Panel 2: Using prescription data to support the HIV care continuum
Using Prescription Data To Support The HIV Care Continuum

- Most antiretroviral (ARV) medications are prescribed as a 30-day supply.
- Prescription data (e.g., refill data, claims, health system) can be used to identify persons who are not filling their medications monthly.
- Tracking ARV prescription data can be a more real-time indicator of adherence and retention in care challenges.
- Using real-time prescription data to identify persons who fail to fill ARV prescriptions and to intervene could have a significant impact on adherence and potentially on retention in care.

The conclusions of this slide are those of the author and do not necessarily represent the views of the Centers for Disease Control and Prevention.
Bridging Gaps in HIV Care: A Michigan Pharmacy Re-Engagement Partnership

Panel 2: Using prescription data to support the HIV care continuum

Alina Whitener MS, CHES
Return to Care Unit, HIV Care Section
Division of HIV/STI Programs, Client, and Partner Services

Michigan Department of Health & Human Services
Bureau of HIV and STI Programs
Data to Care Rx (Link-Up Rx)

- Began as a pilot with the Detroit Health Department and MDHHS in 2018
- Expanded to a statewide program in 2022
- Two current pharmacy partners
Pharmacists are considered care providers in Michigan.

Data sharing agreements are not required.
Link-Up Rx Process

Time lapsed after failed ART pick up

Week 1
Pharmacist reaches out to client

Week 2
Pharmacist contacts prescriber
Prescriber attempts outreach

Week 3
Pharmacist shares information with MDHHS
MDHHS attempts outreach
Link Up RX outcomes

Link-Up RX Outcomes 2018-2024

- Linked to Services: 37%
- Unable to locate: 13%
- Extra meds/Meds delivered: 12%
- Other: 3%
- Moved out of State: 36%

Legend:
- Linked to Services
- Unable to locate
- Extra meds/Meds delivered
- Other
- Moved out of State
Traditional D2C vs D2CRX

Data to Care
From identification to initiation- **76 Days**
From initiation to linkage- 10.9 days

Data to Care RX
From identification to initiation- **4 Days**
From initiation to linkage- 8.9 days
Traditional D2C vs D2CRX - Linkages

Percent of Clients Successfully Linked to Services

- D2RX: 37%
- D2C: 12%
Community Feedback

- **Detroit Health Department**
  - Community members express gratitude for outreach
  - Calling in discrete
  - Communication efforts with pharmacy partners
  - Successful referrals to the pharmacy

- **Outstate**
  - Link for updated contact information to and from the community and pharmacy
  - Gratitude for statewide resource guide for medical and supportive service referrals
  - Productive collaboration with pharmacy partners
Program Barriers

- Pharmacy staff transitions
- Location limited to one area
- New partnership hesitation
- Maintaining list consistency
- Data sharing complexity issues
  - Not all groups have DCH accessibility
  - Not every jurisdiction has a secure data system to use
Next Steps

To Strengthen Partnerships:

• Ensure Rx program understanding
• Encourage onboarding to sustain partnerships with pharmacies
• Discuss time commitment and provide clarity of role

To Optimize Rx Program:

• Rx one pager
• Expand Rx to additional counties in Michigan
• Partner with pharmacists via health systems
  • We have EMR access
AdhereP4
Maryland Department of Health
Grant: PHPA-1108
Implementation and Evaluation of a Pharmacy-Based HIV Data-to-Care and Treatment Adherence Intervention
Outline

- Background
- Objectives
- Methods
- Implementation
- Results
- Next steps
Self Report Adherence:
✓ How do you take your medications?
✓ How many doses have you missed?
✓ Any issues obtaining your medications?

**CONTROLLED**

✓ Medication adherence counseling
✓ Barrier assessment
✓ Adherence intervention

**UNCONTROLLED**
Objective Adherence Data

- Medication adherence counseling
- Barrier assessment
- Adherence intervention
Objective

To evaluate the effectiveness of an ADHEREnce support intervention among people with HIV implemented through the collaboration of Pharmacies, Prescribers, Payers, and Public health agencies (AdhereP4)
AdhereP4 Partners

- Maryland Department of Health
- MADAP
  - Medicaid
- Pharmacies
  - University of Maryland Medical System (UMMS Rx)
  - Chase Brexton Health Services Pharmacy (CBHS Rx)
  - Mt. Vernon Pharmacy (MVP)
- HIV Clinics
  - Chase Brexton Health Services (CBHS)
  - THRIVE Program
- Maryland Department of Health
  - Disease Intervention Specialist
- Public Health Agencies
- Payers
  - Prescribers
  - Pharmacies
AdhereP4 Data Flowchart

MADAP
- MADAP recipient pharmacy claims data

SOP
- Intervention made and outcome at 30, 60, and 90 days

Medicaid
- Medicaid recipient pharmacy claims data

30-day patient list
- UMMS Rx
- CBHS Rx
- Mt. Vernon Rx
- THRIVE

60-day patient list
- CBHS

90-day patient list
- MDH
Line Lists (30/60/90 days)

Purpose: Create line lists for patients who appear to be 30/60/90 days late in filling their specific Generic Code Number (GCN)

*Receive data for claims through previous month
Pt. must have eligibility for the time period to be considered for a list
Review Patient List

Contact Patient

Reason for Noncompliance

Perform Intervention

Intervention Outcome
Timeline

- DUAs/Contracts
- Site Process Discussions
- THRIVE/MTV Interventions
- UMMS Interventions
- CBHS Interventions
- Data Cleaning
- Analysis
- Dissemination

Timeline:
- Jul 2019
- Jul 2020
- Jul 2021
- Jul 2022
- Jul 2023

- Jan 2020
- Jan 2021
- Jan 2022
- Jan 2023
Success Metrics

- HIV Viral Suppression (Prescribers)
- ARV Adherence (Pharmacists/Payers)
- Retention in Care (Prescribers)
- Re-linkage to Care (Public Health Agencies)
Eligibility

- Evaluated between January 2021 and August 2022

- MADAP/Medicaid Patients sent to SOP
- Patients sent to Pharmacies/Clinics

11,918 persons

- 3,171 Nonadherent
  - 1,469 False Positive
  - 1,702 Intervention Needed
- 8,747 Adherent

- Intervention Eligible
## Baseline Characteristics

<table>
<thead>
<tr>
<th>Total Population n (%)</th>
<th>Total</th>
<th>1,702 (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Age (SD, min, max) years</td>
<td>46.7 (13.6, 20, 85)</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>Female</td>
<td>562 (33%)</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>1,140 (67%)</td>
</tr>
<tr>
<td>Race</td>
<td>Black or African American</td>
<td>1,239 (73%)</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>162 (10%)</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>46 (3%)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>255 (15%)</td>
</tr>
<tr>
<td>Location</td>
<td>Baltimore City</td>
<td>1042 (63%)</td>
</tr>
<tr>
<td></td>
<td>Baltimore County</td>
<td>268 (16%)</td>
</tr>
<tr>
<td>HIV RNA &lt;200 copies/mL</td>
<td>No</td>
<td>331 (19%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>1103 (65%)</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>268 (16%)</td>
</tr>
<tr>
<td>HIV RNA &lt;LLOD</td>
<td>No</td>
<td>620 (36%)</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>814 (48%)</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>268 (16%)</td>
</tr>
</tbody>
</table>
Interventions

- Full Intervention: direct patient interaction
  - E.g. phone call, text message, telehealth, or an in-person visit
- Soft Intervention: indirect patient interaction
  - E.g. left a voicemail message
- No Intervention: no patient contact
  - E.g. Missing/incorrect contact information

1,702 persons

1,702 persons

- 465 (27%) No Intervention
- 427 (25%) Soft Intervention
- 810 (48%) Full Intervention

✓ Intervention Eligible
Success Metrics

• HIV Viral Suppression (Prescribers)
  – HIV RNA < 200 copies/mL
• ARV Adherence (Pharmacists/Payers)
• Retention in Care (Prescribers)
• Re-linkage to Care (Public Health Agencies)
Eligibility: HIV RNA Suppression

✅ Intervention Eligible

✅ Eligible between Nov 2020 and Dec 2021 and had HIV RNA results available

1,702 persons

508 persons

165 (33%) No Intervention

102 (20%) Soft Intervention

241 (47%) Full Intervention
Percent of Patients with Viremia

<table>
<thead>
<tr>
<th>Type</th>
<th>Baseline</th>
<th>Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full</td>
<td>30%</td>
<td>27%</td>
</tr>
<tr>
<td>Soft</td>
<td>33%</td>
<td>24%</td>
</tr>
<tr>
<td>No</td>
<td>4%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Percent of Patients
HIV RNA copies/mL (Mean) by Intervention Group

- **No**:
  - Baseline: 7749 copies/mL
  - Follow-up: 7986 copies/mL

- **Soft**:
  - Baseline: 14793 copies/mL
  - Follow-up: 10527 copies/mL

- **Full**:
  - Baseline: 13609 copies/mL
  - Follow-up: 10215 copies/mL

Mean HIV RNA (copies/mL)
HIV RNA Suppression Summary

• After a full or soft intervention, less patients were viremic (HIV RNA >200 copies/mL) as opposed to an increase in the number of viremic patients seen among those who did not obtain an intervention.
Success Metrics

- HIV Viral Suppression (Prescribers)
- ARV Adherence (Pharmacists/Payers)
  - Proportion of days covered (PDC)
    - Adherent = PDC ≥ 80%
    - Nonadherent = PDC < 80%
- Retention in Care (Prescribers)
- Re-linkage to Care (Public Health Agencies)
Eligibility: ARV Adherence

✓ Intervention Eligible

✓ Eligible between Nov 2020 and Jun 2021 and
✓ Single-tablet regimen (STR) before and after intervention or
✓ Multi-tablet regimen (MTR) before and after intervention.

1,702 persons

465 persons

112 (24%) No Intervention

131 (28%) Soft Intervention

222 (48%) Full Intervention

379, 82%

86, 18%
Percent of Patients Adherent to ART

- **Baseline**
  - Full: 5%
  - Soft: 3%
  - No: 10%

- **Follow-up**
  - Full: 21%
  - Soft: 23%
  - No: 21%
Number (%) of patients who became adherent in follow-up
HIV Adherence Summary

• HIV adherence improved in the population evaluated however similar adherence improvement was seen regardless of intervention.
Success Metrics

- HIV Viral Suppression (Prescribers)
- ARV Adherence (Pharmacists/Payers)
  - Proportion of days covered (PDC)
- Retention in Care (Prescribers)
  - 2 patient care visits occurring at least 90 days apart over a continuous 365-day period post-index date
    - in individuals who also had 2 patient care visits occurring at least 90 days apart over a 365-day period prior to the index date
- Re-linkage to Care (Public Health Agencies)
Eligibility: Retention in Care

- Intervention Eligible
- Eligible between Nov 2020 and Dec 2021 and
- had 2 patient care visits at least 90 days apart over a 365-day period before intervention eligibility

1,702 persons
  1187 persons
    513 persons
      161 (31%) No Intervention
      119 (23%) Soft Intervention
      233 (45%) Full Intervention
Odds Ratio for Retention in Care

- Baseline HIV RNA < 200 vs. ≥ 200 copies/mL
- Other Race vs. Black or African American
- Female vs. Male
- Age 20-44 vs Age 45-85 years
- Full vs. No Intervention
- Soft vs. No Intervention

*None were statistically significant*
Retention in Care Summary

• There were no statistically significant differences in the odds of retention between intervention groups.

• When the full and soft intervention groups were combined, there was no difference in the odds of retention between those who received an intervention (full or soft) and those who did not (OR=0.95; 95% CI: 0.55 – 1.65).

• Odds of retention were not different based on age, race, gender, and baseline HIV RNA levels.
Success Metrics

• HIV Viral Suppression (Prescribers)
• ARV Adherence (Pharmacists/Payers)
  – Proportion of days covered (PDC)
• Retention in Care (Prescribers)

• Re-linkage to Care (Public Health Agencies)
  – A medical visit occurring within the 365-day period after the index date
    • in patients who had no medical visits in the 365-day period prior to the index date
Eligibility: Relinkage to Care

- Intervention Eligible
- Eligible between Nov 2020 and Dec 2021 and
- Had no medical visit in over a 365-day period before intervention eligibility

1,702 persons
1187 persons
554 persons
109 (20%) No Intervention
149 (27%) Soft Intervention
296 (53%) Full Intervention
Odds Ratio for Relinkage to Care

- Baseline HIV RNA < 200 vs. >/= 200 copies/mL
  - Odds Ratio: 50
  - p=0.03
- Other Race vs. Black or African American
- Female vs. Male
  - Odds Ratio: more likely
  - p=0.02
- Age 20-44 vs Age 45-85 years
- Full vs. No Intervention
- Soft vs. No Intervention

Less likely  ➔  More likely
Acknowledgements

- Eberechukwu Onukwugha, MS, PhD
- Tsung-Ying Lee, BPharm, M ClinPharm
- Abree Johnson, MS, MBA

- Chase Brexton Health Services
- THRIVE Program, UMMC MTC
- Mt. Vernon Pharmacy
- University of Maryland Medical System Pharmacy
- Maryland Department of Health
  - Maryland AIDS Drug Assistance Program
  - Maryland Medicaid
  - UMB Hilltop
Successes!

• Collaborations were built with:
  – Prescribers, Pharmacies, Payers, Public Health Agencies
• Proactive and targeted adherence interventions were implemented
• Successful Data Sharing Agreements were developed
• Communication was improved across healthcare systems
• Prevented Possible Virologic Failure
Challenges

• Developing Data Use Agreements
• Data Sharing using secure file transfer protocols (sFTP)
• Collaborator Education
  – Intervention
  – Documentation
• Time
• False Positives
• Competing Priorities
• Dare I Say...Pandemic!
AdhereP4
Maryland Department of Health
Grant: PHPA-1108
Implementation and Evaluation of a Pharmacy-Based HIV Data-to-Care and Treatment Adherence Intervention
Barriers to D2C Rx:
Insights from the AIMS Study

April D. Kimmel, PhD
Virginia Commonwealth University
funding

This work was supported by the Centers for Disease Control and National Institute of Mental Health (U01 PS005192)
Antiretroviral Improvement of Medicaid enrollees

- Cluster-randomized, statewide trial of support for Virginia Medicaid members, and their providers, with ART prescriptions >30–90 days late
- Multi-agency, -institutional collaborative research partnership
- Real-time administrative and prescription claims (Virginia Medicaid) and HIV surveillance data (Virginia Department of Health)
Agency buy-in, agreements, commitments

Implementation (planned)

Implementation (actual)

Barriers
barrier domains

- Legality, leadership and priorities
- Data governance
- Data access, usability and support
- Reach and relationships
- Unexpected events
barrier domains

• Legality, leadership and priorities
  - State laws and regulations impacting cross-agency sharing and release (e.g., to a 3rd party) of member personal information
  - Program champion(s) and agency leadership buy-in
  - Competing priorities and leadership/staff turnover
legality, leadership and priorities
legality, leadership and priorities

Political change

Laws
Sharing member information

2019
Turnover
Leadership (mid)

2020
Turnover
Leadership (mid)

2021
Turnover
Leadership (high)

2022
Turnover
Leadership (mid)

2023
Turnover
Leadership (high)

2024
Turnover
Leadership (mid)
barrier domains

• Legality, leadership and priorities

• Data governance
  - Processes for data sharing, maintaining data confidentiality and security
  - Contractual obligations regarding data provision to agency
Data sharing
Agreement mechanisms

Data flows
Data elements, security

Timeliness of data
Multi-step pathways, delays, discrepancies
Data sharing agreement mechanisms

Political change

Timeliness of data
Multi-step pathways, delays, discrepancies

2019
2020
2021
2022
2023
2024

Data flows
Data elements, security

Priority shift — Turnover
Leadership (mid)  Turnover Leadership (mid)  Turnover Leadership (high)  Turnover Leadership (mid)  Turnover Leadership (high)  Turnover Leadership (mid)

Leadership (mid)
Leadership (high)
Leadership (mid)
Leadership (mid)
Leadership (high)
Leadership (mid)
barrier domains

- Legality, leadership and priorities
- Data governance
- Data access, usability and support
  - Technologies and management systems used to work with data
  - Data usability, including data quality and completeness
  - Technical documentation and infrastructure to support analysis
data access, usability and support

**2019**
- **Data access**
  - Server, software, licensing, workspace

**2020**
- **Identifying cases**
  - Approach / accuracy

**2021**
- **Linking providers**
  - Data quality, approach
- **Timeliness of data**
  - Multi-step pathways, delays, discrepancies

**2022**
- **Enrollee reach**
  - Information & modality, relationships, mistrust

**2023**
- **Redetermination**
  - Data delays & quality, mistrust, confusion

**2024**
- **Data use**
  - Technical documents, infrastructure
data access, usability and support

- Enrollee reach: Information & modality, relationships, mistrust
- Political change

2019:
- Turnover - Leadership (mid)
- Priority shift

2020:
- Turnover - Leadership (mid)
- SARS-CoV-2: Agency bandwidth, shifting priorities

2021:
- Turnover - Leadership (high)

2022:
- Turnover - Leadership (mid)
- Redetermination

2023:
- Turnover - Leadership (high)
- Data delays & quality

2024:
- Turnover - Leadership (mid)
- Priority shift

Identifying cases
Approach / accuracy

Linking providers
Data quality, approach

Timeliness of data
Multi-step pathways, delays, discrepancies

Enrollee reach
Information & modality, relationships, mistrust

Data use
Technical documents, infrastructure

Data access
Server, software, licensing, workspace
barrier domains

• Legality, leadership and priorities
• Data governance
• Data access, usability and support
• Reach and relationships
  - Effectively contacting and engaging with members, particularly via a known and/or trusted source
Enrollee reach
Information & modality, mistrust

Timeliness of data
Multi-step pathways, delays, discrepancies

Redetermination
Data delays & quality, mistrust, confusion

reach and relationships
reach and relationships

2019

Program face
Advisory group, agency not aligned

SARS-CoV-2
Agency bandwidth, shifting priorities

2020

2021

2022

2023

2024

Program face
Enrollees, Advisory group not aligned

Timeliness of data
Multi-step pathways, delays, discrepancies

Enrollee reach
Information & modality, relationships, mistrust

Redetermination
Data delays & quality, mistrust, confusion
barrier domains

- Legality, leadership and priorities
- Data governance
- Data access, usability and support
- Reach and relationships

- **Unexpected events**
  - Unanticipated, but impactful, incidents that occur outside the immediate boundaries of the program
unexpected events

2019

SARS-CoV-2
Agency bandwidth, shifting priorities

2020

2021

2022

2023

2024

Redetermination
Data delays & quality, mistrust, confusion

System structure
MCO acquisition, program consolidation
Engagement
Expanding intra-agency involvement

Political change

System structure
MCO acquisition, program consolidation

Expected events

2019
2020
2021
2022
2023
2024

SARS-CoV-2
Agency bandwidth, shifting priorities

Engagement
Expanding intra-agency involvement

Redetermination
Data delays & quality, mistrust, confusion

Turnover
Leadership (high)

Turnover
Leadership (mid)

Priority shift — > Turnover
Leadership (mid)

Leadership (high)

Leadership (mid)

Leadership (mid)

Leadership (mid)

Leadership (mid)

Leadership (mid)

Leadership (mid)

Leadership (mid)

Leadership (mid)
Data sharing
Agreement mechanisms

Resource sharing
Specialized knowledge

Political change

Identifying cases
Approach / accuracy

Linking providers
Data quality, approach

Timeliness of data
Multi-step pathways, delays, discrepancies

Enrollee reach
Information & modality, relationships, mistrust

System structure
MCO acquisition, program consolidation

Data access
Server, software, licensing, workspace

Data use
Technical documents, infrastructure

Data flows
Data elements, security

SARS-CoV-2
Agency bandwidth, shifting priorities

Laws
Non-agency data access

Engagement
Expanding intra-agency involvement

Redetermination
Data delays & quality, mistrust, confusion

Agency buy-in, agreements, commitment

Priorities — Turnover
Leadership (mid) — Leadership (high)

Program face
Advisory group, agency not aligned

Program face
Enrollees, Advisory group not aligned

Agency buy-in, agreements, commitment

2019

2020

2021

2022

2023

2024
key insights

• Multiple barrier domains intersect at different levels and over time
• Just 1 barrier can substantially delay timelines, derail implementation
• Legal and regulatory issues, turnover and governance can eclipse data access and program implementation
• Nuanced knowledge of data pathways vital to identifying population
• Strong data expertise and underlying infrastructure essential
• Reaching, engaging participants not a one-size-fits-all approach
recommendations for claims-based D2C Rx

• Identify D2C Rx champions early and be flexible if champion turnover
• Understand agency incentives for D2C Rx and use as opportunity to bolster relationships, promote communication and elevate, when possible, D2C Rx among competing priorities
• Engage a intra-agency, multidisciplinary team with administrative and regulatory law, data governance and access, and population expertise
• Build in adequate time for nuanced understanding of data, pathways
• Differentiated D2C Rx approach based on known, trusted relationships
# Acknowledgements

<table>
<thead>
<tr>
<th>Virginia Commonwealth University</th>
<th>Virginia Department of Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rose Bono, MPH</td>
<td>Chelsea Canan, PhD</td>
</tr>
<tr>
<td>Bassam Dahman, PhD</td>
<td>Lauren Maxwell, MPH</td>
</tr>
<tr>
<td>Delton Harris, MSW</td>
<td>Tinika McIntosh, MPH</td>
</tr>
<tr>
<td>Jessica Kiernan, MS</td>
<td>Rachel Stallings, MPH</td>
</tr>
<tr>
<td>Caressa Palmer, MPH</td>
<td></td>
</tr>
<tr>
<td>Zhongzhe Pan, PhD</td>
<td></td>
</tr>
<tr>
<td>Elliot Popoff, MPH</td>
<td></td>
</tr>
<tr>
<td>April D. Kimmel, PhD (principal investigator)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Virginia Medicaid</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chethan Bachireddy, MD, MSc</td>
<td></td>
</tr>
<tr>
<td>Neil McCray, PhD, MPP</td>
<td></td>
</tr>
<tr>
<td>Andrew Mitchell, ScD</td>
<td></td>
</tr>
<tr>
<td>John Morgan, MD</td>
<td></td>
</tr>
<tr>
<td>Jennifer Palazzolo, PhD</td>
<td></td>
</tr>
<tr>
<td>Lauryn Walker, PhD</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Virginia Department of Health</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chethan Bachireddy, MD, MSc</td>
<td></td>
</tr>
<tr>
<td>Neil McCray, PhD, MPP</td>
<td></td>
</tr>
<tr>
<td>Andrew Mitchell, ScD</td>
<td></td>
</tr>
<tr>
<td>John Morgan, MD</td>
<td></td>
</tr>
<tr>
<td>Jennifer Palazzolo, PhD</td>
<td></td>
</tr>
<tr>
<td>Lauryn Walker, PhD</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>University of Virginia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Karen Ingersoll, PhD</td>
<td></td>
</tr>
<tr>
<td>Ava Lena Walden, MHS</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sentara</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rebecca Dillingham, MD, MPH</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Centers for Disease Control and Prevention</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathy Byrd, MD, MPH</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National Institute of Mental Health</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Stirratt, PhD</td>
<td></td>
</tr>
</tbody>
</table>
Thank you!

adkimmel@vcu.edu