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# Behavioral and Clinical Characteristics of Persons Receiving Medical Care for HIV Infection

Medical Monitoring Project, United States 2014 Cycle (June 2014–May 2015)



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**Revision note:** The June 2019 revision of *Behavioral and Clinical Characteristics of Persons Receiving Medical Care for HIV Infection—Medical Monitoring Project, United States, 2014 Cycle (June 2014—May 2015)*, HIV Surveillance Special Report 17, includes revised and corrected data on selected sexual behaviors. Errors in estimates of high-risk sex, condom-protected sex, and condomless sex with a partner on preexposure prophylaxis (PrEP) are corrected in Commentary and in Table 19. Further information on the errors and corrections can be found at https://www.cdc.gov/hiv/pdf/statistics/systems/mmp/cdc-hiv-MMP-surveillance-report-changes-2019-06-17.pdf.

On the Web: http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html

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1-800-232-4636 (in English, en Español)

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MMP study group members

http://www.cdc.gov/hiv/pdf/mmp resources-2014-study-group-membersacc.pdf

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## **Commentary**

As of December 31, 2013, an estimated 949,931 persons in the United States and 6 dependent areas were living with diagnosed HIV infection [1]. In 2014, the estimated number of new HIV diagnoses was 40,493 [1]. Although the National HIV Surveillance System collects information about persons with diagnosed HIV infection [2], other surveillance systems provide detailed information about care seeking, health care use, use of ancillary services, and other behaviors [3]. In 2005, in response to an Institute of Medicine report outlining the need for representative data on persons living with HIV [4], the Centers for Disease Control and Prevention (CDC) implemented the Medical Monitoring Project (MMP).

MMP is a cross-sectional, nationally representative, complex sample survey that assesses the clinical and behavioral characteristics of HIV-infected adults who are receiving outpatient medical care in the United States and Puerto Rico [3, 5, 6]. The 2014 MMP sample was selected in 3 consecutive stages: (1) United States and dependent areas, (2) outpatient facilities providing HIV care, and (3) HIV-infected adults aged ≥18 years who made at least 1 medical care visit to a participating facility during January–April, 2014. A total of 23 areas were funded to conduct data collection for the 2014 cycle (Table 1).

This report presents unweighted sample sizes and weighted prevalence estimates with 95% confidence intervals for selected characteristics. The term *patients* refers to HIV-infected adults who are living in the United States or Puerto Rico and who are receiving outpatient medical care. The period referenced is the 12 months before the patient interview unless otherwise noted. Statistical software (SAS, version 9.3) was used for analysis of weighted data [7]. Data are not reported for estimates with a coefficient of variation of ≥30%. No statistical tests were performed. Additional information on MMP is available at http://www.cdc.gov/hiv/statistics/systems/mmp/.

#### HIGHLIGHTS OF ANALYSES

#### **Facility and Patient Response Rates**

Of 561 sampled eligible facilities in 23 project areas, 485 participated in MMP; the facility response rate, adjusted for eligibility, was 86%. In total, 9,400

patients were sampled from the 485 participating facilities. Of these, 5,154 patients completed the standard questionnaire, and their medical records were abstracted (Table 1). Adjusted for eligibility, the patient response rate was 56%.

#### **Sociodemographic Characteristics**

An estimated 74% of patients were male, 24% were female, and 2% were transgender (Table 2). Nearly half (47%) of the patients identified themselves as heterosexual, or straight; 43% as homosexual, gay, or lesbian; and 10% as bisexual. An estimated 42% were black or African American, 30% were white, and 24% were Hispanic or Latino. More than three-quarters (76%) were aged at least 40 years, and 61% had received an HIV diagnosis at least 10 years earlier. More than half (52%) had more than a high school education, and 79% were born in the United States or Puerto Rico. The estimated prevalence of homelessness was 9%. An estimated 99% had health insurance or coverage for antiretroviral therapy (ART) medications: 48% had coverage through the Ryan White HIV/AIDS Program, 45% had Medicaid, 30% had private health insurance, and 29% had Medicare. An estimated 56% had a disability, 47% were unemployed, and 53% had household incomes at or below the federal poverty threshold.

#### **Clinical Characteristics**

According to the CDC stage of disease classification for HIV infection [8], an estimated 68% of patients had ever had stage 3 (AIDS) disease (Table 3). An estimated 9% of patients had a geometric mean CD4 T-lymphocyte (CD4) count of 0–199 cells/ $\mu$ L. The estimated geometric mean CD4 count among all patients was 579 cells/ $\mu$ L, and the median CD4 count was 552 cells/ $\mu$ L (range, 2–2,581) (data not shown in table). An estimated 82% of patients had an undetectable (<200 copies/mL) viral load at the most recent measurement, while 71% had undetectable viral loads at all measurements during the past 12 months.

#### **Use of Health Care Services**

An estimated 59% of patients had at least 3 CD4 or HIV viral load tests documented in the medical record

(Table 4). As recommended by guidelines, most patients had at least 1 viral load test in each 6-month period (74%) and at least 1 CD4 test annually (96%). Overall, an estimated 95% of patients had an ART prescription documented in the medical record. Of patients who met the clinical criteria for *Pneumocystis* pneumonia (PCP) prophylaxis, 51% had a prescription for PCP prophylaxis documented in the medical record. Of patients who met the clinical criteria for *Mycobacterium avium* complex (MAC) prophylaxis, 50% had a prescription for MAC prophylaxis documented in the medical record.

Nearly 100% of patients had a usual place for HIV medical care (e.g., a physician's office or a clinic) (Table 5). Patients' estimated travel time to their usual HIV care provider averaged 34 minutes. In total, 4% of patients participated in an HIV clinical trial. Among sexually active patients, an estimated 48% were tested for gonorrhea, 48% for chlamydia, 70% for syphilis, and 43% for all 3 sexually transmitted diseases (STDs) (Table 6).

An estimated 7% of patients were seen in an emergency department or an urgent care center at least 1 time, and 1% were seen at least 5 times (Table 7). An estimated 5% of patients were admitted to a hospital for an HIV-related illness at least 1 time.

# Self-reported Antiretroviral Medication Use and Adherence

An estimated 96% of patients were currently taking ART based on self-report (Table 8). Among the estimated 2% of patients without a history of ART use, 59% had never taken ART because a physician advised a delay in treatment. Patients' ART medications were paid for by the AIDS Drug Assistance Program (ADAP) (40%), Medicaid (37%), private health insurance (24%), or Medicare (20%).

Estimated adherence to dose, schedule, and special instructions for taking ART during the past 3 days was 88%, 78%, and 75%, respectively. Among patients currently taking ART, 77% had never been troubled by ART side effects during the past 30 days; 12% had rarely been troubled.

Among patients currently taking ART, an estimated 95% were "very" or "extremely" sure that they could take all of their medication as directed, and 91% were "very" or "extremely" sure that their medication would have a positive effect on their health (Table 9). Among patients who were currently taking ART, an

estimated 55% had ever missed a dose (Table 8); 38% of patients who missed a dose did so most recently because they forgot to take it, and 26% most recently missed a dose because of a change in daily routine (Table 10).

#### **Depression and Substance Use**

The estimated prevalence of major or other depression based on the Patient Health Questionnaire (PHQ-8) algorithm [9] was 21%, including 10% with major depression (Table 11). Based on the total PHQ-8 symptom score (see the appendix), an estimated 20% of patients had current moderate or severe depression.

The estimated prevalence of smoking was 38%: 32% of patients smoked daily, 3% weekly, 1% monthly, and 2% less than monthly (Table 12). The estimated prevalence of alcohol use was 60%: 6% of patients drank alcohol daily, 17% weekly, 12% monthly, and 25% less than monthly (Table 13). Nearly 22% of patients drank alcohol before or during sex. An estimated 47% of patients drank alcohol during the past 30 days. Among patients who drank alcohol during the past 30 days, the estimated typical average daily consumption was 3.0 drinks. An estimated 15% of patients engaged in binge drinking during the past 30 days, the estimated mean number of binge-drinking days was 1.4.

An estimated 26% of patients used noninjection drugs for nonmedical purposes, and 12% used noninjection drugs before or during sex (Table 14). In total, an estimated 22% used marijuana, 4% used poppers (amyl nitrite), 4% used methamphetamine, and 4% used cocaine. An estimated 3% of patients used injection drugs for nonmedical purposes (Table 15). Of patients who injected drugs, 86% did so before or during sex.

#### **Gynecologic and Reproductive Health**

An estimated 28% of female patients received HIV care at an obstetrics and gynecology clinic, and 76% received a Papanicolaou (Pap) test (Table 16). An estimated 26% of female patients had been pregnant at least once since testing positive for HIV infection.

#### **Sexual Behavior**

An estimated 33% of men engaged in receptive anal sex with men, 30% had insertive anal sex with men, and 21% engaged in vaginal sex (Table 17). An esti-

This page of the revised edition of HIV Surveillance Special Report 17 includes corrected data for estimates of high-risk sex, condom-protected sex, and condomless sex with a partner on PrEP (see also Table 19).

mated 38% of men did not engage in vaginal or anal sex. Among women, 53% had vaginal sex, and 46% did not have vaginal or anal sex. Among transgender patients, 74% engaged in vaginal or anal sex. An estimated 53% of transgender men had vaginal or anal sex with women, and 72% of transgender women had vaginal or anal sex with men (Table 18).

Among men who had sex with men, an estimated 9% engaged in any high-risk sex, compared to 6% of men who had sex only with women, and 8% of women who had sex with men (Table 19). In terms of prevention strategies, an estimated 73% of men who had sex with men engaged in sex while sustainably virally suppressed, nearly 67% had condomprotected sex, 4% had condomless sex with a partner on preexposure prophylaxis (PrEP), and 62% had sex with an HIV-positive partner. An estimated 67% of both men who had sex only with women and women who had sex with men engaged in sex while sustainably virally suppressed. Among men who had sex only with women, 76% had condom-protected sex, compared to 65% of women who had sex with men.

#### Met and Unmet Need for Ancillary Services

An estimated 59% of patients received HIV case management services; 58% received dental care; 46% received counseling about how to prevent the transmission of HIV; 45% received public benefits, such as Social Security Income or Social Security Disability Insurance; and 44% received eye or vision services or medicine through ADAP (Table 20). An estimated 24% of patients had unmet needs for dental care; 21% for eye or vision services; 10% for public benefits, such as Social Security Income or Social Security Disability Insurance; 9% for transportation assistance; 9% for shelter or housing services; 8% for meal or food services; 7% for HIV peer group support; 6% for mental health services; 6% for lawyer or legal services; and 5% for case management services.

#### **Prevention Activities**

An estimated 54% of patients received counseling from a physician, nurse, or other health care worker about HIV and STD prevention; 38% had a one-on-one conversation with an outreach worker, a counselor, or a prevention program worker about prevention; and 16% participated in a small-group session (excluding discussions with friends) to discuss the prevention of HIV and other STDs (Table 22). An estimated 58% of

patients received free condoms from various organizations; of these, 69% received free condoms from a general health clinic, 23% from an HIV-focused community-based organization, 12% from a social venue (e.g., bar, club, bathhouse, gym, bookstore), 8% from an STD clinic, 5% from a special event, and 2% from a family planning clinic.

For further technical details, please see the appendix.

#### POPULATION OF INFERENCE

For Medical Monitoring Project (MMP) data collection cycles through 2014 (data collected June 1, 2014–May 31, 2015), the population of inference is HIV-infected adults (aged 18 years and older) who received care from known providers of outpatient HIV medical care in the United States and Puerto Rico during the population definition period (PDP). The PDP is a predefined period during which HIV-infected persons must have received care in a sampled facility in order to be sampled for participation in MMP. The PDP for the 2014 data collection cycle was January 1 through April 30, 2014.

A total of 23 areas were funded to conduct data collection for the 2014 cycle: California (including the separately funded jurisdictions of Los Angeles County and San Francisco), Delaware, Florida, Georgia, Illinois (including the separately funded jurisdiction of Chicago), Indiana, Michigan, Mississippi, New Jersey, New York (including the separately funded jurisdiction of New York City), North Carolina, Oregon, Pennsylvania (including the separately funded jurisdiction of Philadelphia), Puerto Rico, Texas (including the separately funded jurisdiction of Houston), Virginia, and Washington.

#### **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 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 computerassisted in-person interview or a telephone interview. English and Spanish versions of the questionnaire were used in the 2014 cycle (June 2014–May 2015). 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 token of appreciation of approximately \$50 in cash or the equivalent for participation; reimbursement amounts differed by project area according to local considerations.

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.

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Table 1. Participants, by project area—Medical Monitoring Project, United States, 2014

Project area	No.	%
California (excluding Los Angeles County and San Francisco)	255	4.9
Chicago, IL	228	4.4
Delaware	197	3.8
Florida	461	8.9
Georgia	193	3.7
Houston, TX	240	4.7
Illinois (excluding Chicago)	55	1.1
Indiana	192	3.7
Los Angeles County, CA	235	4.6
Michigan	192	3.7
Mississippi	254	4.9
New Jersey	204	4.0
New York (excluding New York City)	121	2.3
New York City, NY	433	8.4
North Carolina	222	4.3
Oregon	246	4.8
Pennsylvania (excluding Philadelphia)	57	1.1
Philadelphia, PA	191	3.7
Puerto Rico	260	5.0
San Francisco, CA	233	4.5
Texas (excluding Houston)	239	4.6
Virginia	224	4.3
Washington	222	4.3
Total	5,154	100

Note. Percentages might not sum to 100 because of rounding.

Table 2. Characteristics of patients—Medical Monitoring Project, United States, 2014

	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>
Gender			
Male	3,708	74.2	71.6–76.9
<sup>F</sup> emale	1,360	24.1	21.4–26.8
<sup>-</sup> ransgender <sup>d</sup>	82	1.7	1.2–2.1
Sexual orientation			
Heterosexual or straight	2,505	47.1	43.3–50.9
lomosexual or gay	2,114	43.4	40.0-46.7
Bisexual	478	9.6	8.6–10.5
Race/ethnicity			
American Indian/Alaska Native	20	0.4	0.2-0.7
sian	47	0.9	0.6-1.2
Black/African American	2,170	41.9	33.4–50.5
lispanic/Latino <sup>e</sup>	1,266	23.6	17.4–29.7
lative Hawaiian/Other Pacific Islander	13	0.2	0.1-0.3
Vhite	1,504	30.2	24.3-36.1
fultiple races	133	2.8	2.1–3.6
age at time of interview (yr)			
8–24	146	3.1	2.4-3.8
5–29	296	6.2	5.3–7.1
0–34	332	6.9	6.1–7.8
5–39	410	8.0	7.1–8.9
0–44	587	11.2	10.2–12.2
5–49	866	16.8	15.8–17.8
0–54	1,014	19.5	18.2–20.7
55–59	769	14.5	13.4–15.6
0–64	431	8.0	6.9–9.1
65	303	5.8	5.1–6.6
ducation			
ess than high school	1,039	19.9	18.2–21.6
ligh school diploma or GED	1,483	28.4	26.3–30.6
lore than high school	2,632	51.7	48.6–54.7
Country or territory of birth			
Inited States	3,968	78.9	73.2–84.6
Puerto Rico	_	_	_
Mexico (	279	5.6	4.5–6.8
Cuba	28	0.6	0.3-0.9
Other	548	10.4	8.4–12.3
ïme since HIV diagnosis (yr)			
5	979	19.9	18.2–21.6
5–9	1,003	19.4	17.9–20.9
210	3,170	60.8	58.1-63.4

Table 2. Characteristics of patients—Medical Monitoring Project, United States, 2014 (cont)

	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>
Homeless <sup>f</sup> at any time			
Yes	451	9.0	7.9–10.1
No	4,702	91.0	89.9–92.1
Incarcerated >24 hours			
Yes	212	4.3	3.6-4.9
No	4,941	95.7	95.1–96.4
Health insurance or coverage for antiretroviral medications <sup>g</sup>			
Yes	5,085	98.7	98.4–99.1
No	65	1.3	0.9–1.6
Type of health insurance or coverage for antiretroviral medic	ations		
Ryan White			
Yes	2,535	48.3	45.2–51.3
No	2,561	51.7	48.7–54.8
Medicaid			
Yes	2,292	44.9	42.2–47.6
No	2,845	55.1	52.4–57.8
Private health insurance			
Yes	1,471	30.0	27.4–32.6
No	3,678	70.0	67.4–72.6
Medicare			
Yes	1,486	28.9	27.5–30.3
No	3,648	71.1	69.7–72.5
Other public insurance			
Yes	737	11.6	5.8–17.4
No	4,410	88.4	82.6-94.2
Tricare/CHAMPUS or Veterans Administration			
Yes	89	1.8	0.9–2.7
No	5,054	98.2	97.3–99.1
Insurance type unknown <sup>h</sup>			
Yes	192	4.1	3.2–5.0
No	4,958	95.9	95.0–96.8
	-,		
Any disability <sup>i</sup> No	2 061	56 N	52 1 50 0
Yes	2,861 2,254	56.0 44.0	53.1–58.8 41.2–46.9

Table 2. Characteristics of patients—Medical Monitoring Project, United States, 2014 (cont)

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
Employment status			
Employed	2,254	43.9	41.8-46.0
Unemployed	2,436	47.3	44.9-49.7
Student	139	2.7	2.2-3.2
Retired	324	6.1	5.2–7.1
Primary source of most financial support			
SSI or SSDI	1,983	38.2	36.1–40.3
Salary or wages	2,032	40.0	37.8-42.2
Family, partner, or friends	481	9.5	8.0-11.0
Illegal or possibly illegal activities	_	_	_
No income or financial support	60	1.1	0.7–1.5
Other	587	11.2	8.6–13.7
Combined yearly household income <sup>j</sup> (US\$)			
0–19,999	3,269	65.2	61.8–68.5
20,000–39,999	915	18.5	16.8–20.2
40,000–74,999	429	9.4	8.1–10.7
≥75,000	321	7.0	5.5–8.5
Poverty guidelines <sup>k</sup>			
Above poverty threshold	2,275	47.4	44.1–50.7
At or below poverty threshold	2,659	52.6	49.3–55.9
Total	5,154	100	

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

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

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> CIs incorporate weighted percentages.

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

f Living on the street, in a shelter, in a single-room-occupancy hotel, or in a car.

<sup>&</sup>lt;sup>g</sup> Patients could select more than 1 response for health insurance or coverage for antiretroviral medications.

<sup>&</sup>lt;sup>h</sup> Unknown insurance type means that the patient had insurance or coverage for antiretroviral medications, but the type of insurance or coverage could not be determined.

<sup>&</sup>lt;sup>i</sup> Includes physical, mental, and emotional disabilities.

j Income from all sources, before taxes, in the last calendar year.

<sup>&</sup>lt;sup>k</sup> Poverty guidelines as defined by the Department of Health and Human Services (HHS); the 2013 guidelines were used for patients interviewed in 2014 and the 2014 guidelines were used for patients interviewed in 2015. More information regarding the HHS poverty guidelines can be found at http://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty.

Table 3. Stage of disease, CD4 counts, and viral suppression during the 12 months before the interview—Medical Monitoring Project, United States, 2014

	No.a	<b>%</b> b	95% CI <sup>c</sup>
Most advanced stage of disease (ever)			
Stage 1 <sup>d</sup>	472	9.4	8.4-10.4
Stage 2 <sup>e</sup>	1,164	22.8	21.0-24.5
Stage 3 (AIDS) <sup>f</sup>	3,506	67.8	66.1–69.5
Geometric mean CD4 count (cells/µL)			
0–199	451	9.3	8.5–10.2
200–349	695	14.2	13.2–15.1
350–499	950	19.2	18.0–20.5
≥500	2,819	57.3	55.6–59.0
Lowest CD4 count (cells/µL)			
0–49	142	2.8	2.3-3.3
50–199	503	10.4	9.6–11.2
200–349	836	17.0	16.0–18.0
350–499	1,124	22.6	21.6–23.6
≥500	2,324	47.2	45.7–48.7
Viral suppression			
Most recent viral load documented undetectable or <200 copies/mL	4,243	82.3	79.9–84.6
Most recent viral load documented detectable, ≥200 copies/mL, or missing/unknown	911	17.7	15.4–20.1
Durable viral suppression			
All viral load measurements documented undetectable or <200 copies/mL	3,674	71.0	68.5–73.6
Any viral load ≥200 copies/mL or missing/unknown	1,480	29.0	26.4–31.5
Total	5,154	100	

Abbreviations: CI, confidence interval; CD4, CD4 T-lymphocyte count (cells/µL).

Source of stages: CDC. Revised surveillance case definitions for HIV infection among adults, adolescents, and children aged <18 months and for HIV infection and AIDS among children aged 18 months to <13 years—United States, 2008. *MMWR* 2008;57(RR-10):1–12.

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

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> Cls incorporate weighted percentages.

<sup>&</sup>lt;sup>d</sup> HIV infection, stage 1: No AIDS-defining condition and either CD4 count of ≥500 cells/μL or CD4 percentage of total lymphocytes of ≥29.

e HIV infection, stage 2: No AIDS-defining condition and either CD4 count of 200–499 cells/μL or CD4 percentage of total lymphocytes of 14–28.

f HIV infection, stage 3 (AIDS): Documentation of an AIDS-defining condition or either a CD4 count of <200 cells/ μL or a CD4 percentage of total lymphocytes of <14. Documentation of an AIDS-defining condition supersedes a CD4 count or percentage that would not, by itself, be the basis for a stage 3 (AIDS) classification.

Table 4. CD4 and viral load monitoring and prescription of antiretroviral therapy, *Pneumocystis* pneumonia (PCP) prophylaxis, and *Mycobacterium avium* complex (MAC) prophylaxis during the 12 months before the interview—Medical Monitoring Project, United States, 2014

	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>
Number of outpatient laboratory tests <sup>d</sup>			
CD4 or HIV viral load			
0	147	2.9	2.2-3.5
1	551	11.1	9.9-12.2
2	1,367	27.3	25.6-29.0
≥3	3,049	58.7	56.0-61.4
CD4			
0	206	4.1	3.3-4.9
1	690	13.6	12.1–15.2
2	1,452	29.1	27.3-30.8
≥3	2,766	53.2	50.1-56.3
HIV viral load			
0	275	5.3	3.6–7.0
1	635	12.7	11.7–13.7
2	1,447	28.8	26.8-30.9
≥3	2,757	53.1	50.7–55.5
HIV viral load measurement at least once every 6 months			
Yes	3,790	73.7	71.8–75.6
No	1,324	26.3	24.4–28.2
CD4 measured at least once annually			
Yes	4,908	95.9	95.1–96.7
No	206	4.1	3.3–4.9
Prescribed ART			
Yes	4,900	95.4	94.8-96.0
No	254	4.6	4.0-5.2
Prescribed PCP prophylaxis <sup>e</sup>			
Yes	268	50.6	40.6–60.6
No	286	49.4	39.4–59.4
Prescribed MAC prophylaxis <sup>f</sup>			
Yes	51	49.9	37.4–62.4
No	64	50.1	37.6–62.6
Total	5,154	100	

Abbreviations: CI, confidence interval; CD4, CD4 T-lymphocyte count (cells/µL) 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>lt;sup>a</sup> Numbers are unweighted.

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> Cls incorporate weighted percentages.

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

<sup>&</sup>lt;sup>e</sup> Among patients with CD4 cell count <200 cells/μL.

f Among patients with CD4 cell count <50 cells/μL.

Table 5. Clinical services during the 12 months before the interview—Medical Monitoring Project, United States, 2014

	No. <sup>a</sup>	<b>%</b> b	95% CI <sup>c</sup>
Had usual place for primary HIV care			
Yes	5,130	99.7	99.6-99.9
No	17	0.3	0.1–0.4
Received influenza vaccination			
Yes	4,314	85.1	83.1-87.2
No	779	14.9	12.8–16.9
Participated in HIV clinical trial			
Yes	193	3.7	3.0-4.5
No	4,934	96.3	95.5–97.0
Travel time to primary HIV care (estimated in minutes)			
Mean	34.1		
Median	28.1		
Range	0–360		
Total	5,154	100	

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> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> Cls incorporate weighted percentages.

Table 6. Sexually transmitted disease testing during the 12 months before the interview, by sexual activity— Medical Monitoring Project, United States, 2014

	Total population		Sexually	Sexually active <sup>a</sup> persons of		
	No.b	% <sup>c</sup>	95% CI <sup>d</sup>	No. <sup>b</sup>	% <sup>c</sup>	95% CI <sup>d</sup>
Gonorrhea <sup>e</sup>						
Yes, received test	2,368	43.6	39.0–48.2	1,513	48.2	43.4–53.0
No test documented	2,746	56.4	51.8–61.0	1,448	51.8	47.0–56.6
Chlamydia <sup>f</sup>						
Yes, received test	2,358	43.5	39.0–48.0	1,511	48.4	43.6–53.1
No test documented	2,756	56.5	52.0-61.0	1,450	51.6	46.9–56.4
Syphilis <sup>g</sup>						
Yes, received test	3,510	66.9	64.4–69.4	2,122	70.2	67.5–72.9
No test documented	1,604	33.1	30.6–35.6	839	29.8	27.1–32.5
Gonorrhea, chlamydia, and syphilis						
Yes, received all three tests	2,076	38.2	34.1–42.4	1,347	43.2	38.8–47.6
All three tests not documented	3,038	61.8	57.6–65.9	1,614	56.8	52.4–61.2
Total	5,154	100		2,984	100	

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.

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

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

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

<sup>&</sup>lt;sup>d</sup> CIs incorporate weighted percentages.

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

<sup>&</sup>lt;sup>f</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], microhemagglutination assay for antibody to *T. pallidum* [MHA-TP], fluorescent treponemal antibody absorbed [FTA-ABS] tests), or dark-field microscopy.

Table 7. Emergency department or urgent care clinic use and hospital admission during the 12 months before the interview—Medical Monitoring Project, United States, 2014

	No. <sup>a</sup>	<b>%</b> b	95% CI <sup>c</sup>	
Number of visits to emergency department or urgent care clinic				
0	4,746	92.8	91.9–93.7	
1	205	3.9	3.2-4.6	
2–4	143	2.5	2.2–2.9	
≥5	42	0.8	0.5–1.0	
Number of hospital admissions				
0	4,889	95.3	94.7–96.0	
1	157	3.0	2.5–3.5	
2–4	77	1.4	1.1–1.7	
≥5	_	_	_	
Total	5,154	100		

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

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

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> CIs incorporate weighted percentages.

Table 8. Antiretroviral therapy use, payment source, and adherence—Medical Monitoring Project, United States, 2014

	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>
Ever taken ART			
Yes	5,045	98.2	97.8–98.6
No	91	1.8	1.4–2.2
Currently taking ART			
⁄es	4,933	96.2	95.7-96.7
No	194	3.8	3.3–4.3
Main reason for never taking ART			
Doctor advised to delay treatment	52	59.3	47.6–71.0
Participant believed he or she didn't need medications because felt healthy or believed HIV laboratory results were good	18	21.2	12.7–29.7
Due to side effects of medication	_	_	_
Felt depressed or overwhelmed	_	_	_
Didn't want to think about being HIV positive	_	_	_
Norried about ability to adhere	_	_	_
Orinking or using drugs	0	0.0	_
Money or insurance issues	_	_	_
Homeless	0	0.0	_
Taking alternative or complementary medicines	_	_	_
Other	_	_	_
Main reason for not currently taking ART, among those persons with a history of ART use			
Doctor advised to delay treatment	24	23.2	14.0-32.4
Participant believed he or she didn't need medications because felt healthy or believed HIV laboratory results were good	_	_	_
Due to side effects of medication	11	12.1	6.3-18.0
Felt depressed or overwhelmed	_	_	_
Didn't want to think about being HIV positive	_	_	_
Norried about ability to adhere	_	_	_
Orinking or using drugs	_	_	_
Money or insurance issues	20	22.1	11.8–32.3
Homeless	_	_	_
Taking alternative or complementary medicines	0	0.0	_
Other	19	17.6	9.2-26.0

Table 8. Antiretroviral therapy use, payment source, and adherence—Medical Monitoring Project, United States, 2014 *(cont)* 

	No. <sup>a</sup>	<b>%</b> b	95% CI <sup>c</sup>
ART medications paid for by <sup>d</sup>			
AIDS Drug Assistance Program (ADAP)			
Yes	2,040	40.4	37.4–43.4
No	2,843	59.6	56.6-62.6
Medicaid			
Yes	1,799	37.2	34.5–39.9
No	3,084	62.8	60.1–65.5
Private health insurance			
Yes	1,105	23.8	20.9–26.7
No	3,778	76.2	73.3–79.1
Medicare			
Yes	1,017	20.4	18.8–22.0
No	3,866	79.6	78.0–81.2
Out of pocket			
Yes	539	10.8	6.8–14.9
No	4,344	89.2	85.1–93.2
Other public insurance			
Yes	_	_	_
No	_	_	_
Other unspecified insurance			
Yes	140	3.3	2.4–4.1
No	4,789	96.7	95.9–97.6
AIDS service organizations			
Yes	39	0.8	0.5–1.2
No	4,844	99.2	98.8–99.5
Clinical trial or drug study			
Yes	25	0.5	0.3–0.8
No	4,858	99.5	99.2–99.7
Public clinic	·		
Yes	25	0.4	0.3–0.6
No	4,858	99.6	99.4–99.7
Veterans Administration	,		
Yes	_	_	_
No	_	_	_
Tricare or CHAMPUS			
Yes		_	_
No	_	_	_

Table 8. Antiretroviral therapy use, payment source, and adherence—Medical Monitoring Project, United States, 2014 (cont)

	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>
100% ART medication adherence (during preceding 72 hours) <sup>d</sup>			
By dose			
Yes	4,168	88.2	87.2-89.2
No	570	11.8	10.8–12.8
By schedule			
Yes	3,817	78.4	76.3–80.5
No	1,113	21.6	19.5–23.7
By special instructions (among those with special instructions for taking ART)	or		
Yes	2,375	74.7	73.1–76.4
No	787	25.3	23.6–26.9
Froubled by ART side effects (during past 30 days) <sup>d</sup>			
Never	3,787	76.9	74.2–79.6
Rarely	585	12.0	10.4–13.6
About half the time	205	4.4	3.7-5.1
Most of the time	160	3.2	2.7–3.8
Nways	153	3.1	2.2-3.9
Been on medications less than 30 days	_	_	_
Froubled by ART side effects half of the time or more (during past	30 days) <sup>d</sup>		
Yes	518	10.8	9.2-12.4
No	4,372	89.2	87.6–90.8
Any drug holiday <sup>d,e</sup>			
res	395	7.6	6.3-8.9
No	4,528	92.4	91.1–93.7
Ever missed a dose of ART medications <sup>d</sup>			
⁄es	2,357	55.4	51.7–59.2
No	1,987	44.6	40.8–48.3
Fotal Control of the	5,154	100	

Abbreviations: CI, confidence interval; ART, antiretroviral therapy; CHAMPUS, Civilian Health and Medical Program of the Uniformed Services.

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

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

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> Cls incorporate weighted percentages.

<sup>&</sup>lt;sup>d</sup> Among patients currently taking ART.

 $<sup>^{\</sup>rm e}$  Did not take any ART medications for at least 2 consecutive days.

Table 9. Beliefs among patients currently taking antiretroviral medications—Medical Monitoring Project, United States, 2014

Belief	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>
Will be able to take all or most of medication as d	irected		
Not at all sure	50	1.0	0.7–1.3
Somewhat sure	188	3.5	2.8–4.3
Very sure	1,386	26.5	23.5–29.4
Extremely sure	3,303	69.0	65.8–72.3
Medication will have a positive effect on health			
Not at all sure	126	2.5	1.9–3.1
Somewhat sure	324	6.6	5.9–7.4
Very sure	1,495	29.1	26.5–31.7
Extremely sure	2,951	61.8	59.3–64.2
HIV will become resistant to HIV medications if medication is not taken exactly as instructed			
Not at all sure	336	6.8	5.7–7.8
Somewhat sure	541	11.0	9.7–12.4
Very sure	1,463	28.8	26.3–31.3
Extremely sure	2,509	53.4	50.8–56.0
Total	4,933	100	

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> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> Cls incorporate weighted percentages.

Table 10. Reasons for missed antiretroviral therapy dose, among those ever missing a dose—Medical Monitoring Project, United States, 2014

	No.a	% <sup>b</sup>	95% CI <sup>c</sup>
Forgot to take them			
Yes	905	37.8	35.7-40.0
No	1,437	62.2	60.0-64.3
Change in daily routine, including travel			
Yes	572	25.5	23.3–27.7
No	1,770	74.5	72.3–76.7
Problem with prescription or refill			
Yes	323	14.0	11.4–16.5
No	2,019	86.0	83.5–88.6
Felt sick or tired			
Yes	267	10.9	9.6–12.3
No	2,075	89.1	87.7–90.4
Drinking or using drugs			
Yes	84	3.5	2.6-4.4
No	2,258	96.5	95.6–97.4
Money or insurance issues			
Yes	64	2.9	2.0-3.9
No	2,278	97.1	96.1–98.0
Felt depressed or overwhelmed			
Yes	76	3.1	2.3–3.9
No	2,266	96.9	96.1–97.7
Due to side effects of medication			
Yes	44	1.7	1.0-2.4
No	2,298	98.3	97.6–99.0
Had too many pills to take			
Yes	18	0.7	0.4–1.0
No	2,324	99.3	99.0–99.6
Homeless <sup>d</sup>			
Yes	11	0.5	0.2–0.8
No	2,331	99.5	99.2–99.8
Total	2,357	100	

Note. Patients could report more than 1 reason.

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

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

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> Cls incorporate weighted percentages.

<sup>&</sup>lt;sup>d</sup> Living on the street, in a shelter, in a single-room–occupancy hotel, or in a car.

Table 11. Depression during the 12 months before the interview—Medical Monitoring Project, United States, 2014

	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>
Depression based on DSM-IV criteria <sup>d</sup>			
No depression	4,037	79.1	77.5–80.7
Other depression	538	10.6	9.7–11.6
Major depression	508	10.2	9.0–11.5
Moderate or severe depression (PHQ-8 score >10)			
Yes	998	19.9	17.9–21.9
No	4,085	80.1	78.1–82.1
Total	5,154	100	

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> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> CIs incorporate weighted percentages.

d 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.

Table 12. Cigarette smoking—Medical Monitoring Project, United States, 2014

	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>
Smoked ≥100 cigarettes (lifetime)			
Yes	3,070	60.3	57.9–62.6
No	2,058	39.7	37.4–42.1
Smoking status			
Never smoked	2,058	39.7	37.4–42.1
Former smoker	1,168	22.4	20.0–24.7
Current smoker	1,902	37.9	34.8–41.0
Frequency of current cigarette smoking			
Never	3,226	62.1	59.0–65.2
Daily	1,593	31.7	28.8–34.6
Weekly	158	3.2	2.7–3.6
Monthly	50	1.0	0.8–1.3
Less than monthly	101	2.0	1.6–2.4
Total	5,154	100	

*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> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> Cls incorporate weighted percentages.

Table 13. Alcohol use during the 12 months before the interview—Medical Monitoring Project, United States, 2014

	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>
Any alcohol use <sup>d</sup>			
Yes	3,061	60.3	57.5-63.0
No	2,066	39.7	37.0-42.5
Frequency of alcohol use			
Daily	306	5.9	5.2-6.6
Weekly	881	17.3	15.5-19.1
Monthly	590	11.9	10.7-13.2
Less than monthly	1,284	25.1	23.8-26.4
Never	2,066	39.7	37.0-42.5
Alcohol use before or during sex			
Yes	1,079	22.0	20.4-23.5
No	3,969	78.0	76.5–79.6
Alcohol use (during past 30 days)			
Yes	2,375	47.1	45.0-49.2
No	2,733	52.9	50.8-55.0
Binge drinking <sup>e</sup> (during past 30 days)			
Yes	780	15.3	14.1–16.5
No	4,314	84.7	83.5-85.9
Heavy drinking <sup>f</sup> (during past 30 days)			
Yes	230	4.5	3.9-5.1
No	4,867	95.5	94.9–96.1
Days ≥1 drink consumed <sup>g</sup> (estimated numbers during	past 30 days)		
Mean	7.4		
Median	3.3		
Range	1–30		
Drinks consumed per day <sup>g</sup> (estimated numbers during	ı nast 30 days)		
Mean	3.0		
Median	1.8		
Range	1–30		
Binge drinking days <sup>g</sup> (estimated numbers during past	30 days)		
binge drinking days∘ (estimated numbers during past Mean	30 days) 1.4		
Median	0.0		
Range	0-30		
rango			
Total	5,154	100	

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

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

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> Cls incorporate weighted percentages.

<sup>&</sup>lt;sup>d</sup> Patients 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>e</sup> Patients who drank ≥5 alcoholic beverages in a single sitting (≥4 for women) during the 30 days preceding the interview.

f 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> Among patients who drank alcohol in the past 30 days.

Table 14. Noninjection drug use during the 12 months before the interview—Medical Monitoring Project, United States, 2014

	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>
Use of any noninjection drugs <sup>d</sup>			
Yes	1,309	26.2	24.4–27.9
No	3,816	73.8	72.1–75.6
Use of any noninjection drugs <sup>d</sup> before or during sex			
Yes	581	12.0	10.8–13.2
No	4,475	88.0	86.8–89.2
Noninjection drugs <sup>d</sup> used by patients			
Marijuana			
Yes	1,103	22.2	20.7–23.7
No	4,021	77.8	76.3–79.3
Poppers (amyl nitrite)			
Yes	204	4.1	3.1–5.1
No	4,920	95.9	94.9–96.9
Methamphetamine (crystal meth, tina, crank, ice)			
Yes	215	4.3	3.0-5.7
No	4,910	95.7	94.3–97.0
Cocaine that is smoked or snorted			
Yes	211	4.1	3.4–4.8
No	4,914	95.9	95.2–96.6
Crack			
Yes	135	2.7	2.0-3.4
No	4,990	97.3	96.6–98.0
Painkiller (e.g., Oxycontin, Vicodin, or Percocet)			
Yes	99	1.8	1.3–2.3
No	5,025	98.2	97.7–98.7
X or Ecstasy			
Yes	75	1.5	1.2–1.8
No	5,050	98.5	98.2–98.8
GHB			
Yes	82	1.5	0.9–2.2
No	5,043	98.5	97.8–99.1

Table 14. Noninjection drug use during the 12 months before the interview—Medical Monitoring Project, United States, 2014 (cont)

	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
Downer (e.g., Valium, Ativan, or Xanax)			
Yes	84	1.6	1.2–1.9
No	5,040	98.4	98.1–98.8
Amphetamine (speed)			
Yes	62	1.3	1.0–1.7
No	5,061	98.7	98.3–99.0
Hallucinogen (e.g., LSD or mushrooms)			
Yes	_	_	_
No	_	_	_
Special K (ketamine)			
Yes	31	0.6	0.3–0.8
No	5,094	99.4	99.2–99.7
Heroin or opium that is smoked or snorted			
Yes	45	0.8	0.5–1.1
No	5,080	99.2	98.9–99.5
Steroid			
Yes	16	0.3	0.1–0.4
No	5,109	99.7	99.6–99.9
Total	5,154	100	

Disclaimer: The use of trade names is for identification only and does not imply endorsement by the Department of Health and Human Services or the Centers for Disease Control and Prevention.

Abbreviations: CI, confidence interval; GHB, gamma hydroxybutyrate; LSD, lysergic acid diethylamide.

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

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

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> Cls incorporate weighted percentages.

<sup>&</sup>lt;sup>d</sup> Includes all drugs that were not injected (i.e., administered by any route other than injection), including legal drugs that were not used for medical purposes.

Table 15. Injection drug use during the 12 months before the interview—Medical Monitoring Project, United States, 2014

	No. <sup>a</sup>	<b>%</b> b	95% CI <sup>c</sup>
Use of any injection drugs			
Yes	137	2.5	1.7–3.3
No	4,986	97.5	96.7–98.3
Use of any injection drugs before or during sex <sup>d</sup>			
Yes	95	85.6	78.6–92.5
No	16	14.4	7.5–21.4
Injection drugs used by patients			
Methamphetamine (crystal meth, tina, crank, ice)			
Yes	96	1.8	1.0-2.7
No	5,055	98.2	97.3–99.0
Heroin			
Yes	39	0.6	0.4-0.9
No	5,114	99.4	99.1–99.6
Cocaine			
Yes	_	_	_
No	_	_	_
Heroin and cocaine (speedball)			
Yes	_	_	_
No	_	_	_
Crack			
Yes	_	_	_
No	_	_	_
Amphetamine (speed)			
Yes	_	_	_
No	_	_	_
Oxycontin			
Yes	_	_	_
No	_	_	_
Total	5,154	100	

Disclaimer: The use of trade names is for identification only and does not imply endorsement by the Department of Health and Human Services or the Centers for Disease Control and Prevention.

Abbreviation: CI, confidence interval.

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

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

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> Cls incorporate weighted percentages.

<sup>&</sup>lt;sup>d</sup> Among patients who used any injection drugs.

Table 16. Gynecological care and reproductive health among women—Medical Monitoring Project, United States, 2014

	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>
Received HIV care at a gynecological clinic			
Yes	380	28.0	21.0-34.9
No	967	72.0	65.1–79.0
Papanicolaou (Pap) test			
Yes	1,021	76.0	71.8–80.3
No	316	24.0	19.7–28.2
Pregnant since HIV diagnosis			
Yes	347	26.1	23.9–28.3
No	1,013	73.9	71.7–76.1
Total	1,360	100	

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> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> Cls incorporate weighted percentages.

Table 17. Gender and sexual behavior during the 12 months before the interview—Medical Monitoring Project, United States, 2014

		Men			Women	
Behavior	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>
Engaged in anal sex with men						
Receptive						
Yes	1,144	32.7	30.4–35.0	55	4.2	3.1-5.3
No	2,440	67.3	65.0–69.6	1,281	95.8	94.7–96.9
Insertive						
Yes	1,055	29.9	27.5–32.2	_	_	_
No	2,528	70.1	67.8–72.5	_	_	_
Engaged in anal sex with women						
Yes	73	1.8	1.3–2.3	_	_	_
No	3,632	98.2	97.7–98.7	_	_	_
Engaged in vaginal sex						
Yes	791	21.2	18.5–24.0	707	53.2	50.2-56.2
No	2,835	78.8	76.0–81.5	630	46.8	43.8–49.8
Engaged in vaginal or anal sex						
Yes	2,214	61.7	59.9–63.5	711	53.7	50.5-56.9
No	1,403	38.3	36.5–40.1	626	46.3	43.1–49.5
Number of vaginal or anal sex partners Among MSM <sup>d</sup>						
Mean	7			_		
Median	2			_		
Range	1–400			_		
Among MSW <sup>e</sup>						
Mean	2			_		
Median	1			_		
Range	1–40			_		
Among WSM <sup>f</sup>						
Mean	_			1		
Median	_			1		
Range	_			1–100		
Total	3,708	100		1,360	100	

Abbreviations: CI, confidence interval; MSM, men who had sex with men; MSW, men who had sex only with women; WSM, women who had sex with men.

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

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

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>C</sup> Cls incorporate weighted percentages.

<sup>&</sup>lt;sup>d</sup> Among men who had anal sex with men in the past 12 months.

 $<sup>^{\</sup>mbox{\scriptsize e}}$  Among men who had vaginal or anal sex only with women in the past 12 months.

<sup>&</sup>lt;sup>f</sup> Among women who had vaginal or anal sex with men in the past 12 months.

No. 17

Table 18. Sexual behavior during the 12 months before the interview among transgender people—Medical Monitoring Project, United States, 2014

			a h			а			h
		Transgender	U,s	Transgender women <sup>a</sup>		men <sup>a</sup>		Transgender m	en
Behavior No	No. <sup>c</sup>	<b>%</b> <sup>d</sup>	95% CI <sup>e</sup>	No. <sup>c</sup>	<b>%</b> <sup>d</sup>	95% CI <sup>e</sup>	No. <sup>c</sup>	<b>%</b> <sup>d</sup>	95% CI <sup>e</sup>
Engaged in vaginal or anal sex									
Yes	58	73.9	65.2-82.5	51	73.7	63.4-84.1	_	_	_
No	21	26.1	17.5–34.8	19	26.3	15.9–36.6	_	_	_
Engaged in vaginal or anal sex with men									
Yes	51	66.9	57.3–76.4	49	71.9	60.6-83.3	_	_	_
No	28	33.1	23.6–42.7	21	28.1	16.7–39.4	_	_	_
Engaged in vaginal or anal sex with women									
Yes	_	_	_	_	_	_	5	52.9	26.3-79.4
No	_	_	_	_	_	_	4	47.1	20.6–73.7
Engaged in vaginal or anal sex with transgender partners									
Yes	0	0.0		0	0.0		0	0.0	
No	79	100	_	70	100	_	9	100	_
Reported any high-risk sex <sup>f</sup>									
Yes	_	_	_	_	_	_	_	_	_
No	_	_	_	_	_	_	_	_	_
Number of vaginal or anal sex partners <sup>9</sup>									
Mean	3			3			_		
Median	1			1			_		
Range	1–20			1–20			_		
Total	82	100		72	100		10	100	

Abbreviations: CI, confidence interval; PrEP, preexposure prophylaxis [footnotes only].

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

<sup>&</sup>lt;sup>a</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. When reported sex at birth and gender were different, patients who reported that their sex assigned at birth was male but identified as female were classified as transgender women.

b 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. When reported sex at birth and gender were different, patients who reported that their sex assigned at birth was female but identified as male were classified as transgender men.

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

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

<sup>&</sup>lt;sup>e</sup> CIs incorporate weighted percentages.

f Vaginal or anal sex with at least 1 HIV-negative or unknown status partner while not sustainably virally suppressed, a condom was not used, and the partner was not on PrEP (PrEP use measured among 5 most recent partners only).

<sup>&</sup>lt;sup>g</sup> Among participants who had vaginal or anal sex in the past 12 months.

Corrected data on estimates of high-risk sex, condom-protected sex, and condomless sex with a partner on PrEP—May 2, 2019.

Table 19. Sexual behavior during the 12 months before the interview among men who had sex with men (MSM), men who had sex only with women (MSW), and women who had sex with men (WSM)—Medical Monitoring Project, United States, 2014

Behavior	MSM			MSW			WSM		
	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
Reported any high-risk sex <sup>d</sup>									
Yes	127	8.6	7.5–9.6	37	5.6	4.1–7.2	57	7.8	5.7-9.9
No	1,354	91.4	90.4–92.5	678	94.4	92.8–95.9	640	92.2	90.1–94.3
Percentages of persons who used a prevention strategy with at least 1 partner									
Sex while sustainably virally suppressed <sup>e</sup>									
Yes	1,085	72.8	69.1–76.5	494	66.9	61.5–72.2	473	67.0	63.5-70.5
No	407	27.2	23.5–30.9	225	33.1	27.8–38.5	236	33.0	29.5–36.5
Condom-protected sex <sup>f</sup>									
Yes	955	66.6	63.0–70.3	533	76.2	72.8–79.6	437	64.7	58.8-70.5
No	499	33.4	29.7–37.0	168	23.8	20.4–27.2	245	35.3	29.5–41.2
Condomless sex with a partner on PrEP <sup>9</sup>									
Yes	61	3.5	2.3-4.7	_	_	_	_	_	_
No	1,426	96.5	95.3–97.7	_	_	_	_	_	_
Sex with an HIV-positive partner <sup>h</sup>									
Yes	920	61.6	59.0–64.1	207	30.5	26.0–35.0	200	29.1	24.5-33.7
No	572	38.4	35.9–41.0	512	69.5	65.0–74.0	509	70.9	66.3–75.5
Total	1,492	100		719	100		709	100	

Abbreviations: CI, confidence interval; PrEP, preexposure prophylaxis.

Note. Numbers might not add to total because of missing data. Percentages might not sum to 100 because of rounding. This table does not include information on women who had sex with women only, women who had sex with transgender persons only.

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

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> Cls incorporate weighted percentages.

d Vaginal or anal sex with at least 1 HIV-negative or unknown status partner while not sustainably virally suppressed, a condom was not used, and the partner was not on PrEP (PrEP use measured among 5 most recent partners only).

e HIV viral load <200 copies/mL at every measure in the past 12 months.

f Condoms were used with any vaginal or anal sex partners.

<sup>&</sup>lt;sup>9</sup> Any HIV-negative condomless sex partner was on PrEP. PrEP use measured among 5 most recent partners only.

<sup>&</sup>lt;sup>h</sup> Sex with at least 1 HIV-positive partner.

Table 20. Met and unmet needs for ancillary services during the 12 months before the interview—Medical Monitoring Project, United States, 2014

	Person	Persons who received services			Persons who needed but did not receive services by time of interview			Persons who did not need or receive services		
	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>	No.a	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>	
HIV case management services										
Yes	3,128	59.4	54.9-63.9	238	4.7	4.0-5.5	1,752	35.7	31.5-39.9	
No	2,001	40.6	36.1–45.1	4,888	95.3	94.5–96.0	3,368	64.3	60.1–68.5	
Dental care										
Yes	3,035	58.1	54.9-61.3	1,226	24.4	21.9-26.8	879	17.5	16.0-19.0	
No	2,110	41.9	38.7–45.1	3,914	75.6	73.2–78.1	4,261	82.5	81.0-84.0	
Counseling about how to prevent spread of H	IIV									
Yes	2,411	45.9	41.5–50.3	60	1.1	0.8–1.5	2,672	53.0	48.6–57.3	
No	2,733	54.1	49.7–58.5	5,085	98.9	98.5–99.2	2,471	47.0	42.7–51.4	
Public benefits (e.g., SSI or SSDI)										
Yes	2,378	45.4	42.9–47.9	511	9.9	8.8–11.1	2,240	44.5	41.5–47.4	
No	2,767	54.6	52.1–57.1	4,620	90.1	88.9–91.2	2,889	55.5	52.6–58.5	
Eye or vision service										
Yes	2,350	44.3	40.2–48.3	1,101	21.2	19.1–23.4	1,689	34.5	31.9–37.1	
No	2,794	55.7	51.7–59.8	4,040	78.8	76.6–80.9	3,451	65.5	62.9–68.1	
Medicine through ADAP										
Yes	2,249	43.5	40.4–46.6	119	2.5	2.0-3.0	2,613	53.8	50.8-56.8	
No	2,741	56.5	53.4–59.6	4,930	97.5	97.0–98.0	2,378	46.2	43.2–49.2	
Meal or food services										
Yes	1,506	29.0	25.7–32.4	400	7.7	6.7–8.7	3,237	63.3	60.1–66.4	
No	3,641	71.0	67.6–74.3	4,743	92.3	91.3–93.3	1,906	36.7	33.6–39.9	
Mental health services										
Yes	1,434	27.1	24.4–29.9	305	6.0	5.0-7.0	3,398	66.9	64.4-69.4	
No	3,710	72.9	70.1–75.6	4,834	94.0	93.0–95.0	1,740	33.1	30.6–35.6	
Transportation assistance										
Yes	1,363	26.2	24.1–28.3	448	8.5	7.3–9.7	3,334	65.3	63.0-67.7	
No	3,784	73.8	71.7–75.9	4,697	91.5	90.3–92.7	1,811	34.7	32.3–37.0	
Professional help remembering to take HIV me	edicines on time or co	orrectly (adher	ence support servic	es)						
Yes	1,151	21.6	18.9–24.3	91	1.8	1.3–2.2	3,902	76.6	73.9–79.3	
No	3,993	78.4	75.7–81.1	5,053	98.2	97.8-98.7	1,243	23.4	20.7-26.1	

Table 20. Met and unmet needs for ancillary services during the 12 months before the interview—Medical Monitoring Project, United States, 2014 (cont)

	Persons who received services				Persons who needed but did not receive services by time of interview			Persons who did not need or receive services		
	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	<b>%</b> <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	<b>%</b> b	95% CI <sup>c</sup>	
Shelter or housing services										
Yes	847	16.2	13.8–18.5	441	8.6	7.4-9.9	3,856	75.2	73.3–77.1	
No	4,300	83.8	81.5–86.2	4,703	91.4	90.1–92.6	1,288	24.8	22.9–26.7	
HIV peer group support										
Yes	831	15.7	13.3–18.1	373	7.4	6.3-8.5	3,929	76.9	74.6-79.2	
No	4,316	84.3	81.9–86.7	4,760	92.6	91.5–93.7	1,204	23.1	20.8–25.4	
Lawyer or legal services										
Yes	613	11.8	10.5–13.2	319	6.3	5.0-7.6	4,207	81.8	79.9–83.8	
No	4,533	88.2	86.8–89.5	4,820	93.7	92.4–95.0	932	18.2	16.2–20.1	
Drug or alcohol counseling or treatment										
Yes	423	7.9	6.5–9.4	87	1.7	1.1–2.3	4,634	90.3	88.9–91.8	
No	4,723	92.1	90.6–93.5	5,058	98.3	97.7–98.9	510	9.7	8.2–11.1	
Home health services										
Yes	317	6.2	5.2-7.3	131	2.6	2.1–3.2	4,697	91.1	89.8–92.5	
No	4,830	93.8	92.7–94.8	5,014	97.4	96.8–97.9	448	8.9	7.5–10.2	
Interpreter services										
Yes	256	5.0	3.9-6.0	25	0.5	0.3-0.7	4,866	94.6	93.4-95.7	
No	4,891	95.0	94.0–96.1	5,122	99.5	99.3–99.7	281	5.4	4.3–6.6	
Domestic violence services										
Yes	71	1.4	0.9–1.9	34	0.6	0.3-0.9	5,036	98.0	97.4-98.6	
No	5,073	98.6	98.1–99.1	5,108	99.4	99.1–99.7	105	2.0	1.4–2.6	
Childcare services										
Yes	61	1.3	1.0–1.5	56	1.1	0.7–1.4	5,029	97.7	97.3-98.1	
No	5,086	98.7	98.5–99.0	5,090	98.9	98.6–99.3	117	2.3	1.9–2.7	
Total	5,154	100		5,154	100		5,154	100		

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 1 service.

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

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

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>C</sup> Cls incorporate weighted percentages.

Table 21. Prevention services received during the 12 months before the interview—Medical Monitoring Project, United States, 2014

	No.a	<b>%</b> b	95% CI <sup>c</sup>
One-on-one conversation with physician, nurse, or other health care worker			
Yes	2,784	53.5	48.6–58.5
No	2,333	46.5	41.5–51.4
One-on-one conversation with outreach worker, counselor, or prevention program worker			
Yes	2,018	37.8	32.1–43.6
No	3,103	62.2	56.4–67.9
Organized session involving a small group of people			
Yes	907	16.4	12.7-20.2
No	4,216	83.6	79.8–87.3
Free condoms			
Yes	3,011	58.3	55.2-61.3
No	2,112	41.7	38.7–44.8
Source of free condoms <sup>d</sup>			
General health clinic			
Yes	2,038	68.8	64.1–73.5
No	967	31.2	26.5–35.9
	301	31.2	20.5–55.9
Community-based organization Yes	700	00.0	47.4.00.4
	700	23.3	17.4–29.1
No	2,305	76.7	70.9–82.6
Social venue			
Yes	365	12.1	9.1–15.1
No	2,640	87.9	84.9–90.9
Sexually transmitted disease clinic			
Yes	269	8.1	3.4–12.8
No	2,736	91.9	87.2-96.6
Special event			
Yes	146	4.7	3.0-6.3
No	2,859	95.3	93.7–97.0
Family planning clinic			
Yes	69	2.2	1.2–3.2
No	2,936	97.8	96.8–98.8
Outreach organization for persons who inject drugs	_,,,,,		22.2 00.0
Yes		<u></u>	
No	_		_ <del>_</del>
		<del></del>	— <del>-</del>
Total	5,154	100	

Note. Patients could report receiving more than 1 prevention service.

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

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

<sup>&</sup>lt;sup>b</sup> Percentages are weighted percentages.

<sup>&</sup>lt;sup>c</sup> CIs incorporate weighted percentages.

<sup>&</sup>lt;sup>d</sup> Among patients who received free condoms.

#### **METHODS**

Sampling, nonresponse analysis, and weighting methods were applied as described previously, and data were weighted to account for unequal sampling probabilities and nonresponse [1]. There were no changes in weighting methods in 2014. The only significant change was in the sexual behavior questions in the interview questionnaire. Questions about oral sex were no longer asked in the 2014 interview, and questions about sexual encounters between women were no longer asked. Patients who had anal or vaginal sex during the 12 months before the interview were asked about the following characteristics of their last (up to) 5 sexual partnerships: the partner's gender, age, and race/ethnicity; patient's commitment level to the partner; frequency of vaginal and anal sex and how often a condom was used with the partner; whether the patient or partner disclosed his or her HIV status; and whether the partner was taking preexposure prophylaxis (PrEP) at the time of the last sexual encounter. Patients with more than 5 partners during the 12 months before the interview were also asked to report aggregate information about those partners, including the number of partners with whom they had condomless sex, and the number of partners of HIV-negative or unknown status with whom they had condomless sex. PrEP use was only measured among the participant's 5 most recent partners.

#### **DEFINITIONS**

#### **Sociodemographic Characteristics**

- Gender: Categories were male, female, and transgender. Participants were classified as transgender if reported sex at birth and current gender as reported by the participant were not the same or if the participant answered "transgender" to the interview question regarding self-identified gender.
- Health insurance or other coverage for antiretroviral therapy (ART) medications:

  Participants were asked whether they had health insurance and whether they had other coverage for ART medications during the 12 months

- before interview. Responses to these questions were combined and categorized as private health insurance, Medicaid, Medicare, Ryan White HIV/AIDS Program, Tricare/CHAMPUS and Veterans Administration coverage, insurance classified as other public health insurance, and unknown insurance. Participants could select more than 1 response for health insurance or other coverage for ART medications.
- Federal poverty guidelines: Participants were asked about their combined monthly or yearly household income (in US\$) from all sources during the 12 months before interview. The number of persons meeting the current federal poverty threshold was determined by using the U.S. Department of Health and Human Services poverty guidelines that corresponded to the calendar year for which income was asked. These guidelines are issued yearly for the 48 contiguous U.S. states and Washington, D.C., and are one indicator used for determining eligibility for many federal and state programs. The 2013 guidelines [2] were used for participants interviewed in 2014, and the 2014 guidelines [3] were used for persons interviewed in 2015. Because the poverty guidelines are not defined for the territory of Puerto Rico, the guidelines for the contiguous states and Washington, D.C., were used for this jurisdiction. Participants were asked to specify the range of their income, and household income was assumed to be the midpoint of the income range.

#### **Clinical Characteristics**

• The Centers for Disease Control and Prevention (CDC) stage of disease classification for HIV infection: Defined according to CDC's 2008 revised surveillance case definition for HIV infection [4]. Medical record data were used to determine most advanced HIV disease stage ever reached by patient.

#### Use of Health Care Services

• HIV medical care: Participants were asked whether, during the 12 months before the interview, they had a usual source of primary HIV med-

- ical care. HIV medical care was defined as CD4 T-lymphocyte (CD4) count or viral load testing and prescribing ART in the context of treating and managing a patient's HIV disease on an outpatient basis.
- ART prescription: Defined as a prescription in the medical record, during the 12 months before the interview, of any of the following medications: abacavir, amprenavir, atazanavir, cobicistat, darunavir, delavirdine, didanosine, dolutegravir, efavirenz, elvitagravir, emtricitabine, enfuvirtide, etravirine, fosamprenavir, indinavir, lamivudine, lopinavir/ritonavir, maraviroc, nelfinavir, nevirapine, raltegravir, rilpivarine, ritonavir, saquinavir, stavudine, tenofovir, tipranavir, zalcitabine, or zidovudine.
- *Pneumocystis* pneumonia (PCP) prophylaxis: Defined as documentation in the medical record, during the 12 months before the interview, that prophylaxis for PCP was prescribed among persons with a CD4 count of <200 cells/µL in the 12 months before the interview [5]. Notably, patients prescribed regimens typically given as PCP prophylaxis (trimethoprim-sulfamethoxazole, dapsone with or without pyrimethamine and leucovorin, aerosolized pentamidine, and atovaquone) were not presumptively categorized as having received PCP prophylaxis.
- Mycobacterium avium complex (MAC) prophylaxis: Defined as documentation in the medical record, during the 12 months before the interview, that prophylaxis for MAC disease was prescribed among persons with a CD4 count of <50 cells/µL in the 12 months before the interview [5]. Patients prescribed regimens typically given as MAC prophylaxis (azithromycin with or without ethambutol and/or rifabutin, clarithromycin with or without ethambutol and/or rifabutin, and rifabutin with or without azithromycin or azithromycin along with ethambutol) were not presumptively categorized as having received MAC prophylaxis.
- *Neisseria gonorrhoeae* testing: Defined as documentation in the medical record, during the 12 months before the interview, of a result from culture, Gram stain, enzyme immunoassay (EIA), nucleic acid amplification test (NAAT), or nucleic acid probe.

- *Chlamydia trachomatis* testing: Defined as documentation in the medical record, during the 12 months before the interview, of a result from culture, direct fluorescent antibody (DFA), EIA or enzyme-linked immunoassay (ELISA), NAAT, or nucleic acid probe.
- Syphilis testing: Defined as documentation in the medical record, during the 12 months before the interview, of 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], microhemagglutination for antibody to *T. pallidum* [MHA-TP], fluorescent treponemal antibody absorption [FTA-ABS] tests), or darkfield microscopy.
- **Influenza vaccination:** Participants were asked whether they had received seasonal influenza vaccine during the 12 months before the interview.

# Self-reported Antiretroviral Medication Use and Adherence

• ART adherence: Participants were asked about adherence, over the past 3 days, to ART doses, schedules, and special instructions for taking ART. *Dose adherence* referred to taking a dose or set of pills/spoonfuls/injections of ART medications. *Schedule adherence* referred to following a specific schedule for ART medication timing, such as "2 times a day" or "every 8 hours." *Special instruction adherence* referred to following special instructions for ART medication, such as "take with food" or "on an empty stomach," and was measured only among those who reported they received special instructions for taking their ART medication.

#### **Depression and Substance Use**

• **Depression:** Participants were asked questions from the Patient Health Questionnaire (PHQ-8), an 8-item scale used to measure frequency of depressed mood in the preceding 2 weeks [6]. The PHQ-8 has the following question: "Over the last 2 weeks, how often have you been bothered by any of the following problems?" The respondent is then asked about the following problems: (1) little interest or pleasure in doing things (anhedonia);

- (2) feeling down, depressed, or hopeless;
- (3) trouble falling/staying asleep, or sleeping too much; (4) feeling tired or having little energy;
- (5) poor appetite or overeating; (6) feeling bad about yourself or that you are a failure or have let yourself or your family down; (7) trouble concentrating on things, such as reading the newspaper or watching television; (8) moving or speaking so slowly that other people could have noticed, or being fidgety or restless or moving around a lot more than usual. Response categories were "not at all," "several days," "more than half the days," and "nearly every day." The PHQ-8 responses were scored by using 2 methods. Method 1: an algorithm involving criteria from the Diagnostic and Statistical Manual of Mental Disorders, 4th ed (DSM-IV-TR) [7], for diagnosing major depression was used to classify adults receiving medical care for HIV infection as having major depression, other depression, or no depression. To meet the criteria for any type of depression, a participant must have experienced a number of symptoms, at least 1 of which was anhedonia or feelings of hopelessness (at least 5 symptoms for major depression, 2 to 4 symptoms for other types of depression) for half the days or nearly every day. Method 2: a score-based method, calculated as the sum of scores from the responses in the scale, was used to determine the presence of current depression of moderate or severe intensity, which was defined as a sum score of >10.
- Alcohol use: Participants were asked about alcohol use during the 12 months and 30 days before the interview. A drink was defined as 12 ounces of beer, a 5-ounce glass of wine, or a 1.5-ounce shot of liquor.
- **Heavy drinking:** Defined as an average of >2 drinks per day, or >14 drinks per week, for men and an average of >1 drink per day, or >7 drinks per week, for women.
- Binge drinking: Defined as ≥5 drinks in a single sitting for men and ≥4 drinks in a single sitting for women.

#### **Sexual Behavior**

 High-risk sex: Vaginal or anal sex with at least 1 HIV-negative or unknown status partner while not sustainably virally suppressed, when a condom was not used, and the partner was not on PrEP. Sustained viral suppression was measured by using the medical record abstraction. PrEP use was measured only among the patient's 5 most recent vaginal or anal sex partners, so among patients with more than 5 partners, PrEP was only considered to be used if at least 1 of the patient's 5 most recent partners was on PrEP.

#### Met and Unmet Needs for Ancillary Services

- Met need: Defined as an ancillary service (e.g., HIV case management services, dental care, mental health services) received during the 12 months before the interview.
- **Unmet need:** Defined as an ancillary service that the participant reported as needed but not received during the 12 months before the interview.

#### **ETHICS STATEMENT**

In accordance with the federal human subjects protection regulations at 45 Code of Federal Regulations 46.101c and 46.102d [8] and with the Guidelines for Defining Public Health Research and Public Health Non-Research [9], the Medical Monitoring Project (MMP) was determined by CDC to be a nonresearch, 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) review and approval. Participating states or territories and facilities obtained local IRB approval to conduct MMP if required locally. Informed consent was obtained from all interviewed participants.

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