HIV Surveillance Report | Special Report

Number 10

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

Medical Monitoring Project
United States, 2011

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of HIV/AIDS Prevention

This HIV Surveillance Special Report is published by the Behavioral and Clinical Surveillance Branch of the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, Georgia.

Suggested citation

Centers for Disease Control and Prevention. *Behavioral and Clinical Characteristics of Persons Receiving Medical Care for HIV Infection—Medical Monitoring Project, United States, 2011*. HIV Surveillance Special Report 10. http://www.cdc.gov/hiv/library/reports/surveillance/#special. Published January 2015. Accessed [date].

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Acknowledgments

This report is 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.

MMP study group members
http://www.cdc.gov/hiv/statistics/systems/mmp/resources.html#StudyGroupMembers

Contents

As of December 31, 2011, an estimated 899,273 persons in the United States and 6 dependent areas were living with diagnosed HIV infection [1]. In 2011, the estimated number of new HIV diagnoses was 45,382 [1]. Although the National HIV Surveillance System collects information about persons with diagnosed HIV infection [2], supplemental 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 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, 2011. A total of 23 areas were funded to conduct data collection for the 2011 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 variables with <5 responses or 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 570 sampled eligible facilities in 23 project areas, 473 participated in MMP; the facility response rate, adjusted for eligibility, was 83%. In total, 9,331 patients were sampled from the 473 participating facilities. Of these, 4,503 patients completed the standard questionnaire, and their medical records were abstracted. Adjusted for eligibility, the patient response rate was 49% (Table 1).

Sociodemographic Characteristics

The 4,503 respondents represent an estimated 478,433 (95% confidence interval [CI], 415,928–540,938) adults living with HIV who received outpatient medical care in the United States and Puerto Rico during January–April 2011. An estimated 72% of patients were male, 26% were female, and 1% were transgender (Table 2). Nearly half (49%) of patients identified themselves as heterosexual, or straight; 43% as homosexual, gay, or lesbian; and 8% as bisexual. An estimated 41% were black or African American, 34% were white, and 20% were Hispanic or Latino. More than three-quarters (77%) were aged at least 40 years, and 58% had received an HIV diagnosis at least 10 years earlier. More than half (52%) had more than a high school education, and 82% were born in the United States. The estimated prevalence of homelessness in the previous 12 months was 8%. An estimated 97% had health insurance or coverage for antiretroviral therapy (ART) medications: 41% had Medicaid, 41% had coverage through the Ryan White HIV/AIDS Program, 30% had private health insurance, and 27% had Medicare. An estimated 46% 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 69% of patients had stage 3 (AIDS) disease (Table 3). An estimated 12% of patients had a mean CD4 T-lymphocyte (CD4) count of 0–199 cells/μL in the previous 12 months. The estimated geometric mean CD4 count among all patients in the previous 12 months was 495 cells/μL, and the median CD4 count was 495 cells/μL (range, 0.1–2,688) (data not shown in table). Nearly 76% of patients had an undetectable (<200 copies/ml) viral load at the most recent measurement.

Use of Health Care Services

An estimated 66% 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 (75%) and at least one CD4 test annually (95%). Overall, an estimated 92% of patients had an ART prescription documented in the medical record. Of patients who met the clinical criteria for *Pneumocystis* pneumonia (PCP) prophylaxis, 78% had a prescription for PCP prophylaxis documented in the medical record. Of patients who met the clinical criteria for *Mycobacterium avium* complex (MAC) prophylaxis, 66% had a prescription for MAC prophylaxis documented in the medical record.

Nearly 100% of patients received most of their HIV medical care at a single place (e.g., a physician's office or a clinic) (Table 5). Patients' estimated travel time to their usual HIV care provider averaged 33 minutes. In total, 4% of patients participated in an HIV clinical trial. Among sexually active patients, an estimated 32% were tested for gonorrhea, 33% for chlamydia, 58% for syphilis, and 26% for all 3 sexually transmitted diseases (STDs) (Table 6).

An estimated 9% 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 6% of patients were admitted to a hospital for an HIV-related illness at least 1 time; fewer than 1% were admitted at least 5 times.

Self-reported Antiretroviral Medication Use and Adherence

An estimated 93% of patients were currently taking ART (Table 8). Among the estimated 4% of patients without a history of ART use, 80% had never taken ART because a physician advised a delay in treatment; 9% believed that medications were unnecessary because they felt healthy or believed their HIV laboratory test results (e.g., CD4 count and HIV viral load) were good. Patients' ART medications were most commonly paid for by the AIDS Drug Assistance Program (39%), Medicaid (33%), private health insurance (25%), or Medicare (19%).

Estimated adherence to dose, schedule, and special instructions for taking ART during the past 3 days was 87%, 76%, and 71%, respectively. Among patients currently taking ART, 68% had not been troubled by ART side effects during the past 30 days; 16% had rarely been troubled.

Among patients currently taking ART, an estimated 94% were "very" or "extremely" sure that they could take all of their medication as directed, and 88% believed that their medication would have a positive effect on their health (Table 9). Among the estimated 56% of patients who were currently taking ART and ever missed a dose (Table 8), 30% most recently missed a dose because of a change in daily routine, and 28% most recently missed a dose because they forgot to take it (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 23%, including 10% with major depression (Table 11). Based on the total PHQ-8 symptom score (see the appendix), an estimated 21% of patients had current moderate or severe depression.

The estimated prevalence of smoking in the previous 12 months was 40%: 34% of patients smoked daily, 4% weekly, 1% monthly, and 2% less than monthly (Table 12). The estimated prevalence of alcohol use in the previous 12 months was 65%: 7% of patients drank alcohol daily, 20% weekly, 12% monthly, and 27% less than monthly (Table 13). Nearly 24% of patients drank alcohol before or during sex. An estimated 51% 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 2.9 drinks. An estimated 16% of patients engaged in binge drinking during the past 30 days. Among patients who drank alcohol in 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 23% used marijuana, 4% used cocaine, 4% used poppers (amyl nitrite), and 4% used methamphetamine. An estimated 3% of patients used injection drugs for nonmedical purposes (Table 15). The drugs most frequently injected were methamphetamine by 2% and heroin by fewer than 1%. Of patients who injected drugs, 78% did so before or during sex.

Gynecologic and Reproductive Health

An estimated 21% of female patients received HIV care at an obstetrics and gynecology clinic, and 77%

received a Papanicolaou (Pap) test (Table 16). An estimated 23% of female patients had been pregnant at least once since testing positive for HIV infection; of these, 80% gave birth to 1 or more children after learning their HIV status.

Sexual Behavior

An estimated 49% of patients were gay, bisexual, and other men who have sex with men (collectively referred to as MSM); 24% were men who exclusively have sex with women; 26% were women who have sex with men; fewer than 1% were women who exclusively have sex with women; and 1% were transgender (Table 17) (see the appendix for details of transgender classification). An estimated 62% of patients were sexually active, including 72% of MSM, 57% of men who have sex with women, 51% of women who have sex with men, 43% of women who have sex with women, and 36% of transgender persons. Among all patients, 26% had engaged in unprotected sex, and 12% had engaged in unprotected sex with a partner of negative or unknown HIV status.

Among MSM, 33% had engaged in unprotected anal intercourse, and 13% had engaged in unprotected anal intercourse with a partner of negative or unknown HIV status (Table 18). Among men who have sex with women, 16% had engaged in unprotected vaginal intercourse, and 9% had engaged in unprotected vaginal intercourse with a partner of negative or unknown HIV status (Table 19). Among women who have sex with men, 20% had engaged in unprotected vaginal intercourse, and 13% had engaged in unprotected vaginal intercourse with a partner of negative or unknown HIV status (Table 20).

Met and Unmet Need for Ancillary Services

An estimated 59% of patients received dental care, 58% received HIV case management services, 43% received medicine through the AIDS Drug Assistance Program, and 40% received counseling about how to prevent the transmission of HIV (Table 21). An estimated 23% of patients had unmet needs for dental care; 11% for public benefits, such as Social Security Income or Social Security Disability Insurance; 9% for transportation assistance; 9% for HIV peer group support; 7% for shelter or housing services; 7% for meal or food services; and 7% for mental health services.

Prevention Activities

An estimated 45% of patients received counseling from a physician, nurse, or other health care worker about HIV and STD prevention; 30% had a one-on-one conversation with an outreach worker, a counselor, or a prevention program worker about prevention; and 14% participated in a small-group session (excluding discussions with friends) to discuss the prevention of HIV and other STDs (Table 22). An estimated 54% of patients received free condoms from various organizations; of these, 64% received free condoms from a general health clinic, 27% from an HIV/AIDS-focused community-based organization, 14% from a social venue (i.e., bar, club, bathhouse, gym, bookstore), 7% from an STD clinic, 5% from a special event, 1% from an outreach organization focused on injection drug use (excluding needle exchange programs), and 1% from a family planning clinic.

For further technical details, please see the appendix.

Population of Inference

For each MMP data collection cycle, 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 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 2011 data collection cycle was January 1 through April 30, 2011. Published research suggests that of all HIV-infected persons in medical care, 88% had visited their HIV medical care provider at least once during the first 4 months of the specified calendar year [10].

A total of 23 areas were funded to conduct data collection for the 2011 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 a computer-assisted personal interview. Two versions of the questionnaire (both available in English and in Spanish) were used in 2011: a standard questionnaire and a short questionnaire. The short questionnaire was administered when a patient was too ill to complete the longer standard interview or when translation to a language other than Spanish was required. Only standard questionnaire data are included in this report.

Persons who agreed to participate were interviewed in a private location (e.g., at home or in a clinic) or over the telephone. The standard interview (approximately 45 minutes) included questions about demographics, health care utilization, 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 reimbursed approximately $40 in cash or the equivalent for participation; reimbursement amounts differed slightly by project area.

After the interview, medical records were abstracted by MMP staff, using an electronic application provided by CDC. Abstracted information included diagnoses of AIDS-defining conditions, prescription of ART, laboratory results, and health care utilization in the 12 months before the interview.

References

1. CDC. *HIV Surveillance Report, 2012*; vol. 24. http://www.cdc.gov/hiv/library/reports/surveillance/2012/surveillance_Report_vol_24.html. Published November 2014. Accessed January 12, 2015.
2. Nakashima AK, Fleming PL. HIV/AIDS surveillance in the United States, 1981–2001. *J Acquir Immune Defic Syndr* 2003;32(suppl 1):S68–S85.
3. McNaghten AD, Wolfe MI, Onorato I, et al. Improving the representativeness of behavioral and clinical surveillance for persons with HIV in the United States: the rationale for developing a population-based approach. *PLoS One* 2007;2(6):e550.
4. Institute of Medicine. *Measuring What Matters: Allocation, Planning and Quality Assessment for the Ryan White CARE Act*. Washington, DC: National Academies Press; 2004. http://books.nap.edu/openbook.php?record_id=10855. Published November 7, 2003. Accessed August 13, 2014.
5. Blair JM, McNaghten AD, Frazier EL, et al. Clinical and behavioral characteristics of adults receiving medical care for HIV infection—Medical Monitoring Project, United States, 2007. *MMWR* 2011;60(SS-11):1–20.
6. Frankel MR, McNaghten A, Shapiro MF, et al. A probability sample for monitoring the HIV-infected population in care in the U.S. and in selected states. *Open AIDS J* 2012;6(suppl 1):67–76.
7. SAS Institute Inc. SAS version 9.3. Cary, NC: SAS Institute; 2011.
8. 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.
9. Kroenke K, Strine TW, Spitzer RL, et al. The PHQ-8 as a measure of current depression in the general population. *J Affect Disord* 2009;114(1–3):163–173.
10. Sullivan PS, Juhasz M, McNaghten AD, et al. Time to first annual HIV care visit and associated factors for patients in care for HIV infection in 10 US cities. *AIDS Care* 2011;23(10):1314–1320.

Table 1. Participants, by project area—Medical Monitoring Project, United States, 2011

Project area	No.	%
California (excluding Los Angeles County and San Francisco)	196	4.4
Chicago, IL	204	4.5
Delaware	208	4.6
Florida	389	8.6
Georgia	120	2.7
Houston, TX	201	4.5
Illinois (excluding Chicago)	42	0.9
Indiana	168	3.7
Los Angeles County, CA	209	4.6
Michigan	149	3.3
Mississippi	206	4.6
New Jersey	180	4.0
New York (excluding New York City)	82	1.8
New York City, NY	268	6.0
North Carolina	158	3.5
Oregon	244	5.4
Pennsylvania (excluding Philadelphia)	48	1.1
Philadelphia, PA	257	5.7
Puerto Rico	242	5.4
San Francisco, CA	216	4.8
Texas (excluding Houston)	257	5.7
Virginia	217	4.8
Washington	242	5.4
Total	**4,503**	**100.0**

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

Table 2. Characteristics of patients—Medical Monitoring Project, United States, 2011

	No.[a]	%[b]	95% CI[c]
Gender			
Male	3,248	72.4	68.9–75.9
Female	1,191	26.2	22.8–29.6
Transgender[d]	63	1.4	1.1–1.7
Sexual orientation			
Heterosexual or straight	2,233	49.2	43.7–54.7
Homosexual or gay	1,830	42.5	36.9–48.1
Bisexual	376	8.3	7.4–9.2
Race/ethnicity			
American Indian/Alaska Native	28	0.6	0.3–0.9
Asian	46	1.2	0.8–1.7
Black/African American	1,842	40.8	31.6–50.0
Hispanic/Latino[e]	989	20.3	14.0–26.6
Native Hawaiian/Other Pacific Islander	—	—	—
White	1,450	33.6	26.5–40.7
Multiple races	135	3.2	2.5–3.9
Age at time of interview (yr)			
18–24	127	2.9	2.1–3.8
25–29	199	4.5	3.9–5.1
30–34	298	7.2	6.1–8.2
35–39	384	8.8	7.8–9.7
40–44	649	13.9	12.9–14.8
45–49	889	19.1	17.7–20.6
50–54	890	19.6	18.5–20.8
55–59	559	12.4	11.3–13.5
60–64	306	6.7	5.9–7.6
≥65	202	4.9	4.1–5.7
Education			
Less than high school	977	21.3	18.4–24.3
High school diploma or GED	1,213	26.9	24.5–29.3
More than high school	2,313	51.8	47.3–56.2
Country or territory of birth			
United States	3,599	81.5	75.8–87.2
Puerto Rico	—	—	—
Mexico	168	3.6	2.7–4.5
Cuba	31	0.8	0.3–1.2
Other	383	9.3	7.2–11.4
Time since HIV diagnosis (yr)			
<5	928	21.9	20.3–23.5
5–9	941	20.6	19.4–21.8
≥10	2,631	57.5	55.7–59.3

Table 2. Characteristics of patients—Medical Monitoring Project, United States, 2011 *(cont)*

	No.[a]	%[b]	95% CI[c]
Homeless[f] at any time (during past 12 months)			
Yes	380	8.1	7.0–9.1
No	4,121	91.9	90.9–93.0
Incarcerated >24 hours (during past 12 months)			
Yes	229	5.1	4.2–5.9
No	4,270	94.9	94.1–95.8
Health insurance or coverage for antiretroviral medications[g] (during past 12 months)			
Yes	4,368	97.4	96.4–98.5
No	121	2.6	1.5–3.6
Type of health insurance or coverage for antiretroviral medications (during past 12 months)			
Medicaid			
Yes	1,837	41.1	35.9–46.3
No	2,651	58.9	53.7–64.1
Ryan White			
Yes	1,800	40.5	37.6–43.3
No	2,686	59.5	56.7–62.4
Private health insurance			
Yes	1,293	30.3	25.7–34.9
No	3,194	69.7	65.1–74.3
Medicare			
Yes	1,240	27.3	25.1–29.5
No	3,246	72.7	70.5–74.9
Other public insurance			
Yes	—	—	—
No	—	—	—
Tricare/CHAMPUS or Veterans Administration			
Yes	—	—	—
No	—	—	—
Insurance type unknown[h]			
Yes	117	2.5	1.4–3.6
No	4,372	97.5	96.4–98.6

Table 2. Characteristics of patients—Medical Monitoring Project, United States, 2011 *(cont)*

	No.[a]	%[b]	95% CI[c]
Primary source of most financial support (during past 12 months)			
SSI or SSDI	1,877	40.8	37.7–44.0
Salary or wages	1,592	36.8	33.8–39.8
Family, partner, or friend(s)	420	9.9	8.1–11.7
Illegal or possibly illegal activities	—	—	—
No income or financial support	—	—	—
Other	531	10.9	8.7–13.1
Combined yearly household income[i] (US$)			
0–4,999	530	11.3	9.0–13.6
5,000–9,999	1,184	25.9	23.1–28.7
10,000–14,999	813	18.7	17.1–20.3
15,000–19,999	435	9.9	8.9–10.9
20,000–29,999	447	10.5	9.4–11.5
30,000–39,999	272	6.9	5.5–8.3
40,000–49,999	184	4.5	3.5–5.5
50,000–74,999	232	5.8	4.7–6.9
≥75,000	285	6.6	5.0–8.2
Poverty guidelines[j]			
Above poverty threshold	2,301	54.3	49.8–58.8
At or below poverty threshold	2,081	45.7	41.2–50.2
Total	**4,503**	**100.0**	

Abbreviations: CI, confidence interval; GED, general educational development; CHAMPUS, Civilian Health and Medical Program of the Uniformed Services; SSI, Social Security Supplemental 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 choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

[d] Participants were classified as transgender if sex at birth and gender reported by the participant were different, or if the participant chose transgender in response to the question about self-identified gender.

[e] Hispanics or Latinos might be of any race. Participants are classified in only one category.

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

[g] Participants could select more than one response for health insurance or coverage for antiretroviral medications.

[h] Unknown insurance type means that the participant had insurance or coverage for antiretroviral medications, but the type of insurance or coverage could not be determined.

[i] Income from all sources, before taxes, in the last calendar year.

[j] Poverty guidelines as defined by the Department of Health and Human Services (HHS); the 2010 guidelines were used for patients interviewed in 2011 and the 2011 guidelines were used for patients interviewed in 2012. More information regarding the HHS poverty guidelines can be found at http://aspe.hhs.gov/poverty/faq.cfm.

Table 3. Stage of disease, CD4 counts, and viral suppression of patients during the 12 months before the interview—Medical Monitoring Project, United States, 2011

	No.[a]	%[b]	95% CI[c]
Stage of disease			
Stage 1[d]	289	6.2	5.5–7.0
Stage 2[e]	1,061	24.4	23.0–25.9
Stage 3 (AIDS)[f]	3,126	69.3	67.6–71.1
Geometric mean CD4 count (cells/μL)			
0–199	509	12.1	10.3–13.8
200–349	691	15.8	14.6–17.1
350–499	965	22.9	21.6–24.1
≥500	2,095	49.2	47.4–51.1
Lowest CD4 count (cells/μL)			
0–49	181	4.3	3.4–5.2
50–199	518	12.2	11.1–13.3
200–349	860	19.9	18.7–21.1
350–499	1,016	23.9	22.6–25.2
≥500	1,685	39.7	38.1–41.3
Viral suppression			
Most recent viral load documented undetectable or <200 copies/mL	3,401	75.6	73.5–77.7
Most recent viral load documented ≥200 copies/mL or missing/unknown	1,102	24.4	22.3–26.5
Durable viral suppression			
All viral load measurements during past 12 months documented undetectable or <200 copies/mL	2,820	62.4	60.1–64.8
Any viral load during past 12 months ≥200 copies/mL or missing/unknown	1,683	37.6	35.2–39.9
Total	**4,503**	**100.0**	

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

Source of stages: CDC. Revised surveillance case definition 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 are from medical record abstraction.

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

Excluded are choices with fewer than 5 responses, values with a coefficient of variation greater than .30, "don't know" responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

[d] 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, 2011

	No.[a]	%[b]	95% CI[c]
Outpatient laboratory tests[d]			
CD4 or HIV viral load			
0	168	3.9	3.1–4.6
1	408	9.0	7.4–10.6
2	929	21.1	18.6–23.6
≥3	2,956	66.0	62.5–69.6
CD4			
0	203	4.9	4.0–5.7
1	487	10.8	8.9–12.7
2	1,045	23.8	21.5–26.2
≥3	2,726	60.5	56.9–64.1
HIV viral load			
0	274	6.4	5.3–7.6
1	489	10.9	9.5–12.4
2	1,052	23.6	21.6–25.7
≥3	2,646	59.0	55.7–62.2
Viral load measured at least once every 6 months			
Yes	3,334	74.6	72.2–77.1
No	1,127	25.4	22.9–27.8
CD4 measured at least once annually			
Yes	4,258	95.1	94.3–96.0
No	203	4.9	4.0–5.7
Prescribed ART			
Yes	4,151	92.3	91.0–93.6
No	352	7.7	6.4–9.0
Prescribed PCP prophylaxis[e]			
Yes	550	77.6	73.4–81.8
No	149	22.4	18.2–26.6
Prescribed MAC prophylaxis[f]			
Yes	131	66.3	51.0–81.6
No	50	33.7	18.4–49.0
Total	**4,503**	**100.0**	

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

Excluded are choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

[d] Only includes those tests with a documented result.

[e] 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, 2011

	No.[a]	%[b]	95% CI[c]
Has usual place for primary HIV care			
Yes	4,476	99.6	99.4–99.8
No	19	0.4	0.2–0.6
Received influenza vaccination			
Yes	3,671	82.4	80.2–84.6
No	790	17.6	15.4–19.8
Participated in HIV clinical trial			
Yes	192	4.1	3.3–4.8
No	4,281	95.9	95.2–96.7
Travel time to primary HIV care (estimated in minutes)			
Mean	33.1		
Median	24.7		
Range	0–360		
Total	**4,503**	**100.0**	

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 choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

Table 6. Sexually transmitted disease testing during the 12 months before the interview, by sexual activity—Medical Monitoring Project, United States, 2011

	Total population			Sexually active[a] persons only		
	No.[b]	%[c]	95% CI[d]	No.[b]	%[c]	95% CI[d]
Gonorrhea[e]						
Yes, received screening	1,356	28.7	23.7–33.7	926	32.0	26.9–37.0
No screening documented	3,105	71.3	66.3–76.3	1,829	68.0	63.0–73.1
Chlamydia[f]						
Yes, received screening	1,395	29.7	24.7–34.6	946	32.7	27.6–37.8
No screening documented	3,066	70.3	65.4–75.3	1,809	67.3	62.2–72.4
Syphilis[g]						
Yes, received screening	2,614	55.6	51.5–59.8	1,678	58.0	53.9–62.1
No screening documented	1,847	44.4	40.2–48.5	1,077	42.0	37.9–46.1
Gonorrhea, chlamydia, and syphilis						
Yes, received screening	1,101	22.8	18.5–27.2	764	25.9	21.7–30.0
No screening documented	3,360	77.2	72.8–81.5	1,991	74.1	70.0–78.3
Total	**4,503**	**100.0**		**2,781**	**100.0**	

Abbreviation: CI, confidence interval.

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 choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Sexual activity was reported in the patient interview component of the Medical Monitoring Project and was defined as oral sex or anal or vaginal intercourse.

[b] Numbers are unweighted.

[c] Percentages are weighted percentages.

[d] CIs incorporate weighted percentages.

[e] Testing for *Neisseria gonorrhoeae* was defined as documentation of a result from culture, gram stain, the nucleic acid amplification test (NAAT), or the nucleic acid probe.

[f] *Chlamydia trachomatis* testing was defined as a result from culture, direct fluorescent antibody (DFA), enzyme immunoassay (EIA) or enzyme-linked immunoassay (ELISA), the nucleic acid amplification test (NAAT), or nucleic acid probe.

[g] Syphilis testing was defined as a result from non-treponemal 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, 2011

	No.[a]	%[b]	95% CI[c]
Visits to emergency department or urgent care clinic			
0	4,026	90.5	88.7–92.4
1	230	4.7	3.5–5.9
2–4	197	4.0	3.2–4.9
≥5	38	0.8	0.4–1.1
Hospital admissions			
0	4,192	93.9	93.0–94.9
1	190	4.0	3.4–4.7
2–4	84	1.6	1.2–2.0
≥5	20	0.5	0.3–0.7
Total	**4,503**	**100.0**	

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 choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

Table 8. Antiretroviral therapy use, payment source, and adherence—Medical Monitoring Project, United States, 2011

	No.[a]	%[b]	95% CI[c]
Ever taken antiretroviral medications (ART)			
Yes	4,296	95.9	95.1–96.7
No	193	4.1	3.3–4.9
Currently taking ART			
Yes	4,118	92.9	92.0–93.9
No	326	7.1	6.1–8.0
Main reason for never taking ART			
Doctor advised to delay treatment	151	79.9	74.6–85.1
Participant believed he or she didn't need medications because felt healthy or believed HIV laboratory results were good	20	9.0	4.9–13.0
Due to side effects of medication	—	—	—
Felt depressed or overwhelmed	—	—	—
Didn't want to think about being HIV positive	—	—	—
Worried about ability to adhere	—	—	—
Drinking or using drugs	—	—	—
Money or insurance issues	—	—	—
Homeless	—	—	—
Other	—	—	—
Main reason for not currently taking ART, among those persons with a history of ART use			
Doctor advised to delay treatment	45	34.8	25.6–44.1
Participant believed he or she didn't need medications because felt healthy or believed HIV laboratory results were good	14	8.4	2.6–14.1
Due to side effects of medication	21	16.0	8.5–23.5
Felt depressed or overwhelmed	—	—	—
Didn't want to think about being HIV positive	—	—	—
Worried about ability to adhere	—	—	—
Drinking or using drugs	—	—	—
Money or insurance issues	—	—	—
Homeless	—	—	—
Other	22	16.7	10.5–22.9
ART medications paid for by			
AIDS Drug Assistance Program (ADAP)			
Yes	1,590	39.1	35.7–42.6
No	2,493	60.9	57.4–64.3
Medicaid			
Yes	1,328	32.9	28.0–37.9
No	2,755	67.1	62.1–72.0
Private health insurance			
Yes	955	24.6	20.2–29.1
No	3,128	75.4	70.9–79.8

Table 8. Antiretroviral therapy use, payment source, and adherence—Medical Monitoring Project, United States, 2011 *(cont)*

	No.[a]	%[b]	95% CI[c]
Medicare			
Yes	781	18.5	16.9–20.1
No	3,302	81.5	79.9–83.1
Out of pocket			
Yes	412	9.3	5.8–12.8
No	3,671	90.7	87.2–94.2
Other public insurance			
Yes	271	4.5	0.1–8.9
No	3,844	95.5	91.1–99.9
Other unspecified insurance			
Yes	68	1.7	0.8–2.5
No	4,047	98.3	97.5–99.2
AIDS service organization			
Yes	45	1.2	0.6–1.8
No	4,038	98.8	98.2–99.4
Public clinic			
Yes	68	1.2	0.8–1.6
No	4,015	98.8	98.4–99.2
Veterans Administration			
Yes	—	—	—
No	—	—	—
Clinical trial or drug study			
Yes	21	0.6	0.3–0.9
No	4,062	99.4	99.1–99.7
Tricare or CHAMPUS			
Yes	—	—	—
No	—	—	—
100% ART medication adherence (during preceding 72 hours)			
By dose			
Yes	3,490	86.6	84.9–88.3
No	562	13.4	11.7–15.1
By schedule			
Yes	3,084	75.6	73.0–78.1
No	1,020	24.4	21.9–27.0
By special instructions			
Yes	1,944	70.8	68.6–73.0
No	812	29.2	27.0–31.4

Table 8. Antiretroviral therapy use, payment source, and adherence—Medical Monitoring Project, United States, 2011 *(cont)*

	No.[a]	%[b]	95% CI[c]
Troubled by ART side effects			
Never	2,817	68.1	66.1–70.2
Rarely	648	15.8	14.4–17.2
About half the time	254	6.8	5.7–7.9
Most of the time	184	4.6	3.9–5.3
Always	168	4.3	3.5–5.0
Been on medications <30 days	18	0.4	0.2–0.6
Troubled by ART side effects half of the time or more (during past 30 days)			
Yes	606	15.7	14.1–17.4
No	3,465	84.3	82.6–85.9
Any drug holiday (during past 12 months)			
Yes	360	8.2	6.9–9.5
No	3,752	91.8	90.5–93.1
Ever missed a dose of ART medications			
Yes	1,938	56.1	52.4–59.8
No	1,589	43.9	40.2–47.6
Total	**4,503**	**100.0**	

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.

Excluded are choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

Table 9. Beliefs among patients currently taking antiretroviral medications—Medical Monitoring Project, United States, 2011

Belief	No.[a]	%[b]	95% CI[c]
Will be able to take all or most of medication as directed			
Not at all sure	52	1.3	0.8–1.8
Somewhat sure	206	4.8	3.9–5.7
Very sure	1,192	28.6	25.7–31.5
Extremely sure	2,661	65.3	62.2–68.5
Medication will have a positive effect on health			
Not at all sure	104	2.5	2.0–3.1
Somewhat sure	350	9.3	7.7–10.9
Very sure	1,202	28.6	26.8–30.4
Extremely sure	2,434	59.6	57.2–62.0
HIV will become resistant to antiretroviral medications if medication is not taken exactly as instructed			
Not at all sure	312	7.8	6.5–9.1
Somewhat sure	493	12.2	10.0–14.3
Very sure	1,126	26.9	24.9–28.9
Extremely sure	2,129	53.1	51.0–55.3
Total	**4,118**	**100.0**	

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 choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

Table 10. Reasons for missed antiretroviral therapy dose, among those missing a dose during the 12 months before the interview—Medical Monitoring Project, United States, 2011

	No.[a]	%[b]	95% CI[c]
Change in daily routine, including travel			
Yes	552	29.5	26.8–32.2
No	1,365	70.5	67.8–73.2
Forgot to take them			
Yes	553	27.6	24.2–31.0
No	1,364	72.4	69.0–75.8
Felt sick or tired			
Yes	243	13.5	11.6–15.3
No	1,674	86.5	84.7–88.4
Problem with prescription or refill			
Yes	254	13.3	11.3–15.4
No	1,663	86.7	84.6–88.7
Drinking or using drugs			
Yes	90	5.1	4.0–6.2
No	1,827	94.9	93.8–96.0
Felt depressed or overwhelmed			
Yes	66	3.4	2.6–4.2
No	1,851	96.6	95.8–97.4
Due to side effects of medication			
Yes	46	2.2	1.5–2.9
No	1,871	97.8	97.1–98.5
Money or insurance issues			
Yes	43	2.9	1.4–4.3
No	1,874	97.1	95.7–98.6
Had too many pills to take			
Yes	12	0.5	0.2–0.8
No	1,905	99.5	99.2–99.8
Homeless[d]			
Yes	—	—	—
No	—	—	—
Total	**1,938**	**100.0**	

Abbreviation: CI, confidence interval.

Note. Participants 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.

Excluded are choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

[d] 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, 2011

	No.[a]	%[b]	95% CI[c]
Depression based on DSM-IV criteria[d]			
No depression	3,466	77.3	74.6–80.1
Other depression	514	12.2	10.7–13.7
Major depression	459	10.4	8.6–12.3
Moderate or severe depression (PHQ-8 score >10)			
Yes	929	21.2	18.6–23.7
No	3,510	78.8	76.3–81.4
Total	**4,503**	**100.0**	

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 choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] 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, while “other depression” was defined as having 2–4 symptoms of depression.

Table 12. Cigarette smoking—Medical Monitoring Project, United States, 2011

	No.[a]	%[b]	95% CI[c]
Smoked ≥100 cigarettes (lifetime)			
Yes	2,784	62.0	59.7–64.3
No	1,691	38.0	35.7–40.3
Smoking status			
Never smoked	1,691	38.0	35.7–40.3
Former smoker	976	21.9	19.9–24.0
Current smoker	1,807	40.0	37.2–42.8
Frequency of cigarette smoking (during past 12 months)			
Never	2,667	60.0	57.2–62.8
Daily	1,527	33.6	31.2–36.0
Weekly	152	3.6	2.8–4.4
Monthly	34	0.8	0.5–1.0
Less than monthly	94	2.1	1.5–2.6
Total	**4,503**	**100.0**	

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 choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

Table 13. Alcohol use during the 12 months before the interview—Medical Monitoring Project, United States, 2011

	No.[a]	%[b]	95% CI[c]
Any alcohol use[d] (during past 12 months)			
Yes	2,877	65.3	62.3–68.2
No	1,602	34.7	31.8–37.7
Frequency of alcohol use (during past 12 months)			
Daily	264	6.5	5.1–7.9
Weekly	870	19.8	17.8–21.7
Monthly	560	12.3	11.1–13.5
Less than monthly	1,183	26.7	24.5–29.0
Never	1,602	34.7	31.8–37.7
Alcohol use before or during sex (during past 12 months)			
Yes	1,033	23.9	21.9–25.9
No	3,408	76.1	74.1–78.1
Alcohol use (during past 30 days)			
Yes	2,248	51.4	49.0–53.8
No	2,221	48.6	46.2–51.0
Binge drinking[e] (during past 30 days)			
Yes	695	15.6	14.3–16.8
No	3,764	84.4	83.2–85.7
Heavy drinking[f] (during past 30 days)			
Yes	196	4.3	3.5–5.2
No	4,255	95.7	94.8–96.5
Days ≥1 drink consumed[g] (estimated numbers during past 30 days)			
Mean	7.4		
Median	3.1		
Range	1–30		
Drinks consumed per day[g] (estimated numbers during past 30 days)			
Mean	2.9		
Median	1.7		
Range	1–40		
Binge drinking days[g] (estimated numbers during past 30 days)			
Mean	1.4		
Median	0.0		
Range	0–30		
Total	**4,503**	**100.0**	

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 choices with fewer than 5 responses, values with a coefficient of variation greater than .30, "don't know" responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

[d] Participants 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.

[e] Participants who drank ≥5 alcoholic beverages at one sitting (≥4 for women) during the 30 days preceding the interview.

[f] Participants who drank, on average, >2 alcoholic beverages (>1 for women) per day during the 30 days preceding the interview.

[g] 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, 2011

	No.[a]	%[b]	95% CI[c]
Use of any noninjection drugs[d]			
Yes	1,171	26.3	23.9–28.7
No	3,308	73.7	71.3–76.1
Use of any noninjection drugs[d] before or during sex			
Yes	547	12.3	10.6–14.0
No	3,900	87.7	86.0–89.4
Noninjection drugs[d] used by participants			
Marijuana			
Yes	989	22.5	20.0–24.9
No	3,489	77.5	75.1–80.0
Cocaine (smoked or snorted)			
Yes	199	4.4	3.7–5.0
No	4,280	95.6	95.0–96.3
Poppers (amyl nitrate)			
Yes	203	4.2	2.8–5.6
No	4,275	95.8	94.4–97.2
Methamphetamine (crystal meth, tina, crank, ice)			
Yes	188	4.1	2.8–5.5
No	4,291	95.9	94.5–97.2
Crack			
Yes	160	3.3	2.7–3.9
No	4,318	96.7	96.1–97.3
Painkiller (e.g., Oxycontin, Vicodin, or Percocet)			
Yes	112	2.7	1.9–3.4
No	4,367	97.3	96.6–98.1
Downer (e.g., Valium, Ativan, or Xanax)			
Yes	88	2.1	1.5–2.6
No	4,390	97.9	97.4–98.5
X or Ecstacy			
Yes	83	2.0	1.5–2.5
No	4,396	98.0	97.5–98.5

Table 14. Noninjection drug use during the 12 months before the interview—Medical Monitoring Project, United States, 2011 *(cont)*

	No.[a]	%[b]	95% CI[c]
GHB			
Yes	75	1.7	1.1–2.3
No	4,404	98.3	97.7–98.9
Amphetamine (speed)			
Yes	55	1.2	0.7–1.7
No	4,423	98.8	98.3–99.3
Hallucinogen (e.g., LSD or mushrooms)			
Yes	33	0.8	0.4–1.2
No	4,446	99.2	98.8–99.6
Heroin or opium (smoked or snorted)			
Yes	44	0.7	0.5–1.0
No	4,435	99.3	99.0–99.5
Special K (ketamine)			
Yes	31	0.7	0.4–1.0
No	4,448	99.3	99.0–99.6
Steroid			
Yes	17	0.5	0.2–0.7
No	4,461	99.5	99.3–99.8
Total	**4,503**	**100.0**	

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.

Excluded are choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

[d] 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, 2011

	No.[a]	%[b]	95% CI[c]
Use of any injection drugs			
Yes	124	2.6	1.7–3.5
No	4,355	97.4	96.5–98.3
Use of any injection drugs before or during sex			
Yes	79	77.8	68.4–87.1
No	22	22.2	12.9–31.6
Injection drugs used by participants			
Methamphetamine (crystal meth, tina, crank, ice)			
Yes	86	1.9	1.0–2.7
No	4,393	98.1	97.3–99.0
Heroin			
Yes	41	0.7	0.4–1.0
No	4,438	99.3	99.0–99.6
Cocaine			
Yes	27	0.6	0.3–0.9
No	4,452	99.4	99.1–99.7
Heroin and cocaine (speedball)			
Yes	28	0.5	0.3–0.8
No	4,451	99.5	99.2–99.7
Crack			
Yes	—	—	—
No	—	—	—
Amphetamine (speed)			
Yes	—	—	—
No	—	—	—
Oxycontin			
Yes	—	—	—
No	—	—	—
Total	**4,503**	**100.0**	

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.

Excluded are choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

Table 16. Gynecological history and reproductive health among women—Medical Monitoring Project, United States, 2011

	No.[a]	%[b]	95% CI[c]
Received HIV care at a gynecological clinic			
Yes	258	20.8	14.5–27.1
No	928	79.2	72.9–85.5
Pelvic exam (during past 12 months)			
Yes	876	74.5	70.9–78.0
No	298	25.5	22.0–29.1
Papanicolaou (Pap) smear (during past 12 months)			
Yes	901	77.0	73.7–80.2
No	271	23.0	19.8–26.3
Pregnant since HIV diagnosis			
Yes	273	22.5	20.1–25.0
No	906	77.5	75.0–79.9
Given birth since HIV diagnosis[d]			
Yes	220	80.0	74.3–85.7
No	53	20.0	14.3–25.7
Pregnant (during past 12 months)			
Yes	38	13.1	9.4–16.8
No	235	86.9	83.2–90.6
Given birth (during past 12 months)[e]			
Yes	11	56.9	34.1–79.7
No	9	43.1	20.3–65.9
Total	**1,191**	**100.0**	

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 choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

[d] Among women who had been pregnant since HIV diagnosis.

[e] Among women who had been pregnant during past 12 months.

Table 17. Sexual orientation and sexual activity during the 12 months before the interview—Medical Monitoring Project, United States, 2011

	No.[a]	%[b]	95% CI[c]
Classification of sexual behavior and sexual orientation			
Any MSM (MSM only, and men who have sex with men and women)	2,115	48.6	42.9–54.3
Men who have sex with women only	1,109	23.8	21.1–26.4
Any women who have sex with men (women who have sex with men only, and women who have sex with men and women)	1,163	25.8	22.5–29.1
Women who have sex with women	24	0.4	0.2–0.7
Transgender	63	1.4	1.1–1.7
Any sexual activity			
Yes	2,781	62.1	59.5–64.7
No	1,675	37.9	35.3–40.5
Any sexual activity among			
MSM			
Yes	1,502	71.8	69.4–74.2
No	598	28.2	25.8–30.6
Men who have sex with women only			
Yes	645	57.2	53.1–61.3
No	454	42.8	38.7–46.9
Women who have sex with men			
Yes	597	51.4	47.9–55.0
No	554	48.6	45.0–52.1
Women who have sex with women			
Yes	12	43.2	19.0–67.5
No	12	56.8	32.5–81.0
Transgender			
Yes	25	35.7	23.7–47.8
No	38	64.3	52.2–76.3
Engaged in any unprotected sex with			
Any partner			
Yes	1,088	25.5	22.6–28.4
No	3,268	74.5	71.6–77.4
Any partner whose HIV status was negative or unknown			
Yes	521	12.2	10.8–13.6
No	3,821	87.8	86.4–89.2

Table 17. Sexual orientation and sexual activity during the 12 months before the interview—Medical Monitoring Project, United States, 2011 *(cont)*

	No.[a]	%[b]	95% CI[c]
Estimated number of sex partners[d] among			
MSM			
Mean	6.1		
Median	1.3		
Range	1–260		
Men who have sex with women only			
Mean	1.6		
Median	1.0		
Range	1–50		
Women who have sex with men			
Mean	1.6		
Median	1.0		
Range	1–100		
Women who have sex with women			
Mean	1.0		
Median	1.0		
Range	—		
Transgender			
Mean	2.7		
Median	1.0		
Range	1–40		
Total	**4,503**	**100.0**	

Abbreviations: CI, confidence interval; MSM, men who have sex with men.

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

Excluded are choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

[d] Among sexually active patients.

Table 18. Sexual risk behaviors during the 12 months before the interview among men who have sex with men, by type of partner—Medical Monitoring Project, United States, 2011

	Any partner[a]			Main partner[b]			Casual partner[c]		
Behavior	**No.[d]**	**%[e]**	**95% CI[f]**	**No.[d]**	**%[e]**	**95% CI[f]**	**No.[d]**	**%[e]**	**95% CI[f]**
Any anal sex									
Yes	1,258	60.9	57.8–64.0	877	42.9	40.4–45.4	711	34.2	31.6–36.7
No	819	39.1	36.0–42.2	1,201	57.1	54.6–59.6	1,367	65.8	63.3–68.4
Any unprotected[g] anal sex									
Yes	665	33.4	29.7–37.2	453	22.7	20.1–25.4	364	17.6	14.9–20.3
No	1,358	66.6	62.8–70.3	1,609	77.3	74.6–79.9	1,669	82.4	79.7–85.1
Unprotected[g] anal sex with partner whose HIV status was negative or unknown									
Yes	248	12.6	10.9–14.3	139	6.9	5.8–8.1	144	7.4	6.1–8.7
No	1,763	87.4	85.7–89.1	1,919	93.1	91.9–94.2	1,886	92.6	91.3–93.9
Insertive anal sex									
Yes	1,018	49.0	46.1–52.0	696	33.7	31.4–35.9	556	26.6	24.2–28.9
No	1,059	51.0	48.0–53.9	1,382	66.3	64.1–68.6	1,522	73.4	71.1–75.8
Unprotected[g] insertive anal sex									
Yes	519	25.1	22.1–28.1	335	16.3	14.1–18.5	280	13.2	11.0–15.3
No	1,557	74.9	71.9–77.9	1,743	83.7	81.5–85.9	1,796	86.8	84.7–89.0
Unprotected[g] insertive anal sex with partner whose HIV status was negative or unknown									
Yes	140	6.9	5.6–8.1	71	3.5	2.7–4.2	77	3.7	2.7–4.8
No	1,930	93.1	91.9–94.4	2,004	96.5	95.8–97.3	1,998	96.3	95.2–97.3

Table 18. Sexual risk behaviors during the 12 months before the interview among men who have sex with men, by type of partner—Medical Monitoring Project, United States, 2011 *(cont)*

	Any partner[a]			Main partner[b]			Casual partner[c]		
Behavior	**No.[d]**	**%[e]**	**95% CI[f]**	**No.[d]**	**%[e]**	**95% CI[f]**	**No.[d]**	**%[e]**	**95% CI[f]**
Receptive anal sex									
Yes	924	45.8	43.4–48.2	635	31.8	29.4–34.2	515	25.2	23.2–27.1
No	1,130	54.2	51.8–56.6	1,439	68.2	65.8–70.6	1,542	74.8	72.9–76.8
Unprotected[g] receptive anal sex									
Yes	504	25.4	21.9–29.0	344	17.6	14.7–20.5	272	13.0	10.7–15.2
No	1,518	74.6	71.0–78.1	1,718	82.4	79.5–85.3	1,759	87.0	84.8–89.3
Unprotected[g] receptive anal sex with partner whose HIV status was negative or unknown									
Yes	197	9.9	8.3–11.5	114	5.6	4.4–6.7	114	5.9	4.8–6.9
No	1,816	90.1	88.5–91.7	1,945	94.4	93.3–95.6	1,917	94.1	93.1–95.2
Total	**2,115**	**100.0**		**2,115**	**100.0**		**2,115**	**100.0**	

Abbreviation: CI, confidence interval.

Note. Men who have sex with men were defined as men who reported sex with men during the 12 months preceding the interview, regardless of whether they also reported sex with women, or if no sexual activity was reported, men who identified as homosexual, gay, or bisexual.

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

Excluded are choices with fewer than 5 responses, values with a coefficient of variation greater than .30, "don't know" responses, and skipped (missing) responses.

[a] Indicates whether the behavior was reported with any sexual partner.

[b] A partner with whom the participant had sex and to whom he felt most committed (e.g., boyfriend, spouse, significant other, or life partner).

[c] A partner with whom the participant had sex but to whom he did not feel committed or whom he did not know very well.

[d] Numbers are unweighted.

[e] Percentages are weighted percentages.

[f] CIs incorporate weighted percentages.

[g] Neither the participant nor his partner used a condom.

Table 19. Sexual risk behaviors during the 12 months before the interview among men who have sex with women, by type of partner—Medical Monitoring Project, United States, 2011

	Any partner[a]			Main partner[b]			Casual partner[c]		
Behavior	**No.[d]**	**%[e]**	**95% CI[f]**	**No.[d]**	**%[e]**	**95% CI[f]**	**No.[d]**	**%[e]**	**95% CI[f]**
Any vaginal sex									
Yes	614	55.0	51.1–58.9	500	44.3	39.5–49.1	172	16.0	13.5–18.5
No	477	45.0	41.1–48.9	591	55.7	50.9–60.5	919	84.0	81.5–86.5
Any unprotected[g] vaginal sex									
Yes	166	15.5	13.0–17.9	142	13.3	10.8–15.7	34	3.1	1.8–4.4
No	925	84.5	82.1–87.0	949	86.7	84.3–89.2	1,057	96.9	95.6–98.2
Unprotected[g] vaginal sex with partner whose HIV status was negative or unknown									
Yes	95	9.4	6.8–12.1	77	7.8	5.3–10.3	22	2.0	1.1–2.9
No	996	90.6	87.9–93.2	1,014	92.2	89.7–94.7	1,069	98.0	97.1–98.9
Any anal sex									
Yes	74	6.2	4.2–8.2	54	4.6	3.2–6.0	30	2.1	0.9–3.4
No	1,011	93.8	91.8–95.8	1,034	95.4	94.0–96.8	1,058	97.9	96.6–99.1
Unprotected[g] anal sex									
Yes	26	1.9	0.8–3.1	—	—	—	—	—	—
No	1,059	98.1	96.9–99.2	—	—	—	—	—	—
Unprotected[g] anal sex with partner whose HIV status was negative or unknown									
Yes	—	—	—	—	—	—	—	—	—
No	—	—	—	—	—	—	—	—	—
Total	**1,109**	**100.0**		**1,109**	**100.0**		**1,109**	**100.0**	

Abbreviation: CI, confidence interval.

Note. Men who exclusively have sex with women were defined as men who reported sex only with women during the 12 months preceding the interview, or if no sexual activity was reported, men who identified as heterosexual or straight.

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

Excluded are choices with fewer than 5 responses, values with a coefficient of variation greater than .30, "don't know" responses, and skipped (missing) responses.

[a] Indicates whether the behavior was reported with any sexual partner.

[b] A partner with whom the participant had sex and to whom he felt most committed (e.g., girlfriend, spouse, significant other, or life partner).

[c] A partner with whom the participant had sex but to whom he did not feel committed or whom he did not know very well.

[d] Numbers are unweighted.

[e] Percentages are weighted percentages.

[f] CIs incorporate weighted percentages.

[g] Neither the participant nor his partner used a condom.

Table 20. Sexual risk behaviors during the 12 months before the interview among women who have sex with men, by type of partner—Medical Monitoring Project, United States, 2011

	Any partner[a]			Main partner[b]			Casual partner[c]		
Behavior	**No.[d]**	**%[e]**	**95% CI[f]**	**No.[d]**	**%[e]**	**95% CI[f]**	**No.[d]**	**%[e]**	**95% CI[f]**
Any vaginal sex									
Yes	573	50.0	46.5–53.5	516	44.8	41.4–48.1	93	8.4	6.4–10.4
No	575	50.0	46.5–53.5	631	55.2	51.9–58.6	1,057	91.6	89.6–93.6
Any unprotected[g] vaginal sex									
Yes	230	20.0	17.1–23.0	215	18.9	16.0–21.8	22	1.8	1.0–2.6
No	915	80.0	77.0–82.9	930	81.1	78.2–84.0	1,127	98.2	97.4–99.0
Unprotected[g] vaginal sex with partner whose HIV status was negative or unknown									
Yes	157	13.4	11.5–15.4	149	12.8	10.9–14.8	13	1.1	0.6–1.7
No	987	86.6	84.6–88.5	996	87.2	85.2–89.1	1,135	98.9	98.3–99.4
Any anal sex									
Yes	65	5.4	3.6–7.2	55	4.4	2.9–5.9	14	1.4	0.7–2.2
No	1,081	94.6	92.8–96.4	1,091	95.6	94.1–97.1	1,135	98.6	97.8–99.3
Unprotected[g] anal sex									
Yes	26	2.1	1.0–3.2	24	2.0	0.9–3.1	—	—	—
No	1,120	97.9	96.8–99.0	1,122	98.0	96.9–99.1	—	—	—
Unprotected[g] anal sex with partner whose HIV status was negative or unknown									
Yes	—	—	—	—	—	—	0	0.0	—
No	—	—	—	—	—	—	1,149	100.0	—
Total	**1,163**	**100.0**		**1,163**	**100.0**		**1,163**	**100.0**	

Abbreviation: CI, confidence interval.

Note. Women who have sex with men were defined as women who reported sex with men during the 12 months preceding the interview, regardless of whether they also reported sex with women, or if no sexual activity was reported, women who identified as heterosexual, straight, or bisexual.

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

Excluded are choices with fewer than 5 responses, values with a coefficient of variation greater than .30, "don't know" responses, and skipped (missing) responses.

[a] Indicates whether the behavior was reported with any sexual partner.

[b] A partner with whom the participant had sex and to whom she felt most committed (e.g., boyfriend, spouse, significant other, or life partner).

[c] A partner with whom the participant had sex but to whom she did not feel committed or whom she did not know very well.

[d] Numbers are unweighted.

[e] Percentages are weighted percentages.

[f] CIs incorporate weighted percentages.

[g] Neither the participant nor her partner used a condom.

Table 21. Met and unmet needs for ancillary services during the 12 months before the interview—Medical Monitoring Project, United States, 2011

	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.[a]	%[b]	95% CI[c]	No.[a]	%[b]	95% CI[c]	No.[a]	%[b]	95% CI[c]
Dental care									
Yes	2,666	59.1	56.6–61.5	1,029	23.1	20.7–25.6	794	17.8	16.0–19.5
No	1,824	40.9	38.5–43.4	3,465	76.9	74.4–79.3	3,696	82.2	80.5–84.0
HIV case management services									
Yes	2,688	58.3	54.1–62.5	222	5.1	4.2–6.0	1,572	36.5	32.5–40.5
No	1,802	41.7	37.5–45.9	4,263	94.9	94.0–95.8	2,911	63.5	59.5–67.5
Public benefits (e.g., SSI or SSDI)									
Yes	2,126	46.4	43.4–49.5	443	10.5	9.0–12.1	1,919	43.0	39.5–46.5
No	2,366	53.6	50.5–56.6	4,046	89.5	87.9–91.0	2,569	57.0	53.5–60.5
Medicine through ADAP									
Yes	1,904	43.2	39.9–46.6	117	2.7	2.1–3.3	2,381	54.0	50.6–57.4
No	2,502	56.8	53.4–60.1	4,324	97.3	96.7–97.9	2,024	46.0	42.6–49.4
Counseling about how to prevent spread of HIV									
Yes	1,840	39.9	36.0–43.8	51	1.1	0.7–1.5	2,600	59.0	55.0–63.0
No	2,651	60.1	56.2–64.0	4,443	98.9	98.5–99.3	1,891	41.0	37.0–45.0
Meal or food services									
Yes	1,298	27.7	25.7–29.7	320	7.3	5.7–8.9	2,877	65.0	62.5–67.5
No	3,198	72.3	70.3–74.3	4,175	92.7	91.1–94.3	1,618	35.0	32.5–37.5
Mental health services									
Yes	1,250	27.6	25.7–29.6	280	6.5	5.7–7.3	2,960	65.8	63.8–67.9
No	3,246	72.4	70.4–74.3	4,210	93.5	92.7–94.3	1,530	34.2	32.1–36.2
Transportation assistance									
Yes	1,126	24.4	21.7–27.1	413	9.0	7.5–10.4	2,956	66.6	63.6–69.7
No	3,370	75.6	72.9–78.3	4,082	91.0	89.6–92.5	1,539	33.4	30.3–36.4
Professional help remembering to take HIV medicines on time or correctly (adherence support services)									
Yes	865	19.3	16.9–21.7	101	2.1	1.6–2.7	3,525	78.5	76.2–80.9
No	3,628	80.7	78.3–83.1	4,390	97.9	97.3–98.4	967	21.5	19.1–23.8

Table 21. Met and unmet needs for ancillary services during the 12 months before the interview—Medical Monitoring Project, United States, 2011 *(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.[a]	%[b]	95% CI[c]	No.[a]	%[b]	95% CI[c]	No.[a]	%[b]	95% CI[c]
HIV peer group support									
Yes	756	16.4	14.3–18.6	390	8.9	7.2–10.5	3,340	74.7	72.7–76.6
No	3,740	83.6	81.4–85.7	4,096	91.1	89.5–92.8	1,146	25.3	23.4–27.3
Shelter or housing services									
Yes	712	15.4	13.6–17.2	338	7.4	6.3–8.6	3,446	77.2	75.3–79.0
No	3,784	84.6	82.8–86.4	4,158	92.6	91.4–93.7	1,050	22.8	21.0–24.7
Drug or alcohol counseling or treatment									
Yes	411	8.6	6.7–10.4	66	1.6	1.1–2.1	4,015	89.9	88.0–91.7
No	4,084	91.4	89.6–93.3	4,426	98.4	97.9–98.9	477	10.1	8.3–12.0
Home health services									
Yes	285	6.2	5.3–7.1	116	2.8	1.6–4.0	4,094	91.0	89.5–92.6
No	4,211	93.8	92.9–94.7	4,379	97.2	96.0–98.4	401	9.0	7.4–10.5
Interpreter services									
Yes	135	2.9	2.0–3.9	16	0.2	0.1–0.4	4,344	96.8	95.9–97.8
No	4,360	97.1	96.1–98.0	4,480	99.8	99.6–99.9	151	3.2	2.2–4.1
Domestic violence services									
Yes	67	1.3	0.8–1.8	32	0.6	0.4–0.8	4,395	98.1	97.5–98.6
No	4,428	98.7	98.2–99.2	4,462	99.4	99.2–99.6	99	1.9	1.4–2.5
Childcare services									
Yes	33	0.8	0.4–1.1	62	1.5	1.0–2.1	4,401	97.7	97.0–98.4
No	4,463	99.2	98.9–99.6	4,434	98.5	97.9–99.0	95	2.3	1.6–3.0
Total	**4,503**	**100.0**		**4,503**	**100.0**		**4,503**	**100.0**	

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

Note. Participants 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 choices with fewer than 5 responses, values with a coefficient of variation greater than .30, "don't know" responses, and skipped (missing) responses.

Analyses limited to persons with a diagnosis of HIV infection received at least 12 months before the interview.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

Table 22. Prevention services received during the 12 months before the interview—Medical Monitoring Project, United States, 2011

	No.[a]	%[b]	95% CI[c]
One-on-one conversation with physician, nurse, or other health care worker			
Yes	2,045	44.9	41.3–48.5
No	2,426	55.1	51.5–58.7
One-on-one conversation with outreach work, counselor, or prevention program worker			
Yes	1,362	29.8	26.2–33.4
No	3,112	70.2	66.6–73.8
Organized session involving a small group of people			
Yes	655	14.1	11.7–16.6
No	3,820	85.9	83.4–88.3
Free condoms			
Yes	2,390	53.5	50.0–57.1
No	2,087	46.5	42.9–50.0
Source of free condoms[d]			
General health clinic			
Yes	1,465	64.3	58.2–70.4
No	922	35.7	29.6–41.8
Community-based organization			
Yes	645	26.9	21.3–32.5
No	1,742	73.1	67.5–78.7
Social venue			
Yes	318	14.1	10.0–18.2
No	2,069	85.9	81.8–90.0
Sexually transmitted disease clinic			
Yes	204	7.0	3.1–10.9
No	2,183	93.0	89.1–96.9
Special event			
Yes	129	5.4	3.1–7.6
No	2,258	94.6	92.4–96.9
Outreach organization for persons who inject drugs			
Yes	42	1.4	0.7–2.1
No	2,345	98.6	97.9–99.3
Family planning clinic			
Yes	32	1.0	0.4–1.6
No	2,355	99.0	98.4–99.6
Total	**4,503**	**100.0**	

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 choices with fewer than 5 responses, values with a coefficient of variation greater than .30, “don’t know” responses, and skipped (missing) responses.

[a] Numbers are unweighted.

[b] Percentages are weighted percentages.

[c] CIs incorporate weighted percentages.

[d] Among patients who received free condoms.

Appendix: Methods and Definitions

METHODS

Sampling and nonresponse analyses were conducted, and weighting methods were applied, as described previously [1]. There were 5 updates to the nonresponse analysis and weighting procedures used for 2011 data, none of which substantially changed estimates from previous years. First, patient eligibility was categorized in the same way across datasets. For example, a patient who was categorized as ineligible in the interview datasets was also categorized as ineligible in the medical record abstraction (MRA) dataset. Second, patient interview data were used as the primary source for demographic data in 2011, while MRA data were used as the primary source for demographic data in 2010. Third, the nonresponse analysis was conducted separately for the interview and overlap (contains all patients who were both interviewed and had their medical records abstracted) datasets and for the MRA dataset. Nonresponse analysis for interview and overlap datasets was informed by factors associated with nonresponse to the overlap dataset, and nonresponse analysis for the MRA dataset was informed by factors associated with nonresponse to the MRA. Fourth, an additional facility eligibility adjustment was applied to account for underestimation of ineligible facilities due to the linkage of large and small facilities for sampling purposes. Fifth, an adjustment that used patient data to weight facilities up to the frame total was removed from weighting procedures.

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 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 >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 2010 guidelines [2] were used for participants interviewed in 2011, and the 2011 guidelines [3] were used for persons interviewed in 2012. 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. If the participant's income range and household size resulted in an ambiguous determination of poverty level, the participant's household income was assumed to be the midpoint of the income range.

Clinical Characteristics

- **CDC stage of disease classification for HIV infection:** Defined according to CDC's 2008 revised surveillance case definition for HIV infection [4]. To determine the stage of HIV infection, medical record data from the time since HIV diagnosis and the 12 months before interview were abstracted.

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 medical care. HIV medical care was defined as 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, darunavir, delavirdine, didanosine, efavirenz, emtricitabine, enfuvirtide, etravirine, fosamprenavir, indinavir, lamivudine, lopinavir/ritonavir, maraviroc, nelfinavir, nevirapine, raltegravir, 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 or that regimens typically given as PCP prophylaxis were prescribed (trimethoprim-sulfamethoxazole, dapsone with or without pyrimethamine and leucovorin, aerosolized pentamidine, and atovaquone) among persons with a CD4 count of <200 cells/µL during the 12 months before the interview [5].
- ***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 or that regimens typically given as MAC prophylaxis were prescribed: (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) among persons with a CD4 count of <50 cells/µL in the 12 months before the interview [5].
- ***Neisseria gonorrhoeae* testing:** Defined as documentation in the medical record, during the 12 months before the interview, of a result from culture, gram stain, 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), enzyme immunoassay (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 non-treponemal 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 dark-field microscopy.
- **Influenza vaccination:** Participants were asked whether they had received seasonal influenza vaccine during the 12 months before the interview and whether they had received vaccination for H1N1. Participants were considered vaccinated for influenza if they answered yes to either question.

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."

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) [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 one sitting for men and ≥4 drinks in one sitting for women.

Sexual Behavior

- **Sexual behavior:** Defined as anal intercourse, vaginal intercourse, or oral sex for men who have sex with men, men who have sex with women, and women who have sex with men. Defined as anal intercourse or vaginal intercourse for transgender persons. Defined as any sexual activity for women who have sex with women.
- **Gender of sex partners and sexual orientation:** Men who have sex with men (MSM) were defined as men who reported sex with one or more men in the 12 months before interview, regardless of whether they also reported sex with women, or if no sexual activity was reported, men who self-identified as homosexual, gay, or bisexual. Men who exclusively have sex with women were defined as men who reported sex only with women in the 12 months before interview, or if no sexual activity reported, men who self-identified as heterosexual/straight. Women who have sex with men were defined as women who reported sex with one or more men in the 12 months before interview, regardless of whether they also reported sex with women, or if no sexual activity was reported, women who self-identified as heterosexual/straight or bisexual. Women who exclusively have sex with women were defined as women who reported sex with women only in the 12 months before interview, or if no sexual activity was reported, women who self-identified as homosexual, gay, or lesbian. Transgender persons were defined as previously described. Participants who did not fit into any of the categories above (i.e., were unclassified because they had not engaged in sexual activity during the past year and did not report their sexual orientation) were categorized as other/unclassified. These categories are mutually exclusive (i.e., a participant could not be transgender and be placed in any other category).
- **Main and casual sex partners:** Participants reporting sexual activity in the 12 months before the interview were asked about the number of sex partners and whether they considered the partners to be main or casual. A main partner was defined as a person to whom the respondent felt most committed. A casual partner was defined as person to whom the respondent did not feel committed or whom he or she did not know very well.
- **Unprotected sex:** Defined as vaginal or anal intercourse without a condom or condom use for part of the time during a sexual act during the 12 months before the interview.
- **Unprotected sex with partners of negative or unknown status:** The number of HIV-positive partners reported by a participant during the 12 months before the interview was subtracted from

the total number of partners with whom the participant reported unprotected sex. If the numbers were not equal (i.e., not all partners were HIV-positive), the participant was considered to have had unprotected sex with a partner of negative or unknown HIV status.

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], 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 investigational review board review. Participating states or territories and facilities obtained local institutional review board approval to conduct MMP if required locally. Informed consent was obtained from all interviewed participants.

References

1. CDC. *Behavioral and Clinical Characteristics of Persons Receiving Medical Care for HIV Infection—Medical Monitoring Project, United States, 2010*. HIV Surveillance Special Report 9. http://www.cdc.gov/hiv/pdf/MMP_2010_surveillancesummary.pdf. Published October 2014. Accessed January 12, 2015.
2. U.S. Department of Health and Human Services. The 2010 HHS poverty guidelines. http://aspe.hhs.gov/poverty/10poverty.shtml. Published 2010. Accessed January 12, 2015.
3. U.S. Department of Health and Human Services. The 2011 HHS poverty guidelines. http://aspe.hhs.gov/poverty/11poverty.shtml. Published 2011. Accessed January 12, 2015.
4. 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.
5. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1–infected adults and adolescents. http://go.usa.gov/vdGA. Updated November 13, 2014. Accessed January 12, 2015.
6. Kroenke K, Strine TW, Spitzer RL, et al. The PHQ-8 as a measure of current depression in the general population. *J Affect Disord* 2009;114(1–3):163–173.
7. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders: DSM-IV-TR*. 4th ed. Washington, DC: American Psychiatric Association; 2000.
8. U.S. Department of Health and Human Services. Protection of Human Subjects, US Federal Code Title 45 Part 46. http://go.usa.gov/vdwG. Published 2009. Accessed January 12, 2015.
9. CDC. Distinguishing public health research and public health nonresearch. http://go.usa.gov/vdwz. Published 2010. Accessed January 12, 2015.