

Behavioral and Clinical Characteristics of Persons with Diagnosed HIV Infection in Virginia
The Medical Monitoring Project in Virginia, 2016

Garrett Shields, MPH
Jennifer Kienzle, PhD

Medical Monitoring Project (MMP)
HIV Surveillance Unit
Division of Disease Prevention
Virginia Department of Health

Contact: Jennifer Kienzle: Jennifer.Kienzle@vdh.virginia.gov

Acknowledgements:

The authors would like to acknowledge contributions to this report by current and past MMP staff, MMP community advisory boards, physician advisory boards, as well as the facilities that participated. The authors would also like to acknowledge the training and support of CDC Clinical Outcomes Team in the Division of HIV/AIDS Prevention of the National Center for HIV/AIDS, Viral Hepatitis, and TB Prevention and the Data Coordinating Center at ICF International. Finally, the authors would like to acknowledge the individuals who graciously participated in the project.

Table of Contents

List of Tables	iii
Introduction.....	1
Summary of Findings	
Participant Response Rates	1
Sociodemographic Characteristics	1
Health Care Access and Utilization	2
Met and Unmet Needs for Ancillary Services	2
Self-Reported Antiretroviral Medication Use and Adherence	2
Sexual Behaviors	3
HIV Prevention Activities	3
Mental Health and Substance Use	3
Women’s Health	4
Tables.....	5

List of Tables

Table	Page
1. Participant characteristics- Medical Monitoring Project 2016, Virginia	5
2. Access to care and clinical characteristics- Medical Monitoring Project 2016, Virginia	7
3. Sexually transmitted infection screening during the past 12 months, among sexually active- Medical Monitoring Project 2016, Virginia	9
4. Met and unmet needs for ancillary services during the past 12 months- Medical Monitoring Project 2016, Virginia	10
5. Antiretroviral therapy (ART) access, utilization, and adherence- Medical Monitoring Project 2016, Virginia.....	12
6. Antiretroviral therapy (ART) adherence and beliefs among those currently taking ART- Medical Monitoring Project 2016, Virginia.....	13
7. Mean and range of single adherence score- Medical Monitoring Project 2016, Virginia.....	14
8. Sexual behaviors during the past 12 months- Medical Monitoring Project 2016, Virginia	15
9. Sex partner type and unprotected sex behaviors during the past 12 months- Medical Monitoring Project 2016, Virginia	16
10. Mean and range of sex partners during the past 12 months- Medical Monitoring Project 2016, Virginia.....	17
11. HIV prevention activities- Medical Monitoring Project 2016, Virginia.....	18
12. Depression and anxiety symptoms- Medical Monitoring Project 2016, Virginia.....	19
13. Mean and range of stigma summary score- Medical Monitoring Project 2016, Virginia.....	20
14. Substance use- Medical Monitoring Project 2016, Virginia.....	21
15. Mean and range of alcoholic beverages consumed during the past 30 days- Medical Monitoring Project 2016, Virginia	23

16. Gynecologic and reproductive health- Medical Monitoring Project 2016,
Virginia24

MMP is an ongoing, supplemental surveillance system that assesses clinical and behavioral characteristics of HIV-infected adults in the United States. As a cross-sectional, complex survey design, MMP uses a two-stage sampling design to select participants where: 1. 23 project areas are sampled from all states and territories and 2. persons with diagnosed HIV aged 18 years and older from the sampled project areas are sampled for participation in the project. [1, 2] Structured interviews and medical record abstractions (MRAs) are conducted for each participant that agrees to participate. Medical record abstractions can be conducted without an interview. Raw data are then weighted so that descriptive and statistical analyses can be generalized to the HIV-positive population. These data enhance HIV surveillance systems by providing a more complete picture of behavioral and clinical characteristics of adults diagnosed with HIV in the United States. The data weighting methods are described elsewhere. [3, 4]

In 2016, in collaboration with the Centers for Disease Control and Prevention (CDC), a randomized sample of 400 persons residing in Virginia were selected from the National HIV Surveillance System (NHSS) to participate in the project. This summary report includes participants with a complete interview paired with a MRA. Data are presented as unweighted frequencies and weighted estimates [with 95% confidence intervals (CI)] for select behavioral and clinical characteristics. No statistical analyses were performed; and data with a coefficient of variance (CV) of 30% or higher were not included in this report.

Participant Response Rates

In 2016, 400 participants were sampled, of which 357 were found to be eligible to participate. A total of 158 participants completed the interview, resulting in an adjusted participant response rate of 44%. Data for 157 of those participants are included in this report.

Sociodemographic Characteristics

An estimated 70% of participants were male and 26% were female (Table 1). An estimated 58% were black or African American, 24% were white, 7% were Hispanic, and 11% reported 'other' race. Forty-two percent of participants self-identified as heterosexual, 42% as homosexual, gay or lesbian, and 14% as bisexual. An estimated 39% of participants were age 55 or older, 31% were 45-54, 16% were 35-44 years of age, and 12% were age 25-34. For education level, an estimated 65% completed education beyond high school. Twenty-nine percent of participants were at or below the poverty level for 2016 (calculated based on income and number of persons living in the household) and only 6% reported being homeless in the past 12 months. An estimated 93% reported having health insurance or coverage for medical care and for ART medications. The most commonly reported payer source for ART medications was private insurance (48%), followed by Ryan White (41%), Medicare (31%) and Medicaid (22%). Thirteen percent of participants reported other public health insurance. Payer source categories are not mutually exclusive; therefore, participants can report more than one payer source for medications.

Health Care Access and Utilization

An estimated 19% of participants were diagnosed HIV-positive less than 5 years ago (Table 2). Of those participants, an estimated 79% entered HIV medical care within three months of their HIV-positive diagnosis. Overall, an estimated 98% of participants received outpatient care and 84% were retained in care during the past 12 months. In addition, an estimated 65% of participants visited a provider for HIV care within the past 3 months and an estimated 96% had an ART prescription documented in their medical record in the past 12 months.

For clinical markers of care during the previous 12 months, an estimated 86% of participants had undetectable viral load test results for all tests and an estimated 58% had CD4 counts of 500 or greater.

In the last year, an estimated 13% of participants were admitted to the hospital for an overnight stay and 38% reported at least one emergency department visit. An estimated 92% of participants received the influenza vaccine in the last year.

Among participants reporting having sex in the past 12 months, screening for gonorrhea, chlamydia, and syphilis were estimated at 36%, 37%, and 66% of the participant population, respectively (Table 3).

Met and Unmet Needs for Ancillary Services

For ancillary services received in the previous twelve months, the top five services received were dental care (51%), HIV case management (49%), AIDS Drug Assistance Program (ADAP) (42%), mental health services (30%), and antiretroviral medication adherence

support services (28%; Table 4). Of participants who reported needing a service they did not receive in the past twelve months, the most frequently reported unmet needs for ancillary services were dental care (70%), public benefits, such as Social Security Income and Social Security Disability Insurance (24%), meal or food services (16%), HIV case management services (15%), and shelter or housing services (15%).

Self-Reported Antiretroviral Medication Use and Adherence

An estimated 98% of participants report ever taking antiretroviral therapy (ART) medications and 92% report currently taking ART (Table 5). For participants currently taking ART medications, an estimated 66% reported never being troubled by side effects.

In the past 30 days, an estimated 56% of participants reported not missing any doses of ART (Table 6). In addition, an estimated 50% of participants believe they did an excellent job taking their HIV medication as instructed.

When asked about reasons for the most recent missed ART dose, the two most common responses were forgot to take the medications (45%) and/or a change in daily routine or being out of town (43%). In the past 12 months, an estimated 73% of participants reported a doctor or clinic staff member asking about missed doses and 58% reported a doctor or clinic staff member asking about problems taking the HIV medications (Table 6). The mean adherence score among participants was 90.4 (range, 0.0-100.0; Table 7).

Sexual Behaviors

An estimated 55% of participants engaged in sexual intercourse during the past 12 months (Table 8). Among these sexually active participants, an estimated 56% of participants identified as men who have sex with men (MSM; includes those who identify as gay or engaging in sex behaviors with other men only) and an estimated 28% of participants were women who have sex with men only (WSM). An estimated 49% of sexually active participants engaged in unprotected sexual intercourse (Table 8). When asked about sexual partner type, an estimated 56% of MSM participants reported main partners and 72% of MSM and WSM reported main partners (Table 9).

Among sexually active MSM, the estimated mean for sex partners in the past 12 months was three (range, 1.0-12.0; Table 10). For WSM, an estimated mean of one sex partner (range, 1.0-2.0) was reported.

HIV Prevention Activities

An estimated 51% of participants received free condoms in the past 12 months (Table 11). An estimated 47% of participants engaged in some form of a formal conversation about HIV prevention with a healthcare provider or within a support structure. Specifically, an estimated 43% of participants engaged in a formal conversation about HIV and STD prevention with a medical provider, 26% of participants discussed HIV prevention with a counselor, and 10% of participants discussed HIV prevention within an organized session or small group.

Mental Health and Substance Use

Approximately 19% of participants met the criteria threshold for moderate to severe depression symptoms at the time of the interview, according to their responses to the Participant Health Questionnaire 8 (PHQ-8; Table 12). An estimated 28% of participants met the criteria threshold for presence of anxiety symptoms, according to their responses to the Generalized Anxiety Disorder Scale (GAD-2). The mean HIV stigma score among participants was 45.4 (range, 5.0-100.0); Table 13).

An estimated 55% of participants reported cigarette smoking on a daily basis (Table 14). For alcohol use, the estimated prevalence of use within the past twelve months was 71%, with approximately 10% reporting daily alcohol use. An estimated 58% of participants reported drinking a minimum of one alcoholic drink within the past 30 days (Table 14), with a mean of 2.5 (range, 1.0-6.0) drinks per day that alcohol was consumed (Table 15). An estimated 18% of participants reported binge drinking in the past 30 days. In addition, for those who reported drinking alcohol in the past 30 days, an estimated 64% reported drinking alcohol before or during sex (Table 14).

An estimated 30% of participants reported non-injection substance use within the past twelve months, with an estimated 22% of participants using marijuana (Table 14). In addition, among sexually active participants in the past 12 months, an estimated 29% reported using non-injection drugs before or during sex.

Women's Health

An estimated 70% of female participants reported receiving a pelvic exam and 74% reported receiving a Papanicolaou (Pap) test in the past 12 months (Table 16). In addition, an estimated 22% of female participants reported at least one pregnancy since testing HIV-positive.

References

[1] Institute of Medicine. *Monitoring HIV Care in the United States: Indicators and Data Systems*. Washington, DC: National Academies Press; 2012. doi:10.17226/13225.

[2] Centers for Disease Control and Prevention. *Behavioral and Clinical Characteristics of Persons with Diagnosed HIV Infection – Medical Monitoring Project, United States, 2016 Cycle (June 2016 – May 2017)*. HIV Surveillance Special Report 21. <https://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. Published February 2019. Accessed February 14, 2019.

[3] AAPOR. *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*. 7th edition. AAPOR 2011.

[4] Heeringa, S.G., West, B.T., Berglund, P.A. *Applied Survey Data Analysis*. Chapman and Hall, London, 2010.

Suggested Citation:

Shields, G. & Kienzle, J. (2019). Behavioral and Clinical Characteristics of Persons with Diagnosed HIV Infection in Virginia—The Medical Monitoring Project in Virginia, 2016. <http://www.vdh.virginia.gov/disease-prevention/disease-prevention/virginia-hiv-surveillance-program/medical-monitoring-project/>. Published March 5, 2019. Accessed [enter date].

Table 1. Participant characteristics- Medical Monitoring Project 2016, Virginia

	n ^a	% ^b	95% CI ^c
Gender			
Male	100	70.4	(62.8-78.0)
Female	51	25.8	(18.7-33.0)
Transgender	— ^f	— ^f	— ^f
Race			
Black	97	58.4	(49.2-67.5)
White	32	23.9	(15.7-32.2)
Hispanic	13	7.1	(3.2-11.0)
Other, including multi-racial	14	10.6	(4.4-16.8)
Sexual orientation			
Heterosexual	73	42.0	(33.2-50.9)
Homosexual/Gay/Lesbian	61	42.0	(32.9-51.1)
Bisexual	20	13.8	(7.0-20.6)
Age at time of interview			
18-24	— ^f	— ^f	— ^f
25-34	22	11.6	(6.8-16.4)
35-44	26	15.8	(9.6-22.0)
45-54	48	31.2	(22.7-39.8)
55+	56	39.1	(30.0-48.3)
Education			
Less than high school	21	11.5	(6.6-16.5)
High school diploma or GED	42	23.7	(16.5-31.0)
Beyond high school	93	64.8	(56.5-73.0)
Living above the federal poverty level ^d			
Yes	98	70.6	(62.3-78.8)
No	48	29.4	(21.2-37.7)

Table 1. Participant characteristics- Medical Monitoring Project 2016, Virginia (continued)

	n ^a	% ^b	95% CI ^c
Homeless, past 12 months ^e			
Yes	12	6.3	(2.7-10.0)
No	145	93.7	(90.0-97.3)
Health insurance/coverage for antiretroviral medications, past 12 months			
Yes	142	93.0	(89.0-97.0)
No	— ^f	— ^f	— ^f
Ryan White only	— ^f	— ^f	— ^f
Type of health insurance/coverage for antiretroviral medications, past 12 months ^g			
Private health insurance	75	47.8	(38.5-57.0)
Ryan White	74	41.3	(32.6-50.0)
Medicare	46	30.6	(22.1-39.2)
Medicaid	40	22.4	(15.3-29.6)
Other public health insurance	24	13.1	(7.9-18.3)

^a Unweighted counts; ^b Weighted percentages; ^c Confidence Intervals (CI) incorporate weighted percentages

^d Poverty guidelines as defined by HHS; the 2015 guidelines were used for persons interviewed in 2016 and the 2016 guidelines were used for persons interviewed in 2017. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-askedquestions-related-poverty-guidelines-and-poverty>

^e Includes unstable housing (e.g. living in a shelter, car, or single room occupancy hotel)

^f Coefficient of variance (CV) is greater than 0.30; thus data are not reportable

^g Categories are not mutually exclusive

Table 2. Access to care and clinical characteristics - Medical Monitoring Project 2016, Virginia

	n ^a	% ^b	95% CI ^c
Time since HIV diagnosis			
Less than 5 years ago	31	18.5	(12.0-25.0)
5 years ago or more	125	81.5	(75.0-88.0)
Time between HIV diagnosis and first HIV medical care appointment*			
Within 3 months	24	79.4	(64.2-94.6)
4 months or longer	— ^d	— ^d	— ^d
Received outpatient care, past 12 months ^e			
Yes	156	97.9	(93.9-100.0)
No	— ^d	— ^d	— ^d
Retained in care, past 12 months ^f			
Yes	135	84.4	(77.4-91.4)
No	21	15.6	(8.6-22.6)
Documentation of ART prescription in medical record			
Yes	146	95.8	(92.6-99.0)
No	— ^d	— ^d	— ^d
Missed any appointments for outpatient HIV care that you did not cancel, past 12 months?			
Yes	37	22.1	(14.9-29.3)
No	119	77.9	(70.7-85.1)
Most recent visit to provider for HIV care			
0-3 months	101	64.8	(56.0-73.6)
4-6 months	43	25.4	(17.8-33.0)
More than 6 months	— ^d	— ^d	— ^d

Table 2. Access to care and clinical characteristics- Medical Monitoring Project 2016, Virginia (continued)

	n ^a	% ^b	95% CI ^c
All viral load test results undetectable (< 200 copies/mL), past 12 months			
Yes	117	85.9	(80.3-91.4)
No	25	14.1	(8.6-19.7)
Lowest CD4 count, past 12 months			
0-199	12	6.6	(2.8-10.3)
200-349	16	11.4	(5.5-17.2)
350-499	35	23.9	(15.9-32.0)
500+	79	58.1	(48.8-67.4)
Overnight hospitalization, past 12 months			
Yes	24	13.1	(7.8-18.4)
No	133	86.9	(81.6-92.2)
Emergency department visit, past 12 months			
Yes	64	37.9	(29.3-46.6)
No	92	62.1	(53.4-70.7)
Received seasonal flu vaccine, past 12 months			
Yes	138	91.5	(87.2-95.8)
No	16	8.5	(4.2-12.8)

^a Unweighted counts; ^b Weighted percentages; ^c Confidence Intervals (CI) incorporate weighted percentages

^d Coefficient of variance (CV) is greater than 0.30; thus data are not reportable

^e Outpatient HIV care was defined as any documentation of the following: encounter with an HIV care provider, viral load test result, CD4 test result, HIV resistance test or tropism assay, ART prescription, PCP prophylaxis, or MAC prophylaxis

^f Two elements of outpatient HIV care at least 90 days apart; of those who received outpatient care

*Of those diagnosed within the past five years

Table 3. Sexually transmitted infection screening during the past 12 months^d, among sexually active- Medical Monitoring Project 2016, Virginia

	n ^a	% ^b	95% CI ^c
Received screening for gonorrhea, chlamydia, and syphilis?			
Yes	30	31.3	(20.8-41.7)
No	60	68.7	(58.3-79.2)
Received Gonorrhea screening?			
Yes	36	36.3	(25.5-47.2)
No	54	63.7	(52.8-74.5)
Received Chlamydia screening?			
Yes	36	36.6	(25.8-47.5)
No	54	63.4	(52.5-74.2)
Received Syphilis screening?			
Yes	61	65.8	(54.5-77.0)
No	29	34.2	(23.0-45.5)

^a Unweighted counts; ^b Weighted percentages; ^c Confidence Intervals (CI) incorporate weighted percentages

^d As documented in medical record; screenings could occur elsewhere

Table 4. Met and unmet needs for ancillary services during the past 12 months[†]- Medical Monitoring Project 2016, Virginia

	Persons who received services during the past 12 months			Persons who needed, but did not receive services during the past 12 months		
	n ^a	% ^b	95% CI ^c	n ^a	% ^d	95% CI ^c
HIV case management services						
Yes	83	48.6	(39.4-57.7)	13	15.2	(6.7-23.7)
No	73	51.4	(42.3-60.6)	59	84.8	(76.3-93.3)
Dental care						
Yes	84	50.5	(41.3-59.7)	48	69.7	(57.8-81.6)
No	72	49.5	(40.3-58.7)	24	30.3	(18.4-42.2)
Public benefits (e.g., SSI or SSDI)						
Yes	35	23.3	(15.3-31.3)	24	23.7	(13.8-33.6)
No	120	76.7	(68.7-84.7)	94	76.3	(66.4-86.2)
Medicine through ADAP						
Yes	75	41.5	(32.8-50.2)	— ^e	— ^e	— ^e
No	81	58.5	(49.8-67.2)	77	94.9	(90.2-99.5)
Meal or food services						
Yes	28	16.1	(9.9-22.3)	23	15.8	(8.7-22.9)
No	127	83.9	(77.7-90.1)	104	84.2	(77.1-91.3)
Mental health services						
Yes	50	29.9	(21.8-38.1)	14	13.8	(5.9-21.6)
No	105	70.1	(61.9-78.2)	91	86.2	(78.4-94.1)
Transportation assistance						
Yes	38	21.1	(14.3-27.9)	— ^e	— ^e	— ^e
No	117	78.9	(72.1-85.7)	108	94.7	(90.9-98.5)
Antiretroviral medication adherence support services						
Yes	50	27.5	(20.0-35.0)	— ^e	— ^e	— ^e
No	105	72.5	(65.0-80.0)	102	98.5	(96.8-100.0)

Table 4. Met and unmet needs for ancillary services during the past 12 months[†]- Medical Monitoring Project 2016, Virginia (continued)

	Persons who received services during the past 12 months			Persons who needed, but did not receive services during the past 12 months		
	n ^a	% ^b	95% CI ^c	n ^a	% ^d	95% CI ^c
Shelter or housing services						
Yes	20	10.1	(5.6-14.6)	21	14.5	(7.7-21.3)
No	135	89.9	(85.4-94.4)	114	85.5	(78.7-92.3)
HIV peer group support						
Yes	18	10.4	(5.2-15.6)	— ^e	— ^e	— ^e
No	138	89.6	(84.4-94.8)	127	92.3	(86.6-97.9)
Drug or alcohol counseling or treatment						
Yes	— ^e	— ^e	— ^e	— ^e	— ^e	— ^e
No	145	94.1	(90.5-97.6)	143	98.9	(97.2-100.0)
Interpreter services						
Yes	— ^e	— ^e	— ^e	0	0.0	(0.0-0.0)
No	154	98.3	(96.3-100.0)	154	100.0	(100.0-100.0)
Domestic violence services						
Yes	— ^e	— ^e	— ^e	— ^e	— ^e	— ^e
No	153	99.1	(97.9-100.0)	152	99.3	(98.0-100.0)
A lawyer or legal services						
Yes	19	11.7	(5.8-17.5)	— ^e	— ^e	— ^e
No	136	88.3	(82.5-94.2)	127	92.7	(87.0-98.4)

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

[†] Services are not mutually exclusive; Percentages might not sum to 100% due to rounding

^a Numbers are unweighted; ^b Percentages are weighted percentages; ^c CIs incorporate weighted percentages

^d Proportion calculated from the number of participants that did not receive that particular service

^e Coefficient of variance (CV) is greater than 0.30; thus data are not reportable

Table 5. Antiretroviral therapy (ART) access, utilization, and adherence- Medical Monitoring Project 2016, Virginia

	n ^a	% ^b	95% CI ^c
Ever taken antiretroviral therapy (ART; self-report)			
Yes	153	98.4	(96.6-100.0)
No	— ^d	— ^d	— ^d
Currently taking ART (self-report)			
Yes	144	91.6	(86.3-97.0)
No	— ^d	— ^d	— ^d
How often troubled by side effects, past 30 days? ^e			
Never	96	66.1	(56.9-75.3)
Rarely	27	21.7	(13.3-30.2)
About half the time	— ^d	— ^d	— ^d
Most of the time/Always	— ^d	— ^d	— ^d

^a Unweighted counts; ^b Weighted percentages

^c Confidence Intervals (CI) incorporate weighted percentages

^d Coefficient of variance (CV) is greater than 0.30; thus data are not reportable

^e Among participants currently taking ART

Table 6. Antiretroviral therapy (ART) adherence and beliefs among those currently taking ART-Medical Monitoring Project 2016, Virginia

	n ^a	% ^b	95% CI ^c
In past 30 days, number of days missed at least 1 dose of HIV medications			
0 days	78	55.7	(46.4-65.1)
1 day	26	17.5	(10.3-24.7)
2+ days	40	26.8	(18.7-34.9)
How well did you do at taking HIV medicines in the way you were supposed to, past 30 days?			
Excellent	72	50.2	(40.7-59.7)
Very good	47	33.5	(24.4-42.7)
Less than very good	25	16.2	(9.7-22.8)
How often did you take HIV medicines in the way you were supposed to, past 30 days?			
Always	93	62.5	(53.1-71.8)
Almost always	39	29.3	(20.3-38.3)
Less than almost always	– ^d	– ^d	– ^d
Reasons for last missed ART dose ^e			
Forgot to take medications	57	44.6	(34.9-54.3)
Change in daily routine or out of town	55	42.9	(33.1-52.7)
Asleep or overslept	45	34.6	(25.1-44.1)
Problem with prescription, insurance, or money	30	19.5	(12.5-26.6)
Depressed or overwhelmed	17	9.5	(4.8-14.2)
Didn't feel like taking medications	16	10.1	(5.1-15.0)
Side effects	12	8.2	(3.5-13.0)
Did doctor or clinic staff ask whether you missed any doses, past 12 months?			
Yes	116	72.5	(63.5-81.5)
No	34	27.5	(18.5-36.5)
Did doctor or clinic staff ask if you had problems taking HIV medicines, past 12 months?			
Yes	95	57.6	(48.2-67.0)
No	55	42.4	(33.0-51.8)

^a Unweighted counts; ^b Weighted percentages; ^c Confidence Intervals (CI) incorporate weighted percentages

^d Coefficient of variance (CV) is greater than 0.30; thus data are not reportable

^e Categories are not mutually exclusive

Table 7. Mean and range of single adherence score- Medical Monitoring Project 2016, Virginia

	median	mean	SEM	range
Adherence score ^a	92.5	90.4	1.2	0.0-100.0

^a Adherence score is calculated as the average of the three adherence variables

Table 8. Sexual behaviors during the past 12 months- Medical Monitoring Project 2016, Virginia

	n ^a	% ^b	95% CI ^c
Any sexual intercourse			
Yes	91	54.8	(45.6-64.1)
No	64	45.2	(35.9-54.4)
Classification of sexual partner type ^e			
Men who have sex with men (MSM)	47	55.8	(44.4-67.1)
Men who have sex with women (MSW)	_ ^d	_ ^d	_ ^d
Women who have sex with men (WSM)	28	27.7	(17.7-37.8)
Engaged in unprotected sex ^e			
Yes	43	49.3	(37.5-61.0)
No	46	50.7	(39.0-62.5)
Engaged in unprotected sex with any partner whose HIV status is negative or unknown ^e			
Yes	31	35.8	(24.5-47.1)
No	58	64.2	(52.9-75.5)

^a Unweighted counts; ^b Weighted percentages; ^c Confidence Intervals (CI) incorporate weighted percentages

^d Coefficient of variance (CV) is greater than 0.30; thus data are not reportable

^e Among participants who reported having sex in the past 12 months

Table 9. Sex partner type and unprotected sex behaviors during the past 12 months- Medical Monitoring Project 2016, Virginia

	Casual partner*			Main partner**			Unprotected sex		
	n ^a	% ^b	95% CI ^c	n ^a	% ^b	95% CI ^c	n ^a	% ^b	95% CI ^c
MSM	21	44.2	(27.7-60.8)	25	55.8	(39.2-72.3)	24	50.2	(33.5-66.9)
MSW and WSM	12	28.5	(13.3-43.6)	25	71.5	(56.4-86.7)	14	43.7	(25.6-61.8)

^aUnweighted counts; ^b Weighted percentages of entire study population; ^c Confidence Intervals (CI)

* Casual partner defined as someone a participant is not committed to or does not know

** Main partner defined as someone the participant is most committed

Table 10. Mean and range of sex partners during the past 12 months- Medical Monitoring Project 2016, Virginia

	median	mean	SEM	range
Men who have sex with other men (MSM)	1.0	2.6	0.5	1.0-12.0
Men who have sex with women only (MSW)	_ ^a	_ ^a	_ ^a	_ ^a
Women who have sex with men only (WSM)	1.0	1.3	0.1	1.0-2.0

^a Coefficient of variance (CV) is greater than 0.30; thus data are not reportable

Table 11. HIV prevention activities- Medical Monitoring Project 2016, Virginia

	n ^a	% ^b	95% CI ^c
Received free condoms, past 12 months			
Yes	81	50.5	(41.4-59.7)
No	75	49.5	(40.3-58.6)
Had formal conversation about HIV prevention			
Yes	87	47.3	(38.3-56.3)
No	70	52.7	(43.7-61.7)
HIV prevention discussion with a doctor, nurse or other health care provider			
Yes	80	42.9	(34.2-51.6)
No	76	57.1	(48.4-65.8)
HIV prevention discussion with a counselor			
Yes	46	26.1	(18.6-33.6)
No	110	73.9	(66.4-81.4)
HIV prevention discussion within an organized session/small group			
Yes	19	9.8	(5.4-14.2)
No	137	90.2	(85.8-94.6)

^a Unweighted counts; ^b Weighted percentages; ^c Confidence Intervals (CI) incorporate weighted percentages

Table 12. Depression and anxiety symptoms- Medical Monitoring Project 2016, Virginia

	n ^a	% ^b	95% CI ^c
Moderate to severe depression symptoms (PHQ-8 score \geq 10)			
Yes	30	19.0	(11.8-26.1)
No	125	81.0	(73.9-88.2)
Presence of anxiety symptoms (GAD-2 score \geq 3) ^d			
Yes	40	28.3	(19.7-36.9)
No	117	71.7	(63.1-80.3)

^a Unweighted counts; ^b Weighted percentages; ^c Confidence Intervals (CI) incorporate weighted percentages

^d Responses to the first two questions of the Generalized Anxiety Disorder Scale (GAD-7) were used to calculate the GAD-2 score. A cut-off score of 3 was used to identify the presence of anxiety symptoms

Table 13. Mean and range of stigma summary score- Medical Monitoring Project 2016, Virginia

	median	mean	SEM	range
HIV stigma summary score ^a	43.0	45.4	2.1	5.0-100.0

^a Ten-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma, disclosure concerns, negative self-image, and perceived public attitudes about people living with HIV.

Table 14. Substance use- Medical Monitoring Project 2016, Virginia

	n ^a	% ^b	95% CI ^c
Current smoking status ^e			
Daily	44	54.9	(42.8-67.0)
Less than daily	_ ^d	_ ^d	_ ^d
Not a current smoker	32	34.1	(22.9-45.4)
Any alcohol use, past 12 months			
Yes	106	71.0	(63.2-78.8)
No	50	29.0	(21.2-36.8)
Frequency of alcohol use, past 12 months			
Daily	16	9.9	(4.7-15.0)
Weekly	34	23.1	(15.2-31.1)
Monthly	17	13.7	(6.5-21.0)
Less than monthly	39	24.2	(16.4-32.1)
Never	50	29.0	(21.2-36.8)
Alcohol use, past 30 days			
Yes	83	58.1	(49.4-66.9)
No	73	41.9	(33.1-50.6)
Binge drinking, past 30 days			
Yes	28	17.5	(10.8-24.2)
No	127	82.5	(75.8-89.2)
Alcohol use before or during sex, past 12 months ^f			
Yes	40	63.6	(50.2-77.0)
No	24	36.4	(23.0-49.8)

Table 14. Substance use- Medical Monitoring Project 2016, Virginia (continued)

	n ^a	% ^b	95% CI ^c
Use of non-injection drugs, past 12 months			
Yes	44	30.3	(21.6-39.0)
No	111	69.7	(61.0-78.4)
Most frequently reported non-injection drug type			
Marijuana	37	22.0	(14.8-29.1)
Use of non-injection drugs before or during sex, past 12 months ^g			
Yes	28	28.9	(18.7-39.0)
No	62	71.1	(61.0-81.3)

^a Unweighted counts; ^b Weighted percentages; ^c Confidence Intervals (CI) incorporate weighted percentages

^d Coefficient of variance (CV) is greater than 0.30; thus data are not reportable

^e Among participants who reported smoking at least 100 cigarettes in lifetime

^f Among participants who reported having sex in the past 12 months and drinking alcohol in the past 30 days

^g Among participants who reported having sex in the past 12 months

Table 15. Mean and range of alcoholic beverages consumed during the past 30 days- Medical Monitoring Project 2016, Virginia

	median	mean	SEM	range
During the past 30 days, how many alcoholic drinks did you have on a typical day?	1.6	2.5	0.2	1.0-6.0

Table 16. Gynecologic and reproductive health- Medical Monitoring Project 2016, Virginia

	n ^a	% ^b	95% CI ^c
Pelvic exam, past 12 months			
Yes	35	69.7	(56.2-83.3)
No	16	30.3	(16.7-43.8)
Papanicolaou (Pap) test, past 12 months			
Yes	38	74.3	(61.3-87.4)
No	13	25.7	(12.6-38.7)
Any pregnancies since testing HIV-positive			
Yes	11	21.6	(9.7-33.6)
No	40	78.4	(66.4-90.3)

^a Unweighted counts; ^b Weighted percentages; ^c Confidence Intervals (CI) incorporate weighted percentages