

Behavioral and Clinical Characteristics of Persons Receiving HIV Medical Care San Francisco 2013-2014



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1 Background

There were 255 persons newly diagnosed with HIV in San Francisco in 2015, down from 302 persons diagnosed in 2014 [1]. Deaths among persons with HIV in San Francisco also declined from 261 in 2013 to 197 in 2015 [1]. These declines reflect an increase in the number of persons receiving antiretroviral therapy, which has resulted in sustained viral suppression. The increased survival of persons with HIV has led to an increasing number of persons living with HIV. As of December 31, 2015, there were 15,995 San Francisco residents living with HIV [1].

In 2005, the Institute of Medicine issued a report highlighting the need for nationally representative data on persons living with HIV [2] and in response, the Centers for Disease Control and Prevention (CDC) implemented the Medical Monitoring Project (MMP) to collect information on the clinical and behavioral characteristics of persons receiving HIV care and to assess need for medical and ancillary services [3]. San Francisco is one of the 23 areas in the United States participating in the MMP. In order to have a sufficiently large sample for data analysis, this report summarizes the methods and findings from two cycles of the MMP (2013 and 2014).

2 Methods

The MMP used a three-stage sampling approach to obtain a cross-sectional, locally representative, population-based sample of persons receiving outpatient HIV medical care. The first stage selected 23 states or municipal areas to include in the MMP. The second stage selected outpatient health care facilities providing HIV primary care. The third stage selected the patients to be included. Eligible patients were HIV-positive, 18 years or older, and had at least one HIV medical care visit at a participating facility from January 1 through April 30 of 2013 or 2014. Details of the MMP methods have been previously described [3, 5-6].

2.1 Recruitment and Consent

MMP or facility staff contacted sampled patients by telephone or letter. MMP was conducted as a supplemental HIV surveillance activity with a non-research determination during the 2013 and 2014 data collection cycles nationally and in San Francisco [7, 8]. All participants were given a patient information sheet, similar to an informed consent, prior to the interview and granted permission for the medical record abstraction.

2.2 Interview

Trained interviewers conducted a 45-minute, face-to-face, standardized computer-assisted structured interview in either English or Spanish with sampled patients. Interviews were conducted in a private location (such as at the San Francisco Department of Public Health, the patient's home or at their medical care facility). The standard interview collected information on patient demographic and clinical characteristics, use of health care services and medications, substance use, sexual behavior, depression, gynecologic and reproductive history (for females), met and unmet needs for ancillary services, use of HIV prevention services, and stigma. Participants were reimbursed \$50 for their time. Interviews were conducted from August 2013 through April 2014 for patients in the 2013 sample and from July 2014 through April 2015 for patients in the 2014 sample.

2.3 Medical Record Abstraction

Trained MMP staff reviewed and abstracted medical records for patients after the interview was conducted. Information collected included demographics, HIV diagnosis, history of opportunistic infections, co-morbidities, prescription of antiretroviral therapy and other

medications, HIV laboratory test results, and health care visits in the 12 months before the interview.

2.4 Surveillance Data

The San Francisco Department of Public Health collects information on San Francisco residents who are diagnosed with HIV as mandated by the California Health and Safety regulations [9]. Limited data on demographic and HIV diagnosis variables was extracted from the San Francisco HIV surveillance database for all sampled patients, including those who were not interviewed. Data unavailable from surveillance records was obtained from the sampled patient's medical facility. This information was used for weighting procedures and for non-response adjustment.

2.5 Data Weighting, Management and Statistical Analyses

Data were weighted for the probability of selection based on known probabilities of selection at each sampling stage. In addition, data were weighted to adjust for non-response using predictors of patient level response, including facility size, race/ethnicity, time since HIV diagnosis and age group.

After collection, data were encrypted and transmitted to CDC through a secure data portal. Statistical weighting and cleaning procedures were conducted at CDC before data were returned to the San Francisco Department of Public Health via a secure data portal for data analysis. SAS v9.4 statistical software was used for analysis of weighted data.

Prevalence estimates (weighted percentages) and associated 95% confidence intervals (CI) were calculated using information from participants who completed both the standard questionnaire and also had their medical record abstracted. Confidence intervals are not reported for variables with a coefficient of variation >30% due to unstable estimates. The numbers in the tables represent unweighted frequencies and might not add up to the total N because of missing data. Percentages are weighted percentages and might not sum to 100 because of rounding.

The term "patients" in this report refers to adults living with HIV receiving outpatient HIV medical care in San Francisco. The time period referenced is the 12 months before the patient interview unless otherwise noted.

2.6 Facility and Patient Response Rates

In 2013, 22 (88.0%) of the 25 selected and eligible facilities participated and 237 (59.7%) of the 400 sampled patients participated. In 2014, 22 (88.0%) of the 25 selected and

eligible facilities participated and 238 (59.7%) of the 400 sampled patients participated. The adjusted interview response rate, defined as number of patients interviewed divided by total number of eligible patients (adjusting for eligibility rate), was 59.9% for 2013 and 59.7% for 2014. The overall response rate, defined as facility response rate multiplied by the adjusted patient response rate (for patients with both an interview and a medical record abstraction) was 52.7% in 2013 and 52.6% in 2014.

3 Demographic Characteristics

The majority of patients were men (92%), five percent were female, and close to two percent were transgender (Table 3.1). 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. Eighty-one percent of the sample self-identified as homosexual, gay, or lesbian, and six percent identified as bisexual.

The majority of patients were White (62%), 21% were Latino and 12% were African American. Patients were classified in only one race/ethnicity category, so Hispanics or Latinos might be of any race. Sixty-four percent of patients were aged 40 to 59 years. The majority of patients had some college or greater education (81%) and had been born in the United States (83%). A large proportion of patients had been diagnosed with HIV for 10 or more years (76%). (Table 3.2)

Eighty-three percent of the patients lived in San Francisco at the time of the interview. Twelve percent of those interviewed were homeless and two percent had been incarcerated for more than 24 hours in the 12 months prior to the interview. One-hundred percent of patients had some type of health insurance and/or coverage, and half of these had private insurance. Participants could select more than one insurance or coverage type. Persons were considered uninsured if they reported having health costs paid only by Ryan White-funded programs.

Forty-nine percent of patients were employed at the time of the interview and 39% relied on social security benefits (Supplemental Security Income and Social Security Disability Insurance). Twenty-four percent of patients had a combined household income of at least \$75,000 in the previous year, while 22% had incomes at or below the federal poverty limit. (Table 3.2)

Poverty level was defined using the Department of Health and Human Services (HHS) poverty guidelines; the 2012 guidelines were used for patients interviewed in 2013 and the 2013 guidelines were used for patients interviewed in 2014. More information regarding the HHS poverty guidelines can be found at <http://aspe.hhs.gov/poverty/faq.cfm>.

Table 3.1: Demographics of patients – Medical Monitoring Project, San Francisco, 2013–2014.

Demographics	No.	%	(95% CI)
Gender			
Male	429	92.3	(89.8–94.9)
Female	27	5.0	(2.9–7.1)
Transgender	9	1.7	
Sexual Orientation			
Homosexual, gay or lesbian	367	80.7	(75.6–85.9)
Heterosexual or straight	63	12.9	(8.4–17.5)
Bisexual	30	6.3	(4.1–8.5)
Race / Ethnicity			
White	280	61.7	(56.6–66.8)
Hispanic or Latino	95	20.5	(16.9–24.0)
Black or African American	59	11.5	(7.6–15.5)
Multiracial or Other	14	2.7	(1.1–4.4)
Asian or Pacific Islander	17	3.5	(1.9–5.2)
Age at time of interview			
18–39 years	62	13.4	(10.0–16.7)
40–49 years	126	26.1	(22.4–29.9)
50–59 years	174	37.7	(33.6–41.9)
≥ 60 years	103	22.8	(18.7–26.9)
Education			
< High School	24	4.7	(2.9–6.6)
High School diploma or equivalent	70	14.0	(10.4–17.7)
≥ High School	371	81.2	(76.9–85.5)
Country or territory of birth			
United States	383	82.6	(79.2–85.9)
Other	82	17.4	(14.1–20.8)
Time since HIV diagnosis			
< 5 years	44	9.9	(7.0–12.7)
5–9 years	67	14.1	(10.6–17.5)
≥ 10 years	354	76.1	(72.1–80.0)
Total	465		

Table 3.2: Characteristics of patients – in the past 12 months – Medical Monitoring Project, San Francisco, 2013–2014.

Characteristic	No.	%	(95% CI)
Current San Francisco resident	388	83.2	(79.6–86.8)
Homeless at any time in the past 12 months	63	12.0	(9.0–15.0)
Incarcerated for longer than 24 hours	12	2.3	
Had health insurance coverage	465	100	(100.0-100.0)
Type of health insurance			
Private insurance	212	50.0	(45.6–54.3)
Ryan White	212	44.6	(39.7–49.4)
Medicaid	206	40.9	(35.8–45.9)
Medicare	153	32.6	(28.3–36.8)
Other public insurance	93	19.0	(15.6–22.4)
Tricare/CHAMPUS or VA	3	0.7	
Currently employed	213	48.7	(43.2–54.1)
Primary source of most financial support			
SSI or SSDI	195	39.2	(34.2–44.2)
Salary or wages	194	44.6	(39.7–49.5)
Other (including savings/investments/pensions)	58	12.4	(9.5–15.4)
Family, partner or friend(s)	17	3.8	(1.9–5.6)
Combined yearly household income (dollars)			
\$0 to \$9,999	49	9.8	(6.7–13.0)
\$10,000 to \$19,999	152	30.9	(26.5–34.5)
\$20,000 to \$39,999	80	17.1	(13.5–20.6)
\$40,000 to \$74,999	79	18.2	(14.6–21.8)
\$75,000 or more	103	24.4	(19.5–29.3)
Poverty level			
Above poverty level	354	78.5	(74.1–83.0)
At or below poverty level	109	21.5	(17.0–25.9)
Total	465		

Abbreviations:

CHAMPUS: Civilian Health and Medical Program of the Uniformed Services;

VA: Veterans Administration;

SSI: Supplemental Security Income; SSDI: Social Security Disability Insurance.

4 Clinical Characteristics

Sixty-eight percent of patients met the CDC clinical criteria for HIV Stage 3 (AIDS) [10], although only seven percent of patients had a geometric mean CD4 count less than 200 cells/ μ L in the prior 12 months (Table 4.1). Note that CD4 counts are from medical record abstraction. A large proportion of patients (86%) were virally suppressed on their most recent test and 80% were virally suppressed throughout the entire 12 months prior to the interview.

Table 4.1: Stage of disease, CD4+ lymphocyte counts, and viral suppression of patients during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Stage of disease			
Stage 1 ^a	40	8.8	(6.1–11.6)
Stage 2 ^b	109	23.6	(19.6–27.6)
Stage 3 ^c (AIDS)	316	67.6	(63.0–72.1)
Geometric mean CD4+ lymphocyte count			
0–199 cells/ μ L	30	6.7	(4.5–9.0)
200–349 cells/ μ L	62	13.5	(10.3–16.7)
350–499 cells/ μ L	77	17.6	(14.1–21.1)
≥ 500 cells/ μ L	267	62.2	(57.8–66.6)
Lowest CD4+ lymphocyte count			
0–49 cells/ μ L	8	1.6	
50–199 cells/ μ L	38	8.5	(6.0–11.1)
200–349 cells/ μ L	73	16.1	(12.8–19.5)
350–499 cells/ μ L	94	21.6	(17.4–25.8)
≥ 500 cells/ μ L	225	52.1	(47.4–56.9)
Viral suppression			
Most recent HIV viral load undetectable or <200 copies/mL	399	86.2	(82.7–89.8)
≥ 200 copies/mL or missing/unknown	66	13.8	(10.2–17.3)
Durable viral suppression			
All HIV viral load measurements undetectable or <200 copies/mL	369	79.9	(76.0–83.7)
Any HIV viral load measurement ≥ 200 copies/mL or missing/unknown	96	20.1	(16.3–24.0)
Total	465		

Abbreviations: CD4: CD4 T-lymphocyte count (cells/ μ L);

^aHIV stage 1: No AIDS-defining condition and either CD4 count of ≥ 500 cells/ μ L or CD4 percentage of total lymphocytes of ≥ 29 .

^bHIV stage 2: No AIDS-defining condition and either CD4 count of 200-499 cells/ μ L or CD4 percentage of total lymphocytes of 14-28.

^cHIV stage 3 (AIDS): Documentation of an AIDS-defining condition or either a CD4 count of <200 cells/ μ L or 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.

5 Use of Health Care Services

The Department of Health and Human Services recommends monitoring CD4+ lymphocyte levels every three to six months for the first two years of antiretroviral therapy (ART) and annually thereafter among stable patients [9]. These guidelines also call for monitoring the HIV RNA concentration (HIV viral load) every three to four months, which can be extended to every six months for patients who are clinically stable for two years. At least 45% of patients were appropriately monitored for viral load (i.e. had at least three tests in the past 12 months; Table 5.1). Assuming that all patients were clinically stable, 77% were appropriately monitored for viral load and 75% for CD4 counts. ART is recommended for all persons living with HIV regardless of clinical stage or immunostatus and prophylaxis against *Pneumocystis jiroveci pneumonia* (PCP) and *Mycobacterium avium complex* (MAC) is recommended for patients with CD4+ lymphocyte cell counts below 200 cells/ μ L and below 50 cells/ μ L, respectively [11, 12]. Ninety-six percent of patients had been prescribed ART (Table 5.1). Sixty-three percent of clinically eligible patients were prescribed PCP prophylaxis and 65% of clinically eligible patients were prescribed MAC prophylaxis.

Nearly 100% of patients had a routine place for receiving primary HIV health care (Table 5.2). Eighty-six percent of patients had been vaccinated against influenza in the past year. Travel time to their primary HIV care facility averaged 32 minutes.

Among patients who were sexually active in the previous 12 months, thirty-seven percent were tested for gonorrhea, chlamydia, and syphilis, with syphilis testing conducted most frequently (74% of patients, Table 5.3)

Sexual activity was self-reported in the interview component of the MMP and was defined as anal or vaginal intercourse. Testing for *Neisseria gonorrhoeae* was defined as documentation of a result from culture, gram stain, the nucleic acid amplification test (NAAT), or nucleic acid probe. *Chlamydia trachomatis* testing was defined as a result from culture, direct fluorescent antibody (DFA), enzyme immunoassay (EIA) or enzyme-linked immunoassay (ELISA), the nucleic acid amplification test (NAAT), or nucleic acid probe. Syphilis testing was defined as a result from non-treponemal syphilis tests (rapid plasma reagin [RPR], Venereal Disease Research Laboratory [VDRL]), treponemal syphilis tests (*Treponema pallidum* hemagglutination assay [TPHA], *T. pallidum* particle agglutination [TP-PA], microhemagglutination assay for antibody to *T. pallidum* [MHA-TP], fluorescent treponemal antibody absorbed [FTA-ABS] tests), or dark-field microscopy.

In 2013, MMP collected data for self-reported STI screening as well STI screening abstracted from medical records. The self-reported questions also included the last testing location. Almost twice as many patients self-reported gonorrhea and chlamydia screening compared to the data abstracted from the medical record (Table 5.4). Fifty-seven percent of sexually active patients reported that their last STI screening took place at a private doctor,

while 56% went to either an outpatient, community center, or an STD clinic.

Use of the emergency department (ED) was rare; in the 12 months prior to the interview four percent of patients were seen in the ED between two and four times (Table 5.5). Ninety percent of patients did not have any illnesses or injuries requiring care in the ED and only eight percent were hospitalized.

Table 5.1: 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, San Francisco, 2013–2014.

	No.	%	(95% CI)
Number of outpatient laboratory tests for CD4+ lymphocyte cell count or HIV viral load			
0	15	3.4	(1.6–5.2)
1	72	15.7	(12.2–19.1)
2	139	30.2	(26.0–34.4)
≥3	236	50.8	(46.1–55.5)
Number of outpatient laboratory tests for CD4+ lymphocyte count			
0	26	5.4	(3.2–7.5)
1	95	20.2	(16.5–23.9)
2	150	32.6	(28.1–37.0)
≥3	191	41.9	(37.1–46.6)
Number of outpatient laboratory tests for HIV viral load			
0	21	4.7	(2.4–7.0)
1	84	18.1	(14.5–21.7)
2	152	32.7	(28.3–37.2)
≥3	205	44.5	(39.7–49.3)
CD4+ lymphocyte count measured at least once	436	94.6	(92.5–96.8)
Viral load measured at least once every 6 months	316	68.5	(63.5–73.5)
Prescribed ART			
Yes	449	96.4	(94.7–98.1)
No	16	3.6	(1.9–5.3)
Prescribed PCP prophylaxis^a			
Yes	27	63.1	(48.2–78.1)
No	15	36.9	(21.9–51.8)
Prescribed MAC prophylaxis^b			
Yes	4	65.3	
No	2	34.7	
Total	465		

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

Abbreviations: CD4: CD4 T-lymphocyte count (cells/ μ L) or percentage; ART, antiretroviral therapy; PCP, *Pneumocystis pneumonia*; MAC, *Mycobacterium avium* complex

^aAmong patients with CD4 cell count <200 cells/ μ L.

^bAmong patients with CD4 cell count <50 cells/ μ L.

Table 5.2: Clinical services during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Has usual place for primary HIV care			
Yes	459	99.0	(98.1–100.0)
No	5	1.0	
Received influenza vaccine			
Yes	397	85.9	(82.7–89.2)
No	65	14.1	(10.8–17.3)
Participated in an HIV clinical trial			
Yes	32	6.8	(4.5–9.1)
No	431	93.2	(90.9–95.5)
Travel time to primary HIV care (minutes)			
Mean	32.2		
Median	22.8		
Range	2–330		
Total	465		

Table 5.3: Sexually transmitted infection testing during the 12 months before the interview among the total population versus those who reported sexual activity – Medical Monitoring Project, San Francisco, 2013–2014.

	Total population			Sexually active		
	N	%	(95% CI)	N	%	(95% CI)
Syphilis testing						
Yes, received testing	318	67.9	(63.3–72.6)	211	73.5	(68.4–78.7)
No testing documented	144	32.1	(27.4–36.7)	73	26.5	(21.3–31.6)
Gonorrhea testing						
Yes, received testing	147	32.3	(27.9–36.7)	118	42.0	(35.8–48.2)
No testing documented	315	67.7	(63.3–72.1)	166	58.0	(51.8–64.2)
Chlamydia testing						
Yes, received testing	146	32.0	(27.6–36.5)	117	41.6	(35.4–47.8)
No testing documented	316	68.0	(63.5–72.4)	167	58.4	(52.2–64.6)
Syphilis, gonorrhea and chlamydia testing						
Yes, received all tests	130	28.2	(24.0–32.4)	105	36.9	(30.9–42.9)
No, did not receive all tests	332	71.8	(67.6–76.0)	179	63.1	(57.1–69.1)
Total	465			286		

Table 5.4: Self-reported, abstracted STI testing and testing locations during the 12 months before the interview among the total population versus those who reported sexual activity – Medical Monitoring Project, San Francisco, 2013 only.

	Total population			Sexually active		
	N	%	(95% CI)	N	%	(95% CI)
Medical record abstraction						
Syphilis testing	158	67.7	(61.8–73.7)	108	73.0	(66.0–80.0)
Gonorrhea testing	65	27.7	(22.0–33.5)	52	35.1	(26.8–43.5)
Chlamydia testing	65	27.7	(22.0–33.5)	52	35.1	(26.8–43.5)
Received all STI tests	58	24.8	(19.3–30.3)	47	31.9	(23.9–39.8)
Self reported STI testing						
Syphilis testing	137	61.1	(54.9–67.2)	101	70.0	(62.8–77.2)
Gonorrhea testing	119	52.9	(46.4–59.4)	92	63.5	(55.2–71.8)
Chlamydia testing	109	49.3	(42.7–55.9)	85	60.0	(51.5–68.5)
Received all STI tests	107	23.8	(20.6–27.1)	83	55.6	(47.3–63.9)
Most recent self-reported testing location						
Private doctor	83	60.6	(53.3–67.9)	56	56.9	(47.7–66.2)
Outpatient center	30	18.0	(12.4–23.6)	25	20.9	(14.0–27.7)
Community health center	25	14.9	(8.4–21.4)	18	15.0	(6.6–23.5)
STD clinic	22	15.8	(9.6–22.0)	20	20.2	(12.0–28.4)
Health department	3	1.7		2	1.7	
Emergency room	2	1.1		1	0.7	
Total	232			147		

Table 5.5: Emergency department or urgent care clinic use and hospital admission during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Number of visits to emergency department or urgent care clinic			
0	408	89.5	(86.5–92.3)
1	20	4.0	(2.3–5.6)
2–4	22	4.4	(2.5–6.3)
≥5	11	2.2	
Number of hospital admissions			
0	422	92.1	(89.6–94.6)
1	23	4.7	(2.8–6.6)
2–4	11	2.1	
≥5	5	1.1	
Total	465		

6 Self-reported Antiretroviral Medication Use and Adherence

Ninety-six percent of patients reported current ART use (Table 6.1). Among patients who reported multiple sources of ART payment, the three most common ways ART was paid for were through private insurance (43%), by the AIDS Drug Assistance Program (41%) and out-of-pocket (44%); Eighty-six percent of patients reported adhering to their ART dose in the past 72 hours and 72% also reported adherence to the dosing schedule in this same period. Although recent adherence was high, 67% of patients reported ever missing a dose of ART since initiation of ART. Eighty-six percent of patients reported rarely or never experiencing ART side effects (Table 6.2).

Confidence in their ability to comply with ART and the ability of ART to positively impact their health was reported by a large proportion of patients. Sixty-five percent indicated that they were certain that incorrect use of ART leads to drug resistance (Table 6.3).

The most common reasons for missing a dose were forgetting to take the medication or a change in their daily routine (Table 6.4).

Table 6.1: Antiretroviral therapy use – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Ever taken antiretroviral medications (ART)	458	98.6	(97.5–99.7)
Currently taking ART	446	96.0	(94.1–97.9)
Main reason for never taking ART			
Doctor advised to delay treatment	3	51.8	
Participant believed he/she didn't need medications because felt healthy/believed HIV results were good	1	18.0	
Other	2	30.2	
Main reason for not currently taking ART, among those persons with a history of ART use			
Due to side effects of medication	3	21.2	
Participant believed he/she didn't need medications because felt healthy/believed HIV results were good	2	19.9	
Money or insurance issues	2	26.3	
Doctor advised to delay treatment	1	7.3	
Drinking or using drugs	1	6.5	
Other	5	31.2	
Total	465		
Abbreviations: ART, antiretroviral therapy			

Table 6.2: Antiretroviral payment source and adherence – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
ART medications paid for by^a			
AIDS Drug Assistance Program (ADAP)	188	41.1	(36.2–46.0)
Out of pocket	182	43.5	(37.9–49.2)
Private health insurance	174	43.2	(38.5–47.8)
Medicaid	148	30.4	(25.4–35.4)
Medicare	90	20.2	(16.4–24.0)
Other public insurance	17	3.3	(1.7–5.0)
Other unspecified insurance	15	3.6	(1.8–5.3)
AIDS service organizations	2	0.4	
Clinical trial or drug study	3	0.7	
100% ART medication adherence (during preceding 72 hours)			
By dose	375	86.4	(83.2–89.7)
By schedule	322	72.0	(67.7–76.4)
By special instructions	174	75.8	(70.3–81.3)
Troubled by ART side effects			
Never	289	64.6	(59.8–69.4)
Rarely	90	20.7	(16.3–25.0)
About half the time	29	6.6	(4.3–8.9)
Most of the time	19	4.2	(2.4–6.0)
Always	16	3.6	(1.8–5.4)
Troubled by ART side effects half of the time or more	64	14.5	(11.4–17.6)
Any drug holiday (during past 12 months)	42	9.0	(6.3–11.6)
Ever missed a dose of ART medications	258	66.8	(61.7–72.0)
Total	465		

Abbreviations: ART: antiretroviral therapy

^aParticipants could select more than one ART payment source.

Table 6.3: Beliefs among patients currently taking antiretroviral medications – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Will be able to take all or most of medication as directed			
Not at all sure	6	1.2	
Somewhat sure	25	5.4	(3.4–7.4)
Very sure	136	29.5	(25.5–33.6)
Extremely sure	279	63.9	(59.6–68.1)
Medication will have a positive effect on health			
Not at all sure	6	1.3	
Somewhat sure	40	9.0	(6.3–11.7)
Very sure	161	35.9	(31.4–40.3)
Extremely sure	239	53.8	(49.3–58.4)
HIV will become resistant to HIV medications if medication is not taken exactly as instructed			
Not at all sure	53	12.1	(9.0–15.1)
Somewhat sure	104	23.5	(19.6–27.4)
Very sure	126	28.9	(24.6–33.2)
Extremely sure	156	35.6	(31.2–39.9)
Total	446		

Table 6.4: Reasons for missed antiretroviral therapy dose among those ever missing a dose – Medical Monitoring Project, San Francisco, 2013–2014.

Reason for missing last ART dose	No.	%	(95% CI)
Forgot to take them	146	57.8	(51.1–64.6)
Change in daily routine including travel	47	18.4	(13.1–23.8)
Felt sick or tired	34	12.6	(8.6–16.7)
Problem with prescription or refill	15	5.5	(2.7–8.3)
Drinking or using drugs	9	3.5	
Felt depressed or overwhelmed	5	1.9	
Due to side effects	4	1.6	
Money or insurance issues	3	1.2	
Had too many pills to take	2	0.7	
Homeless ^a	2	0.6	
Total	258		

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

7 Depression

Depression was measured by asking patients to complete the eight-item Patient Health Questionnaire (PHQ-8) algorithm based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria [13]. Nine percent of patients met the criteria for major depression, and ten percent met the criteria for other, less severe depression (Table 7.1). "Major depression" and "Other depression", were defined according to criteria from the Diagnostic and Statistical Manual of Mental Disorders, 4th ed. (DSM-IV-TR).

Table 7.1: Depression during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Depression based on DSM-IV criteria^a			
No depression	363	80.8	(77.4–84.2)
Other depression	46	10.0	(7.2–12.8)
Major depression	45	9.2	(6.5–11.9)
Moderate or severe depression (PHQ-8 score >10)			
Yes	99	20.8	(17.4–24.3)
No	355	79.2	(75.7–82.6)
Total	465		
^a "Other depression" was defined as having 2-4 symptoms of depression; "Major depression" was defined as having at least 5 symptoms of depression.			

8 Substance Use

The number of patients reporting lifetime cigarette smoking was high (59%). Current use was reported by 29% of patients and 21% reported smoking daily (Table 8.1). Alcohol use was reported by 75% of patients and 42% reported daily or weekly drinking (Table 8.2). One alcoholic beverage was defined as a 12-ounce beer, 5-ounce glass of wine, or 1.5-ounce shot of liquor. Thirty percent of patients reported drinking alcohol before or during sex. About twenty-one percent of patients reported binge drinking in the last 30 days with an average of one day of binge drinking in the past month. A binge drinking episode was defined as having more than 5 alcoholic beverages for men or more than 4 drinks for women at one sitting. Heavy drinking was defined as patients who drank, on average, >2 alcoholic beverages (>1 for women) per day.

Non-injection drug use was reported by 45% of patients with 27% reporting drug use before or during sex (Table 8.3). The most commonly used drugs were marijuana (36%), amyl nitrite (17%), and crystal methamphetamine (14%). Nine percent reported use of prescription narcotics such as codeine. Injection drug use in the 12 months before the interview was reported by 9% of patients and among these, 91% injected before or during sex (Table 8.4).

Table 8.1: Cigarette smoking – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Smoked ≥ 100 cigarettes (lifetime)			
Yes	280	59.0	(54.4–63.6)
No	183	41.0	(36.4–45.6)
Smoking status			
Never smoker	183	41.0	(36.4–45.6)
Former smoker	136	29.9	(25.6–34.2)
Current smoker	144	29.1	(24.6–33.5)
Frequency of cigarette smoking (during past 12 months)			
Never	319	70.9	(66.5–75.4)
Daily	103	20.6	(16.9–24.4)
Weekly	17	3.4	(1.8–5.1)
Monthly	12	2.5	(1.0–3.9)
Less than monthly	12	2.6	
Total	465		

Table 8.2: Alcohol use during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Any alcohol used			
Yes	343	74.7	(70.2–79.1)
No	120	25.3	(20.9–29.8)
Frequency of alcohol use			
Daily	57	12.5	(9.4–15.5)
Weekly	131	29.4	(24.5–34.3)
Monthly	54	11.4	(8.5–14.3)
Less than monthly	101	21.3	(17.7–25.0)
Never	120	25.3	(20.9–29.8)
Alcohol use before or during sex			
Yes	133	30.1	(25.4–34.8)
No	323	69.9	(65.2–74.6)
Alcohol use (during past 30 days)			
Yes	287	63.3	(58.7–67.8)
No	176	36.7	(32.2–41.3)
Binge drinking (during past 30 days)			
Yes	95	20.8	(17.0–24.5)
No	367	79.2	(75.5–83.0)
Heavy drinking (during past 30 days)			
Yes	23	5.1	(3.0–7.1)
No	439	94.9	(92.9–97.0)
Days ≥ 1 drink consumed			
(estimated number during past 30 days)			
Mean	10.3		
Median	5.2		
Range	1–30		
Drinks consumed per day			
(estimated number during past 30 days)			
Mean	2.5		
Median	1.6		
Range	1–17		
Binge drinking days			
(estimated number during past 30 days)			
Mean	1.3		
Median	0		
Range	0–30		
Total	465		

Table 8.3: Non-injection drug use during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Use of any noninjection drugs^a	208	44.9	(40.3–49.5)
Use of any noninjection drugs before or during sex	133	29.6	(25.5–33.7)
Non-injection drugs used by participant			
Marijuana	165	35.8	(31.3–40.3)
Amyl nitrate ("Poppers")	74	16.6	(13.1–20.1)
Crystal methamphetamine ("Tina, Crack, Ice")	68	14.0	(10.9–17.1)
Cocaine that is smoked or snorted	43	9.8	(7.0–12.5)
GHB	42	9.1	(6.4–11.8)
X or Ecstasy	31	7.1	(4.5–9.7)
Downers (e.g. Valium, Ativan, or Xanax)	22	4.6	(2.8–6.5)
Crack	22	4.1	
Painkillers (e.g. Oxycontin, Vicodin, or Percocet)	20	4.2	(2.5–5.9)
Special k (ketamine)	20	4.3	(2.4–6.1)
Amphetamines ("speed")	19	4.0	(2.1–5.8)
Hallucinogens such as LSD or mushrooms	18	4.2	(2.3–6.2)
Heroin/opium that is smoked or snorted	5	0.9	
Steroids	5	1.1	
Total	465		

^aIncludes 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 8.4: Injection drug use during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Use of any injection drugs	42	8.5	(5.9–11.0)
Use of any injection drugs before or during sex^a	32	90.9	(81.3–100.0)
Injection drugs used by participant			
Crystal methamphetamine ("Tina, Crack, Ice")	37	7.4	(5.0–9.7)
Heroin	11	2.2	
Amphetamines ("Speed")	3	0.6	
Heroin and cocaine ("Speedball")	3	0.6	
Crack	2	0.4	
Cocaine	1	0.2	
Total	465		

Abbreviations: GHB: gamma hydroxybutyrate; LSD: lysergic acid diethylamide.

^aAmong patients who inject any drug.

9 Gynecologic and Reproductive Health

Twenty-seven women were interviewed during the 2013 and 2014 MMP cycles. Twenty-nine percent reported receiving HIV care at a gynecological clinic (Table 9.1). Eighty-two percent reported a Papanicolaou smear in the past 12 months. Twenty-one percent had been pregnant since time of HIV diagnosis.

Table 9.1: Gynecological history and reproductive health among women during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Received HIV care at a gynecological clinic			
Yes	8	28.6	(12.1–45.0)
No	18	71.4	(51.2–85.5)
Papanicolaou (Pap) smear (during past 12 months)			
Yes	22	82.3	(65.3–99.3)
No	4	17.7	
Pregnant since HIV diagnosis			
Yes	6	21.0	
No	21	79.0	(63.2–94.7)
Total	27		

10 Sexual Behavior

Sixty-two percent of patients reported sexual activity (any vaginal or anal sex) in the 12 months preceding the interview. Thirty-seven percent of patients reported condomless sex with at least one HIV negative or unknown HIV status partner. The median number of partners in the previous 12 months was one for men who have sex only with women (MSW), and women who have sex with men and transgender persons (WSM), while the median number of partners for men who have sex with men was three (MSM) (Table 10.1).

A high proportion of patients (86%) were men who have sex with men (including men who have sex with both men and women) (Table 10.1). Men who have sex with men were defined as men who reported sex with men during the 12 months preceding the interview, regardless of whether they also reported sex with women or if no sexual activity was reported, men who identified as homosexual, gay, or bisexual. Among MSM, 62.5% who reported having any sexual activity in the last 12 months (Table 10.1). No women who reported having sex only with women.

Men who exclusively have sex with women (MSW) were defined as men who reported sex only with women during the 12 months preceding the interview, or if no sexual activity was reported, men who identified as heterosexual or straight. Fifty-eight percent of MSW reported sexual activity (Table 10.1).

Women who have sex with men (WSM) were defined as women who reported sex with men during the 12 months preceding the interview, regardless of whether they also reported sex with women or if no sexual activity was reported, women who identified as heterosexual, straight, or bisexual. Sixty-seven percent of WSM reported sexual activity (Table 10.1).

When looking at a cascade of sexual risk behaviors, approximately 37% of MSM and 35% of WSM reported condomless sex with partners who were either HIV negative or whose HIV status was unknown. Among patients with more than 10 partners in the previous 12 months, more than half reported condomless sex with partners who were either HIV negative or whose HIV status was unknown (Table 10.2).

Among all patients interviewed, 50% strongly disagreed with the statement "having an undetectable viral load means I can worry less about having to use a condom" (Table 10.3). Forty-six percent strongly disagreed with the statement "if I have an undetectable viral load I am more likely to have unprotected sex". Forty-two percent strongly disagreed with the statement "if my partner tells me he or she is HIV-positive, we don't have to worry about using condoms". Thirty-six percent strongly disagreed with the statement "if my partner tells me he or she is HIV-positive, I am more likely to have unprotected sex with him or her".

Table 10.1: Sexual behavior, gender identity and sexual activity during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Any sexual activity	286	62.2	(57.9–66.5)
Condomless sexual activity	199	72.6	(67.2–78.0)
Condomless sex with HIV negative or unknown partner^a	100	36.8	(30.9–42.7)
Classification of sexual behavior and gender identity			
MSM ^b	392	85.7	(81.0–90.4)
MSW ^c	33	6.3	(3.0–9.6)
WSM ^d	25	5.6	(3.4–7.8)
Transgender	12	2.3	
Any sexual activity among:			
MSM	242	62.5	(57.8 - 67.3)
MSW	19	58.2	(41.1 - 75.3)
WSM	17	67.0	(47.1 - 87.0)
Transgender	8	66.5	(57.9–66.5)
Estimated number of sex partners^e among:			
MSM			
Mean	11.7		
Median	3.2		
Range	1–200		
MSW			
Mean	3.1		
Median	1.0		
Range	1 – 30		
WSM			
Mean	1.4		
Median	1.0		
Range	1–4		
Transgender			
Mean	21.3		
Median	1.1		
Range	1–86		
Total	465		

Abbreviation: MSM: men who have sex with men.

^aCondomless sex with partners who were either HIV negative or whose HIV status was unknown.

^bMSM only, and men who have sex with men and women.

^cMen who have sex with women only.

^dWomen who have sex with men only.

^eAmong sexually active patients.

Table 10.2: Sexual risk behavior cascade - by type and number of partners during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

	Any sexual activity ^a		Condomless sex ^b		Condomless sex with partners of neg./unknown serostatus ^c	
	No.	%	No.	%	No.	%
Sexual behavior						
MSM	242	100	181	74.8	90	37.2
MSW	19	100	5	26.3	2	10.5
WSM	17	100	10	58.8	6	35.3
Transgender	8	100	3	37.5	2	25.0
Number of partners						
1 Partner	98	100	54	55.5	18	18.4
2–5 Partners	90	100	65	72.2	33	36.7
6–10 Partners	38	100	29	76.3	18	47.4
> 10 Partners	60	100	51	85.0	31	51.7
Total	286	100	199	69.6	100	50.3

^a Vaginal or anal intercourse – oral sex is not included.

^b Unprotected vaginal or anal intercourse

^c Those who reported condomless sex with partners of unknown or negative serostatus during the 12 months before the interview.

Table 10.3: Attitudes towards condomless sex among all patients and among those who reported condomless sex with partners of unknown or negative serostatus during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

	All patients			Condomless sex with partners of neg./unknown serostatus		
	No.	%	(95% CI)	No.	%	(95% CI)
An undetectable viral load means						
I can worry less about using a condom						
Strongly disagree	231	49.9	(45.4–54.4)	20	19.4	(11.8–27.0)
Disagree	56	12.5	(9.4–15.6)	13	13.6	(6.8–20.3)
Neutral	55	11.6	(8.7–14.5)	15	14.3	(7.8–20.8)
Agree	69	15.4	(12.1–18.7)	26	26.4	(17.3–35.6)
Strongly agree	47	10.6	(7.7–13.5)	25	26.3	(17.7–35.0)
If I have an undetectable viral load,						
I am more likely to have unprotected sex						
Strongly disagree	210	45.5	(40.7–50.4)	11	10.3	(4.4–16.3)
Disagree	54	11.6	(8.5–14.7)	9	8.6	
Neutral	50	10.8	(8.0–13.6)	8	7.9	
Agree	89	19.9	(16.2–23.7)	43	44.3	(33.9–54.7)
Strongly agree	54	12.1	(9.0–15.2)	28	28.8	(19.6–38.0)
If my partner tells me he/she is HIV-positive,						
we don't have to worry about condoms						
Strongly disagree	195	42.0	(37.4–46.7)	11	11.8	
Disagree	75	16.4	(12.9–19.9)	21	20.1	(12.2–28.0)
Neutral	49	10.7	(7.9–13.5)	9	8.7	
Agree	87	19.3	(15.7–23.0)	35	36.3	(27.0–45.7)
Strongly agree	54	11.5	(8.8–14.2)	24	23.1	(15.2–28.0)
If my partner tells me he/she is HIV-positive,						
I am more likely to have unprotected sex						
Strongly disagree	167	36.1	(31.7–40.6)	7	6.8	
Disagree	37	8.0	(5.5–10.5)	8	7.3	
Neutral	52	11.3	(8.4–14.2)	13	13.0	(6.5–19.4)
Agree	94	20.6	(16.8–24.5)	26	26.9	(17.6–36.3)
Strongly agree	109	23.9	(19.9–27.9)	46	46.0	(35.4–56.7)
Total	247			46		

11 Met and Unmet Need for Ancillary Services

The most frequent ancillary services received by patients were dental care (68%), eye or vision services (49%) and Supplemental Security Income or Social Security Disability Insurance (47%) (Table 11.1). Twenty-two percent of patients reported needing but not receiving dental care, while 21% reported needing but not receiving eye or vision services and 10% also needed but did not receive HIV peer support.

Table 11.1: Met and unmet needs for ancillary services during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

Service ^a	Received service			Needed but did not receive service			Did not receive or need service		
	No.	%	(95% CI)	No.	%	(95% CI)	No.	%	(95% CI)
Dental care	310	68.2	(64.3–72.2)	107	22.3	(18.6–26.0)	45	9.2	(6.7–11.7)
Eye or vision services	215	48.7	(44.2–53.2)	103	21.0	(17.3–24.7)	145	30.2	(26.2–34.3)
SSI/SSDI ^b	233	47.2	(42.1–52.3)	14	2.8	(1.3–4.2)	216	50.0	(44.8–55.1)
ADAP ^c	201	43.2	(38.5–47.9)	11	2.5	(1.1–3.9)	237	54.1	(49.2–58.9)
HIV case management	183	37.1	(32.8–41.5)	27	5.8	(3.9–7.6)	249	56.6	(52.1–61.1)
Mental health services	148	31.3	(27.2–35.4)	42	8.8	(6.1–11.4)	271	59.7	(55.4–64.1)
Meal or food services	125	24.9	(20.8–28.9)	27	5.6	(3.5–7.7)	311	69.5	(65.4–73.7)
HIV prevention counseling	102	21.6	(17.8–25.4)	4	0.8		357	77.6	(73.8–81.5)
Transportation services	92	18.8	(15.5–22.2)	42	8.5	(6.1–10.9)	330	72.7	(68.9–76.4)
HIV peer group support	72	14.9	(11.2–18.7)	48	10.2	(7.4–13.1)	343	74.8	(70.4–79.2)
Drug adherence support	68	13.8	(10.5–17.0)	16	3.2	(1.7–4.8)	380	83.0	(79.6–86.4)
Shelter or housing services	65	12.8	(9.9–15.7)	29	5.9	(3.9–7.9)	369	81.3	(77.7–84.9)
Drug or alcohol counseling	51	10.4	(7.8–13.0)	15	3.2	(1.6–4.8)	398	86.4	(83.5–89.4)
Home health services	43	8.6	(5.7–11.4)	19	3.8	(2.2–5.5)	402	87.6	(84.4–90.7)
Interpreter services	9	1.9		2	0.4		453	97.7	(96.3–99.1)
Domestic violence services	4	0.7		9	2.0		449	97.3	(95.7–98.8)
Total	465			465			465		

^aPatients could report receiving or needing more than one service.

^bPublic benefits including Supplemental Security Income or Social Security Disability Insurance.

^cMedicine through the AIDS Drug Assistance Program.

12 Prevention Activities

One-on-one prevention-related conversations with a health care provider 12 months prior to the interview were reported by 32% of patients (Table 12.1). Sixteen percent reported one-on-one prevention-related conversations with a social worker in the 12 months prior to interview. Small group prevention counseling was reported by 12% of patients. Half of patients received free condoms from someone other than a friend, relative or sex partner.

Table 12.1: Prevention services^a received during the 12 months before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
One-on-one conversation with physician, nurse, or other health care worker			
Yes	153	32.1	(27.9–36.3)
No	310	67.9	(63.7–72.1)
One-on-one conversation with outreach worker, counselor, or prevention program worker			
Yes	77	15.9	(12.3–19.4)
No	387	84.1	(80.6–87.7)
Organized session involving a small group of people			
Yes	59	12.1	(8.9–15.3)
No	403	87.9	(84.7–91.1)
Free condoms			
Yes	233	49.4	(44.3–54.4)
No	231	50.6	(45.6–55.7)
Source of free condoms^b			
General health clinic	101	40.0	(34.0–46.0)
Social venue	97	42.6	(35.7–49.5)
Community-based organization	76	31.7	(25.9–37.5)
Special event	56	25.3	(19.4–31.2)
Sexually transmitted disease clinic	17	7.8	(4.1–11.5)
Outreach organization for persons who inject drugs	10	3.9	
Family Planning Clinic	2	0.8	
Total	465		

^aPatients could report receiving or needing more than one service.

^bAmong patients who received free condoms.

13 Internalized Stigma and Discrimination

Fifty-two percent of patients acknowledged having difficulty telling others about having HIV and 46% indicated that they hid their HIV status from others (Table 13.1). Feeling guilty or ashamed of having HIV was reported by 24% and 20%, respectively. Twenty-four percent of patients reported that someone in the health care system had been hostile or disrespectful toward them since their HIV diagnosis. Thirty-two percent of patients reported any discrimination since testing positive for HIV, and among those reporting discrimination, 77% reported discrimination because of their sexual orientation and/or practices.

Table 13.1: Internalized HIV stigma and discrimination experiences – Medical Monitoring Project, San Francisco, 2013–2014.

	No.	%	(95% CI)
Patient "agreed" to the following:			
It is difficult to tell people about my HIV infection.	235	52.1	(47.1–57.2)
I hide my HIV status from others.	203	45.5	(40.8–50.3)
I feel guilty that I am HIV positive.	116	24.4	(20.5–28.2)
I am ashamed that I am HIV positive.	93	20.0	(16.3–23.6)
Being HIV positive makes me feel dirty.	87	18.5	(15.0–21.9)
I sometimes feel worthless because I am HIV positive.	85	17.9	(14.3–21.5)
No. of stigma questions participant responded as "agreed" to			
0	154	33.7	(29.6–37.8)
1	82	17.8	(14.4–21.2)
2	96	21.2	(17.5–24.9)
3	47	10.4	(7.6–13.3)
4	29	6.3	(4.0–8.5)
5	18	3.9	(2.0–5.8)
6	32	6.6	(4.1–9.1)
Number of stigma questions "agreed"			
Mean	1.8		
Median	1.0		
Range	0–6		
Has anyone in the health care system done any of the following to you since testing positive for HIV?			
Exhibited hostility or a lack of respect toward you?	113	24.3	(20.1–28.4)
Given you less attention than other patients?	69	15.1	(11.8–18.5)
Refused you service?	49	10.8	(7.7–13.9)
Experienced any discrimination since testing positive for HIV			
	149	32.0	(27.2–36.7)
Did the discrimination occur because of^a...			
Your HIV infection?	94	76.8	(69.7–84.0)
Your sexual orientation or practices?	61	51.9	(42.7–61.0)
Your drug injecting habit?	16	11.4	(6.2–16.5)
Your race or ethnicity?	14	10.7	(4.8–16.6)
Your gender?	9	6.8	(2.4–11.1)
How comfortable are you discussing your health concerns with your medical provider?			
Completely	382	83.5	(80.3–86.7)
Mostly	52	10.7	(8.0–13.5)
Moderately	17	3.4	(1.8–5.0)
A little	3	0.6	
Not at all	9	1.7	
Total	465		

^aPercent out of those who experienced any discrimination.

14 Food Insecurity

The Household Food Insecurity Access Scale (HFIAS), has been adapted from USAID's Food and Nutrition Technical Assistance (FANTA) project to estimate the prevalence of food insecurity. Among the 132 (27.1%) patients who reported any food insecurities in the four weeks before the interview, those most affected were transgender patients (65.8%) and patients living at or below poverty threshold (49.2%) (Table 14.1).

The main concerns regarding food security were a lack of variety which was reported by 21.5% and having to eat foods they did not want to eat, reported by 20.4% (Table 14.2).

Table 14.1: Food Insecurity during the last four weeks before the interview by gender, ethnicity and poverty status – Medical Monitoring Project, San Francisco, 2013–2014.

	Food secure			Any food insecurity		
	No.	%	(95% CI)	No.	%	(95% CI)
Gender						
Male	315	74.4	(70.4–78.5)	114	25.6	(21.5–29.6)
Female	15	60.0	(41.9–78.0)	12	40.0	(22.0–58.1)
Transgender	3	34.2		6	65.8	(30.8–100.0)
Race/Ethnicity						
White	102	75.5	(68.0–83.1)	35	24.5	(16.9–32.0)
Black or African American	15	59.0	(40.8–77.2)	11	41.0	(22.8–59.2)
Hispanic or Latino	33	66.7	(52.4–81.0)	17	33.3	(19.0–47.6)
Asian or Pacific Islander	8	72.4		3	27.6	
Multiracial or Other	5	84.3		1	15.7	
Poverty						
Above poverty threshold	277	79.1	(75.0–83.2)	77	20.9	(16.8–25.0)
At or below poverty threshold	55	50.8	(41.3–60.3)	54	49.2	(39.7–58.7)
Total	465					

Table 14.2: Household Food Insecurity Access Scale (HFIAS) during the last four weeks before the interview – Medical Monitoring Project, San Francisco, 2013–2014.

Because of a lack of resources ...	No.	%	(95% CI)
Did you worry about not having enough food?			
Yes	82	17.3	(13.8–20.8)
No	381	82.7	(79.2–86.2)
Were you unable to eat preferred foods?			
Yes	98	20.4	(16.8–24.0)
No	365	79.6	(76.1–83.2)
Did you limit variety of foods?			
Yes	103	21.5	(17.8–25.2)
No	360	78.5	(74.8–82.2)
Did you eat foods you really did not want eat?			
Yes	78	16.1	(12.7–19.4)
No	385	83.9	(80.6–87.3)
Did you eat smaller meals?			
Yes	63	12.7	(9.7–15.8)
No	400	87.3	(84.2–90.3)
Did you eat fewer meals a day?			
Yes	60	12.1	(9.2–15.1)
No	402	87.9	(85.0–90.8)
Was there ever no food to eat of any kind?			
Yes	31	6.4	(4.2–8.5)
No	432	93.6	(91.5–95.8)
Did you go to sleep at night hungry?			
Yes	37	7.1	(5.0–9.2)
No	426	92.9	(90.8–95.0)
Did you go a whole day and night without eating?			
Yes	21	4.1	(2.4–5.8)
No	442	95.9	(94.2–97.6)
Total	465		

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