

Behavioral and Clinical Characteristics of Persons Receiving Medical Care for HIV Infection – Comparison of Michigan and National Medical Monitoring Project Data for 2014

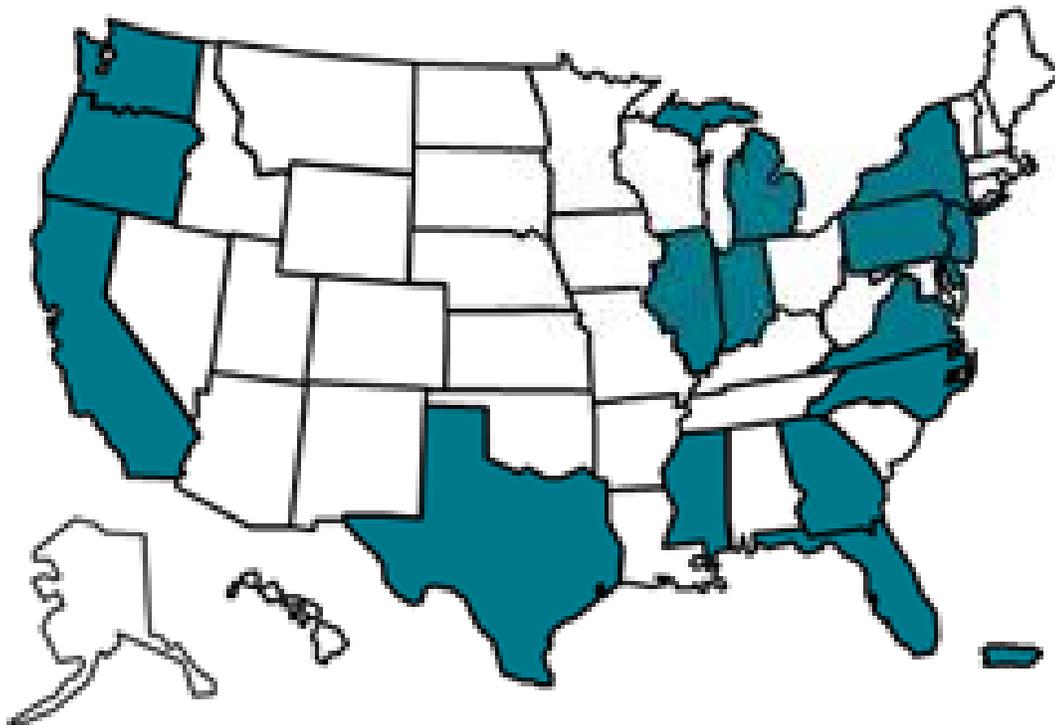
Commentary

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 2014, the sampling method was three-tiered; with project areas being sampled first, then HIV care facilities, and finally individual participants. With 16,750 individuals reported to be living with HIV in Michigan at of January 1, 2014 [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 2014, a total sample of 400 participants was drawn and 192 participants completed both the MMP interview and medical record abstraction (MRA) in the state of Michigan. The 192 respondents are assumed to be a representative sample of an estimated 7,159 adults living in Michigan with HIV who received outpatient HIV care between January 1, 2014 and April 30, 2014.

Main Findings:

- Michigan had a lower proportion of participants identifying as “gay or homosexual” than national participants.
- Only 36% of sexually active Michigan MMP participants were tested for gonorrhea, chlamydia, and syphilis in the previous 12 months.
- At least 78% 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 2014 Cycle [4]



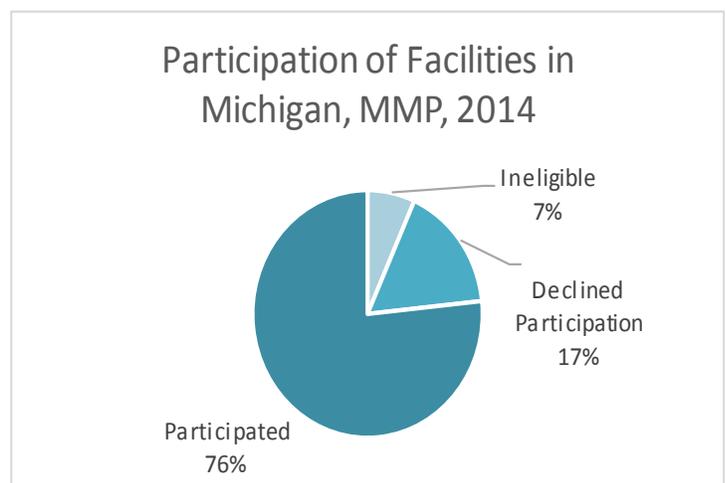
Michigan is one of 65 jurisdictions using eHARS (the Enhanced HIV/AIDS Reporting System) developed by the CDC. This is a surveillance tool that records all HIV-positive individuals either living in Michigan, having tested positive for HIV in Michigan, or receiving care for HIV in Michigan.

Facility and Patient Response Rates

In Michigan in 2014, there were 30 facilities sampled for inclusion in MMP. Of these, 7 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 2014 cycle of MMP was from January 1 through April 30, 2011 [4].

Figure 2. Participation of Facilities in Michigan



Of the 28 sampled and eligible facilities, 23 elected to participate in MMP during the 2014 cycle (Figure 2) . Thus, the eligibility-adjusted facility response rate was 82%. Of the 23 facilities, 400 patients were sampled, of which 192 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 48.7%.

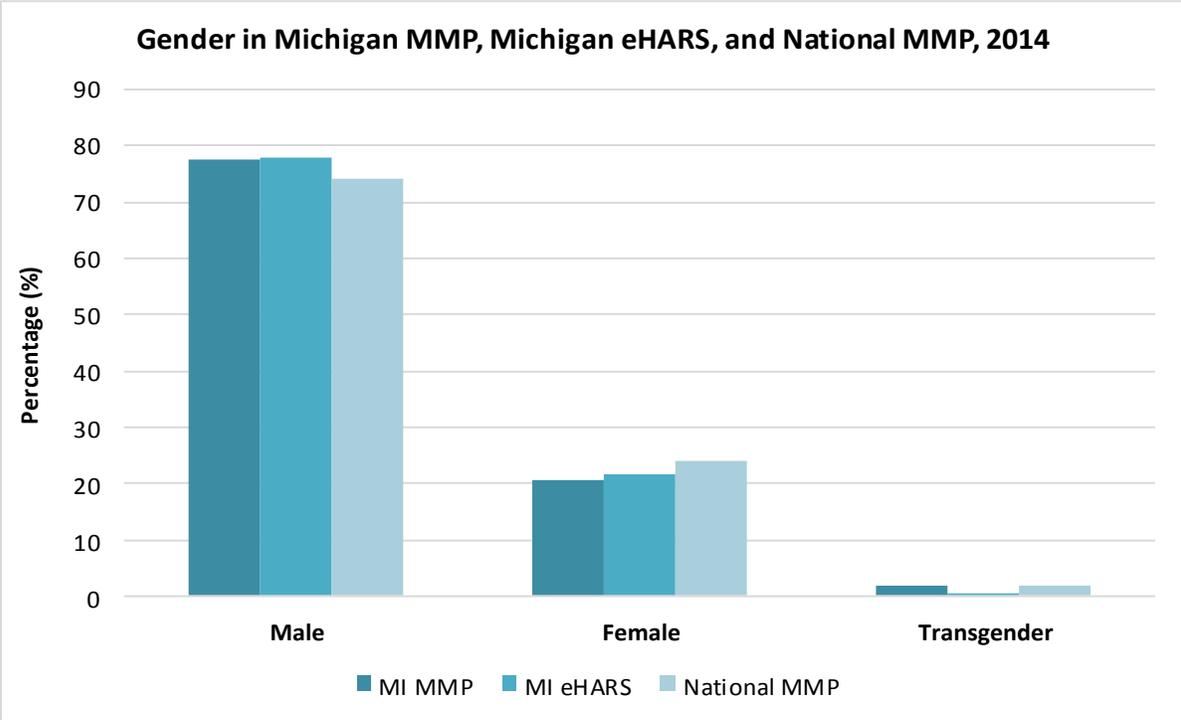
Sociodemographic Characteristics

In order to have been considered eligible for MMP in 2014, individuals had be at least 18 years of age and have received care at an HIV care facility from January 1 to April 30, 2014. Table 2 shows a comparison of 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 2014 (meaning that they were at least 18 years of age and had received care at an HIV care facility from January 1, 2014 to April 30, 2014) and (3) national MMP participants.

Gender

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

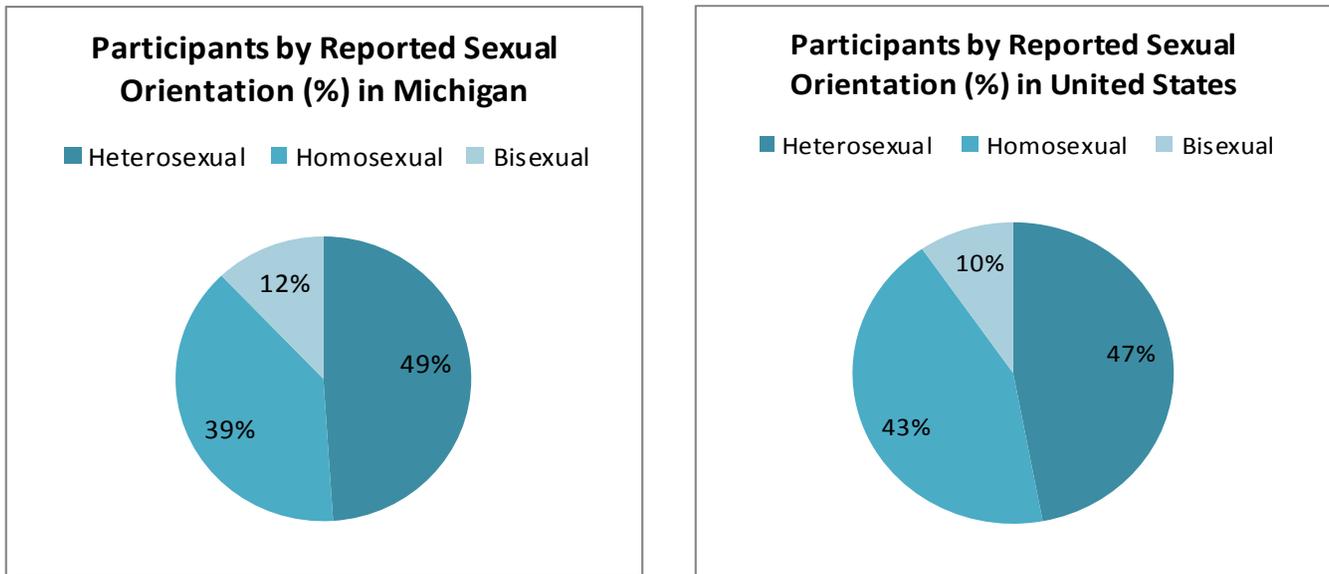
Figure 3. Gender – Michigan MMP, Michigan eHARS, and National MMP, 2014



Sexual Orientation

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

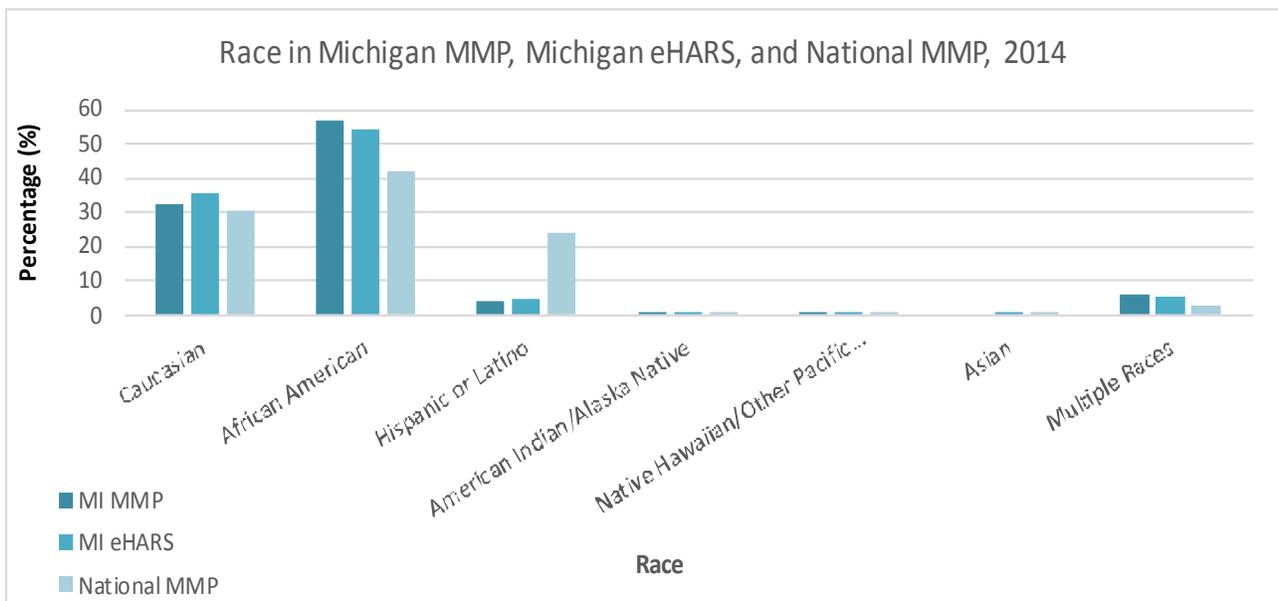
Figure 4. Breakdown of Participants by Sexual Orientation – Michigan MMP vs. National MMP, 2014



Race

The Michigan MMP and eHARS populations had more African Americans 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).

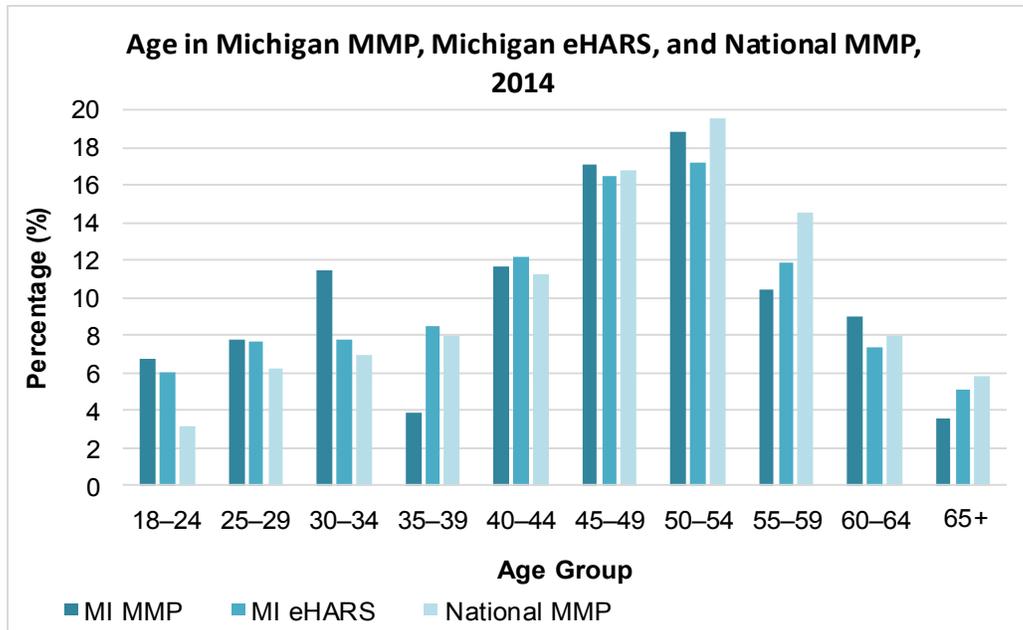
Figure 5. Race – Michigan MMP, Michigan eHARS, and National MMP, 2014



Age

Proportions of age groups differed across the 3 populations (Figure 6). The Michigan MMP and eHARS populations had more in the 18-24 year old age group (6.7% and 6%, respectively), than the national MMP populations, 3.1%. A difference was also seen in the 30-34 age group where the Michigan MMP population had 11.4%, eHARS had 7.8%, and national MMP had 6.9%. In general, the Michigan MMP and eHARS populations were older than the national MMP population (Table 2).

Figure 6: Age in Michigan MMP, Michigan eHARS, and National MMP, 2014



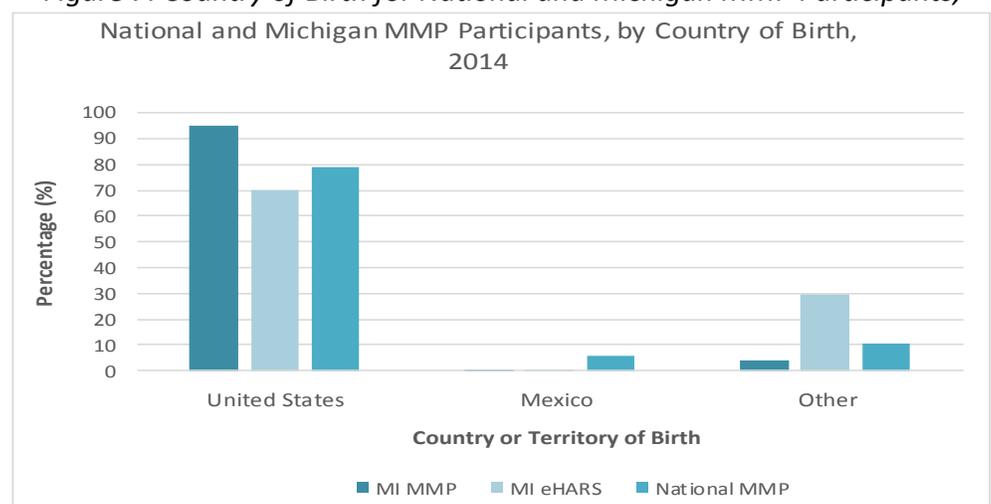
Education

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 (Figure 7 and Table 2). HIV-infected cases born in other countries were under-represented in the MMP sample.

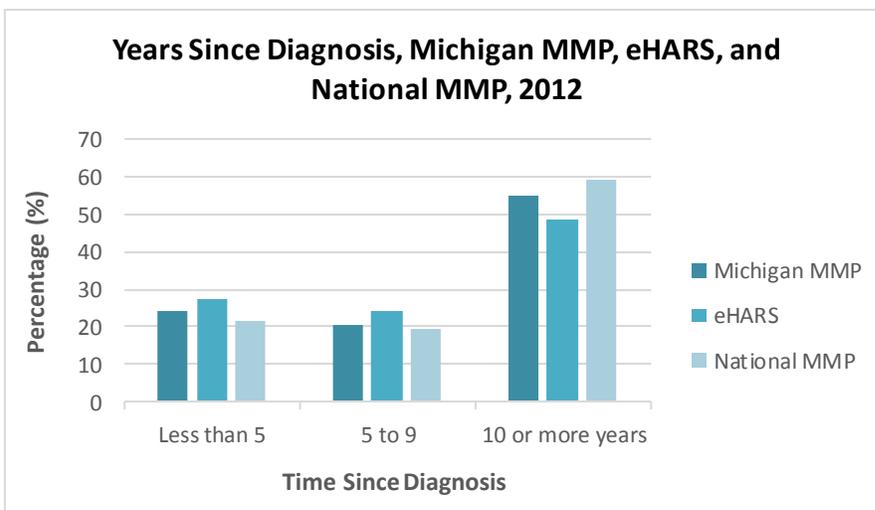
Figure 7: Country of Birth for National and Michigan MMP Participants, 2014



Time Since Diagnosis

The number of years since diagnosis was differed across the populations (Figure 8). The national MMP population had 608 participants diagnosed for more than 10 years. Alternately, only 46.9% of Michigan MMP and 43.2% of Michigan eHARS populations had been diagnosed more than 10 years. (Table 2).

Figure 8. Years Since Diagnosis, Michigan MMP, MI eHARS, and National MMP, 2014



Homelessness and Incarceration

An estimated homeless prevalence (in the 12 months prior to the interview) for the Michigan MMP population was 8.5% with an estimated incarceration prevalence of 2.5%. Both were consistent with the national rates for these variables (Table 2).

Health Insurance Coverage for Antiretroviral Medication

Michigan MMP participants had comparable health insurance coverage for antiretroviral medication compared to national MMP participants (99.5% vs. 98.7%, respectively). Types of health insurance or coverage for antiretroviral medication for those who did have it were also comparable between Michigan and national participants. Michigan participants participated slightly less in Ryan White (46.2% vs. 48.3%, respectively) and somewhat more in Medicaid (54.6% vs. 44.9%, respectively). Medicare and private health insurance participation were comparable between the two groups (Table 2).

Disability, Employment, and Income

Michigan MMP participants had a higher level of disability than the national MMP population, with 48.3% of Michigan MMP participants reporting a disability compared to 44% of national MMP participants. Michigan MMP participants also had a higher level of unemployment compared with national MMP participants, with 51.6% of Michigan MMP participants reporting being unemployed compared to 47.3% of national MMP participants. The Michigan MMP population also had fewer students and retired persons (Table 2). Michigan and national participants had similar sources of income and similar levels of combined yearly household income. An estimated 50% of Michigan participants were at or below the poverty threshold, lower than the national rate of 52.6% (Table 2).

Clinical Characteristics and Use of Healthcare Services

Due to the sampling methodology, every participant in the 2014 cycle (N=192) had a usual place for HIV care. Approximately 61.1% of participants in Michigan had stage 3 (AIDS) infections in accordance with the CDC stage of disease classification [5] (Table 3). Only 76.4% of participants were virally suppressed at their most recent documented viral load and 69% had suppressed levels on all documented viral load measurements. At the lowest CD4 count (cells/ μ L), 89.5% of respondents remained above 200. An estimated 41.3% of Michigan participants had at least 3 CD4 or viral load tests in their medical records, less than the 58.7% in the national group (Table 4). Current treatment guidelines recommend at least one HIV viral load test every 6 months and one CD4 test every year. An estimated 62.7% had at least one HIV viral load every 6 months in Michigan (73.7% nationally) and 92.4% had at least one CD4 (95.9% nationally). Furthermore, 94.3% of Michigan participants were prescribed ART (95.4% nationally).

Clinical Services

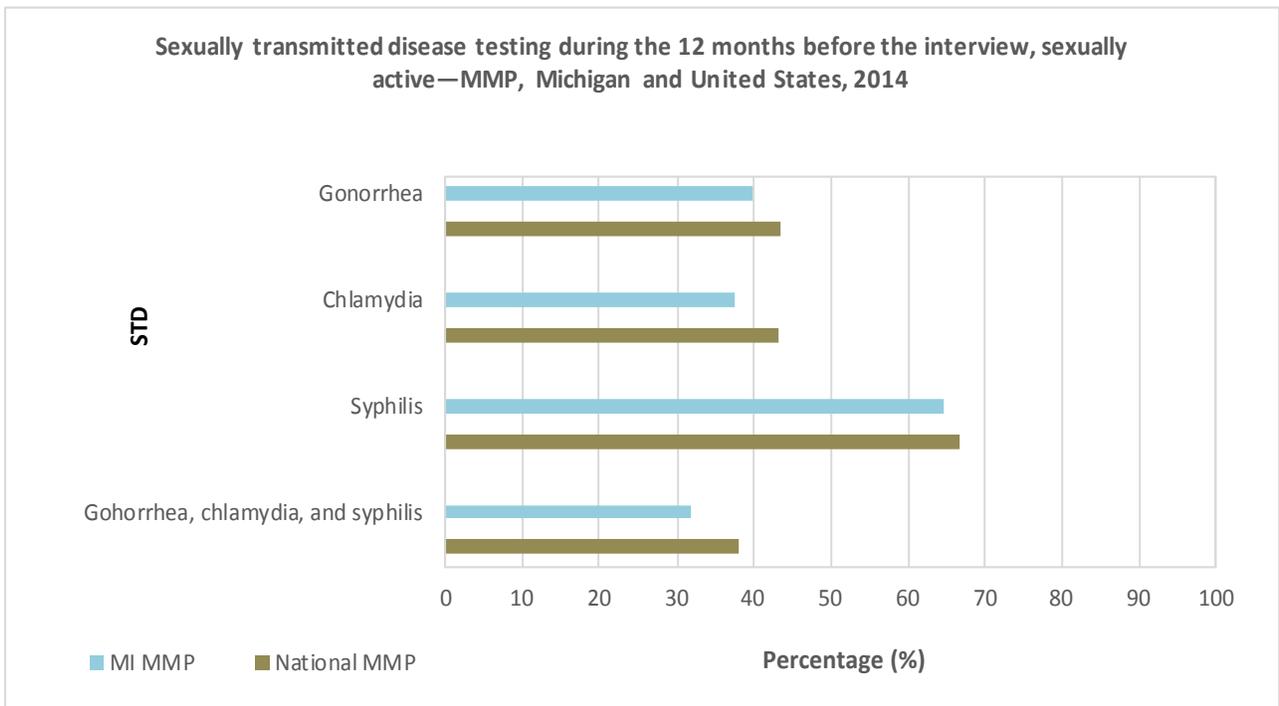
Certain vaccines are recommended for people with HIV, such as Hepatitis A and B, Influenza (injection), pneumonia, and Tetanus, Diphtheria, Pertussis (Tdap). Vaccinations are an important supplement to HIV treatment as they can prevent potentially dangerous illnesses from occurring [6]. An estimated 82% 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 42.2% [7].

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 [8]. The estimated mean travel time for Michigan participants to their primary HIV care provider for patients was 30 minutes, with values ranging from 2 minute to 2 hours. This was shorter than national mean of 34 minutes, with a range of travel time was from 0 minutes to 6 hours (Table 5).

STD Testing

For all Michigan participants (sexually active or not), an estimated 40% were tested for gonorrhea, 37.8% were tested for chlamydia, 64.8% were tested for syphilis and 32.1% for all three (Table 6). The national data was similar to the Michigan data in the STD testing categories. For sexually active participants, Michigan had slightly lower percentages in both gonorrhea and chlamydia testing (46.4% and 43.8%, respectively) than the national percentages for gonorrhea and chlamydia testing (48.2% and 48.4%, respectively) (Table 6 and Figure 9).

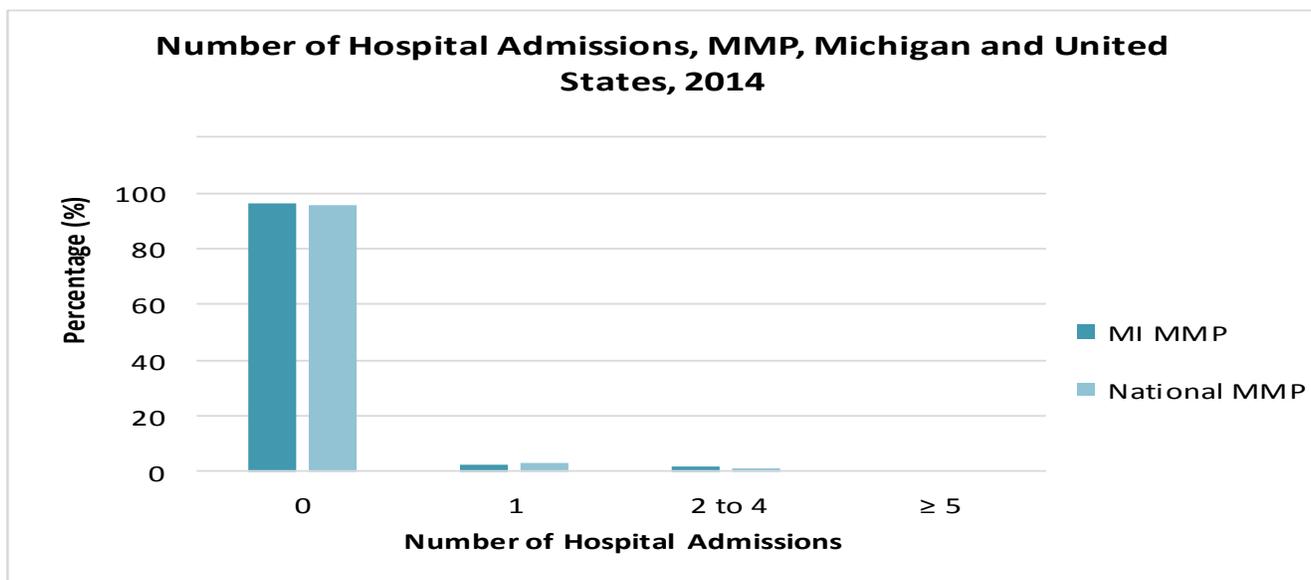
Figure 9: STD Testing for Sexually Active Participants, MMP Michigan and United States, 2014



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 (92.1% and 92.8%, respectively had 0 visits to the ER in the preceding 12 months) (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 preceding year, while 1.6% of participants in Michigan and 1.4% of participants nationally had between 2-4 admissions. (Table 7 & Figure 10).

Figure 10: Hospital admission during the 12 months before the interview, Michigan and National MMP, 2014



Self-reported Antiretroviral Medication Use and Adherence

An estimated 93.5% 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, 6 participants (3.2%) reported having never taken them. The main sources of payment for ART in Michigan was the AIDS Drug Assistance Program (ADAP) (34.8%), Medicaid (39.9%), private health insurance (23.5%), and Medicare (21.8%) (Figure 11 and Table 8). Sources of payment for ART were similar for national participants. Self-reported 100% ART medication adherence in the preceding 72 hours by dose was 78.3%, by schedule 71.1%, and by special instructions 68.4%. The majority of participants (84%) reported ‘Rarely’ or ‘Never’ being troubled by ART side effects in the preceding 30 days. About 16% of participants were troubled by ART side effects half of the time or more during the preceding 30 days, and only 8% had ever taken a drug holiday. Nationally, 55% of participants reported having never missed a dose of ART— lower than the 66% of Michigan participants.

Figure 11: Antiretroviral therapy payment source, Michigan and National MMP, 2014

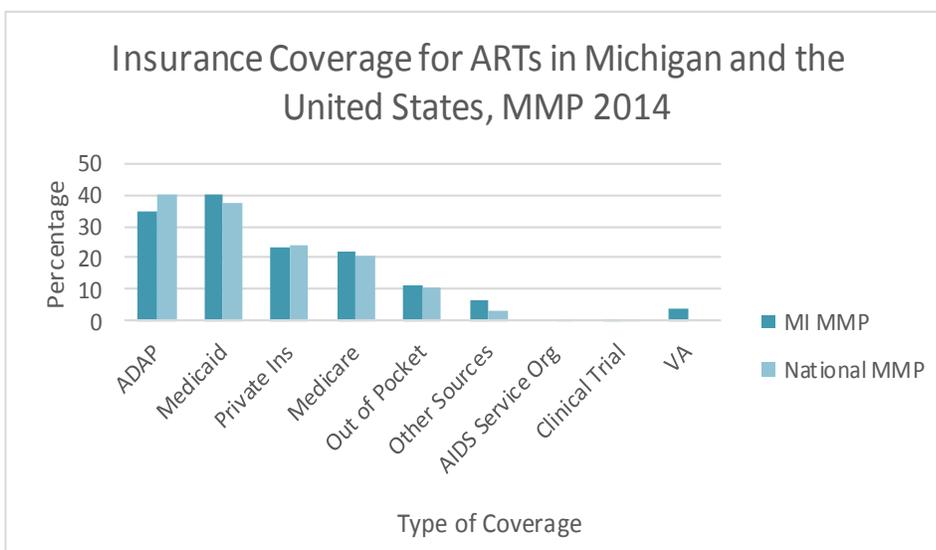
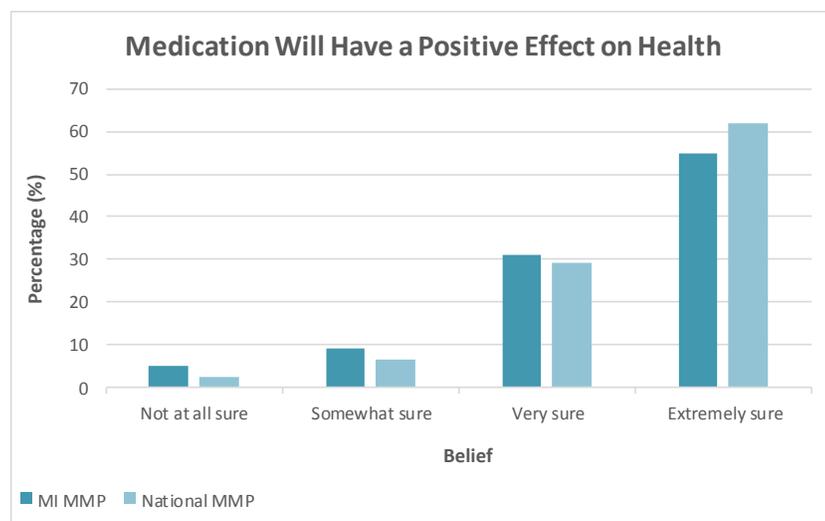


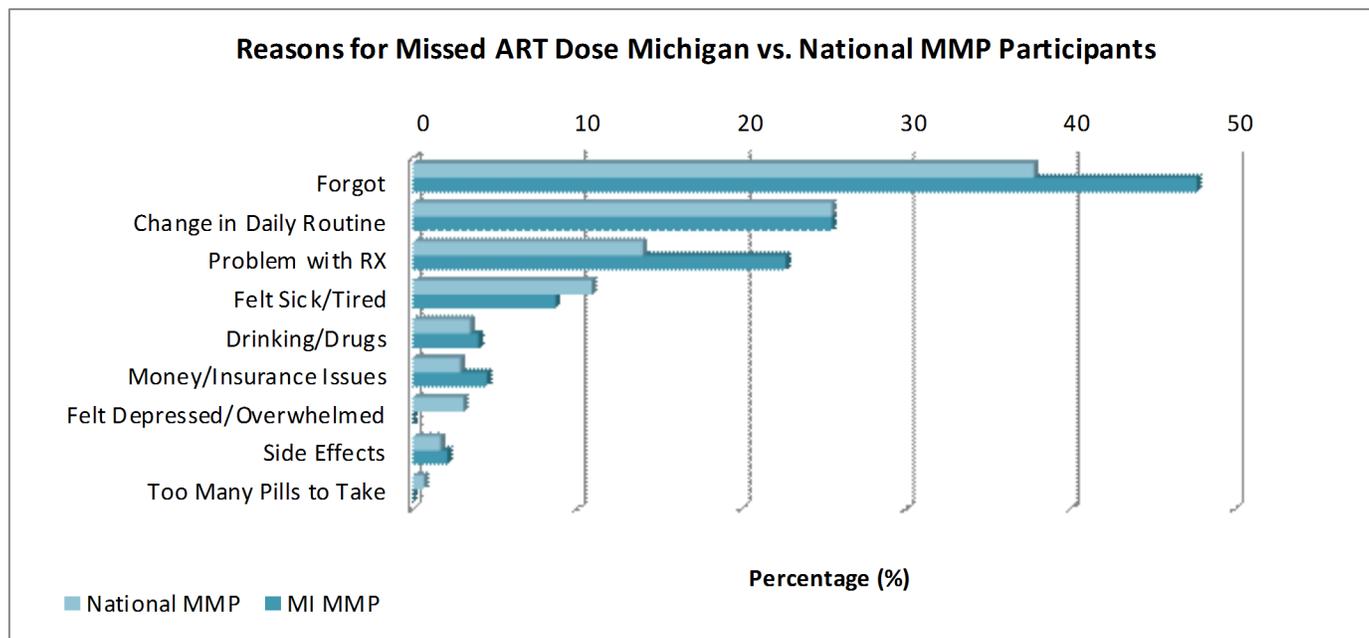
Figure 12: Belief that ART will Have a Positive Effect on Health, Michigan and National MMP, 2014



Participants reported that they were very confident that they would be able to take all or most of the medication as directed (93%) (Table 9). However, Michigan participants were less confident than national participants that the medication will have a positive effect on their health (74% and 82%, respectively reported ‘Very Sure’ or ‘Extremely Sure’) (Figure 12). Michigan participants were well informed of the

importance of ART adherence, with 74% 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, 2014



Depression and Substance Use

The MMP protocol assessed depression during the preceding 12 months in participants in two ways, based on DSM-IV criteria [9] 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, 16.3% of Michigan and 10.2% of national participants scored as having ‘Major depression.’ Based on a PHQ-8 score >10, 28.2% of Michigan and 19.9% of national participants scored as having ‘Moderate or severe depression.’ Michigan had a larger prevalence of current smokers than national participants (51.6% vs. 37.9%, respectively) (Table 12). Of the current smokers, 85% 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 (74% vs. 60%, 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 in the preceding 30 days, 39% had participated in binge drinking and 13% in heavy drinking. Michigan participants self-reported a higher prevalence of non-injection drug use than

national participants (32% vs. 26%, respectively) (Table 14). They also had a slightly higher use of non-injection drugs before or during sex than national participants (12.9% vs. 12%, respectively). The most commonly non-injection drug used by Michigan participants was marijuana (85% of users). Use of injection drugs was reported by 1.1% of Michigan participants, and 2.5% of national participants (Table 15). All Michigan participants reported that the injection drug use was associated with sex and only included methamphetamines.

Reproductive and Gynecologic Health

An estimated 12.7% of female patients received HIV care at a gynecological clinic in Michigan, less than the 28% of national participants (Table 16). Michigan and national female participants had similar rates of receiving a Pap smear (78.6% and 76%, respectively). Pregnancy rates since diagnosis were also similar between Michigan and national female participants (27.7% and 26.1%, respectively).

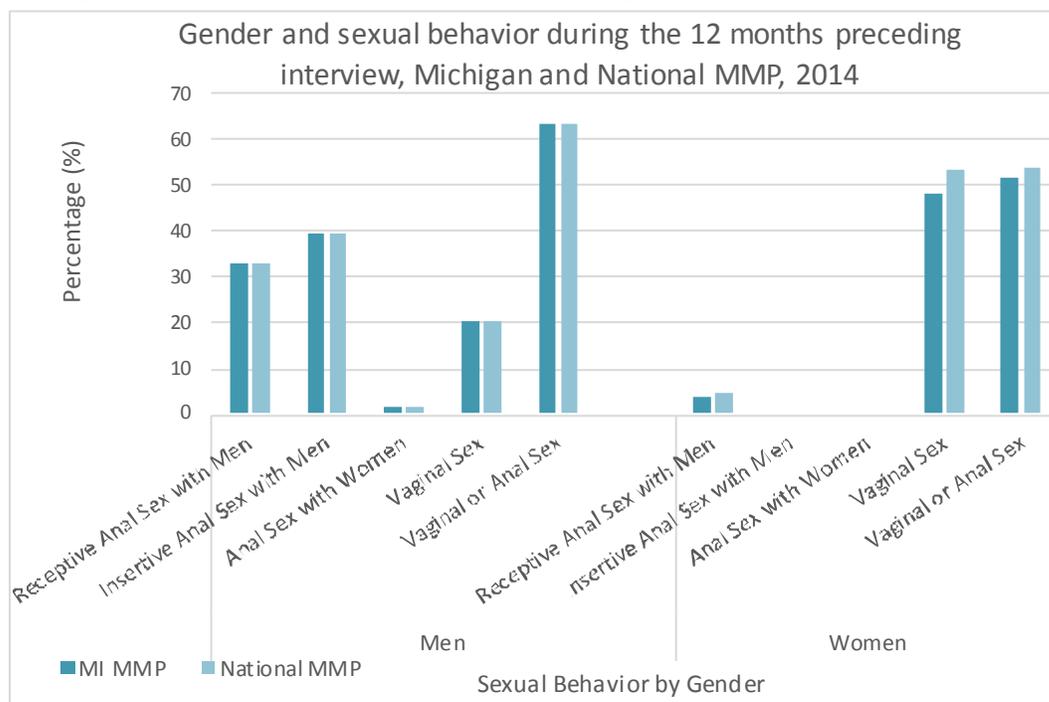
Sexual Behavior

Sexual behavior was similar between Michigan and national MMP participants for both men and women (Table 17). The most common sexual behavior among men was vaginal or anal sex, followed by insertive anal sex with men and receptive anal sex with men (Figure 14).

Among women, the most common sexual behavior was vaginal or anal sex, followed by vaginal sex.

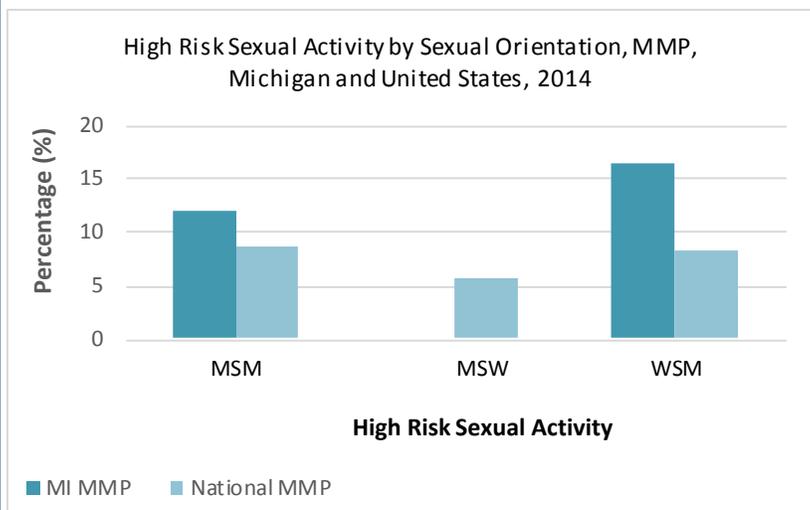
A higher percentage of Michigan participants engaged in high risk sexual activity than national participants (Table 18). High risk sexual activity was defined as ‘vaginal or anal sex with at least 1

Figure 14. Sexual Behavior by Gender, Michigan and National MMP, 2014



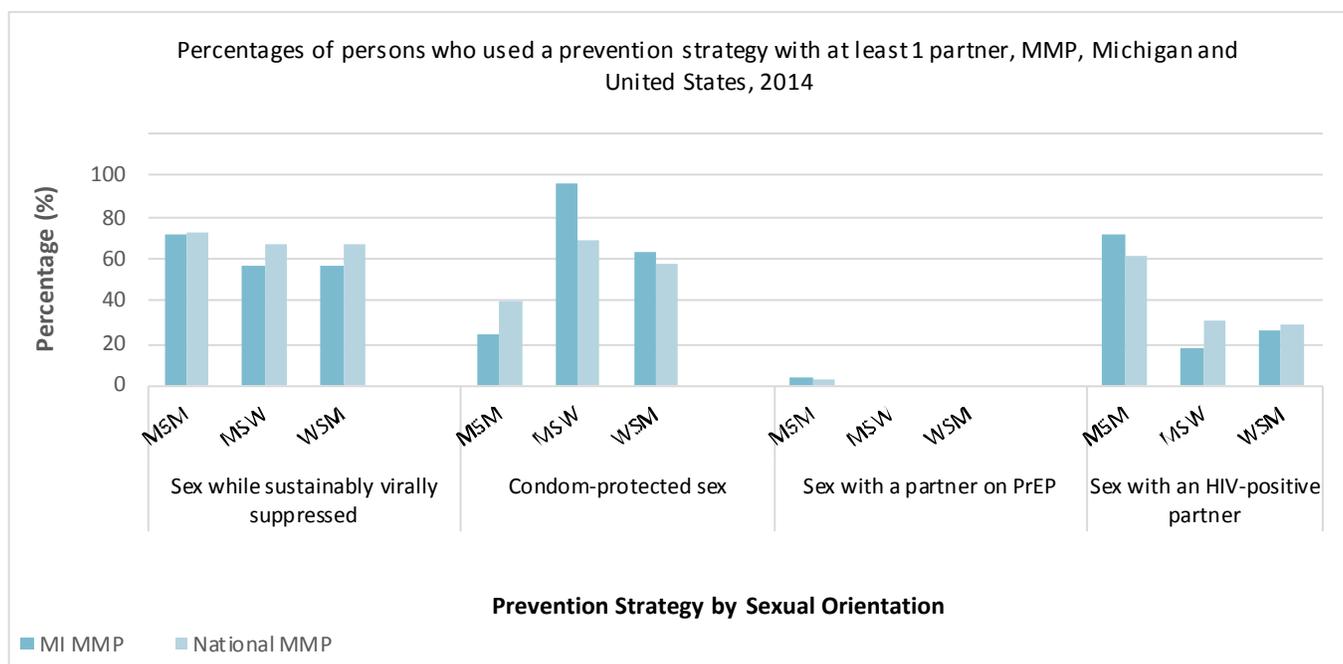
HIV-negative or unknown status partner while not sustainably virally suppressed, a condom was not used, and the partner was not on PrEP. Evaluating high risk sexual behavior by sexual orientation, it was found that women who had sex with men (WSM) in Michigan engaged the most in high risk sexual behavior at 16.4% (national was 8.3%) (Figure 15).

Figure 15. High Risk Sexual Activity by Sexual Orientation, MMP, Michigan and United States, 2014



Men who had sex with men (MSM) in Michigan also had higher prevalence rates of high risk sexual behavior than the national MSM group (12% vs. 8.7%, respectively). This trend did not hold for men who have sex with women only (MSW), where none of Michigan participants engaged in high risk sexual behavior, and 5.6% of the same sexual orientation in the national group engaged in the same behavior.

Figure 16. Prevention Strategies by Sexual Orientation, Michigan and National MMP, 2014

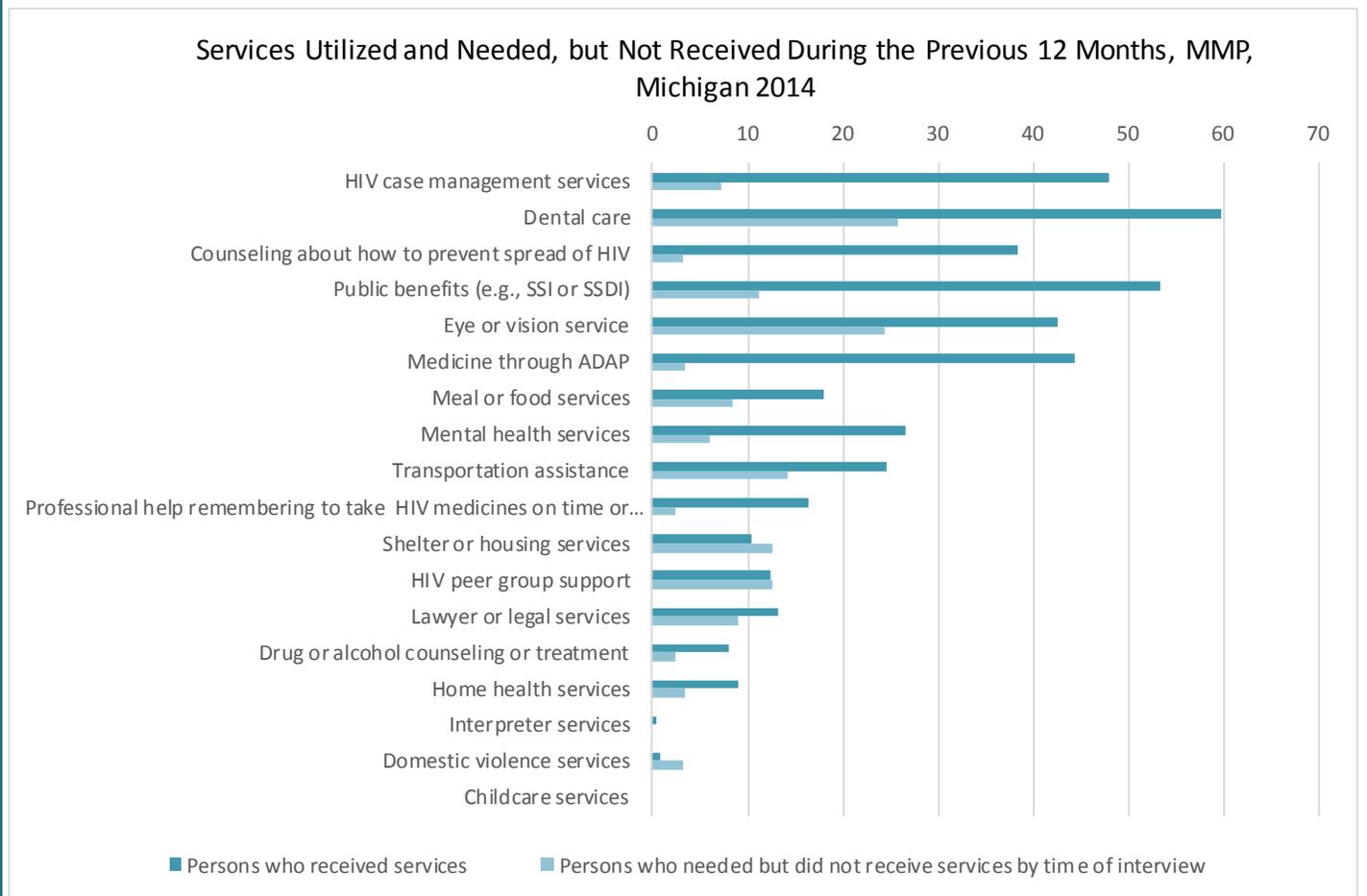


Prevention strategies among HIV-positive cases was also looked at in the 2014 cycle of MMP (Figure 16). Specifically, the use of the following prevention strategies were with at least one partner: sex while sustainably virally suppressed (HIV viral load <200 copies/ml at every measure in the previous 12 months), condom-protected sex (condoms used with any vaginal or anal sex partners), sex with a partner on PrEP (any HIV-negative partner was on PrEP, among 5 most recent partners only), and sex with an HIV-positive partner (at least 1 partner was HIV-positive). Sex while virally suppressed was most widely used by MSM, condom-protected sex by MSW, sex with a partner on PrEP was used exclusively by MSM, and sex with an HIV-

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, public benefits (such as SSI or SSDI), HIV case management services, ADAP (AIDS Drug Assistance Program), and eye or vision service (Table 19a). Services were accessed by similar percentages of participants in both the Michigan and national populations. While dental care was the most used service, it was also the top service that was needed but not received (Table 19b and Figure 17). The next services that were needed but not received were eye or vision services, followed by transportation assistance. Unmet need for services were similar for Michigan and national MMP participants for most services. However, Michigan participants tended to have higher percentages of unmet need than national participants for some services, namely transportation assistance, HIV peer group support, shelter or housing services, and eye or vision services (Table 19b). 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.

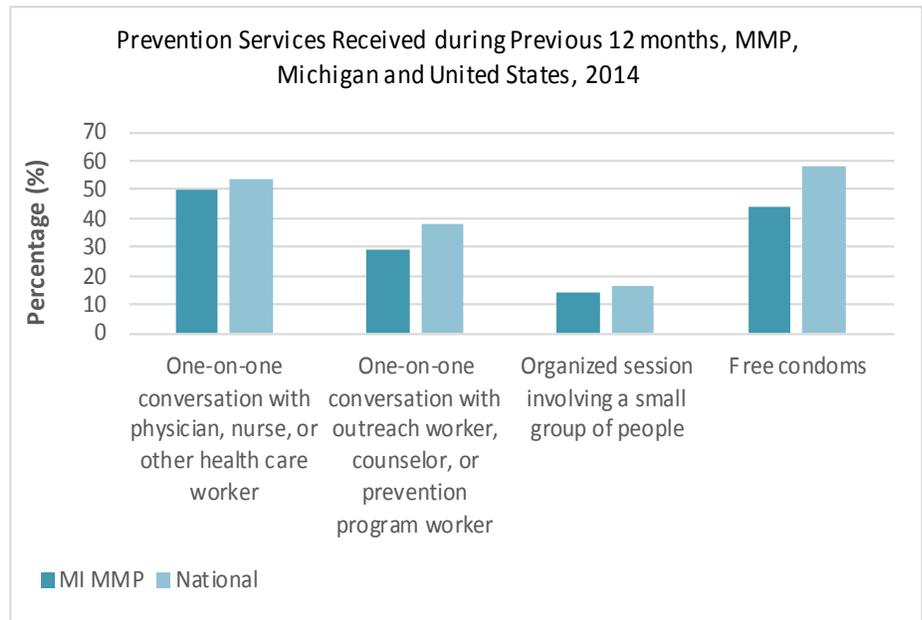
Figure 17. Services Utilized and Needed, but Not Received During the Previous 12 Months, MMP, Michigan 2014



Prevention Activities

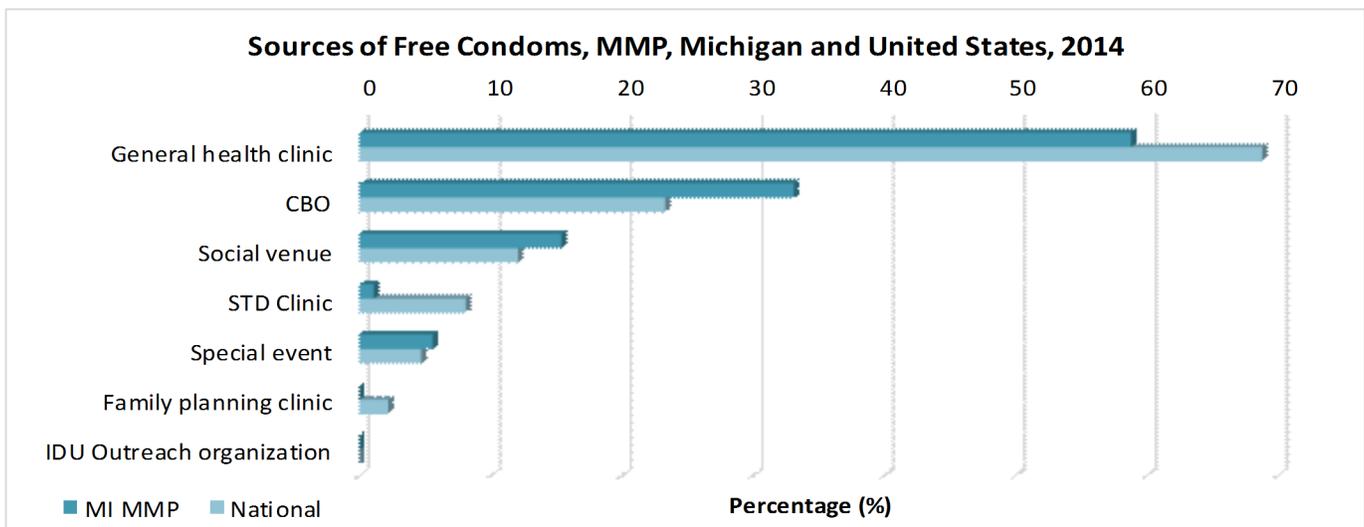
While assessing prevention activities, participants could report receiving more than one prevention services, therefore these categories are not mutually exclusive. The most received prevention activity was one-on-one conversation with physician, nurse or other health care worker, with 49.9% of Michigan and 53.5% of national participants reported they received this service

Figure 18. Prevention Services Received during Previous 12 months, MMP, Michigan and United States, 2014



(Table 20 and Figure 18). The second most received prevention services was free condoms, where 44% of Michigan and 58.3% of national participants received free condoms. Receipt of prevention service types was similar for both Michigan and national participants. The source of free condoms was also similar between Michigan and national participants (Table 20 and Figure 19). The sources of condoms for both Michigan and national MMP participants were general health clinics, community based organizations (CBO), and social venues. Michigan participants did not obtain condoms from sexually transmitted disease clinic as much as national participants.

Figure 19. Sources of Free Condoms, MMP, Michigan and United States, 2014



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 2014

Project Area	No.	%
California (excluding Los Angeles County and San Francisco)	255	4.9
Chicago, IL	228	4.4
Delaware	197	3.8
Florida	461	8.9
Georgia	193	3.7
Houston, TX	240	4.7
Illinois (excluding Chicago)	55	1.1
Indiana	192	3.7
Los Angeles County, CA	235	4.6
Michigan	192	3.7
Mississippi	254	4.9
New Jersey	204	4.0
New York (excluding New York City)	121	2.3
New York City, NY	433	8.4
North Carolina	222	4.3
Oregon	246	4.8
Pennsylvania (excluding Philadelphia)	57	1.1
Philadelphia, PA	191	3.7
Puerto Rico	260	5.0
San Francisco, CA	233	4.5
Texas (excluding Houston)	239	4.6
Virginia	224	4.3
Washington	222	4.3
Total	5,154	100.0

Note: Percentages might not sum to 100 because of rounding

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

	Michigan	Michigan	Michigan	MI	MI	National	National	National
	No. ^a	% ^b	95% CI ^c	eHARS	eHARS	No. ^a	% ^b	95% CI ^c
Gender								
Male	149	77.4	70.9-83.9	5,575	77.9	3,708	74.2	71.6-76.9
Female	39	20.6	14.7-26.4	1,548	21.6	1,360	24.1	21.4-26.8
Transgender ^d	4	2	0.0-4.3	36	0.5	82	1.7	1.2-2.1
Sexual orientation								
Heterosexual or straight	93	48.6	40.3-56.9	—	—	2,505	47.1	43.3-50.9
Homosexual or gay	74	39.4	32.3-46.5	—	—	2,114	43.4	40.0-46.7
Bisexual	23	12	7.2-16.8	—	—	478	9.6	8.6-10.5
Race/ethnicity								
American Indian/Alaska Native	1	0.6	0.0-1.7	15	0.2	20	0.4	0.2-0.7
Asian	—	—	—	35	0.5	47	0.9	0.6-1.2
Black/African American	109	57.1	50.3-64.0	3,889	54.3	2,170	41.9	33.4-50.5
Hispanic/Latino ^e	7	3.7	1.0-6.4	318	4.4	1,266	23.6	17.4-29.7
Native Hawaiian/Other Pacific Islander	1	0.5	0.0-1.5	8	0.1	13	0.2	0.1-0.3
White	63	32.4	26.0-38.7	2,528	35.3	1,504	30.2	24.3-36.1
Multiple races	11	5.7	2.4-9.0	366	5.1	133	2.8	2.1-3.6
Age at time of interview (year)								
18-24	12	6.7	0.0-14.3	429	6.0	146	3.1	2.4-3.8
25-29	14	7.7	4.0-11.3	543	7.6	296	6.2	5.3-7.1
30-34	22	11.4	6.9-15.8	558	7.8	332	6.9	6.1-7.8
35-39	7	3.9	1.0-6.8	610	8.5	410	8	7.1-8.9
40-44	22	11.6	6.6-16.6	870	12.2	587	11.2	10.2-12.2
45-49	34	17.1	11.2-23.0	1,182	16.5	866	16.8	15.8-17.8
50-54	37	18.8	13.5-24.1	1,228	17.2	1,014	19.5	18.2-20.7
55-59	19	10.4	5.2-15.5	849	11.9	769	14.5	13.4-15.6
60-64	18	9	5.1-13.0	521	7.3	431	8	6.9-9.1
≥65	7	3.5	0.9-6.1	361	5.1	303	5.8	5.1-6.6

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

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	MI eHARS No.	MI eHARS %	National No. ^a	National % ^b	National 95% CI ^c
Education								
Less than high school	24	12.7	8.1-17.4	—	—	1,039	19.9	18.2-21.6
High school diploma or GED	53	27.5	21.3-33.8	—	—	1,483	28.4	26.3-30.6
More than high school	115	59.7	52.9-66.5	—	—	2,632	51.7	48.6-54.7
Country or territory of birth								
United States	182	95.2	92.2-98.2	5,019	70.1	3,968	78.9	73.2-84.6
Mexico	1	0.6	0.0-1.7	38	0.5	279	5.6	4.5-6.8
Other	8	4.2	1.3-7.1	2,102	29.4	548	10.4	8.4-12.3
Time since HIV diagnosis (yr)								
<5	44	26.4	19.4-33.4	2,547	35.6	979	19.9	18.2-21.6
5–9	54	26.7	20.2-33.1	1,517	21.2	1,003	19.4	17.9-20.9
≥10	94	46.9	38.9-54.9	3,095	43.2	3,170	60.8	58.1-63.4
Homeless^f at any time (during past 12 months)								
Yes	16	8.5	4.5-12.5	—	—	451	9.0	7.9-10.1
No	176	91.5	87.5-95.5	—	—	4,702	91.0	89.9-92.1
Incarcerated >24 hours (during past 12 months)								
Yes	5	2.5	0.3-4.8	—	—	212	4.3	3.6-4.9
No	187	97.5	95.2-99.7	—	—	4,941	95.7	95.1-96.4
Health insurance or coverage for antiretroviral medications^g (during past 12 months)								
Yes	191	99.5	98.5-100.0	—	—	5,085	98.7	98.4-99.1
No	1	0.5	0.0-1.5	—	—	65	1.3	0.9-1.6
Type of health insurance or coverage for antiretroviral medications (during past 12 months)								
Ryan White								
Yes	87	46.2	39.1-53.4	—	—	2,535	48.3	45.2-51.3
No	101	53.8	46.6-60.9	—	—	2,561	51.7	48.7-54.8
Medicaid								
Yes	104	54.6	46.6-62.7	—	—	2,292	44.9	42.2-47.6
No	86	45.4	37.3-53.4	—	—	2,845	55.1	52.4-57.8
Private health insurance								
Yes	67	35	27.3-42.7	—	—	1,471	30.0	27.4-32.6
No	125	65	57.3-72.7	—	—	3,678	70.0	67.4-72.6
Medicare								
Yes	62	31.8	25.4-38.2	—	—	1,486	28.9	27.5-30.3
No	128	68.2	61.8-74.6	—	—	3,648	71.1	69.7-72.5
Other public insurance								
Yes	21	10.8	6.2-15.5	—	—	737	11.6	5.8-17.4
No	171	89.2	84.5-93.8	—	—	4,410	88.4	82.6-94.2

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

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	MI eHARS No.	MI eHARS %	National No. ^a	National % ^b	95% CI ^c
Tricare/CHAMPUS or Veterans Administration								
Yes	7	3.5	3.2-3.7	—	—	89	1.8	0.9-2.7
No	185	96.5	96.3-96.8	—	—	5,054	98.2	97.3-99.1
Insurance type unknown^h								
Yes	13	6.6	3.1-10.1	—	—	192	4.1	3.2-5.0
No	179	93.4	89.9-96.9	—	—	4,958	95.9	95.0-96.8
Primary source of most financial support (during past 12 months)								
Salary or wages	77	40.3	32.0-48.6	—	—	2,032	40	37.8-42.2
SSI or SSDI	80	41.0	33.3-48.8	—	—	1,983	38.2	36.1-40.3
Family, partner, or friend(s)	19	10.3	6.1-14.6	—	—	481	9.5	8.0-11.0
Illegal or possibly illegal activities	1	0.5	0.0-1.5	—	—	—	—	—
No income or financial support	—	—	—	—	—	60	1.1	0.7–1.5
Other	15	7.8	4.0-11.7	—	—	587	11.2	8.6-13.7
Combined yearly household incomeⁱ (US\$)								
0–19,999	119	64.1	56.5-71.7	—	—	3,269	65.2	61.8-68.5
20,000–39,999	35	18.6	12.5-24.7	—	—	915	18.5	16.8-20.2
40,000–74,999	18	9.7	5.7-13.7	—	—	429	9.4	8.1-10.7
>75,000	14	7.6	3.7-11.4	—	—	321	7	5.5-8.5
Poverty guidelines^j								
Above poverty threshold	93	50.0	42.1-57.8	—	—	2,275	47.4	44.1-50.7
At or below poverty threshold	93	50.0	42.2-57.9	—	—	2,659	52.6	49.3-55.9
Total	192	100		7,159	100	5,154	100	

Abbreviations: CI, confidence interval; GED, general educational development; CHAMPUS, Civilian Health and Medical Program of the Uniformed Services; SSI, Supplemental Security Income; SSDI, Social Security Disability Insurance.

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

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

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d 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.

^e Hispanics or Latinos might be of any race. Patients are classified in only 1 race/ethnicity category.

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

^g Patients could select more than 1 response for health insurance or coverage for antiretroviral medications.

^h 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.

ⁱ Includes physical, mental, and emotional disabilities.

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

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

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

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Most advanced stage of disease (ever)						
Stage 1 ^d	20	10.5	6.2-14.7	472	9.4	8.4-10.4
Stage 2 ^e	53	28.4	21.0-35.9	1,164	22.8	21.0-24.5
Stage 3 (AIDS) ^f	117	61.1	53.3-68.9	3,506	67.8	66.1-69.5
Geometric mean CD4 count (cells/μL)						
0-199	12	7.0	3.0-11.0	451	9.3	8.5-10.2
200-349	23	13.3	8.2-18.3	695	14.2	13.2-15.1
350-499	23	13.5	7.3-19.8	950	19.2	18.0-20.5
≥500	115	66.2	59.2-73.2	2,819	57.3	55.6-59.0
Lowest CD4 count (cells/μL)						
0-49	3	1.8	0.0-3.8	142	2.8	2.3-3.3
50-199	15	8.8	4.4-13.1	503	10.4	9.6-11.2
200-349	22	12.6	8.0-17.2	836	17	16.0-18.0
350-499	39	22.6	16.3-28.9	1,124	22.6	21.6-23.6
≥500	94	54.3	47.0-61.5	2,324	47.2	45.7-48.7
Viral Suppression						
Most recent viral load documented undetectable or <200 copies/mL	147	76.4	68.5-84.4	4,243	82.3	79.9-84.6
Most recent viral load documented detectable, ≥200 copies/mL, or missing/unknown	45	23.6	15.6-31.5	911	17.7	15.4-20.1
Durable Viral Suppression						
All viral load measurements documented undetectable or <200 copies/mL	133	69.0	61.2-76.8	3,674	71.0	68.5-73.6
Any viral load ≥200 copies/mL or missing/unknown	59	31.0	23.2-38.8	1,480	29.0	26.4-31.5
Total	192	100		5,154	100	

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

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

Note. CD4 counts 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 values with a coefficient of variation ≥30%, “don’t know” responses, and skipped (missing) responses.

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCIs incorporate weighted percentages.

^dHIV infection, stage 1: No AIDS-defining condition and either CD4 count of ≥500 cells/μL or CD4 percentage of total lymphocytes of ≥29.

^eHIV 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.

^fHIV 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, 2014

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Number of Outpatient Laboratory tests^d						
CD4 or HIV Viral Load						
0	13	6.7	2.2–11.1	147	2.9	2.2–3.5
1	26	13.5	8.9–18.0	551	11.1	9.9–12.2
2	73	38.6	31.7–45.5	1,367	27.3	25.6–29.0
≥3	77	41.3	32.9–49.7	3,049	58.7	56.0–61.4
CD4						
0	15	7.6	3.0–12.3	206	4.1	3.3–4.9
1	35	18.5	13.2–23.9	690	13.6	12.1–15.2
2	79	41.3	33.6–49.1	1,452	29.1	27.3–30.8
≥3	60	32.5	24.2–40.8	2,766	53.2	50.1–56.3
HIV Viral Load						
0	19	9.7	3.2–16.2	275	5.3	3.6–7.0
1	35	18.3	13.1–23.6	635	12.7	11.7–13.7
2	70	36.7	30.0–43.4	1,447	28.8	26.8–30.9
≥3	65	35.3	27.1–43.5	2,757	53.1	50.7–55.5
HIV Viral Load measurement at least once every 6						
Yes	118	62.7	54.0–71.4	3,790	73.7	71.8–75.6
No	71	37.3	28.6–46.0	1,324	26.3	24.4–28.2
CD4 measured at least once annually						
Yes	174	92.4	87.7–97.0	4,908	95.9	95.1–96.7
No	15	7.6	3.0–12.3	206	4.1	3.3–4.9
Prescribed ART						
Yes	181	94.3	91.1–97.5	4,900	95.4	94.8–96.0
No	11	5.7	2.5–8.9	254	4.6	4.0–5.2
Prescribed PCP prophylaxis^e						
Yes	4	37.1	7.6–66.5	268	50.6	40.6–60.6
No	7	62.9	33.5–92.4	286	49.4	39.4–59.4
Prescribed MAC prophylaxis^f						
Yes	0		–	51	49.9	37.4–62.4
No	1	100	100.0–100.0	64	50.1	37.6–62.6
Total	192	100		5,154	100	

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

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

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

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

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCI's incorporate weighted percentages.

^dOnly includes those tests with a documented result.

^eAmong patients with CD4 cell count <200 cells/μL.

^fAmong 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, 2014

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Had usual place for primary HIV care						
Yes	192	100	100.0–100.0	5,130	99.7	99.6–99.9
No	0	0	0.0–0.0	17	0.3	0.1–0.4
Received influenza vaccination						
Yes	156	82	76.5–87.5	4,314	85.1	83.1–87.2
No	33	18	12.5–23.5	779	14.9	12.8–16.9
Participated in HIV clinical trial						
Yes	11	5.8	2.3–9.2	193	3.7	3.0–4.5
No	181	94.2	90.8–97.7	4,934	96.3	95.5–97.0
Travel time to primary HIV care (estimated in						
Mean	29.6			34.1		
Median	20			28.1		
Range	2–120			0–360		
Total	192	100		5,154	100	

Abbreviation: CI, confidence interval.

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

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

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCI'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, 2014

Total Population Only	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Gonorrhea^e						
Yes, received test	75	40	30.7–49.2	2,368	43.6	39.0–48.2
No test documented	114	60	50.8–69.3	2,746	56.4	51.8–61.0
Chlamydia^f						
Yes, received test	71	37.8	28.2–47.5	2,358	43.5	39.0–48.0
No test documented	118	62.2	52.5–71.8	2,756	56.5	52.0–61.0
Syphilis^g						
Yes, received test	122	64.8	56.2–73.4	3,510	66.9	64.4–69.4
No test documented	67	35.2	26.6–43.8	1,604	33.1	30.6–35.6
Gonorrhea, chlamydia, and syphilis						
Yes, received test	60	32.1	22.6–41.5	2,076	38.2	34.1–42.4
No test documented	129	67.9	58.5–77.4	3,038	61.8	57.6–65.9
Sexually Active Only						
Gonorrhea						
Yes, received test	52	46.4	35.4–57.5	1,513	48.2	43.4–53.0
No test documented	60	53.6	42.5–64.6	1,448	51.8	47.0–56.6
Chlamydia^f						
Yes, received test	49	43.8	32.5–55.0	1,511	48.4	43.6–53.1
No test documented	63	56.2	45.0–67.5	1,450	51.6	46.9–56.4
Syphilis^g						
Yes, received test	76	68.1	57.5–78.8	2,122	70.2	67.5–72.9
No test documented	36	31.9	21.2–42.5	839	29.8	27.1–32.5
Gonorrhea, chlamydia, and syphilis						
Yes, received test	40	35.9	24.4–47.3	1,347	43.2	38.8–47.6
No test documented	72	64.1	52.7–75.6	1,614	56.8	52.4–61.2
Total	113	100		2,984	100	

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 values with a coefficient of variation $\geq 30\%$, “don’t know” responses, and skipped (missing) responses.

^aSexual activity was reported in the patient interview component of the Medical Monitoring Project and was defined as oral sex or anal or vaginal intercourse.

^bNumbers are unweighted.

^cPercentages are weighted percentages.

^dCIs incorporate weighted percentages.

^eTesting for *Neisseria gonorrhoeae* was defined as documentation of a result from culture, gram stain, enzyme immunoassay (EIA), nucleic acid amplification test (NAAT), or the nucleic acid probe.

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

^gSyphilis 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, 2014

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Number of visits to emergency department or urgent care clinic						
0	177	92.1	88.2–95.9	4,746	92.8	91.9–93.7
1	7	3.8	1.1–6.4	205	3.9	3.2–4.6
2-4	6	3.1	0.8–5.4	143	2.5	2.2–2.9
≥5	2	1.1	0.0–2.6	42	0.8	0.5–1.0
Number of hospital admissions						
0	184	96.3	93.5–99.0	4,889	95.3	94.7–96.0
1	4	2.1	0.1–4.2	157	3	2.5–3.5
2-4	3	1.6	0.0–3.4	77	1.4	1.1–1.7
≥5	—	—	—	—	—	—
Total	192	100		5,154	100	

Abbreviation: CI, confidence interval.

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

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

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCI^s incorporate weighted percentages.

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

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Ever taken antiretroviral medications (ART)						
Yes	186	96.8	93.9–99.7	5,045	98.2	97.8–98.6
No	6	3.2	0.3–6.1	91	1.8	1.4–2.2
Currently taking ART						
Yes	180	93.5	89.8–97.3	4,933	96.2	95.7–96.7
No	12	6.5	2.7–10.2	194	3.8	3.3–4.3
Main reason for never taking ART						
Doctor advised to delay treatment	1	17.3	0.0–48.9	52	59.3	47.6–71.0
Patient believed they didn't need medications because felt healthy or believed HIV lab results were good	1	18.2	0.0–51.0	18	21.2	12.7–29.7
Due to side effects of medication	—	—	—	—	—	—
Felt depressed or overwhelmed	1	23.2	0.0–63.4	—	—	—
Didn't want to think about being HIV positive	—	—	—	—	—	—
Worried about ability to adhere	—	—	—	—	—	—
Drinking or using drugs	—	—	—	0	0	—
Money or insurance issues	—	—	—	—	—	—
Homeless	—	—	—	0	0	—
Taking alternative or complementary medicines	—	—	—	—	—	—
Other	2	41.3	0.0–86.1	—	—	—
Main reason for not currently taking ART, among those persons with a history of ART use						
Doctor advised to delay treatment	1	17.9	0.0–51.9	24	23.2	14.0–32.4
Patient believed they didn't need medications because felt healthy or believed HIV lab results were good	1	17.9	0.0–51.9	—	—	—
Due to side effects of medication	1	23.2	0.0–62.1	11	12.1	6.3–18.0
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	2	40.9	0.0–83.6	20	22.1	11.8–32.3
Homeless	—	—	—	—	—	—
Taking alternative or complementary medicines	—	—	—	0	0	—
Other	—	—	—	19	17.6	9.2–26.0
Total	192	100		5,154	100	

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

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
ART medications paid for by:						
AIDS Drug Assistance Program (ADAP)						
Yes	62	34.8	27.7–41.9	2,040	40.4	37.4–43.4
No	117	65.2	58.1–72.3	2,843	59.6	56.6–62.6
Medicaid						
Yes	71	39.9	32.5–47.3	1,799	37.2	34.5–39.9
No	108	60.1	52.7–67.5	3,084	62.8	60.1–65.5
Private Health Insurance						
Yes	42	23.5	16.5–30.5	1,105	23.8	20.9–26.7
No	137	76.5	69.5–83.5	3,778	76.2	73.3–79.1
Medicare						
Yes	40	21.8	15.6–28.1	1,017	20.4	18.8–22.0
No	139	78.2	71.9–84.4	3,866	79.6	78.0–81.2
Out of pocket						
Yes	20	11.2	6.4–16.0	539	10.8	6.8–14.9
No	159	88.8	84.0–93.6	4,344	89.2	85.1–93.2
Other public insurance						
Yes	4	2.3	0.0–4.5	—	—	—
No	176	97.7	95.5–100.0	—	—	—
Other unspecified insurance						
Yes	7	3.8	0.6–6.9	140	3.3	2.4–4.1
No	173	96.2	93.1–99.4	4,789	96.7	95.9–97.6
AIDS service organizations						
Yes	—	—	—	39	0.8	0.5–1.2
No	179	100	100.0–100.0	4,844	99.2	98.8–99.5
Clinical trial or drug study						
Yes	1	0.5	0.0–1.6	25	0.5	0.3–0.8
No	178	99.5	98.4–100.0	4,858	99.5	99.2–99.7
Public Clinic						
Yes	—	—	—	25	0.4	0.3–0.6
No	179	100	100.0–100.0	4,858	99.6	99.4–99.7
Veterans Administration						
Yes	7	3.7	3.4–4.0	—	—	—
No	173	96.3	96.0–96.6	—	—	—
Tricare or CHAMPUS						
Yes	—	—	—	—	—	—
No	180	100	100.0–100.0	—	—	—
Total	192	100		5,154	100	

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

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
100% ART medication adherence (during preceding 72 hours)						
By dose						
Yes	138	78.3	72.0–84.5	4,168	88.2	87.2–89.2
No	39	21.7	15.5–28.0	570	11.8	10.8–12.8
By schedule						
Yes	127	71.1	64.2–78.0	3,817	78.4	76.3–80.5
No	53	28.9	22.0–35.8	1,113	21.6	19.5–23.7
By special instructions (among those with special instructions for ART)						
Yes	85	68.4	60.4–76.5	2,375	74.7	73.1–76.4
No	40	31.6	23.5–39.6	787	25.3	23.6–26.9
Troubled by ART side effects (during past 30 days)						
Never	128	71.8	65.1–78.6	3,787	76.9	74.2–79.6
Rarely	21	12.5	7.2–17.7	585	12	10.4–13.6
About half the time	16	8.8	4.8–12.9	205	4.4	3.7–5.1
Most of the time	7	4.1	1.3–7.0	160	3.2	2.7–3.8
Always	5	2.8	0.4–5.1	153	3.1	2.2–3.9
Been on medications less than 30 days	—	—	—	—	—	—
Troubled by ART side effects half of the time or more (during past 30 days)						
Yes	28	15.7	10.6–20.8	518	10.8	9.2–12.4
No	149	84.3	79.2–89.4	4,372	89.2	87.6–90.8
Any drug holiday						
Yes	15	8.1	4.3–11.9	395	7.6	6.3–8.9
No	165	91.9	88.1–95.7	4,528	92.4	91.1–93.7
Ever missed a dose of ART medications						
Yes	93	65.6	57.7–73.5	2,357	55.4	51.7–59.2
No	48	34.4	26.5–42.3	1,987	44.6	40.8–48.3
Total	192	100		5,154	100	

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

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

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

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCI^s incorporate weighted percentages.

^dAmong patients currently taking ART.

^eDid not take any ART medications for at least 2 consecutive days.

Table 9. Beliefs among patients currently taking antiretroviral medications—Medical Monitor-

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Will be able to take all or most of medication as directed						
Not at all sure	3	1.6	0.0–3.5	50	1	0.7–1.3
Somewhat sure	10	5.5	2.1–8.9	188	3.5	2.8–4.3
Very sure	54	29.9	22.7–37.0	1,386	26.5	23.5–29.4
Extremely sure	113	63	55.6–70.3	3,303	69	65.8–72.3
Medication will have a positive effect on health						
Not at all sure	9	5	1.2–8.9	126	2.5	1.9–3.1
Somewhat sure	16	9	4.5–13.5	324	6.6	5.9–7.4
Very sure	55	31.2	24.3–38.0	1,495	29.1	26.5–31.7
Extremely sure	100	54.8	47.1–62.4	2,951	61.8	59.3–64.2
HIV will become resistant to antiretroviral medications if medication is not taken exactly as instructed						
Not at all sure	15	8.3	4.2–12.4	336	6.8	5.7–7.8
Somewhat sure	33	18.3	12.8–23.7	541	11	9.7–12.4
Very sure	49	27.6	21.3–33.8	1,463	28.8	26.3–31.3
Extremely sure	82	45.9	39.3–52.4	2,509	53.4	50.8–56.0
Total	180	100		4,933	100	

Abbreviation: CI, confidence interval.

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

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

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCI^s 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, 2014

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Forgot to take them						
Yes	45	47.7	37.2–58.2	905	37.8	35.7–40.0
No	48	52.3	41.8–62.8	1,437	62.2	60.0–64.3
Change in daily routine, including travel						
Yes	24	25.5	17.2–33.7	572	25.5	23.3–27.7
No	69	74.5	66.3–82.8	1,770	74.5	72.3–76.7
Problem with prescription or refill						
Yes	20	22.7	14.1–31.3	323	14	11.4–16.5
No	73	77.3	68.7–85.9	2,019	86	83.5–88.6
Felt sick or tired						
Yes	8	8.7	2.2–15.2	267	10.9	9.6–12.3
No	85	91.3	84.8–97.8	2,075	89.1	87.7–90.4
Drinking or using drugs						
Yes	4	4	0.2–7.9	84	3.5	2.6–4.4
No	89	96	92.1–99.8	2,258	96.5	95.6–97.4
Money or insurance issues						
Yes	4	4.5	0.2–8.8	64	2.9	2.0–3.9
No	89	95.5	91.2–99.8	2,278	97.1	96.1–98.0
Felt depressed or overwhelmed						
Yes	0		–	76	3.1	2.3–3.9
No	93	100	100.0–100.0	2,266	96.9	96.1–97.7
Due to side effects of medication						
Yes	2	2.1	0.0–5.0	44	1.7	1.0–2.4
No	91	97.9	95.0–100.0	2,298	98.3	97.6–99.0
Had too many pills to take						
Yes	—	—	—	18	0.7	0.4–1.0
No	93	100	100.0–100.0	2,324	99.3	99.0–99.6
Homeless^d						
Yes	—	—	—	11	0.5	0.2–0.8
No	93	100	100.0–100.0	2,331	99.5	99.2–99.8
Total	93	100		2,357	100	

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 values with a coefficient of variation $\geq 30\%$, “don’t know” responses, and skipped (missing) responses.

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCIs incorporate weighted percentages.

^dLiving 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, 2014

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Depression based on DSM-IV criteria^d						
No depression	138	72.4	66.3–78.6	4,037	79.1	77.5–80.7
Other depression	22	11.2	6.6–15.8	538	10.6	9.7–11.6
Major depression	31	16.3	11.2–21.4	508	10.2	9.0–11.5
Moderate or severe depression (PHQ-8 score >10)						
Yes	54	28.2	21.3–35.1	998	19.9	17.9–21.9
No	137	71.8	64.9–78.7	4,085	80.1	78.1–82.1
Total	192	100		5,154	100	

Abbreviation: CI, confidence interval.

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

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

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCI_s incorporate weighted percentages.

^dResponses 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, 2014

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Smoked ≥100 cigarettes						
Yes	136	70.2	63.7–76.6	3,070	60.3	57.9–62.6
No	56	29.8	23.4–36.3	2,058	39.7	37.4–42.1
Smoking Sta-						
Never	56	29.8	23.4–36.3	2,058	39.7	37.4–42.1
Former smok-	36	18.6	12.8–24.4	1,168	22.4	20.0–24.7
Current smok-	100	51.6	43.7–59.4	1,902	37.9	34.8–41.0
Frequency of cigarette						
Never	92	48.4	40.6–56.3	3,226	62.1	59.0–65.2
Daily	85	43.9	35.6–52.2	1,593	31.7	28.8–34.6
Weekly	5	2.6	0.3–5.0	158	3.2	2.7–3.6
Monthly	3	1.6	0.0–3.4	50	1	0.8–1.3
Less than	7	3.5	0.9–6.0	101	2	1.6–2.4
Total	192	100		5,154	100	

Abbreviation: CI, confidence interval.

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

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

^aNumbers are un-weighted.

^bPercentages are weighted percentages.

^cCI^s incorporate weighted percentages.

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

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Any alcohol use^d						
Yes	142	74.1	67.9–80.2	3,061	60.3	57.5–63.0
No	50	25.9	19.8–32.1	2,066	39.7	37.0–42.5
Frequency of alcohol use						
Daily	13	6.7	2.9–10.6	306	5.9	5.2–6.6
Weekly	40	21.3	15.7–26.9	881	17.3	15.5–19.1
Monthly	29	14.9	10.1–19.6	590	11.9	10.7–13.2
Less than monthly	60	31.2	24.2–38.2	1,284	25.1	23.8–26.4
Never	50	25.9	19.8–32.1	2,066	39.7	37.0–42.5
Alcohol use before or during sex						
Yes	58	30.8	24.2–37.5	1,079	22	20.4–23.5
No	131	69.2	62.5–75.8	3,969	78	76.5–79.6
Alcohol use (during past 30 days)						
Yes	113	59.2	52.0–66.4	2,375	47.1	45.0–49.2
No	78	40.8	33.6–48.0	2,733	52.9	50.8–55.0
Binge drinking^e (during past 30 days)						
Yes	44	23.1	17.2–29.1	780	15.3	14.1–16.5
No	146	76.9	70.9–82.8	4,314	84.7	83.5–85.9
Heavy drinking^f (during past 30 days)						
Yes	15	7.8	4.0–11.6	230	4.5	3.9–5.1
No	175	92.2	88.4–96.0	4,867	95.5	94.9–96.1
Days ≥1 drink consumed^g (estimated numbers during past 30 days)						
Mean	8			7.4		
Median	3.6			3.3		
Range	1–30			1–30		
Drinks consumed per day^g (estimated numbers during past 30 days)						
Mean	3.4			3		
Median	2.2			1.8		
Range	1–15			0–30		
Binge drinking days^g (estimated numbers during past 30 days)						
Mean	1.9			1.4		
Median	0			0.0		
Range	0–30			0–30		
Total	192	100		5,154	100	

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

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

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCI^s incorporate weighted percentages.

^dPatients 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.

^ePatients who drank ≥5 alcoholic beverages at one sitting (≥4 for women) during the 30 days preceding the interview.

^fPatients who drank, on average, >2 alcoholic beverages (>1 for women) per day during the 30 days preceding the interview.

^gAmong 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, 2014

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Use of any noninjection drugs^d						
Yes	61	32.1	25.5–38.8	1,309	26.2	24.4–27.9
No	130	67.9	61.2–74.5	3,816	73.8	72.1–75.6
Use of any noninjection drugs^d before or during sex						
Yes	24	12.9	7.6–18.1	581	12	10.8–13.2
No	166	87.1	81.9–92.4	4,475	88	86.8–89.2
Noninjection drugs^d used by patients:						
Marijuana						
Yes	52	27.4	20.8–33.9	1,103	22.2	20.7–23.7
No	139	72.6	66.1–79.2	4,021	77.8	76.3–79.3
Poppers (amyl nitrate)						
Yes	9	4.6	1.5–7.6	204	4.1	3.1–5.1
No	182	95.4	92.4–98.5	4,920	95.9	94.9–96.9
Methamphetamine (crystal meth, tina, crank, ice)						
Yes	4	2.2	0.0–4.5	215	4.3	3.0–5.7
No	187	97.8	95.5–100.0	4,910	95.7	94.3–97.0
Cocaine that is smoked or snorted						
Yes	6	3.1	0.6–5.6	211	4.1	3.4–4.8
No	185	96.9	94.4–99.4	4,914	95.9	95.2–96.6
Crack						
Yes	2	1	0.0–2.4	135	2.7	2.0–3.4
No	189	99	97.6–100.0	4,990	97.3	96.6–98.0
Painkiller (e.g. Oxycontin, Vicodin, Percocet)						
Yes	4	2.1	0.0–4.2	99	1.8	1.3–2.3
No	187	97.9	95.8–100.0	5,025	98.2	97.7–98.7
X or Ecstasy						
Yes	4	2	0.0–4.0	75	1.5	1.2–1.8
No	187	98	96.0–100.0	5,050	98.5	98.2–98.8
GHB						
Yes	3	1.6	0.0–3.5	82	1.5	0.9–2.2
No	188	98.4	96.5–100.0	5,043	98.5	97.8–99.1
Downer (e.g. Valium, Ativan, Xanax)						
Yes	3	1.6	0.0–3.4	84	1.6	1.2–1.9
No	188	98.4	96.6–100.0	5,040	98.4	98.1–98.8
Amphetamine (speed)						
Yes	1	0.6	0.0–1.8	62	1.3	1.0–1.7
No	190	99.4	98.2–100.0	5,061	98.7	98.3–99.0
Total	192	100		5,154	100	

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

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

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

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

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCI's incorporate weighted percentages.

^dIncludes all drugs that were not injected (i.e., administered by any route other than injection), including legal drugs that were not used for medical purposes.

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

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Use of any injection drugs						
Yes	2	1.1	0.0-2.6	137	2.5	1.7-3.3
No	189	98.9	97.4-100.0	4,986	97.5	96.7-98.3
Use of any injection drugs before or during sex^d						
Yes	2	100.0	100.0-100.0	95	85.6	78.6-92.5
No	—	—	—	16	14.4	7.5-21.4
Injection drugs used by patients:						
Methamphetamine (crystal meth, tina, crank, ice)						
Yes	2	1.1	0.0-2.6	96	1.8	1.0-2.7
No	190	98.9	97.4-100.0	5,055	98.2	97.3-99.0
Heroin						
Yes	—	—	—	39	0.6	0.4-0.9
No	192	100	100.0-100.0	5,114	99.4	99.1-99.6
Cocaine						
Yes	—	—	—	—	—	—
No	192	100	100.0-100.0	—	—	—
Heroin and cocaine (speedball)						
Yes	—	—	—	—	—	—
No	192	100	100.0-100.0	—	—	—
Crack						
Yes	—	—	—	—	—	—
No	192	100	100.0-100.0	—	—	—
Amphetamine (speed)						
Yes	—	—	—	—	—	—
No	192	100	100.0-100.0	—	—	—
Oxycontin						
Yes	—	—	—	—	—	—
No	192	100	100.0-100.0	—	—	—
Total	192	100			5,154	100

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

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

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

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

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCI's incorporate weighted percentages.

^dAmong patients who used any injection drugs.

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

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
Received HIV care at gynecological clinic						
Yes	5	12.7	4.1–21.3	380	28	21.0–34.9
No	34	87.3	78.7–95.9	967	72	65.1–79.0
Papanicolaou (Pap) smear						
Yes	29	78.6	65.3–91.8	1,021	76	71.8–80.3
No	8	21.4	8.2–34.7	316	24	19.7–28.2
Pregnant since HIV diagnosis^d						
Yes	11	27.7	11.7–43.8	347	26.1	23.9–28.3
No	28	72.3	56.2–88.3	1,013	73.9	71.7–76.1
Total	39	100		1,360	100	

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.

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCI^s incorporate weighted percentages.

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

	Men			Women		
	Michi- gan No. ^a	Michi- gan % ^b	National No. ^a	Michi- gan No. ^a	Michi- gan % ^b	National No. ^a
Engaged in anal sex with men						
Receptive						
Yes	47	32.9	1,144	1	3.3	55
No	99	67.1	2,440	36	96.7	1,281
Insertive						
Yes	57	39.5	1,055	—	—	—
No	89	60.5	2,528	—	—	—
Engaged in anal sex with women						
Yes	2	1.4	73	—	—	—
No	147	98.6	3,632	—	—	—
Engaged in vaginal sex						
Yes	29	20.0	791	18	48.2	707
No	118	80.0	2,835	19	51.8	630
Engaged in vaginal or anal sex						
Yes	92	63.3	2,214	19	51.5	711
No	55	36.7	1,403	18	48.5	626
Number of vaginal or anal sex partners						
Among MSM ^d						
Mean	10		7	—		—
Median	2		2	—		—
Range	1-365		1-400	—		—
Among MSW ^e						
Mean	2		2	—		—
Median	1		1	—		—
Range	1-5		1-40	—		—
Among WSM ^d						
Mean	1		1	1		1
Median	1		1	1		1
Range	1-3		1-100	1-3		1-100
Total	149	100	3,708	39	100	1,360

Abbreviations: CI, confidence interval; MSM, men who have sex with men; MSW, men who have sex with women; WSM, women 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 values with a coefficient of variation ≥30%, “don’t know” responses, and skipped (missing) responses.

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCIs incorporate weighted percentages.

^dAmong men who had anal sex with men in the past 12 months.

^eAmong men who had vaginal or anal sex only with women in the past 12 months.

^fAmong women who had vaginal or anal sex with men in the past 12 months.

Table 18. Sexual behavior during the 12 months before the interview by sexual orientation—Medical Monitoring Project, Michigan and United States, 2014

	MSM				MSW				WSM				
	Michigan		National		Michigan		National		Michigan		National		
	No. ^a	% ^b											
Engaged in any high-risk sex^d													
Yes	8	12.0	130	8.7	0	—	37	5.6	3	16.4	60	8.3	6.1-10.5
No	61	88.0	1,351	91.3	23	100.0	678	94.4	15	83.6	637	91.7	89.5-93.9
Percentages of persons who used a prevention strategy with at least 1 person													
Sex while sustainably virally suppressed^e													
Yes	50	72.3	1,085	72.8	13	56.5	494	66.9	11	57.0	473	67.0	63.5-70.5
No	19	27.7	407	27.2	10	43.5	225	33.1	8	43.0	236	33.0	29.5-36.5
Condom-protected sex^f													
Yes	16	23.9	578	39.8	22	95.9	495	69.2	12	63.6	411	58.1	53.0-63.2
No	53	76.1	914	60.2	1	4.1	224	30.8	7	36.4	298	41.9	36.8-47.0
Sex with a partner on PrEP^g													
Yes	2	3.1	41	2.3	0	—	—	—	0	—	—	—	—
No	67	96.9	1,444	97.7	23	100.0	—	—	19	100.0	—	—	100.0-100.0
Sex with an HIV-positive partner^h													
Yes	49	71.4	920	61.6	4	17.3	207	30.5	5	26.3	200	29.1	24.5-33.7
No	20	28.6	572	38.4	19	82.7	512	69.5	14	73.7	509	70.9	66.3-75.5
Total	69	100	1,492	100	23	100	719	100	19	100	709	100	

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

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

Excluded are values with a coefficient of variation ≥50%, "don't know" responses, and skipped (missing) responses.

^aNumbers are unweighted.

^bPercentages are weighted percentages.

^cCIs incorporate weighted percentages.

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

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

^fCondoms were used with any vaginal or anal sex partners.

^gAny HIV-negative partner was on PrEP. PrEP use measured among 5 recent most partners only.

^hSex with at least 1 HIV-positive partner.

Table 19a. Met and unmet needs for ancillary services during the 12 months before the interview (Persons who received services)—Medical Monitoring Project, Michigan and United States, 2014

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
HIV case management services						
Yes	90	48.2	40.6–55.7	3,128	59.4	54.9–63.9
No	100	51.8	44.3–59.4	2,001	40.6	36.1–45.1
Dental care						
Yes	116	59.9	53.0–66.7	3,035	58.1	54.9–61.3
No	76	40.1	33.3–47.0	2,110	41.9	38.7–45.1
Counseling about how to prevent spread of HIV						
Yes	74	38.5	30.9–46.0	2,411	45.9	41.5–50.3
No	118	61.5	54.0–69.1	2,733	54.1	49.7–58.5
Public benefits (e.g., SSI or SSDI)						
Yes	103	53.5	46.1–60.9	2,378	45.4	42.9–47.9
No	88	46.5	39.1–53.9	2,767	54.6	52.1–57.1
Eye or vision service						
Yes	82	42.8	35.2–50.5	2,350	44.3	40.2–48.3
No	110	57.2	49.5–64.8	2,794	55.7	51.7–59.8
Medicine through ADAP						
Yes	85	44.6	36.9–52.2	2,249	43.5	40.4–46.6
No	106	55.4	47.8–63.1	2,741	56.5	53.4–59.6
Meal or food services						
Yes	35	18.2	12.6–23.9	1,506	29	25.7–32.4
No	157	81.8	76.1–87.4	3,641	71	67.6–74.3
Mental health services						
Yes	52	26.7	20.3–33.2	1,434	27.1	24.4–29.9
No	140	73.3	66.8–79.7	3,710	72.9	70.1–75.6
Transportation assistance						
Yes	48	24.8	18.9–30.7	1,363	26.2	24.1–28.3
No	144	75.2	69.3–81.1	3,784	73.8	71.7–75.9
Professional help remembering to take HIV medicines on time or correctly (adherence support services)						
Yes	32	16.6	11.9–21.3	1,151	21.6	18.9–24.3
No	160	83.4	78.7–88.1	3,993	78.4	75.7–81.1
Shelter or housing services						
Yes	20	10.5	5.3–15.6	847	16.2	13.8–18.5
No	172	89.5	84.4–94.7	4,300	83.8	81.5–86.2
HIV peer group support						
Yes	25	12.6	7.6–17.6	831	15.7	13.3–18.1
No	167	87.4	82.4–92.4	4,316	84.3	81.9–86.7
Lawyer or legal services						
Yes	26	13.3	8.4–18.3	613	11.8	10.5–13.2
No	166	86.7	81.7–91.6	4,533	88.2	86.8–89.5
Drug or alcohol counseling or treatment						
Yes	16	8.2	4.4–11.9	423	7.9	6.5–9.4
No	176	91.8	88.1–95.6	4,723	92.1	90.6–93.5
Home health services						
Yes	18	9.1	4.8–13.5	317	6.2	5.2–7.3
No	174	90.9	86.5–95.2	4,830	93.8	92.7–94.8
Interpreter services						
Yes	1	0.5	0.0–1.4	256	5	3.9–6.0
No	191	99.5	98.6–100.0	4,891	95	94.0–96.1
Domestic violence services						
Yes	2	1	0.0–2.4	71	1.4	0.9–1.9
No	191	100	100.0–100.0	5,073	98.6	98.1–99.1
Childcare services						
Yes	—	—	—	61	1.3	1.0–1.5
No	—	—	—	5,086	98.7	98.5–99.0
Total	192	100		5,154	100	

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

Note. Patients could report receiving or needing more than 1 service.

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

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

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

Table 19b. Met and unmet needs for ancillary services during the 12 months before the interview (Persons who needed but did not receive services by time of interview)—Medical Monitoring Project, Michigan and United States, 2014

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
HIV case management services						
Yes	14	7.3	3.7–10.9	238	4.7	4.0–5.5
No	175	92.7	89.1–96.3	4,888	95.3	94.5–96.0
Dental care						
Yes	49	26	20.0–32.1	1,226	24.4	21.9–26.8
No	143	74	67.9–80.0	3,914	75.6	73.2–78.1
Counseling about how to prevent spread of HIV						
Yes	6	3.4	0.7–6.2	60	1.1	0.8–1.5
No	186	96.6	93.8–99.3	5,085	98.9	98.5–99.2
Public benefits (e.g., SSI or SSDI)						
Yes	21	11.4	6.7–16.1	511	9.9	8.8–11.1
No	170	88.6	83.9–93.3	4,620	90.1	88.9–91.2
Eye or vision service						
Yes	48	24.6	18.6–30.5	1,101	21.2	19.1–23.4
No	144	75.4	69.5–81.4	4,040	78.8	76.6–80.9
Medicine through ADAP						
Yes	7	3.6	0.9–6.2	119	2.5	2.0–3.0
No	185	96.4	93.8–99.1	4,930	97.5	97.0–98.0
Meal or food services						
Yes	16	8.5	4.6–12.4	400	7.7	6.7–8.7
No	176	91.5	87.6–95.4	4,743	92.3	91.3–93.3
Mental health services						
Yes	11	6.2	2.7–9.8	305	6	5.0–7.0
No	181	93.8	90.2–97.3	4,834	94	93.0–95.0
Transportation assistance						
Yes	27	14.3	8.9–19.8	448	8.5	7.3–9.7
No	165	85.7	80.2–91.1	4,697	91.5	90.3–92.7
Professional help remembering to take HIV medicines on time or correctly (adherence support services)						
Yes	5	2.6	0.3–4.8	91	1.8	1.3–2.2
No	187	97.4	95.2–99.7	5,053	98.2	97.8–98.7
Shelter or housing services						
Yes	24	12.8	8.3–17.3	441	8.6	7.4–9.9
No	168	87.2	82.7–91.7	4,703	91.4	90.1–92.6
HIV peer group support						
Yes	24	12.7	7.5–18.0	373	7.4	6.3–8.5
No	167	87.3	82.0–92.5	4,760	92.6	91.5–93.7
Lawyer or legal services						
Yes	17	9.1	4.9–13.3	319	6.3	5.0–7.6
No	175	90.9	86.7–95.1	4,820	93.7	92.4–95.0
Drug or alcohol counseling or treatment						
Yes	5	2.6	0.3–5.0	87	1.7	1.1–2.3
No	187	97.4	95.0–99.7	5,058	98.3	97.7–98.9
Home health services						
Yes	7	3.6	1.1–6.1	131	2.6	2.1–3.2
No	185	96.4	93.9–98.9	5,014	97.4	96.8–97.9
Interpreter services						
Yes	0	0	0.0–0.0	25	0.5	0.3–0.7
No	192	100	100.0–100.0	5,122	99.5	99.3–99.7
Domestic violence services						
Yes	6	3.4	0.7–6.0	34	0.6	0.3–0.9
No	186	96.6	94.0–99.3	5,108	99.4	99.1–99.7
Childcare services						
Yes	—	—	—	56	1.1	0.7–1.4
No	—	—	—	5,090	98.9	98.6–99.3
Total	192	100		5,154	100	

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

Note. Patients could report receiving or needing more than 1 service.

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

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

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

Table 19c. Met and unmet needs for ancillary services during the 12 months before the interview (Persons who did not need or receive services)—Medical Monitoring Project, Michigan and United States, 2014

	Michigan No. ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
HIV case management services						
Yes	84	43.8	36.1–51.5	1,752	35.7	31.5–39.9
No	105	56.2	48.5–63.9	3,368	64.3	60.1–68.5
Dental care						
Yes	27	14.1	9.1–19.1	879	17.5	16.0–19.0
No	165	85.9	80.9–90.9	4,261	82.5	81.0–84.0
Counseling about how to prevent spread of HIV						
Yes	112	58.1	50.5–65.6	2,672	53	48.6–57.3
No	80	41.9	34.4–49.5	2,471	47	42.7–51.4
Public benefits (e.g., SSI or SSDI)						
Yes	66	34.8	27.7–41.8	2,240	44.5	41.5–47.4
No	124	65.2	58.2–72.3	2,889	55.5	52.6–58.5
Eye or vision service						
Yes	62	32.6	25.0–40.2	1,689	34.5	31.9–37.1
No	130	67.4	59.8–75.0	3,451	65.5	62.9–68.1
Medicine through ADAP						
Yes	99	51.8	44.2–59.4	2,613	53.8	50.8–56.8
No	92	48.2	40.6–55.8	2,378	46.2	43.2–49.2
Meal or food services						
Yes	141	73.3	66.9–79.6	3,237	63.3	60.1–66.4
No	51	26.7	20.4–33.1	1,906	36.7	33.6–39.9
Mental health services						
Yes	129	67	60.2–73.8	3,398	66.9	64.4–69.4
No	63	33	26.2–39.8	1,740	33.1	30.6–35.6
Transportation assistance						
Yes	117	60.9	54.2–67.5	3,334	65.3	63.0–67.7
No	75	39.1	32.5–45.8	1,811	34.7	32.3–37.0
Professional help remembering to take HIV medicines on time or correctly (adherence support services)						
Yes	155	80.9	75.6–86.2	3,902	76.6	73.9–79.3
No	37	19.1	13.8–24.4	1,243	23.4	20.7–26.1
Shelter or housing services						
Yes	148	76.7	70.4–83.0	3,856	75.2	73.3–77.1
No	44	23.3	17.0–29.6	1,288	24.8	22.9–26.7
HIV peer group support						
Yes	142	74.6	68.4–80.8	3,929	76.9	74.6–79.2
No	49	25.4	19.2–31.6	1,204	23.1	20.8–25.4
Lawyer or legal services						
Yes	149	77.6	71.7–83.5	4,207	81.8	79.9–83.8
No	43	22.4	16.5–28.3	932	18.2	16.2–20.1
Drug or alcohol counseling or treatment						
Yes	171	89.2	84.9–93.5	4,634	90.3	88.9–91.8
No	21	10.8	6.5–15.1	510	9.7	8.2–11.1
Home health services						
Yes	167	87.2	82.3–92.1	4,697	91.1	89.8–92.5
No	25	12.8	7.9–17.7	448	8.9	7.5–10.2
Interpreter services						
Yes	191	99.5	98.6–100.0	4,866	94.6	93.4–95.7
No	1	0.5	0.0–1.4	281	5.4	4.3–6.6
Domestic violence services						
Yes	191	100	100.0–100.0	5,036	98	97.4–98.6
No	184	95.7	92.7–98.6	105	2	1.4–2.6
Childcare services						
Yes	—	—	—	5,029	97.7	97.3–98.1
No	—	—	—	117	2.3	1.9–2.7
Total	192	100		5,154	100	

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

Note. Patients could report receiving or needing more than 1 service.

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

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

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

Table 20. Prevention services received during the 12 months before the interview—Medical Monitoring Project, Michigan and United States, 2014

	Michigan No ^a	Michigan % ^b	Michigan 95% CI ^c	National No. ^a	National % ^b	National 95% CI ^c
One-on-one conversation with physician, nurse, or other health care worker						
Yes	93	49.9	43.1–56.6	2,784	53.5	48.6–58.5
No	98	50.1	43.4–56.9	2,333	46.5	41.5–51.4
One-on one conversation with outreach worker, counselor, or prevention program worker						
Yes	54	28.9	21.8–36.0	2,018	37.8	32.1–43.6
No	137	71.1	64.0–78.2	3,103	62.2	56.4–67.9
Organized session involving a small group of people						
Yes	28	14.4	9.6–19.1	907	16.4	12.7–20.2
No	164	85.6	80.9–90.4	4,216	83.6	79.8–87.3
Free condoms						
Yes	84	44	35.9–52.0	3,011	58.3	55.2–61.3
No	108	56	48.0–64.1	2,112	41.7	38.7–44.8
Source of free condoms^d						
General health clinic						
Yes	49	58.8	46.5–71.0	2,038	68.8	64.1–73.5
No	35	41.2	29.0–53.5	967	31.2	26.5–35.9
Community-based organization						
Yes	28	33.1	23.6–42.6	700	23.3	17.4–29.1
No	56	66.9	57.4–76.4	2,305	76.7	70.9–82.6
Social venue						
Yes	13	15.4	8.0–22.8	365	12.1	9.1–15.1
No	71	84.6	77.2–92.0	2,640	87.9	84.9–90.9
Sexually transmitted disease clinic						
Yes	1	1.1	0.0–3.1	269	8.1	3.4–12.8
No	83	98.9	96.9–100.0	2,736	91.9	87.2–96.6
Special event						
Yes	5	5.6	0.7–10.6	146	4.7	3.0–6.3
No	79	94.4	89.4–99.3	2,859	95.3	93.7–97.0
Family planning clinic						
Yes				69	2.2	1.2–3.2
No	84	100	100.0–100.0	2,936	97.8	96.8–98.8
Outreach organization for persons who inject drugs						
Yes	—	—	—	—	—	—
No				—	—	—
Total	192	100		5,154	100	

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

^a Numbers are unweighted.

^b Percentages are weighted percentages.

^c CIs incorporate weighted percentages.

^d Among patients who received free condoms.