

Case-Surveillance-Based Sampling

Alternative Method for the Medical Monitoring Project

Spectrum of Engagement Symposium
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Goal of Presentation

- Hand out latest Medical Monitoring Project (MMP) Fact Sheet (excludes Houston MMP data)
- Quick overview of the MMP
- Introduce Case-Surveillance-Based Sampling (CSBS)
- HIV Prevention, Care, Service Providers and Texas MMP w/ CSBS

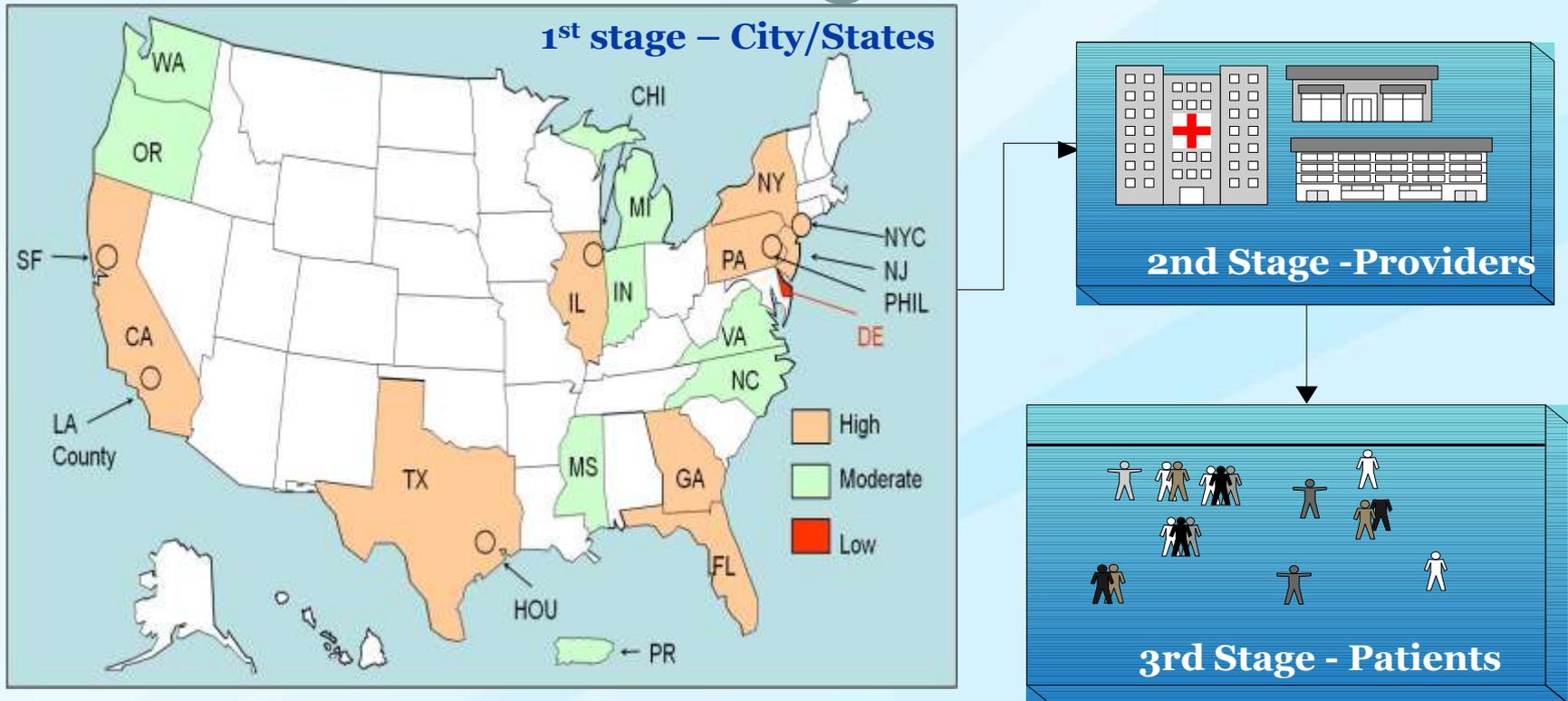
What Is MMP?

- Supplemental surveillance project designed to produce nationally representative data on people living with HIV/AIDS (PLWHA) who are receiving care in the United States
- Matched interview and medical record abstraction (MRA)
- Annual multi-stage probability sample of adults in care for HIV
- Collaborative effort with:
 - State and local health departments
 - CDC (Centers for Disease Control and Prevention)
 - NIH (National Institutes of Health)
 - HRSA (Health Resources and Services Administration)

Medical Monitoring Project Goals

- Provide local and national estimates of clinical and behavioral characteristics of people with HIV receiving medical care
- Determine access to and use of prevention and support services
- Examine geographic and socio-demographic differences in outcomes

MMP Three Stage Sampling Design



Questions MMP Data Can Answer

Access to Care

- What proportion of PLWH use multiple sources of care?
- What are the met/unmet needs for medical services?
- What are the barriers to accessing care?

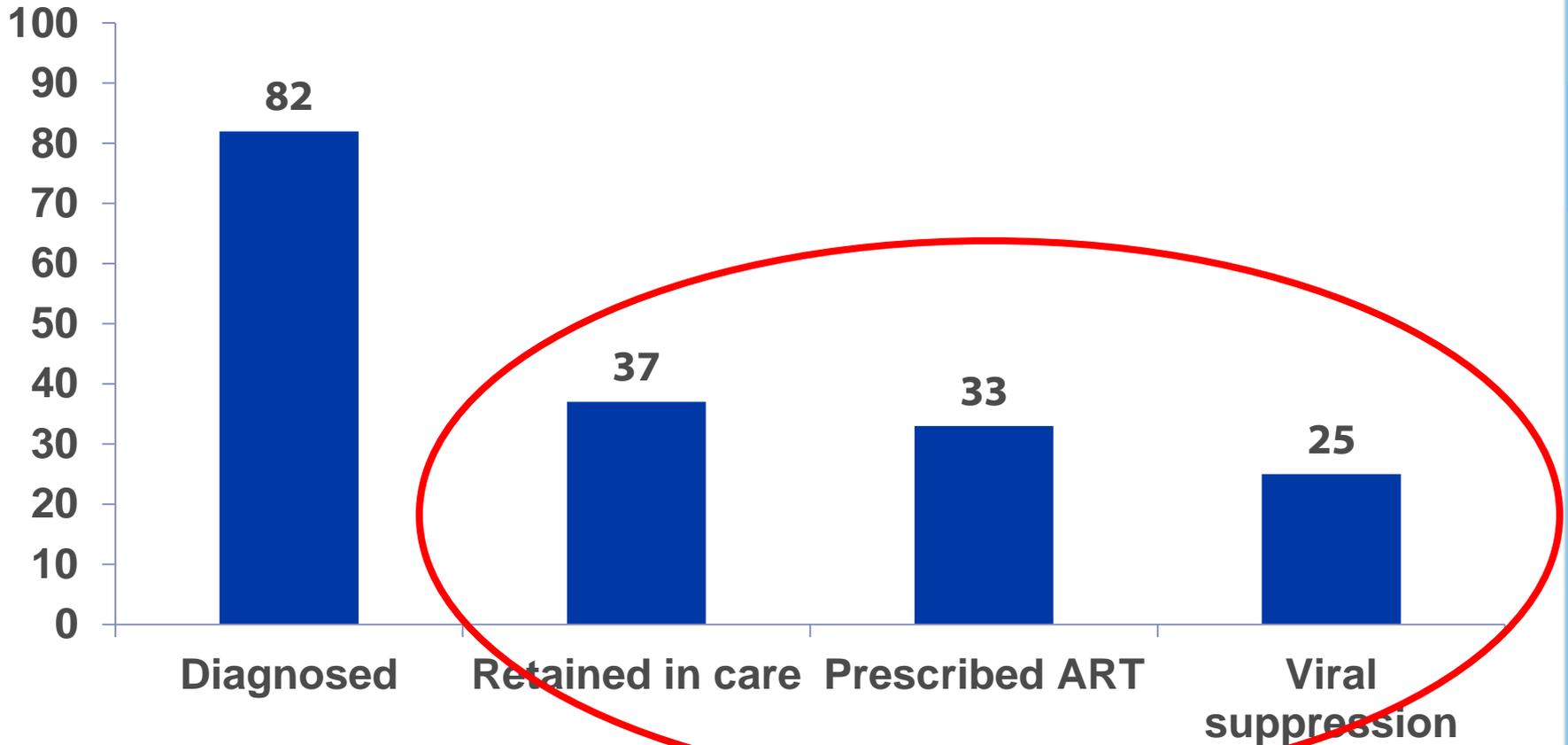
Treatment

- What proportion of PLWH are receiving treatment and care according to the USPHS guidelines?
- What proportion are prescribed ART?
- What factors are associated with non-adherence to ART?

Behaviors

- What behaviors are PLWH engaging in?
 - Drug and alcohol use
 - Sex

Percentage of Persons with HIV Engaged in Selected Stages of the Continuum of Care — United States



- Hall et al. JAMA Int Med. 2013; DOI:10.1001/jamainternmed.2013.6841

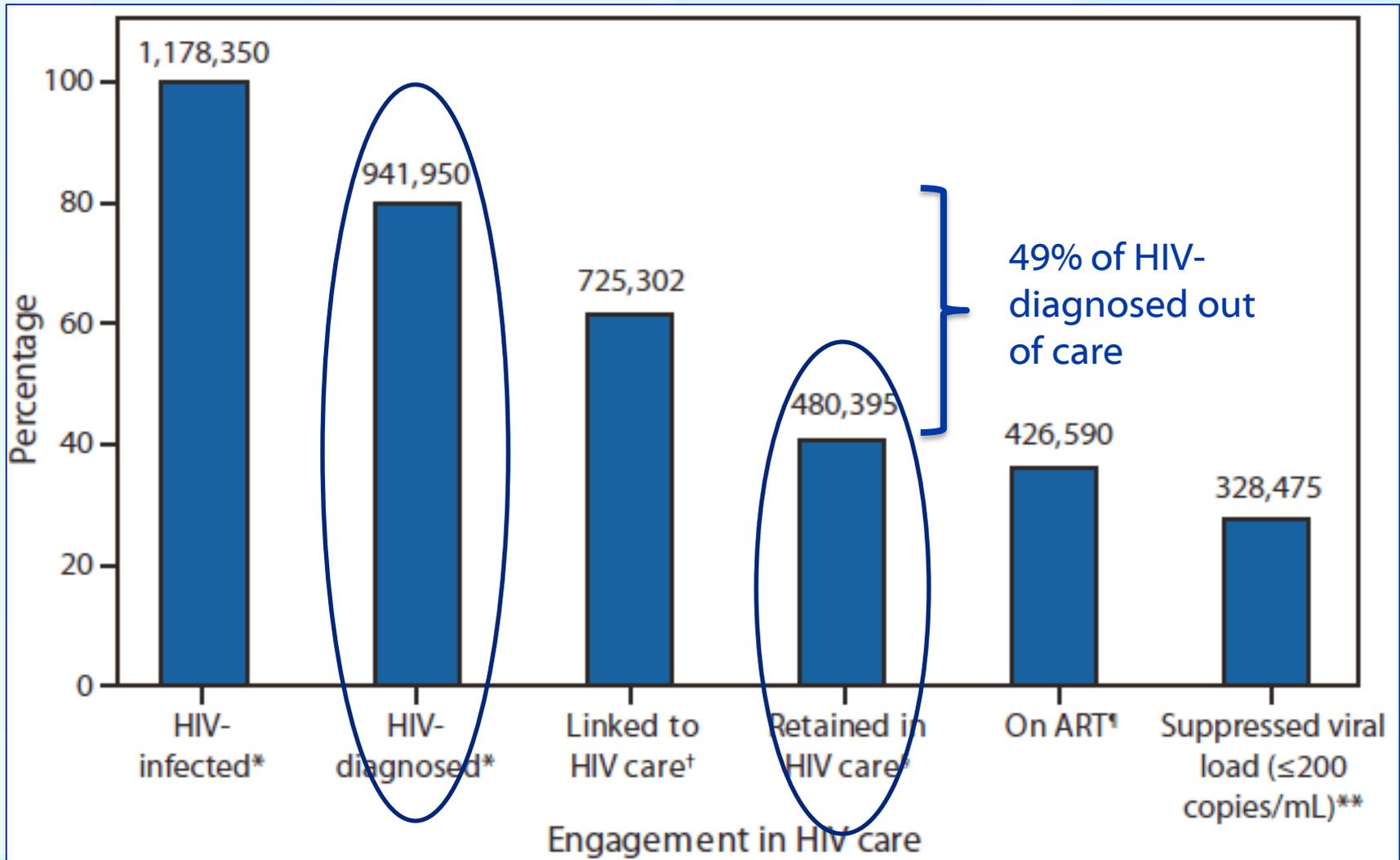
Understanding the Continuum of Care is Critical to Meet HIV/AIDS Strategy Goals

- **1. Reducing New HIV infections**
 - ART is highly effective in preventing transmission

- **2. Increasing Access to Care and Improving Health Outcomes for People Living with HIV**
 - HIV positive people on ART can enjoy excellent quality of life

- **3. Reducing HIV-Related Health Disparities**
 - Disparities exist at all levels of the continuum of care → drivers for differences in morbidity, mortality, and transmission

MMP Limitations



Case-Surveillance-Based Sampling (CSBS) Overview

- **Designed to collect data on both in-care and not-in-care populations**
- **Patients sampled from eHARS.**
- **Two-year demonstration project in 5 project areas**
 - Funded July 2012-June 2014
 - MS, NYC, SFO, LAC, WA

MMP using CSBS 2015-2019

□ Opportunities

- Create a comprehensive nationally representative supplemental surveillance system of all HIV-diagnosed persons with linked interview and medical record data
- Only data system of its kind in the world
- Expand our ability to guide HIV prevention and care

CSBS Involves More Facilities

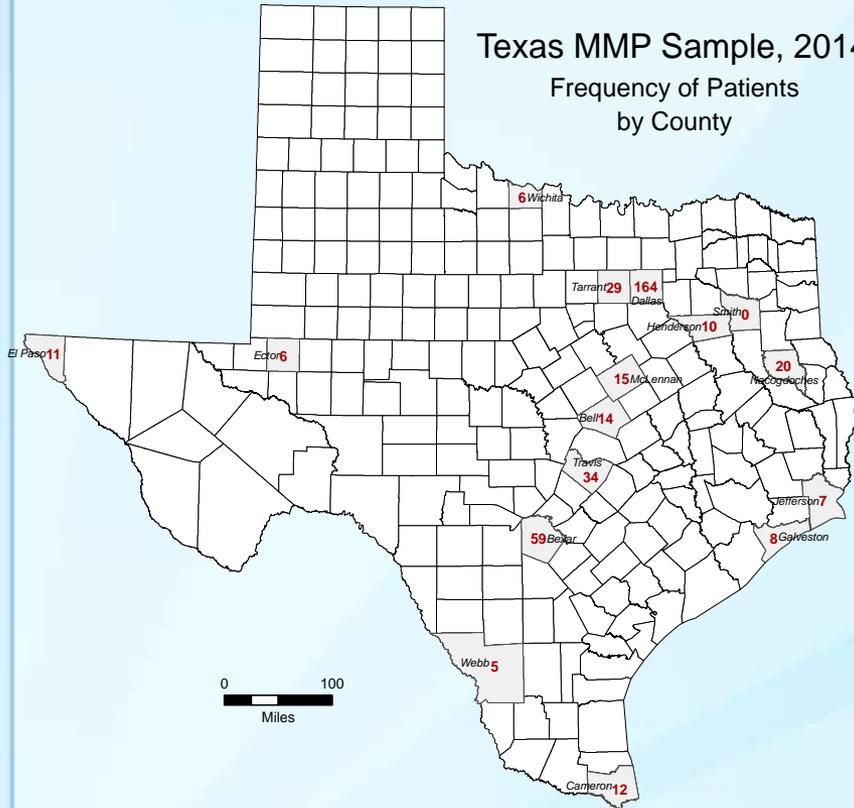
- **Average of 20 facilities per project area (PA) in MMP***
 - Texas average is 35 facilities in MMP
- **Estimate that full scale implementation of CSBS would lead to 30-35 facilities***
 - How many more facilities would Texas have, 45-50?

* Analysis is restricted to 3 project areas: LAC, SFO, and WA

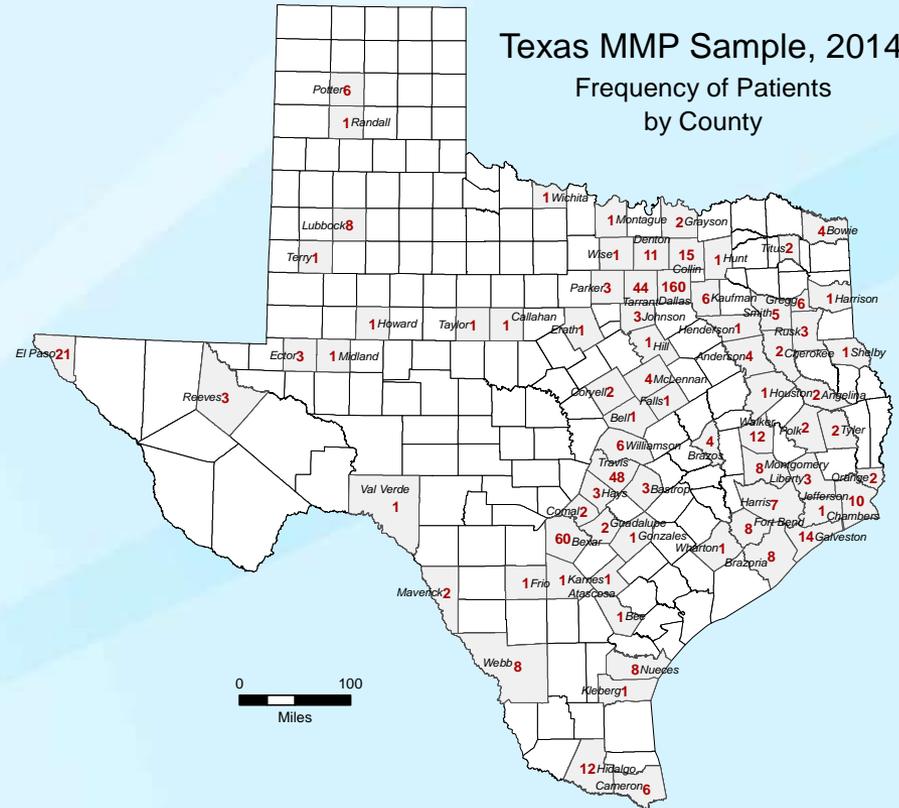
Current MMP Patient
Sample N=400

MMP CSBS Mock
Sample N=500

Texas MMP Sample, 2014
Frequency of Patients
by County



Texas MMP Sample, 2014
Frequency of Patients
by County



16 counties sampling patients from facilities
46 counties sampling persons from eHARS

Synergies with Case Surveillance and HIV Prevention

□ **Case surveillance**

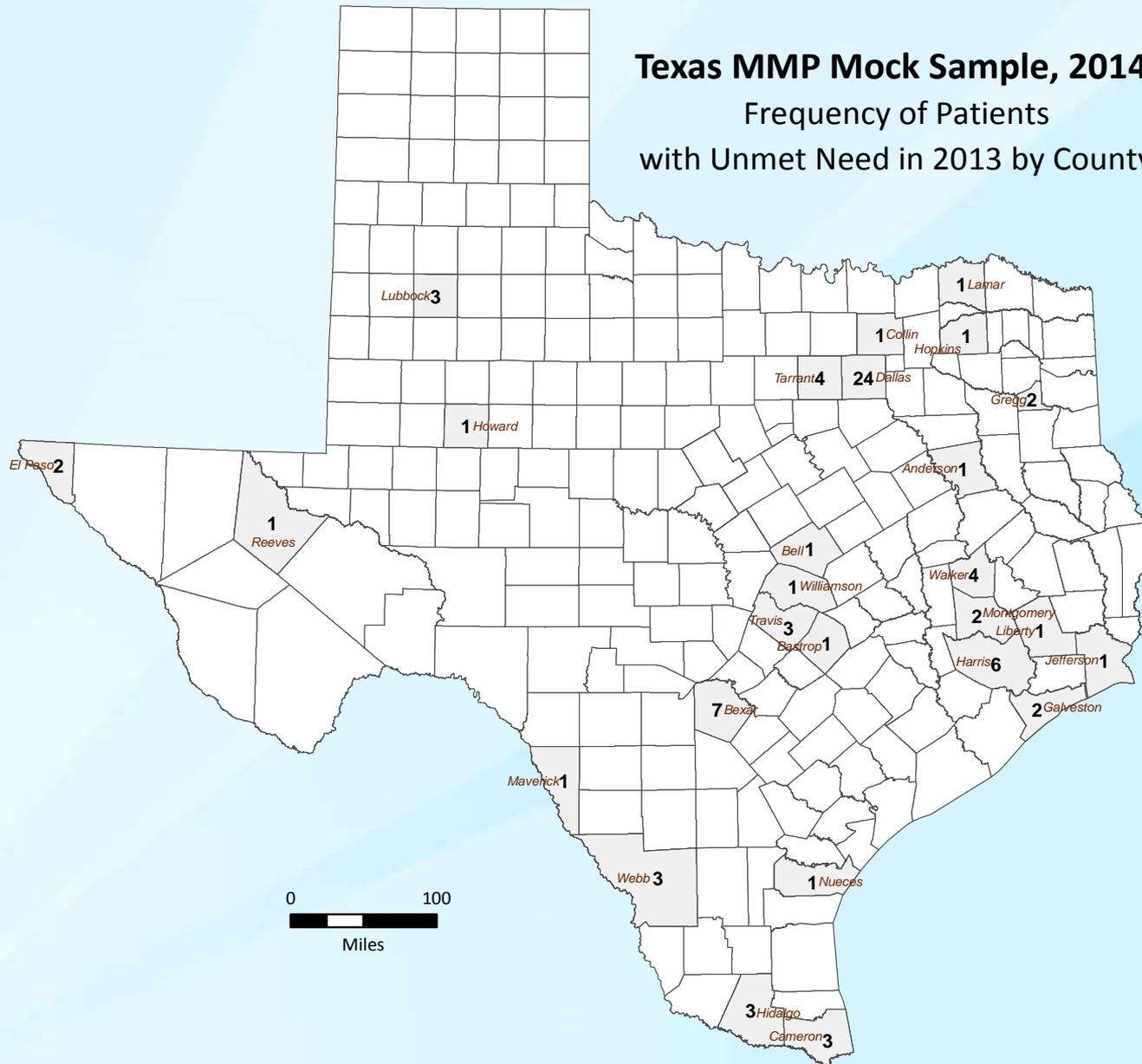
- CSBS improves information on current residence
- Data improvement through use

□ **HIV prevention**

- Direct partnership in referral to linkage and re-engagement services
- Development of location and contact methods that could be extended to HIV programs

Texas MMP Mock Sample, 2014

Frequency of Patients with Unmet Need in 2013 by County



Pilot Project Preliminary Estimate of Size of CSBS Population Not Eligible for MMP

- Based on interview and MRA data from Pilot Project

		Number (%)
Eligible for MMP (≥ 1 Visit in 4-month PDP)		204 (77)
Not Eligible for MMP		61 (23)
	Some Care (≥ 1 Visit in past 12 months)	48 (18)
	No Care in past 12 months	9 (3)
	Never in Care	4 (2)
All HIV Diagnosed		265

With CSBS less engaged population captured

- 23% of CSBS population not eligible for MMP

Key Question: Out-of-Care

- **Does CSBS provide data from a different, less engaged population than MMP?**

Linkage Assistance

- **No funds available in the MMP FOA for linkage**
- **We will have to use local established linkage pathways**
- **Participants out of care will sign release of information, MMP staff will forward contact information to local linkage staff**
 - **Regional DIS staff for rural areas**

Thank You!

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Trade-offs of Facility Situation in CSBS

- **Somewhat more facilities, more spread out**
 - Logistically more difficult
- **More statistically efficient to select people w/o regard to facility clusters**
- **More geographically diverse data**

Medical Monitoring Project

1st stage

- Sites eligible
 - 50 states + District of Columbia + Puerto Rico
- Sites selected
 - 23 city/state areas selected
 - Estimated to include >80% of US AIDS cases
 - Houston and Texas separately funded sites

Medical Monitoring Project

2nd stage

- Providers eligible
 - Health departments will identify all providers of HIV care
 - ART or CD4 or HIV viral load
- Providers selected
 - large, medium and small facilities/clinics/practices
 - Approximately 25-40 providers selected per site
 - Public/private; HRSA/non HRSA

Medical Monitoring Project

3rd stage

- Patients eligible
 - Selected providers will identify all eligible patients
 - ≥ 18 years old, HIV+, received HIV care during a specified period
- Patients selected
 - Randomly sampled within each facility
 - Approximately 400 patients selected per site
 - Texas – 400 sampled yearly
 - Houston – 400 sampled yearly

CSBS modification to MMP

- Budget concerns
 - Will MMP's budget be increased?
 - More time, effort, resources needed for: locating/tracking patients, additional data collection activities (process indicators), linkage to care, and working with non-MMP facilities for recruitment and abstraction
- Staffing issues
 - Staff skills needed to locate out-of-care persons and link them into care are different than what is needed for MMP
 - Need more DIS investigative skills, counseling, case management/social work-type skills
 - Additional training required:
 - Modified version of Dept's HIV testing/counseling training (to prepare for any contact with patients who are unaware of their status)
 - Ride-along with DIS for conducting home visits

MMP 2005-2014

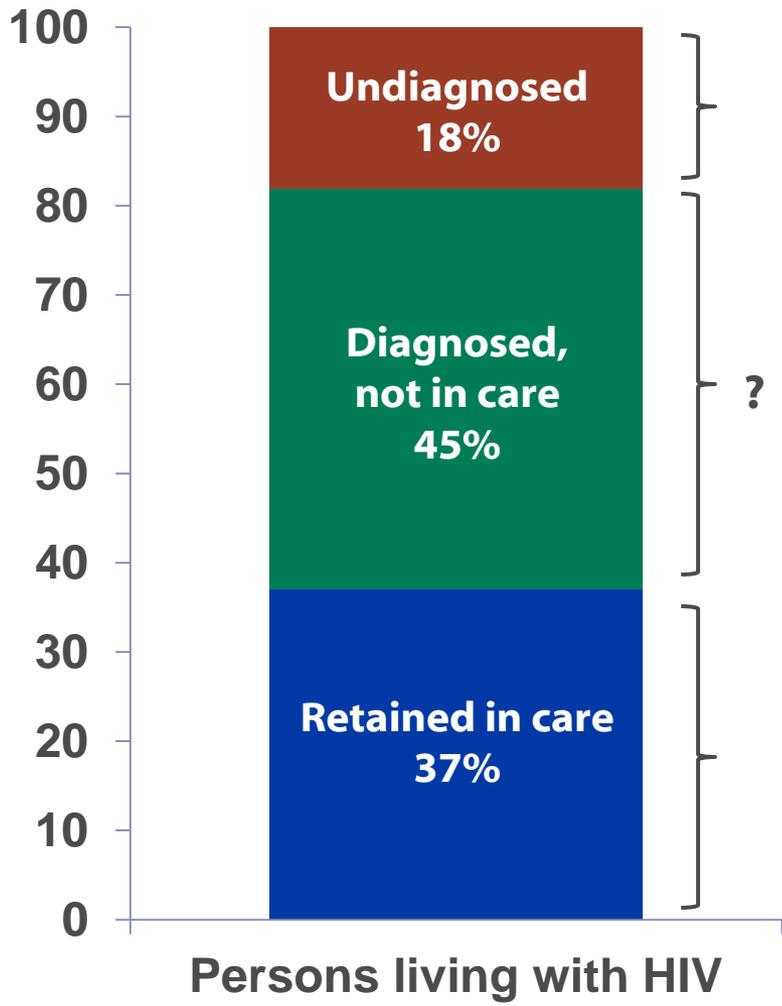
- **Strengths**

- Only nationally representative data on HIV-infected persons receiving medical care
- Linked interview, MRA, facility attributes, and National HIV Surveillance System (NHSS) data

- **Weaknesses**

- Non-standard in-care definition: 1 visit January-April of index year
- Many other data collection systems on in-care population
 - NA-ACCORD, HOPS, other clinical cohorts
 - Administrative data bases (Market Scan, Kaiser, DC Cohort, VA)
- Excludes out-of-care population
 - Identified as a key population by National HIV/AIDS Strategy, Office of National AIDS Policy and Institute of Medicine

Critical Data Needs on Not in Care Population



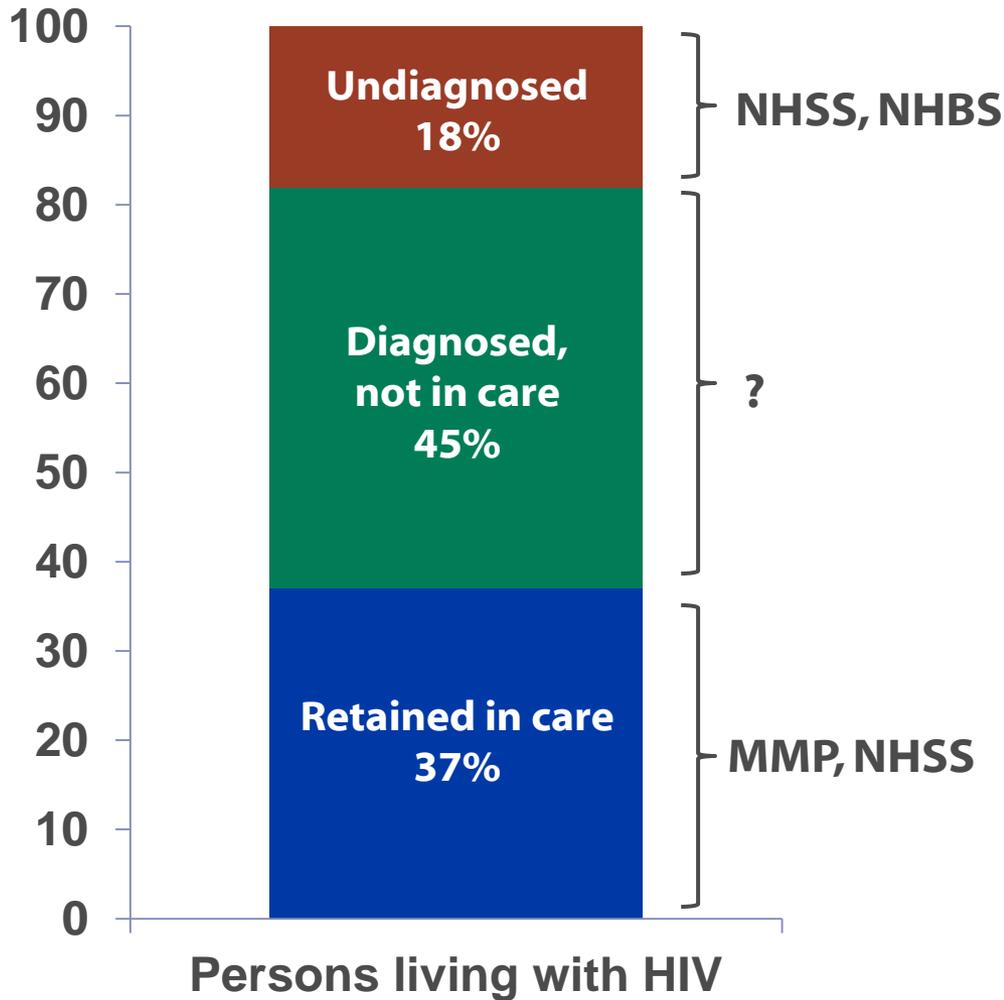
Population size

- MMP
 - In care definition too restrictive
- NHSS
 - Available for 19 jurisdictions
 - Incomplete CD4/VL reporting
 - Migration between jurisdictions

Population characteristics

- Sociodemographic
- Behavioral
- Clinical

Percentage of Persons with HIV Engaged in Selected Stages of the Continuum of Care — United States



Reference Populations Differ

CSBS	HIV-diagnosed persons aged ≥ 18
MMP	HIV-diagnosed persons aged ≥ 18 who received at least 1 HIV outpatient visit between January-April

Inclusion Criteria

- **Age \geq 18**
- **Presumed alive as of 9/25 of index year**
- **HIV-diagnosed and reported to CDC**
- **Residing in project area on 9/25 of index year**
 - Most recent address algorithm