

# Behavioral and Clinical Characteristics of Persons Receiving Medical Care for HIV Infection – Comparison of Michigan and National Medical Monitoring Project Data for 2012

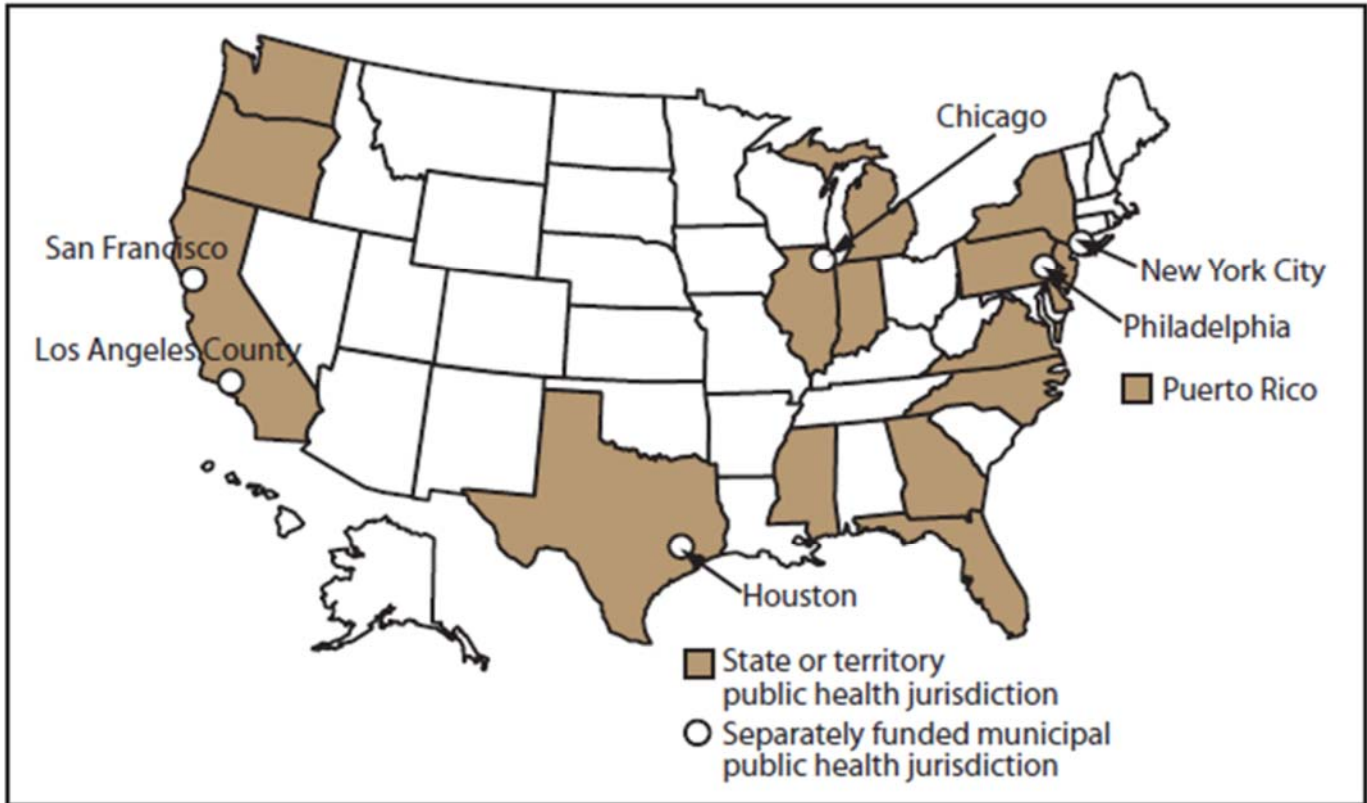
## Commentary

The Medical Monitoring Project (MMP) is a Centers for Disease Control and Prevention (CDC)-sponsored initiative housed within the HIV surveillance program. Part of the goal of the project is to ascertain the met and unmet needs of those living with HIV [1]. There are a total of 23 project areas in the United States (Figure 1) [1]. In 2012, the sampling method was three-tiered; with project areas being sampled first, then HIV care facilities, and finally individual participants. With 15,753 individuals known to be living with HIV in Michigan at the end of the year in 2011 [2], Michigan was sampled to participate in MMP as a medium morbidity state. To be considered eligible for inclusion, care facilities needed to at least provide HIV care — defined as the treatment and management of HIV disease, and includes monitoring CD4 and HIV viral load tests and/or the prescription of antiretroviral medications. Facilities providing HIV care could include outpatient facilities, such as hospital-affiliated clinics, freestanding clinics, and private physician offices. Individual participants were randomly sampled from eligible facilities [3]. In 2012, a total sample of 400 participants was drawn and 164 participants completed both the MMP interview and medical record abstraction (MRA) in the state of Michigan. The 164 respondents are assumed to be a representative sample of an estimated 7,282 adults living in Michigan with HIV who received outpatient HIV care between January 1, 2012 and April 30, 2012.

## Main Findings:

- Michigan had a higher proportion of participants identifying as ‘bisexual’ than national participants.
- Only 27% of sexually active Michigan MMP participants were tested for gonorrhea, chlamydia, and syphilis in the previous 12 months.
- At least 76% of Michigan MMP participants self-reported 100% adherence to ART medication in the 72 hours preceding interview.
- Dental care was both the most received as well as, the most needed, but not received service.

Figure 1. Map of Participating Project Areas in the 2012 Cycle [4]

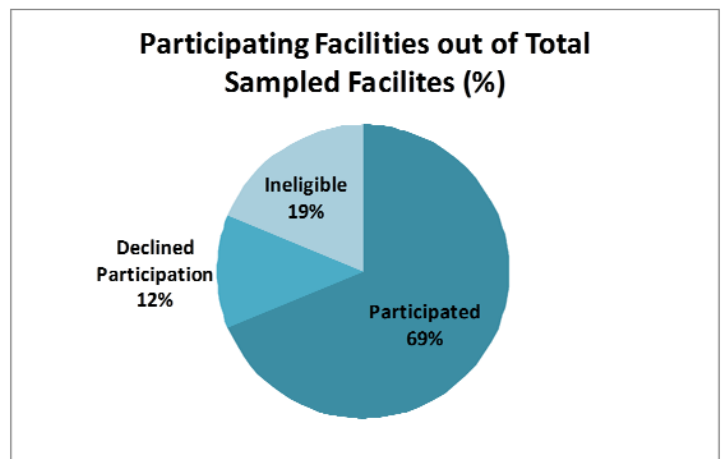


Michigan is one of 65 jurisdictions using eHARS (the Enhanced HIV/AIDS Reporting System) developed by the CDC. This is a surveillance tool that records all HIV-positive individuals either living in Michigan, having tested positive for HIV in Michigan, or receiving care for HIV in Michigan.

### Facility and Patient Response Rates

In Michigan in 2012, there were 32 facilities sampled for inclusion in MMP. Of these, 6 were deemed ineligible because they did not provide HIV care or because they referred patients elsewhere for HIV care during the Population Definition Period (PDP). The PDP is the period during which the potential participants must have received care at the facility sampled in order to participate in the project. The PDP for the 2012 cycle of MMP was from January 1 through April 30, 2012 [5].

Figure 2. Participation of Facilities in Michigan



Of the 26 sampled and eligible facilities, 22 elected to participate in MMP during the 2012 cycle. Thus, the eligibility-adjusted facility response rate was 84.6% (Figure 2). Of the 22 facilities, 400 patients were sampled, of which 164 of them consented to, and completed, both the interview and the medical record abstraction (MRA) (Table 1). The patient response rate adjusted for eligibility was 41.3%.

### Sociodemographic Characteristics

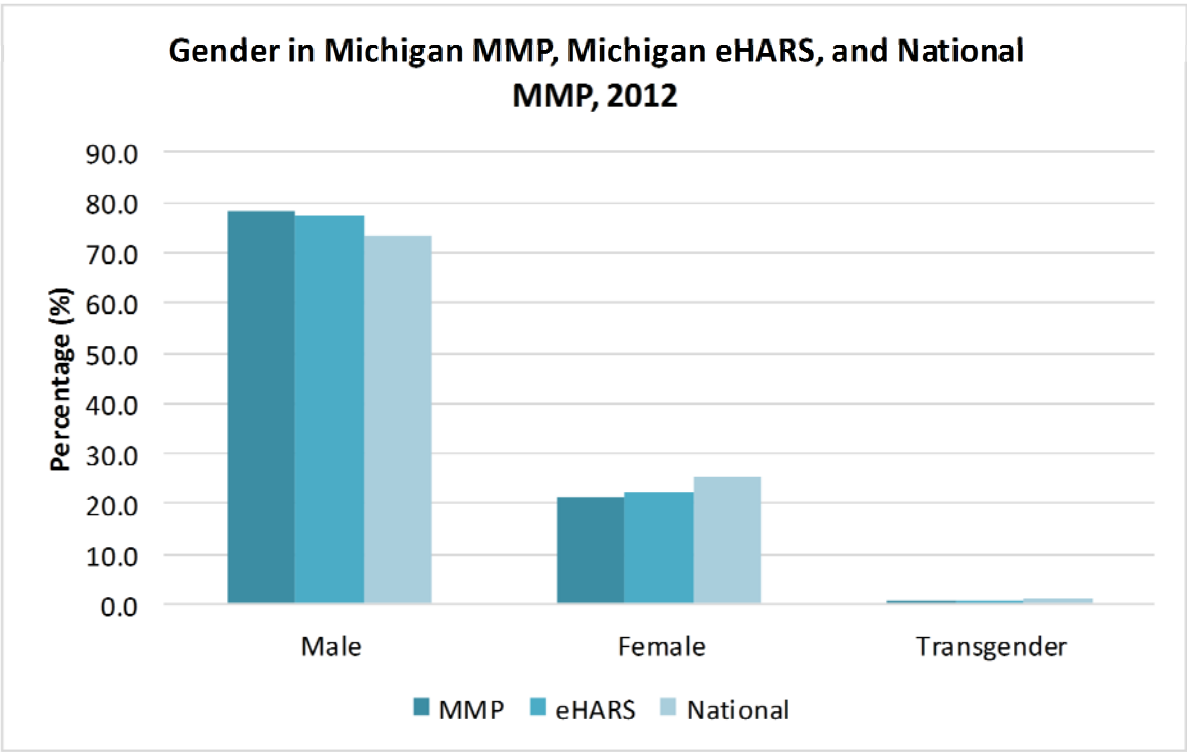
In order to have been considered eligible for MMP in 2012, individuals had to be at least 18 years of age and have received care at an HIV care facility from January 1 to April 30, 2012.

Compared below are selected sociodemographic characteristics of (1) individuals in Michigan who participated in MMP contrasted with (2) individuals in eHARS who were eligible to have been sampled for MMP in 2012 (meaning that they were at least 18 years of age and had received care at an HIV care facility from January 1, 2012 to April 30, 2012) and (3) national MMP participants (Table 2).

### Gender

The proportions of male, female, and transgender were similar between Michigan MMP, comparable Michigan eHARS, and national MMP populations (Table 2).

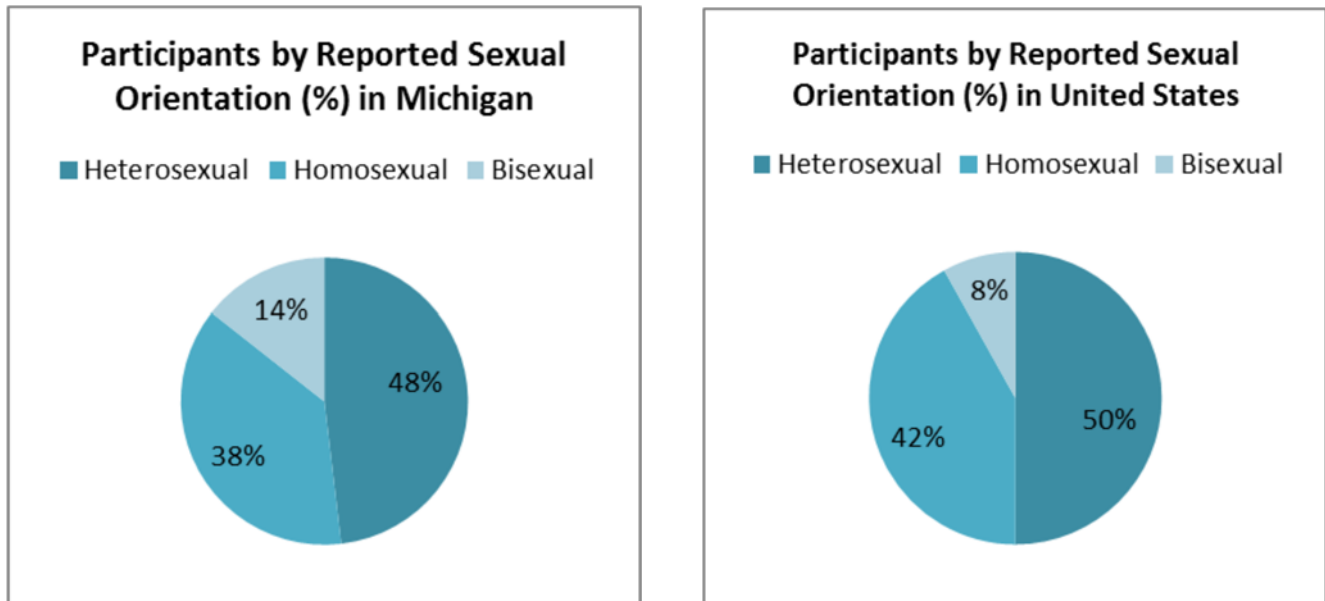
Figure 3. Gender – Michigan MMP, Michigan eHARS, and National MMP, 2012



## Sexual Orientation

Reported sexual orientation in Michigan was consistent with national estimates for MMP participants, except for the bisexual category in which Michigan had a higher percentage. This type of data was not available for the eHARS population (Table 2).

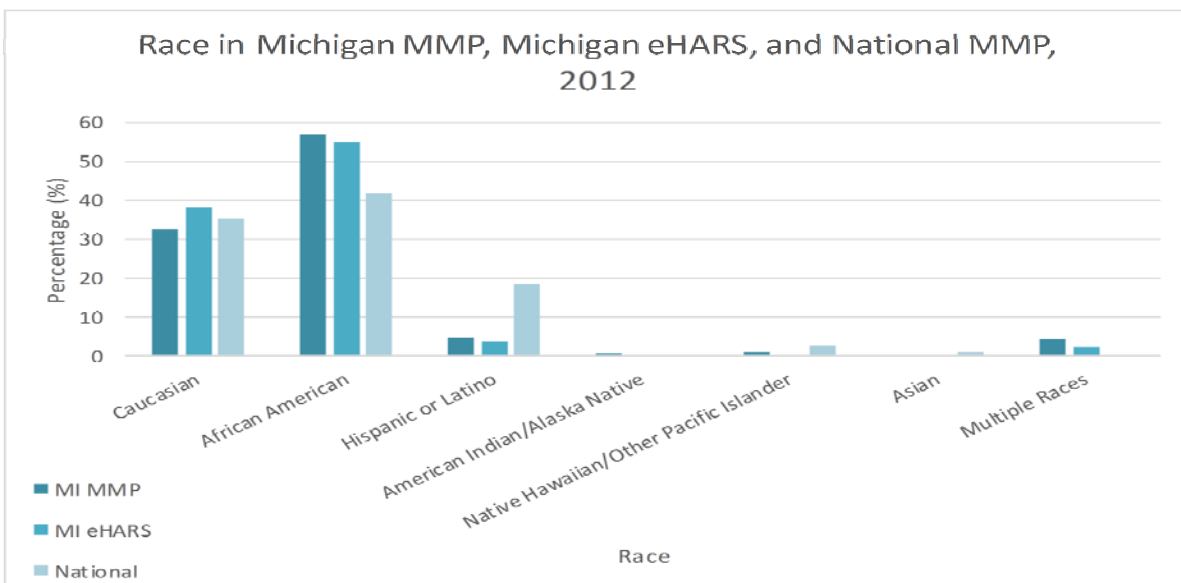
Figure 4. Breakdown of Participants by Sexual Orientation – Michigan MMP vs. National MMP



## Race

The Michigan MMP participant population had less Caucasians than the comparable Michigan eHARS and national MMP populations. There were more African Americans in the Michigan MMP and Michigan eHARS populations than the national MMP population. The national MMP population had more Hispanics than Michigan MMP and Michigan eHARS populations. All other races were comparable across the groups (Table 2).

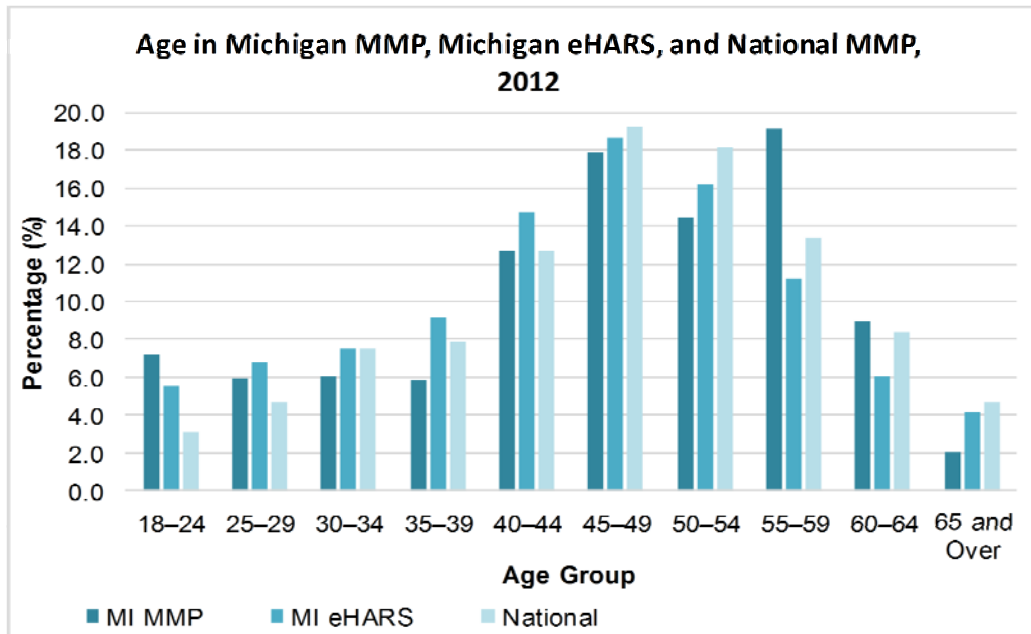
Figure 5. Race – Michigan MMP, Michigan eHARS, and National MMP, 2012



## Age

Proportions of age groups differed across the 3 populations. The Michigan MMP population had more in the 18-24 year old age group with 7.2% than the comparable eHARS and national MMP populations (5% and 3.1%, respectively). A difference was also seen in the 55-59 age group where the Michigan MMP population had 19.1%, eHARS had 11.2%, and national MMP had 13.4%. In general, the Michigan MMP population was older than the other populations (Table 2).

Figure 6: Age in Michigan MMP, Michigan eHARS, and National MMP, 2012



## Education

Education levels were similar between national and Michigan MMP participants. Education levels were not available in eHARS (Table 2).

## Country or Territory of Birth

Michigan MMP participants had a higher proportion of being born in the USA than national MMP participants (Table 2).

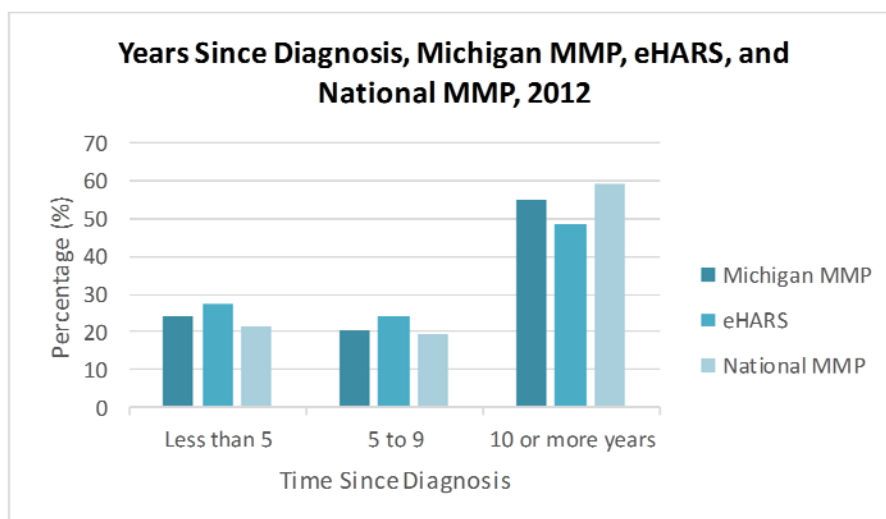
Figure 7: Country of Birth for National and Michigan MMP Participants, 2012



## Time Since Diagnosis

The number of years since diagnosis was comparable across the populations. The two MMP populations (Michigan and national) had been diagnosed slightly later than the comparable eHARS population (Table 2).

Figure 8. Years Since Diagnosis, Michigan MMP, eHARS, and National MMP, 2012



## Homelessness and Incarceration

An estimated homeless prevalence (in the 12 months prior to the interview) was 8.8% with an estimated incarceration prevalence of 3.8%. Both were consistent with the national rates for these variables (Table 2).

## Health Insurance Coverage for Antiretroviral Medication

Michigan MMP participants had less health insurance coverage for antiretroviral medication than national MMP participants (93.9% vs. 97.9%, respectively). Types of health insurance or coverage for antiretroviral medication for those who did have it also differed between Michigan and national participants. Michigan participants participated less in Ryan White (34.9% vs. 41.9%, respectively) and more in Medicare (31.6% vs. 26.2%, respectively). Medicaid (40.5% in Michigan) and private health insurance (33.6% in Michigan) participation were comparable between the two groups (Table 2).

## Income

Michigan and national participants had similar sources of income and similar levels of combined yearly household income. An estimated 39% of Michigan participants were at or below the poverty threshold, lower than the national rate of 43.8% (Table 2).

## Clinical Characteristics and Use of Healthcare Services

Due to the sampling methodology, every participant in the 2012 cycle (N=164) had a usual place for HIV care. Approximately 68.6% of participants in Michigan had stage 3 (AIDS) infections in accordance with the CDC stage of disease classification [6] (Table 3).

Only 76.4% of participants were virally suppressed at their most recent documented viral load and 64.9% of participants had all documented viral load measurements at a suppressed level (Table 3). At the lowest CD4 count (cells/ $\mu$ L), 86.9% of respondents remained above 200. An estimated 53% of Michigan participants had at least 3 CD4 or viral load tests in their medical records, less than the 62% in the national group. Current treatment guidelines recommend at least one HIV viral load test every 6 months and one CD4 test every year. An estimated 64% had at least one HIV viral load every 6 months in Michigan (72% nationally) and 92% had at least one CD4 (95% nationally) (Table 4). Furthermore, 92% of Michigan participants were prescribed ART (93% nationally) (Table 4).

### **Clinical Services**

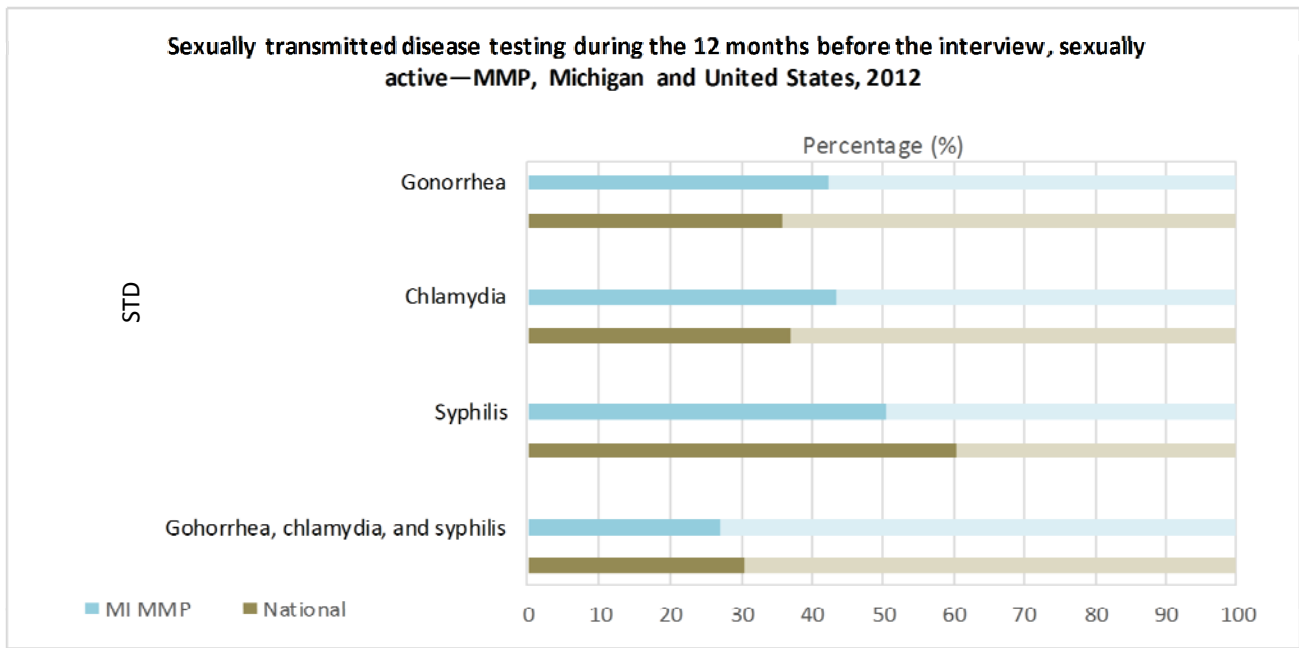
Certain vaccines are recommended for people with HIV, such as Hepatitis A and B, Influenza (injection), pneumonia, and Tetanus, Diphtheria, Pertussis (Tdap). Vaccinations are an important supplement to HIV treatment as they can prevent potentially dangerous illnesses from occurring [7]. An estimated 85.4% of Michigan MMP participants had received an influenza vaccine (Table 5). This finding is significant because the rate of influenza vaccination in the general population of U.S. adults 18 and older for 2012 was significantly lower, at 41.5% [8].

Another important consideration of HIV treatment is the travel time to the provider's office, as not all individuals have equal or convenient access to transportation, which can be a significant barrier to treatment [9]. The estimated mean travel time from Michigan participants to their primary HIV care provider for patients was 29 minutes, with values ranging from 1 minute to 2.5 hours. This was shorter than national mean of 34 minutes, with a range of travel time was from 1 minute to 6 hours (Table 5).

### **STD Testing**

For all of the Michigan participants (sexually active or not), an estimated 33.2% were tested for gonorrhea, 33.7% were tested for chlamydia, and 46.7% were tested for syphilis (Table 6). The national data was similar to the Michigan data in the STD testing categories. For sexually active participants, Michigan had slightly higher percentages in both gonorrhea and chlamydia testing (42.5% and 43.4%, respectively) than the national percentages for gonorrhea and chlamydia testing (36.0% and 37.0%, respectively) (Table 6 and Figure 9).

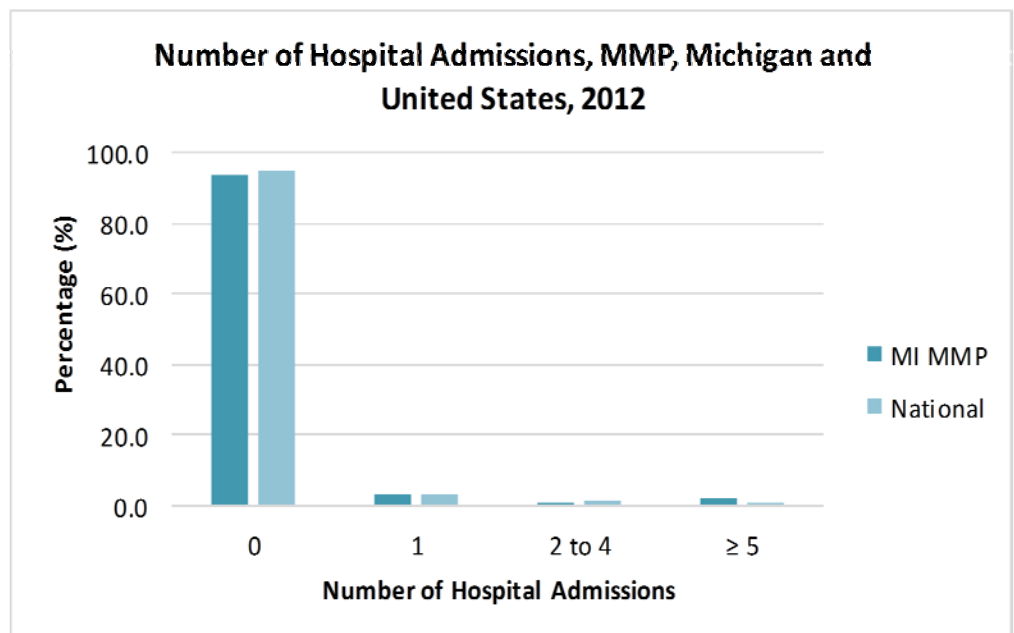
Figure 9: STD Testing for Sexually Active Participants, MMP Michigan and United States, 2012



### Emergency Department or Urgent Care Clinic Use and Hospital Admissions

There were few emergency department or urgent care clinic visits among both Michigan and national MMP participants (94% and 92%, respectively) (Table 7). The number of hospital admissions the prior 12 months was also low for both national and Michigan MMP Participants. Most participants had had zero hospital admissions in the previous year, while 1.9% of participants in Michigan and 0.4% of participants nationally had five or more. (Table 7 & Figure 10).

Figure 10: Hospital admission during the 12 months before the interview, Michigan and National MMP, 2012





## Self-reported Antiretroviral Medication Use and Adherence

An estimated 93.4% of Michigan participants were taking ART at the time of the interview (Table 8). Although almost all participants had taken ARTs at some point in their lifetime, 8 participants (4%) reported having never taken them. For all 8 of these participants, they reported that their doctor had advised them to delay treatment. The main sources of payment for ART was the AIDS Drug Assistance Program (ADAP) (35%), Medicaid (28%), private health insurance (24%), and Medicare (24%) (Table 8). Self-reported 100% ART medication adherence in the

preceding 72 hours to dose was 85%, to schedule 76%, and to special instructions 69%. The majority of participants (83%) reported 'Rarely' or 'Never' being troubled by ART side effects in the preceding 30 days. About 17% of participants were troubled by ART side effects half of the time or more during the preceding 30 days, and only 11% had ever

taken a drug holiday. Nationally, 45% of participants reported having never missed a dose of ART— much higher than the 31% of Michigan participants.

Figure 11: Antiretroviral therapy payment source, Michigan MMP, 2012

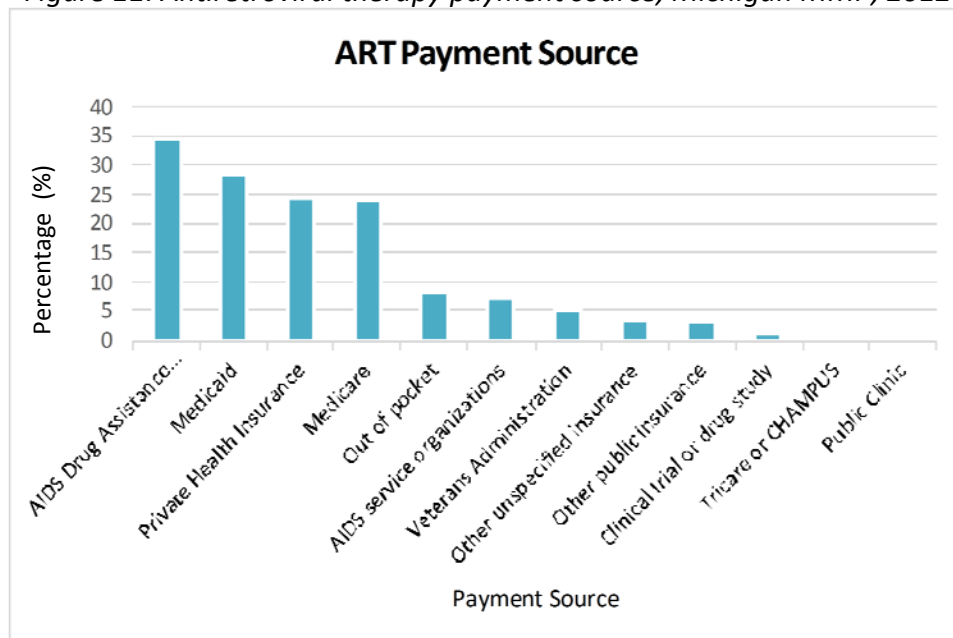
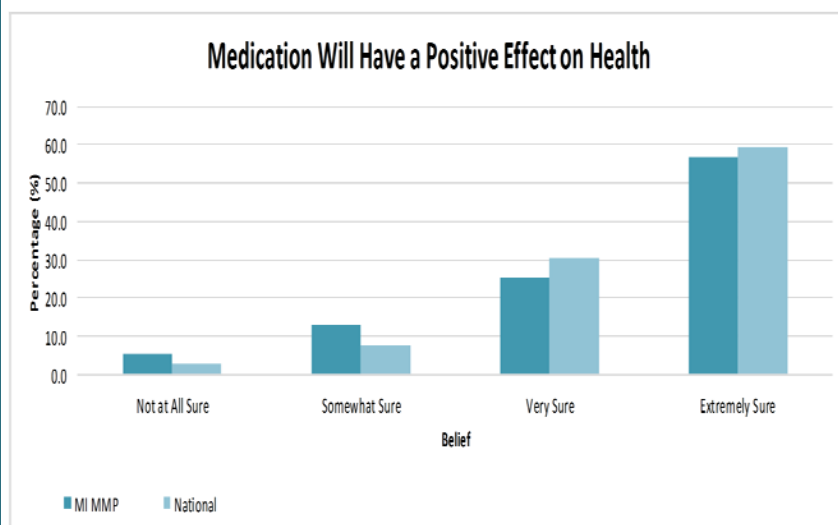


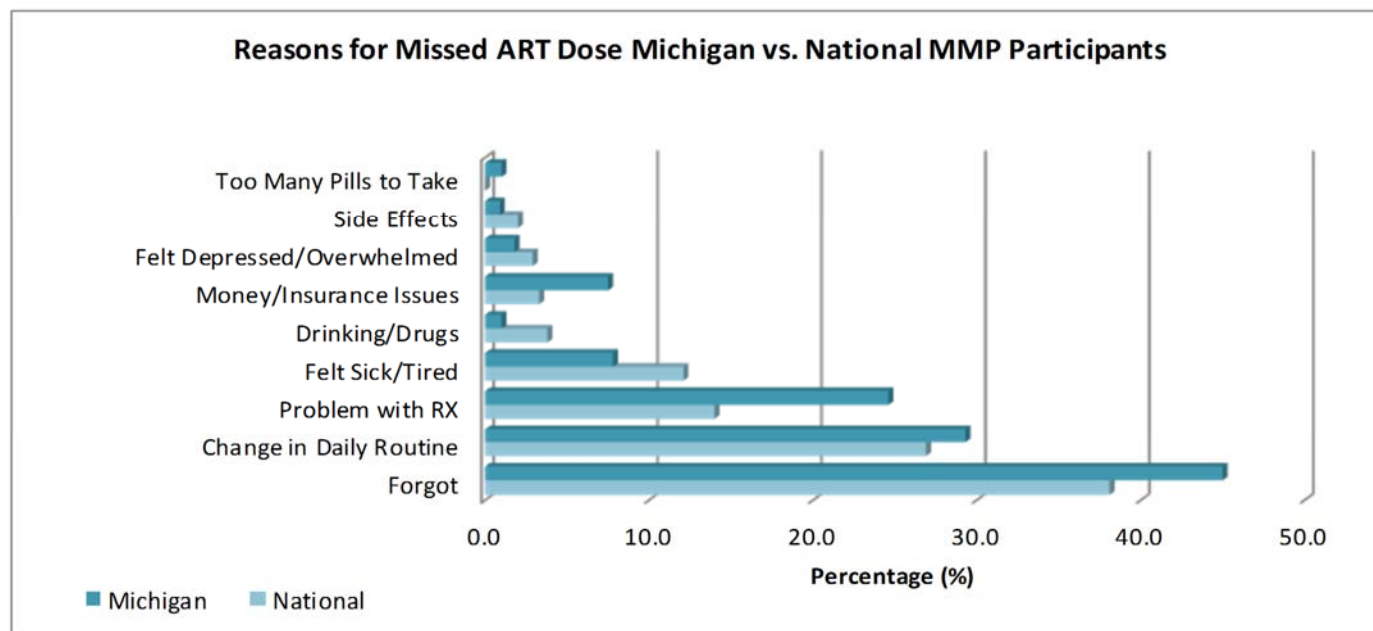
Figure 12: Belief that ART will Have a Positive Effect on Health, Michigan and National MMP, 2012



Participants reported that they were very confident that they would be able to take all or most of the medication as directed (95 %) (Table 9). However, Michigan participants were less confident than national participants that the medication will have a positive effect on their health (82% and 90%, respectively reported 'Very Sure' or 'Extremely Sure') (Figure 12). Michigan participants were well informed of the

importance of ART adherence, with 80% being ‘Very Sure’ or ‘Extremely Sure’ that HIV will become resistant to ART if medication is not taken exactly as instructed. Among participants who were on ART and had missed a dose during the preceding 12 months, the most common reasons for missing a dose were: ‘Forgot to take them,’ ‘Change in daily routine, including travel,’ and ‘Problem with prescription or refill’ (Table 10 and Figure 13).

Figure 13: Reasons for missed antiretroviral therapy dose, among those missing a dose during the 12 months before the interview—Michigan and National MMP, 2012



## Depression and Substance Use

The MMP protocol assessed depression during the preceding 12 months in participants in two ways, based on DSM-IV criteria [10] and a PHQ-8 (Personal Health Questionnaire Depression) symptom score >10 (Table 11). More Michigan participants were assessed as having ‘Major depression’ (DSM-IV) or ‘Moderate or severe depression’ (PHQ-8) than national participants. Based on the DSM-IV criteria 13.1% of Michigan and 9.9% of national participants scored as having ‘Major depression.’ Based on a PHQ-8 score >10, 28.5% of Michigan and 20% of national participants scored as having ‘Moderate or severe depression.’ Michigan had a slightly larger prevalence of current smokers than national participants (44% vs. 40%, respectively) (Table 12). Of the current smokers, 88% of Michigan and 84% of national participants smoked daily. Alcohol use during the preceding 12 months was also greater in Michigan compared to national participants (73% vs. 64%, respectively) (Table 13). In Michigan, of those who used alcohol, 42% used alcohol less than monthly. Heavy and binge drinking was also assessed during the preceding 30 days. Of Michigan participants who used alcohol, 23% had participated in binge drinking and 7% in heavy drinking. Michigan participants self-reported a higher prevalence of noninjection drug

use than national participants (33% vs. 25%, respectively) (Table 14). They also had a higher use of noninjection drugs before or during sex than national participants (15% vs. 12%, respectively). The most commonly noninjection drug used by Michigan participants was marijuana (98% of users). No Michigan participants reported any use of injection drugs.

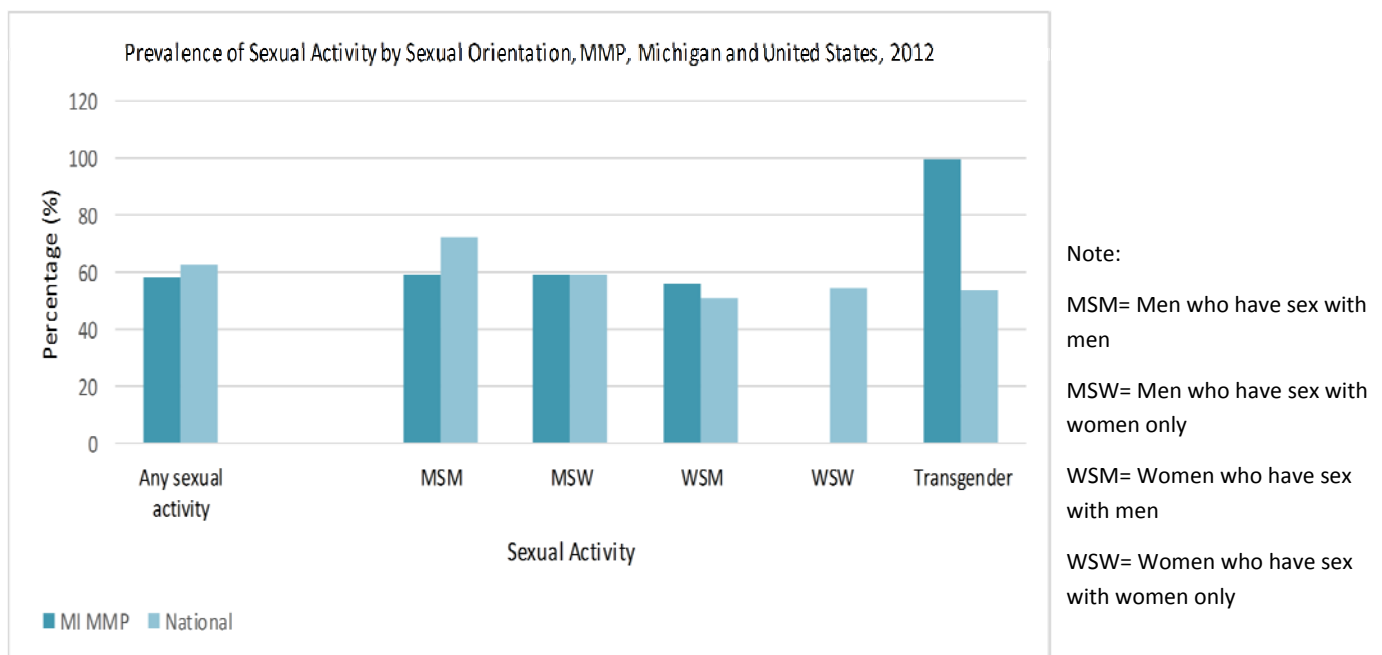
## Reproductive and Gynecologic Health

An estimated 8.3% of female patients received HIV care at a gynecological clinic in Michigan, less than the 21.3% of national participants (Table 15). Michigan and national female participants had similar rates of receiving a Pap smear (75% and 77%, respectively).

## Sexual Behavior

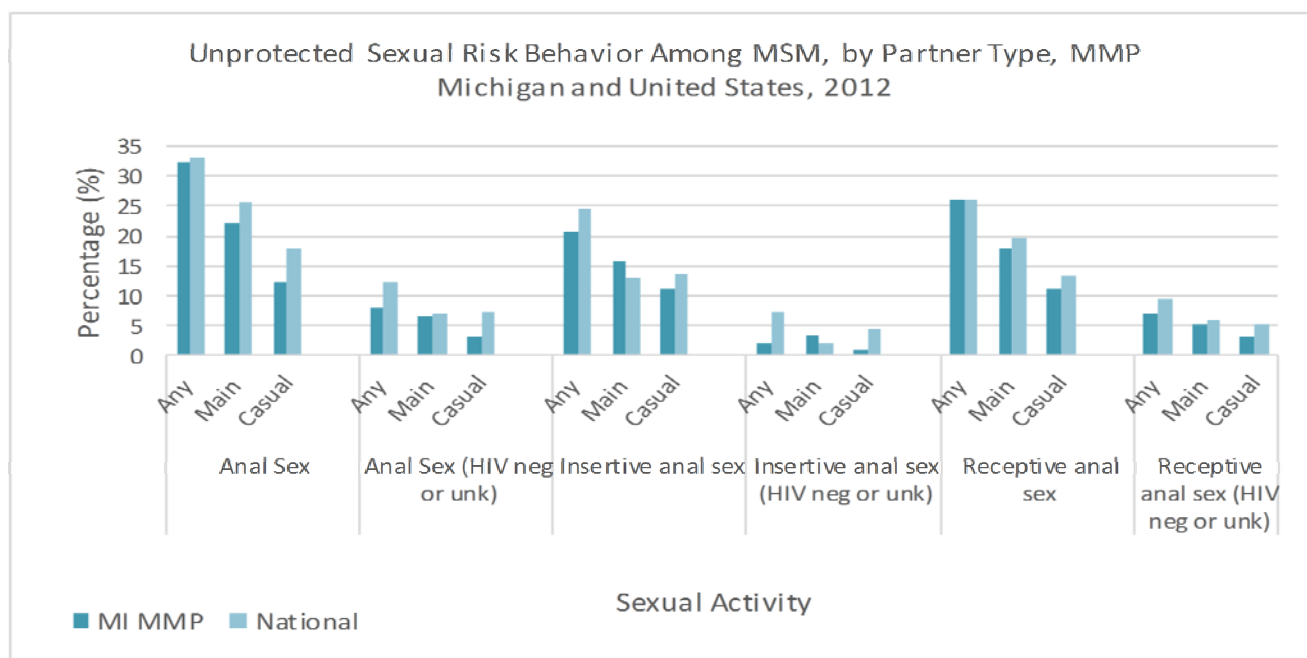
Michigan participants reported less overall sexual activity than national participants (58% vs. 63%, respectively) (Table 16 and Figure 14). While 59% of Michigan MSM participants reported any sexual activity in the preceding 12 months, 72% of national MSM participants reported any sexual activity in the same time frame. Approximately 24% of Michigan participants reported unprotected sex with any kind of partner. Michigan MSM participants also reported a smaller average number sex partners than national MSM participants. The average number of partners were comparable between Michigan and national participants among all the other sexual orientation groups.

Figure 14. Prevalence of Sexual Activity by Sexual Orientation- Michigan and National MMP, 2012



Comparing unprotected sexual activity specifically among MSM by partner type, it can be seen that overall Michigan MSM participants had less unprotected sex with all types of partners than national participants (Tables 17 and 18, Figure 15). The only exception to this trend is that a slightly higher percentage of Michigan MSM participants than national participants had insertive anal sex with their main partners (those that had known HIV status [16% vs. 13%, respectively] and negative and unknown HIV status [4% vs. 2%, respectively]). Michigan MSM participants had more unprotected sex with main partners than casual partners. Surprisingly, this was not always the pattern for national MSM participants. National MSM participants had more unprotected sex with casual partners than main partners for 2 sexual behaviors: insertive anal sex (13% vs. 14%, respectively) and insertive anal sex with a partner of negative or unknown HIV status (2% vs. 4%, respectively).

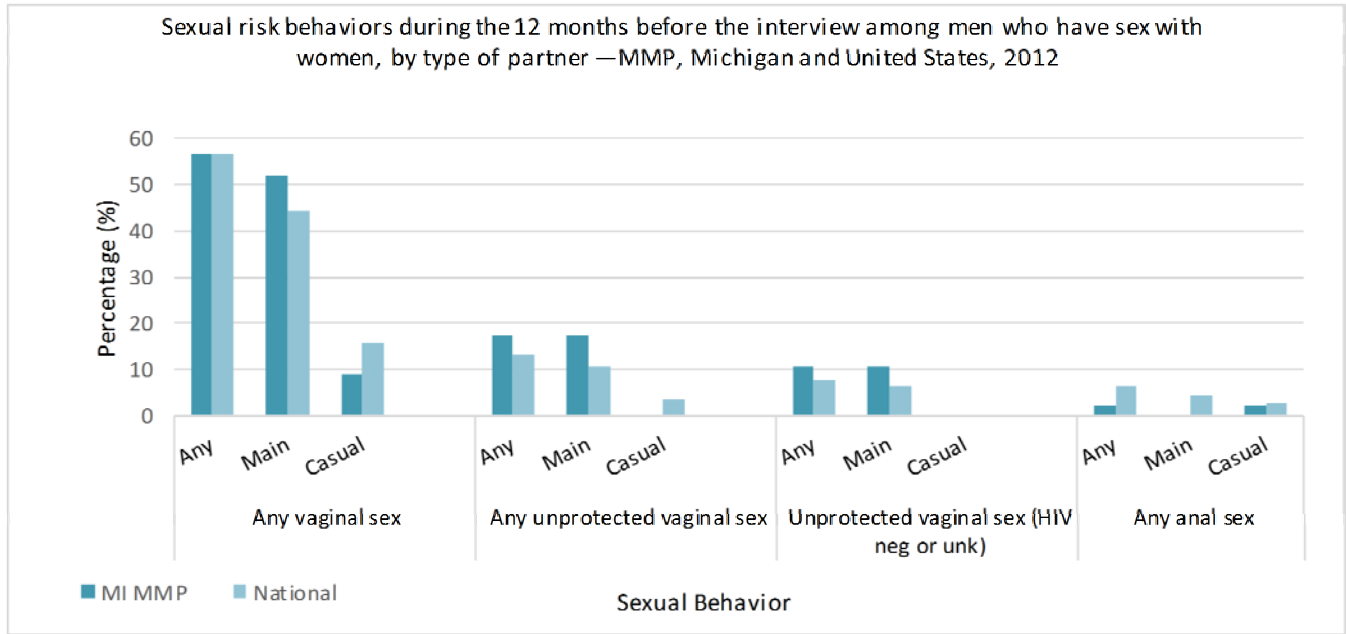
Figure 15. Unprotected Sexual Risk Behavior Among MSM, by Partner Type, Michigan and National MMP, 2012



Approximately 59% of both Michigan and national male participants who have sex with women had been sexually active in the preceding 12 months (Table 16). The pattern of sexual behavior was different, however than that for MSM. Overall, heterosexual male Michigan MMP participants were more sexually active than comparable national participants (Tables 19 and 20, Figure 16). More Michigan men had vaginal sex with a main partner than national men (52% vs. 44%, respectively), but less Michigan men had vaginal sex with a casual partner than national men (9% vs. 16%, respectively). In Michigan, men only had unprotected vaginal

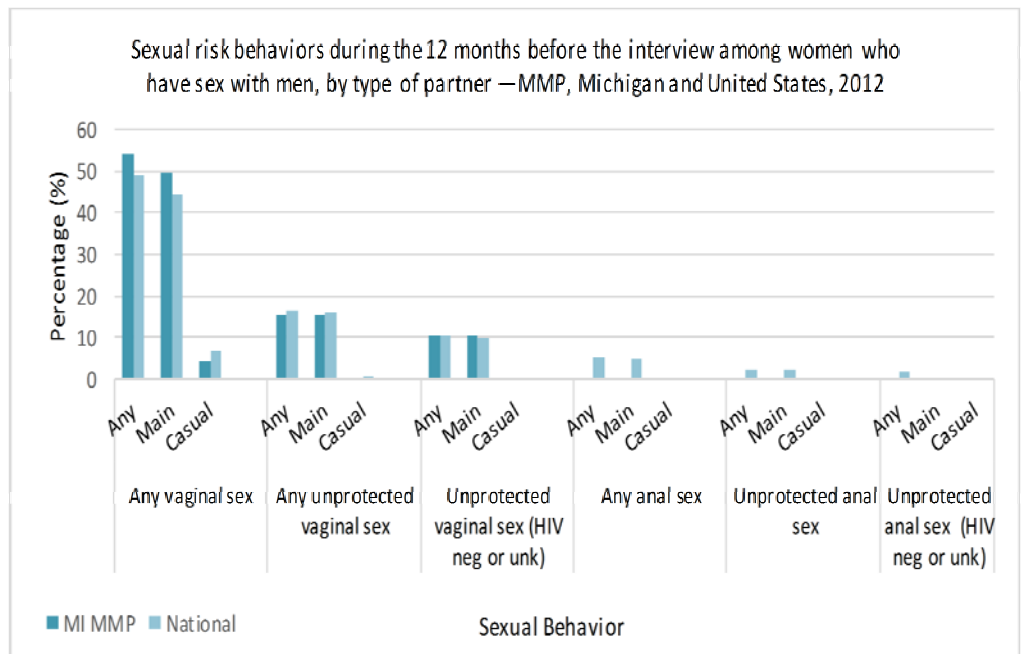
sex with a main partner, and none with a casual partner. Similarly, Michigan men did not have unprotected vaginal sex with a partner of negative or unknown HIV status. Michigan men only had anal sex with a casual partner, and no unprotected anal sex.

Figure 16. Sexual risk behaviors during the 12 months before the interview among men who have sex with women, by type of partner —MMP, Michigan and United States, 2012



Prevalence of unprotected vaginal sex among women who have sex with men was similar for both Michigan and national female participants (16% vs. 17%, respectively) and occurred almost primarily with main partners (Tables 21 and 22, Figure 17). About 10% of Michigan women MMP participant engaged in unprotected vaginal sex with a partner of negative or unknown HIV status, and the partner was exclusively a main partner. No Michigan women MMP participants reported engaging in anal sex.

Figure 17. Sexual risk behaviors during the 12 months before the interview among women who have sex with men, by type of partner —MMP, Michigan and United States, 2012



## Met and Unmet Need for Ancillary Services

One of the main goals for this project is to identify the types of services people living with HIV/AIDS use and need. The five most utilized services by Michigan MMP participants were dental care, HIV case management services, ADAP (AIDS Drug Assistance Program), public benefits (such as SSI or SSDI), and transmission prevention counseling (Table 23 and Figure 18). While dental care was the most used service, it was also the top service that was needed but not received (Figure 19). Next was public benefits (such as SSI or SSDI) followed by transportation assistance.

Figure 18. Ancillary Services Utilized During the Previous 12 Months, MMP, Michigan 2012

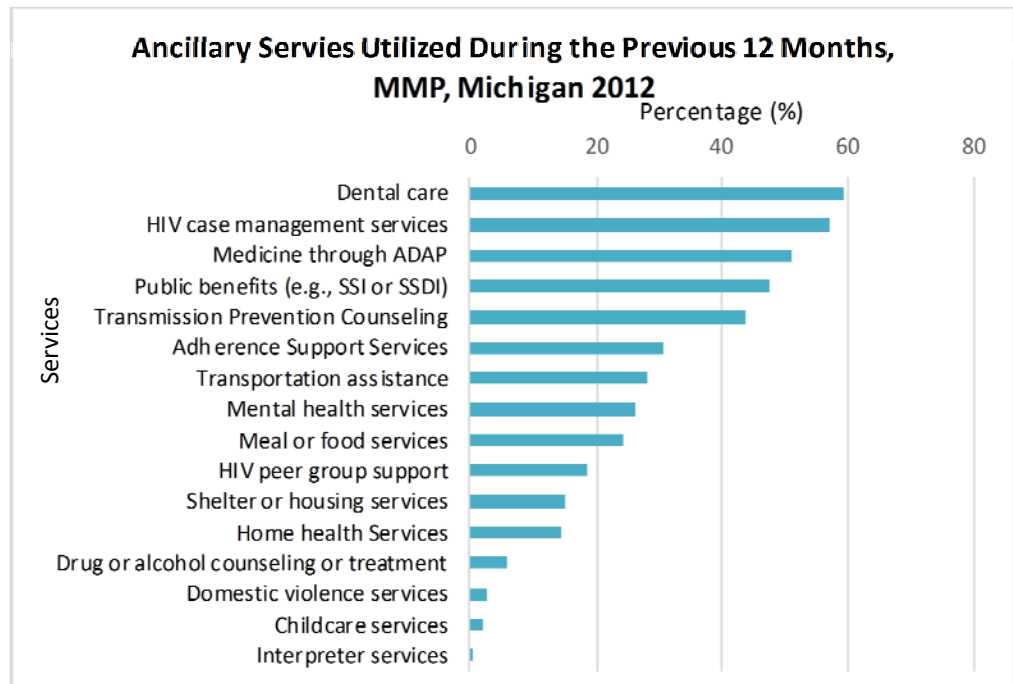
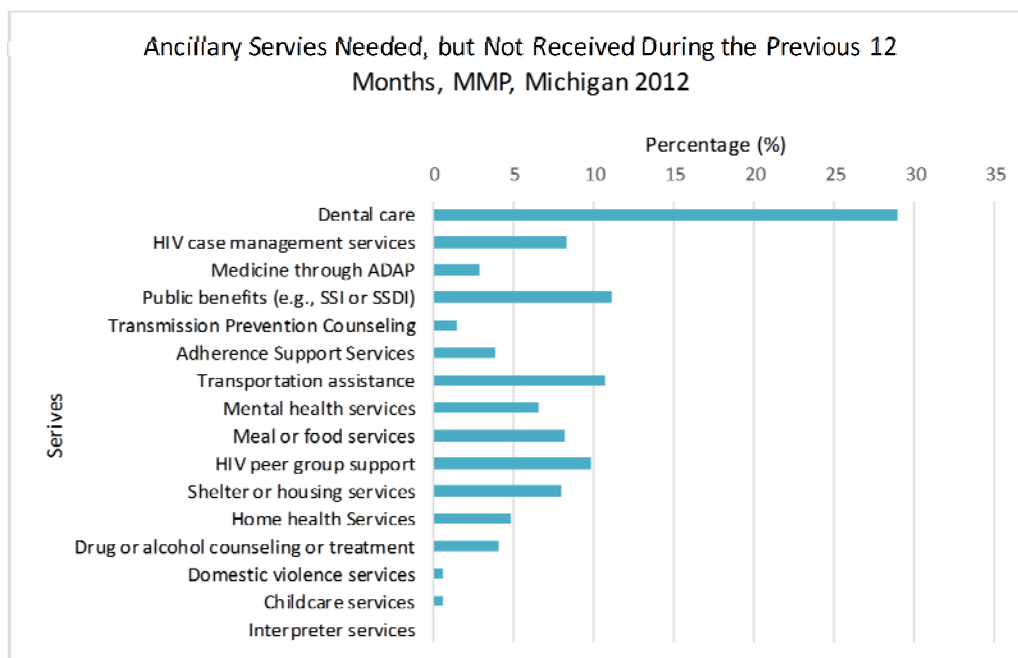


Figure 19. Ancillary Services Needed, but Not Received During the Previous 12 Months, MMP, Michigan 2012



There are multiple reasons why a service was not received: service not available, participant did not know where to go or whom to call, not eligible or denied service, transportation issues, etc.

## Prevention Activities

The most utilized prevention activity was free condoms, followed by a one-on-one conversation with a physician, nurse, or other health care worker (Table 25 and Figure 20).

Receipt of the kinds of prevention services was similar for both Michigan and national participants. The source

of free condoms did differ slightly between Michigan and national participants (Table 25 and Figure 21). The top 2 sources of condoms for both Michigan and national MMP participants were a general health clinic and a community based organization (CBO).

For Michigan participants, the third most common source of free condoms was social venues, while for national participants it was outreach organizations for injection drug users (IDUs).

Figure 20. Prevention Services Received during Previous 12 months, MMP, Michigan and United States, 2012

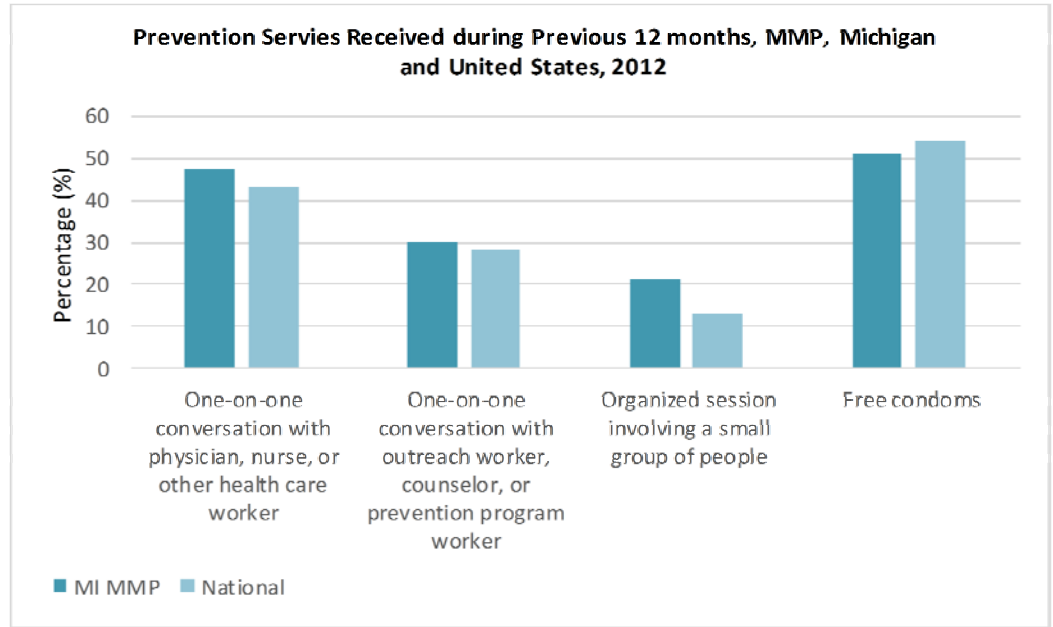
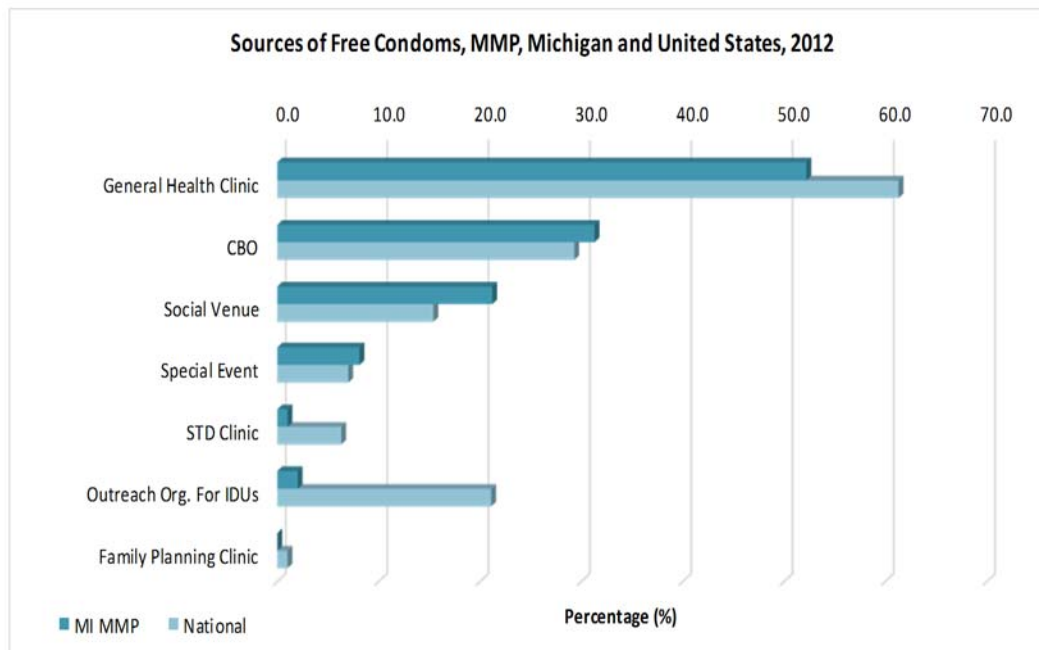


Figure 21. Sources of Free Condoms, MMP, Michigan and United States, 2012



## Note

The Medical Monitoring Project is an important surveillance tool for those who are living with HIV. Recognizing areas in which Michigan is different than the other project areas can help to focus where additional services may be needed to assist those living with HIV in this state.

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**Table 1. Participants, by project area—Medical Monitoring Project, United States, 2012**

	<b>No.</b>	<b>%</b>
California (excluding Los Angeles County and San Francisco)	224	4.6
Chicago, IL	220	4.5
Delaware	193	3.9
Florida	416	8.5
Georgia	179	3.7
Houston, TX	222	4.5
Illinois (excluding Chicago)	36	0.7
Indiana	247	5.0
Los Angeles County, CA	247	5.0
Michigan	164	3.3
Mississippi	161	3.3
New Jersey	208	4.2
New York (excluding New York City)	100	2.0
New York City, NY	445	9.1
North Carolina	180	3.7
Oregon	255	5.2
Pennsylvania (excluding Philadelphia)	40	0.8
Philadelphia, PA	195	4.0
Puerto Rico	222	4.5
San Francisco, CA	246	5.0
Texas (excluding Houston)	248	5.1
Virginia	228	4.7
Washington	225	4.6
<b>Total</b>	<b>4,901</b>	<b>100.0</b>

*Note:* Percentages might not sum to 100 because of rounding

**Table 2. Characteristics of patients—Medical Monitoring Project, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	MI eHARS No.	MI eHARS %	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Gender</b>								
Male	124	78.4	70.2-86.7	5636	77.4	3,571	73.5	69.9–77.2
Female	39	21.1	12.6-29.5	1634	22.4	1,268	25.4	21.8–28.9
Transgender <sup>d</sup>	1	0.5	0.0-1.5	12	0.2	60	1.1	0.8–1.4
<b>Sexual orientation</b>								
Heterosexual or straight	77	44.1	35.3-53.0	—	—	2,419	48.5	42.7–54.3
Homosexual or gay	60	42.2	34.0-50.4	—	—	2,027	43.6	37.5–49.8
Bisexual	23	13.7	7.6-19.7	—	—	391	7.9	6.7–9.1
<b>Race/ethnicity</b>								
American Indian/Alaska Native	1	0.5	0.0-1.4	15	0.2	21	0.4	0.2–0.6
Asian	—	—	—	30	0.4	48	1.1	0.6–1.6
Black/African American	107	57.1	49.2-65.0	4015	55.1	2,072	41.6	31.9–51.3
Hispanic/Latino <sup>e</sup>	9	4.8	1.7-8.0	285	3.9	1,060	18.7	12.7–24.6
Native Hawaiian/Other Pacific Islander	1	0.9	0.0-2.8	10	0.1	—	—	—
White	39	32.5	23.4-41.6	2771	38	1,560	35.3	27.4–43.2
Multiple races	7	4.2	1.1-7.2	156	2.1	124	2.7	2.1–3.2
<b>Age at time of inter- view (year)</b>								
18–24	14	7.2	0.0-16.3	407	5.6	144	3.1	2.3–3.9
25–29	11	5.9	2.0-9.9	491	6.8	235	4.7	3.9–5.5
30–34	11	6	1.2-10.8	542	7.5	344	7.5	6.6–8.5
35–39	10	5.8	2.0-9.6	672	9.2	392	7.9	7.1–8.7
40–44	20	12.7	7.0-18.4	1071	14.7	623	12.7	11.8–13.7
45–49	28	17.9	12.0-23.7	1350	18.6	955	19.2	18.1–20.3
50–54	22	14.4	8.6-20.1	1180	16.2	914	18.2	16.8–19.7
55–59	31	19.1	11.4-26.9	815	11.2	645	13.4	12.2–14.6
60–64	14	9	3.8-14.2	433	6	421	8.4	7.7–9.2
≥65	3	2	0.0-5.0	308	4.2	228	4.7	3.8–5.6

**Table 2. Characteristics of patients—Medical Monitoring Project, Michigan and United States, 2012 (continued)**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	MI eHARS No.	MI eHARS %	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Education</b>								
Less than high school	30	17.3	12.2-22.3	—	—	1,038	19.8	16.9–22.6
High school diploma or GED	55	32.7	25.3-40.1	—	—	1,372	27.9	25.6–30.2
More than high school	79	50	41.1-59.0	—	—	2,487	52.3	47.6–57.0
<b>Country or territory of birth</b>								
United States	153	92.8	88.3-97.3	5219	71.7	3,915	81.7	76.2–87.1
Puerto Rico	1	0.5	0.0-1.6	11	0.2	—	—	—
Mexico	1	0.5	0.0-1.4	36	0.5	209	3.9	3.1–4.7
Cuba	1	0.5	0.0-1.6	7	0.1	—	—	—
Other	8	5.6	1.5-9.8	2009	27.6	434	9.1	7.3–10.8
<b>Time since HIV diagnosis (yr)</b>								
<5	43	24.4	17.1-31.7	1985	27.3	957	21.6	20.1–23.0
5–9	33	20.6	13.3-27.9	1761	24.2	965	19.4	18.1–20.8
≥10	88	55	45.6-64.4	3536	48.6	2,979	59	56.9–61.2
<b>Homeless<sup>f</sup> at any time (during past 12 months)</b>								
Yes	16	8.8	4.0-13.5	—	—	399	8.3	6.9–9.7
No	148	91.2	86.5-96.0	—	—	4,502	91.7	90.3–93.1
<b>Incarcerated &gt;24 hours (during past 12 months)</b>								
Yes	7	3.8	0.0-7.6	—	—	224	4.7	3.8–5.7
No	157	96.2	92.4-100.0	—	—	4,675	95.3	94.3–96.2
<b>Health insurance or coverage for antiretroviral medications<sup>g</sup> (during past 12 months)</b>								
Yes	153	93.9	88.5-99.4	—	—	4,787	97.9	97.1–98.6
No	11	6.1	0.6-11.5	—	—	104	2.1	1.4–2.9
<b>Type of health insurance or coverage for antiretroviral medications (during past 12 months)</b>								
<b>Ryan White</b>								
Yes	52	34.9	27.1-42.7	—	—	1,992	41.9	39.1–44.7
No	112	65.1	57.3-72.9	—	—	2,891	58.1	55.3–60.9
<b>Medicaid</b>								
Yes	67	40.5	33.5-47.5	—	—	1,909	38.8	34.1–43.5
No	96	59.5	52.5-66.5	—	—	2,977	61.2	56.5–65.9
<b>Private health insurance</b>								
Yes	51	33.6	22.9-44.3	—	—	1,422	30.6	25.8–35.5
No	112	66.4	55.7-77.1	—	—	3,460	69.4	64.5–74.2
<b>Medicare</b>								
Yes	48	31.6	24.6-38.6	—	—	1,276	26.2	24.7–27.6
No	116	68.4	61.4-75.4	—	—	3,607	73.8	72.4–75.3
<b>Other public insurance</b>								
Yes	10	6.2	1.5-10.9	—	—	—	—	—
No	153	93.8	89.1-98.5	—	—	—	—	—

**Table 2. Characteristics of patients—Medical Monitoring Project, Michigan and United States, 2012 (continued)**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	MI eHARS No.	MI eHARS %	National No. <sup>a</sup>	National % <sup>b</sup>	95% CI <sup>c</sup>
<b>Tricare/CHAMPUS or Veterans Administration</b>								
Yes	11	6.3	0.0-16.4	—	—	—	—	—
No	152	93.7	83.6-100.0	—	—	—	—	—
<b>Insurance type unknown<sup>h</sup></b>								
Yes	11	6.3	2.8-9.7	—	—	189	3.9	3.1-4.7
No	152	93.7	90.3-97.2	—	—	4,697	96.1	95.3-96.9
<b>Primary source of most financial support (during past 12 months)</b>								
Salary or wages	59	35.5	25.6-45.5	—	—	1,827	38.4	34.5-42.2
SSI or SSDI	65	40.3	31.5-49.2	—	—	1,919	38	35.2-40.7
Family, partner, or friend(s)	21	12.4	8.1-16.7	—	—	497	10.8	9.1-12.4
Illegal or possibly illegal activities	2	1.4	0.0-3.5	—	—	—	—	—
No income or financial support	1	0.5	0.0-1.6	—	—	54	1.1	0.7-1.5
Other	16	9.7	5.0-14.4	—	—	589	11.7	9.5-13.8
<b>Combined yearly household income<sup>i</sup> (US\$)</b>								
0-19,999	100	61.2	53.3-69.0	—	—	3,106	64.5	59.9-69.1
20,000-39,999	38	24.2	17.8-30.5	—	—	770	17	15.4-18.6
40,000-74,999	13	10.5	4.7-16.2	—	—	455	10.5	8.1-12.9
>75,000	6	4.2	0.8-7.6	—	—	347	8	6.0-9.9
<b>Poverty guidelines<sup>j</sup></b>								
Above poverty threshold	91	61	53.1-68.9	—	—	2,541	56.2	51.5-60.8
At or below poverty threshold	66	39	31.1-46.9	—	—	2,136	43.8	39.2-48.5
<b>Total</b>	<b>164</b>	<b>100</b>		<b>7282</b>	<b>100</b>	<b>4,901</b>	<b>100</b>	

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.

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

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CIs incorporate weighted percentages.

<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>e</sup>Hispanics or Latinos might be of any race. Patients are classified in only one race/ethnicity category.

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

<sup>g</sup>Patients could select more than one response for health insurance or coverage for antiretroviral medications.

<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>i</sup>Income from all sources, before taxes, in the last calendar year.

[Poverty guidelines as defined by the Department of Health and Human Services \(HHS\); the 2011 guidelines were used for patients interviewed in 2012 and the 2012 guidelines were used for patients interviewed in 2013. More information regarding the HHS poverty guidelines can be found at <http://aspe.hhs.gov/poverty/faq.cfm>.](http://aspe.hhs.gov/poverty/faq.cfm)

**Table 3. Stage of disease, CD4 counts, and viral suppression during 12 months before interview—Medical Monitoring Project, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Stage of Disease</b>						
Stage 1 <sup>d</sup>	13	7.7	3.5-12.0	365	8	7.0-9.0
Stage 2 <sup>e</sup>	40	23.8	15.6-31.9	1,135	23.4	21.8-25.0
Stage 3 (AIDS) <sup>f</sup>	109	68.5	60.9-76.1	3,380	68.6	66.4-70.8
<b>Geometric mean CD4 count (cells/μL)</b>						
0-199	11	7	3.0-11.0	477	10	8.6-11.4
200-349	33	21.1	14.0-28.2	694	14.4	12.8-16.1
350-499	29	18.9	13.0-24.8	1,013	22.3	20.7-23.9
≥500	79	53	45.4-60.5	2,460	53.3	51.2-55.3
<b>Lowest CD4 count (cells/μL)</b>						
0-49	4	2.8	0.1-5.4	134	2.9	2.3-3.4
50-199	16	10.4	5.5-15.3	505	10.4	9.0-11.7
200-349	32	20.4	11.0-29.8	883	18.8	17.2-20.4
350-499	36	22.8	15.6-30.0	1,120	24.4	23.0-25.8
≥500	64	43.7	35.9-51.5	2,002	43.6	41.5-45.7
<b>Viral Suppression</b>						
Most recent viral load documented undetectable or <200 copies/mL	123	76.4	67.9-84.9	3,829	77.3	75.4-79.2
Most recent viral load documented detectable, ≥200 copies/mL, or missing/unknown	41	23.6	15.1-32.1	1,072	22.7	20.8-24.6
<b>Durable Viral Suppression</b>						
All viral load measurements documented undetectable or <200 copies/mL	104	64.9	54.0-75.8	3,283	66.2	64.1-68.3
Any viral load ≥200 copies/mL or missing/unknown	60	35.1	24.2-46.0	1,618	33.8	31.7-35.9
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

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 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 ≥30%, “don’t know” responses, and skipped (missing) responses.

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CI incorporates weighted percentages.

<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.

<sup>e</sup>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.

<sup>f</sup>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, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Number of Outpatient Laboratory tests<sup>d</sup></b>						
<b>CD4 or HIV Viral Load</b>						
0	6	3.9	0.8-6.9	165	3.7	2.5-4.8
1	23	13.9	8.2-19.6	519	10.8	9.5-12.0
2	47	29.5	22.3-36.7	1,131	23.7	21.2-26.2
≥3	88	52.8	44.6-60.9	3,036	61.9	58.5-65.2
<b>CD4</b>						
0	12	7.9	4.1-11.7	205	4.7	3.4-5.9
1	26	15.7	10.2-21.2	607	12.7	11.3-14.2
2	51	31.1	23.9-38.2	1,232	25.6	23.1-28.0
≥3	75	45.3	36.6-53.9	2,807	57	53.4-60.6
<b>HIV Viral Load</b>						
0	12	7.5	3.4-11.7	259	5.6	4.3-6.9
1	30	17.9	11.0-24.7	648	13.4	12.0-14.7
2	50	30.9	23.7-38.1	1,255	26.4	24.1-28.6
≥3	72	43.7	34.8-52.7	2,689	54.6	51.4-57.9
<b>HIV Viral Load measurement at least once every 6 months</b>						
Yes	105	64.2	56.6-71.7	3,489	71.6	69.1-74.1
No	59	35.8	28.3-43.4	1,362	28.4	25.9-30.9
<b>CD4 measured at least once annually</b>						
Yes	152	92.1	88.3-95.9	4,646	95.3	94.1-96.6
No	12	7.9	4.1-11.7	205	4.7	3.4-5.9
<b>Prescribed ART</b>						
Yes	148	91.2	87.0-95.5	4,563	92.7	91.8-93.6
No	16	8.8	4.5-13.0	338	7.3	6.4-8.2
<b>Prescribed PCP prophylaxis<sup>e</sup></b>						
Yes	16	78.2	58.9-97.6	514	80.4	76.4-84.5
No	4	21.8	2.4-41.1	124	19.6	15.5-23.6
<b>Prescribed MAC prophylaxis<sup>f</sup></b>						
Yes	2	40.5	0.0-92.7	104	76.6	68.0-85.1
No	2	0.5	7.3-100.0	30	23.4	14.9-32.0
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

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.

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

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CIs incorporate weighted percentages.

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

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

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

**Table 5. Clinical services during the 12 months before the interview—Medical Monitoring Project, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Had usual place for primary HIV care</b>						
Yes	164	100	100.0-100.0	4891	99.2	99.7-100.0
No	0	0	0.0-0.0	9	0.2	0.0-0.3
<b>Received influenza vaccination</b>						
Yes	137	85.4	79.5-91.3	3955	81.8	79.5-84.1
No	26	14.6	8.7-20.5	903	18.2	15.9-20.5
<b>Participated in HIV clinical trial</b>						
Yes	5	3.7	0.3-7.0	183	3.5	2.8-4.3
No	159	96.3	93.0-99.7	4702	96.5	95.7-97.2
<b>Travel time to primary HIV care (estimated in minutes)</b>						
Mean	28.6			34.1		
Median	20			28.1		
Range	1-150			1-360		
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4901</b>	<b>100</b>	

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  $\geq 30\%$ , “don’t know” responses, and skipped (missing) responses.

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CI's incorporate weighted percentages.

**Table 6. Sexually transmitted disease testing during the 12 months before the interview, by sexual activity—Medical Monitoring Project, Michigan and United States, 2012**

Total Population Only	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Gonorrhea<sup>e</sup></b>						
Yes, received test	52	33.2	23.2-43.2	1650	32.6	28.2-36.9
No test documented	112	66.8	56.8-76.8	3201	67.4	63.1-71.8
<b>Chlamydia<sup>f</sup></b>						
Yes, received test	53	33.7	23.3-44.1	1684	33.3	28.8-37.8
No test documented	111	66.3	55.9-76.7	3167	66.7	62.2-71.2
<b>Syphilis<sup>g</sup></b>						
Yes, received test	76	46.7	37.2-56.2	2880	57	52.8-61.3
No test documented	88	53.3	43.8-62.8	1971	43	38.7-47.2
<b>Gonorrhea, chlamydia, and syphilis</b>						
Yes, received test	33	21.4	12.9-30.0	1364	26.8	22.7-30.9
No test documented	131	78.6	70.0-87.1	3487	73.2	69.1-77.3
<b>Sexually Active Only</b>						
<b>Gonorrhea</b>						
Yes, received test	39	42.5	28.7-56.3	1122	36	31.6-40.4
No test documented	55	57.5	43.7-71.3	1892	64	59.6-68.4
<b>Chlamydia<sup>f</sup></b>						
Yes, received test	40	43.4	29.3-57.5	1149	37	32.5-41.5
No test documented	54	56.6	42.5-70.7	1865	63	58.5-67.5
<b>Syphilis<sup>g</sup></b>						
Yes, received test	48	50.6	37.2-64.1	1876	60.5	55.9-65.0
No test documented	46	49.4	35.9-62.8	1138	39.5	35.0-44.1
<b>Gonorrhea, chlamydia, and syphilis</b>						
Yes, received test	25	27.2	14.3-40.2	950	30.5	26.3-34.6
No test documented	69	72.8	59.8-85.7	2064	69.5	65.4-73.7
<b>Total</b>	<b>94</b>	<b>100</b>		<b>3,039</b>	<b>100</b>	

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  $\geq 30\%$ , "don't know" responses, and skipped (missing) responses.

<sup>a</sup>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.

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

<sup>c</sup>Percentages are weighted percentages.

<sup>d</sup>CIs incorporate weighted percentages.

<sup>e</sup>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.

<sup>f</sup>*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.

<sup>g</sup>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, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Number of visits to emergency department or urgent care clinic</b>						
0	151	93.7	90.6-96.9	4499	92.1	90.8-93.5
1	7	4.1	1.3-6.8	207	4.2	3.3-5.1
2-4	4	2.2	0.0-4.5	144	2.8	2.3-3.4
≥5	-	-	-	41	0.8	0.5-1.1
<b>Number of hospital admissions</b>						
0	155	93.6	89.2-98.1	4657	95.2	94.5-96.0
1	5	3.4	0.2-6.6	154	3.1	2.5-3.8
2-4	2	1.1	0.0-2.3	68	1.3	1.0-1.6
≥5	2	1.9	0.0-4.6	17	0.4	0.2-0.5
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

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 ≥30%, “don’t know” responses, and skipped (missing) responses.

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CIs incorporate weighted percentages.

**Table 8. Antiretroviral therapy use, payment source, and adherence—Medical Monitoring Project, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Ever taken antiretroviral medications (ART)</b>						
Yes	156	95.6	91.7-99.5	4729	96.4	95.8-97.0
No	8	4.4	0.5-8.3	166	3.6	3.0-4.2
<b>Currently taking ART</b>						
Yes	152	93.4	89.0-97.8	4605	93.9	93.2-94.6
No	12	6.6	2.2-11.0	288	6.1	5.4-6.8
<b>Main reason for never taking ART</b>						
Doctor advised to delay treatment	8	100	100.0-100.0	127	80.4	72.1-88.7
Patient believed they didn't need medications because felt healthy or believed HIV lab results were good	—	—	—	17	8.7	3.9-13.4
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	—	—	—	8	4.6	1.2-8.0
<b>Main reason for not currently taking ART, among those persons with a history of ART use</b>						
Doctor advised to delay treatment	3	78	50.4-100.0	36	33.4	22.7-44.2
Patient believed they didn't need medications because felt healthy or believed HIV lab results were good	—	—	—	—	—	—
Due to side effects of medication	—	—	—	25	20.7	13.2-28.2
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	1	22	0.0-49.6	20	15.8	9.8-21.8
Homeless	—	—	—	—	—	—
Other	—	—	—	15	11	5.3-16.7
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

**Table 8. Antiretroviral therapy use, payment source, and adherence—Medical Monitoring Project, Michigan and United States, 2012 (continued)**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>ART medications paid for by:</b>						
<b>AIDS Drug Assistance Program (ADAP)</b>						
Yes	48	34.6	25.9-43.3	1792	39.8	36.2-43.4
No	104	65.4	56.7-74.1	2763	60.2	56.6-63.8
<b>Medicaid</b>						
Yes	45	28.4	20.6-36.2	1441	30.9	26.4-35.3
No	107	71.6	63.8-79.4	3114	69.1	64.7-73.6
<b>Private Health Insurance</b>						
Yes	34	24.4	14.6-34.3	1101	25.7	20.7-30.8
No	118	75.6	65.7-85.4	3454	74.3	69.2-79.3
<b>Medicare</b>						
Yes	35	24	16.0-32.0	855	18.6	17.2-19.9
No	117	76	68.0-84.0	3700	81.4	80.1-82.8
<b>Out of pocket</b>						
Yes	14	8.4	2.1-14.8	489	10.3	6.4-14.2
No	138	91.6	85.2-97.9	4066	89.7	85.8-93.6
<b>Other public insurance</b>						
Yes	5	3.3	0.4-6.1	—	—	—
No	147	96.7	93.9-99.6	—	—	—
<b>Other unspecified insurance</b>						
Yes	6	3.8	0.9-6.6	128	2.9	2.2-3.6
No	146	96.2	93.4-99.1	4472	97.1	96.4-97.8
<b>AIDS service organizations</b>						
Yes	13	7.3	1.0-13.7	—	—	—
No	139	92.7	86.3-99.0	—	—	—
<b>Clinical trial or drug study</b>						
Yes	2	1.3	0.0-3.3	25	0.6	0.4-0.9
No	150	98.7	96.7-100.0	4530	99.4	99.1-99.6
<b>Public Clinic</b>						
Yes	—	—	—	22	0.4	0.2-0.6
No	152	100	100.0-100.0	4533	99.6	99.4-99.8
<b>Veterans Administration</b>						
Yes	9	5.5	0.0-16.4	—	—	—
No	143	94.5	83.6-100.0	—	—	—
<b>Tricare or CHAMPUS</b>						
Yes	1	0.6	0.0-1.8	—	—	—
No	151	99.4	98.2-100.0	—	—	—
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

**Table 8. Antiretroviral therapy use, payment source, and adherence—Medical Monitoring Project, Michigan and United States, 2012 (continued)**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>100% ART medication adherence (during preceding 72 hours)</b>						
<b>By dose</b>						
Yes	126	84.7	76.9-92.4	3915	88.7	87.1-90.2
No	23	15.3	7.6-23.1	548	11.3	9.8-12.9
<b>By schedule</b>						
Yes	116	76.1	68.3-83.8	3413	75.6	73.1-78.1
No	36	23.9	16.2-31.7	1180	24.4	21.9-26.9
<b>By special instructions (among those with special instructions for ART)</b>						
Yes	73	68.9	59.4-78.4	2148	73.8	71.0-76.2
No	33	31.1	21.6-40.6	797	26.2	23.4-29.0
<b>Troubled by ART side effects (during past 30 days)</b>						
Never	99	63.2	54.6-71.9	3323	72	69.6-74.4
Rarely	27	20.1	13.4-26.9	614	13.9	12.4-15.4
About half the time	13	9.1	4.2-14.1	262	5.7	4.7-6.8
Most of the time	7	4.1	1.1-7.2	179	4.1	3.4-4.8
Always	6	3.4	0.5-6.3	192	4	3.2-4.9
Been on medications less than 30 days	—	—	—	—	—	—
<b>Troubled by ART side effects half of the time or more (during past 30 days)</b>						
Yes	26	16.6	10.8-22.5	633	13.9	12.3-15.5
No	126	83.4	77.5-89.2	3937	86.1	84.5-87.7
<b>Any drug holiday</b>						
Yes	18	10.7	6.9-14.4	358	7	5.7-8.3
No	134	89.3	85.6-93.1	4238	93	91.7-94.3
<b>Ever missed a dose of ART medications</b>						
Yes	88	68.6	58.6-78.6	2209	55.3	52.6-58.1
No	40	31.4	21.4-41.4	1820	44.7	41.9-47.4
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

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  $\geq 30\%$ , “don’t know” responses, and skipped (missing) responses.

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CI<sup>s</sup> incorporate weighted percentages.

**Table 9. Beliefs among patients currently taking antiretroviral medications—Medical Monitoring Project, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Will be able to take all or most of medication as directed</b>						
Not at all sure	—	—	—	55	1.1	0.8-1.4
Somewhat sure	7	5.3	1.0-9.5	196	4.3	3.5-5.1
Very sure	49	31.3	21.4-41.3	1312	27.7	25.1-30.4
Extremely sure	96	63.4	53.1-73.6	3035	66.9	64.0-69.7
<b>Medication will have a positive effect on health</b>						
Not at all sure	8	5.2	1.1-9.4	121	2.7	2.1-3.3
Somewhat sure	19	12.8	7.6-17.9	329	7.5	6.7-8.3
Very sure	39	25.1	17.0-33.2	1427	30.4	27.9-32.8
Extremely sure	84	56.9	47.8-66.1	2706	59.5	57.2-61.7
<b>HIV will become resistant to antiretroviral medications if medication is not taken exactly as instructed</b>						
Not at all sure	12	8.3	3.1-13.4	295	6.4	5.5-7.3
Somewhat sure	16	11.6	7.0-16.2	545	11.9	10.3-13.4
Very sure	46	29.4	23.0-35.9	1374	29.5	27.1-32.0
Extremely sure	75	50.7	43.0-58.4	2322	52.2	49.5-54.8
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,605</b>	<b>100</b>	

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  $\geq 30\%$ , “don’t know” responses, and skipped (missing) responses.

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CI<sup>s</sup> 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, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Forgot to take them</b>						
Yes	37	45	34.1-55.9	834	38.1	35.0-41.1
No	50	55	44.1-65.9	1363	61.9	58.9-65.0
<b>Change in daily routine, including travel</b>						
Yes	26	29.3	19.7-39.0	581	26.9	23.6-30.1
No	61	70.7	61.0-80.3	1616	73.1	69.9-76.4
<b>Problem with prescription or refill</b>						
Yes	21	24.6	14.8-34.3	299	14	11.4-16.6
No	66	75.4	65.7-85.2	1898	86	83.4-88.6
<b>Felt sick or tired</b>						
Yes	7	7.8	1.8-13.7	270	12.1	10.2-14.0
No	80	92.2	86.3-98.2	1927	87.9	86.0-89.8
<b>Drinking or using drugs</b>						
Yes	1	1	0.0-3.0	85	3.8	2.9-4.6
No	86	99	97.0-100.0	2112	96.2	95.4-97.1
<b>Money or insurance issues</b>						
Yes	6	7.5	1.0-14.0	63	3.3	1.9-4.7
No	81	92.5	86.0-99.0	2134	96.7	95.3-98.1
<b>Felt depressed or overwhelmed</b>						
Yes	1	1.8	0.0-5.3	70	2.9	2.3-3.5
No	86	98.2	94.7-100.0	2127	97.1	96.5-97.7
<b>Due to side effects of medication</b>						
Yes	1	0.9	0.0-2.8	49	2	1.5-2.5
No	86	99.1	97.2-100.0	2148	98	97.5-98.5
<b>Had too many pills to take</b>						
Yes	1	1	0.0-3.0	—	—	—
No	86	99	97.0-100.0	—	—	—
<b>Homeless<sup>d</sup></b>						
Yes	—	—	—	—	—	—
No	87	100	100.0-100.0	—	—	—
<b>Total</b>	<b>88</b>	<b>100</b>		<b>2209</b>	<b>100</b>	

Abbreviation: CI, confidence interval.

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.

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

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CI's incorporate weighted percentages.

<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, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Depression based on DSM-IV criteria<sup>d</sup></b>						
No depression	129	76.7	69.9-83.5	3882	80.4	78.9-81.8
Other depression	16	10.2	4.9-15.5	490	9.7	8.8-10.6
Major depression	18	13.1	7.5-18.6	484	9.9	8.8-11.0
<b>Moderate or severe depression (PHQ-8 score &gt;10)</b>						
Yes	42	28.5	20.2-36.8	986	20	17.8-22.1
No	121	71.5	63.2-79.8	3870	80	77.9-82.2
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

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  $\geq 30\%$ , “don’t know” responses, and skipped (missing) responses.

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CI<sup>s</sup> incorporate weighted percentages.

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

**Table 12. Cigarette smoking—Medical Monitoring Project, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Smoked ≥100 cigarettes (lifetime)</b>						
Yes	107	64.4	55.7-73.1	3036	62.5	60.0-64.9
No	57	35.6	26.9-44.3	1848	37.5	35.1-40.0
<b>Smoking Status</b>						
Never smoked	57	35.6	26.9-44.3	1848	37.5	35.1-40.0
Former smoker	31	20.3	12.7-27.9	1067	22.3	20.2-24.3
Current smoker	76	44.1	37.2-50.9	1969	40.2	37.1-43.3
<b>Frequency of cigarette smoking</b>						
Never	88	55.9	49.1-62.8	2915	59.8	56.7-62.9
Daily	67	39.3	32.6-46.0	1660	33.9	31.0-36.8
Weekly	4	2.1	0.1-4.0	168	3.5	2.8-4.1
Monthly	—	—	—	43	1	0.7-1.3
Less than monthly	5	2.7	0.6-4.8	98	1.8	1.4-2.2
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

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 ≥30%, “don’t know” responses, and skipped (missing) responses.

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CIs incorporate weighted percentages.



**Table 13. Alcohol use during the 12 months before interview—Medical Monitoring Project, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Any alcohol use<sup>d</sup></b>						
Yes	119	72.7	65.2-80.2	3080	63.8	60.3-67.2
No	45	27.3	19.8-34.8	1808	36.2	32.8-39.7
<b>Frequency of alcohol use</b>						
Daily	11	6.3	2.2-10.3	324	7.4	5.6-9.2
Weekly	27	16.5	10.3-22.7	922	19.1	17.3-20.8
Monthly	31	19.1	12.6-25.6	636	13.2	11.7-14.6
Less than monthly	50	30.9	22.9-38.9	1198	24.2	22.3-26.1
Never	45	27.3	19.8-34.8	1808	36.8	32.8-39.7
<b>Alcohol use before or during sex</b>						
Yes	40	24.2	17.4-31.0	1070	22.8	21.1-24.6
No	119	75.8	69.0-82.6	3770	77.2	75.4-78.9
<b>Alcohol use (during past 30 days)</b>						
Yes	101	62.4	54.7-70.1	2440	51.2	48.5-53.8
No	62	37.6	29.9-45.3	2436	48.8	46.2-51.5
<b>Binge drinking<sup>e</sup> (during past 30 days)</b>						
Yes	27	16.8	10.2-23.4	764	15.5	14.5-16.6
No	136	83.2	76.6-89.8	4103	84.5	83.4-85.5
<b>Heavy drinking<sup>f</sup> (during past 30 days)</b>						
Yes	8	4.7	0.7-8.7	232	5.1	4.3-5.9
No	155	95.3	91.3-99.9	4632	94.9	94.1-95.7
<b>Days ≥1 drink consumed<sup>g</sup> (estimated numbers during past 30 days)</b>						
Mean	6.3			7.9		
Median	2.3			3.3		
Range	1-30			1-30		
<b>Drinks consumed per day<sup>g</sup> (estimated numbers during past 30 days)</b>						
Mean	3			2.8		
Median	1.7			1.7		
Range	1-24			0-30		
<b>Binge drinking days<sup>g</sup> (estimated numbers during past 30 days)</b>						
Mean	2			1.7		
Median	0			0		
Range	0-30			0-30		
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

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 ≥30%, "don't know" responses, and skipped (missing) responses.

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CI's incorporate weighted percentages.

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

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

<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, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Use of any noninjection drugs<sup>d</sup></b>						
Yes	56	32.7	24.9-40.5	1201	24.6	22.7-26.5
No	108	67.3	59.5-75.1	3682	75.4	73.5-77.3
<b>Use of any noninjection drugs<sup>d</sup> before or during sex</b>						
Yes	25	15.2	10.0-20.4	568	11.7	10.1-13.2
No	137	84.8	79.6-90.0	4283	88.3	86.8-89.9
<b>Noninjection drugs<sup>d</sup> used by patients:</b>						
<b>Marijuana</b>						
Yes	55	31.7	23.9-39.6	1021	20.8	19.2-22.5
No	109	68.3	60.4-76.1	3864	79.2	77.5-80.8
<b>Poppers (amyl nitrate)</b>						
Yes	3	2.8	0.0-5.9	213	4.3	2.6-5.9
No	161	97.2	94.1-100.0	4672	95.7	94.1-97.4
<b>Methamphetamine (crystal meth, tina, crank, ice)</b>						
Yes	1	0.9	0.0-2.8	192	3.9	2.5-5.4
No	163	99.1	97.2-100.0	4693	96.1	94.6-97.5
<b>Cocaine that is smoked or snorted</b>						
Yes	3	1.8	0.0-3.8	181	3.6	3.1-4.2
No	161	98.2	96.2-100.0	4703	96.4	95.8-96.9
<b>Crack</b>						
Yes	4	2.2	0.0-4.3	142	3	2.4-3.6
No	160	97.8	95.7-100.0	4743	97	96.4-97.6
<b>Painkiller (e.g. Oxycontin, Vicodin, Percocet)</b>						
Yes	5	3.6	0.0-7.5	102	2.1	1.6-2.6
No	159	96.4	92.5-100.0	4782	97.9	97.4-98.4
<b>Use of any injection drugs</b>						
Yes	—	—	—	125	2.4	1.3-3.5
No	164	100	100.0-100.0	4764	97.6	96.5-98.7
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

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  $\geq 30\%$ , "don't know" responses, and skipped (missing) responses.

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CI's incorporate weighted percentages.

<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. Gynecological care and reproductive health among women—Medical Monitoring Project, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Received HIV care at gynecological clinic</b>						
Yes	3	8.3	0.7-15.9	289	21.3	16.6-26.0
No	36	91.7	84.1-99.3	978	78.7	74.0-83.4
<b>Papanicolaou (Pap) smear</b>						
Yes	29	75.4	60.2-90.6	965	76.6	73.2-80.0
No	10	24.6	9.4-39.8	295	23.4	20.0-26.8
<b>Pregnant since HIV diagnosis<sup>d</sup></b>						
Yes	4	10.8	0.4-21.1	295	24	20.3-27.7
No	35	89.2	78.9-99.6	968	76	72.3-79.7
<b>Given birth since HIV diagnosis<sup>d</sup></b>						
Yes	3	75.4	32.1-100.0	243	79.9	75.3-84.4
No	1	24.6	0.0-67.9	52	20.1	15.6-24.7
<b>Pregnant (during past 12 months)<sup>d</sup></b>						
Yes	—	—	—	35	12.6	7.7-17.5
No	4	100	100.0-100.0	260	87.4	82.5-92.3
<b>Given birth (during past 12 months)<sup>e</sup></b>						
Yes	—	—	—	—	—	—
No	—	—	—	—	—	—
<b>Total</b>	<b>39</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

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  $\geq 30\%$ , “don’t know” responses, and skipped (missing) responses.

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CI<sup>s</sup> incorporate weighted percentages.

<sup>d</sup>Among women who had been pregnant since HIV diagnosis.

<sup>e</sup>Among women who had been pregnant during past 12 months.

**Table 16. Sexual orientation and sexual activity during the 12 months before the interview—Medical Monitoring Project, Michigan and United States, 2012**

	Michigan No. <sup>a</sup>	Michigan % <sup>b</sup>	Michigan 95% CI <sup>c</sup>	National No. <sup>a</sup>	National % <sup>b</sup>	National 95% CI <sup>c</sup>
<b>Classification of sexual behavior and sexual orientation<sup>d</sup></b>						
Any MSM (MSM only, and men who have sex with men and women)	80	53.9	44.7-63.0	2301	49.2	43.3-55.1
Men who have sex with women only	40	24	17.0-31.0	1234	24.2	21.6-26.9
Any women who have sex with men (women who have sex with men only, and women who have sex with men and women)	39	21.6	13.0-30.3	1230	24.9	21.5-28.3
Transgender	1	0.5	0.0-1.5	33	0.6	0.4-0.9
<b>Any sexual activity</b>						
Yes	94	58.1	49.7-66.4	3039	62.9	60.1-65.8
No	68	41.9	33.6-50.3	1821	37.1	34.2-39.9
<b>Any sexual activity among MSM</b>						
Yes	47	58.8	45.5-72.2	1636	72.3	68.7-75.9
No	32	41.2	27.8-54.5	657	27.7	24.1-31.3
<b>Men who have sex with women only</b>						
Yes	23	58.8	45.8-71.9	722	59.1	56.0-62.2
No	17	41.2	28.1-54.2	500	40.9	37.8-44.0
<b>Women who have sex with men</b>						
Yes	22	56.2	40.4-72.0	629	50.6	47.9-53.4
No	17	43.8	28.0-59.6	588	49.4	46.6-52.1
<b>Women who have sex with women only</b>						
Yes	—	—	—	18	54.8	32.9-76.6
No	—	—	—	15	45.2	23.4-67.1
<b>Transgender</b>						
Yes	1	100	—	32	53.8	40.9-66.6
No	0	0	—	28	46.2	33.4-59.1
<b>Engaged in any unprotected<sup>e</sup> sex with any partner</b>						
Yes	39	25.2	17.1-33.2	1120	23.9	20.5-27.3
No	120	74.8	66.8-82.9	3620	76.1	72.7-79.5
<b>Any partner whose HIV status was negative or unknown</b>						
Yes	16	9.6	4.7-14.4	535	10.9	9.4-12.5
No	142	90.4	85.6-95.3	4190	89.1	87.5-90.6
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

**Table 16. Sexual orientation and sexual activity during the 12 months before the interview—Medical Monitoring Project, Michigan and United States, 2012 (continued)**

	Michigan No. <sup>a</sup>	National No. <sup>a</sup>
<b>Estimated number of sex partners<sup>f</sup> among MSM</b>		
Mean	2.3	5.7
Median	1	1.3
Range	1-20	1-300
<b>Men who have sex with women only</b>		
Mean	1.5	1.5
Median	1	1
Range	1-7	1-20
<b>Women who have sex with men</b>		
Mean	1.1	1.3
Median	1	1
Range	1-3	1-26
<b>Women who have sex with women only</b>		
Mean	—	1.2
Median	—	1
Range	—	1-3
<b>Transgender</b>		
Mean	--	2.3
Median	--	1
Range	--	1-13
<b>Total</b>	<b>164</b>	<b>4,901</b>

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  $\geq 30\%$ , "don't know" responses, and skipped (missing) responses.

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

<sup>b</sup>Percentages are weighted percentages.

<sup>c</sup>CI's incorporate weighted percentages.

<sup>d</sup>Sixty transgender persons not included in any of these categories.

<sup>e</sup>A condom was not used.

<sup>f</sup>Among sexually active patients.

Table 17. Sexual risk behaviors during the 12 months before the interview among men who have sex with men, by type of partner — Medical Monitoring Project, Michigan, 2012

Behavior	Any partner <sup>a</sup>			Main partner <sup>b</sup>			Casual partner <sup>c</sup>		
	No. <sup>d</sup>	%	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>
<b>Any anal sex</b>									
Yes	39	47.5	32.1-62.9	31	40.9	38.0-43.8	18	20.5	12.3-28.7
No	39	52.5	37.1-67.9	47	59.1	56.2-62.0	60	79.5	71.3-87.7
<b>Any unprotected<sup>g</sup> anal sex</b>									
Yes	25	32.2	17.6-46.8	20	22.2	18.7-25.7	10	12.3	5.6-19.0
No	53	67.8	53.2-82.4	58	77.8	74.3-81.3	68	87.7	81.0-94.4
<b>Unprotected<sup>g</sup> anal sex with partner whose HIV status was negative or unknown</b>									
Yes	7	8	1.0-15.1	6	6.7	5.3-8.1	3	3	0.0-6.2
No	70	92	84.9-99.0	71	93.3	91.9-94.7	75	97	93.8-100.0
<b>Insertive anal sex</b>									
Yes	28	33.5	24.6-42.4	19	30.8	28.2-33.5	16	18.5	10.4-26.6
No	50	66.5	57.6-75.4	59	69.2	66.5-71.8	62	81.5	73.4-89.6
<b>Unprotected<sup>g</sup> insertive anal sex</b>									
Yes	16	20.6	12.4-28.7	10	15.7	12.9-18.5	9	11.3	4.6-18.0
No	62	79.4	71.3-87.6	68	84.3	81.5-87.1	69	88.7	82.0-95.4
<b>Unprotected<sup>g</sup> insertive anal sex with partner whose HIV status was negative or unknown</b>									
Yes	2	2	0.0-4.8	2	3.5	2.6-4.3	1	1	0.0-2.8
No	76	98	95.2-100.0	76	96.5	95.7-97.4	77	99	97.2-100.0
<b>Receptive anal sex</b>									
Yes	30	37.4	21.7-53.0	25	32.3	28.9-35.8	12	14.2	7.1-21.4
No	48	62.6	47.0-78.3	53	67.7	64.2-71.1	66	85.8	78.6-92.9
<b>Unprotected<sup>g</sup> receptive anal sex</b>									
Yes	20	26.1	11.5-40.8	15	18.1	14.4-21.8	9	11.2	4.5-17.9
No	58	73.9	59.2-88.5	63	81.9	78.2-85.6	69	88.8	82.1-95.5
<b>Unprotected<sup>g</sup> receptive anal sex with partner whose HIV status was negative or unknown</b>									
Yes	6	7	0.2-13.7	5	5.2	4.0-6.4	3	3	0.0-6.2
No	71	93	86.3-99.8	72	94.8	93.6-96.0	75	97	93.8-100.0
<b>Total</b>	<b>80</b>	<b>100</b>	<b>-</b>	<b>80</b>	<b>100</b>	<b>-</b>	<b>80</b>	<b>100</b>	<b>-</b>

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 ≥30%, 'don't know' responses, and skipped (missing) responses.

<sup>a</sup> Indicates whether the behavior was reported with any sexual partner.

<sup>b</sup> A partner with whom the patient had sex and to whom he felt most committed (e.g., boyfriend, spouse, significant other, or life partner).

<sup>c</sup> A partner with whom the patient had sex but to whom he did not feel committed or whom he did not know very well.

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

<sup>e</sup> Percentages are weighted percentages.

<sup>f</sup> CIs incorporate weighted percentages.

<sup>g</sup> A condom was not used.

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, 2012

Behavior	Any partner <sup>a</sup>			Main partner <sup>b</sup>			Casual partner <sup>c</sup>		
	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>
<b>Any anal sex</b>									
Yes	1,321	59.5	56.0-63.0	902	38	24.9-51.0	766	33.3	30.1-36.3
No	932	40.5	37.0-44.0	1,352	62	49.0-75.1	1,492	66.7	63.4-69.9
<b>Any unprotected<sup>g</sup> anal sex</b>									
Yes	714	32.9	29.2-36.7	475	25.8	13.8-37.7	414	17.8	14.8-20.9
No	1,486	67.1	63.3-70.8	1,761	74.2	62.3-86.2	1,802	82.2	79.1-85.2
<b>Unprotected<sup>g</sup> anal sex with partner whose HIV status was negative or unknown</b>									
Yes	284	12.4	10.4-14.5	156	7	0.2-13.8	171	7.3	6.0-8.7
No	1,905	87.6	85.5-89.6	2,079	93	86.2-99.8	2,043	92.7	91.3-94.0
<b>Insertive anal sex</b>									
Yes	1,059	47.4	44.3-50.6	692	22.9	14.1-31.8	621	27.1	24.6-29.7
No	1,194	52.6	49.4-55.7	1,562	77.1	68.2-85.9	1,636	72.9	70.3-75.4
<b>Unprotected<sup>g</sup> insertive anal sex</b>									
Yes	553	24.7	21.7-27.7	344	13.1	5.5-20.7	324	13.7	11.7-15.7
No	1,697	75.3	72.3-78.3	1,910	86.9	79.3-94.5	1,932	86.3	84.3-88.3
<b>Unprotected<sup>g</sup> insertive anal sex with partner whose HIV status was negative or unknown</b>									
Yes	166	7.2	5.9-8.4	82	2	0.0-4.8	105	4.4	3.5-5.4
No	2,083	92.8	91.6-94.1	2,172	98	95.2-100.0	2,151	95.6	94.6-96.5
<b>Receptive anal sex</b>									
Yes	1,030	47.7	43.4-52.0	689	30.9	17.9-44.0	578	25.6	22.5-28.7
No	1,198	52.3	48.0-56.6	1,556	69.1	56.0-82.1	1,661	74.4	71.3-77.5
<b>Unprotected<sup>g</sup> receptive anal sex</b>									
Yes	552	26	22.0-30.0	373	19.7	8.0-31.4	307	13.2	10.6-15.9
No	1,644	74	70.0-78.0	1,863	80.3	68.6-92.0	1,909	86.8	84.1-89.4
<b>Unprotected<sup>g</sup> receptive anal sex with partner whose HIV status was negative or unknown</b>									
Yes	209	9.5	7.8-11.2	118	5.9	0.0-12.5	120	5.4	4.3-6.5
No	1,979	90.5	88.8-92.2	2,117	94.1	87.5-100.0	2,094	94.6	93.5-95.7
<b>Total</b>	<b>2,301</b>	<b>100</b>		<b>2,301</b>	<b>100</b>		<b>2,301</b>	<b>100</b>	

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  $\geq 30\%$ , 'don't know' responses, and skipped (missing) responses.

<sup>a</sup> Indicates whether the behavior was reported with any sexual partner.

<sup>b</sup> A partner with whom the patient had sex and to whom he felt most committed (e.g., boyfriend, spouse, significant other, or life partner).

<sup>c</sup> A partner with whom the patient had sex but to whom he did not feel committed or whom he did not know very well.

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

<sup>e</sup> Percentages are weighted percentages.

**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, Michigan, 2012**

Behavior	Any partner <sup>a</sup>			Main partner <sup>b</sup>			Casual partner <sup>c</sup>		
	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>
<b>Any vaginal sex</b>									
Yes	22	56.6	44.9-68.2	20	52	38.3-65.7	4	8.9	1.8-16.1
No	18	43.4	31.8-55.1	20	48	34.3-61.7	36	91.1	83.9-98.2
<b>Any unprotected<sup>g</sup> vaginal sex</b>									
Yes	7	17.4	8.3-26.5	7	17.4	8.3-26.5	0	0	0.0-0.0
No	33	82.6	73.5-91.7	33	82.6	73.5-91.7	40	100	100.0-100.0
<b>Unprotected<sup>g</sup> vaginal sex with partner whose HIV status was negative or unknown</b>									
Yes	4	10.5	3.3-17.8	4	10.5	3.3-17.8	0	0	0.0-0.0
No	36	89.5	82.2-96.7	36	89.5	82.2-96.7	40	100	100.0-100.0
<b>Any anal sex</b>									
Yes	1	2.3	0.0-6.9	0	0	0.0-0.0	1	2.3	0.0-6.9
No	39	97.7	93.1-100.0	40	100	100.0-100.0	39	97.7	93.1-100.0
<b>Unprotected<sup>g</sup> anal sex</b>									
Yes	0	0	0.0-0.0	0	0	0.0-0.0	0	0	0.0-0.0
No	40	100	100.0-100.0	40	100	100.0-100.0	40	100	100.0-100.0
<b>Unprotected<sup>g</sup> anal sex with partner whose HIV status was negative or unknown</b>									
Yes	0	0	0.0-0.0	0	0	0.0-0.0	0	0	0.0-0.0
No	40	100	100.0-100.0	40	100	100.0-100.0	40	100	100.0-100.0
<b>Total</b>	<b>40</b>	<b>100</b>		<b>40</b>	<b>100</b>		<b>40</b>	<b>100</b>	

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  $\geq 30\%$ , 'don't know' responses, and skipped (missing) responses.

<sup>a</sup> Indicates whether the behavior was reported with any sexual partner.

<sup>b</sup> A partner with whom the patient had sex and to whom he felt most committed (e.g., girlfriend, spouse, significant other, or life partner).

<sup>c</sup> A partner with whom the patient had sex but to whom he did not feel committed or whom he did not know very well.

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

<sup>e</sup> Percentages are weighted percentages.

<sup>f</sup> CIs incorporate weighted percentages.

<sup>g</sup> A condom was not used.



**Table 20. 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, 2012**

Behavior	Any partner <sup>a</sup>			Main partner <sup>b</sup>			Casual partner <sup>c</sup>		
	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>
<b>Any vaginal sex</b>									
Yes	692	56.8	53.5-60.0	545	44.4	40.6-48.2	184	15.6	13.1-18.1
No	527	43.2	40.0-46.5	675	55.6	51.8-59.4	1,035	84.4	81.9-86.9
<b>Any unprotected<sup>g</sup> vaginal sex</b>									
Yes	169	13.2	9.6-16.9	138	10.8	7.5-14.1	40	3.3	1.8-4.7
No	1,050	86.8	83.1-90.4	1,082	89.2	85.9-92.5	1,179	96.7	95.3-98.2
<b>Unprotected<sup>g</sup> vaginal sex with partner whose HIV status was negative or unknown</b>									
Yes	102	7.8	5.3-10.2	85	6.4	4.1-8.7	--	--	--
No	1,117	92.2	89.8-94.7	1,135	93.6	91.3-95.9	--	--	--
<b>Any anal sex</b>									
Yes	81	6.5	4.7-8.2	53	4.2	2.9-5.5	32	2.5	1.6-3.4
No	1,129	93.5	91.8-95.3	1,160	95.8	94.5-97.1	1,186	97.5	96.6-98.4
<b>Unprotected<sup>g</sup> anal sex</b>									
Yes	--	--	--	--	--	--	--	--	--
No	--	--	--	--	--	--	--	--	--
<b>Unprotected<sup>g</sup> anal sex with partner whose HIV status was negative or unknown</b>									
Yes	--	--	--	--	--	--	--	--	--
No	--	--	--	--	--	--	--	--	--
<b>Total</b>									
	<b>1,234</b>	<b>100</b>		<b>1,234</b>	<b>100</b>		<b>1,234</b>	<b>100</b>	

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  $\geq 30\%$ , 'don't know' responses, and skipped (missing) responses.

<sup>a</sup> Indicates whether the behavior was reported with any sexual partner.

<sup>b</sup> A partner with whom the patient had sex and to whom he felt most committed (e.g., girlfriend, spouse, significant other, or life partner).

<sup>c</sup> A partner with whom the patient had sex but to whom he did not feel committed or whom he did not know very well.

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

<sup>e</sup> Percentages are weighted percentages.

<sup>f</sup> CIs incorporate weighted percentages.

<sup>g</sup> A condom was not used.

**Table 21. Sexual risk behaviors during the 12 months before the interview among women who have sex with men, by type of partner —Medical Monitoring Project, Michigan, 2012**

Behavior	Any partner <sup>a</sup>			Main partner <sup>b</sup>			Casual partner <sup>c</sup>		
	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>
<b>Any vaginal sex</b>									
Yes	21	54.1	38.2-69.9	19	49.7	34.6-64.9	2	4.3	0.0-11.2
No	18	45.9	30.1-61.8	20	50.3	35.1-65.4	37	95.7	88.8-100.0
<b>Any unprotected<sup>g</sup> vaginal sex</b>									
Yes	6	15.7	4.4-27.1	6	15.7	4.4-27.1	0	0	0.0-0.0
No	33	84.3	72.9-95.6	33	84.3	72.9-95.6	39	100	100.0-100.0
<b>Unprotected<sup>g</sup> vaginal sex with partner whose HIV status was negative or unknown</b>									
Yes	4	10.3	0.0-20.5	4	10.3	0.0-20.5	0	0	0.0-0.0
No	35	89.7	79.5-100.0	35	89.7	79.5-100.0	39	100	100.0-100.0
<b>Any anal sex</b>									
Yes	0	0	0.0-0.0	0	0	0.0-0.0	0	0	0.0-0.0
No	38	100	100.0-100.0	38	100	100.0-100.0	39	100	100.0-100.0
<b>Unprotected<sup>g</sup> anal sex</b>									
Yes	0	0	0.0-0.0	0	0	0.0-0.0	0	0	0.0-0.0
No	38	100	100.0-100.0	38	100	100.0-100.0	39	100	100.0-100.0
<b>Unprotected<sup>g</sup> anal sex with partner whose HIV status was negative or unknown</b>									
Yes	0	0	0.0-0.0	0	0	0.0-0.0	0	0	0.0-0.0
No	38	100	100.0-100.0	38	100	100.0-100.0	39	100	100.0-100.0
<b>Total</b>	<b>39</b>	<b>100</b>		<b>39</b>	<b>100</b>		<b>39</b>	<b>100</b>	

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  $\geq 30\%$ , 'don't know' responses, and skipped (missing) responses.

<sup>a</sup> Indicates whether the behavior was reported with any sexual partner.

<sup>b</sup> A partner with whom the patient had sex and to whom she felt most committed (e.g., boyfriend, spouse, significant other, or life partner).

<sup>c</sup> A partner with whom the patient had sex but to whom she did not feel committed or whom she did not know very well.

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

<sup>e</sup> Percentages are weighted percentages.

<sup>f</sup> CIs incorporate weighted percentages.

<sup>g</sup> A condom was not used.

**Table 22. 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, 2012**

Behavior	Any partner <sup>a</sup>			Main partner <sup>b</sup>			Casual partner <sup>c</sup>		
	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>	No. <sup>d</sup>	% <sup>e</sup>	95% CI <sup>f</sup>
<b>Any vaginal sex</b>									
Yes	605	49.1	46.5-51.7	550	44.5	42.0-47.0	85	6.8	5.6-8.0
No	605	50.9	48.3-53.5	660	55.5	53.0-58.0	1,126	93.2	92.0-94.4
<b>Any unprotected<sup>g</sup> vaginal sex</b>									
Yes	209	16.8	14.4-19.2	196	16	13.6-18.4	15	0.9	0.5-1.4
No	1,001	83.2	80.8-85.6	1,014	84	81.6-86.4	1,196	99.1	98.6-99.5
<b>Unprotected<sup>g</sup> vaginal sex with partner whose HIV status was negative or unknown</b>									
Yes	128	10.3	8.7-12.0	120	9.9	8.4-11.5	--	--	--
No	1,082	89.7	88.0-91.3	1,090	90.1	88.5-91.6	--	--	--
<b>Any anal sex</b>									
Yes	62	5.3	4.0-6.6	54	4.6	3.3-5.8	--	--	--
No	1,144	94.7	93.4-96.0	1,153	95.4	94.2-96.7	--	--	--
<b>Unprotected<sup>g</sup> anal sex</b>									
Yes	32	2.5	1.3-3.8	30	2.4	1.2-3.6	--	--	--
No	1,174	97.5	96.2-98.7	1,177	97.6	96.4-98.8	--	--	--
<b>Unprotected<sup>g</sup> anal sex with partner whose HIV status was negative or unknown</b>									
Yes	19	1.6	0.7-2.5	--	--	--	--	--	--
No	1,187	98.4	97.5-99.3	--	--	--	--	--	--
<b>Total</b>	<b>1,230</b>	<b>100</b>		<b>1,230</b>	<b>100</b>		<b>1,230</b>	<b>100</b>	

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  $\geq 30\%$ , 'don't know' responses, and skipped (missing) responses.

<sup>a</sup> Indicates whether the behavior was reported with any sexual partner.

<sup>b</sup> A partner with whom the patient had sex and to whom she felt most committed (e.g., boyfriend, spouse, significant other, or life partner).

<sup>c</sup> A partner with whom the patient had sex but to whom she did not feel committed or whom she did not know very well.

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

<sup>e</sup> Percentages are weighted percentages.

<sup>f</sup> CIs incorporate weighted percentages.

<sup>g</sup> A condom was not used.

**Table 23. Met and unmet needs for ancillary services during the 12 months before the interview—Medical Monitoring Project, Michigan, 2012**

	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. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Dental care</b>									
Yes	94	59.4	50.8-68.1	50	29	19.0-39.1	19	11.5	5.7-17.2
No	69	40.6	31.9-49.2	113	71	60.9-81.0	145	88.5	82.8-94.3
<b>HIV case management services</b>									
Yes	95	57.2	48.9-65.6	13	8.3	3.6-12.9	56	34.5	27.1-41.9
No	69	42.8	34.4-51.1	151	91.7	87.1-96.4	108	65.5	58.1-72.9
<b>Medicine through ADAP</b>									
Yes	80	51.3	40.4-62.2	5	2.9	0.3-5.4	76	45.8	35.3-56.4
No	81	48.7	37.8-59.6	158	97.1	94.6-99.7	85	54.2	43.6-64.7
<b>Public benefits (e.g., SSI or SSDI)</b>									
Yes	76	47.7	39.3-56.2	20	11.2	6.0-16.5	67	40.7	33.9-47.5
No	88	52.3	43.8-60.7	143	88.8	83.5-94.0	96	59.3	52.5-66.1
<b>Counseling about how to prevent spread of HIV</b>									
Yes	75	43.8	33.2-54.4	2	1.5	0.0-3.7	87	54.7	44.1-65.3
No	89	56.2	45.6-66.8	162	98.5	96.3-100.0	77	45.3	34.7-55.9
<b>Meal or food services</b>									
Yes	42	24.4	15.4-33.4	14	8.2	3.9-12.5	108	67.4	59.2-75.6
No	122	75.6	66.6-84.6	150	91.8	87.5-96.1	56	32.6	24.4-40.8
<b>Mental health services</b>									
Yes	45	26.2	19.7-32.6	10	6.6	2.7-10.5	109	67.2	60.0-74.5
No	119	73.8	67.4-80.3	154	93.4	89.5-97.3	55	32.8	25.5-40.0
<b>Transportation assistance</b>									
Yes	50	28.4	20.0-36.8	19	10.7	6.0-15.5	95	60.8	52.4-69.3
No	114	71.6	63.2-80.0	145	89.3	84.5-94.0	69	39.2	30.7-47.6
<b>Professional help remembering to take HIV medicines on time or correctly (adherence support services)</b>									
Yes	51	30.7	24.0-37.5	5	3.9	0.5-7.4	108	65.3	58.6-72.0
No	113	69.3	62.5-76.0	159	96.1	92.6-99.5	56	34.7	28.0-41.4
<b>Shelter or housing services</b>									
Yes	25	15.2	10.0-20.5	14	8	4.6-11.4	125	76.8	70.8-82.8
No	139	84.8	79.5-90.0	150	92	88.6-95.4	39	23.2	17.2-29.2
<b>HIV peer group support</b>									
Yes	32	18.8	12.5-25.1	15	9.8	5.4-14.3	117	71.4	64.5-78.3
No	132	81.2	74.9-87.5	149	90.2	85.7-94.6	47	28.6	21.7-35.5
<b>Drug or alcohol counseling or treatment</b>									
Yes	11	5.9	3.0-8.7	6	4.1	0.9-7.2	147	90.1	85.9-94.3
No	153	94.1	91.3-97.0	158	95.9	92.8-99.1	17	9.9	5.7-14.1
<b>Home health Services</b>									
Yes	24	14.6	8.6-20.6	9	4.8	2.2-7.4	131	80.6	74.2-87.0
No	140	85.4	79.4-91.4	155	95.2	92.6-97.8	33	19.4	13.0-25.8
<b>Interpreter services</b>									
Yes	1	0.6	0.0-1.6	0	0	0.0-0.0	163	99.4	98.4-100.0
No	163	99.4	98.4-100.0	164	100	100.0-100.0	1	0.6	0.0-1.6
<b>Domestic violence services</b>									
Yes	5	2.7	0.0-5.5	1	0.6	0.0-1.6	157	96.2	92.7-99.7
No	159	97.3	94.5-100.0	162	98.9	97.6-100.0	7	3.8	0.3-7.3
<b>Childcare services</b>									
Yes	3	2.1	0.0-4.1	1	0.56	0.0-1.6	160	97.4	94.5-100.0
No	161	97.92	95.89-99.96	163	99.4	98.4-100.0	3	2.63	0.0-5.5
<b>Total</b>	<b>164</b>			<b>164</b>			<b>164</b>		

Abbreviation: CI, confidence interval; SSI, Supplemental Security Income; ADAP, AIDS Drug Assistance Program.

Note: Patients could report receiving or needing more than one service.

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

Excluded are choice with fewer than 5 responses, values with a coefficient of variation  $\geq 30\%$ , 'don't know' responses, and skipped (missing) responses.

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

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

**Table 24. Met and unmet needs for ancillary services during the 12 months before the interview—Medical Monitoring Project, United States, 2012**

	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. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>Dental care</b>									
Yes	2,880	59.5	56.5-62.5	1155	22.3	19.7-24.8	862	18.2	16.6-19.8
No	2,019	40.5	37.5-43.5	3743	77.7	75.2-80.3	4036	81.8	80.2-83.4
<b>HIV case management services</b>									
Yes	2,859	57.1	52.5-61.6	215	4.4	3.4-5.4	1812	38.5	34.0-42.9
No	2,033	42.9	38.4-47.5	4679	95.6	94.6-96.6	3074	61.5	57.1-66.0
<b>Medicine through ADAP</b>									
Yes	2,093	43.4	40.4-46.4	113	2.3	1.7-2.8	2598	54.3	51.1-57.4
No	2,715	56.6	53.6-59.6	4734	97.7	97.2-98.3	2208	45.7	42.6-48.9
<b>Public benefits (e.g., SSI or SSDI)</b>									
Yes	2,182	42.9	40.4-45.3	515	10.7	9.1-12.2	2197	46.4	43.3-49.5
No	2,717	57.1	54.7-59.6	4379	89.3	87.8-90.9	2698	53.6	50.5-56.7
<b>Counseling about how to prevent spread of HIV</b>									
Yes	2,073	41.1	36.2-45.9	55	1	0.7-1.3	2770	58	53.1-62.8
No	2,825	58.9	54.1-63.8	4844	99	98.7-99.3	2128	42	37.2-46.9
<b>Meal or food services</b>									
Yes	1,351	27.1	24.6-29.6	309	5.9	4.9-6.9	3240	67	64.0-70.0
No	3,549	72.9	70.4-75.4	4591	94.1	93.1-95.1	1660	33	30.0-36.0
<b>Mental health services</b>									
Yes	1,324	26.2	23.9-28.5	290	5.9	4.4-7.4	3284	67.9	65.3-70.6
No	3,576	73.8	71.5-76.1	4608	94.1	92.6-95.6	1614	32.1	29.4-34.7
<b>Transportation assistance</b>									
Yes	1,190	23.5	20.5-26.4	381	7.5	6.2-8.8	3327	69	65.7-72.4
No	3,709	76.5	73.6-79.5	4518	92.5	91.2-93.8	1571	31	27.6-34.3
<b>Professional help remembering to take HIV medicines on time or correctly (adherence support services)</b>									
Yes	956	18.5	16.2-20.8	101	1.9	1.4-2.4	3841	79.6	75.9-79.3
No	3,943	81.5	79.2-83.8	4798	98.1	97.6-98.6	1057	20.4	20.7-24.1
<b>Shelter or housing services</b>									
Yes	788	15.7	14.3-17.2	326	6.7	5.6-7.7	3,785	76.8	76.4-80.7
No	4,111	84.3	82.8-85.7	4573	93.3	92.3-94.4	1,114	23.2	19.3-23.6
<b>HIV peer group support</b>									
Yes	759	14.4	12.4-16.4	340	7	5.5-8.5	3,788	71.4	88.8-91.7
No	4,140	85.6	83.6-87.6	4548	93	91.5-94.5	1,099	28.6	8.3-11.2
<b>Drug or alcohol counseling or treatment</b>									
Yes	449	8.4	7.0-9.8	73	1.4	1.0-1.8	4376	90.1	89.3-91.7
No	4,449	91.6	90.2-93.0	4826	98.6	98.2-99.0	522	9.9	8.3-10.7
<b>Home health services</b>									
Yes	335	6.8	5.9-7.8	120	2.6	2.1-3.2	4455	80.6	89.3-91.7
No	4,565	93.2	92.2-94.1	4780	97.4	96.8-97.9	455	19.4	8.3-10.7
<b>Interpreter services</b>									
Yes	181	3.4	2.5-4.4	13	0.2	0.1-0.4	4706	99.4	95.4-97.3
No	4,719	96.6	95.6-97.5	4887	99.8	99.6-99.9	194	0.6	2.7-4.6
<b>Domestic violence services</b>									
Yes	75	1.6	1.1-2.1	28	0.5	0.3-0.6	4797	96.2	97.4-98.4
No	4,825	98.4	97.9-98.9	4872	99.5	99.4-99.7	103	3.8	1.6-2.6
<b>Childcare services</b>									
Yes	50	1.1	0.6-1.6	49	0.9	0.6-1.2	4800		97.4-98.5
No	4,850	98.9	98.4-99.4	4850	99.1	98.8-99.4	99	97.4	1.5-2.6
<b>Total</b>	<b>4,901</b>	<b>100</b>		<b>4,901</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

Abbreviation: CI, confidence interval; SSI, Supplemental Security Income; ADAP, AIDS Drug Assistance Program.

Note: Patients could report receiving or needing more than one service.

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

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

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

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

**Table 25. Prevention services received during the 12 months before the interview—Medical Monitoring Project, Michigan and United States, 2012**

	Michigan	Michigan	Michigan	National	National	National
	No <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>	No. <sup>a</sup>	% <sup>b</sup>	95% CI <sup>c</sup>
<b>One-on-one conversation with physician, nurse, or other health care worker</b>						
Yes	81	47.3	38.2-56.5	2,151	43.4	39.2-47.6
No	83	52.7	43.5-61.8	2,725	56.6	52.4-60.8
<b>One-on-one conversation with outreach worker, counselor, or prevention program worker</b>						
Yes	51	30.2	22.3-38.0	1,418	28	23.8-32.2
No	113	69.8	62.0-77.7	3,457	72	67.8-76.2
<b>Organized session involving a small group of people</b>						
Yes	36	21.5	13.8-29.2	727	13.3	10.5-16.1
No	128	78.5	70.8-86.2	4,154	86.7	83.9-89.5
<b>Free condoms</b>						
Yes	88	51	42.6-59.3	2,640	54.2	50.7-57.6
No	76	49	40.7-57.4	2,243	45.8	42.4-49.3
<b>Source of free condoms<sup>d</sup></b>						
-						
<b>General health clinic</b>						
Yes	47	52.2	39.5-64.9	1,562	61.3	55.6-67.0
No	41	47.8	35.1-60.5	1,074	38.7	33.0-44.4
<b>Community-based organization</b>						
Yes	29	31.3	21.2-41.4	780	29.3	23.4-35.2
No	59	68.7	58.6-78.8	1,856	70.7	64.8-76.6
<b>Social venue</b>						
Yes	17	21.2	11.6-30.9	372	15.4	10.5-20.3
No	71	78.8	69.1-88.4	2,264	84.6	79.7-89.5
<b>Special event</b>						
Yes	8	8.1	2.1-14.1	176	7	4.4-9.5
No	80	91.9	85.9-97.9	2,460	93	90.5-95.6
<b>Sexually transmitted disease clinic</b>						
Yes	1	1	0.0-3.0	198	6.3	1.8-10.7
No	87	99	97.0-100.0	2,438	93.7	89.3-98.2
<b>Outreach organization for persons who inject drugs</b>						
Yes	2	2	0.0-4.8	32	21.1	0.6-1.6
No	86	98	95.2-100.0	2,604	98.9	98.4-99.4
<b>Family planning clinic</b>						
Yes				26	1	0.4-1.5
No	88	100	100.0-100.0	2,610	99	98.5-99.6
<b>Total</b>	<b>164</b>	<b>100</b>		<b>4,901</b>	<b>100</b>	

Note: Patients could report receiving more than one prevention service.

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

Excluded are choice with fewer than 5 responses, values with a coefficient of variation  $\geq 30\%$ , 'don't know' responses, and skipped (missing) responses.

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

<sup>b</sup> Percentages are weighted percentages.

<sup>c</sup> CIs incorporate weighted percentages.

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