Lessons learned about access to HIV care at the height of the COVID-19 Pandemic

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Importance of retention in HIV care and viral suppression

- Antiretroviral therapy (ART) greatly increases life expectancy among people with HIV[1-3]
- Viral suppression reduces communicability[4-6]
- Viral suppression among individuals reduces community HIV incidence[7-9]
- HIV care and treatment prevents perinatal HIV[10]

Retention in care → Viral suppression →

1. Antiretroviral Therapy Cohort Collaboration. Lancet. 2008;372(9635):293-299. 2. Nakagawa F, et al. AIDS. 2012; 26(3):335-343. 3. Samji H, et al. PLoS One. 2013 ;8(12):e81355. 4. Attia S, et al AIDS. 2009;23(11):1397–1404.
5. Cohen MS, et al. New Engl J Med 2016;375(9):830-839. 6.Shah M, et al. Clin Infect Dis. 2016;62(2):220–229. 7. Das M, et al. PLoS One. 2010; 5(6):e11068. 8. Montaner JS, et al. Lancet. 2010; 376(9740):532-539. 9. Tanser F, et al. Science. 2013; 339(6122):966-971. 10. Steiner RJ, et al. Am J Pub Health 2013;103(8):1357-1366. 11. HIV.gov. Ending the HIV Epidemic. https://www.hiv.gov/federal-response/ending-the-hiv-epidemic/key-strategies.5/8/2020.

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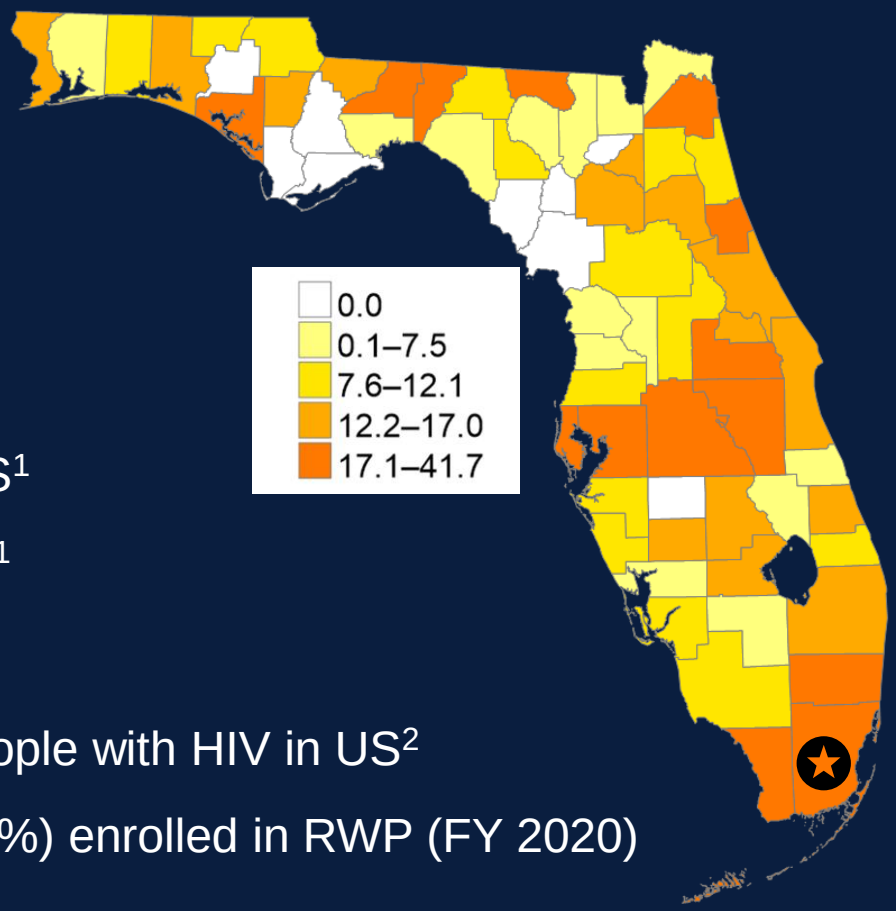
Objective

Assess access to HIV care and COVID-19 Pandemic-related hardships among Miami-Dade County Ryan White Program clients

Setting

- Miami-Dade County
  - 2.7 million people[1]
  - Minority majority, urban setting (69% Hispanic, 18% Black)
  - Large immigrant population, 54% born outside US[1]
  - #1 in HIV diagnosis rates in US for multiple years[1]
- Ryan White Program (RWP)
  - HIV care provider of last resort for over half of people with HIV in US[2]
  - Of 27,190 PWH in Miami-Dade in 2020, 8127 (30%) enrolled in RWP (FY 2020)

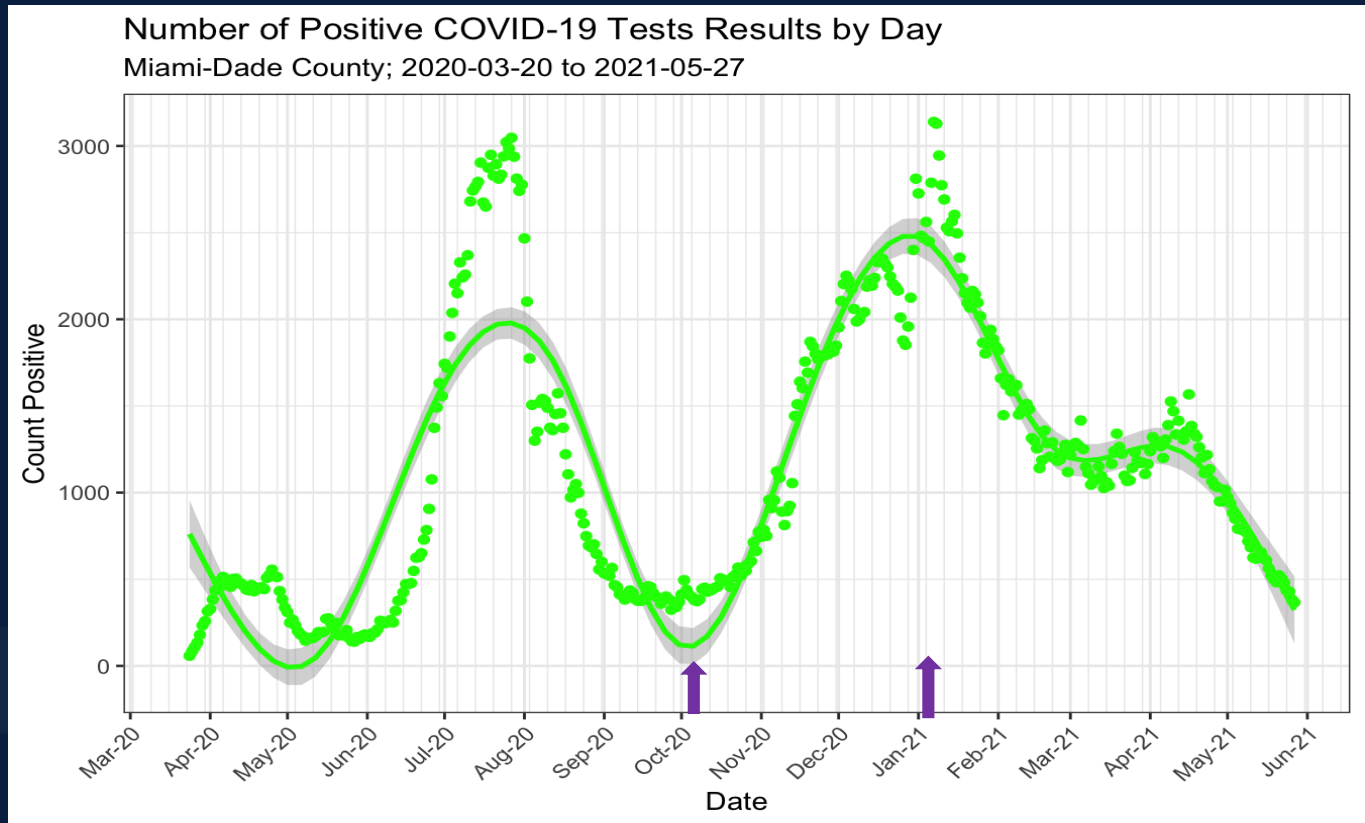


1. U.S. Census Bureau. https://www.census.gov/quickfacts/fact/table/miamidadecountyflorida/POP060210.
2. CDC. *HIV Surveillance Report*, 2019, vol. 32, https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html; May 2021
3. HRSA. 2020. https://hab.hrsa.gov/about-ryan-white-hivaids-program/about-ryan-white-hivaids-program
4. Behavioral Science Research. 2022 Annual Needs Assessment. http://aidsnet.org/wp-content/uploads/2022/05/Partnership-2020-slides-Area-11A_.pdf and http://aidsnet.org/wp-content/uploads/2022/05/FY31_RW-NA_Demographics-060222-presentation.pdf.

Map courtesy of Florida Department of Health http://www.floridahealth.gov/diseases-and-conditions/aids/surveillance/epi-slide-sets.html

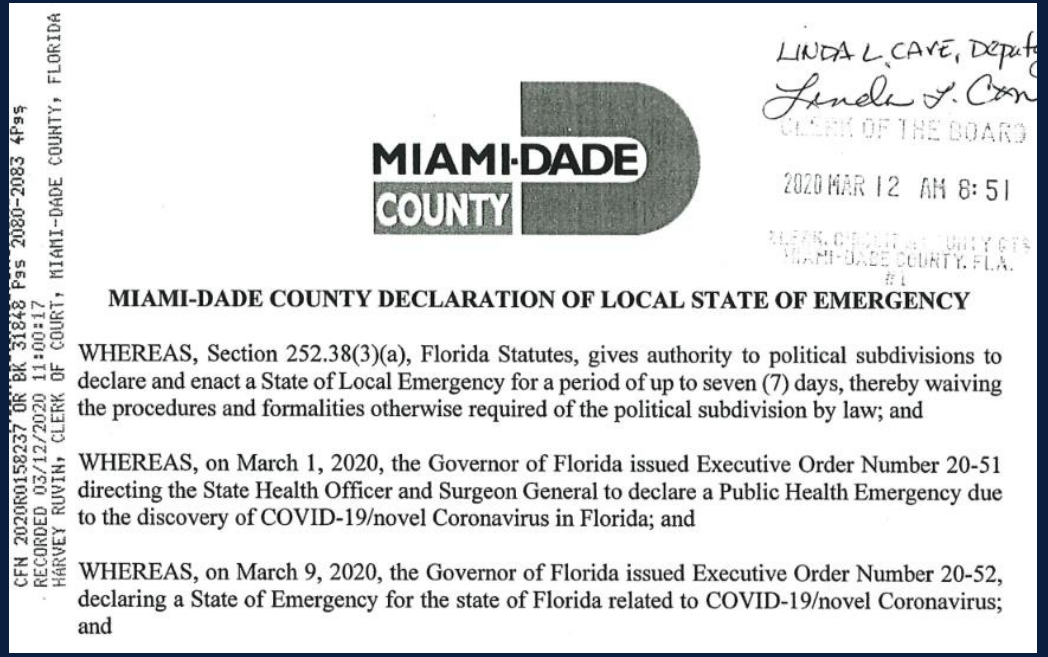
Context: COVID-19 in Miami-Dade County

- COVID-19 impact in Miami-Dade as of 6/14/2022:
  - Over 1.29 million diagnosed cases (48% of the population)
  - Over 11,000 deaths (over 4 out of every 1000 residents)
  - Multiple waves
- COVID status at beginning of survey (10/2020)
  - 170,000 cases (6% of population)
  - 3284 deaths
  - 7809 hospitalizations



COVID-19-related disruptions and HIV care

- Mandated physical distancing (e.g., lock downs)
- Efforts to reduce exposure of PWH and clinic to SARS-CoV-2 virus
- Diversion of infectious disease health care providers to COVID-19 care



CFN 2020R0158237 OR BK 31848 Pgs 2080-2083 4Pgs
RECORDED 03/12/2020 11:00:17
HARVEY RUVIN, CLERK OF COURT, MIAMI-DADE COUNTY, FLORIDA

LINDA L. CAVE, Deputy
Linda L. Cave
CLERK OF THE BOARD
2020 MAR 12 AM 8:51
MIAMI-DADE COUNTY, FLA.

MIAMI-DADE COUNTY

MIAMI-DADE COUNTY DECLARATION OF LOCAL STATE OF EMERGENCY

WHEREAS, Section 252.38(3)(a), Florida Statutes, gives authority to political subdivisions to declare and enact a State of Local Emergency for a period of up to seven (7) days, thereby waiving the procedures and formalities otherwise required of the political subdivision by law; and

WHEREAS, on March 1, 2020, the Governor of Florida issued Executive Order Number 20-51 directing the State Health Officer and Surgeon General to declare a Public Health Emergency due to the discovery of COVID-19/novel Coronavirus in Florida; and

WHEREAS, on March 9, 2020, the Governor of Florida issued Executive Order Number 20-52, declaring a State of Emergency for the state of Florida related to COVID-19/novel Coronavirus; and

Beima-Sofie K, et al. *AIDS Behav*. 2020;24(10):2760-2763; Dandachi D, et al. *AIDS Behav*. 2020; 24(9):2463-2465; Guaraldi G, et al. *Clin Infect Dis*. 2020 December 10. doi:10.1093/cid/ciaa1864; Ridgway JP, et al. *AIDS Behav*. 2020;24(10):2770-2772.

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COVID-19-related disruptions and HIV care

- Early studies during spring 2020
  - Clinics in South Carolina serving uninsured people more likely to have disruptions than other clinics
  - Decreased viral suppression rates documented in homeless populations in San Francisco
  - Viral suppression maintained in Boston clinic that quickly implemented telemedicine
- Modeling study
  - 10% reduction over 6 months in viral suppression among men who have male to male sexual contact could lead to a 6.4% increase in new HIV infections and 9.5% increase in deaths in subsequent year

Qiao S, et al. *AIDS Behav*. 2021;25(1):49-57; Spinelli MA, et al. *AIDS*. 2020;34(15):2328-2331; Mayer KH, et al. *Open Forum Infect Dis*. 2020;7(Suppl 1):S337-S338; Mitchell KM, et al. *Lancet HIV*. 2021;8(4):e206-e215.

RWP Response to Pandemic

- Federal (Health Resources and Services Administration), State (Florida), and Miami-Dade County allowed improved flexibility
- Resulted in----
  - Waiving requirement of viral load test results for enrollment and 6-month recertification for AIDS Drug Assistance Program (ADAP) in Florida and RWP Part A/Minority AIDS Initiative in Miami-Dade County
  - Allowing ADAP and RWP Part A/Minority AIDS Initiative recertification without in-person eligibility specialist/medical case management visits
  - Expansion of drive-through, mail, and home delivery of antiretroviral therapy
  - Waiving of RWP Part A and Minority AIDS Initiative HIV care programs re-enrollment lab tests and increased flexibility with re-enrollment timelines
  - Increased availability of and access to telehealth services (including telemedicine, tele-medical case management, tele-dentistry, tele-mental health, and tele-substance use disorder counseling)

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Methods

- Exploratory, descriptive, cross-sectional study of adults with HIV receiving medical case management
- Eligibility criteria
  - 18 or older
  - African American/Black (non-Haitian), Hispanic/Latinx, or Haitian
  - Receiving case management in RWP
- Quota sample: 100 African American, 130 Hispanics, and 70 Haitians; of whom half of each group were women

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Methods

- Survey instrument
  - Demographic questions
  - How providers accessed and ease of access
  - How antiretroviral medications obtained and ease of access
  - Experience with COVID-19
  - Changes in psychosocial factors
- Questions in relation to Pandemic
  - “Since the COVID-19 Pandemic began, have you been in touch with your HIV doctor either in person or some other way?”
  - “Compared to before the COVID-19 Pandemic, how easy has it been to get the help you needed from your HIV doctor?”
    - (Much easier, Somewhat easier, About the same, Somewhat harder, Much harder)

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Methods

- Translated into Spanish and Haitian Creole
- Piloted in all three priority racial/ethnic groups for Miami-Dade (African American, Hispanic, and Haitian)
- Conducted October 2020-January 2021
- Fully remote, telephone-administered verbal informed consent and survey by BSR subcontracted interviewers
- Up to 5 phone attempts were made and text messages sent
- FIU Institutional Review Board approval
- Weighted analysis

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Results

- Response rate
  - Of 743 RWP clients in sampling frame, 624 (84%) could not be reached, and 15 (2%) refused.
  - Enrolled 187 from same racial/ethnic groups concurrently participating in annual client experience survey
- 298 enrolled
  - Race/ethnicity
    - 53 (18%) Haitian
    - 129 (43%) Hispanic
    - 116 (39%) African American
  - Gender
    - 148 (50%) Cis-gender women
    - 143 (48%) Cis-gender men
    - 7 (2%) Other

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Demographic characteristics

- 32% aged 55 and older
- 68% not born in US
- 61% preferred language not English
- 39% household < 100% Federal Poverty Level
- 82% employed prior to the Pandemic (full or part time)
- 14% less than 12th grade education
- 19% had one or more children in household
- 58% lesbian/gay/bisexual

*All are weighted percentages

Access to care maintained

- 97% in contact with medical care provider
- 90% in contact with medical case manager
- 99% taking antiretroviral medications

The percentages above are weighted.

HIV viral suppression largely unaffected

- Among 201 participants with a viral load measurement in 2019 and one post March 2020
  - 88% suppressed both times
  - 3% not suppressed either time
  - 6% became suppressed
  - 4% became not suppressed

Ways participants accessed medical care providers by gender

	Cis-gender women	Cis-gender male
In-Person	74%	58%
By Phone	44%	41%
By Video Call	31%	52%
By Text Messaging	0%	0.4%
By E-mail	1%	0%

*Percentages are weighted. Yellow indicates statistically significant differences. The percentages don't total 100% for each group as respondent could select multiple ways.

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Ways participants accessed medical providers by race/ethnicity

	African American	Hispanic	Haitian
In-Person	68%	56%	81%
By Phone	43%	42%	41%
By Video Call	39%	54%	19%
By Text Messaging	2%	0%	0%
By E-mail	2%	0%	0%

*Percentages are weighted. Yellow indicates statistically significant differences. The percentages don't total 100% for each group as respondent could select multiple ways.

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Ways participants accessed medical case manager by gender

	Cis-gender women	Cis-gender male
In-Person	62%	47%
By Phone	70%	78%
By Video Call	4%	11%
By Text Messaging	8%	6%
By E-mail	5%	11%

*Percentages are weighted. The percentages don't total 100% for each group as respondent could select multiple ways.

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Ways participants accessed medical case managers by race/ethnicity

	African American	Hispanic	Haitian
In-Person	50%	48%	72%
By Phone	79%	79%	61%
By Video Call	5%	12%	0%
By Text Messaging	9%	5%	9%
By Email	6%	13%	0%

*Percentages are weighted. Yellow indicates statistically significant differences.
The percentages don't total 100% for each group as respondent could select multiple ways.

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Ways participants obtained antiretroviral therapy by gender

	Cis-gender women	Cis-gender male
In-person from ADAP	40%	35%
In-person from another pharmacy	24%	28%
Home delivery/mail	39%	44%

*Percentages are weighted. The percentages don't total 100% for each group as respondent could select multiple ways.

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Ways participants obtained antiretroviral medication by racial/ethnic group

	African American	Hispanic	Haitian
In-person from ADAP	32%	36%	42%
In-person from another pharmacy	37%	23%	36%
Home delivery/mail	38%	46%	32%

*Percentages are weighted. The percentages don't total 100% for each group as respondent could select multiple ways.

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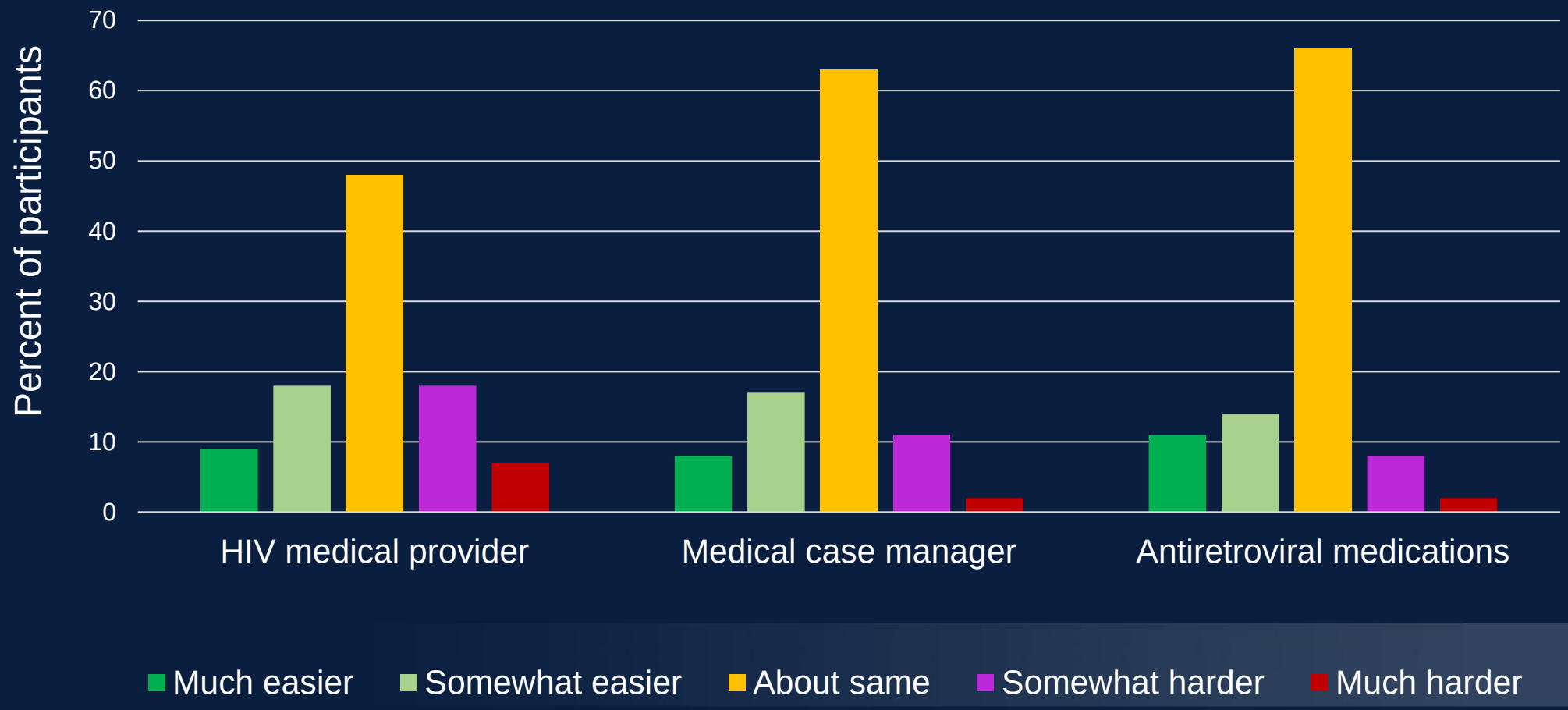
Compared to before the Pandemic, how easy it was to access…



Factors associated with reporting access to medical doctor was harder compared with prior to the Pandemic

- 25% reported access somewhat or much harder
- Weighted bivariate:
  - One or more children: 34% vs. no children: 23%, (p=0.08)
- Weighted logistic regression model:
  - Controlled for age, gender, race/ethnicity, and number children
  - Having ≥1 children more likely to report harder than those with no children (aOR: 2.38; 95% CI 1.01-5.64, p=0.048)

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Factors associated with reporting access to medical case manager was harder compared to prior to the Pandemic

- 12% reported access somewhat or much harder
- Weighted bivariate:
  - Work: 25% not working, 10% part-time, 8% full-time (p=0.0096)
  - Language: 18% English, 9% non-English speakers (p= 0.04)
  - Children: 25% if 1 or more, 9% if none (p=0.0018)
- Weighted logistic regression model:
  - Controlled for sex, race/ethnicity, age group, language, poverty level, work, US born, sexual orientation, and number children
  - Having 1 or more children more likely to report harder
    (aOR: 5.77; 95% CI 1.90-17.55, p=0.002)
  - Non-English speakers less likely to report harder than English speakers
    (aOR: 0.10; 95% CI 0.02-0.43, p=0.002)
  - Race/ethnicity:
    - Haitian less likely to report harder than Hispanics
      (aOR: 0.12; 95% CI 0.02-0.76; p=0.02)

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Factors associated with reporting access to HIV medications was harder compared to before the Pandemic

- 9% reported that it was somewhat or much harder
- Weighted bivariate:
  - Age: 18-34 yrs: 19%, 35-44 yrs: 3.7%, 45-54: 7.4%, 55+: 9% ($p<0.04$)
  - Number of children in household: One or more: 25%, none 6% ($p<0.001$).
- Weighted logistic regression model:
  - Controlled for age, gender, race/ethnicity, poverty level, number of children
  - Having one or more children associated with difficulty accessing medications

    aOR 9.5 (95% CI: 2.2-40.9), p=0.0025
  - Haitians and African Americans less likely than Hispanics to report difficulty
    - Haitians: aOR 0.14 (95% CI: 0.03-0.76), p=0.02
    - African Americans: aOR 0.16 (95% CI: 0.03-0.79), p=0.03)

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Limitations

- Convenience sample
- Participants more likely to be in care than non-participants
  - Viral suppression for entire RWP: 80% during 2020 vs. 93% for participants with viral loads
- Not sure of language equivalence of surveys
- No data about quality of encounters or extent to which providers had or hadn’t implemented telehealth
- Telehealth implementation may also have varied based on when they saw their provider as implementation took time.

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Conclusions

- Findings suggest that access to care was maintained and possibly improved in some respects
  - Despite multiple psychosocial challenges (more on that at the July presentation)
- Accessing care remotely
  - Participants did successfully access medical care provider and medical case manager remotely
  - Differences by race/ethnicity and gender with women and Haitians less likely to use videocalls.
- Clients with children more likely to report difficulties accessing care

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Telehealth considerations

- Potential advantages
  - Removes transportation costs
  - Reduces time taken from work
  - Reduces concerns about being “outed” through physical presence in a clinic
- Potential problems
  - Privacy
  - Distractions
  - Lack of device capable of videocalls
  - Poor connectivity

Budak JZ, et al. *Curr HIV/AIDS Rep*. 2021;18(2):98-104; Dandachi D, et al. *J Investig Med*. 2019;67(5):815-820; Wood BR, et al. *Clin Infect Dis*. 2021.

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Telehealth and RWP clients in Atlanta

- Convenience sample of 101 RWP clients during summer 2020
- Overall, high ratings of quality, and satisfaction with telemedicine
- Concerns about inability of provider to examine them and lack of laboratory tests
- Women had more concerns than men especially related to safety of personal information
- Barriers:
  - Poor connectivity
  - Cost of telephone/WiFi services
  - Difficulty communicating with provider
  - Device problems

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Galaviz KI, et al. *AIDS Res Hum Retroviruses*. 2022 May;38(5):415-420.

Mixed methods study of telehealth and PWH patients in a New Haven and a New York clinic: survey of patients

- Convenience sample of 273 patients during May to August 2020
- 74% thought telemedicine as good as in-person visits
- Those who had not recently been in care more likely to report that telemedicine useful during the pandemic
- Those without a smartphone less likely to report telemedicine being useful during pandemic

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Harsono D, et al. *AIDS Behav*. 2022 Jun;26(6):2099-2111. doi: 10.1007/s10461-021-03556-7. Epub 2022 Jan 22.

Mixed methods study of telehealth and PWH patients in a New Haven and a New York clinic: themes from focus groups of providers

1) Telemedicine vital during pandemic, offered re-engagement opportunities and development of new skills for patients

2) Visits perceived as patient centered because at times and settings accessible for patients, but concern about limited non-verbal cues, lack of in-person contact, and increased provider workload

3) Technical challenges for provider and clients; connection issues interfered with visit

4) Privacy concerns but also allowed interaction with patients' family members

5) Overall support for maintaining telemedicine, but patient preferences should be honored

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Harsono D, et al. *AIDS Behav*. 2022 Jun;26(6):2099-2111. doi: 10.1007/s10461-021-03556-7. Epub 2022 Jan 22.

Older PWH in New York State and telehealth during pandemic

- 80 PWH, ≥50 years of age, July to November 2020
- About half reported difficulties with technology
  - Mostly video (image freezing)
  - Difficulties depended on software used by clinic (e.g., “MyChart” difficult)
  - Associated with less education
  - Frustration-couldn’t understand audio
- Worries about privacy and thinking that conversation was recorded, led to self censoring
- Visits perceived as less personal and with more miscommunication
- Positive perceptions associated with long-term relationship with provider, non-urgent covering primarily information exchange (e.g., discussion of lab results)

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Baim-Lance A, et al. *BMC Health Serv Res.* 2022 May 6;22(1):609. doi: 10.1186/s12913-022-08010-5.

Recommendations

- Qualitative studies of RWP clients needed to assess barriers to telehealth and quality of encounters with medical care providers and case managers
- Qualitative studies needed to assess barriers to clients with children and possible solutions
- Consider continuing some pandemic program modifications such as
  - Relaxing of in-person re-certification timeframes
  - Continued use of telehealth
  - More alternatives to obtaining medications
- Consider “differentiated service delivery” (i.e., tailoring delivery modalities to patient’s needs)

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