15th International Conference on
HIV TREATMENT AND
PREVENTION ADHERENCE

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Service Delivery: The Evolution & Impact of Innovative HIV Care Models

Implementation Science session, Nov. 3, 2020

Overview

- Differentiated service delivery
- Care for high-need, complex patients (*United States focus*)
- Low-barrier clinic models
- Implementation science research priorities

Evolution of HIV Service Delivery

- Case management
- Navigation
- Transition support (jail & hospital)
- Appointment reminders
- Clinic-wide messaging
- Outreach & Patient Tracing
- Text message support
- Data to Care

Differentiated Service Delivery

- Client-centered
- Adapts services to the needs of patients
- Reduces burden on the healthcare system

Fast-track ART refills

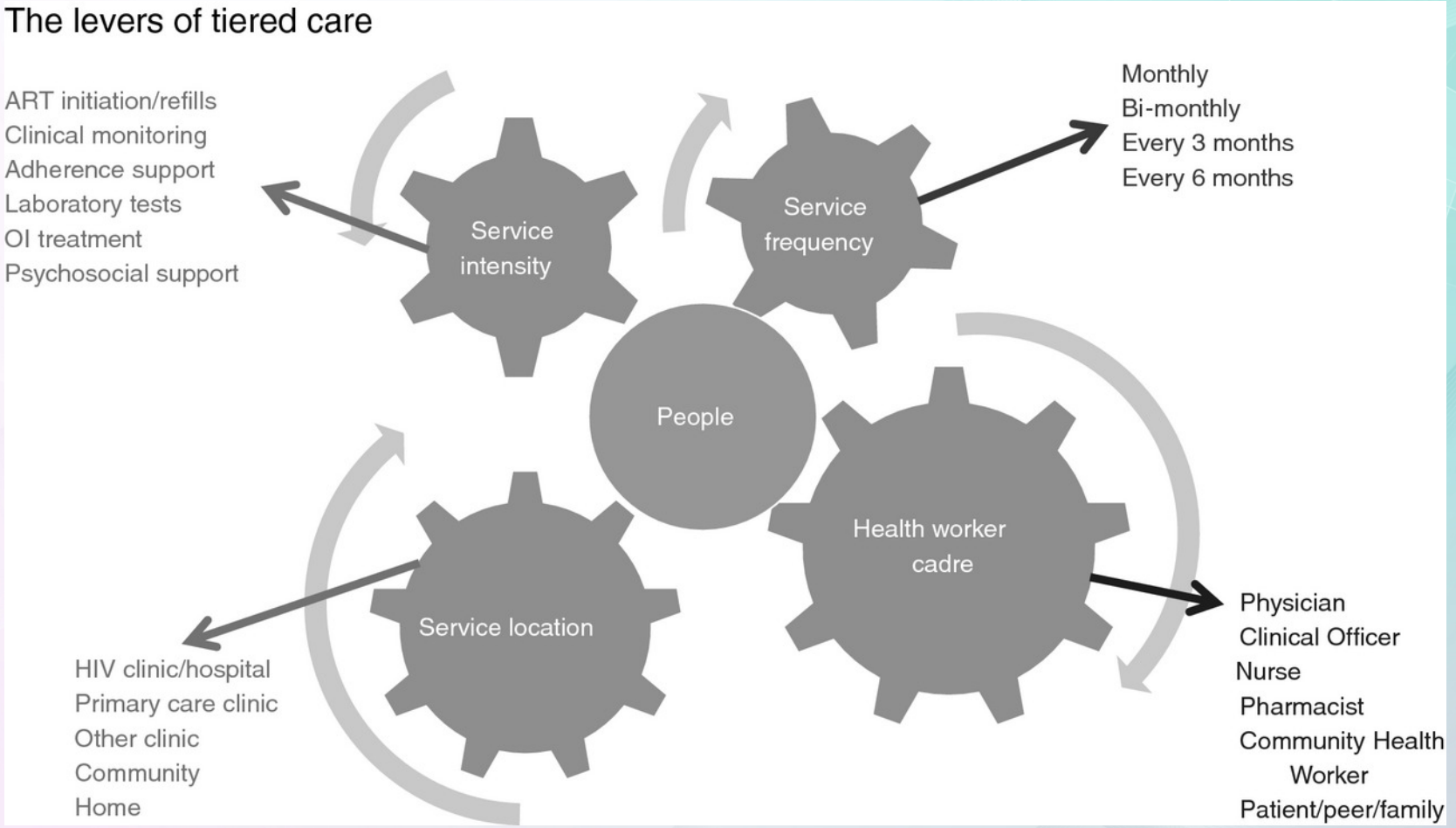
Adherence Clubs

Task Sharing

Focus on stable patients

Sources: picture from iasociety.org/Differentiated-Service-Delivery

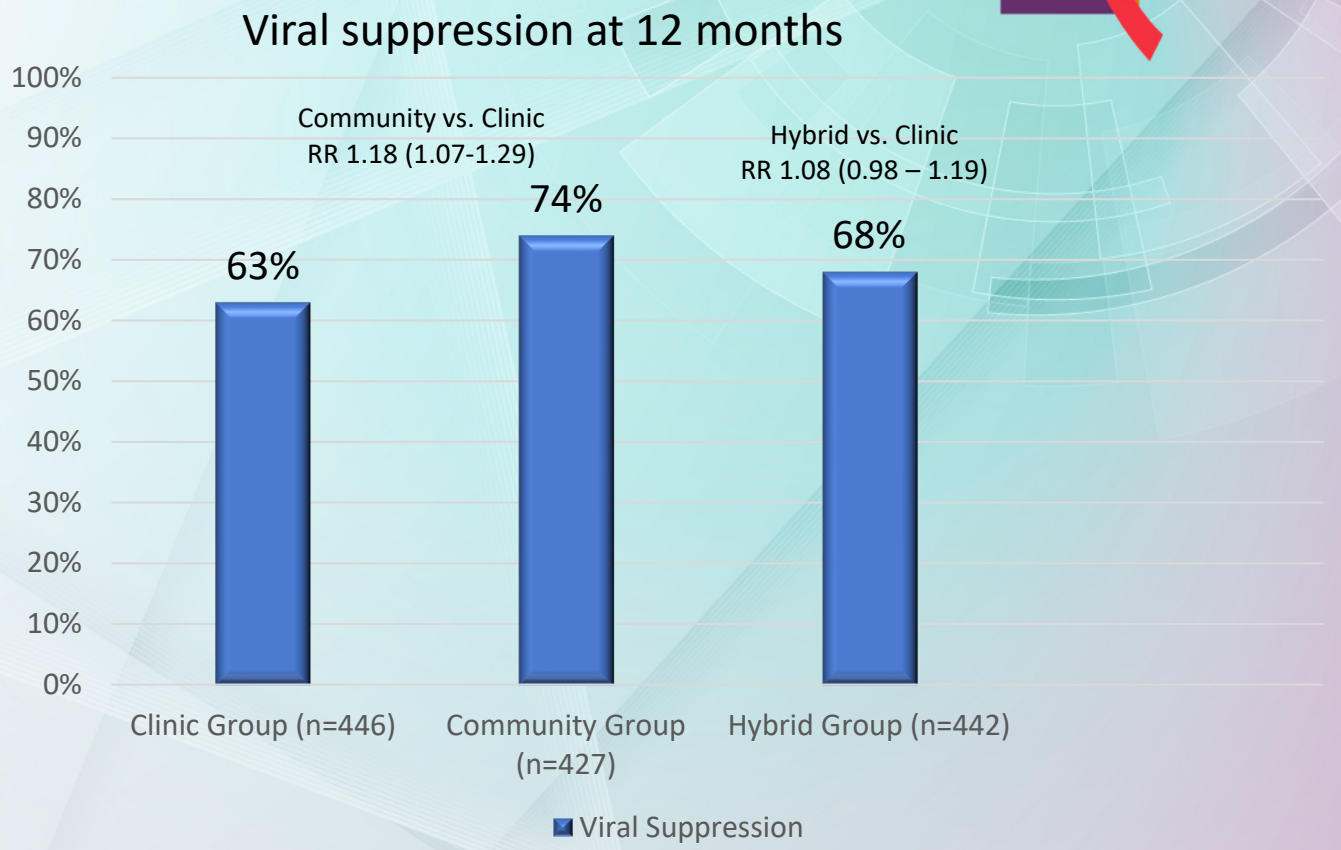
Elements of Tiered Care



Source: Duncombe Trop Med Int Health, 2015: "Reframing HIV care: putting people at the centre of antiretroviral delivery"

Community-Based ART Delivery

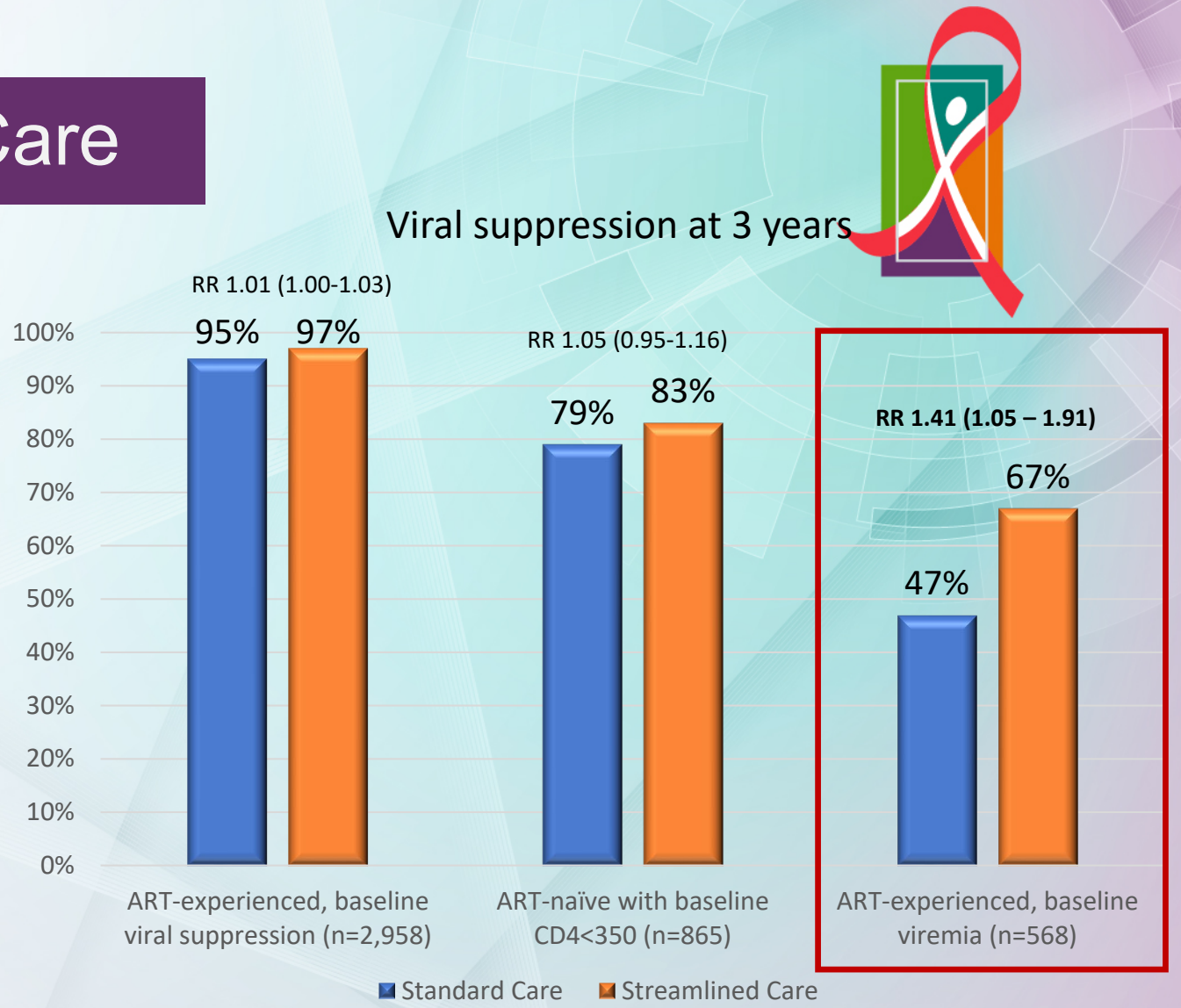
- DO ART Study
- South Africa & Uganda
- Participants not taking ART at time of entry
- Randomized to one of 3 care models



Source: Barnabas RV, Lancet Global Health, 2020

Streamlined Care

- SEARCH Study
- Universal Test & Treat trial in Uganda and Kenya
- Randomized communities (N=32)
- Intervention: streamlined care
  - Patient-centered care
  - Increased appointment spacing
  - Improved clinic access
  - Reminders
  - Tracking



Source: Hickey MD, JAIDS, 2020

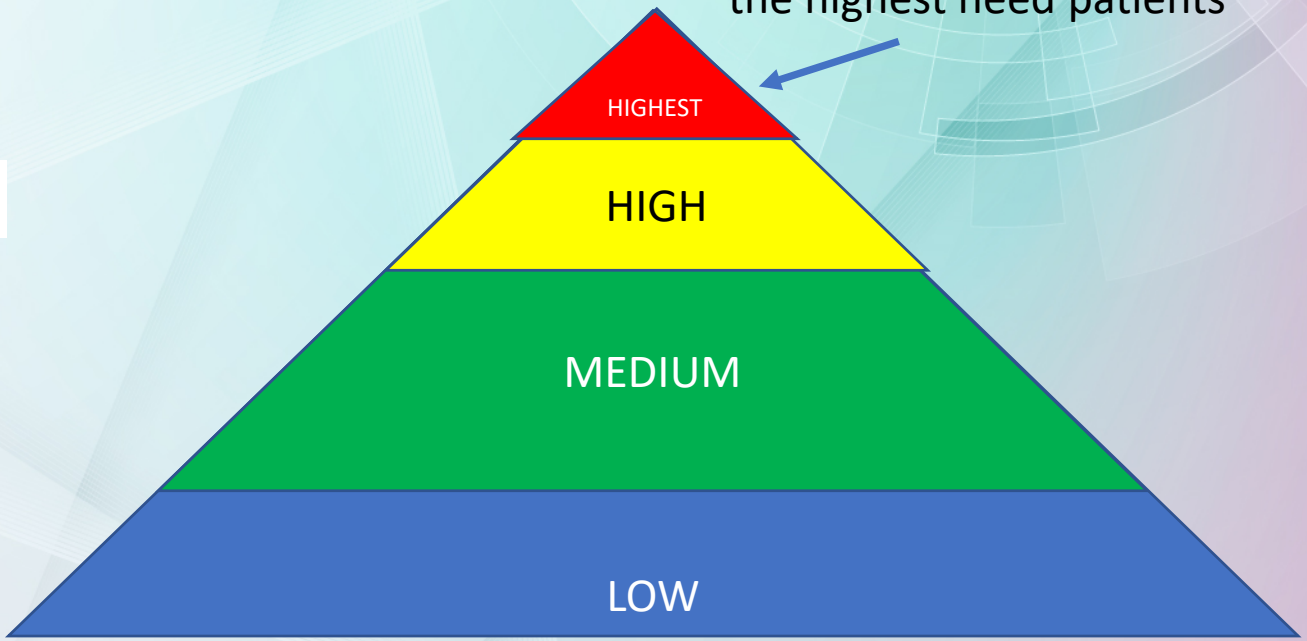
High-Need, Complex Patients

- Tiered service strategy needed to match spectrum of support need among patients

Viral suppression among Ryan White Clients, 2010-18

Image credit: 2018 Ryan White HIV/AIDS Program By the Numbers (PDF, 452 KB)

Need new approaches for the highest need patients



Not Unique to HIV

The National Center
for Complex Health & Social Needs
An initiative of the Camden Coalition

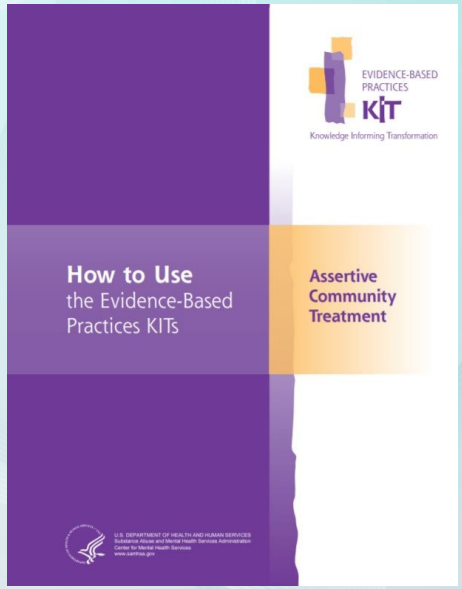
VA NATIONAL CENTER ON HOMELESSNESS AMONG VETERANS
Research-driven solutions to prevent and end homelessness

Development and Expansion of Homeless Patient Aligned Care Team (H-PACT) Model

NATIONAL ACADEMY OF MEDICINE

EFFECTIVE CARE
FOR HIGH-NEED PATIENTS

OPPORTUNITIES FOR IMPROVING OUTCOMES, VALUE, AND HEALTH



NATIONAL
HEALTH CARE
for the
HOMELESS
COUNCIL

Sources: nationalcomplex.care, samhsa.gov, va.gov/HOMELESS, nhchc.org, nam.edu

Target Population

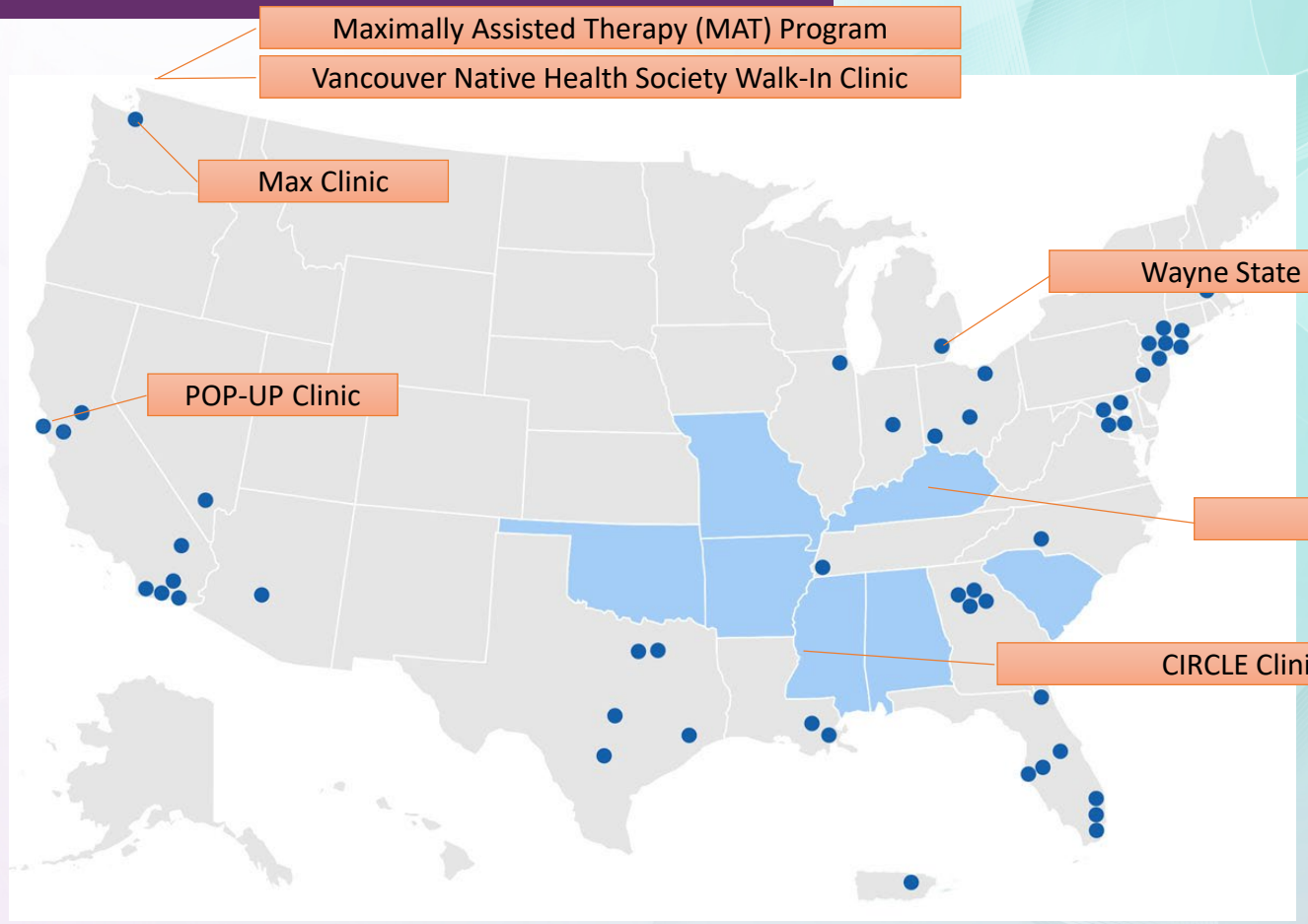
- Virally unsuppressed
- Not engaged in HIV medical care
- Complex medical & social needs
  - Homelessness & unstable housing
  - Substance use disorders
  - Mental health disorders

A central goal of care for high-need, complex patients is to ***mitigate the impact of*** social & structural inequities on HIV health outcomes

What is Low-Barrier Care?

- Designed specifically to engage the “hardest-to-reach” people with HIV
- Changes the model of care available for patients who don’t engage in mainstream care
- Aims to reduce health systems barriers
- Informed by low-barrier models of substance use disorder treatment

The United States (and near neighbors) Context: Low-Barrier Care Programs*



*Undoubtedly incomplete map

Source: Ending the HIV Epidemic map from hiv.gov

Common Elements of Low-Barrier Care

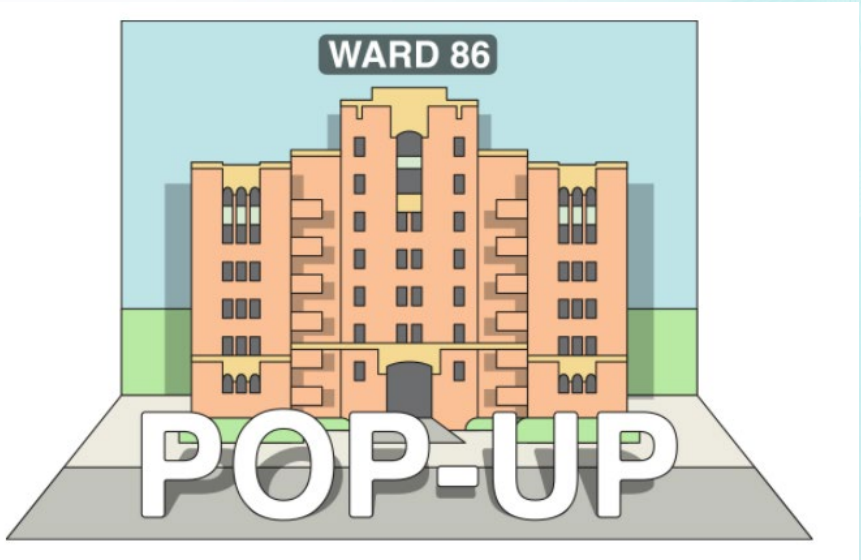
- **Walk-in access to primary care**
- **High-intensity case management**
- **Address immediate needs such as food, clothing, or hygiene**
- Financial incentives
- Team-based (group cares for the patient)
- Outreach (patient encounters outside clinic)
- Cross-agency coordination
- Harm-reduction orientation

Examples

Max Clinic

Maximum Assistance Clinic

University of Washington & Public Health – Seattle & King County



Positive-health Onsite Program for Unstably-housed Populations

UCSF

All-In at CIRCLE
University of Mississippi Medical Center

Cooperative for Innovation, Research and Clinical Engagement

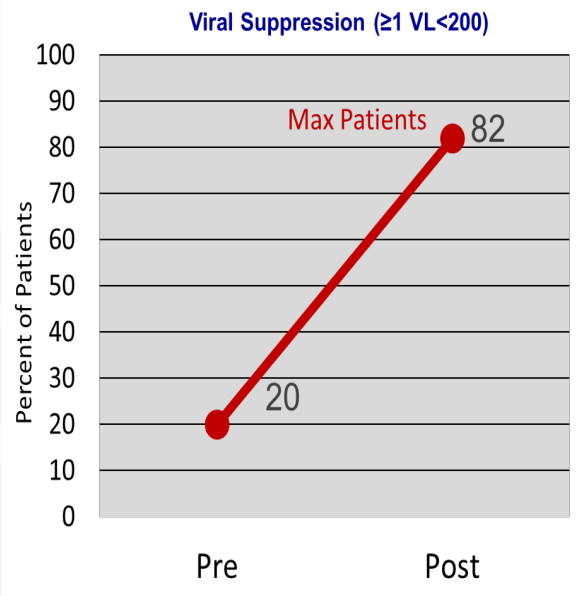
University of Mississippi

Sources: Public Health – Seattle & King County website; hividgm.ucsf.edu/pop-up; courtesy of Leandro Mena

Impact Evaluation – Max Clinic

Retrospective case-control

HIV care outcomes among patients enrolled in the Max Clinic (n = 50) and standard-of-care controls (n = 100) in the 12 months pre- and postbaseline.



Source: Dombrowski JC, Open Forum Infect Dis, 2019

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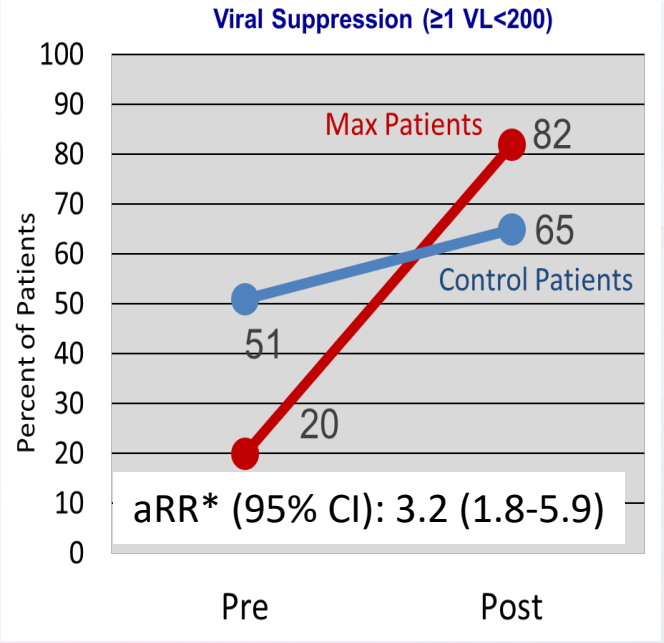

*Relative Risk Ratio (RRR) Adjusted for substance use, psychiatric dx, housing status (aRRR)

Source: Dombrowski JC, Open Forum Infect Dis, 2019

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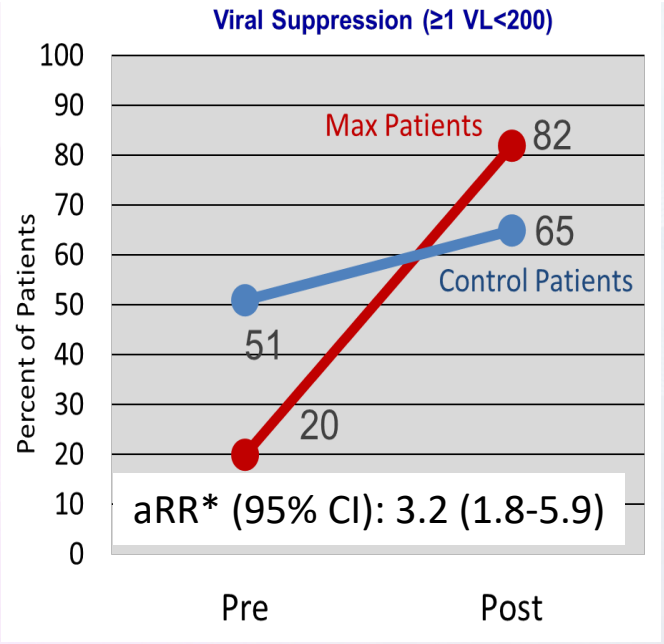

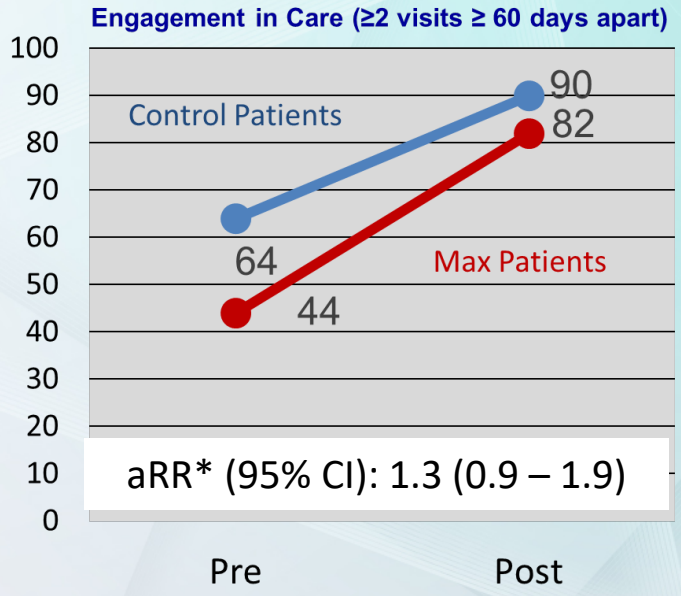

Provider visits are not the most useful measure of engagement for this model since most visits are with case managers

*Relative Risk Ratio (RRR) Adjusted for substance use, psychiatric dx, housing status (aRRR)

Source: Dombrowski JC, Open Forum Infect Dis, 2019

Qualitative Findings

Themes

- Key component is how patients feel they are treated and how social circumstances are addressed
- Walk-in access to care is essential
  - alleviates shame from missed appointments
- Incentives often served as a bridge to engagement: unimportant to some, crucial to others

"I was there at that road where I felt like giving up every day, and I used to tell the doctors that too…..I was like, 'You don't understand how hard it is to take [antiretroviral medications]. *You don't understand that my mom's dead and sometimes I don't care to even live'…..When I came here, it just changed my life. So, I am forever grateful to be here.*

"They help me help myself. And even if I don't want to help myself, they're still in it. They're here for me regardless.

"When I don't have an appointment to miss, it doesn't put me off of coming back. Because I feel very flaky when I miss appointments. I feel like I'm not meeting my standards and I don't want to face the music with that and go back in. I will avoid stuff that's critical to my health because I'm embarrassed."

"It's a great incentive for you to take your meds and get in the habit of taking your meds, so you know, even when….you're at the point where you leave this [the Max Clinic] and you stop getting cash for taking them, you're already in the habit of [taking them] and are already in a routine of taking them, so it's not that big of a deal for you to continue to take them, you know?"

Source: Beima-Sofie K, AIDS Patient Care STDs, 2020

Impact Evaluation – POP-Up Clinic

Prospective Cohort Study

- Eligibility
  - Homeless or unstably housed
  - Viremic
  - ≥1 missed primary care appointment & ≥2 drop-in visits
- Outcomes
  - Uptake among eligible patients
  - Cumulative incidence of ART initiation
  - Return to care
  - Virologic suppression 6 months post-enrollment
- Results forthcoming

Source: Personal Communication, Elizabeth Imbert, manuscript under review

Discrete Choice Experiment

- Homeless or unstably housed patients (n=65) with viremia and ≥1 missed visit in past year
- Choose between hypothetical clinics

Care team gets to know me as a person

Drop-in (vs. scheduled) visits

$10, $15, or $20 gift cards for clinic visits

2 (vs. 20) blocks from where I'm staying

Direct phone communication to care team (vs. front-desk staff)

Source: Conte M, JAIDS 2020

Discrete Choice Experiment

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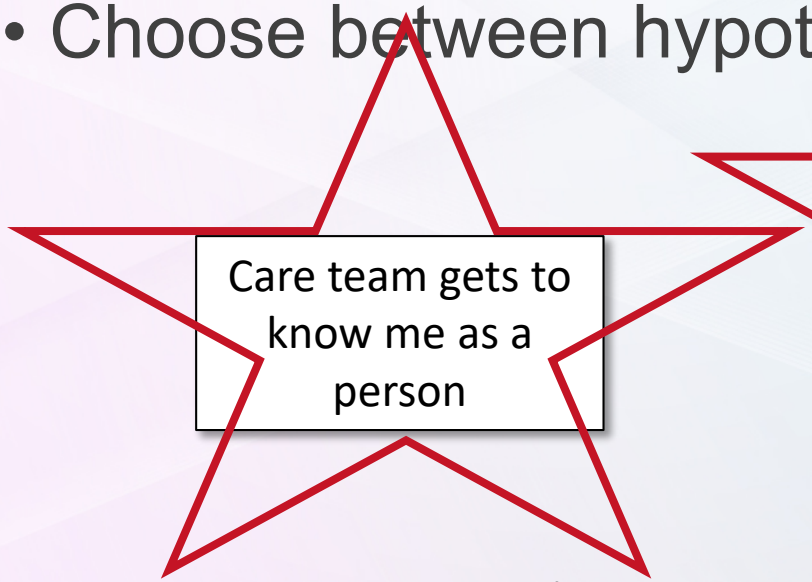

Willingness to trade $32.79 in gift cards per visit

Willingness to trade $11.45 in gift cards per visit

$10, $15, or $20 gift cards for clinic visits

Direct phone communication to care team (vs. front-desk staff)

2 (vs. 20) blocks from where I'm staying

Source: Conte M, JAIDS 2020

Implementation Research Priorities

- Impact evaluation
  - Ideally controlled
    - Consider quasi-experimental approaches when randomization not feasible or appropriate
  - HIV care continuum outcomes
  - Other chronic conditions
  - Health service utilization
- Who needs and benefits most
  - Transitions in and out (?) of low-barrier care
- Economic analyses

Acknowledgements

- Matthew Golden
- Meena Ramchandani
- Elizabeth Imbert
- Leandro Mena
- Elvin Geng & Saiqa Mullick

Thank you!

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