### Houston Area HIV Services Ryan White Planning Council

### **Comprehensive HIV Planning Committee Meeting**

2:00 p.m., Thursday, October 11, 2018 Meeting Location: 2223 W. Loop South, Room 532 Houston, Texas 77027

### **AGENDA**

- I. Call to Order
  - A. Welcome and Introductions
  - B. Moment of Reflection
  - C. Adoption of the Agenda
  - D. Approval of the Minutes

Ted Artiaga and Steven Vargas, Co-Chairs

### II. Public Comment and Announcements

(NOTE: If you wish to speak during the Public Comment portion of the meeting, please sign up on the clipboard at the front of the room. No one is required to give his or her name or HIV status. All meetings are audio taped by the Office of Support for use in creating the meeting minutes. The audiotape and the minutes are public record. If you state your name or HIV status it will be on public record. If you would like your health status known, but do not wish to state your name, you can simply say: "I am a person living with HIV", before stating your opinion. If you represent an organization, please state that you are representing an agency and give the name of the organization. If you work for an organization, but are representing yourself, please state that you are attending as an individual and not as an agency representative. Individuals can also submit written comments to a member of the staff who would be happy to read the comments on behalf of the individual at this point in the meeting. All information from the public must be provided in this portion of the meeting.)

III. Update on PrEP and Data to Care Campaigns

Denis Kelly

IV. Presentation: Social Determinants of Health Special Study Key Findings

A. Approve Special Study Report

Amber Harbolt, Health Planner Office of Support

V. Announcements

Ted Artiaga and Steven Vargas, Co-Chairs

VI. Adjourn

# **Houston Area HIV Services Ryan White Planning Council**

Comprehensive HIV Planning Committee 2:00 p.m., Monday, September 13, 2018

Meeting Location: 2223 West Loop South, Room 532; Houston, Texas 77027

### **Minutes**

MEMBERS PRESENT	MEMBERS ABSENT	OTHERS PRESENT
Steven Vargas, Co-Chair	Ted Artiaga	Sha'Terra Johnson-Fairley, TRG
Herman Finley	Elizabeth Drayden	Amber Harbolt, Office of Support
Denis Kelly	Eddie Gonzalez	Diane Beck, Office of Support
Osaro Mgbere	Dawn Jenkins, excused	
Shital Patel	Rodney Mills	
Ryan Clark	Robert Noble	
Cynthia Deverson	Faye Robinson	
Cristina Martinez	Isis Torrente, excused	
Nancy Miertschin	Esther Ogunjimi	
Crystal Starr	Oluseyi Orija, excused	
Amana Turner		
Larry Woods		

**Call to Order:** Steven Vargas, Co-Chair, called the meeting to order at 2:12 p.m. and asked for a moment of reflection.

**Adoption of Agenda:** <u>Motion #1</u>: it was moved and seconded (Clark, Starr) to adopt the agenda. Motion carried.

**Approval of the Minutes:** <u>Motion #2</u>: it was moved and seconded (Starr, Clark) to approve the July 30, 2018 minutes. **Motion carried.** Abstentions: Kelly, Mgbere, Patel, Martinez, Woods.

**Public Comment:** None.

Overview - Achieving Together: A Community Plan to End the HIV Epidemic in Texas: Harbolt presented the attached PowerPoint and draft document dated 07-18-18.

### **Project Updates**

Social Determinants of Health and Out of Care Special Studies: Harbolt said that most of the MMP data has been received. There is some great information in the 55 tables, she will write up a summary report for the committee to see. She has completed 17 interviews for the out of care study and wants to get 8 more for a total of 25. Men and homeless respondents are overrepresented so she would like to get more women as well as transgender individuals. Participants must be living with HIV and have at least two episodes of being out of care but they can be in care now. She will send out recruitment information soon.

**Epidemiological Profile:** Harbolt said that the epi profile will be available for creating the sampling plan for the 2019 Needs Assessment.

**Comprehensive Plan Evaluation:** The Evaluation Workgroup began working on this in May and finished up yesterday.

**African American MSM Profile:** Harbolt said that the Ryan White Grant Administration asked for this information. It will be a true representation of gay and bisexual men. It should be ready for distribution by the end of December.

**Preparing for the 2019 Needs Assessment Process:** See attached. Harbolt reviewed the timeline for the 2019 Needs Assessment.

**Announcements:** See the attached flyer for the Consumer-only Standards of Care workgroup on September 17<sup>th</sup>. Also attached is a flyer from the AETC about prescribing nPEP, a report about transgender adults in the US and information from the CDC about understanding the HIV care continuum.

Adjournment: The meeting was ad	journed at 3:4	43 p.m.	
Submitted by:		Approved by:	
Amber Harbolt, Office of Support	Date	Chair of Committee	Date

JA = Just arrived at meeting LR = Left room temporarily LM = Left the meeting C = Chaired the meeting

# 2018 Voting Record for Meeting Date September 13, 2018

		Motion #1: Agenda Motion Carried			Motion #2: Minutes Motion Carried			
MEMBERS	ABSENT	YES	No	OABSTAIN	ABSENT	YES	No	O ABSTAIN
Steven Vargas, Co-Chair				C				C
Ted Artiaga, Co-Chair	X							
Herman Finley		X				X		
Dawn Jenkins	X							
Denis Kelly		X						X
Osaro Mgbere		X						X
Rodney Mills	X							
Robert Noble	X							
Shital Patel		X						X
Faye Robinson	X							
Isis Torrente	X							
Ryan Clark		X				X		
Cynthia Deverson		X				X		
Cristina Martinez		X						X
Nancy Miertschin lm 3:26 pm		X				X		
Esther Ogunjimi	X							
Oluseyi Orija	X							
Crystal Starr		X				X		
Amana Turner		X				X		
Larry Woods lm 3:11 pm		X						X

# HIV and Social Determinants of Health in Houston/Harris County

A Collaborative Special Study of the Houston Area Ryan White Planning Council and the Houston Health Department Houston Medical Monitoring Project Approval Pending

### Acknowledgments

The Houston Area HIV Services Ryan White Planning Council would like to thank the following individuals and agencies for their contribution to this Special Study.

# 2017-2018 Comprehensive HIV Planning Committee Members

Ted Artiaga (2017-2018)

Quality Analyst, Legacy Community Health; and 2018 Co-Chair, Comprehensive HIV Planning Committee

Taneisha Broaddus (2017)

Facility Manager, Wood Group Mustang

Ryan Clark (2017-2018)

Assistant, Brandon Bartell Cleaning

Cynthia Deverson (2018)

Clinical Research Manager, Baylor College of Medicine

Elizabeth Drayden (2018)

Receptionist, Marshall Management Group

Evelio Salinas Escamilla (2017)

Independent Consultant

Herman Finley (2017-2018)

Health Education Risk Reduction Coordinator, St. Hope Foundation, Inc.

Eddie Gonzalez (2018)

Co-founder, Grupo de Teatro Índigo

Tracy Gorden (2017)

Member, City of Houston Community Development Advisory Council; and 2017 Vice Chair, Ryan White Planning Council

Dawn Jenkins (2018)

Sr. Operations Manager, Thomas Street Health Center

Daphne L. Jones (2018)

Senior Public Health Investigator, Houston Health Department

Denis Kelly (2018)

2018 Co-Chair, Quality Improvement Committee

Cristina Martinez, (2017-2018)

CEO, Cristina E. Martinez Consulting

Osaro Mgbere, PhD (2017-2018)

Epidemiologist, Houston Health Department

Nancy Miertschin (2018)

HIV Projects Manager, Thomas Street Health Center; and Co-Chair, Comprehensive HIV Planning Committee

Rodney Mills (2017-2018)

2017-2018 Co-Chair, Affected Community Committee Allen Murray (2017)

2018 Co-Chair, Project LEAP Advisory Committee Robert Noble (2018)

Case Manager, AIDS Healthcare Foundation

Esther Ogunjimi (2017-2018)

Case Manager, Texas Department of State Health Services Oluseyi Orija (2017-2018)

External Committee Member, Comprehensive HIV Planning Committee

Shital Patel, MD (2017-2018)

Assistant Professor, Baylor College of Medicine

Faye Robinson (2018)

Senior Public Health Investigator Manager, Houston Health Department

Crystal Starr (2018)

External Committee Member, Comprehensive HIV Planning Committee

Kris Sveska (2017)

External Committee Member, Comprehensive HIV Planning Committee

Isis Torrente (2017-2018)

2017 Co-Chair, Comprehensive HIV Planning Committee

Amana Turner (2017-2018)

Program Coordinator, Change Happens

Steven Vargas (2017-2018)

Program Coordinator, Association for the Advancement of Mexican Americans; and 2017-2018 Co-Chair, Comprehensive HIV Planning Committee

David Watson (2017)

Service Linkage Worker, Houston Health Department

Maggie White (2017)

Nurse Practitioner, Gordon Crowfoot MD

Larry Woods (2017-2018)

Counseling, Testing, and Referral Coordinator, St. Hope Foundation

### Staff

### Ryan White Planning Council Office of Support

Tori Williams

Amber Harbolt

Diane Beck

Rodriga Avila

### Houston Health Department Center for Community Health Services Disease Prevention and Control Division

Marlene McNeese Camden Hallmark

Houston Medical Monitoring Project (HMMP)

Osaro Mgbere, PhD, MS, MPH

# **Funding Acknowledgments**

The development of this document was made possible by funding from the Ryan White HIV/AIDS Treatment Extension Act of 2009.

Data reported are based, in part, on contributions by Medical Monitoring Project (MMP) participants, facilities, community and provider advisory boards, interviewers, and abstractors; the Data Coordinating Center for HIV Supplemental Surveillance at ICF International; and members of the Clinical Outcomes Team, Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC, Atlanta, Georgia.

The MMP for which this report is based was conducted between 2009 and 2014 by the Houston Health Department in collaboration with the Centers for Disease Control and Prevention (CDC) and funded by CDC under the Cooperative agreement number PS09-937. The

CDC conceived the project, developed associated materials including data collection instrument and provided oversight on the survey implementation in Houston/Harris County, Texas, and other 22 participating sites in the United States

Participants in the MMP were offered an incentive gift card for their participation ranging in value from \$25-50.

# **Suggested Citations**

Source/Complementary Report Citation:

Houston Health Department. Behavioral and Clinical Characteristics of Persons Receiving Medical Care for HIV Infection in Houston/Harris County, Texas — Houston Medical Monitoring Project, 2009-2014 Cycles. HIV Surveillance Special Report, August, 2018. 55 pp.

Findings Report Citation (This Document):

HIV and Social Determinants of Health in Houston/Harris County.

Approved: Pending RWPC Approval.

Primary Author: Amber Lynn Harbolt, MA, Health Planner, Ryan White Planning Council Office of

Support.

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# Background

The Houston Area Ryan White Planning Council (RWPC) is a volunteer planning group comprised of 38 appointed community members charged with planning, designing, and allocating funding for HIV medical care and support services for people living with HIV (PLWH) in the six-county Houston Eligible Metropolitan Area (EMA), and the 10-county Houston Heath Service Delivery Area (HSDA). To inform these processes, the RWPC conducts a community needs assessment every three years that measures and describes the HIV medical care and support service needs of the local HIV community, most recently in 2016. In addition to capturing data related to service needs and barriers, the Houston Area HIV Consumer Needs Assessment serve as a tool to evaluate consumer knowledge about services, engagement along the HIV Care Continuum (including a profile of those with unmet need), and co-occurring medical conditions and social determinants of health. The Needs Assessment Group (NAG) streamlined the 2016 Needs Assessment survey tool to allow for faster data collection and to meet a completion deadline to incorporate the data gathered into the joint 2017-2021 Houston Area Comprehensive HIV Prevention and Care Services Plan. The NAF trimmed thirty questions from the survey tool with the caveat that the Comprehensive HIV Planning Committee would prioritize a Special Study exploring HIV and social determinants of health in the Houston area.

The RWPC's Comprehensive HIV Planning Committee commissions Special Studies to complement and contextualize the wealth of information gathered through the community needs assessment process, and to bridge the gap in data between community needs assessments. Past Special Studies have examined service needs among special demographic populations such as people living with HIV (PLWH) in the Houston EMA who are transgender/gender non-conforming, youth, or incarcerated/recently released. Special Studies conducted in 2014 examined consumer needs and experiences related to specific service categories such as the Health Insurance Assistance Program following the first Affordable Care Act Health Insurance Marketplace Open Enrollment period. In 2017, the Comprehensive HIV Planning Committee directed the RWPC Office of Support to collaborate with the Houston Health Department (HHD) to Bureau of Epidemiology Disease Prevention and Control Division to conduct a Special Study using data from the 2009-2014 Houston Medical Monitoring Project (HMMP). HHD and RWPC Office of Support staff met in August 2017 to identify data elements in the HMMP that reflected the social determinants of health questions removed from the 2016 Needs Assessment survey tool. In August 2018, HHD staff provided these data in a complementary report titled Behavioral and Clinical Characteristics of Persons Receiving Medical Care for HIV Infection in Houston/Harris County, Texas — Houston Medical Monitoring Project, 2009-2014 Cycles. This report details key findings from the requested HMMP data to provide a portrait of general social determinants of health that PLWH in the Houston Area. Where HMMP data are not available, RWPC Office of Support staff attempted to provide other relevant needs assessment data to fill the gaps.

### Introduction

As a division of the U.S. Department of Health & Human Service (HHS), the Office of Disease Prevention and Health Promotion (ODPHP) sets national health goals and objectives, and supports programs, services, and education activities aimed to improve the health of all Americans. One such project, Healthy People 2020, envisions America as a society in which all people live long, healthy lives by striving to:

- Identify nationwide health improvement priorities
- Increase public awareness and understanding of the determinants of health, disease, and disability and the opportunities for progress
- Provide measurable objectives and goals that are applicable at the national, State, and local levels, with a completion year of 2020,
- Engage multiple sectors to take actions to strengthen policies and improve practices that are driven by the best available evidence and knowledge, and
- Identify critical research, evaluation, and data collection needs.<sup>1</sup>

Healthy People 2020 provides a framework for describing the economic, educational, sociocultural, healthcare, and physical environments of individuals and communities that co-occur with, influence, and are shaped by individual and community-wide health and quality of life. These environments, called social determinants of health, can help explain and contextualize why low-income and low educational attainment areas, communities of color, marginalized, oppressed, or isolated groups, those without regular access to quality, affordable, and affirming healthcare, and people living in adverse physical environments with low access to healthy food, quality housing, reliable transportation, safe neighborhoods, and freedom from pollution and other environmental insults have significantly poorer health indicators than other groups and communities. This is especially true for HIV, in which new HIV diagnoses, HIV prevalence, barriers to HIV prevention and care services, and poorer HIV-related health outcomes co-occur across a wide variety of demographic groups when substance use disorders and interpersonal or community-level violence are prevalent, known in medical anthropology and public health as the Substance Abuse, Violence, and AIDS (SAVA) syndemic.<sup>2, 3, 4</sup>

Harris County, with over 4.6 million residents distributed across 1,777 square miles of highly ethnically-diverse urban, suburban, and rural communities, presents unique challenges to providing effective HIV prevention and care services to stem new transmissions and ensure that all people have unfettered access to quality HIV care. Amid questions of how to design and provide effective HIV prevention and care services to a growing and varied population, this Special Study was commissioned to describe the social determinants of health PLWH in Houston/Harris County experience.

# Methodology

As with many past Special Studies, this Special Study includes aggregate client-level data, however most of data presented in this document were collected external to the RWPC through HMMP cycles 2009-2014. HHD compiled these data into tables available in the complementary report to this document titled *Behavioral and Clinical Characteristics of Persons Receiving Medical Care for HIV Infection in Houston/Harris County, Texas — Houston Medical Monitoring Project, 2009-2014 Cycles*. Technical notes on methodology from the complementary report are paraphrased below:

### **Population**

For HMMP data collection cycles 2009 through 2014, the population sampled was diagnosed PLWH aged 18 years and over receiving care from known outpatient HIV medical care providers in the Houston/Harris County at any point between January 1 and April 30 of each project year from 2009 through 2014. Individuals with previous participation in HMMP during the current data collection cycle were ineligible to participate twice.

### Data Collection

HHMP or provider staff enrolled eligible participants, depending on clinic needs, project area needs, local institutional review board requirements, and the number of patients sampled from a particular facility. When HMMP staff enrolled participants, facilities provided local HMMP staff with contact information for patients. When provider staff enrolled participants, the provider contacted selected clients—in person, by telephone, or by mail—with follow-up from HMMP staff. A trained interviewer conducted structured participant questionnaires in English or Spanish through either computer-assisted in-person interview in a private location (e.g., at home or in a clinic), or telephone administration of the questionnaire. The interview (approximately 45 minutes) included questions about demographics, healthcare use, service gaps, sexual behavior, mental health concerns, gynecologic and reproductive history (women only), drug and alcohol use, and use of HIV prevention services. HMMP staff offered each participant one gift card ranging in value from \$25 to \$50 as token of appreciation, depending on the cycle year. After data collection was complete, HMMP staff used a Centers for Disease Control and Prevention (CDC) electronic application to abstract information from participant medical records, including diagnoses of Stage 3 HIV (formerly AIDS)-defining conditions, prescription of antiretroviral treatment (ART), laboratory results, and healthcare use in the 24 months prior the interview.

### Methods

HMMP staff applied sampling, nonresponse analysis, and weighting methods to account for non-representative sampling probabilities and nonresponse. The sample comprised 1,181 records covering the period 2009-2014 with 40 strata, 1,030 clusters, and a weighted sum of 11,469. HHMP staff made a small number of updates to sampling and weighting procedures the study years with no significant impact on the prevalence estimates from previous cycles. Medical record data used for estimates in the complementary report were limited to data recorded in the 12 months preceding the interview (except where otherwise noted) to facilitate comparability with previously published estimates. HMMP staff adjusted the interview questionnaire between 2009 and 2014 to measure patient ethnicity, health insurance type(s), and income more precisely.

### Data Analysis

HMMP staff conducted statistical analysis of questionnaire and medical record abstraction using SAS 9.4 (SAS Institute, Cary, NC, USA) software. HHMP staff used the SAS PROC SURVEYFREQ procedure to produce aggregate frequency and cross-tabulation tables. HMMP staff excluded following data from final analysis:

- Values with a coefficient of variation ≥30%
- "Don't know" responses, and
- Skipped (missing) responses.

The analysis produced frequency, weighted frequency, row and column percent, standard errors of percent and the 95% confident intervals reflected in the complementary report. HHMP staff suppressed frequencies below a threshold of five in the complementary report to protect confidentiality.

### Summarization of Findings

RWPC Office of Support staff reviewed the HMMP staff complementary report to provide a summarization of findings for use in HIV planning. For social determinants of health data among PLWH not presented in the complementary HMMP report, RWPC Office of Support staff used data collected for the 2016 Consumer Needs Assessment.<sup>a</sup> This document presents summarized findings within the six major domains of social determinants of health as outlined by Healthy People 2020:<sup>6</sup>

- Economic Stability
- Education
- Social and Community Context
- Health and Healthcare
- Neighborhood and Built Environment

Topics for which there are no HMMP or Needs Assessment data available are noted to be considered for inclusion in the 2019 Consumer Needs Assessment.

<sup>&</sup>lt;sup>a</sup> The full 2016 Consumer Needs Assessment report, including methodology and limitations, is available on the RWPC website: <a href="http://www.rwpchouston.org/Publications/2016">http://www.rwpchouston.org/Publications/2016</a> NA/2016%20Needs%20Assessment.htm

### Limitations

As the HMMP identified the sample population as diagnosed adult PLWH receiving HIV medical care at known providers, and interviews were administered in English or Spanish, the following populations may be unrepresented or underrepresented in the social determinants of health data discussed in this document:

- Those living with HIV who are undiagnosed
- Children and youth under 18 years old
- Individuals who were out of care at the time of participant selection<sup>b</sup>
- Houston/Harris County residents receiving HIV medical care outside of Houston/Harris County
- Individuals with limited English or Spanish proficiency

Data collected through HMMP are representative of the sample population, and summarized findings are generalizable only to Houston/Harris County. Data collected through the 2016 Consumer Needs Assessment are also only representative of diagnosed PLWH over the age of 18 who were proficient in spoken or written English or Spanish at the time of survey, though results are generalizable to the 6-county Houston EMA and the 10-county Houston HSDA.

HMMP data presented in this document are intended to show trends in social determinant of health among PLWH, but do not reflect the experiences of PLWH in the Houston area after 2014. Needs Assessment data discussed in the document reflect the experiences of PLWH in the Houston EMA/HSDA in 2016.

Finally, some topics within the six Healthy People 2020 social determinants of health domains have no correlative data collected in the *Behavioral and Clinical Characteristics of Persons Receiving Medical Care for HIV Infection in Houston/Harris County, Texas — Houston Medical Monitoring Project, 2009-2014 Cycles* or the 2016 Consumer Needs Assessment for which to draw conclusions about social determinants of health specific to PLWH in the Houston area. Such topics in this document are noted under the pertinent domain, and will be considered for inclusion in the 2019 Consumer Needs Assessment.

<sup>&</sup>lt;sup>b</sup> An additional RWPC Special Study of those with a history of unmet need/out of care will be completed in 2018 and will be available on the RWPC website: <a href="http://www.rwpchouston.org/">http://www.rwpchouston.org/</a>

# **Findings**

### **Economic Stability**

Communities that experience greater economic stability are more likely to have access to tools and medications that prevent new HIV transmissions and assist PLWH to reach viral suppression. A community with economic stability reflects higher levels of gainful employment, households with available financial resources for food, persistent access to affordable quality housing free of overcrowding, and access to financial resources adequate to cover necessities. Communities that experience lower economic stability, and thereby greater vulnerability to new HIV transmissions and barriers to HIV care, may reflect higher levels of unemployment, under-employment, or unreported employment, households with a lack of available financial resources for food, unstable access to affordable quality housing free of overcrowding, and financial resources that may not adequately to cover necessities.

### **Employment**

### (See HMMP Tables 4, 14, and 33)

Forty-one percent (41%) of HMMP participants reported being employed for wages at the time of interview. Following employed for wages, 24% were unable to work due to disability, 11% were out of work for more than one year, 8% were out of work for less than one year, and 7% were self-employed. Fewer than 5% each were students, retired, or homemakers.

Among those employed for wages, no specification was offered as to the proportions of full-time vs. part-time employment, but cross-tabulation of the association between employment status and healthcare coverage revealed that 31% of employed participants were insured, while 33% of unemployed participants were ensured. This may indicate that PLWH and those vulnerable to new transmissions may be employed for wages, but without access to benefits like employer-sponsored health insurance. An additional 13% of employed participants had no insurance, but accessed Ryan White or the AIDS Drug Assistance Program (ADAP) for medication coverage, while 10% of unemployed uninsured participants accessed Ryan White or ADAP.

Unreported employment in general was not addressed in the complementary report, though 3% of HMMP participants reported engaging in sex work in exchange for resources like food shelter, transportation, money, or drugs.

### Food Insecurity

### (See HMMP **Table 30**)

Food insecurity differs from hunger, in that any individual may experience hunger may be experienced by any individual independent of access to resources. Households that are food insecure regularly lack of available financial resources for food. Ten percent (10%) of HMMP participants reported needing meal or food services, but did not receive those services. No indication as to why needed meal or food services was presented in the complementary report, but 2016 Consumer Needs Assessment found that 25% of participants who reported needing food pantry services had difficulty accessing food pantry. This was most often due to education and

awareness barriers such lack of knowledge about service availability, location, and appropriate staff contact. Though food pantry is not currently a Ryan White funded service in the Houston area, questions regarding persistent food insecurity may be considered for inclusion in the 2019 Consumer Needs Assessment.

**Housing Instability** 

### (See HMMP **Tables 2** and **33**)

HHS provides a firm definition for homelessness as a living condition in which an individual "lacks housing (without regard to whether the individual is a member of a family), including an individual whose primary residence during the night is a supervised public or private facility (e.g., shelters) that provides temporary living accommodations, and an individual who is a resident in transitional housing." Nine percent (9%) of HMMP participants experienced homelessness at the time of survey, and were most often living on the street (5%). This was followed by other homeless living conditions such as living in a shelter (4%), living in a single room occupancy hotel (4%), or living in a car (3%).

Housing instability describes conditions in which an individual's housing situations may be subject to change rapidly, or present challenges to affordability, quality, or overcrowding. This can include a situation in which an individual is living with friends or family, but may have no legal protection or right to remain in the habitation. Compared to individuals with persistent stable housing, individuals who are unstably housed may be more vulnerable to experiencing homelessness, and may experience interpersonal violence, intimate partner violence (IPV), or difficulty keeping medications safe. Nine percent (9%) of HMMP participants reported needing shelter or housing services, but did not receive those services. No indication as to why needed housing or shelter services were not received was presented in the complementary report, but 2016 Consumer Needs Assessment found that 32% of participants who reported needing housing services had difficulty accessing housing. This was most often due to education and awareness barriers such as lack of knowledge about service availability, service location, appropriate staff contact, and service definition, or wait-related issues such as placement on a waiting list, being told a wait list was full/unavailable, and long durations between housing resource application and approval.

### **Poverty**

### (See HMMP Tables 1 and 4)

Seventy-two percent (72%) of HMMP participants reported combined yearly household incomes of \$19,999 or less. This was followed by 18% with annual incomes of \$20,000 to \$39,999, 7% with incomes \$40,000 to \$74,999, and 4% with incomes of \$75,000 or higher. Just over half of HMMP participants (52%) had annual incomes that fell below 100% of the U.S. federal poverty level (FPL) at the time of survey. A quarter (25%) had annual incomes at 139-400%, 16% had incomes at 100-139% of FPL, and 7% had incomes over 400% FPL.

Most often, HHMP participants reported their primary source of income as salary or wages (40% of participants) or Supplemental Security Income (SSI)/Social Security Disability Insurance (SSDI) (37% of HMMP participants). This was followed by 15% of HMMP participants whose primary source of income was money received from family, a partner, or friends. Two percent (2%) of

HMMP participants listed each savings or investments, pension or retirement fund, other public assistance, or no income, or other as their primary source of income.

### Education

Communities that experience widespread high levels of education attainment are more likely to have economic stability, encounter fewer challenges with literacy or health literacy, and experience higher levels of self-efficacy, or the belief in one's capacity to carry out particular interventions, such as medication adherence for pre-exposure prophylaxis (PrEP) and HIV treatment. A community with ample resources to support high education attainment reflects greater enrollment in higher education, increased high school graduation rates, less linguistic isolation, and higher general literacy. Communities with fewer resources dedicated to high education attainment may reflect greater vulnerability to new HIV transmissions and barriers to HIV care through economic instability due to lower enrollment in higher education, lower rates of high school graduation, linguistic isolation, and low general literacy.

# Enrollment in Higher Education and High School Graduation (See HMMP **Table 1**)

Fifty percent of HMMP participants enrolled in higher education at some point, attaining greater than a high school education. While HMMP data provided in the complementary report do not offer an in-depth analysis of the types of higher education in which HMMP participants enrolled, questions regarding higher education enrollment may be considered for inclusion in the 2019 Consumer Needs Assessment. Twenty-eight percent (28%) of HMMP participants graduated from high school or achieved their General Education Development (GED) test certificate and 22% had some high school education or less.

### Language

### (See HMMP **Table 8**)

Nine percent (9%) of HMMP participants reported English proficiency lower than "I speak English well". Twenty percent (20%) of HMMP participants reported that they speak a language other than English at home. While information on specific languages spoken other than English was not included the complementary report, HMMP participants with limited English proficiency likely reflects primarily Spanish speaking or Spanish monolingual individuals (see **Methodology** and **Limitations**). Changes in methodology and questions regarding non-English/non-Spanish languages spoken and linguistic isolation may be considered for inclusion in the 2019 Consumer Needs Assessment.

### General Literacy

### (See HMMP **Table 8**)

While language refers to a system of written or verbal communication, literacy refers to one's ability to effectively interpret and use a language, often in its written format. Individuals with low general literacy may experience difficulty reading written communications or writing. For PLWH who experience low general literacy, this presents additional challenges for completing important

enrollment paperwork, or accurately deciphering medically relevant written information such as referrals or medication instructions. Twenty-one percent (21%) of HMMP participants reported always (5%), often (3%), or sometimes (14%) experiencing difficulty learning about their medical condition due to difficulty understanding written information. When asked how confident they are filling out medical forms without assistance, 28% of HMMP participants reported that being somewhat (13%), a little bit (7%), or not at all confident (9%). Twenty-two percent (22%) of HMMP participants reported that they sometimes (12%), often (4%) or always (6%) have someone assist them with reading hospital materials.

### Social and Community Context

Social and community context refers to the collective cultural and interpersonal structures within a community that influence health, access, decision-making, resource navigation, and resilience. Health determinants within this domain include civic participation, discrimination, incarceration, and social cohesion. Communities that experience supportive social and community context are more likely to have active civic participation, fewer instances of discrimination, lower rates of incarceration, and stronger social cohesion, while communities that experience discordant or absent social and community context may experience less civic participation, more instances of discrimination, higher rates of incarceration, and weaker social cohesion.

### Civic Participation

Civic participation, including voting, volunteering, and engaging in collective activities gives individuals a higher degree of control and investment in healthcare decisions made within a particular community, facilitates physical activity, and social connectivity for support and resource sharing. An example of civic participation specific to HIV could be volunteering at a clinic or testing event, or attending a city council meeting to help speak on behalf of the HIV community. While the complementary report does not relay data relevant to civic participation, the 2016 Consumer Needs Assessment found that participants derived social support through several types of civic participation, including HIV-related groups or programs (26%), community groups (15%), advocacy/activism groups (13%), serving on a board or committee (9%) and participation in fundraising (9%). Questions regarding other types of civic participation may be considered for inclusion in the 2019 Consumer Needs Assessment

### Discrimination

### (See HMMP **Table 9**)

Discrimination such as racism, sexism, homophobia, and stigma within social and community context increases vulnerability to new HIV transmissions throughout the community by discouraging regular HIV testing, engagement in PrEP or HIV medical care, and medication adherence to support viral suppression for treatment as prevention (TaSP). When asked about experiences with stigma and discrimination, HMMP participants reported the following:

- 65% agreed that it is difficult to tell people about their positive HIV status
- 28% agreed that having a positive HIV status made them feel in some way contaminated
- 36% agreed each that they felt guilty and ashamed for having a positive HIV status
- 25% agreed that having a positive HIV status sometimes made them feel worthless

- 64% stated that they hid their positive HIV status from others
- 15% stated that they had been treated with hostility or a lack of respect in a medical environment
- 10% reported that they had been given less attention in a medical environment that other patients
- 7% reported that they had been refused service

Of HHMP participants who reported experiences of any type of discrimination:

- 77% reported that the discrimination occurred because of their positive HIV status
- 13% reported that the discrimination occurred because of their gender
- 33% reported that the discrimination occurred because of their sexual orientation or behaviors
- 20% reported that the discrimination occurred because of their race or ethnicity
- 3% reported that the discrimination occurred because of their injection drug use

### Incarceration

### (See HMMP Table 2)

High rates of incarceration are linked to increased vulnerability to new HIV transmissions, lower entry and retention in care following release from incarceration, and restricted access to resources such as housing and employment opportunities particularly when compounded by recidivism and re-incarceration. Six percent (6%) of HMMP participants reported that they were incarcerated for longer than 24 hours within the past 12 months. Questions regarding experiences with linkage, retention, and service navigation following release from incarceration may be considered for inclusion in the 2019 Consumer Needs Assessment.

### Social Cohesion

### (See HMMP **Table 11**)

Social cohesion describes the tendency of strong social networks that share support, knowledge, and resources through social capital and a shared sense of social identity. This cohesion influences community health in general and HIV-related issues in particular through informational support through peer navigation, resource sharing, emotional support, and support for positive health behaviors such as retention in care and engaging in exercise. While the complementary report does not relay data general data on social cohesion, it does describe social support in relation to HIV medication adherence. Eighty-seven percent of HMMP participants were satisfied with the overall support they get from friends and family members, but 55% reported that friends and family members do no help them remember to take their medications at all.

The 2016 Consumer Needs Assessment found that participants derived social support and belonging through social networks, including family (75%), friend (69%), partner(s) (45%), faith communities (45%), support groups (26%), sobriety groups (18%), having or being a mentor (16-17%), and co-workers (16%). Questions regarding other types of social cohesion may be considered for inclusion in the 2019 Consumer Needs Assessment.

### Health and Healthcare

Health and healthcare structures within the context of social determinants of health may be most effectively discussed in terms of access to healthcare, access to primary care, and health literacy. Communities with strong health and healthcare structures are more likely to have readily accessible general and HIV-specific health resources, regular primary care including HIV prevention and care services, and reflect high health literacy. Communities with weakened or absent health and healthcare structures are more likely to have limited access to general and HIV-specific health resources, irregular or no receipt of primary care including HIV prevention and care services, and reflect difficulties with low health literacy.

### Access to Healthcare

### (See HMMP Tables 3, 4, 13, 21, 28 and Figure 3)

Access to healthcare describes the presence healthcare structures and institutions within a community that is easily accessible to all people. In the U.S., financial access to healthcare is most often achieved with assistance through health insurance or other types of health care coverage. While 65% of HMMP participants reported having any kind of health insurance in the past 12 months at the time of interview, this proportion dropped to 56% for continuous coverage throughout the year. Over a third (38%) reported having no continuous health insurance or coverage. Questions regarding reasons for lapses in health care coverage may be considered for inclusion in the 2019 Consumer Needs Assessment. For type of health insurance, 45% of HMMP participants reported they had some type of public insurance, followed by over third (38%) with no insurance (38%), and 16% with private health insurance only. Of combinations of health insurance coverage reported by HMMP participants, the most common combinations were:

- 21% with Ryan White/ADAP only
- 15% with private health insurance only
- 12% with Medicaid only
- 8% with no insurance
- 7% with an unspecified health insurance combination
- 6% each with other public insurance and Ryan White/ADAP; Medicaid and Medicare; and other public only.

Most often, HMMP participant receive coverage for HIV-related medications through:

- 47% ADAP
- 18% out of pocket payment
- 17% Medicaid
- 14% Medicare

Accommodation for varying levels of ability also influences access to healthcare. Forty-six percent (46%) of HMMP participants reported receiving some form disability-related income. Among HMMP participants who reported ability or mobility requiring accommodation:

- 24% reported cognitive difficulty concentrating, remember, or making decision
- 20% reported difficulty walking or climbing stairs
- 16% reported experiencing blindness or difficulty seeing
- 11% reported experiencing deafness or difficulty hearing

- 10% reported experiencing difficulty doing errands such as attending medical visits without assistance
- 5% reported experiencing difficulty dressing or bathing

Proximity and travel time to medical facilities shape access to healthcare, particularly for those with transportation difficulties. The mean travel time for HMMP participants to their usual primary care facility was 35 minutes, though travel times ranged from two to 240 minutes.

### Access to Primary Care

Access to primary care differs from access to healthcare in that it describes regular interactions with healthcare providers and facilities rather than the community presence of healthcare structures. This includes access to general primary care as well as primary care for HIV prevention, HIV care, mental health care, and treatment for substance use disorders.

Access to General and HIV Prevention-Related Primary Care (See HMMP Tables 5, 6, 14, 19, 20, 22, 23, 28, and 31)

An important indicator of restricted access to preventive medicine and primary care is use of emergency or urgent care facilities, hospital admissions, and inpatient care for mental health and substance use concerns. In the 12 months preceding interview, HMMP participants reported:

- 3% visited an emergency department or urgent care clinic 2-4 times, and 1% five or greater times
- 4% had one hospital admission, 2% had 2-4 hospital admissions

Seventy-five percent (75%) of HMMP participants reported receiving an influenza vaccination, and 4% reported participating in an HIV clinical trial in the 12 months prior to interview.

Gynecological and contraceptive care also reflect access to general preventive primary care for individuals who were assigned female at birth. Of HMMP participants who received gynecological, obstetric care:

- 34% received HIV care at a gynecological clinic
- 73% received a Pap Smear test
  - o 12% with abnormal results, and of those 89% received medical follow-up
- 72% received a pelvic exam
- Over half (51%) became pregnant once (31%), twice (11%), or 3+ (9%) following their HIV diagnosis

Among HMMP participants who were assigned female at birth, the most common birth control and contraceptive methods were:

- 50% used male condoms
- 44% abstained from sex
- 28% had female surgical sterilization (tubal ligation or hysterectomy)
- 8% used female condoms
- 5% used oral hormonal contraception
- 4% practiced withdrawal

- 4% used a spermicidal substance
- 3% used injectable hormonal contraception

Access to primary care reduces community and individual vulnerability to HIV transmission when it supports HIV prevention including discussion of behaviors linked to transmission and risk reduction strategies, as well as access to HIV/STI testing and disease investigation specialist (DIS) services. For sexual contact and gender identity:

- 42% of cis-gender men reported any male-to-male sexual contact
- 27% of cis-gender men reported exclusive male-to-female sexual contact
- 27% of cis-gender women reported any male-to-female sexual contact
- 2% identified as transgender individuals

The following proportions of HMMP participants reported experiencing transmission risk factors prior to their initial HIV diagnosis:

- 76% reported having sex with a male partner
- 47% reported having sex with a female partner
- 45% reported having sex with a male partner living with HIV
- 43% reported receiving clotting factor prior to March 1985
- 17% reported having sex with a male partner with injection drug use
- 12% reported having sex with a male partner who had sexual contact with male partners
- 12% reported having sex with a female partner with injection drug use

For the 2009-2014 HMMP cycle, serosorting appears to have been more widely practiced than using TaSP/viral load suppression:

- 17% agreed that they are more likely to not condoms when a partner says they are also living with HIV
- 12% agreed that they do not need to use condoms when a partner says they are also living with HIV
- 14% agreed that they are more likely to not use condoms when they have an undetectable viral load
- 7% agreed that they do not have to worry about using condoms when they have an undetectable viral load

In the 12 months preceding interview, HMMP participants received the following HIV prevention services:

- 54% received informational/educational materials
- 46% received free condoms
  - o 62% from a medical office or clinic
  - o 26% from a community-based organization (CBO)
  - o 11% from a social venue
- 39% had a one-on-one conversation with a health care provider
- 25% had a one-on-one conversation with an outreach work, counselor, or prevention program worker

• 18% received free cleaning kits for injection equipment

The most common testing sites at which HMMP participants received their HIV diagnosis were:

- 20% were tested at a primary care clinic or community health center
- 19% were tested at a private doctor's office
- 18% were tested at an inpatient hospital
- 17% were tested in a correctional facility
- 10% were tested at a health department

The most common motivations for receiving an HIV test were:

- 31% due to another non-sexually transmitted illness
- 20% transmission risk through sexual contact
- 20% other/not specified
- 8% personal initiative to get routine HIV testing
- 8% as part of STI screening or due to another STI diagnosis

Sixty-five percent (65%) of HMMP participants reported that they were offered partner notification services. Among those offered partner notification services, 61% asked that all their partners be notified, while 17% asked that none of their partners be notified. Questions regarding motivation for requesting or declining partner notification may be considered for inclusion in the 2019 Consumer Needs Assessment.

Among HMMP participants who reported being sexually active, the following proportions had STI testing reflected in their medical records:

- 60% received syphilis testing
- 23% received chlamydia testing
- 22% received gonorrhea testing

### Access to HIV Primary Care

(See HMMP **Tables 7, 10, 12, 15,** and **27**)

The complementary HMMP report contains data on stages of HIV progression, lab values, and medication adherence as these components of access to HIV primary were excluded from the 2016 Consumer Need Assessment survey tool. A full reporting of the access and barriers to HIV care services in the Houston area is available in the 2016 Consumer Needs Assessment document on the RWPC website at:

http://www.rwpchouston.org/Publications/2016 NA/2016%20Needs%20Assessment.htm

Regardless of current health status, 71% HMMP participants never progressed past Stage 1/acute HIV, 19% progressed to Stage 2/chronic HIV, and 10% progressed to Stage 3 HIV. Of those who experienced Stage 3 HIV, 24% presented with at least one opportunistic infection. Medical records indicated CD4 counts and viral load tests that match typical progression for PLWH in HIV medical care, with the highest proportion of HMMP participants:

28% had a first CD4 count of 500 or more cells/μL

- 37% had a lowest CD4 count of 199 or less cells/μL
- 61% had a most recent CD4 count of 500 or more cells/μL
- 84% had a most recent viral load test below the level of detection
- 70% experienced durable viral suppression with all viral load tests below 200 copies/mL for the preceding 12 months

Medical records indicated that 20% of HMMP participants were prescribed Pneumocystis pneumonia prophylaxis, and 9% were prescribed mycobacterium avium complex prophylaxis.

Ninety percent (90%) of HMMP participants were receiving antiretroviral therapy (ART) at the time of interview, though only 5% had not taken ART medication within the preceding 12 months. The most common reason HMMP participants reported for not taking ART was that 33% that their doctor advised to delay treatment. Eighty-eight percent (88%) reported that ART sides effects never (73%) or rarely (15%) troubled them over the preceding 20 days. Only 9% of participants had ever taken a planned break ("drug holiday") from ART, with the most common reasons of other/unspecified (38%), being tired of taking medications (22%), feeling poorly from side effects (20%), and being on vacation (15%). Twenty-nine percent (29%) of HMMP participants had recent difficulty taking ART according to schedule, 27% had difficulty taking ART according to instructions, and 15% had difficulty taking ART according to medication does. Recent adherence to medication adherence to schedule. The most common reasons for a recently missed dose of ART were:

- 43% forgot to take their medication
- 24% had problems with a prescription or refill

#### Mental Health Care

### (See HMMP Tables 25, 26, and 32)

The 2016 Consumer Needs Assessment revealed that symptoms of emotional and psychological distress occur more frequently among PLWH than is indicated with a formal mental health condition diagnoses. The data presented in the complementary report indicate this finding as well, with the following proportions of HMMP participants who experienced several days or more of:

- 54% feeling tired or having little energy
- 49% having trouble falling or staying asleep, or sleeping too much
- 42% feeling apathetic
- 41% feeling down, depressed, or hopeless
- 36% experiencing over-eating/under-eating
- 29% having feelings of low self-worth
- 27% having difficulty concentrating
- 19% noticeably moving slowly or restlessly

Thirty-three percent (33%) of HMMP participants had diagnoses of mental health conditions noted in their medical records, the most common of which were depression (29%), generalized anxiety disorder (8%), and bipolar disorder (5%). Sixty percent (60%) of HMMP participants who reported needing mental health services but who did not receive mental health services and had a record of a diagnosed mental health condition. No indication as to why needed mental health services were not received was presented in the complementary report, but the 2016 Consumer Needs Assessment found the most commonly reported barriers to mental health services were both

administrative such as inconvenient hours of operation, complex administrative paperwork and processes, and staff changes without notification to the client, and wait-related including placement on a waitlist. Four percent (4%) of HMMP participants admitted to an inpatient mental health care facility in the 12 months preceding interview.

# Substance Use and Access to Substance Use Disorder Treatment (See HMMP **Tables 15, 16, 17,** and **18)**

Thirty-two percent (32%) of HMMP participants identified as current cigarette smokers, with another 18% identified as former cigarette smokers. Twenty-six percent (26%) of HMMP participants reported smoking cigarettes daily. Fifty-eight percent (58%) of HMMP participants reported any alcohol use in the preceding 12 months, with 34% of HMMP participants using alcohol before or during sex. Seventeen percent (17%) of HMMP reported weekly alcohol use, and 5% reported daily alcohol use. Within the 30 days preceding interview, 48% reported alcohol used, 14% reported binge drinking, and 5% reported heavy drinking.

Within the 12 months preceding interview, 14% of participants indicated some form of substance use. Six percent (6%) reported stimulant use, 14% reported non-injection substance use, and 0.5% reported injection substance use. Of those reporting non-injection substance use, 9% reported that they used non-injection substances before or during sex, and 8% indicated using more than one non-injection substance at a time. Two percent (2%) of HMMP participants admitted to a substance use disorder treatment facility in the 12 months preceding interview.

### Health Literacy

### (See HMMP Tables 10 and 11)

Health literacy describes an individual's ability to decipher, understand, and communicate medically relevant information, with the goal of making informed decisions about one's healthcare. While general and health literacy may overlap for written medical communications, health literacy refers more to one's proficiency in either written or verbal medical communications. The complementary report did not relay much data on health literacy, but questions regarding health literacy may be considered for inclusion in the 2019 Consumer Needs Assessment. Among the 10% of HMMP participants who were not taking ART medications at the time of interview, 10% indicated that they felt healthy and believed they did not need ART medications. Ninety-five percent of HMMP participants taking ART felt sure would be able to take all or most of their medications as directed, and 94% felt sure that ART would have a positive effect on their health.

### Neighborhood and Built Environment

One gap in knowledge identified during this Special Study was the lack neighborhood and built environment data on the Houston HIV community. While partners in HHD monitor new HIV diagnoses by zip code, to date no Consumer Needs Assessment data are gather on neighborhood or other physical environment conditions experienced by PLWH in the Houston area. Questions regarding access to foods that support healthy eating patterns, community crime and violence, environmental conditions such as chemical, light, or noise pollution, and quality of housing may be considered for inclusion in the 2019 Consumer Needs Assessment.

### References

- 1. Healthy People 2020 [Internet]. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, accessed September 27, 2018. Available from: <a href="https://www.healthypeople.gov/">https://www.healthypeople.gov/</a>.
- 2. Sullivan, K. A., Messer, L. C., & Quinlivan, E. B. (2015). Substance Abuse, Violence, and HIV/AIDS (SAVA) Syndemic Effects on Viral Supression Among HIV Positive Women of Color. *AIDS Patient Care and STDS*, 28(S1), S42-s48. doi:https://doi.org/10.1089/apc.2014.0278
- 3. Salas-Wright, C. P., Olate, R., & Vaughn, M. G. (2014). Substance Use, Violence, and HIV Risk Behavior in El Salvador and the United States: Cross-National Profiles of the SAVA Syndemic. Victims & Offenders, 10(1), 95-116. doi:10.1080/15564886.2014.940435
- 4. Stall, R., Mills, T., Williamson, J., Hart, T., Greenwood, G., Paul, J., Pollack, L., Binson, D., Osmond, D. and Catania, J. (2003). Association of Co-Occurring Psychosocial Health Problems and Increased Vulnerability to HIV/AIDS Among Urban Men Who Have Sex With Men. *American Journal of Public Health*, 93(6), pp.939-942.
- 5. Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2017 Source: U.S. Census Bureau, Population Division Release Date: May 2018.
- 6. Healthy People 2020: Social Determinants of Health [Internet]. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion, accessed September 27, 2018. Available from: <a href="https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health">https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health</a>.
- 7. <a href="https://www.nhchc.org/faq/official-definition-homelessness/">https://www.nhchc.org/faq/official-definition-homelessness/</a>
- 8. Westergaard, Ryan P., Anne C. Spaulding, and Timothy P. Flanigan. "HIV among Persons Incarcerated in the US: A Review of Evolving Concepts in Testing, Treatment and Linkage to Community Care." *Current opinion in infectious diseases* 26.1 (2013): 10–16. PMC. Web. 5 Oct. 2018.



### RYAN WHITE PLANNING COUNCIL DATA REQUEST

Summary Report

# **Houston Medical Monitoring Project (HMMP)**

Grants, Research and Special Projects (GRSP)

Bureau of Epidemiology

Disease Prevention and Control Division



The Medical monitoring Project (MMP) for which this report is based was conducted between 2009 and 2014 by the Houston Health Department in collaboration with the Centers for Disease Control and Prevention (CDC) and funded by CDC under the Cooperative agreement number PS09-937. The CDC conceived the project, developed associated materials including data collection instrument and provided oversight on the survey implementation in Houston/Harris County, Texas, and other 22 participating sites in the United States

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August 2018

# Contents

Table	Title	Page
1	Characteristics of People living with HIV in Houston/Harris County, Texas — Medical	
	Monitoring Project, 2009-2014	5
2	Housing and Living Conditions of Persons Living with HIV in Houston/Harris County,	
	Texas- Houston Medical Monitoring Project, 2009 - 2014	7
3	Types of Health Insurance and Health Insurance Combinations used by PLWH in	
	Houston/Harris County, Texas – Houston Medical Monitoring Project, 2009-2014	8
4	Employment Status and Yearly Household Income and Sources – Houston Medical	
	Monitoring Project, 2009-2014	10
5	HIV Test Location and Main Reasons for Testing – Houston Medical Monitoring Project,	
	2009-2014	11
	Emergency department or urgent care clinic use and hospital admission during the	
6	past 12 months before the interview —Houston Medical Monitoring Project, 2009-	
	2014	13
7	Stage of disease, CD4 counts, and viral suppression during the 12 months before the	
	interview—Houston Medical Monitoring Project, 2009-2014	14
8	Functional Health Literacy and English Fluency Level of PLWH in Houston/Harris	
	County, Texas - Houston Medical Monitoring Project, 2009-2014	16
9	Experiences of Stigma and Discrimination Among PLWH in Houston/Harris County,	
	Texas – Houston Medical Monitoring Project, 2009-2014	17
10	Antiretroviral therapy use and side effects and reasons for drug holiday—Houston	
	Medical Monitoring Project, 2009-2014	19
11	Table 11: Beliefs Among Persons Currently Taking Antiretroviral Medications and	
	Support Received — Houston Medical Monitoring Project, 2009-2014	20
12	Reasons for missed antiretroviral therapy dose, among those ever missing a dose —	
	Houston Medical Monitoring Project, 2009-2014	21
13	How Antiretroviral Medications were paid for during the last 12 Months – Houston	
	medical Monitoring Project, 2009-2014	22
14	Sexual Risk Behaviors and Serosorting Practices Among PLWH– Houston Medical	
	Monitoring Project, 2009-2014	24
15	Cigarette Smoking Among PLWH — Houston Medical Monitoring Project, 2009-2014	25
	Alcohol use during the 12 months before the interview—Houston Medical Monitoring	
16	Project, 2009-2014	26
	Estimated Mean Number of Days and Alcoholic Drinks Consumed Per Day During Past	
17	30 Days – Houston Medical Monitoring Project, 2009-2014	27
	Non-injection and Injection Drug Use during the 12 Months Before the Interview —	
18	Houston Medical Monitoring Project, 2009-2014	30
	Gynecological Care and Reproductive Health among Women Living with HIV in	
19	Houston/Harris County, Texas — Houston Medical Monitoring Project, 2009-2014	31
	Birth Control and Contraceptives Use Among Women Living with HIV in Houston/Harris	
20	County, Texas – Houston Medical Monitoring Project, 2009-2014	33

21	Impairments, Activity Limitations and Participation Restrictions among Persons Living with HIV in Houston/Harris County, Texas – Houston Medical Monitoring Project, 2009-2014	35
	HIV Risk Behaviors Associated with PLWH Prior to First Positive Test for HIV – Houston	
22	Medical Monitoring Project, 2009-2014	36
	Prevention Services Received During the 12 months before the Interview—Houston	
23	Medical Monitoring Project, 2009-2014	38
	Classification of Sexual behavior, Sexual Orientation and gender among PLWH –	
24	Houston Medical Monitoring Project, 2009-2014	40
	Anxiety and Depressive symptoms among PLWH – Houston Medical Monitoring	
25	Project, 2009-2014	41
	Depression and Mental Health Status of PLWH in Houston/Harris County, Texas -	
26	Houston Medical Monitoring Project, 2009-2014	42
	Adherence to antiretroviral therapy (ART) instruction, medication dose and schedule	
27	during preceding 72 hours - Houston Medical Monitoring Project, 2009-2014	43
	Clinical services during the 12 months before the interview—Houston Medical	
28	Monitoring Project, 2009-2014	44
	CD4 and Viral Load Monitoring and Prescription of Antiretroviral Therapy, Pneumocystis	
29	Pneumonia Prophylaxis (PCP), and Mycobacterium avium complex (MAC) Prophylaxis	46
	during the 12 Months Before the Interview—Houston Medical Monitoring Project, 2009-	
	2014	
	Met and unmet needs for ancillary services during the 12 months before the	
30	interview—Houston Medical Monitoring Project, 2009-2014	47
	Sexually transmitted disease testing during the 12 months before the interview by	
31	sexual activity—Houston Medical Monitoring Project, 2009-2014	49
	Association between self-reported mental health needs and mental health conditions	
32	documented in the medical charts - Houston Medical Monitoring Project, 2009-2014	50
	Association between employment status of PLWH and Health insurance or coverage	
33	for antiretroviral medications - Houston Medical Monitoring Project, 2009-2014	51
	Technical Notes	53
Figure		
	Distribution of Number of Days Alcoholic Drinks were Consumed (estimated numbers	20
1	during past 30 days)	28
_	Distribution of Number Alcoholic Drinks Consumed on a Typical Day (estimated	20
2	numbers during past 30 days)	29
2	Distribution of Number of Minutes Travel by PLWHA to their Usual Primary HIV Care	45
3	Facility	45

Table 1: Characteristics of People living with HIV in Houston/Harris County, Texas — Medical Monitoring Project, 2009-2014

Characteristics	No. a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>	
Overall	1,180	11,461	100	[10,845-12,077] <sup>β</sup>	
Gender at Birth					
Male	835	8,200	71.5	68.1-74.9	
Female	346	3,268	28.5	25.1-31.9	
Current Gender					
Male	816	8,000	69.8	66.2-73.3	
Female	344	3,232	28.2	24.7-31.6	
Transgender <sup>e</sup>	21	237	2.1	1.2-2.9	
Age Group (Years)					
18-29	120	1,262	11.0	9.1-12.9	
30-39	241	2,402	20.9	18.1-23.8	
40-49	399	3,929	34.3	31.3-37.2	
50+	421	3,876	33.8	31.0-36.6	
Race/Ethnicity					
White (non-Hispanic)	255	2,659	23.2	19.8-26.6	
Black (non-Hispanic)	598	5,667	49.4	46.0-52.8	
Hispanic or Latino <sup>f</sup>	306	2,929	25.5	22.9-28.2	
Other	22	214	1.9	1.1-2.6	
Educational Level					
< High School	257	2,484	21.7	18.8 - 24.6	
High School Diploma or GED	336	3,244	28.3	25.5 - 31.1	
>High School	587	5,733	50.0	45.9 - 54.1	
Sexual Orientation $^g$					
Homosexual, gay, or lesbian	307	3,179	33.6	29.3-37.8	
Heterosexual or straight	537	5,348	56.5	52.0-61.0	
Bisexual	84	811	8.6	6.6-10.5	
Other/unclassified	13	128	1.4	0.6-2.1	
Time since HIV diagnosis (Years)					
< 5	294	3,120	27.3	24.6-30.0	
5-9	264	2,454	21.4	19.0-23.9	
≥ 10	621	5,869	51.3	48.1-54.5	
Country of Birth					
United States	929	9,092	79.3	76.8-81.8	
Mexico	135	1,288	11.2	9.4-13.1	
Other	117	1,089	9.5	7.7-11.3	
Years Living in the United States					
< 5	9	85	3.6	1.2-5.9	
5 – 10	42	408	17.2	12.3-22.0	
11 - 15	45	428	18.0	13.2-22.8	
16 - 20	53	504	21.2	15.9-26.5	
20⁺	103	952	40.1	33.7-46.5	
Poverty Level h					
Above Poverty Level	540	5,355	47.9	44.5-51.3	

At or below poverty level	613	5,834	52.1	48.7-55.5
% of Federal Poverty Level (FPL)				
<100% FPL	613	5834	52.1	48.7-55.5
>=100% - <139% FPL	180	1785	16.0	13.6-18.3
>=139% - <400% FPL	280	2774	24.8	21.7-27.9
>=400% FPL	80	796	7.1	5.3-8.9

Abbreviations: CI, confidence interval; GED, general educational development;

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Excluded are values with a coefficient of variation ≥30%, "don't know" responses, and skipped (missing) responses.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

<sup>&</sup>lt;sup>e</sup> Patients were classified as transgender if sex at birth and gender reported by the patient were different, or if the patient chose transgender in response to the question about self-identified gender.

<sup>&</sup>lt;sup>f</sup>Hispanics or Latinos might be of any race. Patients are classified in only 1 race/ethnicity category.

<sup>&</sup>lt;sup>g</sup> Self-identified sexual orientation.

<sup>&</sup>lt;sup>h</sup> Level of Poverty based on yearly income and number of household dependents; Poverty guidelines as defined by the Department of Health and Human Services was used.

<sup>1%</sup> of FPL categories based on midpoint of yearly income and HH Size.

<sup>&</sup>lt;sup>β</sup> Confident interval based on weighted numbers.

Table 2: Housing and Living Conditions of Persons Living with HIV in Houston/Harris County, Texas - Houston Medical Monitoring Project, 2009 - 2014

Characteristics	No. a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Incarcerated >24 hours <sup>e</sup>				
No	1,103	10,731	93.6	92.1-95.0
Yes	78	738	6.4	5.0-7.9
Homelessness Status				
Not Homeless	1,080	10,488	91.4	89.7-93.2
Homeless	101	981	8.6	6.8-10.3
Lived on the Street				
No	1,126	10,905	95.1	93.6-96.6
Yes	55	563	4.9	3.4-6.4
Lived in a Shelter				
No	11.2	10,983	95.8	94.5-97.0
Yes	49	486	4.2	3.0-5.5
Lived in a Single Room				
Occupancy Hotel				
No	1,132	11,020	96.1	94.9-97.2
Yes	49	449	3.9	2.8-5.1
Lived in a Car				
No	1,152	11,182	97.5	96.5-98.4
Yes	29	287	2.5	1.6-3.5

Abbreviation: CI, confidence interval.

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation ≥30%, "don't know" responses, and skipped (missing) responses.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

<sup>&</sup>lt;sup>e</sup> In the past 12 months, arrested and put in jail detention or prison

Table 3: Types of Health Insurance and Health Insurance Combinations used by PLWH in Houston/Harris County, Texas – Houston Medical Monitoring Project 2009-2014

Characteristics	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Any Kind of Health Insurance in the past 12				
months				
No	389	3,983	34.8	31.7-37.8
Yes	791	7,478	65.2	62.2-68.3
Continuous Insurance in the past 12 months				
(excluding Ryan White)				
Continuous insurance/coverage	687	6,457	56.4	53.2-59.6
Lapsed Insurance/coverage	65	632	5.5	4.1-7.0
No insurance/coverage	426	4,354	38.0	34.9-41.2
Health Insurance Type				
Private Only	191	1,869	16.3	13.5-19.1
Any Public	560	5,208	45.4	42.4-48.5
No Insurance/coverage	426	4,354	38.0	34.9-41.1
Unknown/unspecified insurance	*	30	0.3	0.0-0.6
Ryan White				
Yes	273	2,494	21.8	19.2-24.4
No	565	5,561	48.6	45.2-52.0
Uninsured	91	954	8.3	6.6-10.1
Uninsured (RW/ADAP only)	249	2,429	21.2	18.8-23.7
Medicaid				
Yes	312	3,001	26.2	23.4-29.0
No	529	5,085	44.3	40.7-47.9
Uninsured	91	954	8.3	6.6-10.0
Uninsured (RW/ADAP only)	249	2,429	21.2	18.7-23.7
Medicare				
Yes	261	2,444	21.3	18.9-23.7
No	580	5,642	49.2	46.3-52.0
Uninsured	91	954	8.3	6.6-10.0
Uninsured (RW/ADAP only)	249	2,429	21.2	18.7-23.7
Tricare or CHAMPUS				
Yes	*	*	01	0.0-0.2
No	840	8,079	70.4	67.7-73.2
Uninsured	91	954	8.3	6.6-10.0
Uninsured (RW/ADAP only)	249	2,429	21.2	18.7-23.7
Veterans Administration				
Yes				
No	841	8,086	70.5	67.8-73.3
Uninsured	91	954	8.3	6.6-10.0
Uninsured (RW/ADAP only)	249	2,429	21.2	18.7-23.7

Private Health Insurance				
Yes	252	2,528	22.0	18.6-25.4
No	589	5,558	48.5	45.3-51.7
Uninsured	91	954	8.3	6.6-10.0
Uninsured (RW/ADAP only)	249	2,429	21.2	18.7-23.7
Public Health Insurance				
Yes	186	1,762	15.4	12.9-17.8
No	655	6,324	55.1	51.8-58.5
Uninsured	91	954	8.3	6.6-10.0
Uninsured (RW/ADAP only)	249	2,429	21.2	18.7-23.7
Other unspecified Health Insurance				
Yes	18	171	1.5	0.8-2.2
No	823	7,915	69.0	66.3-71.7
Uninsured	91	954	8.3	6.6-10.0
Uninsured (RW/ADAP only)	249	2429	21.2	18.7-23.7
No Insurance (anytime past 12 months)				
No	721	6,804	91.2	89.0-93.4
yes	68	656	8.8	6.6-11.0
Health Insurance Combinations				
Private insurance only	169	1,701	14.8	12.3-17.4
Medicaid only	144	1,428	12.4	10.4-14.5
Medicare only	56	534	4.7	3.4-5.9
Medicaid + Medicare	72	685	6.0	4.5-7.5
Ryan White/ADAP only	249	2,429	21.2	18.7-23.7
Any Veteran Administration	*	7	0.1	0.0-0.2
Other public	72	693	6.0	4.5-7.5
Private + Ryan White/ADAP	37	341	3.0	2.0-4.0
Medicaid + Ryan White/ADAP	43	400	3.5	2.4-4.6
Medicare + Ryan White/ADAP	63	550	4.8	3.6-6.0
Medicaid + Medicare + Ryan White/ADAP	21	189	1.6	0.9-2.4
Other public + Ryan White/ADAP	77	717	6.3	4.8-7.7
Uninsured	91	954	8.3	6.6-10.0
Other	86	841	7.3	5.3-9.4

Abbreviations: CI, confidence interval; PLWH, People living with HIV; ADAP, AIDS Drug Assistance Program; CHAMPUS, Civilian Health and Medical Program of the Uniformed Services; SSI, Supplemental Security Income; SSDI, Social Security Disability Insurance.

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation  $\geq$ 30%, "don't know" responses, and skipped (missing) responses.

<sup>\*</sup> Number suppressed because it is below threshold.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

Table 4: Employment Status and Yearly Household Income and Sources – Houston Medical Monitoring Project, 2009-2014

Characteristics	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Current Employment Status				
Employed for wages	185	1,577	41.4	36.6-46.1
Self-employed	32	262	6.9	4.6-9.2
Out of work for more than 1 year	50	399	10.5	7.7-13.3
Out of work for less than 1 year	34	284	7.5	5.0-9.9
Homemaker	8	60	1.5	0.5-2.6
Student	18	153	4.0	2.1-5.9
Retired	20	164	4.3	2.5-6.1
Unable to work (Disability)	110	916	24.0	20.0-28.0
Combined yearly household income (US\$) e				
\$0 to \$19,999	833	8,072	72.1	68.9-75.4
\$20,000 to \$39,999	199	1,957	17.5	15.3-19.7
\$40,000 to \$74,999	75	727	6.5	4.7-8.3
\$75,000 and more	46	433	3.9	2.7-5.1
Source of Money				
Salary or wages	465	4,550	39.8	36.7-42.8
Savings or investments	23	250	2.2	1.3-3.1
Pension or retirement fund	12	126	1.1	0.4-1.8
Supplemental Security Income (SSI) or Social				
Security Disability Insurance (SSDI)	441	4,225	36.9	34.1-39.8
Other public assistance (welfare)	20	202	1.8	0.9-2.6
Family, partner, or friend(s)	171	1,672	14.6	12.4-16.9
No income or financial support	21	203	1.8	1.0-2.6
Other	21	211	1.8	1.0-2.7
Any Disability				
Yes	211	1,728	45.5	40.8-50.1
No	244	2,072	54.5	49.9-59.2

Abbreviations: CI, confidence interval; SSI, Supplemental Security Income; SSDI, Social Security Disability Insurance.

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

Excluded are values with a coefficient of variation  $\geq$ 30%, "don't know" responses, and skipped (missing) responses.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

<sup>&</sup>lt;sup>e</sup> Income from all sources, before taxes, in the last calendar year.

Table 5: HIV Test Location and Main Reasons for Testing – Houston Medical Monitoring Project, 2009-2014

Characteristics	No.ª	Wt. No. b	Percentage <sup>c</sup>	95% CI <sup>d</sup>
Test Location				
Private doctor's office	52	553	18.5	13.6-23.3
Primary care clinic or community health center	55	590	19.7	15.0-24.4
Health department	28	293	9.8	5.9-13.7
OBGYN or family planning clinic	7	62	2.1	0.2-3.9
Emergency Room	19	194	6.5	3.6-9.3
Inpatient Hospital	52	534	17.8	13.7-22.0
Mobile test site	11	127	4.2	1.6-6.9
Correctional facility	11	125	4.2	1.7-6.6
Other	50	518	17.3	12.5-22.1
Main Reason for Testing				
Exposure through sexual contact	55	607	20.2	15.4-25.0
Part of STD screening or due to STD diagnosis	23	234	7.8	4.6-10.9
Due to other illness (not STD)	92	922	30.7	25.2-36.1
Due to pregnancy	11	117	3.9	1.1-6.7
Personal initiative to routinely test	24	249	8.3	4.9-11.6
Provider recommendation as part of routine care	19	182	6.1	3.4-8.7
Requirement (military, court order, or insurance)	9	115	3.8	1.3-6.3
Other	53	580	19.3	14.4-24.2
Partner notification after testing HIV positive				
Yes	182	1,894	64.7	59.0-70.5
No	96	1,031	35.3	29.5-41.0
Response to offering to tell partner				
I asked them not to tell any of my partners	28	308	17.1	11.0-23.3
I asked them to tell only some of my partners	19	183	10.2	5.7-14.7
I asked them to tell all my partners	103	1,096	60.9	54.0-67.9
I told them that I didn't have any partners	22	212	11.8	7.3-16.3
Have Place for Usual HIV Care				
Yes	1,166	11,385	98.6	97.9-99.3
No	15	163	1.4	0.7-2.1
Satisfied with medical care received				
Strongly agree	216	1,794	46.8	42.0-51.7
Agree	208	1,755	45.8	41.0-50.6
Uncertain	17	147	3.8	2.0-5.7
Disagree	10	81	2.1	0.8-3.4
Strongly disagree	7	52	1.4	0.4-2.4
Dissatisfied with medical care received				
Strongly agree	43	351	9.1	6.6-11.8
Agree	96	793	20.8	17.1-24.4
Uncertain	22	194	5.1	3.0-7.2
Disagree	164	1,385	36.2	31.6-40.8
Strongly disagree	132	1,098	28.7	24.5-32.9

Abbreviations: CI, confidence interval;

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Excluded are values with a coefficient of variation  $\geq$ 30%, "don't know" responses, and skipped (missing) responses.

<sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

<sup>&</sup>lt;sup>e</sup> Income from all sources, before taxes, in the last calendar year.

Table 6: Emergency Department or Urgent Care Clinic Use and Hospital Admission During the Past 12 months Before the Interview—Houston Medical Monitoring Project, 2009-2014

Characteristics	No.a	Wt. No. b	Percentage <sup>c</sup>	95% CI <sup>d</sup>
Number of visits to emergency				
department or urgent care clinic				
0	1,055	10,193	89.0	87.0-91.0
1	81	831	7.3	5.6-8.9
2-4	36	348	3.0	2.0-4.0
≥5	8	84	0.7	0.2-1.3
Number of hospital admissions				
0	1110	10,740	93.8	92.2-95.3
1	46	486	4.2	3.0-5.5
2-4	18	182	1.6	0.8-2.4
≥5	5	45	0.4	0.0-0.8
Admitted to inpatient mental health				
facility				
Yes	49	490	4.3	3.1-5.5
No	1132	10,979	95.7	94.5-96.9
Admitted to inpatient drug or alcohol				
treatment facility				
Yes	28	242	2.1	1.3-2.9
No	1,153	11,227	97.9	97.1-98.7

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

Table 7: Stage of Disease, CD4 counts, and Viral Suppression During the 12 Months Before the Interview—Houston Medical Monitoring Project, 2009-2014

Characteristics	No.ª	Wt. No. b	Percentage <sup>c</sup>	95% CI <sup>d</sup>
Most advanced stage of disease (ever)			_	
Stage 1	849	8,129	71.2	68.5-73.8
Stage 2	217	2,145	18.8	16.4-21.1
Stage 3 (AIDS)	111	1,149	10.1	8.0-12.1
Geometric mean CD4 count (cells/μL)				
0–199	127	1,333	12.9	10.0-15.3
200–349	188	1,859	18.1	15.3-20.8
350–499	214	2,043	19.8	17.4-22.3
≥500	540	5,065	49.2	45.9-52.4
Lowest CD4 Count (cells/µL)				
(1)0-199	439	4,180	37.1	34.0-40.1
(2)200-349	282	2,829	25.1	22.2-28.0
(3)350-499	208	1,966	17.4	15.3-19.6
(4) =>500	236	2,306	20.4	17.5-23.4
First CD4 count (cells/μL)				
(1)0-49	136	1,341	19.9	16.5-23.3
(2)50-99	56	527	7.8	5.5-10.1
(3)100-199	65	660	9.8	7.3-12.2
(4)200-349	123	1,298	19.3	16.2-22.3
(5)350-499	101	1,026	15.2	12.5-18.0
(6)500 or more	196	1,886	28.0	24.5-31.5
Most recent viral load test				
(1)Below the level of detection, undetectable	601	4,844	84.4	81.6-87.2
(2)Detectable but less than 5,000 viral	79	652	11.4	8.9-13.8
copies/ml	22	194	3.4	2.0-4.8
(3)5,000 to 100,000 viral copies/ml	5	47	0.8	0.1-1.6
(4)Greater than 100,000 viral copies/ml				
Most recent CD4 count (cells/μL)				
(1)0-49	5	35	0.8	0.1-1.5
(2)50-99	6	50	1.1	0.2-2.0
(3)100-199	27	227	5.0	316.8
(4)200-349	70	568	12.4	9.8-15.1
(5)350-499	114	922	20.2	16.8-23.5
(6)500 or more	342	2,771	60.6	56.3-64.9
Viral suppression				
Most recent viral load documented				
undetectable or <200 copies/mL	849	7,975	80.2	77.7-82.7
Most recent viral load documented detectable,				
≥200 copies/mL, or missing/unknown	195	1,970	19.8	17.3-22.3

Durable viral suppression				
All viral load measurements documented	736	6,805	68.9	65.9-71.9
undetectable or <200 copies/mL				
Any viral load ≥200 copies/mL or	308	3,090	31.1	28.1-34.1
missing/unknown				
Clinical AIDS: Any OI Ever				
Yes	180	1,834	24.0	19.3-28.7
No	543	5,805	76.0	71.3-80.7
Clinical AIDS: Any OI during 2-year				
Surveillance	54	471	12.3	9.1-15.5
Yes	404	3,358	87.7	84.5-90.9
No				
At least 1 viral load test every 6 months				
Did not have at least 1 viral load test every 6	497	4,946	43.5	40.0-47.0
months				
Did have at least 1 viral load test every 6	673	6,424	56.5	53.0-60.0
months				

Abbreviations: CI, confidence interval; P12M, Past 12 months.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

Table 8: Functional Health Literacy and English Fluency Level of PLWH in Houston/Harris County, Texas – Houston Medical Monitoring Project, 2009-2014

Characteristics	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
How Well do you Speak English?				
Very well	326	2,757	72.0	67.7-76.2
Well	89	727	19.0	15.3-22.7
Not Well	23	190	5.0	3.0-6.9
Not at all	20	155	4.0	2.3-5.8
Do you speak a language other than				
English at home?				
Yes	88	747	19.5	15.8-23.2
No	370	3,082	80.5	76.8-84.2
How often do you have problems learning				
about your medical condition because of				
difficulty understanding written				
information?				
Always	31	245	4.5	2.9-6.2
Often	19	150	2.8	1.5-4.0
Sometimes	90	729	13.5	10.9-16.2
Occasionally	61	504	9.4	7.0-11.7
Never	479	3,761	69.8	66.2-73.4
How confident are you filling out medical				
forms by yourself?				
Extremely	360	2,855	53.0	49.0-57.0
Quite a bit	124	1,002	18.6	15.5-21.6
Somewhat	89	685	12.7	10.2-15.3
A little bit	45	350	6.5	4.6-8.4
Not at all	62	495	9.2	7.0-11.4
How often do you have someone help you				
read hospital materials?				
Never	450	3,531	65.6	62.1-69.2
Occasionally	86	690	12.8	10.3-15.4
Sometimes	78	631	11.7	9.2-14.2
Often	26	211	3.9	2.4-5.4
Always	39	316	5.9	4.1-7.7

Abbreviations: CI, confidence interval; PLWH, People living with HIV.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

Table 9: Experiences of Stigma and Discrimination Among PLWH in Houston/Harris County, Texas – Houston Medical Monitoring Project, 2009-2014

Characteristics	No.ª	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
It is difficult to tell people about my HIV infection				
Disagree	237	1,887	35.5	31.9-39.1
Agree	436	3,435	64.5	60.9-68.1
Being HIV positive makes me feel dirty				
Disagree	490	3845	72.2	68.8-75.8
Agree	183	1478	27.8	24.2-31.4
I feel guilty that I am HIV positive				
Disagree	429	3377	63.7	60.0-67.3
Agree	241	1928	36.3	32.7-40.0
I am ashamed that I am HIV positive				
Disagree	424	3361	63.6	59.9-67.4
Agree	245	1921	36.4	32.6-40.1
I sometimes feel worthless because I am HIV				
positive				
Disagree	504	3998	74.9	71.6-78.1
Agree	171	1343	25.1	21.9-28.4
I hide my HIV status from others				
Disagree	240	1886	35.6	31.7-39.5
Agree	430	3415	64.4	60.5-68.3
Exhibited hostility or a lack of respect toward you?				
No	745	6070	85.1	82.5-87.6
Yes	136	1067	14.9	12.4-17.5
Given you less attention than other patients?				
No	790	6416	90.2	88.2-92.1
Yes	88	698	9.8	7.9-11.8
Refused you service?				
No	825	6668	93.4	91.8-95.1
Yes	56	469	6.6	4.9-8.2
Did the discrimination occur because of your HIV				
infection?				
No	37	296	24.4	17.0-31.7
Yes	117	919	75.6	68.3-83.0

Abbreviations: CI, confidence interval; PLWH, People living with HIV.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted

<sup>&</sup>lt;sup>c</sup> Percentages are weighted

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

Table 9: Experiences of Stigma and Discrimination Among PLWH in Houston/Harris County, Texas – Houston Medical Monitoring Project, 2009-2014 (Cont'd)

Characteristics	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Did the discrimination occur because of your				
gender?				
No	134	1057	86.8	81.1-92.4
Yes	21	161	13.2	7.6-18.9
Did the discrimination occur because of your				
sexual orientation and practices?				
No	106	821	67.1	59.2-74.9
Yes	49	403	32.9	25.1-40.8
Did the discrimination occur because of your				
race or ethnicity?				
No	124	981	80.4	74.0-86.8
Yes	31	239	19.6	13.2-26.0
Did the discrimination occur because of your				
drug injecting habit?				
No	153	1212	96.7	94.1-99.4
Yes	6	41	3.3	0.6-5.9

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted

<sup>&</sup>lt;sup>c</sup> Percentages are weighted

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

Table 10: Antiretroviral Therapy Use and Side Effects and Reasons for Drug Holiday—Houston Medical Monitoring Project, 2009-2014

Characteristics	No.a	Wt. No. <sup>b</sup>	% <sup>c</sup>	95% CI <sup>d</sup>
<b>Currently Receiving Antiretroviral Treatment</b>				
No	103	1,141	10.0	8.0-11.9
Yes	1,073	10,274	90.0	88.1-92.0
Reasons not taking antiretroviral medicines				
Doctor advised to delay treatment	12	157	32.6	17.9-47.2
Participant felt healthy and believed he/she didn't				
need medications	*	48	9.8	0.0-19.8
Due to side effects of medication	6	100	20.6	3.3-37.9
Felt depressed or overwhelmed	*	8	1.6	0.0-4.9
Money or insurance issues	*	45	4.7	0.0-18.5
Other	10	127	8.1	10.2-42.1
During the past 12 months, have you taken				
antiretroviral medicines				
No	27	366	5.2	2.9-7.4
Yes	826	6,709	94.8	92.6-97.1
During the past 30 days, how troubled were you				
by side effects from your ART medicines				
Never	802	7,480	72.9	69.7-76.1
Rarely	143	1,563	15.2	12.8-17.7
About half the time	55	522	5.1	3.8-6.4
Most of the time	38	398	3.9	2.5-5.3
Always	29	255	2.5	1.6-3.4
Been on medications less than 30 days	5	49	0.5	0.1-0.9
Ever taken a drug holiday				
Yes	83	881	8.5	6.6-10.3
No	1000	9,510	91.5	89.7-93.4
Main reason for a drug holiday				
Medicine has side effects or makes me feel bad	12	137	19.7	8.9-30.4
Got tired of taking medicines or needed a break	16	154	22.1	12.0-32.3
Was using drugs or alcohol	*	23	3.3	0.0-7.0
Was on vacation	11	101	14.5	6.4-22.6
Felt good	*	19	2.8	0.0-6.8
Other	28	261	37.6	26.5-48.8

<sup>\*</sup>Number suppressed because it is below threshold.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

 $<sup>^{\</sup>it d}$  Weighted Confident Intervals in percentages.

Table 11: Beliefs Among Persons Currently Taking Antiretroviral Medications and Support Received — Houston Medical Monitoring Project, 2009-2014

Characteristics	No.ª	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
How sure are you that you will be able to take all or				
most of your meds as directed?				
Not at all sure	8	89	0.9	0.2-1.5
Somewhat sure	41	394	3.8	2.6-5.1
Very sure	400	3,692	36.0	32.7-39.2
Extremely sure	623	6,090	59.3	56.1-62.5
How sure are you that your medication will have a				
positive effect on your health?				
Not at all sure	14	129	1.3	0.6-1.9
Somewhat sure	58	525	5.1	3.7-6.6
Very sure	386	3,626	35.5	32.3-38.6
Extremely sure	609	5,942	58.1	55.0-61.2
How sure if you do not take your meds exactly as				
instructed, the HIV will become resistant to				
medications?				
Not at all sure	50	449	4.4	3.1-5.7
Somewhat sure	110	1,058	10.4	8.2-12.6
Very sure	375	3,500	34.3	31.4-37.2
Extremely sure	530	5,195	50.9	47.7-54.1
How satisfied are you with the overall support you				
get from friends and family members?				
Very dissatisfied	102	937	9.4	7.5-11.3
Somewhat dissatisfied	44	407	4.1	2.9-5.3
Somewhat satisfied	213	2,020	20.3	17.6-22.9
Very satisfied	680	6,597	66.2	63.0-69.4
To what extent do friends or family members help				
you remember to take your medications?				
Not at all	603	5,632	55.4	52.1-58.8
A little	101	1,007	9.9	7.9-11.9
Somewhat	125	1,219	12.0	9.9-14.1
A lot	234	2,305	22.7	20.0-25.3

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

Table 12: Reasons for Missing Antiretroviral Therapy Dose, among those Ever Missing a Dose—Houston Medical Monitoring Project, 2009-2014

Characteristics	No.ª	Wt. No. b	<b>%</b> <sup>c</sup>	95% CI <sup>d</sup>
During the past 12 months, did your doctor or other clinic staff ask you whether you missed taking any doses of				
your antiretroviral medicines or if you had difficulty				
taking your antiretroviral medicines				
No	79	660	18.4	14.6-22.0
Yes	352	2,933	81.6	78.0-85.3
The last time you missed taking your antiretroviral				
medicines, what were the reasons? e				
Problem with prescription or refill	86	697	23.8	19.4-28.3
Felt sick or tired	33	259	8.9	5.9-11.8
Change in daily routine including travel	38	297	10.2	7.1-13.2
Due to side effects of medications	5	41	1.4	0.9-2.6
Felt depressed or overwhelmed	7	53	1.8	0.5-3.2
Drinking or using drugs	10	74	2.5	1.0-4.1
Money or insurance issues	*	5	0.2	0.0-0.5
Had too many pills to take	*	9	0.3	0.0-0.9
Forgot to take them	157	1,247	42.6	37.5-47.7
Other	40	310	11.2	7.9-14.5

<sup>\*</sup>Number suppressed because it is below threshold.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

<sup>&</sup>lt;sup>e</sup> Only those that reported missing taking their antiretroviral medicines. Responses are independent.

Table 13: How Antiretroviral Medications were Paid for During the last 12 Months – Houston medical Monitoring Project, 2009-2014

Payment Source	No.ª	Wt. No. <sup>b</sup>	% <sup>c</sup>	95% CI <sup>d</sup>
Private health care coverage				
No	527	4,148	77.8	74.7-81.0
Yes	108	867	16.3	13.6-18.9
Never took ARV	32	261	4.9	3.2-6.5
Did not take ARV in P12M	6	54	1.0	0.2-1.9
Medicaid				
No	505	4,026	75.5	72.3-78.8
Yes	130	989	18.6	15.6-21.5
Never took ARV	32	261	4.9	3.2-6.5
Did not take ARV in P12M	6	54	1.0	0.2-1.9
Medicare				
No	540	4,289	80.5	77.5-83.4
Yes	95	726	13.6	11.1-16.1
Never took ARV	32	261	4.9	3.2-6.5
Did not take ARV in P12M	6	54	1.0	0.2-1.9
ADAP				
No	322	2,491	46.7	43.1-50.4
Yes	313	2,524	47.4	43.6-51.1
Never took ARV	32	261	4.9	3.2-6.5
Did not take ARV in P12M	6	54	1.0	0.2-1.9
An AIDS service organization				
No	633	4,999	93.8	91.9-95.7
Yes	*	16	0.3	0.0-0.7
Never took ARV	32	261	4.9	3.2-6.5
Did not take ARV in P12M	6	54	1.0	0.2-1.9
At a public clinic				
No	619	4,880	91.6	89.3-93.8
Yes	16	135	2.5	1.3-3.8
Never took ARV	32	261	4.9	3.2-6.5
Did not take ARV in P12M	6	54	1.0	0.2-1.9
Clinical trial/drug study				
No	628	4,963	93.1	91.2-95.1
Yes	7	52	1.0	0.2-1.7
Never took ARV	32	261	4.9	3.2-6.5
Did not take ARV in P12M	6	54	1.0	0.2-1.9
Paid out of pocket				
No	512	4,035	75.7	72.0-79.4
Yes	123	980	18.4	15.2-21.6
Never took ARV	32	261	4.9	3.2-6.5
Did not take ARV in P12M	6	54	1.0	0.2-1.9
Other, Specify				
No	590	4,676	87.7	85.3-90.2
Yes	45	339	6.4	4.6-8.1
Never took ARV	32	261	4.9	3.2-6.5
Did not take ARV in P12M	6	54	1.0	0.2-1.9

Abbreviations: CI, confidence interval; ARV, Antiretroviral; P12M, Past 12 months.

- \*Number suppressed because it is below threshold.
- <sup>a</sup> Numbers are unweighted.
- <sup>b</sup> Numbers are weighted.
- <sup>c</sup> Percentages are weighted.
- <sup>d</sup> Weighted Confident Intervals in percentages.

Table 14: Sexual Risk Behaviors and Serosorting Practices Among PLWH– Houston Medical Monitoring Project, 2009-2014

Statement	No.ª	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Have sex in exchange for things like food, shelter,				
transportation, money or drugs?				
No	140	1,180	96.8	94.0-99.6
Yes	5	39	3.2	0.4-6.0
If my partner tells me he or she is HIV positive, I am				
more likely to have unprotected sex with him or her				
Strongly disagree	410	3,229	60.9	57.2-64.6
Somewhat disagree	95	745	14.1	11.4-16.7
Neutral/no opinion	50	416	7.8	5.8-9.9
Somewhat agree	61	479	9.0	6.8-11.2
Strongly agree	55	431	8.1	6.1-10.2
If my partner tells me he or she is HIV positive, we				
don't have to worry about using condoms				
Strongly disagree	467	3,688	64.4	66.0-72.8
Somewhat disagree	89	701	13.2	10.7-15.7
Neutral/no opinion	33	273	5.1	3.4-6.9
Somewhat agree	43	332	6.3	4.4-8.1
Strongly agree	40	320	6.0	4.1-7.9
If I have an undetectable HIV viral load, I am more				
likely to have unprotected sex				
Strongly disagree	455	3,579	67.4	63.8-71.0
Somewhat disagree	93	736	13.9	11.3-16.5
Neutral/no opinion	30	250	4.7	3.0-6.4
Somewhat agree	43	345	6.5	4.5-8.5
Strongly agree	50	400	7.5	5.4-9.6
Having an undetectable HIV viral load means I can				
worry less about having to use condoms				
Strongly disagree	509	4,030	76.1	72.8-79.4
Somewhat disagree	85	655	12.4	9.9-14.9
Neutral/no opinion	27	221	4.2	2.5-5.8
Somewhat agree	24	199	3.8	2.2-5.3
Strongly agree	24	190	3.6	2.2-5.0

Abbreviations: CI, confidence interval; PLWH, People living with HIV.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

Table 15. Cigarette Smoking Among PLWH — Houston Medical Monitoring Project, 2009-2014

Characteristics	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Smoked ≥100 cigarettes (lifetime)				
No	591	5,791	50.7	47.6-53.7
Yes	586	5,634	49.3	46.3-52.4
Current smoker				
No	801	7,785	68.1	65.5-70.8
Yes	376	3,639	31.9	29.2-34.5
Smoking status				
Never smoked	591	5,791	50.7	47.6-53.7
Former smoker	210	1,995	17.5	15.1-19.8
Current smoker	376	3,639	31.9	29.2-34.5
Frequency of current cigarette smoking				
Daily	300	2,931	25.7	23.1-28.2
Weekly	36	339	3.0	1.9-4.0
Monthly	10	91	0.8	0.3-1.3
Less than Monthly	30	279	2.4	1.6-3.3
Never	801	7,785	68.1	65.5-70.8

<sup>\*</sup>Number suppressed because it is below threshold.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted

<sup>&</sup>lt;sup>c</sup> Percentages are weighted

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages

Table 16: Alcohol Use During the 12 months Before the Interview—Houston Medical Monitoring Project, 2009-2014

Characteristics	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Any alcohol Use <sup>e</sup>				
No	500	4,806	42.0	38.7-45.4
Yes	678	6,627	58.0	54.6-61.3
Alcohol use before or during sex in P12M				
No	468	4,535	66.0	62.3-69.8
Yes	234	2,332	34.0	30.2-37.7
Frequency of alcohol use				
Daily	60	558	4.9	3.6-6.2
Weekly	189	1,894	16.6	14.3-18.8
Monthly	140	1,332	11.7	9.8-13.6
Less than Monthly	289	2,843	24.9	22.0-27.7
Never	500	4,806	42.0	38.7-45.4
Alcohol use f (during past 30 days)				
No	622	5,958	52.2	48.9-55.4
Yes	554	5,464	47.8	44.6-51.1
Binge drinking f (during past 30 days)				
No	1,011	9,844	86.3	84.4-88.3
Yes	163	1,558	13.7	11.7-15.6
Heavy drinking <sup>g</sup> (during past 30 days)				
No	1,120	10,884	95.3	94.1-96.5
Yes	56	538	4.7	3.5-5.9

Abbreviation: CI, confidence interval; P12M, Past 12 months.

<sup>\*</sup>Number suppressed because it is below threshold.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted

<sup>&</sup>lt;sup>c</sup> Percentages are weighted

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages

<sup>&</sup>lt;sup>e</sup> Persons who drank at least 1 alcoholic beverage during the 12 months preceding the interview. Alcoholic beverage was defined as a 12-ounce beer, 5-ounce glass of wine, or 1.5-ounce shot of liquor.

<sup>&</sup>lt;sup>f</sup> Patients who drank, on average, >2 alcoholic beverages (>1 for women) per day during the 30 days preceding the interview.

<sup>&</sup>lt;sup>g</sup> Patients who drank ≥5 alcoholic beverages at one sitting (≥4 for women) during the 30 days preceding the interview.

Table 17: Estimated Mean Number of Days and Alcoholic Drinks Consumed Per Day During Past 30 Days – Houston Medical Monitoring Project, 2009-2014

Characteristics <sup>a</sup>	No.b	Wt. No. <sup>c</sup>	Mean	95% CI <sup>d</sup>	Median	Range
Number of days' alcoholic						
drinks were consumed	554	5,464	6.1	5.6-6.7	2.7	1-30
Number of alcoholic drinks						
consumed on a typical day	547	5,417	2.8	2.6-3.0	1.6	1-30
Number of days 4 or more						
alcoholic drinks were	23	197	2.5	1.4-3.7	1.0	1-9
consumed in one sitting						
Number of days 5 or more						
alcoholic drinks were	140	1361	4.4	3.5-5.3	1.8	1-30
consumed in one sitting						

<sup>&</sup>lt;sup>a</sup> Among patients who drank alcohol in the past 30 days.

<sup>&</sup>lt;sup>b</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>c</sup> Numbers are weighted

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages

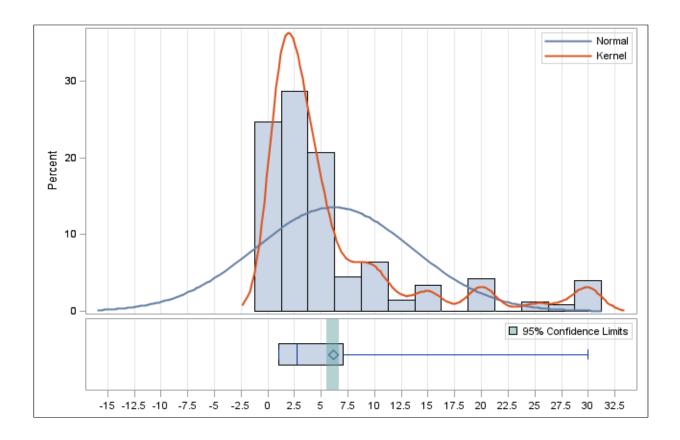


Figure 1: Distribution of Number of Days Alcoholic Drinks were Consumed (estimated numbers during past 30 days)

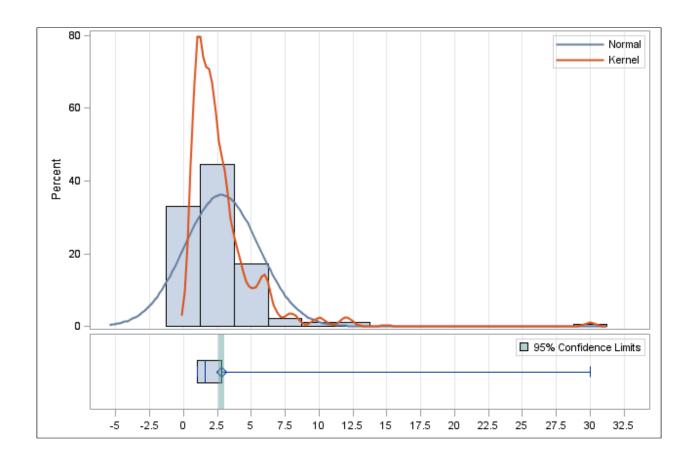


Figure 2: Distribution of Number Alcoholic Drinks Consumed on a Typical Day (estimated numbers during past 30 days)

Table 18: Non-injection and Injection Drug Use during the 12 Months Before the Interview — Houston Medical Monitoring Project, 2009-2014

Characteristics	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Any injection or non-injection drug use in past 12 months				
No	1,002	9,775	85.6	83.4-87.7
Yes	175	1,650	14.4	12.3-16.6
Any stimulant use in past 12 months				
No	1,113	10,774	94.3	92.9-95.7
Yes	64	650	5.7	4.3-7.1
Use of any non-injection drugs				
No	1,004	9,790	85.6	83.5-87.8
Yes	174	1,643	14.4	12.2-16.5
Use of any non-injection drugs before or during sex				
No	638	6,265	91.2	89.0-93.5
Yes	64	601	8.8	6.5-11.0
Poly non-injection drug use				
No	1,093	10,564	92.4	90.7-94.1
Yes	85	869	7.6	5.9-9.3
Ever injected any drugs				
No	437	3,656	95.7	93.9-97.4
Yes	20	166	4.3	2.6 -6 .1
Injected Drugs in the past 12 months				
No	1,170	11,369	99.5	99.1-99.9
Yes	7	56	0.5	0.1-0.9
Use of any Injection drugs before or during sex				
No	698	6,829	99.5	98.9-100.0
Yes	*	36	0.5	0.0-1.1
Poly Injection drug use				
No	1,174	11,403	99.8	99.6-100.0
Yes	*	22	0.2	00.4

Abbreviation: CI, confidence interval; P12M, Past 12 months.

<sup>\*</sup>Number suppressed because it is below threshold.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted

<sup>&</sup>lt;sup>c</sup> Percentages are weighted

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages

Table 19: Gynecological Care and Reproductive Health among Women Living with HIV in Houston/Harris County, Texas — Houston Medical Monitoring Project, 2009-2014

Characteristics	No.ª	Wt. No. <sup>b</sup>	% <sup>c</sup>	95% CI <sup>d</sup>
Received HIV care at a gynecological clinic				
No	229	2,145	66.4	61.1-71.7
Yes	115	1,085	33.6	28.3-38.9
Papanicolaou (Pap Smear) test				
No	72	726	26.7	20.6-32.8
Yes	201	1,995	73.3	67.2-79.4
Received pelvic examination				
No	77	779	28.5	22.3-34.8
Yes	197	1,951	71.5	62.2-77.7
Result of Pap Smear Test				
Normal	127	962	88.5	83.1-93.8
Abnormal	17	125	11.5	6.2-16.9
Received follow-up exam or tests for abnormal result				
No	*	13	10.6	0.0-24.6
Yes	15	112	89.4	75.4-100.0
Number of times pregnant after positive HIV diagnosis				
0	104	818	48.6	39.9-57.3
1	54	522	31.0	23.9-38.2
2	21	190	11.3	6.2-16.4
3+	17	153	9.1	4.9-13.3
For your 1st pregnancy since testing positive for HIV,				
were you trying to get pregnant				
No	25	202	70.6	55.0-86.1
Yes	12	85	29.4	13.9-45.0
1 <sup>st</sup> Pregnancy outcome after testing positive for HIV				
Currently pregnant	*	7	2.6	0.0-7.6
Live birth	29	229	79.8	65.3-94.3
Miscarriage	6	44	15.4	2.1-28.8
Abortion	*	6	2.2	0.0-6.5
Child from 1st pregnancy diagnosed with HIV				
No	21	170	74.3	60.0-88.7
Yes	8	59	25.7	11.3-40.0
For your 2 <sup>nd</sup> pregnancy since testing positive for HIV,				
were you trying to get pregnant				
No	6	47	42.8	20.2-65.5
Yes	9	63	57.2	34.5-79.8
2 <sup>nd</sup> Pregnancy outcome after testing positive for HIV				
Currently pregnant	*	7	6.7	0.0-19.6
Live birth	9	66	60.3	38.7-81.9
Stillbirth	*	8	7.4	0.0-18.7
Miscarriage	*	28	26.6	6.5-44.8
Child from 2 <sup>nd</sup> pregnancy diagnosed with HIV				
No , G	8	60	89.6	96.6-100.0
Yes	*	7	10.4	0.0-30.4

Note. Patients could report receiving or needing more than one service. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Excluded are values with a coefficient of variation ≥30%, "don't know" responses, and skipped (missing) responses.

- \*Number suppressed because it is below threshold.
- <sup>a</sup> Numbers are unweighted.
- <sup>b</sup> Numbers are weighted
- <sup>c</sup> Percentages are weighted
- <sup>d</sup> Weighted Confident Intervals in percentages

Table 20: Birth Control and Contraceptives Use Among Women Living with HIV in Houston/Harris County, Texas – Houston Medical Monitoring Project, 2009-2014

Characteristics	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Male condom				
No	72	557	50.4	42.3-58.5
Yes	69	548	49.6	41.5-57.7
Female condom				
No	131	1,023	92.5	87.9-97.1
Yes	10	83	7.5	2.9-12.1
Diaphragm, cervical cap, or cervical sponge				
No	140	1,099	99.4	98.1-10.0
Yes	*	7	0.6	0.0-1.9
Spermicidal foam or jelly				
No	136	1,065	96.3	93.1-99.5
Yes	5	40	3.7	0.5-6.9
Depo-Provera®, which is an injection <sup>e</sup>				
No	137	1,072	97.0	94.0-100.0
Yes	*	33	3.0	0.0-6.0
Illama and Sandanta and a land				
Hormonal implants such as Implanon® or Nexplanon® f	4.40	4.004	00.0	07.0.400.0
No	140	1,094	99.0	97.0-100.0
Yes	*	11	1.0	0.0-3.0
Birth control pills				
No	134	1,047	94.7	90.5-98.9
Yes	7	59	5.3	1.1-9.5
Contraceptive patch, for example, Ortho Evra®				
No	141	1,106	100.0	100.0-100.0
Yes	141			100.0-100.0
163				
Contraceptive ring, for example NuvaRing®				
No	139	1,086	98.3	95.8-100.0
Yes	*	19	1.7	0.0-4.2
Intrauterine device or IUD, which comes as a coil or loop				
No				
Yes	140	1,093	98.9	96.7-100.0
· · <del></del>	*	12	1.1	0.0-3.3
Emergency contraception or morning after pill		_ <b>_</b>		2.3 3.0
No	141	1,106	100.0	100.0-100.0
Yes				
Withdrawal, also called pulling out				
No	135	1,058	95.7	92.2-99.2
Yes	6	47	4.3	0.8-78

Table 20: Birth Control and Contraceptives Use Among Women Living with HIV in Houston/Harris County, Texas – Houston Medical Monitoring Project, 2009-2014 (Cont'd)

Characteristics	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Abstinence, which is not having sex				
No	81	624	56.4	48.2-64.7
Yes	60	482	43.6	35.3-51.8
At Post-Menopausal Stage				
No	116	911	82.4	76.1-88.8
Yes	25	194	17.6	11.2-23.9
Tubal sterilization or hysterectomy				
No	99	788	71.2	63.6-78.9
Yes	42	318	28.8	21.2-36.4
Partner's vasectomy				
No	139	1086	98.3	95.8-100.0
Yes	*	19	1.7	0.0-4.2

Note. Patients could report receiving or needing more than one service. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Excluded are values with a coefficient of variation ≥30%, "don't know" responses, and skipped (missing) responses.

<sup>\*</sup>Number suppressed because it is below threshold.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted

<sup>&</sup>lt;sup>c</sup> Percentages are weighted

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages

<sup>&</sup>lt;sup>e</sup> Depo-Provera is a well-known brand name for medroxyprogesterone acetate, a contraceptive injection for women that contains the hormone progestin. Depo-Provera is given as an injection every three months.

<sup>&</sup>lt;sup>f</sup> Birth control implants that releases hormones progestin into your body that prevent you from getting pregnant.

Table 21: Impairments, Activity Limitations and Participation Restrictions among Persons
Living with HIV in Houston/Harris County, Texas – Houston Medical Monitoring Project, 20092014

Activity Limitation	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Are you deaf or do you have serious difficulty				
hearing?				
No	404	3,393	89.0	86.1-91.8
Yes	52	421	11.0	8.2-13.9
Are you blind or do you have serious difficulty				
seeing, even when wearing glasses?				
No	381	3,217	84.2	80.8-87.6
Yes	76	604	15.8	12.4-19.2
Have serious difficulty concentrating,				
remembering, or making decisions				
No	345	2,888	76.0	72.0-80.0
Yes	110	913	24.0	20.0-28.0
Have serious difficulty walking or climbing stairs				
No	365	3,057	80.0	76.3-83.7
Yes	92	764	20.0	16.3-23.7
Have difficulty dressing or bathing				
No	437	3,647	95.4	93.4-97.5
Yes	20	174	4.6	2.5-6.6
Have difficulty doing errands alone such as visiting				
a doctor's office or shopping				
No	412	3432	90.0	87.1-92.9
Yes	44	381	10.0	7.1-12.9

Note. Information on laboratory testing for sexually transmitted diseases was based on documentation in medical records. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Excluded are values with a coefficient of variation ≥30%, "don't know" responses, and skipped (missing) responses.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted

<sup>&</sup>lt;sup>c</sup> Percentages are weighted

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages

Table 22: HIV Risk Behaviors Associated with PLWH Prior to First Positive Test for HIV – Houston Medical Monitoring Project, 2009-2014

Risk Behavior	No.ª	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Born with HIV				
No	454	3797	99.6	99.0-100
Yes	2	16	0.4	0.0-1.0
Have sex with a male <sup>e</sup>				
No	110	926	24.4	20.5-28.2
Yes	344	2872	75.6	71.8-79.5
Have sex with a female <sup>e</sup>				
No	241	1997	52.6	47.7-37.5
Yes	213	1801	47.4	42.5-52.3
Male partners use needles to inject heroin, cocaine, steroids,				
or any other drug that was not prescribed by a doctor				
No				
Yes	79	635	83.2	75.7-90.7
	17	128	16.8	9.3-24.3
Male sex partners have sex with other men				
No	65	519	87.7	80.4-95.0
Yes	10	73	12.3	5.0-19.6
Male sex partners have HIV or AIDS				
No	46	362	54.6	43.9-65.3
Yes	39	301	45.4	34.7-56.1
Male sex partners who had HIV or AIDS have hemophilia or				
any other bleeding disorder before they found out they had				
HIV or AIDS?				
No				
Yes				
Male sex partners who had HIV or AIDS receive a transfusion				
of blood products before they were diagnosed with HIV or				
AIDS				
No				
Yes				
Opposite sex partners who had HIV or AIDS receive an organ				
or tissue transplant before they were diagnosed with HIV or				
AIDS				
No				
Yes				
Female sex partners use needles to inject heroin, cocaine,				
steroids, or any other drug that was not prescribed by a				
doctor	1 4 4	1103	00.4	02.4.02.2
No You	141	1182	88.4	83.4-93.3
Yes	18	155	11.6	6.7-16.6

Table 22: HIV Risk Behaviors Associated with PLWH Prior to First Positive Test for HIV – Houston Medical Monitoring Project, 2009-2014 (Cont'd)

	No.ª	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Female sex partners who had HIV or AIDS have hemophilia or any				
other bleeding disorder before they found out they had HIV or				
AIDS?				
No				
Yes				
Female sex partners who had HIV or AIDS receive a transfusion of				
blood products before they were diagnosed with HIV or AIDS				
No				
Yes				
Female sex partners who had HIV or AIDS receive an organ or				
tissue transplant before they were diagnosed with HIV or AIDS				
No				
Yes				
Used needles to inject heroin, cocaine, steroids, or any other				
drug that was not prescribed by a doctor				
No	418	3500	92.2	89.8-94.6
Yes	36	296	7.8	5.4-10.2
Ever received clotting factor				
No	450	3762	99.6	99.0-100
Yes	*	17	0.4	0.0-1.0
Ever received clotting factor before March, 1985				
No	25	217	57.4	43.0-71.8
Yes	21	161	42.6	28.2-57.0
Receive an organ or tissue transplant or artificial insemination				
No				
Yes				
Worked in a health care or laboratory setting where you might				
have been exposed to human blood or other body fluids				
No	417	3504	92.1	89.6-94.6
Yes	38	302	7.9	5.4-10.4

Abbreviation: CI, confidence interval; PLWH, People living with HIV.

Note. Information on laboratory testing for sexually transmitted diseases was based on documentation in medical records. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Excluded are values with a coefficient of variation ≥30%, "don't know" responses, and skipped (missing) responses.

<sup>\*</sup>Number suppressed because it is below threshold

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

<sup>&</sup>lt;sup>e</sup> Have sex with male or female prior to first testing positive for HIV.

Table 23: Prevention services received during the 12 months before the interview—Houston Medical Monitoring Project, 2009-2014

Characteristics	No.ª	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
One-on-one conversation with physician, nurse, or other				
health care worker				
No	418	3,253	60.7	57.0-64.5
Yes	259	2,102	39.3	35.5-43.0
One-on-one conversation with outreach worker,				
counselor, or prevention program worker				
No	874	8,578	75.3	72.4-78.2
Yes	300	2,814	24.7	21.8-27.6
Organized session involving a small group of people		,		
No	584	4,630	86.2	83.6-88.9
Yes	94	740	13.8	11.1-16.4
Received any informational/educational materials <sup>e</sup>				
No	210	1,751	46.2	41.6-50.8
Yes	244	2,038	53.8	49.2-58.4
Received Free Condoms <sup>f</sup>		, = = =		
No	629	6,119	53.6	50.6-56.6
Yes	548	5,298	46.4	43.4-49.4
Source of free condoms: Doctor's office/General Health	3.0	3,230	10.1	1311 1311
Clinic	130	1,065	38.2	32.9-43.4
No	214	1,725	61.8	56.6-67.1
Yes	217	1,723	01.0	30.0 07.1
Source of free condoms: Community-based organization				
No	256	2,058	73.8	69.0-78.5
Yes	88	732	26.2	21.5-31.0
Source of free condoms: Social venue	- 00	732	20.2	21.5-51.0
No	307	2,497	89.5	86.3-92.7
Yes	37	2,437	10.5	7.3-13.7
Source of free condoms: Sexually transmitted disease	37	234	10.5	7.5-15.7
clinic	334	2,711	97.2	95.7-98.9
No	10	79	2.8	1.1-4.6
Yes	10	79	2.6	1.1-4.0
Source of free condoms: Special event				
No	334	2,713	97.2	95.4-99.1
Yes	10	77	2.8	0.9-4.6
	10	//	2.0	0.5-4.0
Source of free condoms: Family Planning Clinic No	343	2,782	99.7	99.1-100
Yes	343	8	0.3	0.0-0.9
Source of free condoms: Other source	<u> </u>	0	0.5	0.0-0.9
No	334	2,714	98.0	96.5-99.5
	7	-		
Yes Received free new sterile needles	<del>  '</del>	56	2.0	0.5-3.5
		60	100.0	100 0 100 0
No Voc	8	68	100.0	100.0-100.0
Yes				
Received any free kits for rinsing needles or preparing			0	
drugs	6	56	81.9	57.8-100.0
No	*	12	18.1	0.0-42.2
Yes				

Abbreviation: CI, confidence interval. *Note*. Patients could report receiving more than one prevention service.

- \*Number suppressed because it is below threshold.
- <sup>a</sup> Numbers are unweighted.
- <sup>b</sup> Numbers are weighted
- <sup>c</sup> Percentages are weighted
- <sup>d</sup> Weighted Confident Intervals in percentages
- <sup>e</sup> Refers to persons who have seen or received any informational/educational materials such as posters, leaflets, pamphlets, or videos that tell them how to protect themselves or their partners from HIV or other STDs
- <sup>f</sup> Among persons who received free condoms.

Table 24: Classification of Sexual Behavior, Sexual Orientation and Gender among PLWH – Houston Medical Monitoring Project, 2009-2014

Classification of sexual behavior and	No.ª	Wt. No. <sup>b</sup>	% <sup>c</sup>	95% CI <sup>d</sup>
sexual orientation				
(1) Any MSM (MSM only + MSMW)	389	3,974	42.0	37.1-46.9
(2) MSW only	263	2,594	27.4	23.9-30.9
(3) Any WSM (WSM only + WSMW)	262	2,594	27.4	23.5-31.3
(4) WSW only	*	42	0.4	0.0-0.9
(5) Transgender	16	194	2.1	1.1-3.0
(6) Other/unclassified	7	68	0.7	0.1-1.3

Abbreviation: CI, confidence interval; PLWH, People living with HIV; Any MSM (MSM only, and men who have sex with men and women); MSW only, Men who have sex with women only; Any WSM, any women who have sex with men (women who have sex with men only, and women who have sex with men and women); WSW only, Women who have sex with women only

<sup>\*</sup>Number suppressed because it is below threshold.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

Table 25: Anxiety and Depressive symptoms among PLWH – Houston Medical Monitoring Project, 2009-2014

Statement	No.a	Wt. No. <sup>b</sup>	% <sup>c</sup>	95% CI <sup>d</sup>
Little interest or pleasure in doing things				
Not at all	681	6,640	58.2	55.2-61.2
Several Days	281	2,677	23.5	21.1-25.9
More than half the days	113	1,080	9.5	7.7-11.2
Nearly every day	100	1,007	8.8	7.1-10.6
Feeling down, depressed, or hopeless				
Not at all	698	6,774	59.2	56.3-62.2
Several Days	314	3,032	26.5	23.9-29.2
More than half the days	94	910	8.0	6.3-9.6
Nearly every day	72	717	6.3	4.8-7.8
Trouble falling or staying asleep, or sleeping too much				
Not at all	607	5,839	51.1	48.0-54.2
Several Days	300	2,976	26.0	23.5-28.6
More than half the days	133	1,266	11.1	9.3-12.9
Nearly every day	137	1,345	11.8	9.8-13.8
Feeling tired or having little energy				
Not at all	532	5,214	45.6	42.5-48.7
Several Days	369	3,562	31.2	28.4-339
More than half the days	163	1,529	13.4	11.3-15.4
Nearly every day	114	1,128	9.9	8.2-11.6
Poor appetite or overeating				
Not at all	742	7,297	63.9	61.0-66.7
Several Days	245	2,300	20.1	17.4-22.9
More than half the days	98	908	7.9	6.4-9.5
Nearly every day	92	920	8.0	6.3-9.8
Feeling bad about yourself, that you are a failure, or have				
let yourself or your family down				
Not at all	834	8,078	70.8	68.1-73.6
Several Days	205	1,977	17.3	15.1-19.6
More than half the days	72	732	6.4	4.8-8.0
Nearly every day	64	616	5.4	4.0-6.8
Trouble concentrating on things, such as reading the				
newspaper or watching television				
Not at all	864	8,334	72.9	70.0-75.8
Several Days	189	1,956	17.1	14.6-19.6
More than half the days	73	660	5.8	4.4-7.1
Nearly every day	52	484	4.2	3.1-5.4
Moving/speaking so slowly other people could				
notice/being so fidgety or restless moving around a lot				
more than usual				
Not at all	950	9,237	81.0	78.5-83.5
Several Days	142	1,390	12.2	10.1-14.3
More than half the days	40	390	3.4	2.3-4.6
Nearly every day	43	391	3.4	2.4-4.5

Abbreviation: CI, confidence interval; PLWH, People living with HIV.

Note. Information on laboratory testing for sexually transmitted diseases was based on documentation in medical records. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Excluded are values with a coefficient of variation ≥30%, "don't know" responses, and skipped (missing) responses.

<sup>\*</sup>Number suppressed because it is below threshold

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

Table 26: Depression and Mental Health Status of PLWH in Houston/Harris County, Texas - Houston Medical Monitoring Project, 2009-2014

Depressive/mental health condition	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>	
Any Depression <sup>e</sup>					
No depression	934	9,053	79.7	77.2-82.2	
Major depression or other depression	236	2,302	20.3	17.8-22.8	
Depression based on DSM-IV criteria <sup>e</sup>					
No depression	934	9,053	79.7	77.2-82.2	
Other depression	152	1,525	13.4	11.3-15.6	
Major depression	84	778	6.8	5.4-8.3	
General Anxiety Disorder f					
No	658	7,042	92.2	90.2-94.2	
Yes	65	598	7.8	5.8-9.8	
Bipolar Disorder f					
No	680	7,254	95.0	93.4-96.5	
Yes	43	385	5.0	3.5-6.6	
Psychosis <sup>f</sup>					
No	703	7,430	97.3	96.0-98.5	
Yes	20	209	2.7	1.5-4.0	
Depression <sup>f</sup>					
No	500	5,402	71.0	67.7-74.4	
Yes	220	2,203	29.0	25.6-32.3	
Diagnosis of anxiety, bipolar disorder,					
psychosis, or depression <sup>f</sup>					
No	471	5,137	67.2	63.7-70.8	
Yes	252	2,503	32.8	29.2-36.3	

<sup>\*</sup>Number suppressed because it is below threshold.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

<sup>&</sup>lt;sup>e</sup> Responses to the 8 items on the Patient Health Questionnaire (PHQ-8) were used to define "major depression" and "other depression," according to criteria from the Diagnostic and Statistical Manual of Mental Disorders, 4th ed. (DSM-IV-TR). "Major depression" was defined as having at least 5 symptoms of depression; "other depression" was defined as having 2–4 symptoms of depression.

f Mental health condition/diagnosis is based on documented evidence from medical chart.

Table 27: Adherence to antiretroviral therapy (ART) instruction, medication dose and schedule during preceding 72 hours - Houston Medical Monitoring Project, 2009-2014

Characteristic	No.a	Wt. No. b	Percentage <sup>c</sup>	95% CI <sup>d</sup>
Adherence to instruction				
Person is 100% adherent	621	5,899	73.3	69.9-76.6
Person is <u>not</u> 100% adherent	221	2,151	26.7	23.4-30.1
Adherence to Schedule				
Person is 100% adherent	763	7,297	71.2	68.3-74.1
Person is <u>not</u> 100% adherent	307	2,952	28.8	25.9-31.7
Adherence to medication dose				
Person is 100% adherent	900	8,630	85.0	82.7-87.3
Person is <u>not</u> 100% adherent	160	1,523	15.0	12.7-17.3
Adherence to instruction, schedule & dose				
Person is 100% adherent	498	4,753	54.4	50.8-58.0
Person is <u>not</u> 100% adherent	416	3,990	45.6	42.0-49.2

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

Table 28: Clinical Services During the 12 months Before the Interview—Houston Medical Monitoring Project, 2009-2014

	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Received influenza vaccination				
Yes	788	7,050	75.0	72.1-78.0
No	247	2,344	25.0	22.0-27.9
Participated in HIV clinical trial				
Yes	40	402	3.5	2.3-4.7
No	1,137	11,023	96.5	95.3-97.7
Travel time to primary HIV care (estimated in				
minutes)				
Mean	34.9			
Median	27.9			
Range	2 - 240			

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted.

<sup>&</sup>lt;sup>c</sup> Percentages are weighted.

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages.

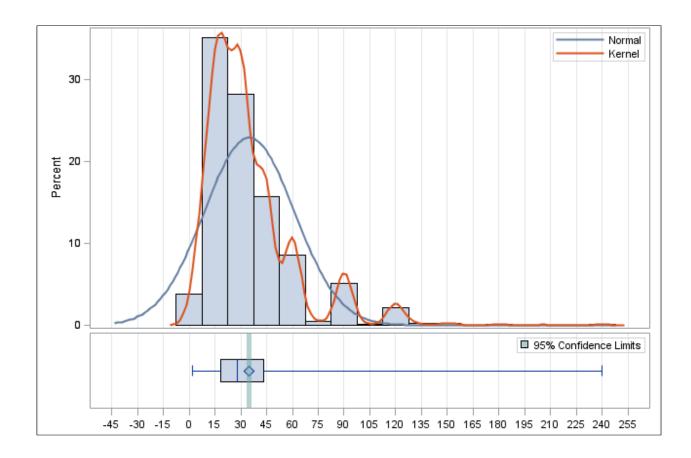


Figure 3: Distribution of Number of Minutes Travel by PLWHA to their Usual Primary HIV Care Facility

Table 29: CD4 and Viral Load Monitoring and Prescription of Antiretroviral Therapy, Pneumocystis Pneumonia Prophylaxis (PCP), and Mycobacterium Avium complex (MAC) Prophylaxis during the 12 Months Before the Interview—Houston Medical Monitoring Project, 2009-2014

Characteristic	No.a	Wt. No. b	% <sup>c</sup>	95% CI <sup>d</sup>
Number of outpatient laboratory tests <sup>e</sup>				
CD4 or HIV viral load				
No test documented	96	1,009	8.9	7.0-10.7
1 test documented	210	2,010	17.7	15.1-20.2
2 tests documented	344	3,310	29.1	26.4-31.8
3+ tests documented	520	5,042	44.3	41.4-47.3
CD4				
No test documented	102	1,085	9.5	7.5-11.5
1 test documented	216	2,064	18.2	15.6-20.7
2 tests documented	350	3,368	29.6	26.9-32.4
3+ tests documented	502	4,853	42.7	39.8-45.6
HIV viral load				
No test documented	127	1,440	12.7	10.5-14.8
1 test documented	229	2,170	19.1	16.4-21.7
2 tests documented	347	3,291	28.9	26.1-31.8
3+ tests documented	467	4,469	39.3	36.4-42.2
HIV viral load measurement at least once every 6 months				
Yes	673	6,424	56.5	53.0-60.0
No	497	4,946	43.5	40.0-47.0
CD4 measured at least one or more annually				
Yes	1,068	10,286	90.5	88.5-92.5
No	102	1,085	9.5	7.6-11.5
Prescribed ART				
Yes	1010	9,814	86.5	84.5-88.5
No	156	1,527	13.5	11.5-15.5
Prescribed PCP prophylaxis <sup>f</sup>				
Yes	185	1,982	19.6	16.9-22.4
No	839	8,127	80.4	77.6-83.1
Prescribed MAC prophylaxis <sup>g</sup>				
Yes	87	894	8.8	7.0-10.7
No	937	9,214	91.2	89.3-93.0

Abbreviations: CI, confidence interval; CD4, CD4 T-lymphocyte count (cells/ $\mu$ L) or percentage; ART, antiretroviral therapy; PCP, Pneumocystis pneumonia; MAC, Mycobacterium avium complex.

Note. CD4 counts and viral load measurements are from medical record abstraction.

Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding.

<sup>\*</sup>Number suppressed because it is below threshold.

<sup>&</sup>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Numbers are weighted

<sup>&</sup>lt;sup>c</sup> Percentages are weighted

<sup>&</sup>lt;sup>d</sup> Weighted Confident Intervals in percentages

<sup>&</sup>lt;sup>e</sup> Only includes those tests with a documented result.

f Among patients with CD4 cell count <200 cells/µL.

<sup>&</sup>lt;sup>g</sup> Among patients with CD4 cell count <50 cells/μL.

Table 30: Met and Unmet Needs for Ancillary Services During the 12 Months before the Interview—Houston Medical Monitoring Project, 2009-2014

				_			t did not re	ceive services			_	
		Persons who			by time of			1 .				ceive services
Service	No.a	Wt. No.b	% <sup>c</sup>	95% CI <sup>d</sup>	No.a	Wt. No.b	% c	95% CI <sup>d</sup>	No.a	Wt. No.b	% <sup>c</sup>	95% CI d
HIV case management services												
Yes	442	4,169	36.5	33.3-39.7	93	893	7.8	6.2-9.5	660	6,344	55.6	52.1-59.1
No	754	7,251	63.5	60.3-66.8	1084	10,529	92.2	90.5-93.8	515	5,061	44.4	40.9-47.9
HIV prevention education services <sup>e</sup>												
Yes	369	3,514	30.7	27.9-33.6	14	123	1.1	0.5-1.7	796	7,804	68.2	65.3-71.1
No	810	7,927	69.3	66.4-72.1	1,165	11,318	98.9	98.3-99.5	383	3,638	31.8	28.9-34.7
Public benefits (e.g., SSI or SSDI)												
Yes	447	4,215	36.8	34.1-39.6	110	1,034	9.1	7.3-10.8	620	6,175	54.1	51.2-56.9
No	732	7,227	63.2	60.4-65.9	1,067	10389	90.9	89.2-92.7	557	5,249	45.9	43.1-48.8
Eye or vision service												
Yes	220	1,819	47.5	43.1-51.9	110	919	24.0	20.1-27.8	128	1,092	28.5	24.4-32.6
No	238	2,011	52.5	48.1-56.9	348	2,911	76.0	72.2-79.9	330	2,738	71.5	67.4-75.6
Medicine through ADAP												
Yes	514	4,836	42.7	39.5-45.9	38	386	3.4	2.4-4.4	611	6,085	53.8	50.7-56.9
No	651	6,492	57.3	54.1-60.5	1133	10,985	96.6	95.6-97.6	552	5,222	46.2	43.1-49.3
Mental health services												
Yes	221	2,219	19.4	16.8-22.0	32	322	2.8	1.8-3.8	924	8,885	77.8	75.0-80.6
No	958	9,222	80.6	78.0-83.2	1,145	11,104	97.2	96.2-98.2	253	2,541	22.2	19.4-25.0
Meal or food services												
Yes	248	2,283	20.0	17.6-22.3	117	1,087	9.5	7.8-11.2	814	8,072	70.6	67.8-73.3
No	931	9,159	80.0	77.7-82.4	1,062	10,355	90.5	88.8-92.2	365	3,369	29.4	26.7-32.2
Transportation assistance service												
Yes	309	2,853	24.9	22.3-27.6	104	1,014	8.9	7.1-10.6	765	7,575	66.2	63.2-69.2
No	870	8,588	75.1	72.4-77.7	1,075	10,428	91.1	89.4-92.9	413	3,867	33.8	30.8-36.8
Adherence support services <sup>f</sup>												
Yes	210	1,980	17.3	1.50-19.6	22	198	1.7	0.9-2.5	946	9,257	80.9	78.6-83.3
No	968	9,455	82.7	80.4-85.0	1,157	11,243	98.3	97.5-99.1	232	2,179	19.1	16.7-21.4
HIV peer group support												
Yes	139	1,310	11.4	9.6-13.2	52	478	4.2	3.0-5.3	988	9,654	84.4	82.3-86.5
No	1040	10,132	88.6	86.8-90.4	1,127	10,964	95.8	94.7-97.0	191	1,787	15.6	13.5-17.7
Shelter or housing services												
Yes	133	1,217	10.6	8.8-12.5	100	984	8.6	6.9-10.3	946	9,241	80.8	78.3-83.2
No	1046	10,225	89.4	87.5-91.2	1,079	10,458	91.4	89.7-93.1	233	2,201	19.2	16.8-21.7

Table 30: Met and Unmet Needs for Ancillary Services During the 12 Months Before the Interview—Houston Medical Monitoring Project, 2009-2014 (Cont'd)

							t did not re	ceive services				
		Persons who r	eceived ser		by time of	interview			Persons v	vho did not n	eed or re	ceive services
Service	No.a	Wt. No.b	% c	95% CI <sup>d</sup>	No.a	Wt. No.b	% c	95% CI <sup>d</sup>	No.a	Wt. No.b	% c	95% CI d
Nutritional services												
Yes	127	1,007	18.7	15.7-21.7	62	495	9.2	7.0-11.4	490	3,877	72.1	68.6-75.5
No	553	4,381	81.3	78.3-84.3	617	4,884	90.8	88.6-93.0	189	1,503	27.9	24.5-31.4
Dental Services												
Yes	610	5,942	51.9	48.7-55.1	330	3,042	26.6	24.0-29.2	238	2,448	21.4	18.8-24.0
No	569	5,499	48.1	44.9-51.3	848	8,391	73.4	70.8-76.0	940	8,984	78.6	76.0-81.2
Lawyer or legal services												
Yes	63	539	14.1	10.8-17.4	29	240	6.3	4.0-8.5	365	3,043	79.6	75.8-83.5
No	395	3,291	85.9	52.6-89.2	428	3,581	93.7	91.5-96.0	92	779	20.4	16.5-24.2
Drug or alcohol counseling or												
treatment												
Yes	54	532	4.7	3.3-6.0	13	117	1.0	0.5-1.6	1,111	10,783	94.3	92.8-95.8
No	1,125	10,909	95.3	94.0-96.7	1,165	11,315	99.0	98.4-99.5	67	650	5.7	4.2-7.2
Home health services												
Yes	61	595	5.2	3.9-6.5	24	214	1.9	1.1-2.6	1,094	10,633	92.9	91.4-94.4
No	1,118	10,847	94.8	95.5-96.1	1,155	11,227	98.1	97.4-98.9	85	809	7.1	5.6-8.6
Interpreter services												
Yes	57	482	4.2	3.1-5.3	5	43	0.4	0.0-0.7	1,117	10,917	95.4	94.2-96.6
No	1,122	10,960	95.8	94.7-96.9	1,174	11,399	99.6	99.3-100.0	62	524	4.6	3.4-5.8
Domestic violence services												
Yes	23	215	1.9	1.1-2.7	9	78	0.7	0.2-1.1	1,147	11,442	97.4	96.5-98.4
No	1,156	11,227	98.1	97.3-98.9	1,170	11,364	99.3	98.9-99.8	32	293	2.6	1.6-3.5
Childcare services												
Yes	16	154	1.4	0.6-2.1	21	209	1.8	0.9-2.8	1142	11,078	96.8	95.6-98.0
No	1,163	11,287	98.7	97.9-99.4	1,158	11,232	98.2	97.2-99.1	37	364	3.2	2.0-4.4
Have at least one service												
Yes	1,100	10,636	93.0	91.3-94.8	611	5,696	49.9	47.1-52.7	1,179	11,442	100.0	100.0
No	78	796	7.0	5.2-8.7	520	5,229	45.8	42.8-48.9				
Don't need any services					45	489	4.3	2.9-5.7				

Abbreviations: CI, confidence interval; SSI, Supplemental Security Income; SSDI, Social Security Disability Insurance; ADAP, AIDS Drug Assistance Program.

Note. Patients could report receiving or needing more than one service. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Excluded are values with a coefficient of variation ≥30%, "don't know" responses, and skipped (missing) responses.

- \*Number suppressed because it is below threshold.
- <sup>a</sup> Numbers are unweighted.
- <sup>b</sup> Numbers are weighted
- <sup>c</sup> Percentages are weighted
- <sup>d</sup> Weighted Confident Intervals in percentages
- <sup>e</sup> Counseling about how to prevent spread of HIV and provision of educational materials
- <sup>f</sup> Professional help remembering to take HIV medicines on time or correctly.

Table 31: Sexually transmitted disease testing during the 12 months before the interview by sexual activity—Houston Medical Monitoring Project, 2009-2014

CTD.		Total Po	pulation		Sexually active persons only <sup>a</sup>					
STD	No.b	Wt. No.c	% d	95% CI e	No.b	Wt. No.c	% d	95% CI e		
Gonorrhea <sup>f</sup>										
Yes, received test	277	2,348	20.9	18.4-23.3	169	1,446	21.5	18.2-24.9		
No test documented	881	8,910	79.1	76.7-81.6	515	5,265	79.5	75.1-81.8		
Chlamydia <sup>g</sup>										
Yes, received test	287	2,460	21.9	19.3-24.4	179	1,559	23.2	19.7-26.8		
No test documented	871	8,798	78.1	75.6-80.7	505	5,151	76.8	73.2-80.3		
Syphilis <sup>h</sup>										
Yes, received test	688	6,354	56.4	52.8-60.0	426	3,999	59.6	55.4-63.8		
No test documented	470	4,903	43.6	40.0-47.2	258	2,712	40.4	36.2-44.6		
Gonorrhea and chlamydia										
Yes, received the two tests	273	2,316	20.6	18.2-23.0	167	1,431	21.3	18.0-24.8		
The two tests not documented	885	8,942	79.4	77.0-81.8	517	5,280	78.7	75.3-82.0		
Gonorrhea, chlamydia, and syphilis										
Yes, received all three tests	225	1,883	16.7	14.7-18.7	143	1,198	17.8	15.1-20.6		
All three tests not documented	933	9,375	83.3	81.3-85.3	541	5,513	82.2	79.4-84.9		

Abbreviation: CI, confidence interval; STD, Sexually transmitted disease

Note. Information on laboratory testing for sexually transmitted diseases was based on documentation in medical records. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Excluded are values with a coefficient of variation ≥30%, "don't know" responses, and skipped (missing) responses.

<sup>&</sup>lt;sup>a</sup> Sexual activity was reported in the interview component of the Medical Monitoring Project and was defined as oral sex or anal or vaginal intercourse.

<sup>&</sup>lt;sup>b</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>c</sup> Numbers are weighted

<sup>&</sup>lt;sup>d</sup> Percentages are weighted

<sup>&</sup>lt;sup>e</sup>Weighted confident intervals in percentages

<sup>&</sup>lt;sup>f</sup> Testing for *Neisseria gonorrhoeae* was defined as documentation of a result from culture, gram stain, enzyme immunoassay (EIA), the nucleic acid amplification test (NAAT), or the nucleic acid probe.

<sup>&</sup>lt;sup>g</sup> Chlamydia trachomatis testing was defined as a result from culture, direct fluorescent antibody (DFA), EIA or enzyme-linked immunoassay (ELISA), NAAT, or nucleic acid probe.

<sup>&</sup>lt;sup>g</sup> Syphilis testing was defined as a result from nontreponemal syphilis tests (rapid plasma reagin [RPR], Venereal Disease Research Laboratory [VDRL]), treponemal syphilis tests (*Treponema pallidum* hemagglutination assay [TPHA], *T. pallidum* particle agglutination [TP-PA], micro-hemagglutination assay for antibody to *T. pallidum* [MHA-TP], fluorescent treponemal antibody absorbed [FTA-ABS] tests), or dark-field microscopy.

Table 32: Association Between Self-Reported Mental Health Needs and Mental Health Conditions Documented in the Medical Charts - Houston Medical Monitoring Project, 2009-2014

						Self-Reporte	ed Respons	e <sup>b</sup>				
Mental Health Condition					Needed r	nental health	service but	did not	Did not need or receive mental health service			
Documented in Medical Chart	Received mental health service				receive so	ervice						
a	No.c	Wt. No.d	% e	95% CI <sup>f</sup>	No.c	Wt. No.d	% e	95% CI f	No.c	Wt. No.d	% e	95% CI <sup>f</sup>
General Anxiety Disorder												
Yes	23	228	14.1	7.8-20.4	*	18	8.8	0.0-20.6	40	352	6.1	4.1-8.0
No	126	1,390	85.9	79.6-92.2	17	189	91.2	79.4-100.0	512	5,428	93.9	92.0-95.9
Depression												
Yes	81	822	50.8	42.9-58.8	10	107	51.8	28.0-75.7	129	1,273	22.0	18.6-25.5
No	68	796	49.2	41.2-57.1	9	100	48.2	24.3-72.0	423	4,507	78.0	74.5-81.4
Bipolar Disorder												
Yes	16	142	8.8	4.4-13.1	*	15	7.5	0.0-17.7	25	228	3.9	2.3-5.6
No	133	1,476	91.2	86.9-95.6	17	192	92.5	82.3-100.0	527	5,553	96.1	94.4-97.7
Psychosis												
Yes	9	98	6.1	2.1-10.0	*	13	6.2	0.0-17.9	10	98	1.7	0.6-2.8
No	140	1,520	93.9	90.0-97.9	18	207	93.8	82.1-100.0	542	5,682	98.3	97.2-99.4
Diagnosis of anxiety, bipolar												
disorder, psychosis, or												
depression	89	896	55.4	47.5-63.3	12	124	59.8	35.9-83.8	150	1,476	25.5	21.9-29.2
Yes	60	722	44.6	36.7-52.5	7	83	40.2	16.2-64.1	402	4,304	74.5	70.8-78.1
No												

Note. Information on laboratory testing for sexually transmitted diseases was based on documentation in medical records. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Excluded are values with a coefficient of variation ≥30%, "don't know" responses, and skipped (missing) responses.

<sup>\*</sup>Number suppressed because it is below threshold.

<sup>&</sup>lt;sup>a</sup> Mental health conditions/diagnoses are based on documented evidence from medical charts.

<sup>&</sup>lt;sup>b</sup> Self-reported response by survey participants – Medical Monitoring Project, 2009-2014.

<sup>&</sup>lt;sup>c</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>d</sup> Numbers are weighted.

<sup>&</sup>lt;sup>e</sup> Percentages are weighted.

<sup>&</sup>lt;sup>f</sup>Weighted Confident Intervals in percentages.

Table 33: Association between employment status of PLWH and Health insurance or coverage for antiretroviral medications - Houston Medical Monitoring Project, 2009-2014

		Health insurance or coverage for antiretroviral medications in the P12M											
	Insured					Uninsured				Uninsured (RW/ADAP only)			
<b>Employment Status</b>	No.a	Wt. No.b	% <sup>c</sup>	95% CI <sup>d</sup>	No.a	Wt. No.b	% <sup>c</sup>	95% CI <sup>d</sup>	No.a	Wt. No.b	% <sup>c</sup>	95% CI <sup>d</sup>	
Employed	141	1,178	30.9	26.4-35.4	20	168	4.4	2.5-6.3	56	494	12.9	9.8-16.1	
Unemployed	153	1,246	32.7	28.5-36.9	5	41	1.1	0.1-2.0	44	371	9.7	7.0-12.5	
Retired	19	157	4.1	2.3-5.9					*	7	0.2	0.0-0.6	
Student	13	110	2.9	1.3-4.5					5	43	1.1	0.1-2.1	
Total	326	2,691	70.6	66.6-74.5	25	208	5.5	3.4-7.6	106	915	24.0	20.2-27.8	

Abbreviation: CI, confidence interval; ARVs, Antiretroviral medicines; P12M, Past 12 months; RW/ADAP, Ryan White/ AIDS Drug Assistance Program. *Note*. Information on laboratory testing for sexually transmitted diseases was based on documentation in medical records. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. Excluded are values with a coefficient of variation ≥30%, "don't know" responses, and skipped (missing) responses.

<sup>\*</sup>Number suppressed because it is below threshold.

<sup>&</sup>lt;sup>a</sup> Mental health conditions/diagnoses are based on documented evidence from medical charts.

<sup>&</sup>lt;sup>b</sup> Self-reported response by survey participants – Medical Monitoring Project, 2009-2014.

<sup>&</sup>lt;sup>c</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>d</sup> Numbers are weighted

<sup>&</sup>lt;sup>e</sup> Percentages are weighted

<sup>&</sup>lt;sup>f</sup>Weighted Confident Intervals in percentages

### **Technical Notes**

# **Population of Inference**

For Medical Monitoring Project (MMP) data collection cycles 2009 through 2014, the population of inference is people living with HIV (PLWH) HIV-infected adults (aged 18 years and older) who received care from known providers of outpatient HIV medical care in the Houston/Harris County, Texas during the population definition period (PDP). The PDP is a predefined period during which PLWH must have received care in a sampled facility in order to be sampled for participation in MMP. The PDP period used for data collection was January 1 through April 30 of each project year from 2009 through 2014.

#### **Data Collection**

Patients were enrolled by either MMP staff or health facility staff. The enrollment strategy depended on clinic needs, project area needs, local institutional review board requirements, and the number of patients sampled from a given facility. For enrollment by MMP staff, facilities provided local MMP staff with contact information for patients. For enrollment by HIV medical care providers, selected patients were initially contacted by their health care providers—in person, by telephone, or by mail—and then were contacted by MMP staff. The participant eligibility criteria were the same in all MMP participating project areas: diagnosis of HIV infection, age of ≥18 years at the beginning of the 4-month period when patients were eligible for selection (PDP), no previous participation in MMP during the current data collection cycle, and receipt of medical care at the sampled facility during the PDP.

A trained interviewer conducted either a computer-assisted in-person interview or a telephone interview. English and Spanish versions of the questionnaire were used during the period 2009-2014 for which in the current data analysis is based. Persons who agreed to participate were interviewed in a private location (e.g., at home or in a clinic) or over the telephone. The interview (approximately 45 minutes) included questions about demographics, health care use, met and unmet needs for ancillary services, sexual behavior, depression, gynecologic and reproductive

history (women only), drug and alcohol use, and use of prevention services. Participants were given a gift card as token of appreciation. The value of the gift card varied across the difference cycles (2009-2014) and ranged from \$25-\$50. After the interview, MMP staff used an electronic application provided by the Centers for Disease Control and Prevention (CDC) to abstract information from the medical records of participants. Abstracted information included diagnoses of AIDS-defining conditions, prescription of antiretroviral treatment (ART), laboratory results, and health care use in the 24 months before the interview.

#### Methods

Sampling, nonresponse analysis, and weighting methods were applied and data were weighted to account for unequal sampling probabilities and nonresponse. The data obtained is representative of the PLWH in Houston/Harris County, Texas and therefore, the findings are generalizable to this population. There sample comprised of a total of 1181 records covering the period 2009-2014 and has 40 strata, 1030 clusters and a weighted sum of 11,469. There were few updates to sampling and weighting procedures used during the period with no significant impact on the prevalence estimates from previous years. Medical record data used for estimates in this report were limited to data recorded in the 12 months preceding the interview (except where otherwise noted) to facilitate comparability with previously published estimates. Lastly, the interview questionnaire was slightly updated to more precisely measure patient ethnicity, health insurance type(s), and income.

### **Data Analysis**

Data obtained from both sampled persons interview and medical record abstractions were subjected to statistical analysis using the SAS PROC SURVEYFREQ procedure. The SURVEYFREQ procedure produces one-way to n-way frequency and crosstabulation tables from the sample survey data. Values with a coefficient of variation ≥30%, "don't know" responses, and skipped (missing) responses were excluded in the final analytic data. The analysis produced frequency, weighted frequency, row and column percent, standard errors of percent and the 95% confident intervals. Numbers below the threshold of 5 are suppressed in the report for confidentiality

reasons. All data management and statistical analyses were conducted using SAS 9.4 (SAS Institute, Cary, NC, USA).

# **Human Subjects Protection**

MMP has been determined by the National Center for HIV, Viral Hepatitis, STD and TB Prevention's Office of the Associate Director for Science at the CDC to be a non-research, public health surveillance activity used for disease control program or policy purposes. As such, MMP is not subject to human subjects' regulations, including federal institutional review board (IRB) approval. All data collection was Health Insurance Portability and Accountability Act compliant.

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