Continuity of HIV Care in the Presence of COVID-19

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Implementing HIV Telemedicine in a high COVID-19 Prevalent Context
Nothing to declare
• 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 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

New reported deaths by day in New York

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

*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

New reported deaths by day in New York

Number of Deaths

Total Vietnam War Deaths (NY State residents) 4119
9/11 Attacks 2996
NYC COVID19 Deaths (as of 5/5/2020) 17795

* 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: Cases by Borough

- Bronx
- Manhattan
- Queens
- New York City
- Brooklyn
- Staten Island
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.

<table>
<thead>
<tr>
<th>Borough</th>
<th>Rate per 100,000 people</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Bronx</td>
<td>2.552</td>
<td>37,551</td>
</tr>
<tr>
<td>Staten Island</td>
<td>2.360</td>
<td>11,661</td>
</tr>
<tr>
<td>Queens</td>
<td>2.040</td>
<td>51,028</td>
</tr>
<tr>
<td>Brooklyn</td>
<td>1.608</td>
<td>43,621</td>
</tr>
<tr>
<td>Manhattan</td>
<td>1.082</td>
<td>20,363</td>
</tr>
<tr>
<td>Citywide</td>
<td></td>
<td>164,505</td>
</tr>
</tbody>
</table>

Get the data • Created with Datawrapper
Demographic Characteristics of NYC Boroughs

Race/Ethnicity: Latino
Percent of total population
- 7% - 13%
- 14% - 21%
- 22% - 44%
- 45% - 76%
- Unpopulated areas

Race/Ethnicity: Black
Percent of total population
- 1% - 3%
- 4% - 12%
- 13% - 30%
- 31% - 88%
- Unpopulated areas

Did Not Complete High School
Percent of adults (ages 25+)
- 3% - 19%
- 14% - 19%
- 20% - 25%
- 26% - 41%
- Unpopulated areas


Source: U.S. Census Bureau, American Community Survey, 2012-2016
Demographic Characteristics of NYC Boroughs

Did Not Complete High School
Percent of adults (ages 25+)
- 3% - 13%
- 14% - 19%
- 20% - 25%
- 26% - 41%
- Unpopulated areas

Poverty
Percent of residents
- 7% - 15%
- 16% - 20%
- 21% - 25%
- 26% - 34%
- Unpopulated areas

New HIV Diagnoses
Rate per 100,000 people
- 3.1 - 14.4
- 14.5 - 19.9
- 19.1 - 24.8
- 24.9 - 69.9
- Unpopulated areas

Source: U.S. Census Bureau, American Community Survey, 2012-2016
Source: American Community Survey Public Use Micro Sample files as augmented by NYC Opportunity, 2012-2016 (community district and NYC, 2014) (borough)
## COVID-19 rates per 100,000 people

<table>
<thead>
<tr>
<th>Location</th>
<th>Case</th>
<th>Hospitalization</th>
<th>Death (Confirmed+Probable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Bronx</td>
<td>2406</td>
<td>642</td>
<td>267</td>
</tr>
<tr>
<td>Queens</td>
<td>1932</td>
<td>611</td>
<td>232</td>
</tr>
<tr>
<td>Brooklyn</td>
<td>1523</td>
<td>448</td>
<td>214</td>
</tr>
<tr>
<td>Staten Island</td>
<td>2274</td>
<td>406</td>
<td>167</td>
</tr>
<tr>
<td>Manhattan</td>
<td>1036</td>
<td>360</td>
<td>145</td>
</tr>
</tbody>
</table>

May 5, 2020  
Source: NYCDOHMH - Created with Datawrapper

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
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

Medical Face-to-face ( excl. Labs)
Need for Other Care models

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

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

- Medical Face-to-face (excl. Labs)
- Tele-Health Visits - Medical
- TeleHealth Video Visits
HIV Primary Care Telemedicine Encounters

March 15 – May 5
N=748 Unique Patients

- Total Communications: 2,423
- Telephone Interactions: 1,633
- Total Telemedicine: 790
- Telephone Telemedicine: 756
- Video Telemedicine: 34
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 personal 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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