

Network for Implementation Science in HIV (NISH)

**3rd National Ending the HIV Epidemic
Partnerships for Research Meeting**

April 15-16, 2024 | Los Angeles, CA

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Johns Hopkins CFAR**



Disclosures

- None

Acknowledgments

- NIH EHE Supplement Funding for Coordinating Center and IS Hubs
- Community collaborators and participants
- Coordinating Center and IS Hubs' Investigators and Administrative Staff



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Jill Blumenthal
Joseph "Greg" Rosen

Joseph Kenny
Joyce Jones
LaRon Nelson
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Uyen Kao
Victor Wang
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Outline

- **Introduction to NISH**
 - Overview of structure & ongoing studies
 - **Potential for NISH multi-site research to support EHE goals & advance implementation science**
 - Generalizability vs. Context
 - Power in numbers
 - Developing & testing implementation strategies to advance effectiveness & equity
 - **Conclusions**
-

Pilot of a National Network for Implementation Science in HIV



Engage local partners at each IS Hub to identify common HIV implementation priorities and define the scope of the study



Collectively develop a shared protocol, including recruitment materials and data collection tools



Shared protocol oversight with sub-team Cores (e.g site engagement, quantitative methods, qualitative methods)

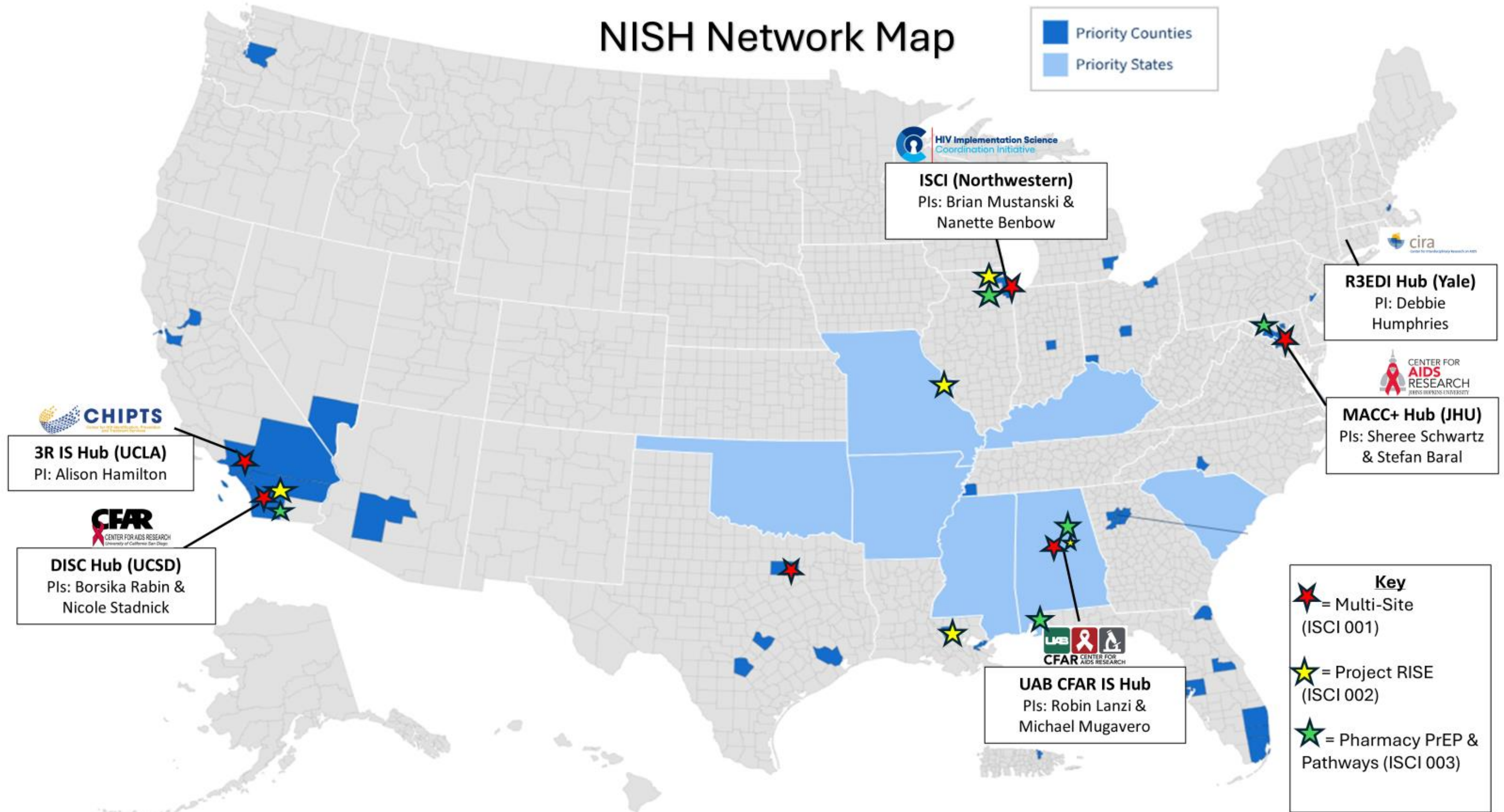


Analyze findings of implementation determinants, strategies, outcomes, and process indicators, such as research milestones and evidence of collaborative decision-making as proof of concept. Feedback to local stakeholders / health departments

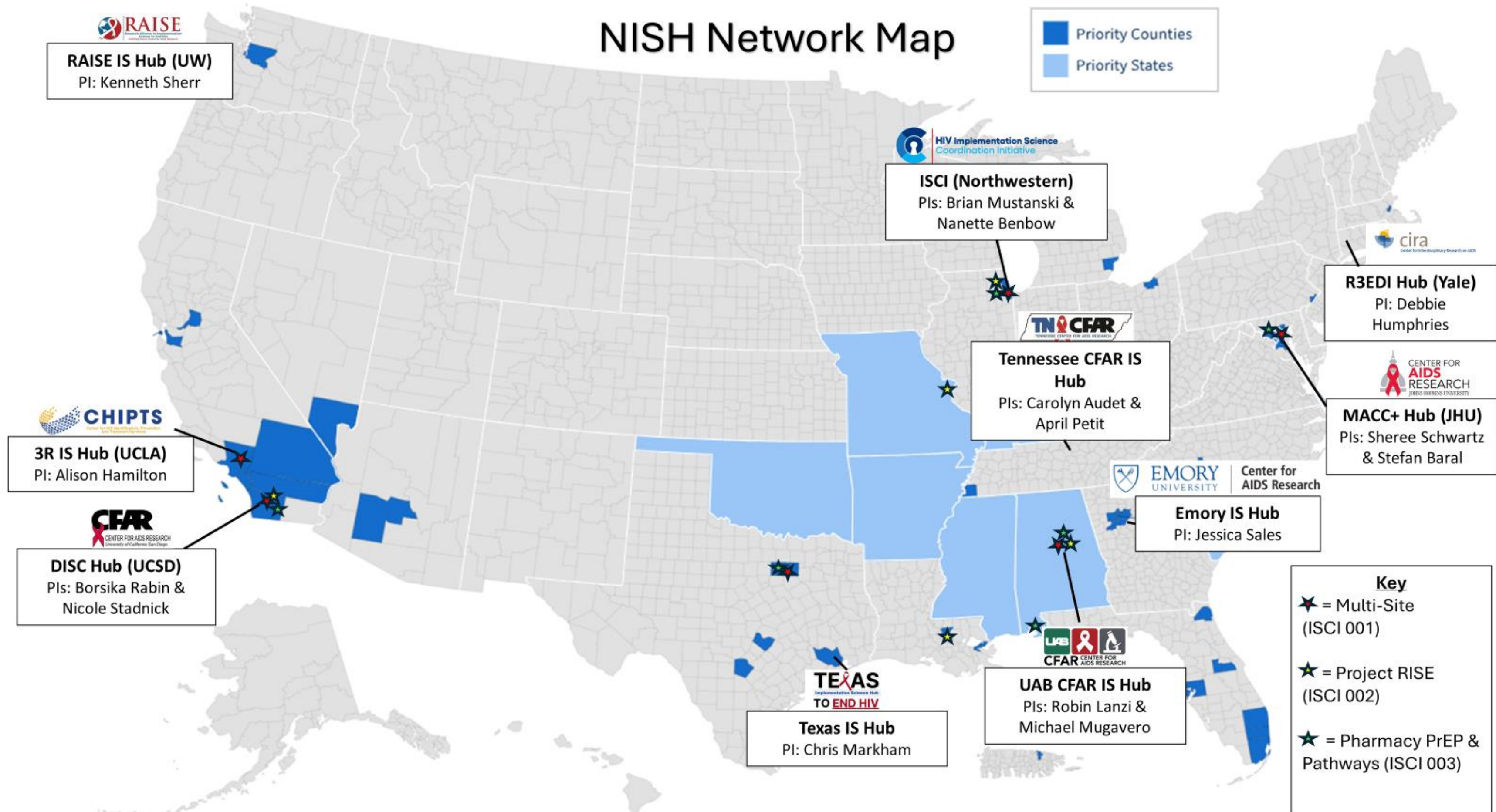


Develop Manual of Operation to facilitate replication of future multisite HIV IR

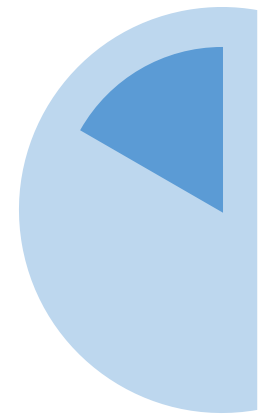
NISH Network Map



NISH Network Map



Ongoing Multisite Projects



001

Identifying Optimal Rapid START Implementation Strategies to End the HIV Epidemic in the U.S: A Preparatory Study

PI: Sheree Schwartz (JHU)

Collaborator (Site) PIs: Joyce Jones (Hopkins); Aadia Rana (UAB); Jill Blumenthal (UCSD), Russell Brewer (Third Coast CFAR, U of C), Sung-Jae Lee (UCLA), LaRon Nelson (Yale)



002

Project RISE: Relevant Implementation Strategies to Enhance (RISE)

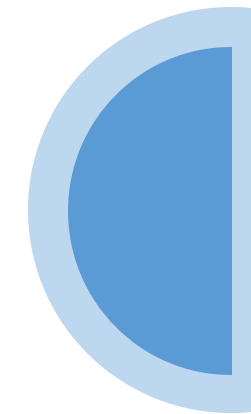
PI: Brewer (TC-CFAR)

Collaborator PIs: Laramie Smith (UCSD), Sarah Chrestman (Louisiana Public Health Institute)

RISE (AL-MO)

PI: Donna Spiegelman, Debbie Humphries (Yale)

Collaborator PIs: Marotta (Wash U), Lanzi (UAB)



003

Identifying Capacity and Strategies for Community Pharmacy PrEP Implementation

PI: Christopher Kemp, Sheree Schwartz (JHU)

Collaborator PIs: Gabriel Wagner (UCSD)

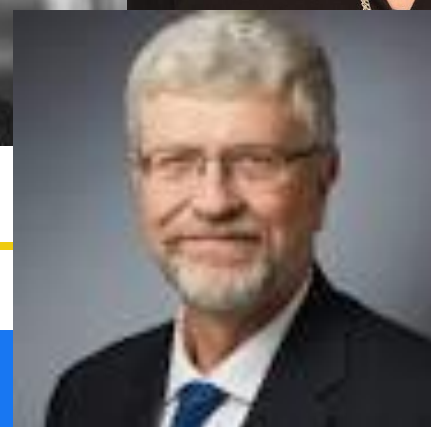
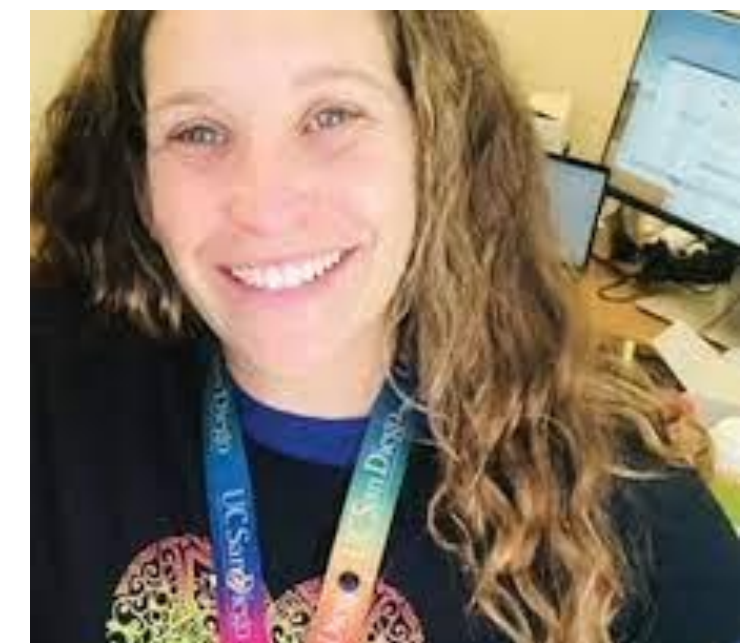
Pathways to PrEP: Informing Rapid PrEP Implementation Strategies Tailored to the Context of Medicaid Expansion

PIs: Latesha Elope (UAB)

Collaborator PIs: Russell Brewer (TC-CFAR), LaRon Nelson (Yale)

Research and Community Network Building

Identifying Optimal Rapid START Implementation Strategies (001)



- Protocol Chair – **Sheree Schwartz**
- EHE Jurisdictions/Sites & Site PIs:
 - Alabama – **Aadia Rana** (UAB)
 - Baltimore – **Joyce Jones** (JHU)
 - Chicago – **Russell Brewer** (UC)
 - Dallas/Fort Worth – **LaRon Nelson** (Yale)
 - Los Angeles – **Sung-Jae Lee** (UCLA)
 - San Diego – **Jill Blumenthal** (UCSD)
- Sub teams
 - Site engagement Team (**Nanette Benbow**)
 - Qual Team (**Laura Beres**)
 - Quant Team (**Sung-Jae Lee/Donna Spiegelman**
Debbie Humphries)

Project RISE Team (002)

Cook County, IL

Russell Brewer, DrPH
University of Chicago



Chicago Community Collaboration
Board

East Baton Rouge Parish, LA

Louisiana Public Health
Institute (LPHI)

Capitol Area Reentry
Program (CARP)

San Diego County

UCSD

San Diego EHE Scientific
Working Group



Jeanette Webb



Mayra Malagon



Alicia Dawdani



Darjai Payne



Sarah Chrestman, MP



Gjvar Payne



Laramie Smith, PhD



Rebecca Fowler, MPH

Missouri

Donna Spiegelman,
ScD Yale University



Debbie Humphries,
PhD Yale University

Washington University in Saint Louis

Novus Health



Philip Marotta, PhD



Amanda Williams



Dale Wrigley

Alabama

UAB

Birmingham AIDS Outreach (BAO)



Robin Lanzi, PhD



Emma Kay, PhD



Karen Musgrove

Identifying Capacity and Strategies for Community PrEP & Pharmacy PrEP Implementation (003)



Baltimore, MD (Pharmacies)

Team Members

Christopher Kemp
Sheree Schwartz
Anna Katomski
Lipin Lukose

Collaborating Sites

Amanda Rosecrans – BCHD



Alabama (FQHCs)

Team Members

Latesha Elopre
Larry Herald
Michael Mugavero
Samantha Hill
Mariel Parman

Collaborating Sites

Christ Center Health - FQHC
AIDS Alabama South - CBO



Dallas, TX (FQHCs)

Team Members

LaRon Nelson
Drew Cameron

Collaborating Sites

Abounding Prosperity - CBO

Cook County, IL (FQHCs)

Team Members

Russell Brewer

Collaborating Sites

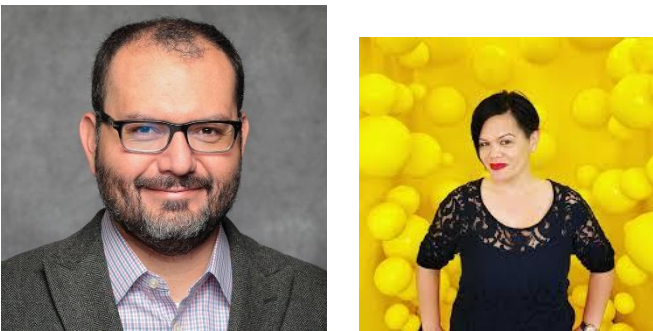
Howard Brown Health Center - FQHC
AIDS Foundation of Chicago



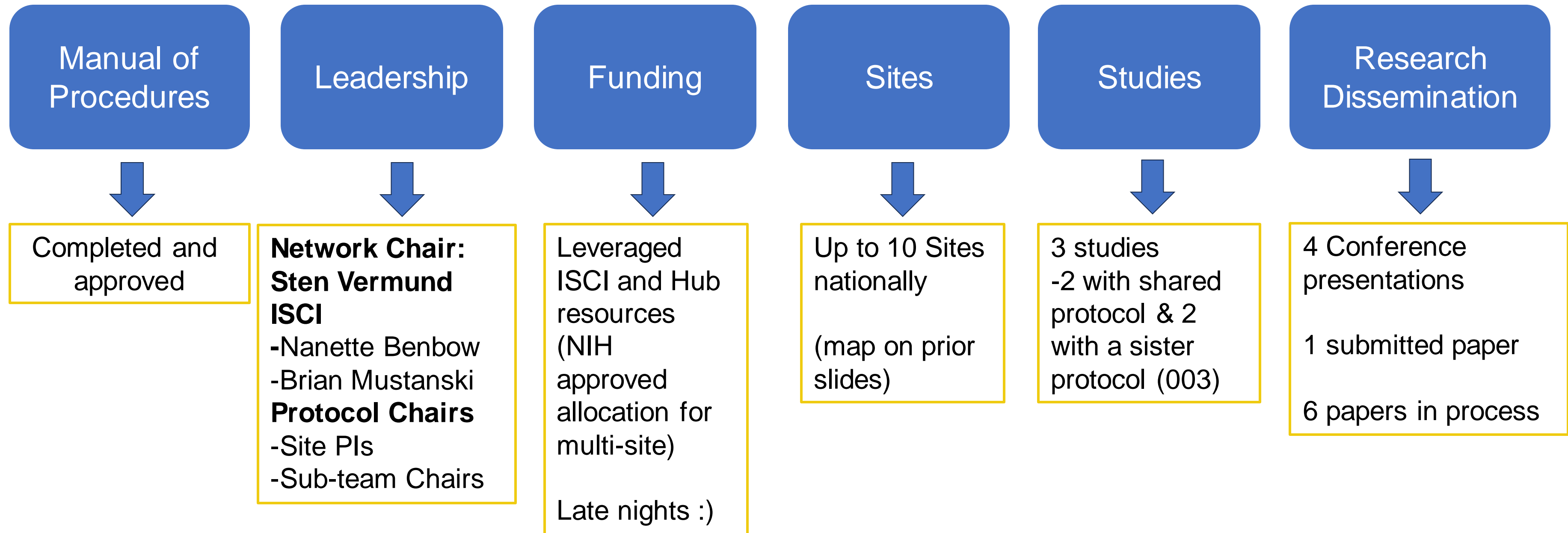
San Diego, CA (Pharmacies)

Team Members

Nicole Carter
Gabriel Wagner
Shanaya Sidhu
Cheryl Dullano



What NISH is now



Structure

Network Chair

ISCI Exec
Committee

Protocol
Chairs

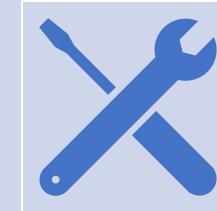
Site PIs and Sub-
team Chairs

Single IRB, Data MOU

Site
Engagement
Team:
Meets
bi-weekly

Qualitative
Research
Team:
Meets
bi-weekly

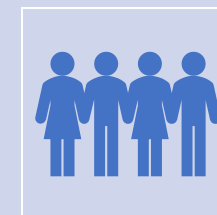
Quantitative
Research
Team:
Meets
bi-weekly



Infrastructure to share expertise
& technical skills



Infrastructure to share data



Created clinic and community
relationships

Potential for multi-site research to support EHE goals & advance implementation science

What can we achieve with NISH?

Context versus Generalizability



- **Context plays a critical role in implementation**, but measuring the context and understanding **how** it influences implementation and effectiveness outcomes is an ongoing discussion in the field and critical to get buy-in and move evidence-based interventions (EBIs) forward



- Generalizable knowledge can **improve speed of evidence translation across contexts** & thus support reaching EHE goals by 2030



- **NISH can increase our understanding of both context & generalizability** → improved EBI transportability & efficiency

Project RISE: Implementation Strategies Shared across Sites

Funding-focused strategies: increased organization funding and fair compensation for CHWs
CHW-focused strategies: intentional CHW hiring from the community and increased investment in CHW training

San Diego

“Having a fair compensation structure is really important.”

“Easy but funding.”

“We want to hire people who are sensitive to people's feelings...sensitive to the needs of other people, especially the community we serve.”

Chicago

“If we're going to hire people from community, we have to make sure that they're paid a fair wage... And I know that we're limited with public health funds, but having more policy conversations about increasing public health funding”

“I think for the type sort of-- in order to involve the people that are most affected by HIV, you really have to hire from black and brown communities..”

Louisiana

“I do feel like we do need workers that can relate to the populations that we serve.

“ I think the training would be, well, of course, helping them what status-neutral is, helping them to understand the different approaches when it comes to status-neutral...”

Missouri

“I really think that some of our community organizations are ones that are honestly typically doing so much work. But they're so underfunded.

“build out those roles and making sure that they're [CHWs] paid, and they're supported.”

“training workshops, time, role playing, doing some exercises. I think those things are needed...”

Alabama

“I think cross-training in several different types of, um, like, - different programs would be helpful to kind of understand what everybody else does. I think that's helpful for anyone”

Project RISE: Implementation Strategies Shared across Sites

‘Fair funding for Community Health Workers is essential’ [to getting community-based status neutral approaches to work]

This theme was the same and strong ACROSS all 5 settings

who are sensitive to people's feelings...sensitive to the needs of other people, especially the community we serve."	having more policy conversations about increasing public health funding" "I think for the type sort of-- in order to involve the people that are most affected by HIV, you really have to hire from black and brown communities.."	helping them what status-neutral is, helping them to understand the different approaches when it comes to status-neutral..."	"build out those roles and making sure that they're [CHWs] paid, and they're supported." "training workshops, time, role playing, doing some exercises. I think those things are needed..."	anyone"
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Project RISE: Implementation Strategies that vary Across Sites

<p>San Diego</p> <p>Limit caseloads</p> <p>“led by peer navigators with max caseload of 35.”</p>	<p>Missouri</p> <p>Using emerging technologies</p> <p>"And a plus for us is that we offer Telehealth as well. So that's a big plus for us and so I think that is something also that we offer that others don't.</p>	<p>Chicago</p> <p>Need for data informed work and systems</p> <p>“I think that there should be better tracking mechanism in place not only for [Organization] but all these CBOs where, one, you collect accurate, quality data so that the data can be assessed to prove that there is a need for the services</p>	<p>Alabama</p> <p>Prioritizing the client’s perspective</p> <p>“It’s kinda takin’ that – that servant’s heart, um, and – and – and being like ‘What else do you need</p> <p>“Our clients really deserve to have people around them that are knowledgeable about HIV and knowledgeable about community risk.”</p>
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Landscape of Rapid Implementation by Jurisdiction

Jurisdiction	Definition of Rapid
Alabama	Rapid ART is defined as medication initiation within 7 days diagnosis . No standard rapid PrEP definition.
Chicago	No standard rapid ART definition. No standard rapid PrEP definition.
Dallas/Fort Worth	Rapid ART is defined as medication initiation within 72 hours by 2023 and same day by 2025 . Rapid PrEP is defined as same day.
LA	Rapid ART is defined as medication initiation in 0-7 days . Rapid/Same-day PrEP is unknown.
San Diego	Rapid ART is defined as medication initiation within 7 days , with the goal of same day. Rapid PrEP is defined as initiation within 0-7 days with the goal of same day delivery.
Tarrant County	No standard definition but aim is ART initiation within +/- 7 days. No standard definition of rapid PrEP.

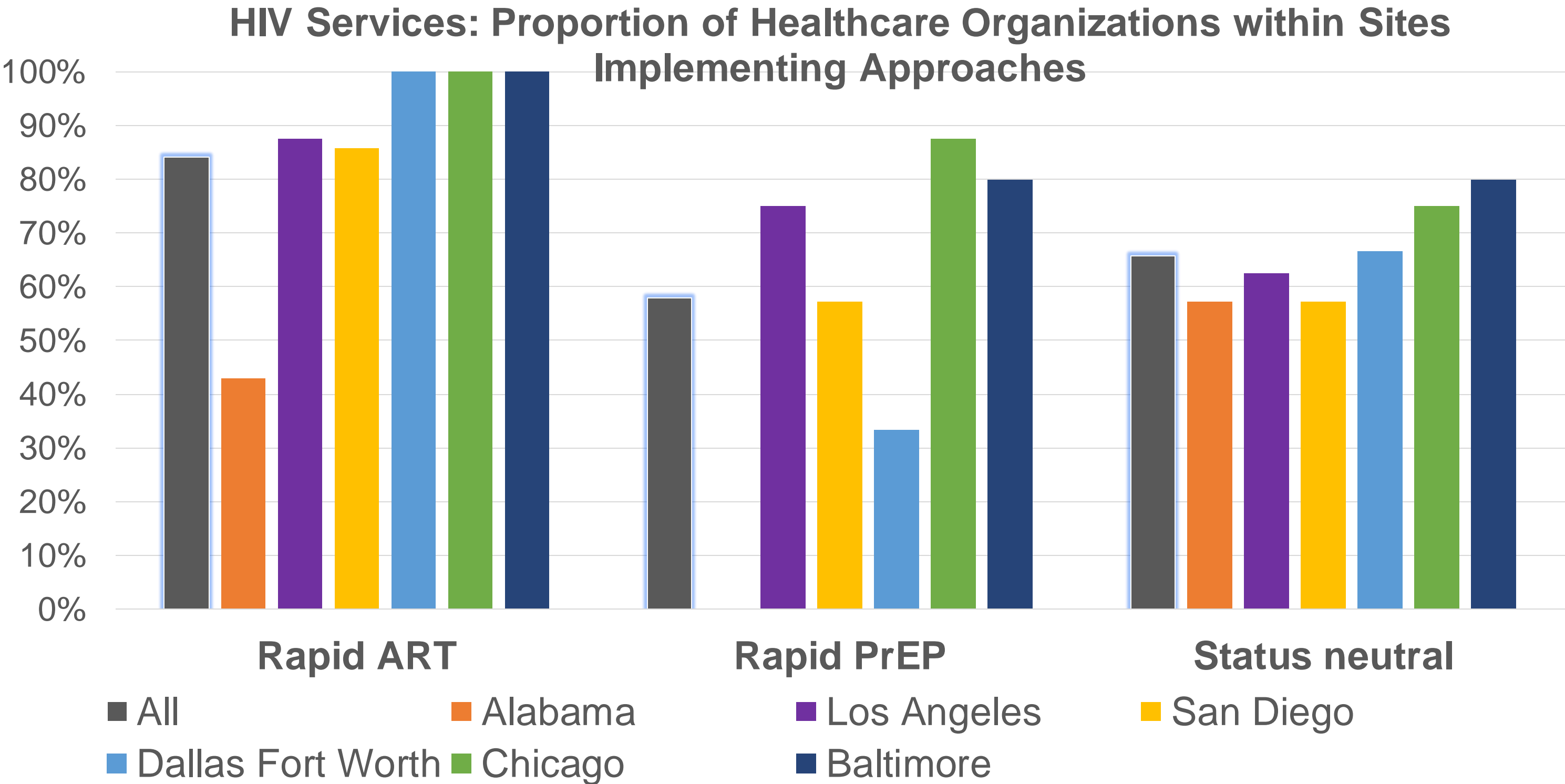
NISH 001: Zamantakis et al.

Landscape of Rapid Implementation by Jurisdiction

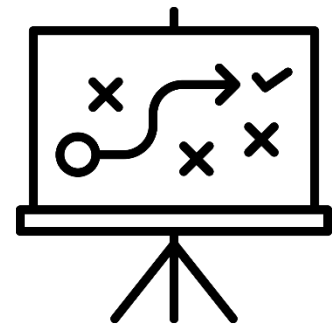
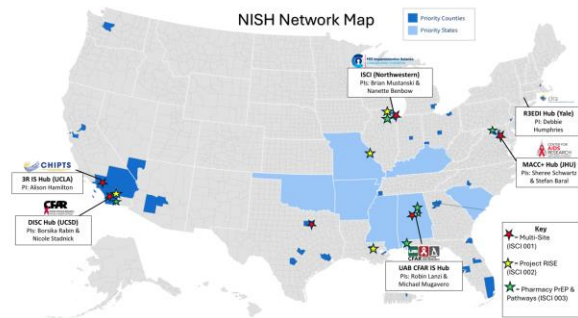
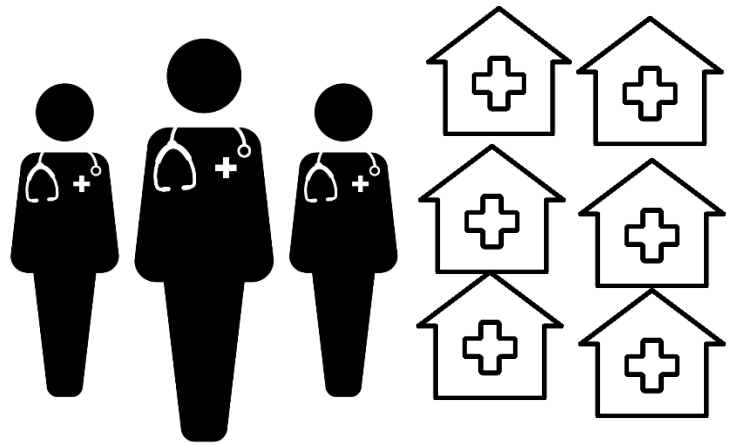
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Dallas/Fort Worth	Rapid ART is defined as medication initiation within 72 hours by 2023 and same day by 2025. Rapid PrEP is defined as same day .
LA	Rapid ART is defined as medication initiation in 0-7 days. Rapid PrEP is not part of plan/defined .
San Diego	Rapid ART is defined as medication initiation within 7 days, with the goal of same day. Rapid PrEP is defined as initiation within 0-7 days with the goal of same day delivery.
Tarrant County	No standard definition but aim is ART initiation within +/- 7 days. No standard definition of rapid PrEP.

NISH 001: Zamantakis et al.

Context versus Generalizability



Power in numbers



- If **strategies** will be **targeting providers**, representation of individuals from **one or a few clinic(s)/CBO(s)** is often **insufficient**
 - As such, in implementation research designs which test strategies targeting implementors, **we often need multiple counties** (clusters) to study them
- **Representation of multiple jurisdictions can increase** representation across groups which is important for **equity**
- Harnessing the **NISH** multi-site work and routine service settings **can expand possibilities** for reaching implementors and can lead to opportunities **for testing strategies** rigorously in future cluster randomized trials

Power in numbers

		Jurisdiction					
		A	B	C	D	E	F
Heterogeneity in implementation of intervention	Rapid PrEP: Happening within well-resourced clinics / Health Dept clinics						
	Rapid PrEP: Not happening						
Generalizable barrier across contexts	Key Barrier: Financing and insurance delays						
Context-specific facilitator	Key Facilitator: State / County-level mandate, policy, funding						
Heterogeneity in strategies to similar barrier	Strategy to overcome medical mistrust: Patient Navigators						
	Strategy to overcome medical mistrust: Peer Specialists						
	Strategy to overcome medical mistrust: Champions						

Sufficient sample of different contexts supports generalizability and transportability of findings

Critical context-specific consideration:

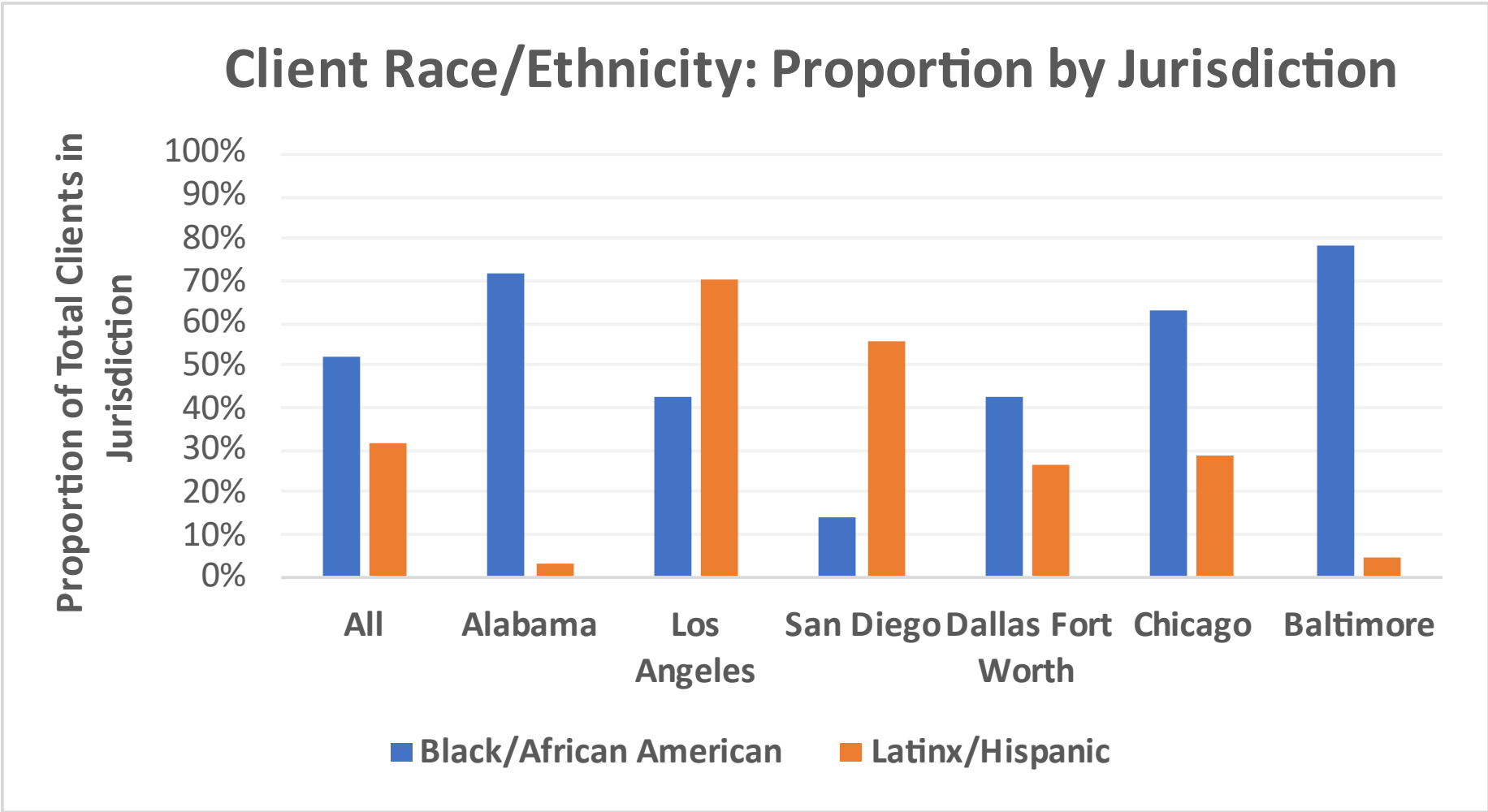
- States with medicaid expansion had more options for rapid PrEP provision than those without

Generalizable across contexts:

"So, you've got kind of the administrative piece, which is, how do you make this happen in a clinic workflow?" - KI, Jurisdiction F

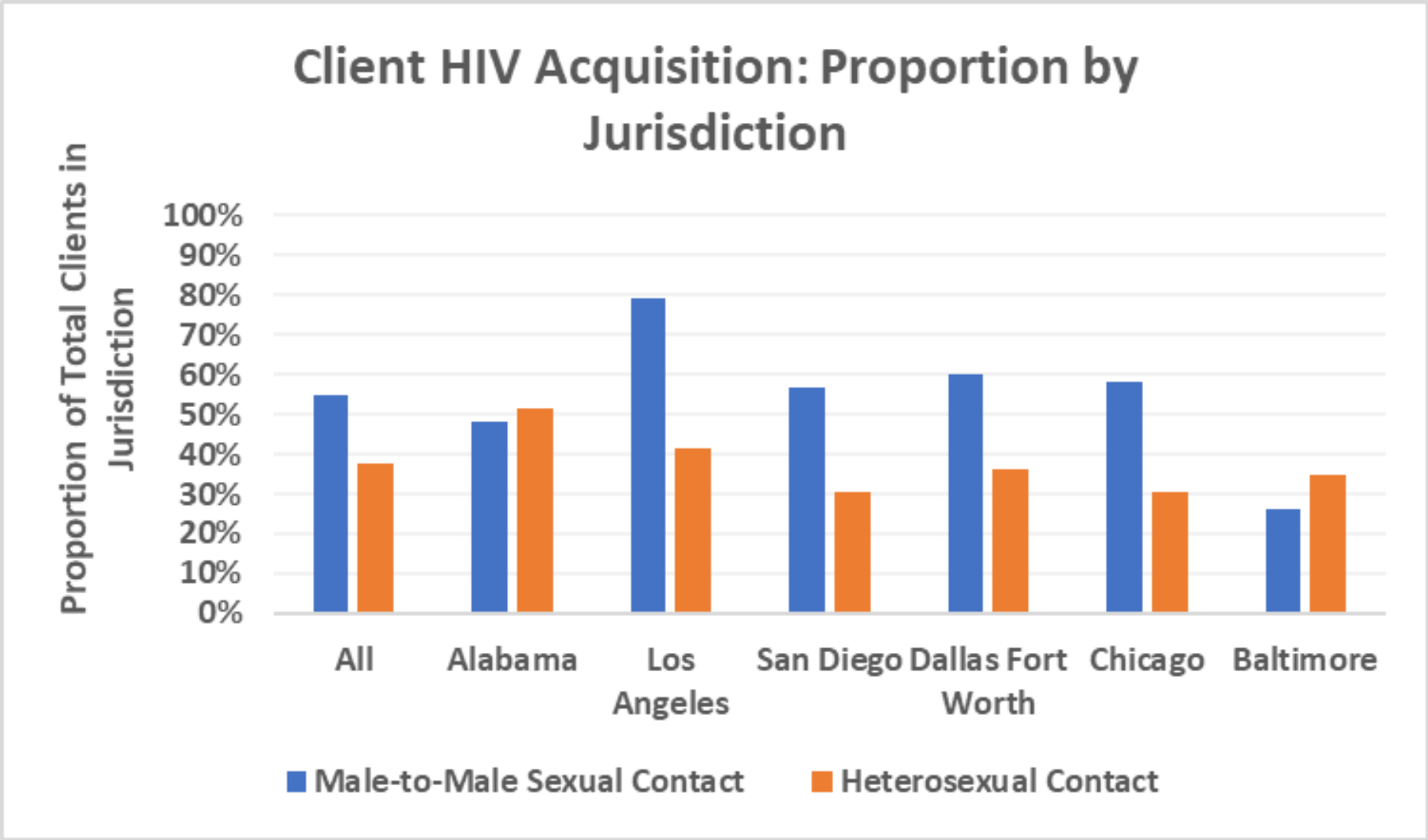
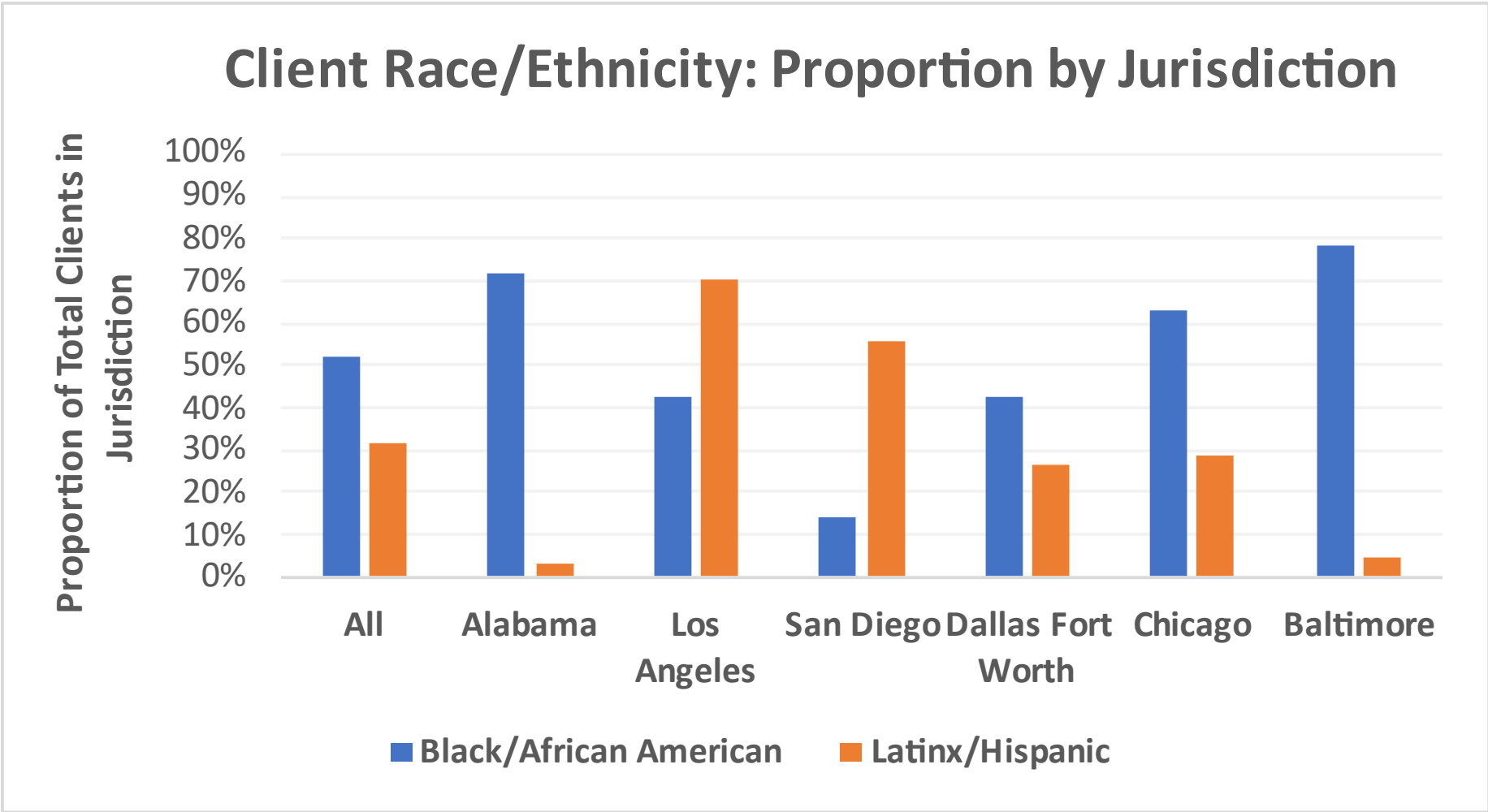
Key Informant Interviews, NISH 001

Power in numbers



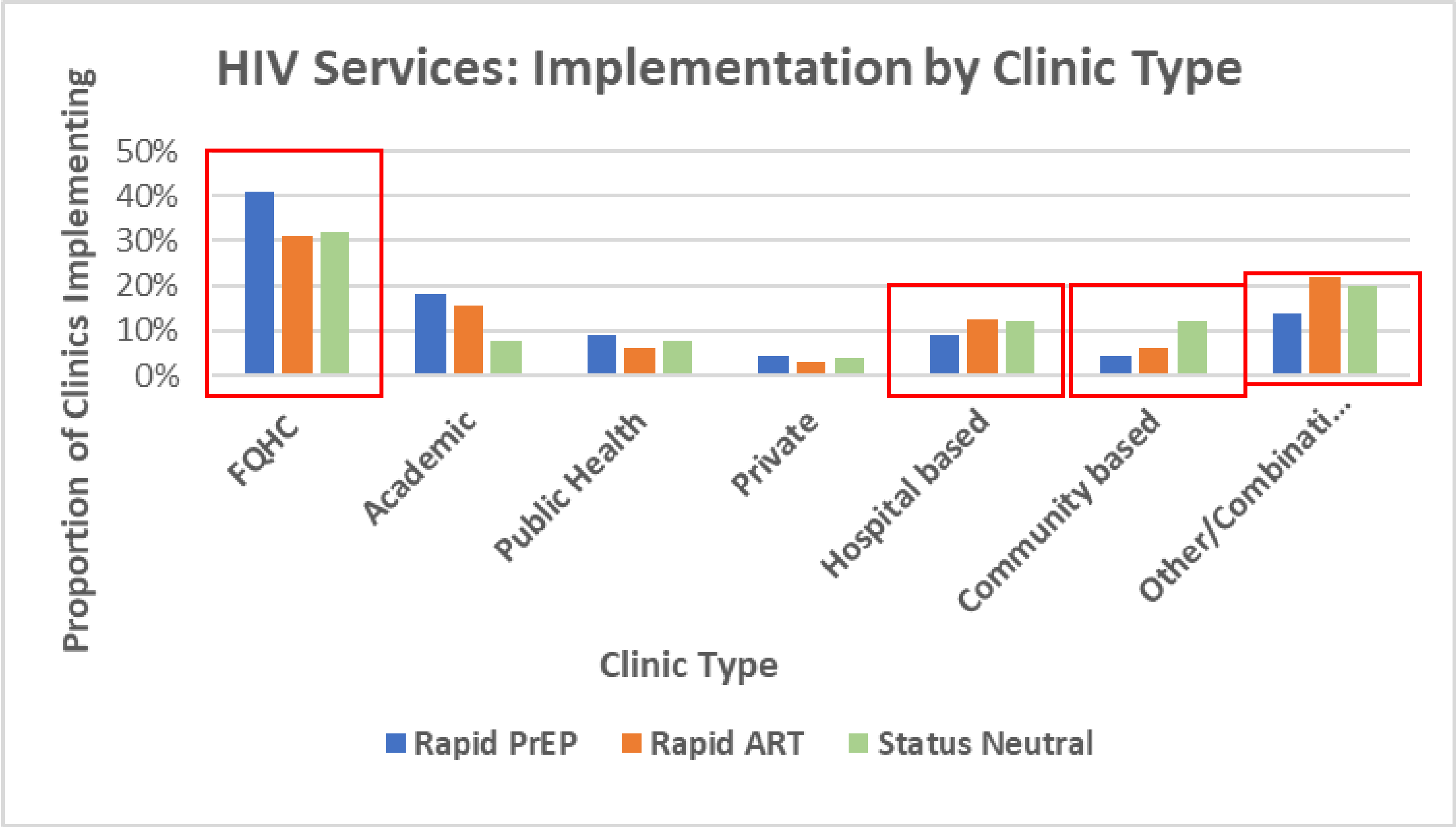
NISH 001: Characteristics of patient population among represented healthcare organizations (n=38) AL=7; LA=8; SD==7; Dallas/Fort Worth=3; Chicago=5; Baltimore=5

Power in numbers



NISH 001: Characteristics of patient population among represented healthcare organizations (n=38) AL=7; LA=8; SD==7; Dallas/Fort Worth=3; Chicago=5; Baltimore=5

Power in numbers



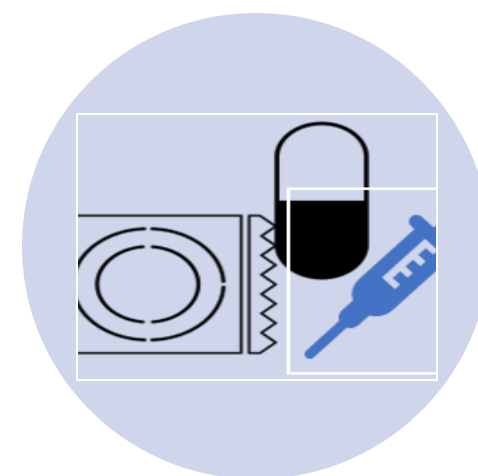
Power in numbers



**38 CLINICAL
ORGANIZATIONS**



52 CLINICS



**28,679 HIV
PREVENTION CLIENTS**



48,945 PLHV

NISH 001: Clinic survey



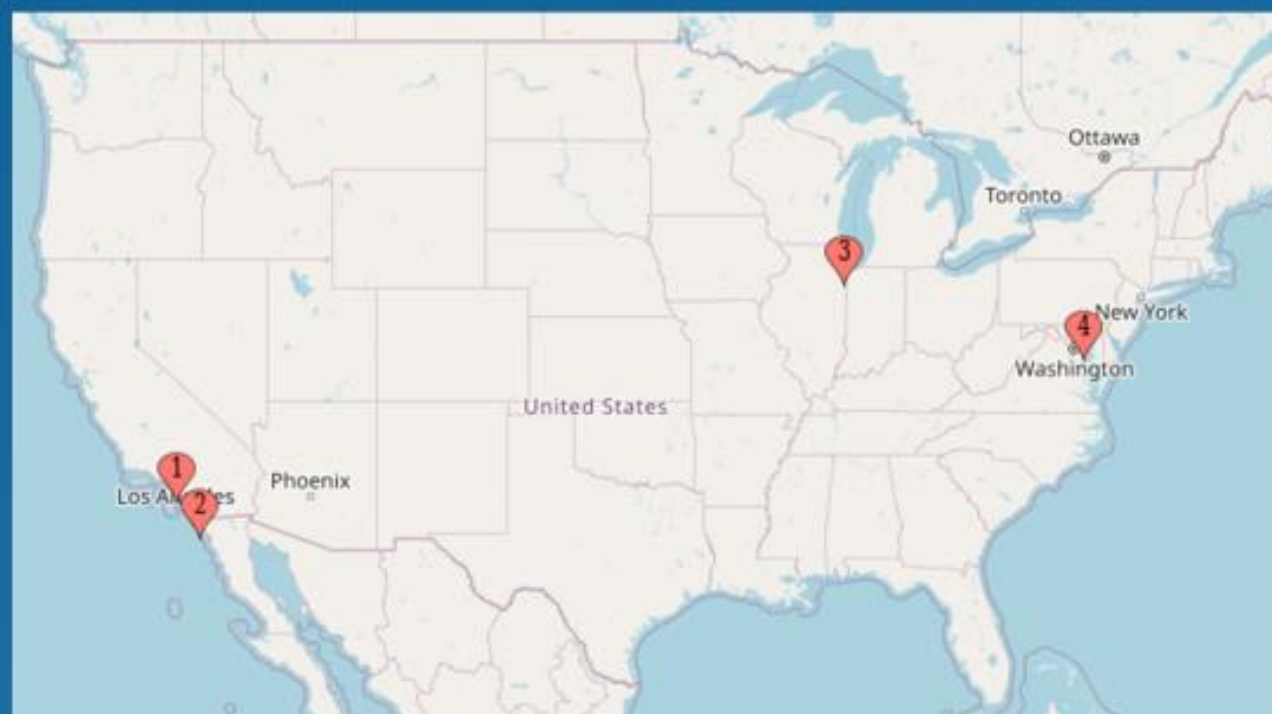
Preliminary Results

Utilized 64 zip codes

- Twenty-six from Los Angeles, CA
- Sixteen from Cook County, IL
- Ten from Baltimore County, MD
- Nine from San Diego, CA.

The mean percentage of PLWH who were virally suppressed is 60.3%

- Neighborhood variability ranging from 33% to 79%.



Power in numbers

UCLA

Department of Epidemiology

Preliminary Results

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- Twenty-six from Los Angeles, CA
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The mean percentage of PLWH who were virally suppressed is 60.3%

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30

Rezai, et al.



Auxiliary Neighborhood-level Data



Project RISE (NISH 002)

- **Identify and prioritize implementation strategies for a status neutral community health worker program in CBOs in 5 EHE jurisdictions** (Baton Rouge Louisiana, Chicago Illinois, San Diego California, St. Louis Missouri, Birmingham Alabama)



Methods:

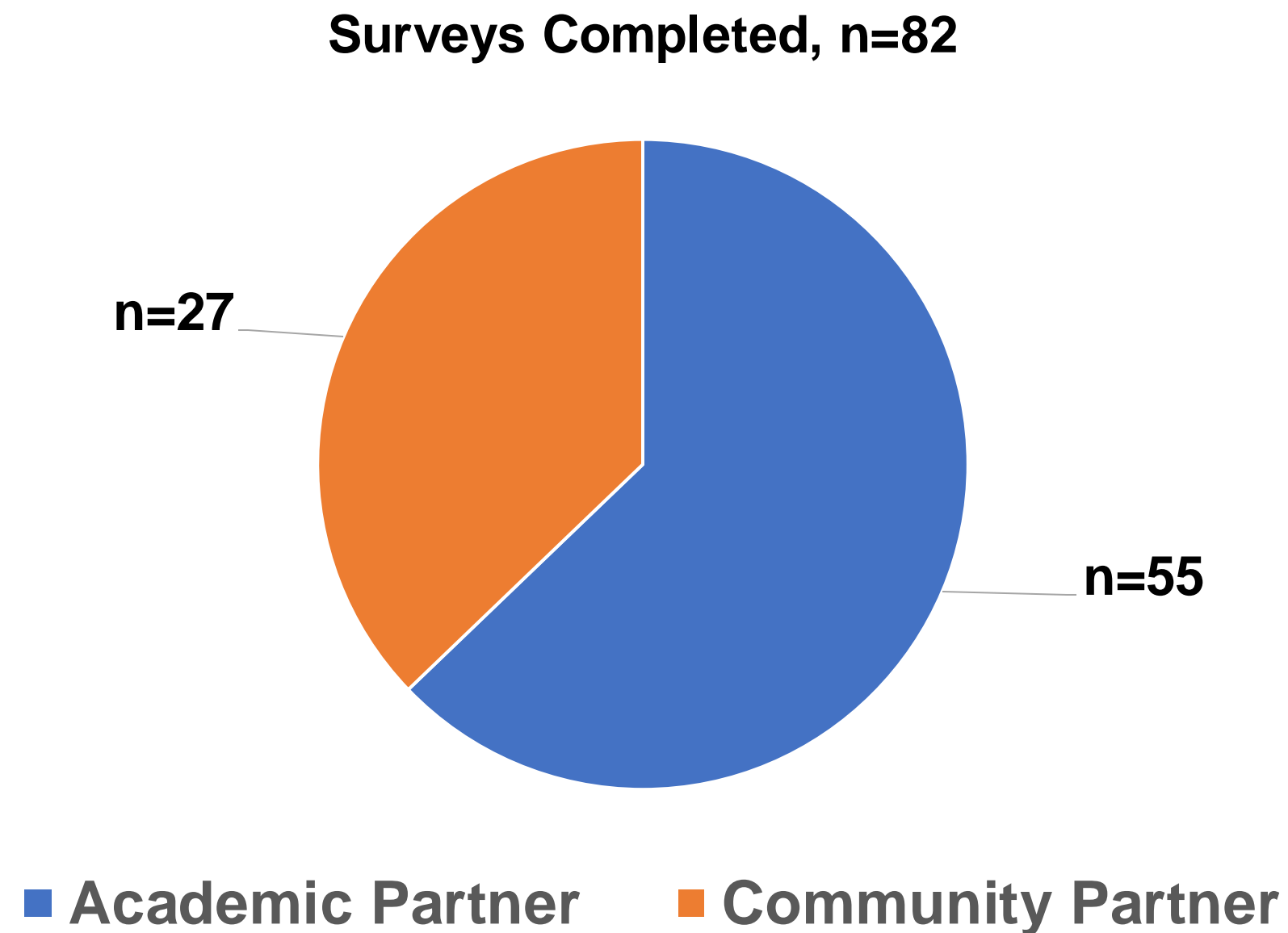
IDs (**n=10 per site, 50 total**) with frontline CBO staff

Focus groups (**1 per site, ~35-50 participants** total) with CBO leadership

Implementation Strategies Prioritization Survey distributed to all interview and focus group participants (**~20 per site; ~100 total**)

Power in numbers

Community Engaged Research Survey of EHE awardees (community & academic partners)



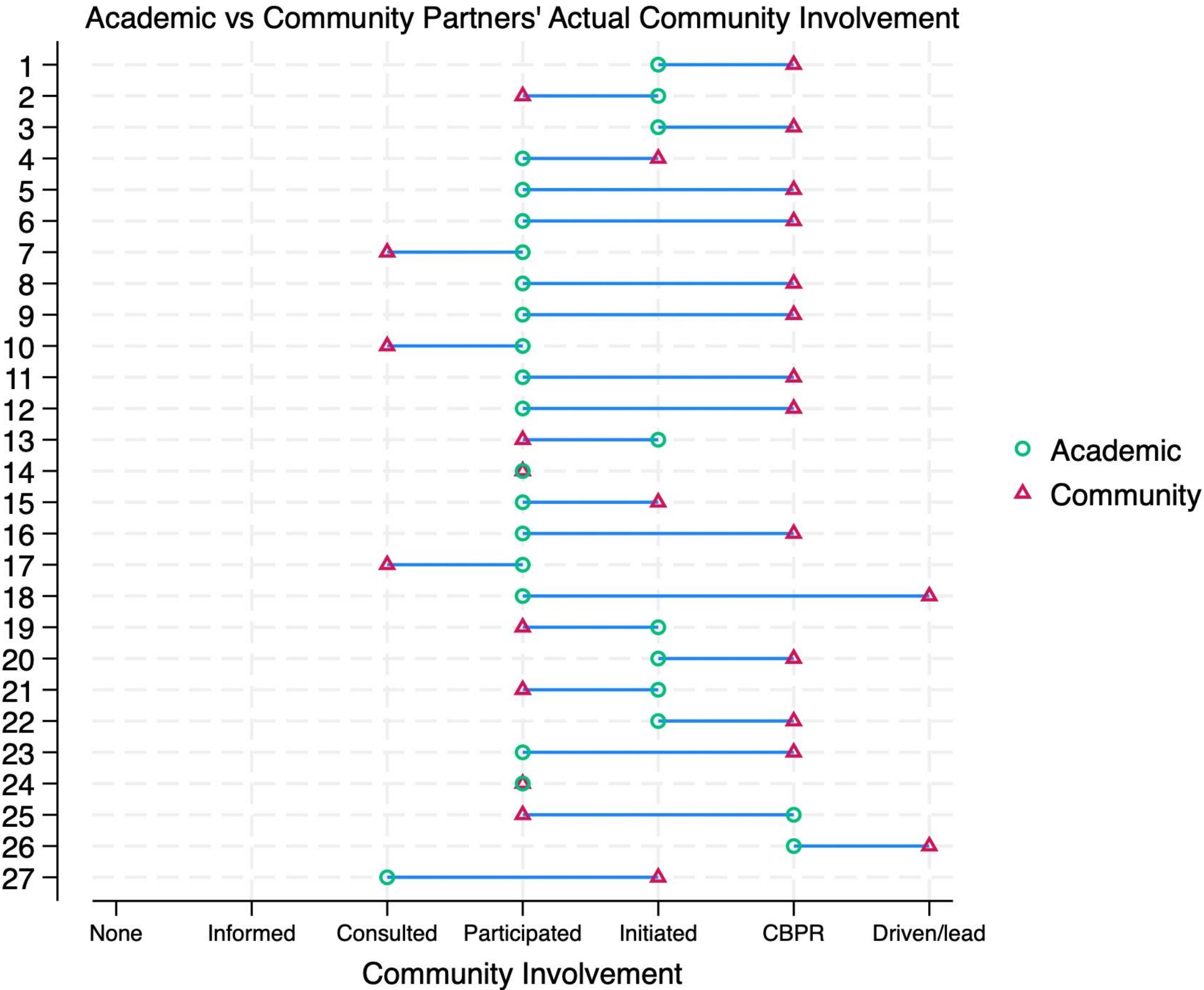
Data from 57 / 102
possible 2021-2022
supplement awards
(56%)

Datar, et al.

Power in numbers

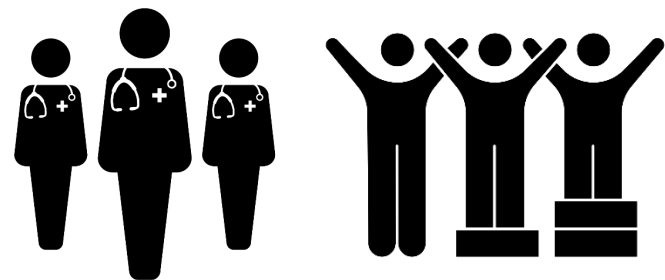
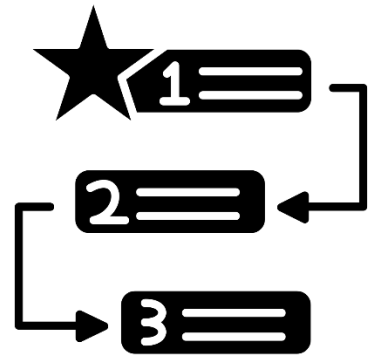
EHE
Supplement
Paired
Community-
Academic
Partner Data:
Perceptions of
Community
Partner
Involvement

Partners Paired ID



Datar, et al.

Developing & testing implementation strategies to advance effectiveness & equity



- By understanding **prioritization across contexts**, we can identify promising implementation strategies that may be **broadly recommended**
- Conversely, **when priorities differ – tailoring services** to the needs of those historically disenfranchised from services is critical
- **Emphasizes providers' / health systems' role in production of equitable health outcomes** – not just patient outcomes and responsibility

Developing & testing implementation strategies for effectiveness & equity



Goal – Understand key determinants to implementation of same-day PrEP in Medicaid expanded and unexpanded states



Aim 1a – Interviewed (N=24) key informants at CBOs and FQHCs in Alabama, Dallas, and Chicago

Interviews explored implementation strategies for same-day PrEP



Aim 2 – Focus Groups with ASO (AL, N = 25) – Rank ordering Process of most effective strategies to support same day PrEP

Developing & testing implementation strategies for effectiveness & equity



Goal – Understand key determinants to implementation of same-day PrEP in Medicaid expanded and unexpanded states

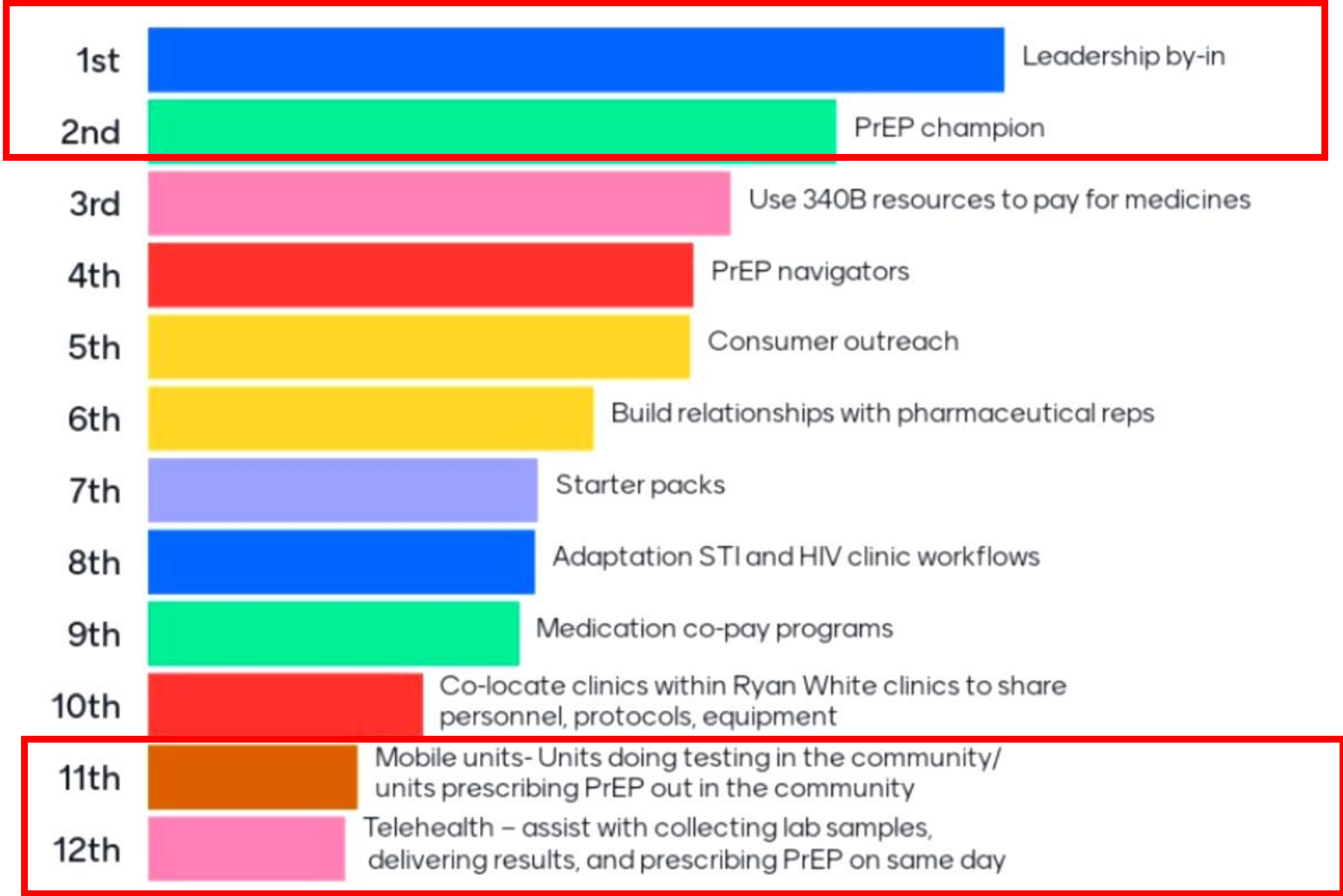


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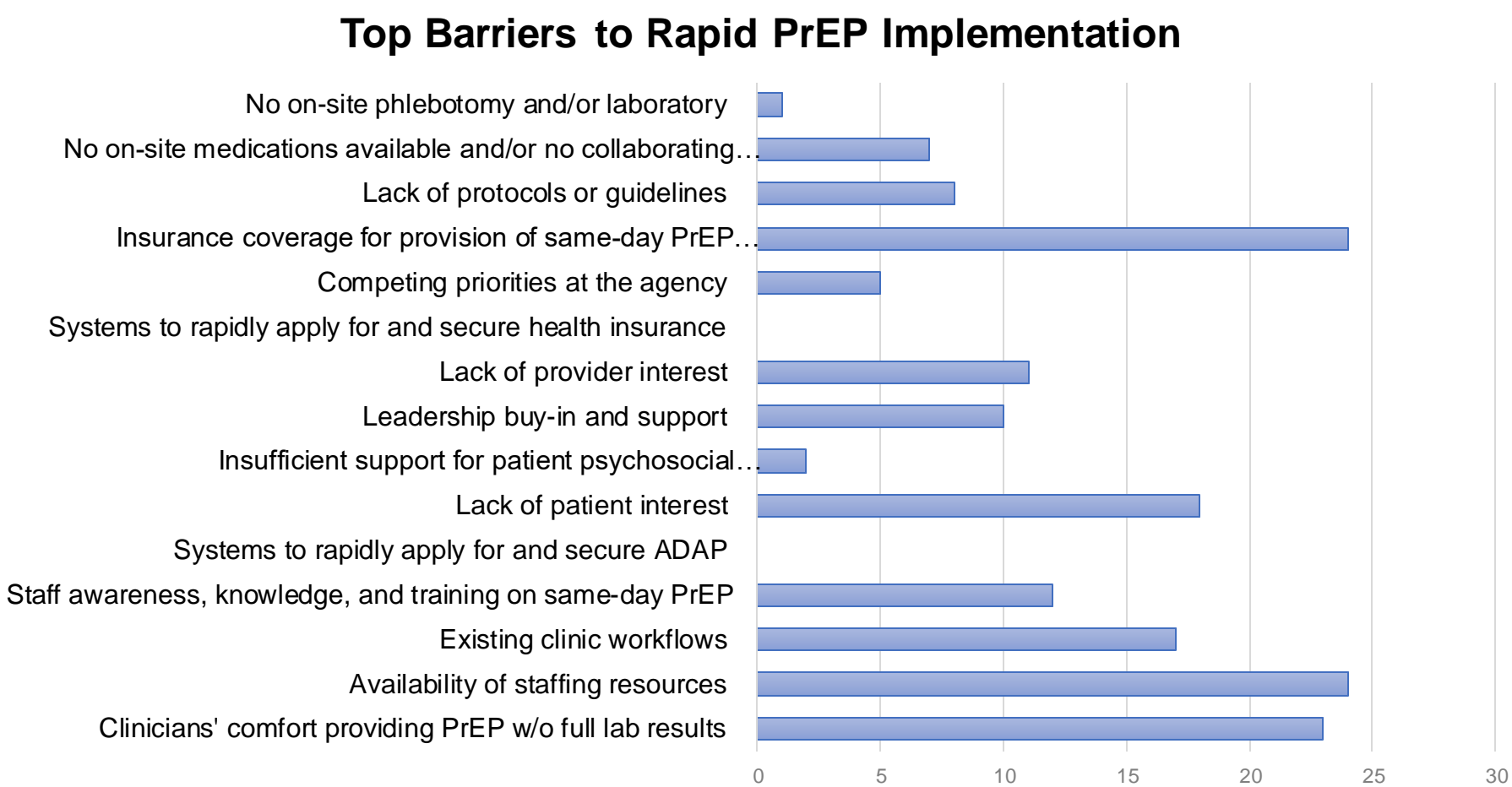
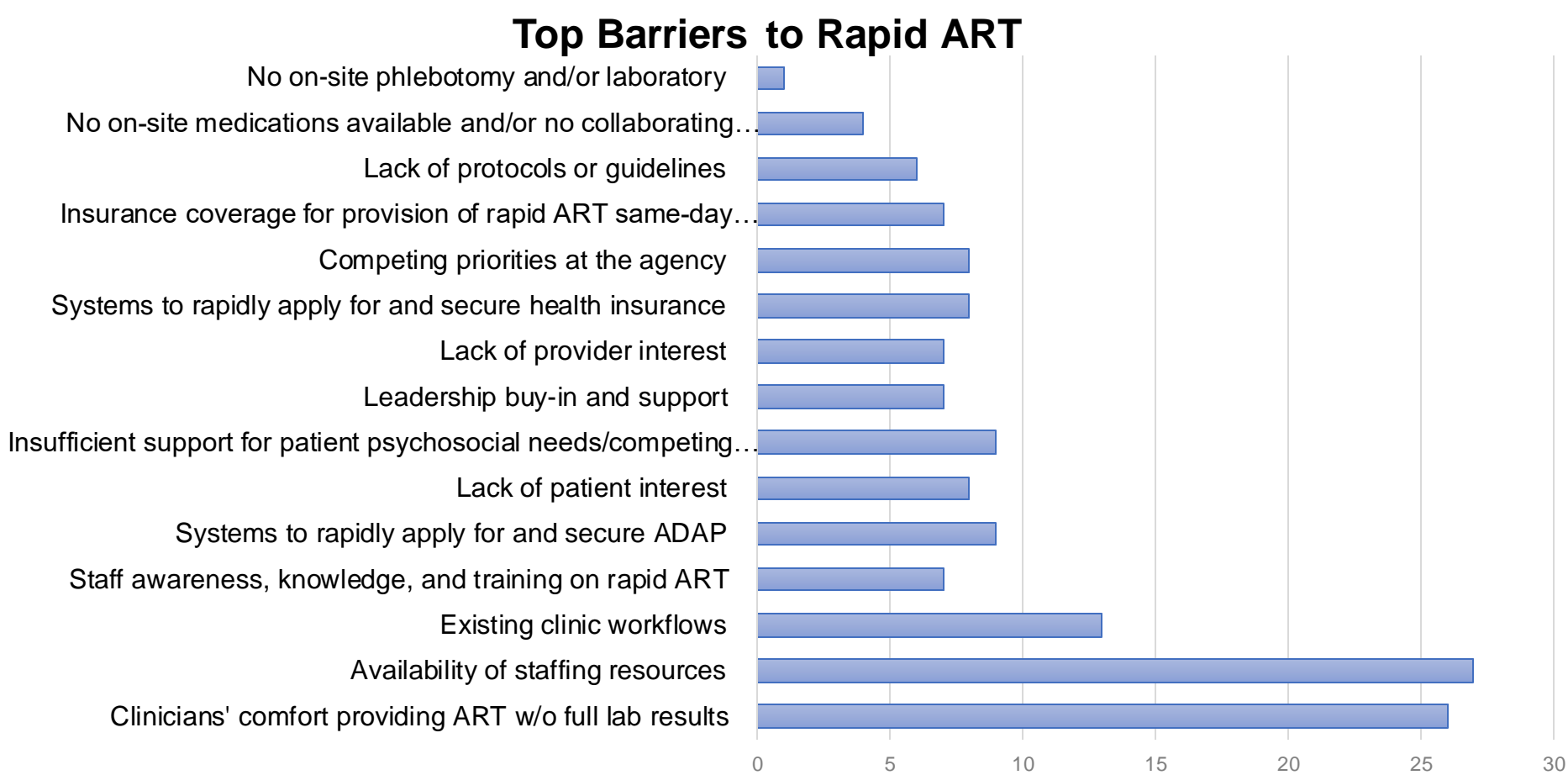
Aim 2 – Focus Groups with ASO (AL, N = 25) – Rank ordering Process of most effective strategies to support same day PrEP



NISH 003 - Elope et al.

Developing & testing implementation strategies for effectiveness & equity

Clinic Survey Results



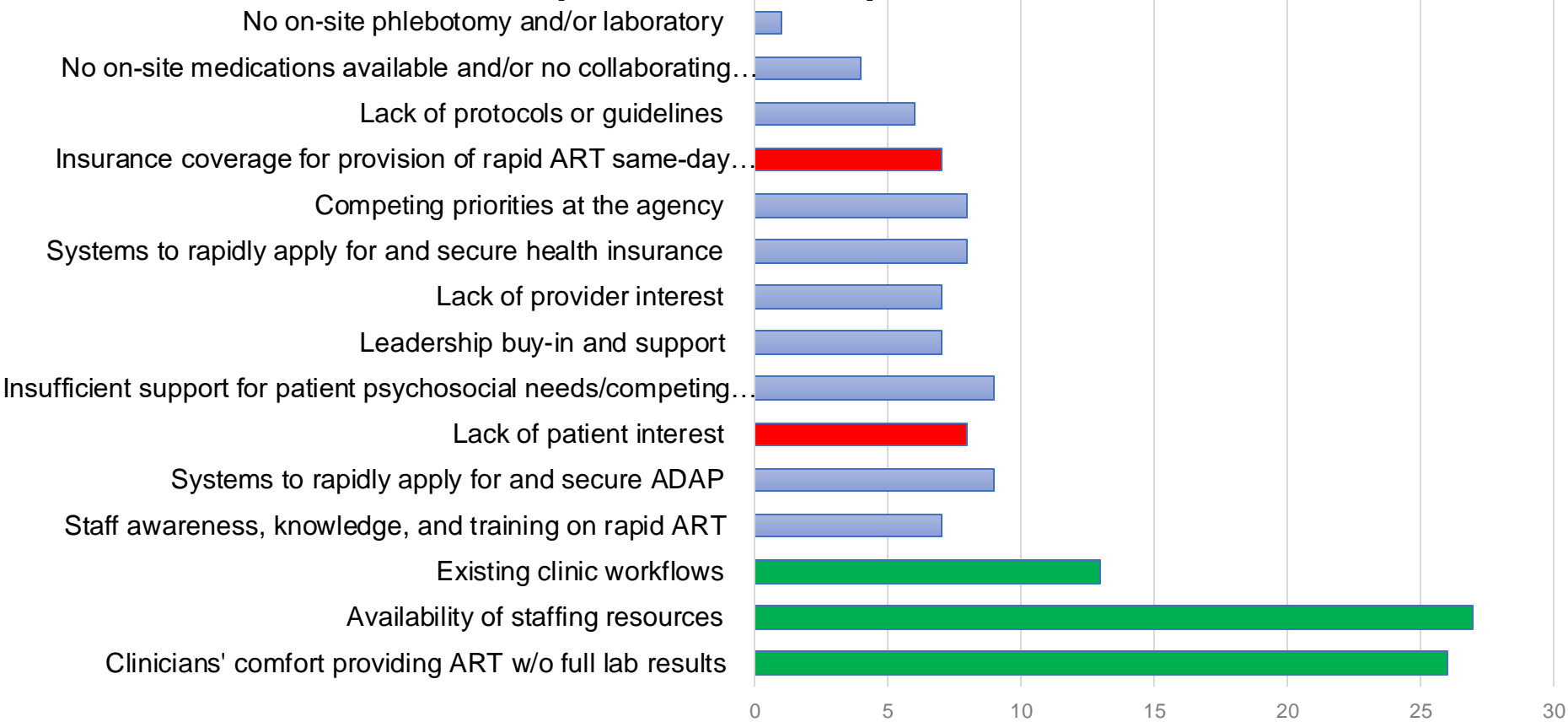
NISH 001

Developing & testing implementation strategies for effectiveness & equity

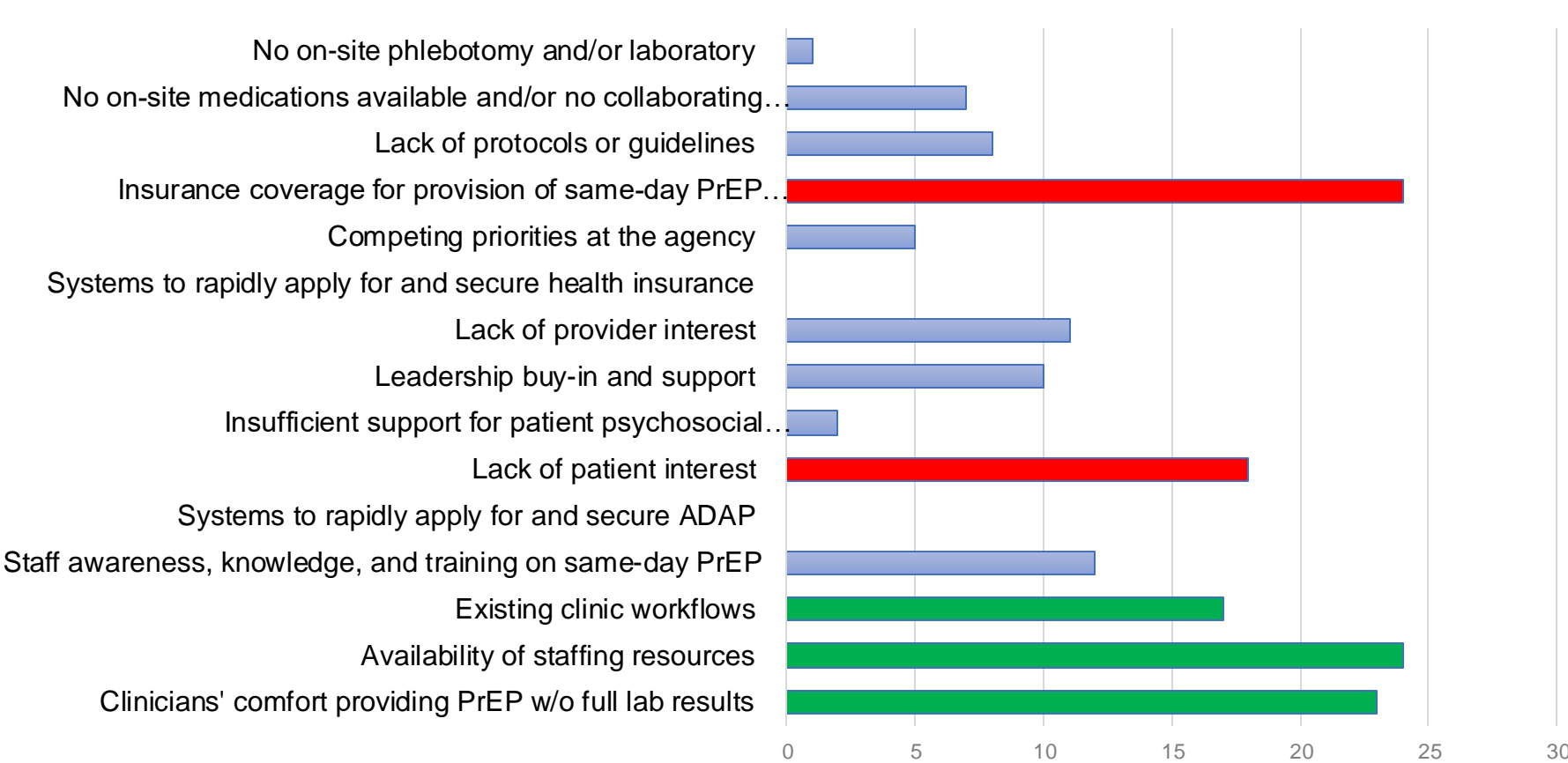
Clinic Survey Results

Status Neutral Implications

Top Barriers to Rapid ART



Top Barriers to Rapid PrEP Implementation



NISH 001

Developing & testing implementation strategies for effectiveness & equity

NISH 001

The data can defy expectations and unpack mechanisms

- Because implementation of PrEP within Ryan White Clinics is less common, we believed advocating for PrEP integration would be needed to advance status neutral implementation
 - But KIs have helped us to understand that this is not always the case
- Other assumptions about the universal ‘good’ of status neutral approaches have been uncovered – chiefly concern from PLWH around threat to limited resources

Rare or inconsistent within-site findings achieved prominence across sites

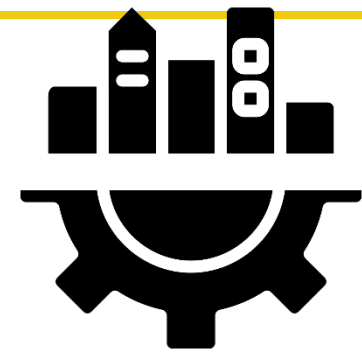
KI examples:

- 3 jurisdictions identified a lack of wrap-around services and holistic approaches for priority populations as barriers.
- 2 jurisdictions found that individual needs impede rapid ART initiation: lack of stable housing, additional medications, healthcare deserts, transportation systems, general access medical care, and no coverage for uninsured individuals
- 1 jurisdiction stated that provider experience with specific populations hindered willingness for rapid ART

Across sites, understanding barriers within sub-populations including system supports and provider approaches may be a key set of strategies

Conclusions

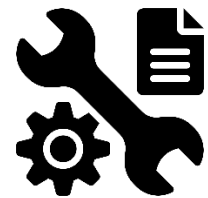
Value of NISH/Recommendations



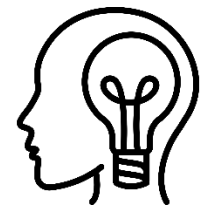
- **Framework and infrastructure** for how we can conduct **implementation research** at a **national scale**
 - *Including approach to IRB for multi-site implementation research studies*



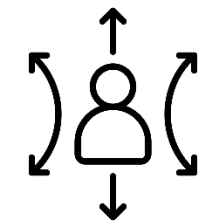
- **Support** CDC, NIH, local Health Departments in **guideline development and research prioritization** – when to generalize, when to tailor



- Shared **tools & data harmonization**



- **Shared expertise**



- Ability to work across settings and **nimbly adjust** research questions (e.g. response to status neutral findings)

NISH Next: Operationalizing the vision by leveraging existing investment with strategic new investments

Network PIs

Leadership
and
Operations

Data Access,
Harmonization,
and Coordination
Center

Implementer
and
Community
Engagement

Executive
Committee

Opportunities for ESIs & mid-career professionals – not just researchers with the most trial experience or publications, but those with strong ties to Health Departments / implementors / communities

Efficient model to conduct multi-site research – harnessing local connections, expertise & commitment to the last mile of implementation

The EHE Initiative has identified:

- Our nation faces an unprecedented opportunity once thought impossible.
- The most powerful HIV prevention and treatment tools in history are now available.
- By deploying those tools swiftly and to greatest effect, the HIV epidemic in America can end.
- The time to act is now.

To realize this opportunity, the **Network for Implementation Science in HIV** offers:

Increased opportunities for generalizable knowledge and reach

Speed

Experience

Technical expertise