

Virtual Pre-Conference

Continuity of HIV Care in the Presence of COVID-19

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Albert Einstein College of Medicine
Montefiore Health System, Bronx, New York, USA

Implementing HIV Telemedicine in a high COVID-19 Prevalent Context





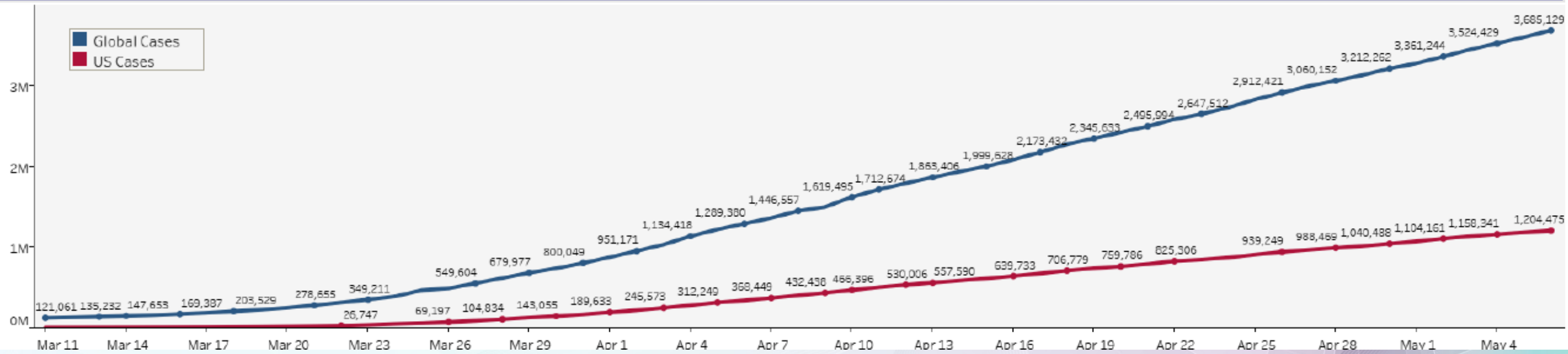
Nothing to declare

Outline

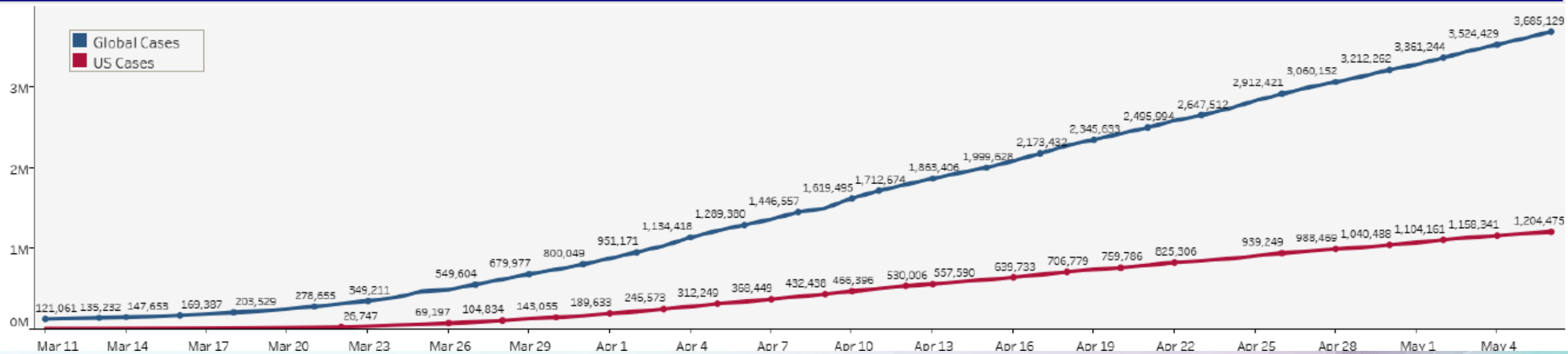


- COVID-19 in New York City and The Bronx
- Description of Montefiore's HIV primary care treatment care model
- Disruptions Faced
- Implementation of telemedicine to date
- Challenges faced
- Future directions for practice and research

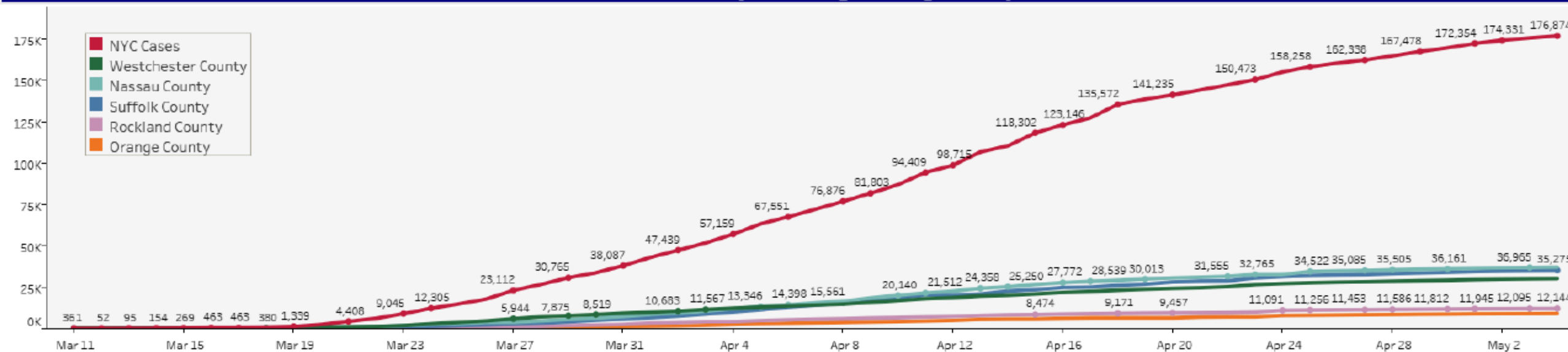
COVID-19 Global and US Cases



COVID-19 Global and US Cases



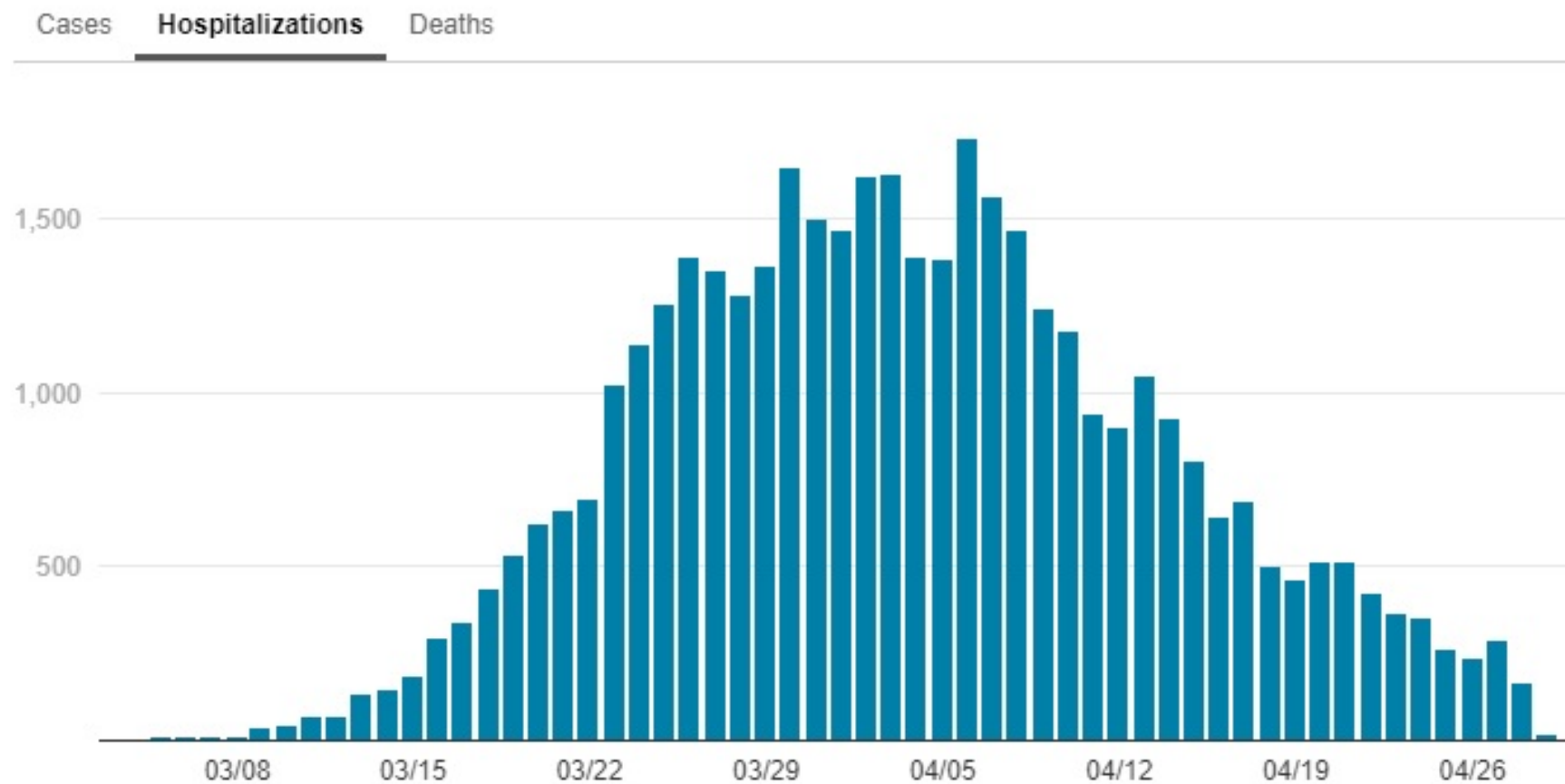
COVID-19 New York City and Neighboring County Cases



COVID-19 Cases Hospitalizations in New York City

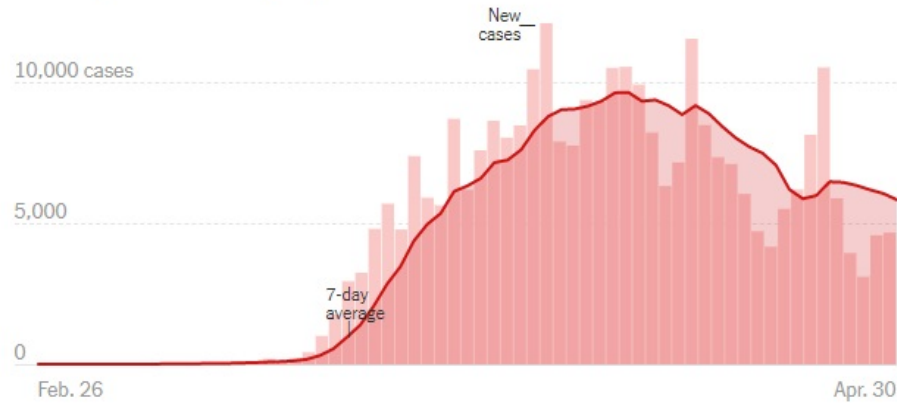


Due to delays in reporting,
recent data are incomplete.



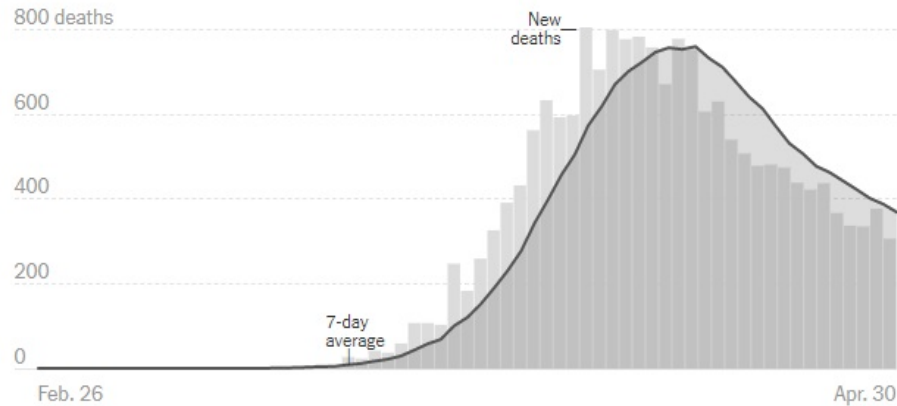
COVID-19 Cases and Deaths in NYC

New reported cases by day in New York



Note: The seven-day average is the average of a day and the previous six days of data.

New reported deaths by day in New York



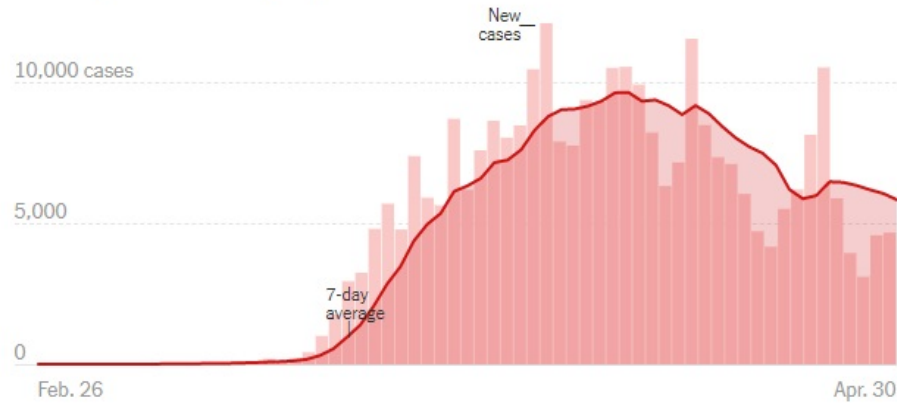
*<https://www.archives.gov/research/military/vietnam-war/casualty-statistics>



COVID-19 Cases and Deaths in NYC

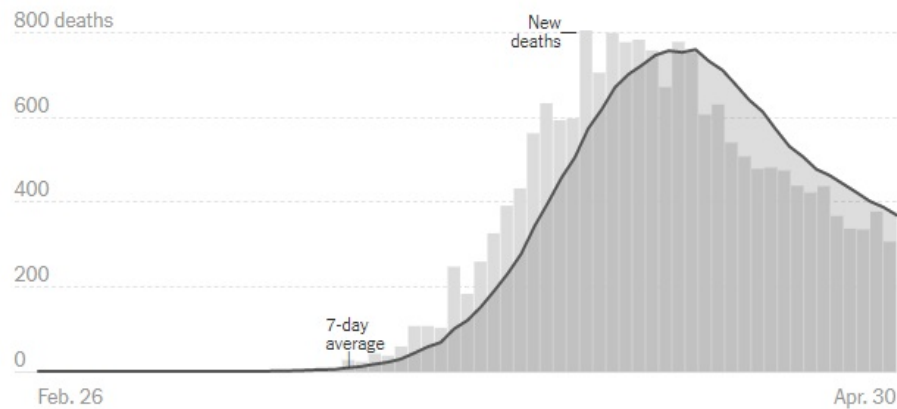


New reported cases by day in New York

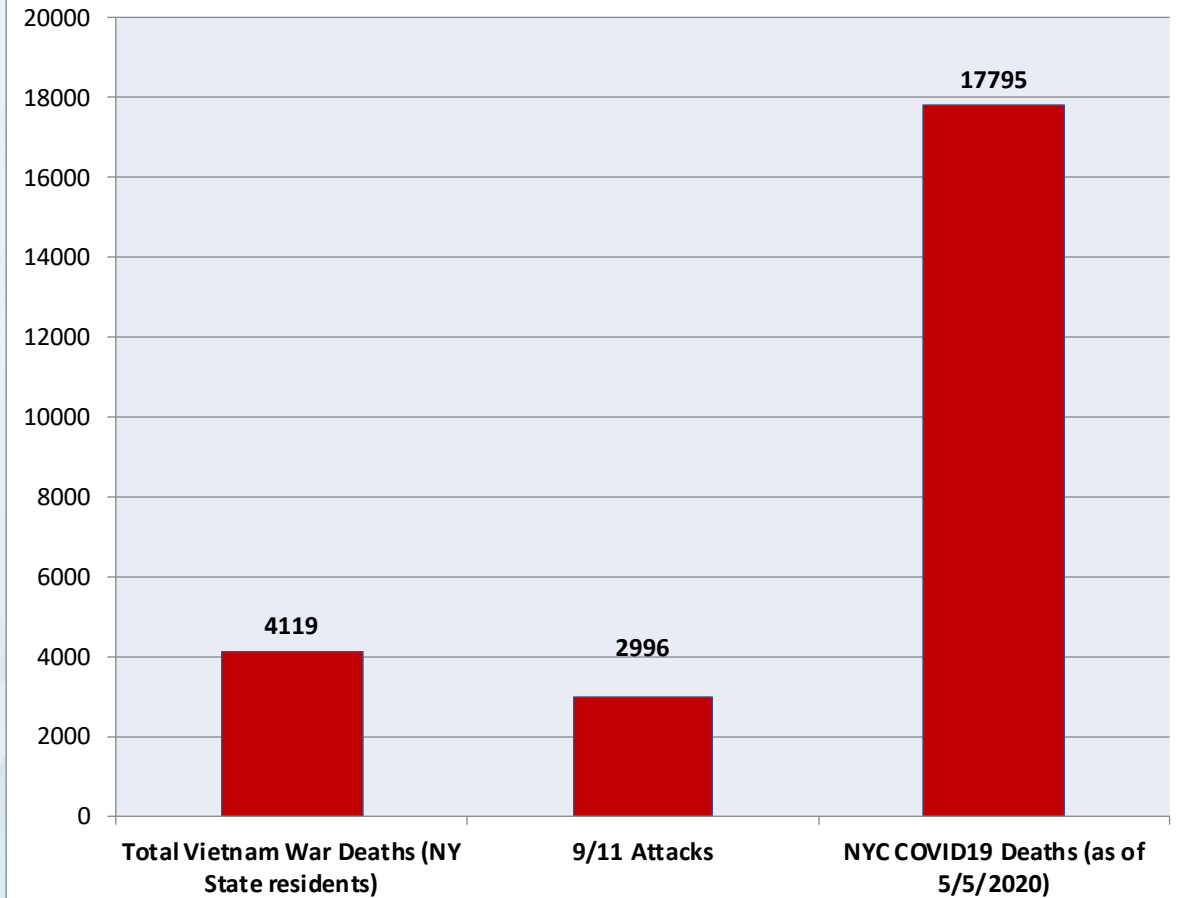


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New reported deaths by day in New York



Number of Deaths



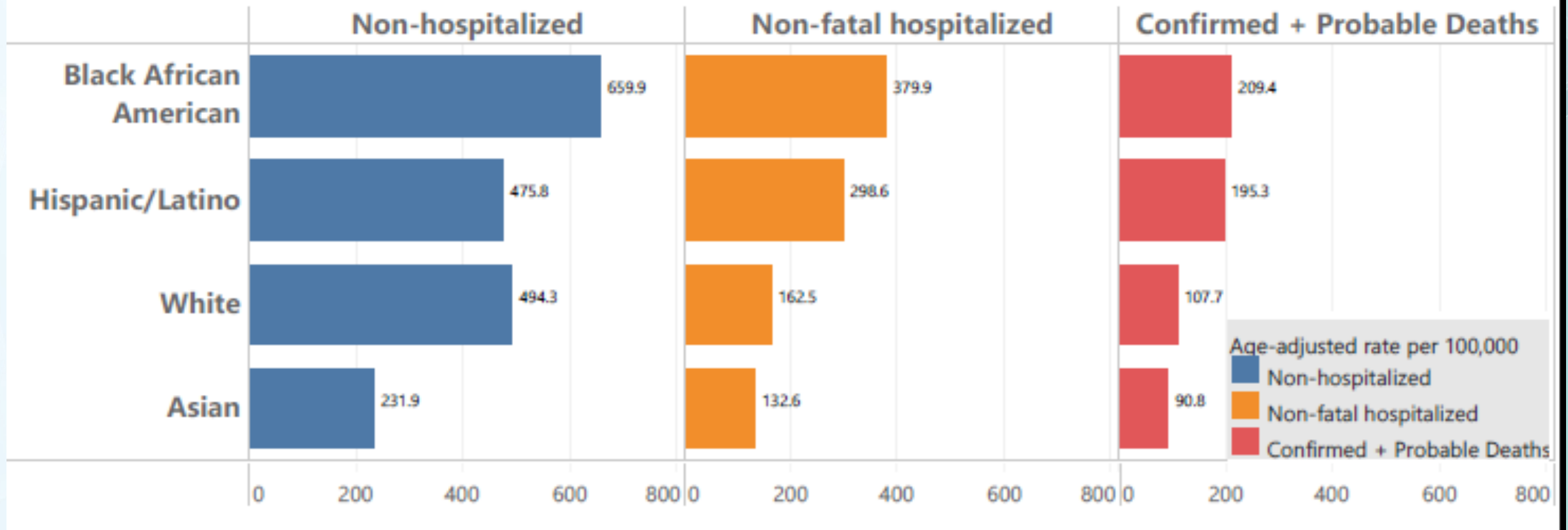
*<https://www.archives.gov/research/military/vietnam-war/casualty-statistics>

Disparities by Race/Ethnicity



Age-adjusted rates of lab-confirmed COVID-19 non hospitalized cases, estimated non-fatal hospitalized cases, and total persons known to have died (lab-confirmed and probable) per 100,000 by race/ethnicity group

NYC
Health



NYC Health: Cases by Borough



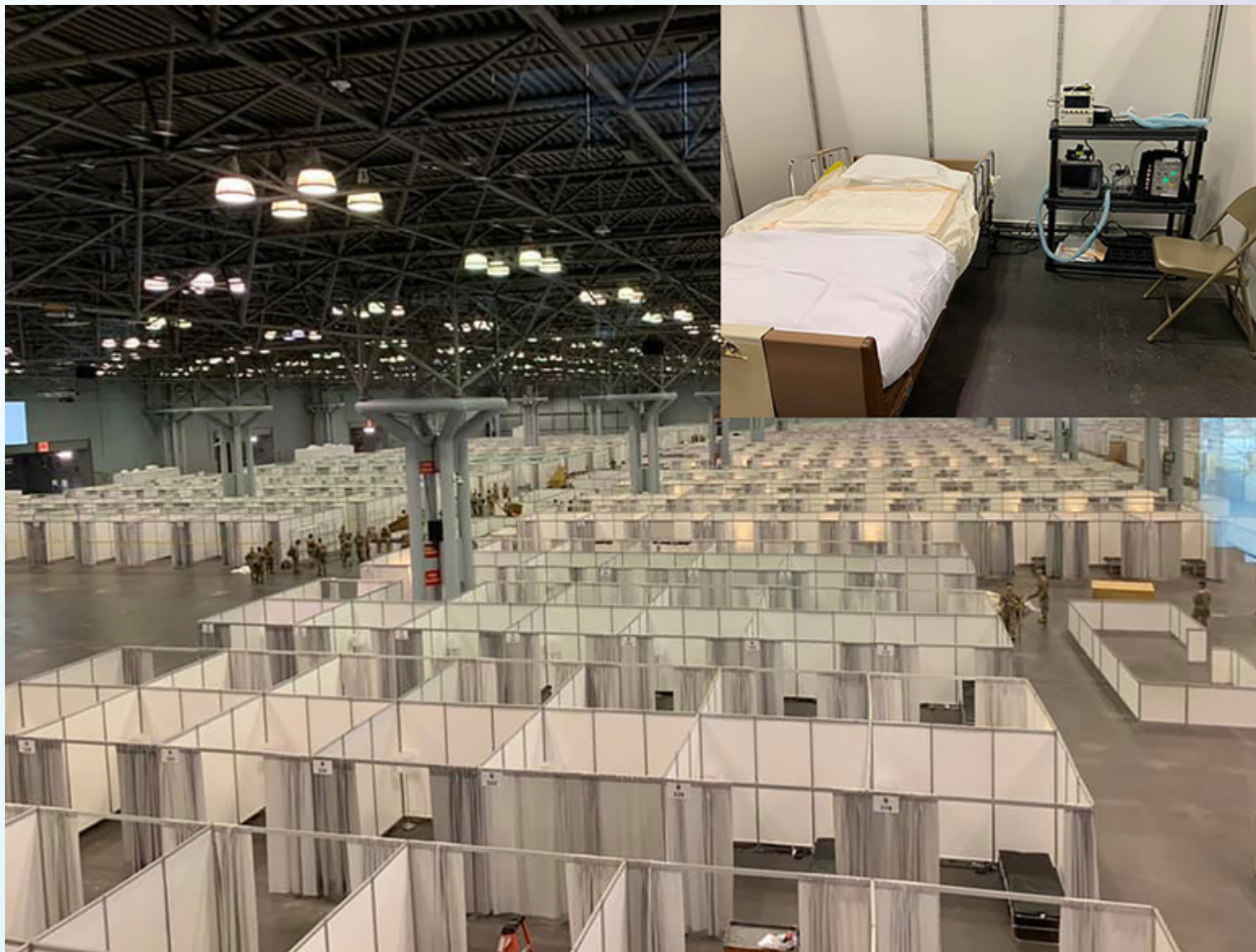
New York City: Before



NYC: After







NYC Health: Cases by Borough



Rates by Borough

This chart shows the number of positive cases per 100,000 people in each borough. It indicates the spread of COVID-19 relative to each borough's population.

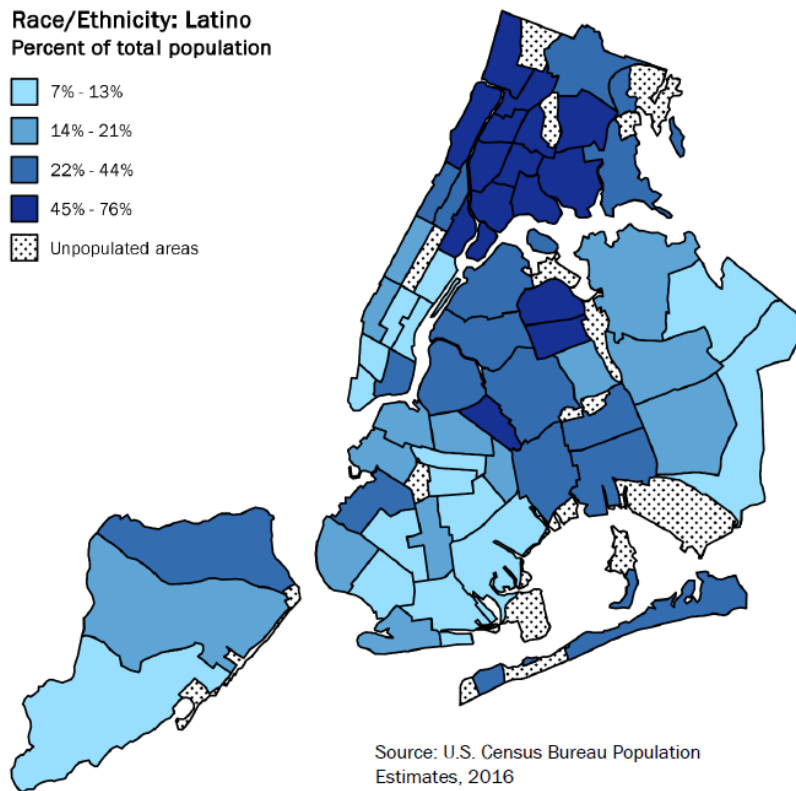
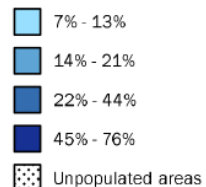
	▼ Rate per 100,000 people	Count
The Bronx	2,552	37,551
Staten Island	2,360	11,861
Queens	2,040	51,028
Brooklyn	1,608	43,621
Manhattan	1,082	20,363
Citywide		164,505

[Get the data](#) • Created with [Datawrapper](#)

Demographic Characteristics of NYC Boroughs

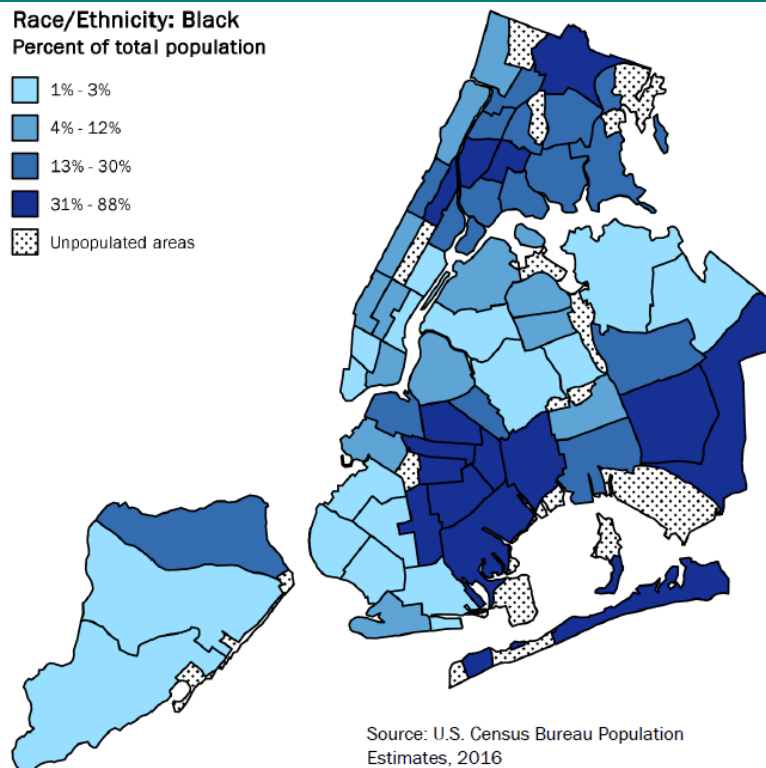
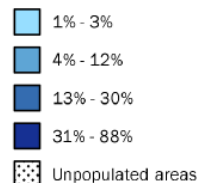


Race/Ethnicity: Latino
Percent of total population



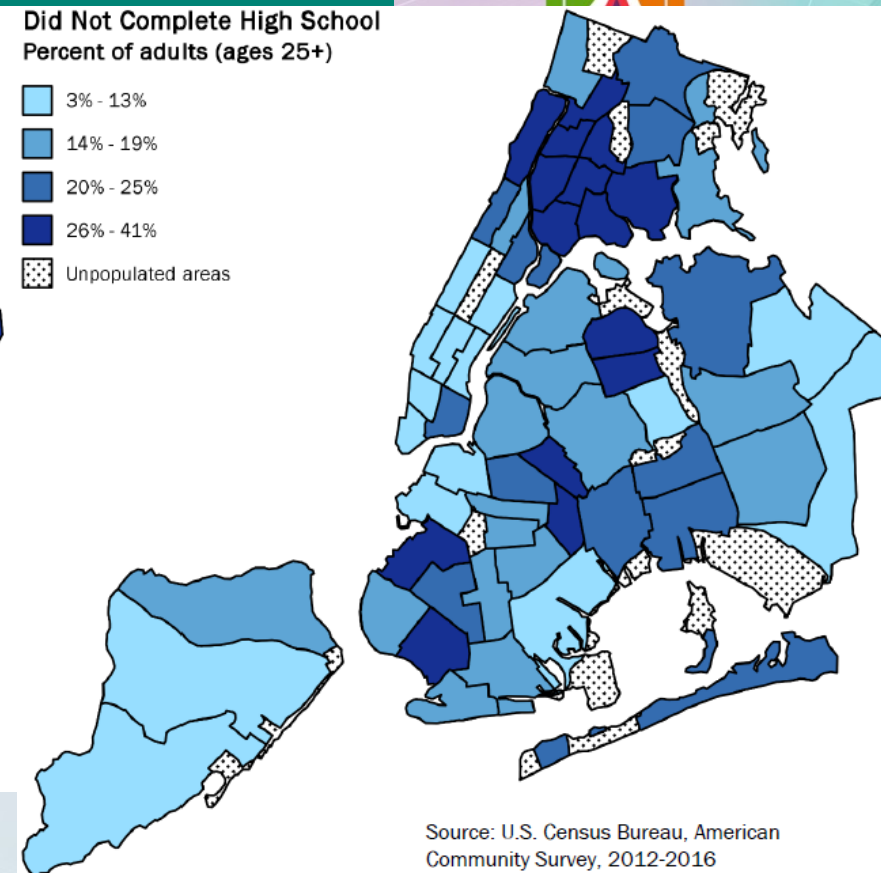
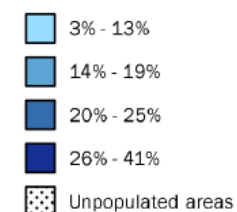
Source: U.S. Census Bureau Population Estimates, 2016

Race/Ethnicity: Black
Percent of total population



Source: U.S. Census Bureau Population Estimates, 2016

Did Not Complete High School
Percent of adults (ages 25+)

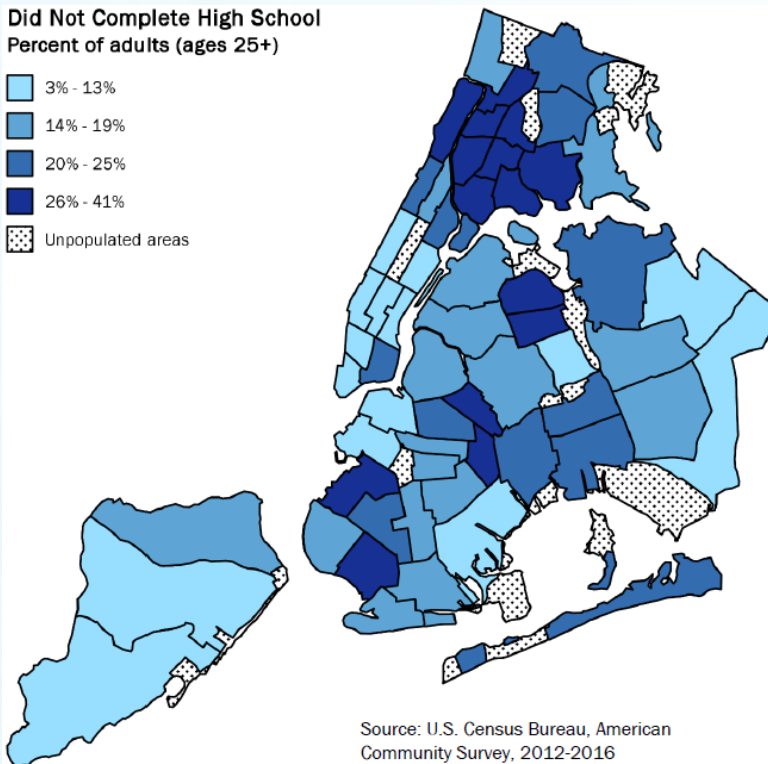
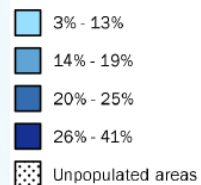


Source: U.S. Census Bureau, American Community Survey, 2012-2016

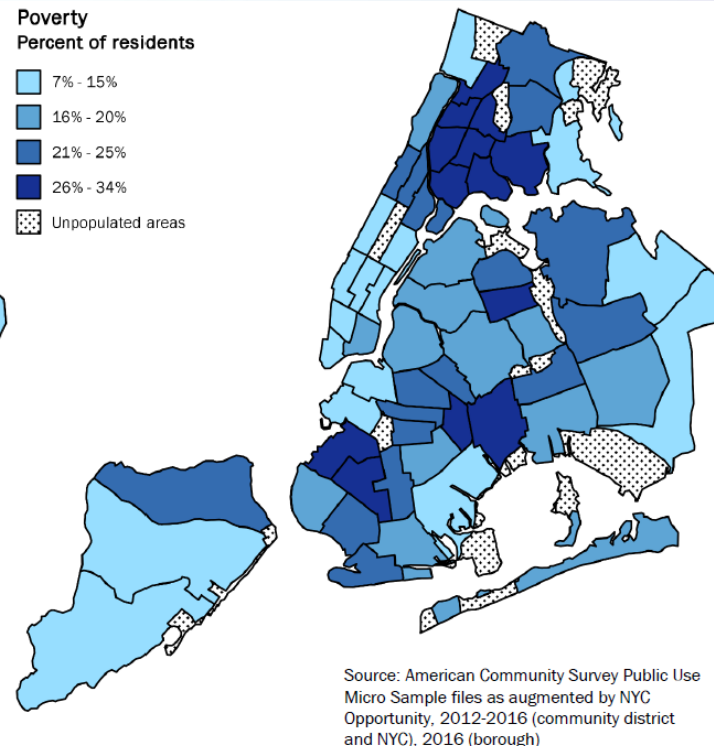
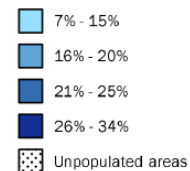
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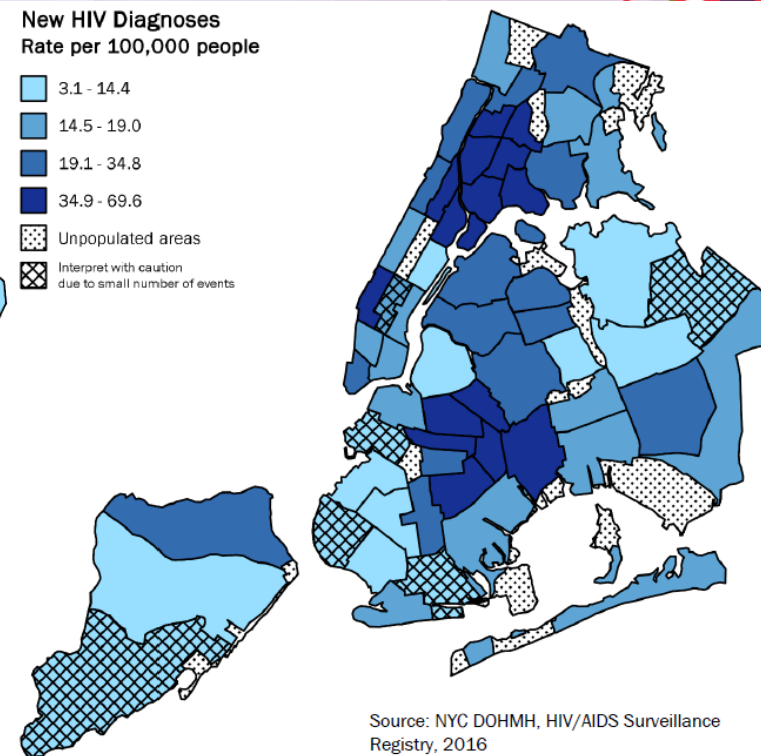
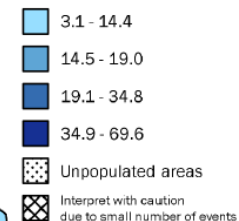
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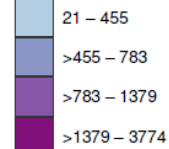
Poverty
Percent of residents



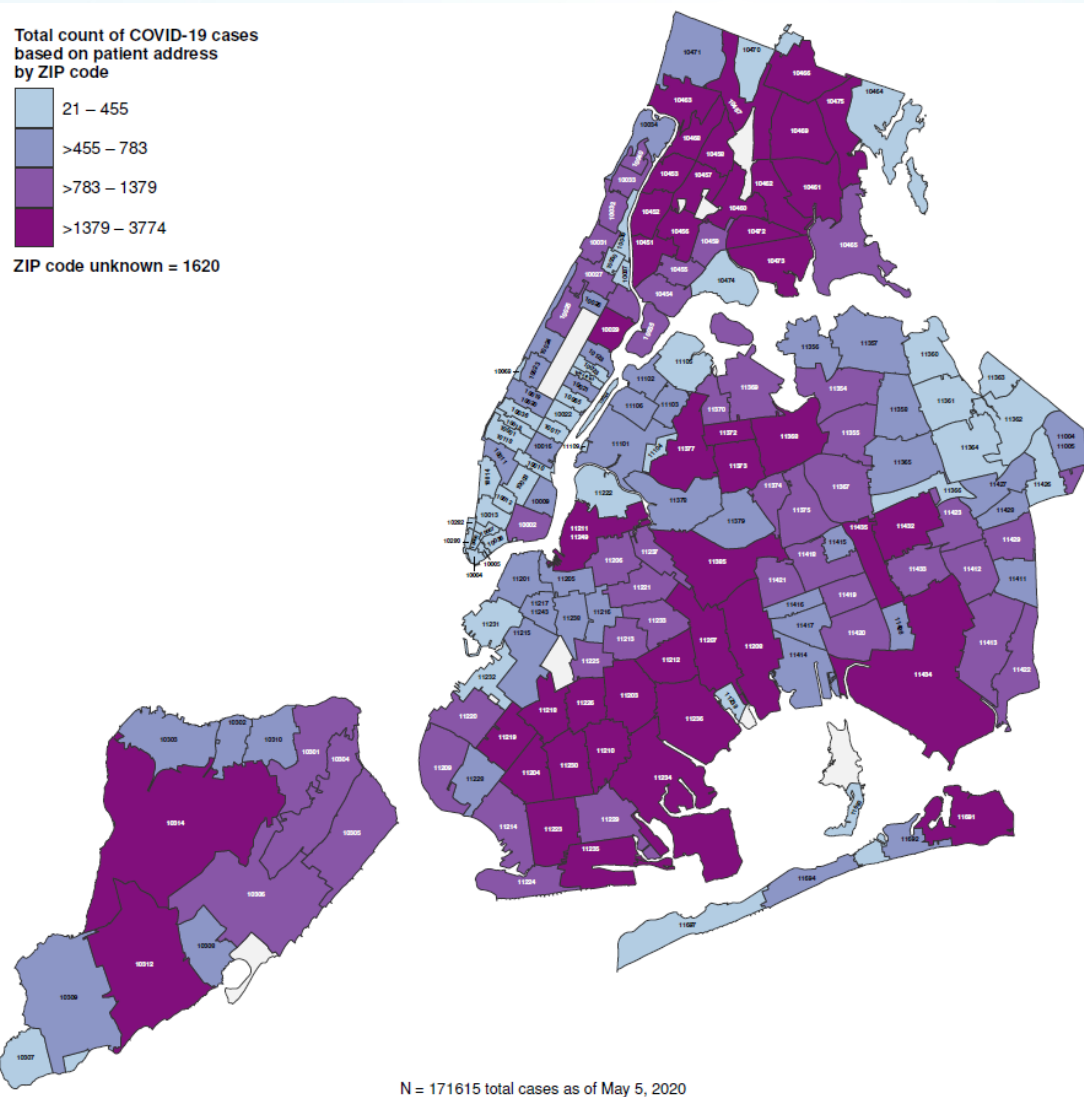
New HIV Diagnoses
Rate per 100,000 people



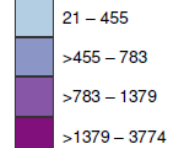
Total count of COVID-19 cases
based on patient address
by ZIP code



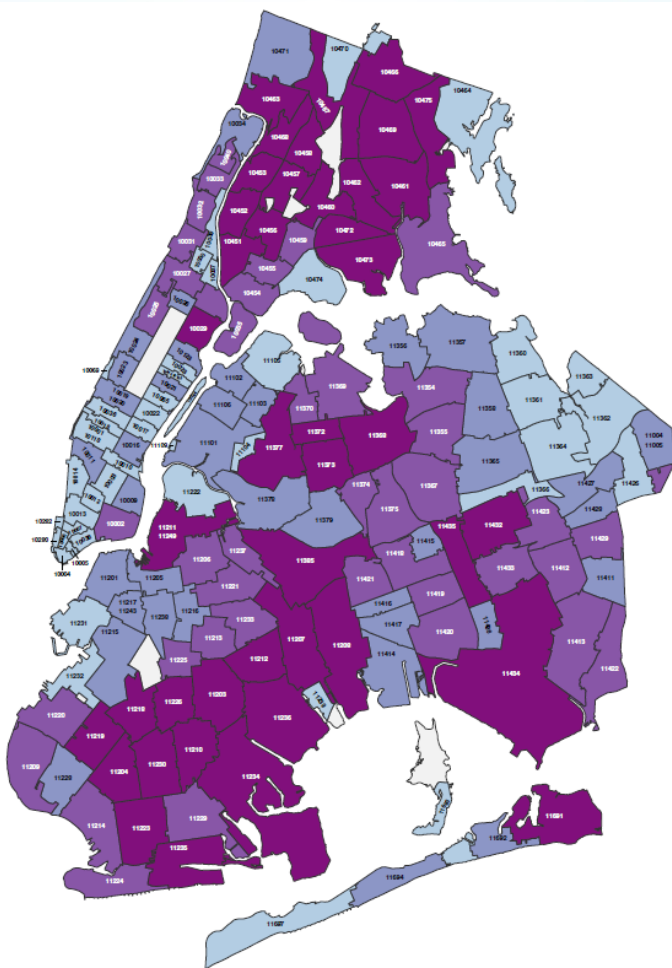
ZIP code unknown = 1620



Total count of COVID-19 cases
based on patient address
by ZIP code



ZIP code unknown = 1620



N = 171615 total cases as of May 5, 2020

COVID-19 rates per 100,000 people

Rate per 100,000 people Hospitalization Rate Death Rate (Confirmed+Probable)

	Case	Hospitalization	Death (Confirmed+Probable)
The Bronx	2406	642	267
Queens	1932	611	232
Brooklyn	1523	448	214
Staten Island	2274	406	167
Manhattan	1036	360	145

May 5, 2020

Source: NYCDOHMH • Created with Datawrapper

<https://www.nytimes.com/interactive/2020/04/28/us/coronavirus-death-toll-total.html>

Montefiore Health System

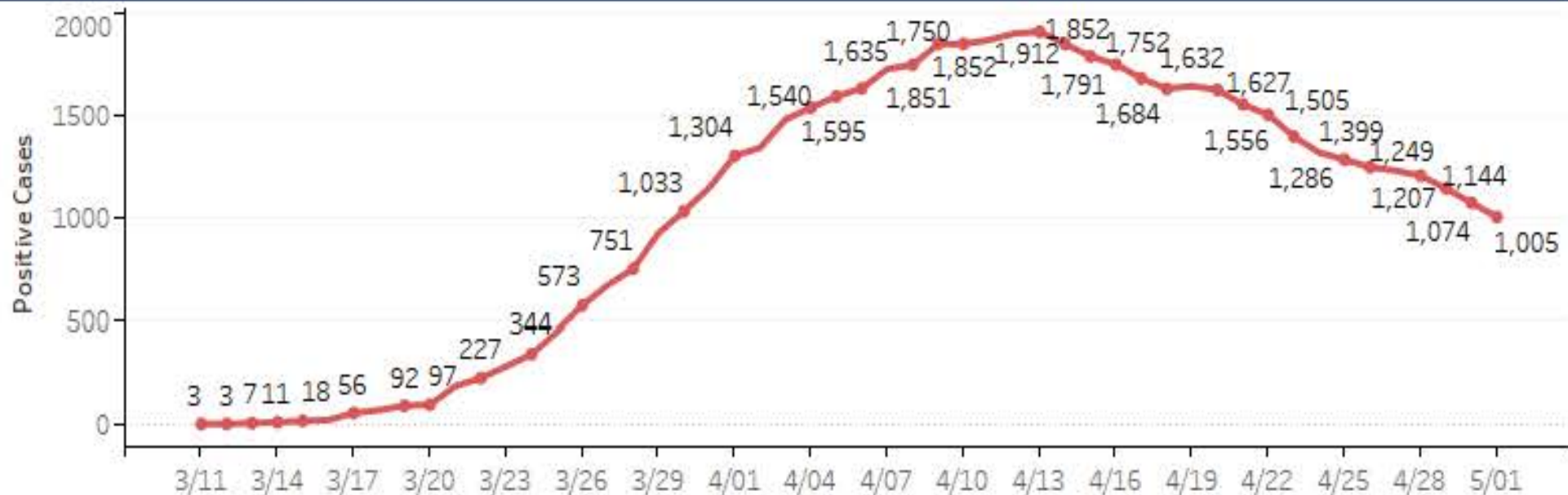


- Largest healthcare provider in the Bronx
- Among the largest patient populations with HIV
- High levels of care for uninsured, Medicaid (low-income)
- Encounter social and structural barriers to care daily for our patients

Montefiore Medical Center Case Count



MHS Total Case Count



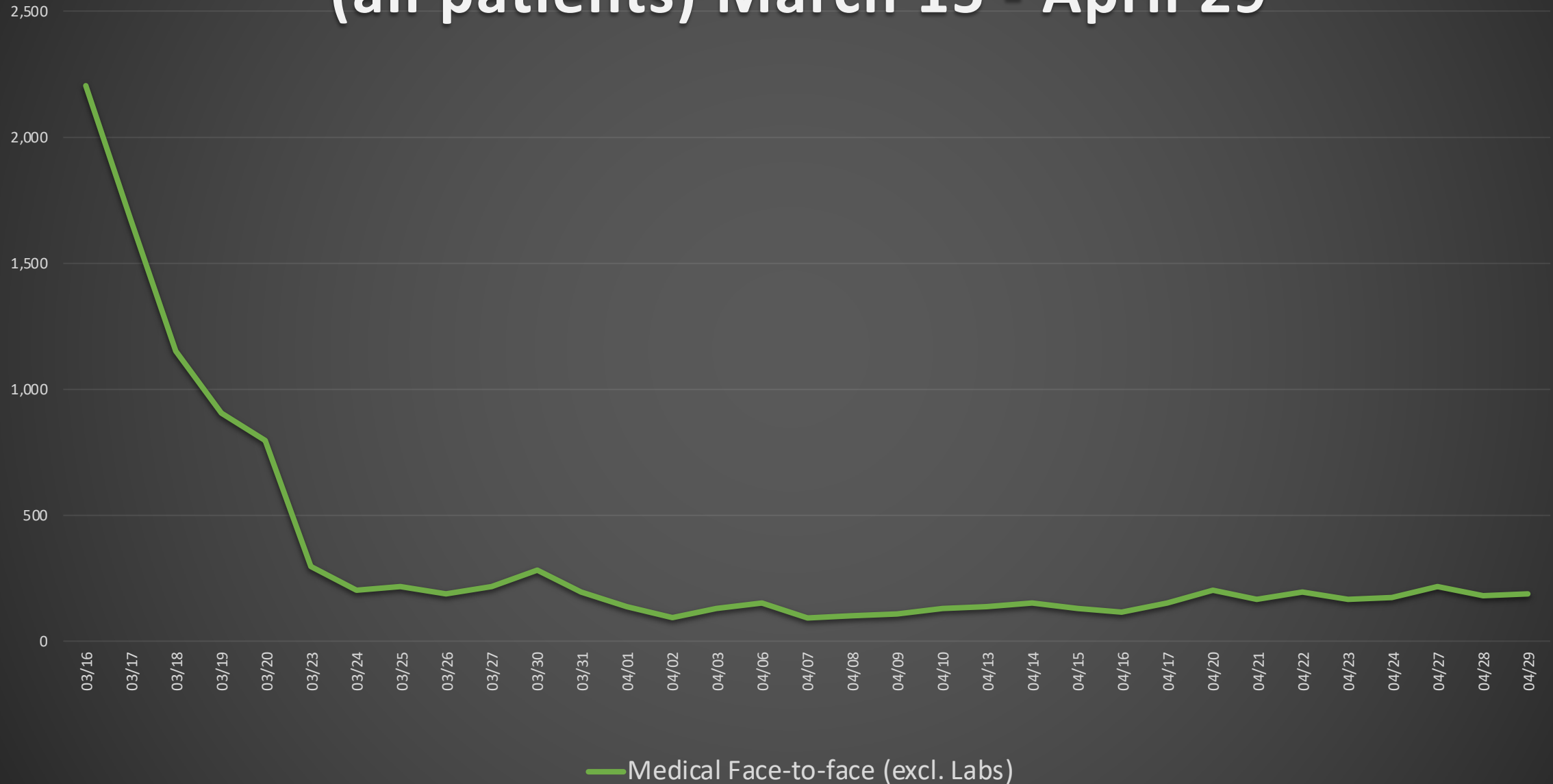


HIV Primary Care at Montefiore



- HIV Care delivery via primary care community health centers, ID clinic, and an adolescent specific clinic
- In the Primary Care Network, 1,003 patients with HIV
- Care by a team approach
 - Physician/NP/PA providers
 - Social Workers, Psychologist, Psychiatrist
 - Clinical Pharmacist, Navigators, Counselors

Total Daily Outpatient Clinical Visits (all patients) March 15 - April 29





Need for Other Care models



Medicaid Update

The Official Newsletter of the New York State Medicaid Program

March 23, 2020
Volume 36 | Number 5

Special Edition – This Document is Updated Frequently – please check back

Comprehensive Guidance Regarding Use of Telehealth including Telephonic Services During the COVID-19 State of Emergency



Montefiore
FIRST
DOCTOR VIDEO VISITS

Telehealth Resource Guide During COVID-19 Public Health Crisis for the Outpatient Setting

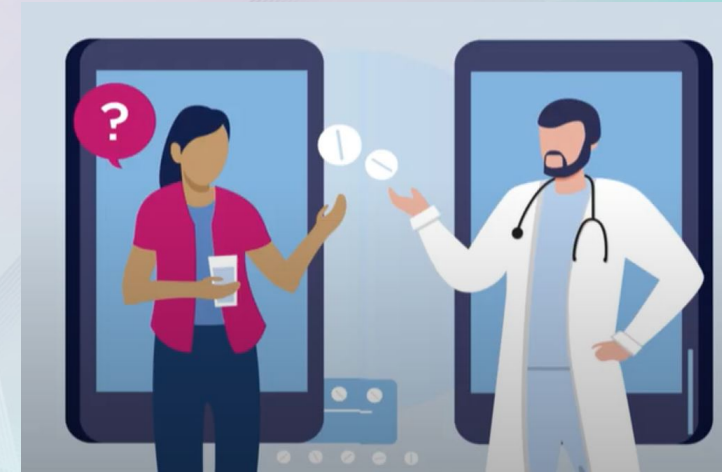
March 23, 2020

Montefiore **Montefiore**
FACULTY PRACTICE GROUP Medical Group

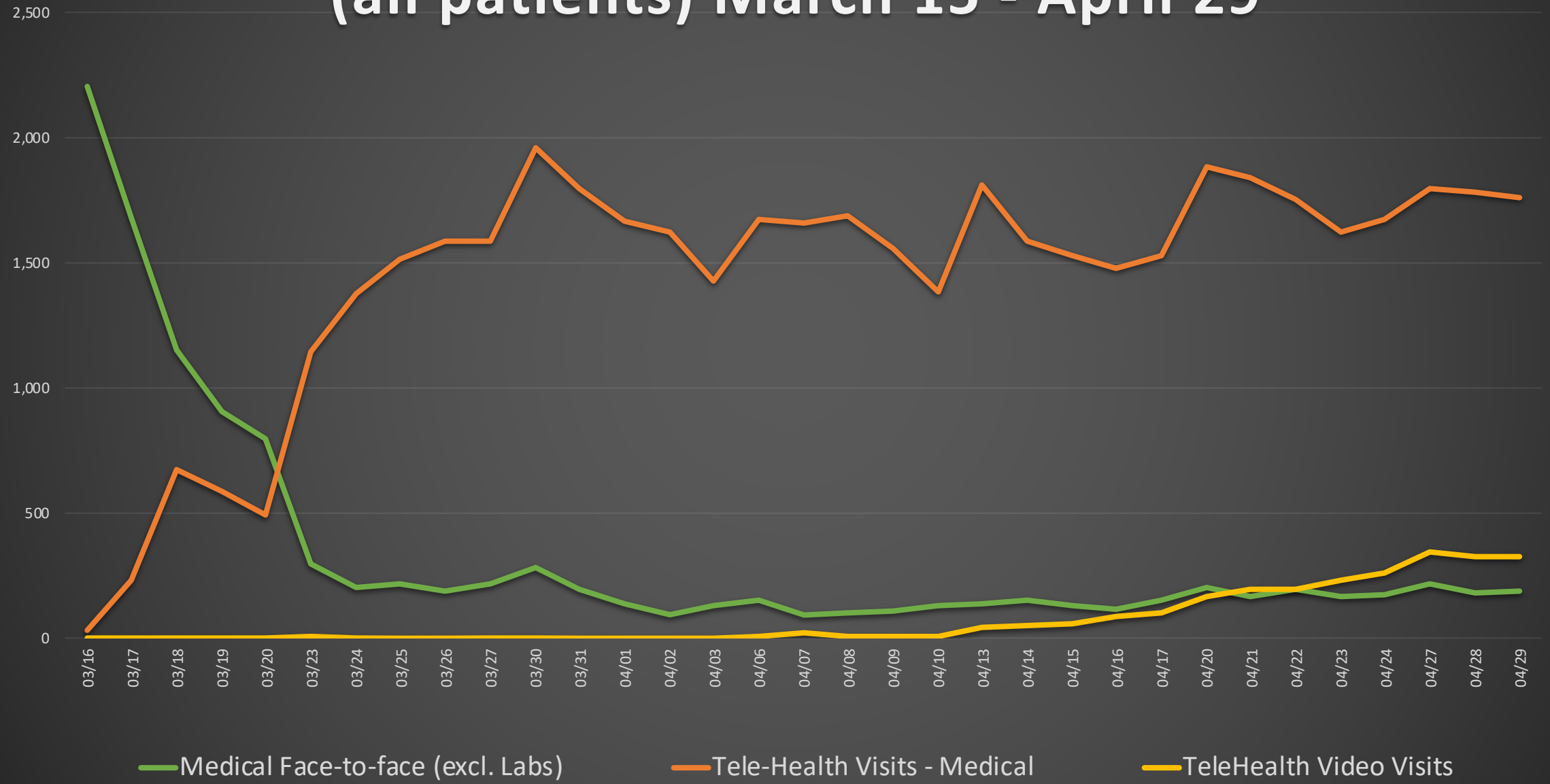
This document should be used while Montefiore is acting under Emergency Procedures.

Current Telemedicine Flow

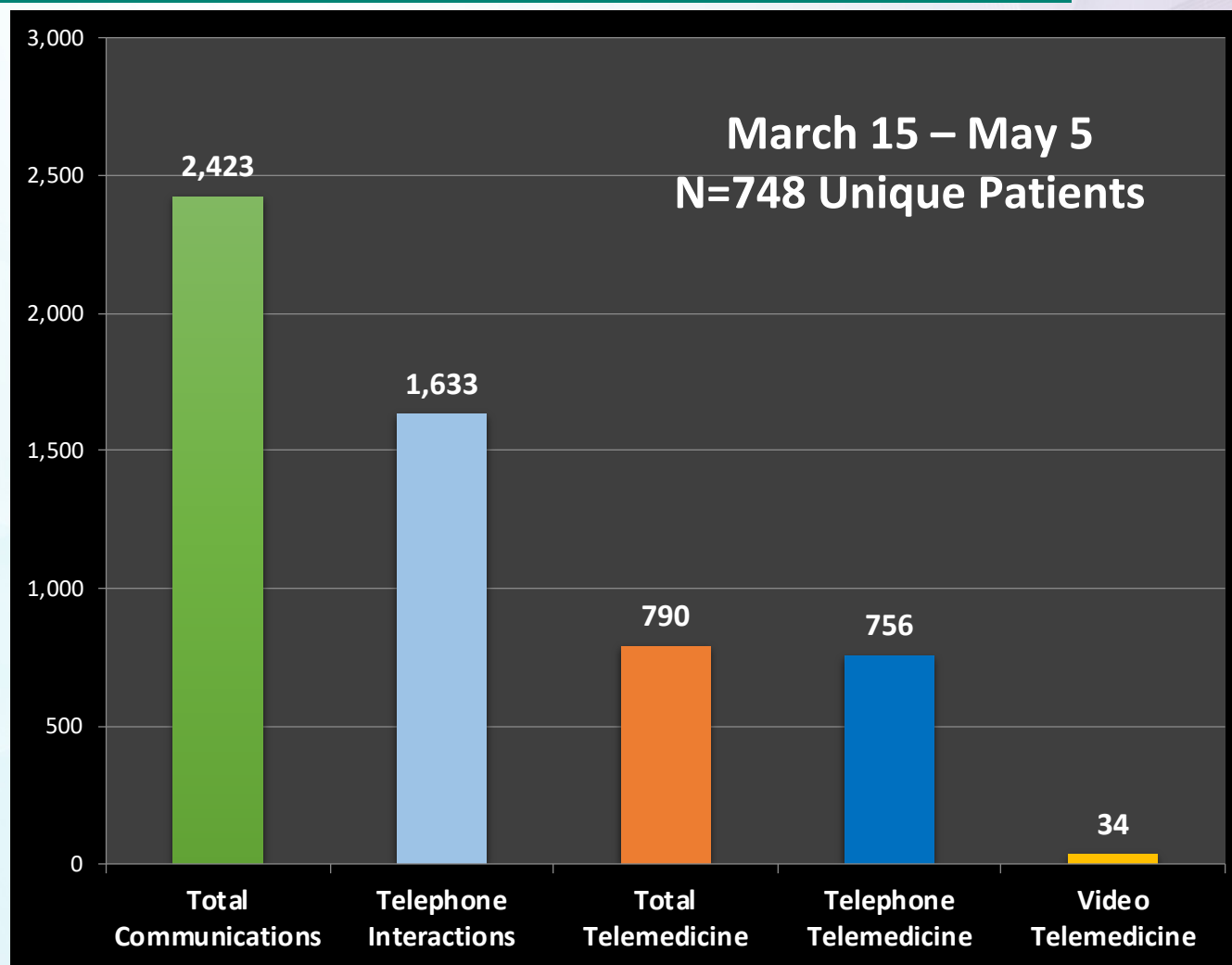
- All existing and future appointments converted to televisits
- Need to train and keep up with shifting protocols (all happening rapidly)
 - Documentation changes for billing
- Supporting patients to be able to use the tools (video/telephone)
- Use of email via electronic health record
- Mail (e.g., self-test kits for HIV → PrEP)



Total Daily Outpatient Clinical Visits (all patients) March 15 - April 29



HIV Primary Care Telemedicine Encounters



Care Modifications



- No or very limited lab capacity
- Lack of PPE & need to preserve PPE
- Providers/staff not available → pulled into inpatient/ED care

Patient-Provider Interactions



- What are more effective ways to have a virtual encounter?
- Research needed on virtual patient-provider communication
- Can aides/support personnel overcome digital literacy barriers?
- Privacy concerns, may increase vulnerability of patients
- Bias in encounters due to assumptions made by providers based on what they see or don't see?

Exacerbate disparities?



- Age disparities?
- Digital Literacy?
- Access issues (data plans + compatible device)
- Limitations of telephone/audio vs. video
- Who does Telemedicine/Virtual Care help improve care outcomes, and for whom does it worsen?
- What can we do **proactively** to ensure **equity**?

New Opportunities

- Overcome some barriers
- Possibly increase timely access
- Lower costs to the system
- Preserve resources for those most at need
- Reorganize care delivery → improve it



No need to reinvent the wheel...

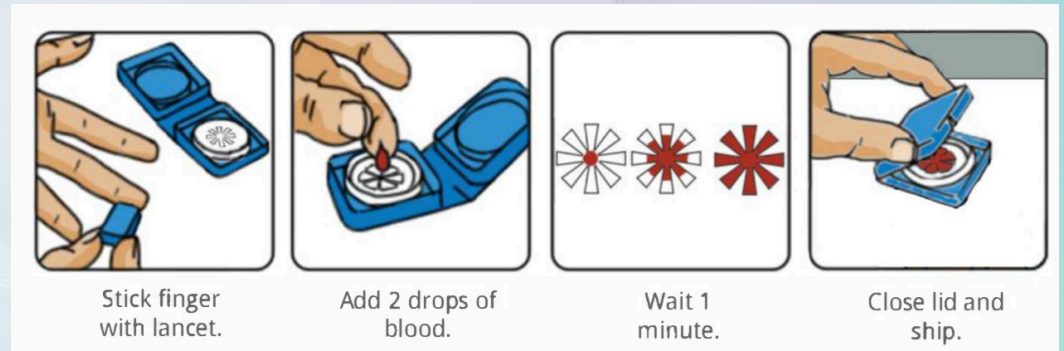
- Learn from LMIC implementation of innovations to support care
 - “ATMs” to dispense medications



No need to reinvent the wheel...



- Learn from LMIC implementation of innovations to support care
 - “ATMs” to dispense medications
 - Dried Blood Spots for HIV VL monitoring (e.g., Sikombe 2019; Thepbundit 2019, Hirshfield 2018)



Thank You



Our Patients

IAPAC

Aaron Pajeras

Miguel Vasquez

Joseph Deluca

Rob Beil

Deepika Slawek

Matthew Akiyama

Bronx Community Health Network

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-  @DoctorPatel9