Mobile testing to increase HIV-testing uptake in rural Alabama: a pilot implementation project (MOBILISE)

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Lynn T. Matthews, MD, MPH
Associate Professor, Division of Infectious Disease
Associate Director, Research and Partnerships, Mary Heersink Institute for Global Health
University of Alabama at Birmingham, Heersink School of Medicine
lynnmatthews@uabmc.edu

DeAndra Tuyishime, MAEd, CHES, RPCV
Chief Prevention & Outreach Officer - Southern Region
Five Horizons Health Services
Montgomery, AL
dtuyishime@fivehorizons.org
Disclosures

• None
Southern, rural states are a focus of the U.S. plan to End the HIV Epidemic (EHE)

Rate of New HIV Diagnoses in the Us and Dependent Areas by Region, 2021*†

- **West**: 9.2
- **Midwest**: 7.0
- **Southeast**: 14.7
- **Northeast**: 8.7
- **US Dependent Areas**: 11.5

* Rates are per 100,000 people.
† Among adults, adolescents, and children under the age of 13.

HIV testing gaps in Alabama: 37% ever-tested for HIV

- Modelling time to diagnosis based on CD4 count (Song 2017 JAIDS)
  - 3.7 (IQR 0-9.2) years across Alabama

Pitasi, CDC MMWR. 2019, Matthews, OFID. 2023
Transportation needs
Provider discrimination and stigma
Financial constraints
Sparse, over-taxed clinics
Confidentiality concerns

Rural U.S. challenges accessing testing overlap with challenges in global settings

Mobile HIV counseling and testing increases testing coverage

- WHO review, meta-analysis of community testing
  - Mobile HCT uptake 87%
  - Earlier Diagnoses
  - Increased HCT coverage (RR 7.07) with a trend towards reduced HIV incidence.

- Increased testing availability
- Reduced facility-associated stigmas
- Reach “hot spots”
- Little is known about mobile testing in rural America.


From AIDS Healthcare Foundation, South Africa.
Mobile Testing to increase HIV-testing Uptake in rural Alabama: A Pilot Implementation Project

Pre-Implementation

Key stakeholder in-depth interviews: identify sites, refine messaging

Evaluate implementation of Mobile-based HCT

Quantitative questionnaire + Operational data to describe those accessing the mobile unit

Qualitative interviews with clients, providers, and community members for feedback on Mobile HCT

Conceptual and implementation frameworks:

Funding: Ending the HIV Epidemic Supplement to UAB CFAR NIAD P30AI027767 (PI Heffron, PD Matthews)
## Pre-implementation Findings

### Opportunities for Linking Clients to Rapid ART / PrEP
- On-site intake
- Telehealth support
- On-site PrEP prescription

### Methods for Refining Key Stigma Reducing Messages
- Integrate HIV testing with other screenings
- Social media campaigns
- Emphasis on possibility of good quality of life when living with HIV

### Community Champions
- Church leaders
- Beauticians/Barbers
- Sororities/Fraternities
- Teachers
- Politicians
- Healthcare providers
- Activists

Pratt et al. Archives of Public Health, 2023
Methods

Population and Setting

- Adolescents and adults (ages 18-65)
- Living in Alabama, particularly in rural counties and the Black Belt region
- Received HIV testing and counseling from 5Horizons outreach team

Recruitment

- Recruitment at clinical and outreach testing sites \(^5\), including:
  - Five Horizons Montgomery clinical location
  - college and university campuses
  - health fairs
  - job resource centers
  - substance use support centers
  - churches
- Study recruitment flyer with QR code linking directly to the survey

Survey

- Demographics
- Current HIV status
- HIV risk perception
- Prior/future use of HIV self-testing or home-testing kits
- Acceptability, feasibility, appropriateness of mobile-based HCT.

- HIV-related stigma \(^1\)
- Barriers to accessing healthcare \(^2\)
- Medical mistrust \(^3\)
- Social support \(^4\)

Methods

Challenges & Adjustments

- Delays in deployment of mobile testing unit(s)
  - Procurement, Procedures, Personnel, Protocols
- Leadership changes and challenges at partner site
  - Community buy-in during transitions
- Shifted strategy to explore experiences with any form of outreach testing/care that occurred outside of the clinic.
- Length of survey was difficult for some people to commit the time to complete
- Recruiting for and conducting in-depth interviews remotely limits engagement of new participants
Demographics, N=181

<table>
<thead>
<tr>
<th>N (%) or Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
</tr>
<tr>
<td>Cis-women</td>
</tr>
<tr>
<td>Cis-men</td>
</tr>
<tr>
<td>Gender diverse</td>
</tr>
<tr>
<td><strong>Race</strong></td>
</tr>
<tr>
<td>Black or African American</td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td><strong>Counties represented</strong></td>
</tr>
<tr>
<td><strong>HIV serostatus negative</strong></td>
</tr>
<tr>
<td><strong>HIV risk perception low</strong></td>
</tr>
<tr>
<td><strong>HIV stigma</strong></td>
</tr>
<tr>
<td>Score range 0-5</td>
</tr>
<tr>
<td><strong>Barriers to care score</strong></td>
</tr>
<tr>
<td>Score range 0-6</td>
</tr>
<tr>
<td><strong>Medical mistrust</strong></td>
</tr>
<tr>
<td>Score range 10-50</td>
</tr>
<tr>
<td><strong>Social support</strong></td>
</tr>
<tr>
<td>Score range 0 and 100</td>
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</table>

Counties of residence reported by participants
## Acceptability of Mobile-based HIV testing

<table>
<thead>
<tr>
<th></th>
<th>N (%) or Mean (SD)</th>
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</thead>
<tbody>
<tr>
<td>Ever accessed mobile-based HCT</td>
<td>41 (22%)</td>
</tr>
<tr>
<td>Acceptability</td>
<td>3.9 (0.9)</td>
</tr>
<tr>
<td>Feasibility</td>
<td>4.0 (0.9)</td>
</tr>
<tr>
<td>Appropriateness</td>
<td>4.0 (0.9)</td>
</tr>
</tbody>
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People with more social support, higher perceived HIV risk, more barriers to care were less likely to rate mobile based HCT favorably in unadjusted models.

### Interest in HIV-self testing (HIVST)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heard of HIVST</td>
<td>62%</td>
</tr>
<tr>
<td>Tested using HIVST</td>
<td>35%</td>
</tr>
<tr>
<td>Interested in using HIVST* (again)</td>
<td>46%</td>
</tr>
<tr>
<td>Interested in distributing HIVST to partner(s)</td>
<td>55%</td>
</tr>
<tr>
<td>Interested in distributing HIVST to friends</td>
<td>55%</td>
</tr>
<tr>
<td>Interested in distributing HIVST to family</td>
<td>56%</td>
</tr>
</tbody>
</table>

More perceived HIV risk, less likely to be interested in HIVST in unadjusted models.

*Top listed reasons for not wanting to pursue:
- Prefer to be with testing counselor (27%)
- I have questions (5%)
- Test may be difficult to use (2%)
Summary

• Clients across a rural EHE state are interested in non-facility-based testing: opportunities to reach people who are not accessing facility-based care

• HIVST is an option for many, requires clear avenues to link to a counselor and follow-up care

• 78% of survey participants were women
  • Successfully reaching women who are often left out of HIV prevention
  • Need to also reach men

• Implementation of mobile testing requires clear protocols and procedures to procure, maintain, secure, staff, and manage the unit. Steep learning curve.

• Resilience and creativity of ASO/CBO leadership in Alabama; passion for the work
Subsequent activities

- One MGM Project
  - Work focused on Montgomery and surrounding counties to rebuild trust, build partnerships, mobile-based community outreach.
- Reaching broader populations through new partnerships
  - e.g., People experiencing homelessness, local library partnership, open-mic night
  - Planning for maintenance and upkeep of the van, upgrade the mobile unit to include bathroom facilities – important especially if integrating STI testing, PrEP care, and reaching more rural spaces.
• COAST-AL Study
  • A type 2 hybrid effectiveness-implementation trial to evaluate a population health combination intervention to meet HIV testing, linkage, and viral suppression goals in coastal Alabama (COAST-AL). R01-AI69671, MPI Rana, Matthews
  • One of three interventions is data informed testing outreach to expand testing reach

Subsequent activities

Round table on mobile-based testing strategies
# Acknowledgements

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  - Former Director Education & Training Officer
- Ashley Tarrant
  - Former Chief Operations Officer

## Current Community Partners
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  - Chief Executive Officer
- Katherine Waldon
  - Chief Community Impact Officer
- Shericka Williams
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