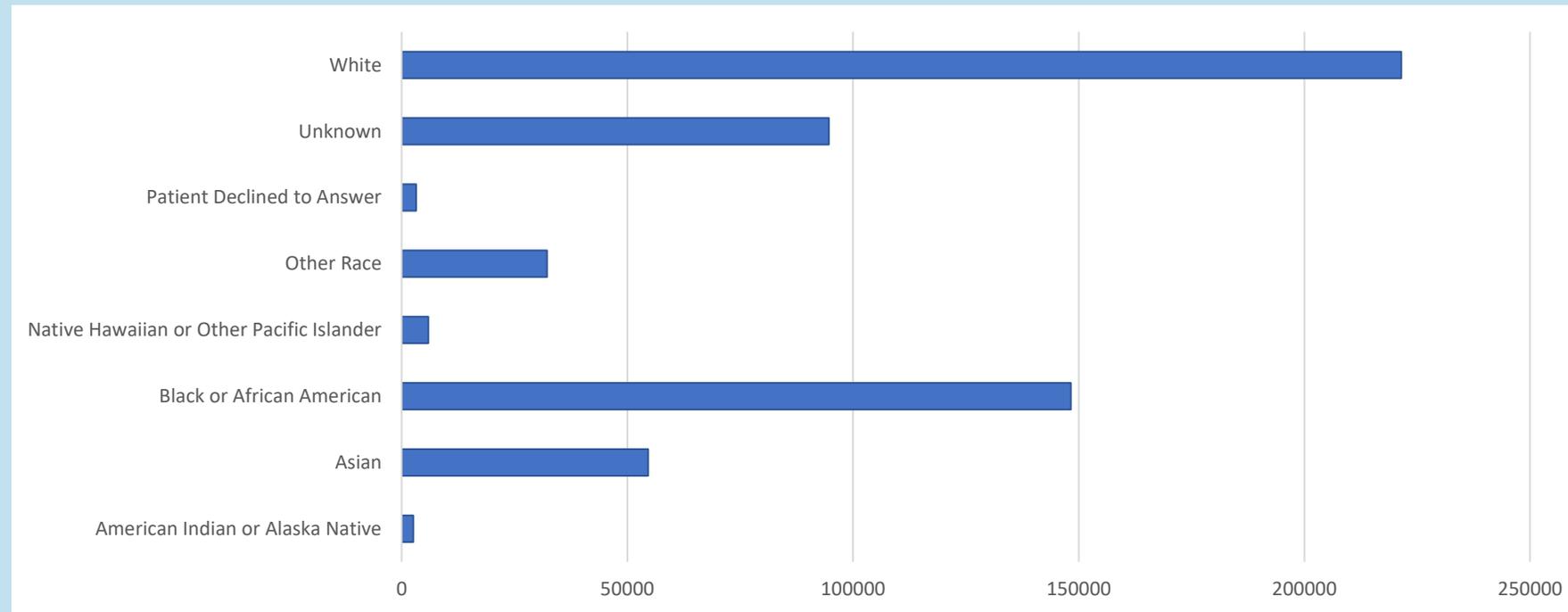
Results of Patient Level Engagement

- CCB launched a telephonic effort to reach out to Brooklynites to encourage regular COVID-19 testing with our partner providers and vaccination education when appropriate
- Using AWS Chat Bot, we sent over 330,000 text messages to members of the community over the lifetime of the grant

Total Monthly COVID-19 Tests Conducted By TPP Participants



Results of Patient Level Engagement by Race Demographics



Conclusion and Lessons Learned

- We were able to utilize data provided by Healthix to effectively deliver timely and targeted outreach and monitor resulting test activity in various neighborhoods throughout Brooklyn
- Through analysis of community-level data via PAR, CCB discovered the need for better accessibility to and efficiency at testing centers and identified 14 CBOs equipped with the tools to engage those most at risk for contracting COVID-19.
- CCB leveraged technology developed for the initial emergency response to COVID-19 for this program
- With support, PCPs and CBOs are strong assets in the fight against COVID-19
Leveraging community-level organizations and leaders allowed CCB to provide education to Brooklyn communities that are historically underserved and less likely to respond to traditional methods of education and engagement

Thank you!

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