

HIV | SURVEILLANCE REPORT

SPECIAL REPORT

**Individual-level Social Determinants of
Health and Quality of Life Among
Persons With Diagnosed HIV Infection
Medical Monitoring Project, United States,
2021 Data Cycle (June 2021–May 2022)**



Centers for Disease
Control and Prevention
National Center for HIV,
Viral Hepatitis, STD, and
TB Prevention

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MMP project areas—<https://www.cdc.gov/hiv/statistics/systems/mmp/projectareas.html>

Commentary	5
Figures	
1 National HIV/AIDS Strategy indicators among adults with diagnosed HIV—Medical Monitoring Project, United States, 2021	6
2 Household poverty level of adults with diagnosed HIV—Medical Monitoring Project, United States, 2015–2021	7
3 Health insurance or coverage among adults with diagnosed HIV—Medical Monitoring Project, United States, 2015–2021	8
4 Disability among adults with diagnosed HIV—Medical Monitoring Project, United States, 2015–2021	9
5 HIV health care discrimination, limited English proficiency, experiences with physical violence by an intimate partner or forced sex, and incarceration among adults with diagnosed HIV—Medical Monitoring Project, United States, 2021	10
6 Good or better self-rated health among adults with diagnosed HIV, by age, gender, sexual orientation, and race/ethnicity—Medical Monitoring Project, United States, 2021	11
7 Unmet needs for services from a mental health professional among adults with diagnosed HIV with a need for services, by age, gender, sexual orientation, and race/ethnicity—Medical Monitoring Project, United States, 2021	12
8 Unstable housing or homelessness among adults with diagnosed HIV, by age, gender, sexual orientation, and race/ethnicity—Medical Monitoring Project, United States, 2021	13
9 Unemployment among adults with diagnosed HIV, by age, gender, sexual orientation, and race/ethnicity—Medical Monitoring Project, United States, 2021	14
10 Hunger or food insecurity among adults with diagnosed HIV, by age, gender, sexual orientation, and race/ethnicity—Medical Monitoring Project, United States, 2021	15
11 Median HIV stigma scores among adults with diagnosed HIV, by age, gender, sexual orientation, and race/ethnicity—Medical Monitoring Project, United States, 2021	16
12 Good or better self-rated health among adults with diagnosed HIV, by NHAS priority population—Medical Monitoring Project, United States, 2021	17
13 Unmet needs for services from a mental health professional among adults with diagnosed HIV who needed services, by NHAS priority population—Medical Monitoring Project, United States, 2021	18
14 Unstable housing or homelessness among adults with diagnosed HIV, by NHAS priority population—Medical Monitoring Project, United States, 2021	18
15 Unemployment among adults with diagnosed HIV, by NHAS priority population—Medical Monitoring Project, United States, 2021	19
16 Hunger or food insecurity among adults with diagnosed HIV, by NHAS priority population—Medical Monitoring Project, United States, 2021	19
17 Median HIV stigma scores among adults with diagnosed HIV, by NHAS priority population—Medical Monitoring Project, United States, 2021	20
18 Good or better self-rated health among adults with diagnosed HIV, by jurisdiction—Medical Monitoring Project, United States, 2021	21
19 Unmet needs for services from a mental health professional among adults with diagnosed HIV who needed services, by jurisdiction—Medical Monitoring Project, United States, 2021	22
20 Unstable housing or homelessness among adults with diagnosed HIV, by jurisdiction—Medical Monitoring Project, United States, 2021	23
21 Unemployment among adults with diagnosed HIV, by jurisdiction—Medical Monitoring Project, United States, 2021	24
22 Hunger or food insecurity among adults with diagnosed HIV, by jurisdiction—Medical Monitoring Project, United States, 2021	25
23 Median HIV stigma score among adults with diagnosed HIV, by jurisdiction—Medical Monitoring Project, United States, 2021	26

24	Prevalence of adverse clinical outcomes among adults with diagnosed HIV, by self-rated health—Medical Monitoring Project, United States, 2021	27
25	Prevalence of adverse clinical outcomes among adults with diagnosed HIV, by whether or not persons experienced unmet needs for mental health services among those who needed them—Medical Monitoring Project, United States, 2021	28
26	Prevalence of adverse clinical outcomes among adults with diagnosed HIV, by whether or not persons experienced unstable housing or homelessness—Medical Monitoring Project, United States, 2021	29
27	Prevalence of adverse clinical outcomes among adults with diagnosed HIV, by whether or not persons were unemployed—Medical Monitoring Project, United States, 2021	30
28	Prevalence of adverse clinical outcomes among adults with diagnosed HIV, by whether or not persons experienced hunger or food insecurity—Medical Monitoring Project, United States, 2021	31
29	Median HIV stigma scores among adults with diagnosed HIV, by selected HIV outcomes—Medical Monitoring Project, United States, 2021	32

Tables

1	Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by cycle year—Medical Monitoring Project, United States, 2015–2021	33
2a	Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by age—Medical Monitoring Project, United States, 2021	35
2b	Relative and absolute differences in individual-level social determinants of health and quality of life among adults with diagnosed HIV, by age—Medical Monitoring Project, United States, 2021	37
3a	Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by current gender identity—Medical Monitoring Project, United States, 2021	39
3b	Relative and absolute differences in individual-level social determinants of health and quality of life among adults with diagnosed HIV, by current gender identity—Medical Monitoring Project, United States, 2021	41
4a	Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by sexual orientation—Medical Monitoring Project, United States, 2021	43
4b	Relative and absolute differences in individual-level social determinants of health and quality of life among adults with diagnosed HIV, by sexual orientation—Medical Monitoring Project, United States, 2021	45
5a	Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by racial/ethnic identity—Medical Monitoring Project, United States, 2021	47
5b	Relative and absolute differences in individual-level social determinants of health and quality of life among adults with diagnosed HIV, by racial/ethnic identity—Medical Monitoring Project, United States, 2021	49
6	Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by National HIV/AIDS Strategy priority populations—Medical Monitoring Project, United States, 2021	51
7	National HIV/AIDS Strategy indicators among adults with diagnosed HIV, by other individual-level social determinants of health—Medical Monitoring Project, United States, 2021	53
8	National HIV/AIDS Strategy indicators among adults with diagnosed HIV, by project area—Medical Monitoring Project, United States, 2021	55
9	Key clinical outcomes among adults with diagnosed HIV, by individual-level social determinants of health and quality of life—Medical Monitoring Project, United States, 2021	56
10	Median HIV stigma scores by key clinical outcomes among adults with diagnosed HIV—Medical Monitoring Project, 2021	58
Technical Notes and Appendix		59

Commentary

Social determinants of health (SDOH) are the “conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks” [1]. Addressing social determinants of health among persons with diagnosed HIV (PWH) is a national priority highlighted in the White House’s National HIV/AIDS Strategy (NHAS), as it is essential for reducing disparities in health outcomes and achieving health equity among persons with HIV [2, 3], particularly among priority groups, including: gay, bisexual, and other men who have sex with men (MSM) (in particular, Black, Latino, and American Indian/Alaska Native men); Black women; transgender women; youths aged 13–24 years; and persons who inject drugs. Further, NHAS added several indicators in 2022 based on community input to monitor quality of life (QoL) among PWH that are related to SDOH, including aspects of physical health (i.e., self-reported health status), mental health (i.e., unmet needs for mental health services), and structural or subsistence factors (i.e., unemployment, hunger/food insecurity, and unstable housing or homelessness) [4].

The Centers for Disease Control and Prevention (CDC) Medical Monitoring Project (MMP) is the only source of nationally representative data on individual-level SDOH and QoL among adults with diagnosed HIV in the United States, including among priority populations highlighted in NHAS. Estimates are also representative for each of MMP’s reporting project areas: California (including separately funded jurisdictions of Los Angeles County and San Francisco), Delaware, Florida, Georgia, Illinois (including the separately funded jurisdiction of Chicago), Indiana, Michigan, Mississippi, New Jersey, New York (including the separately funded jurisdiction of New York City), North Carolina, Oregon, Pennsylvania (including the separately funded jurisdiction of Philadelphia), Puerto Rico, Texas (including the separately funded jurisdiction of Houston), Virginia, and Washington. Data from MMP are critical for achieving the goals of NHAS [4] and the Ending the HIV Epidemic in the U.S. (EHE) initiative [5], which seek to reduce new HIV infections in the United States by 90% by 2030 and prioritize reducing HIV-related disparities and health inequities and improving PWH’s health and well-being.

This report highlights aspects of individual-level SDOH—including socioeconomic status, health-related factors, neighborhood and built environment, and social and community context—and QoL among adults with diagnosed HIV (hereafter known as PWH). Estimates are presented overall, and stratified by cycle year, age, current gender identity, sexual orientation, race/ethnicity, NHAS priority populations, and jurisdiction. In addition, selected clinical outcomes are stratified by measures related to individual-level SDOH and QoL.

This is the first national HIV surveillance report that presents representative estimates of individual-level SDOH and QoL among PWH in the U.S. Continuing to monitor SDOH and QoL among PWH is an essential step towards meeting national goals aimed at ending the HIV epidemic and ensuring good health and well-being among PWH in the U.S.

This report presents unweighted frequencies and weighted prevalence estimates with 95% confidence intervals (CIs) for all characteristics represented by categorical variables. Continuous variables are represented using median values and 95% CIs. The estimates describe the characteristics of adults with diagnosed HIV infection who are living in the United States, hereafter referred to as *persons with diagnosed HIV* or *persons*. The period referenced for estimates is the 12 months before the respondents’ interviews unless otherwise noted. Statistical software (SAS, version 9.4) was used for analysis of weighted data. For categorical variables, data are not reported for estimates derived from a denominator size <30 or for estimates with a coefficient of variation ≥ 0.30 . For continuous variables, estimates based on a denominator sample size <30 were suppressed. In both the tables and the narrative, estimates with an absolute confidence interval width ≥ 30 , estimates with an absolute confidence interval width between 5 and 30 and a relative confidence interval width $\geq 130\%$, and

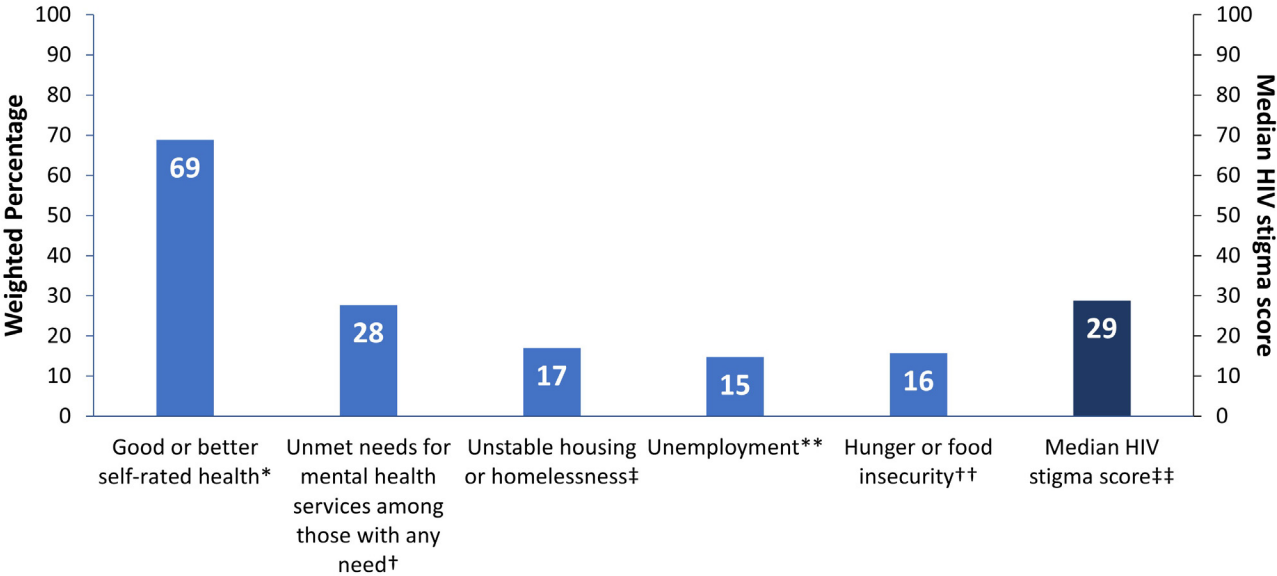
estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution. No statistical tests were performed. Estimates from the 2020 and 2021 cycles presented in this report may have been affected by the COVID-19 pandemic. Estimates for persons identifying as American Indian/Alaska Native or Native Hawaiian/other Pacific Islander were suppressed for all measures due to small numbers. Many estimates for Asian persons were also unreliable and were suppressed. Additional information on MMP is available at <https://www.cdc.gov/hiv/statistics/systems/mmp/>.

HIGHLIGHTS OF ANALYSES

Individual-level SDOH and QOL

MMP reports information on QoL indicators and HIV stigma to monitor progress towards meeting national HIV prevention and treatment goals highlighted in NHAS. During 2021, 69% of persons with HIV had good or better self-rated health (2025 NHAS goal: 95%), and 28% had an unmet need for services from a mental health professional among those with any need (2025 NHAS goal: 12%) (Figure 1; Table 1). Overall, 17% experienced unstable housing or homelessness during the past 12 months (2025 NHAS goal: 11%), 15% were unemployed (2025 NHAS goal: 8%), and 16% experienced hunger or food insecurity during the past 12 months (2025 NHAS goal: 11%). During 2021, the median HIV stigma score based on a scale that ranged from 0 (no stigma) to 100 (high stigma) was 29 among PWH (2025 NHAS goal: 16).

Figure 1. National HIV/AIDS Strategy indicators among adults with diagnosed HIV—Medical Monitoring Project, United States, 2021



* “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

† “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

‡ “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room–occupancy hotel, or in a car) at any time during the past 12 months.

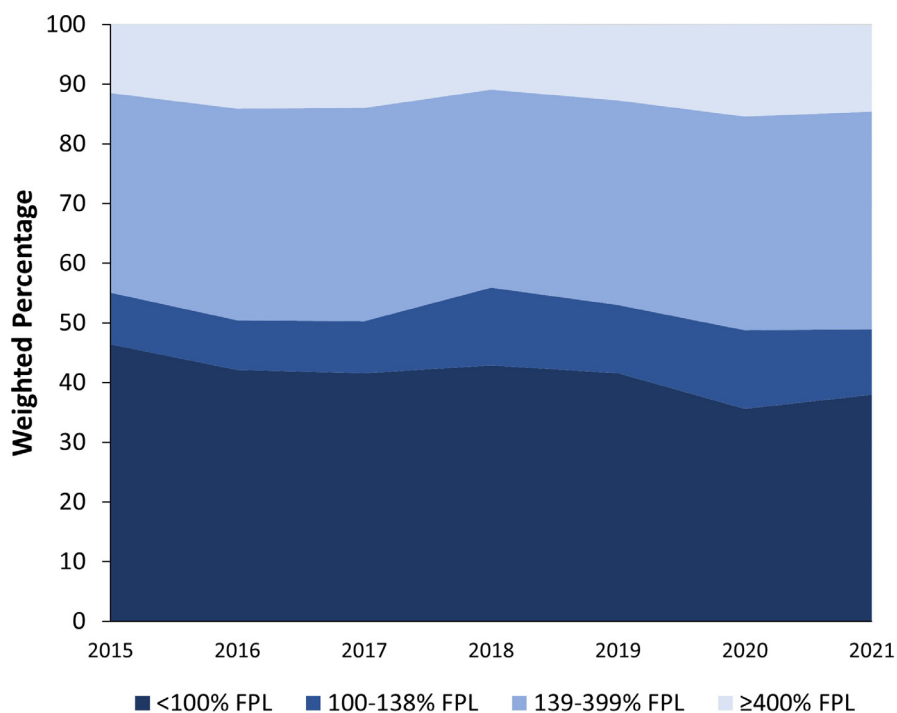
** Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

†† “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

‡‡ “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥ 18 years with diagnosed HIV infection living in the United States and Puerto Rico.

MMP also collects information on other individual-level SDOH related to economic stability, education, health-related factors, and social and community context. During 2021, 85% of PWH were living in a household with an income <400% of the federal poverty level (FPL); 38% were living in a household with an income <100% of the FPL, 11% in a household with an income between 100%–138% of the FPL, and 37% in a household with an income between 139%–399% (Figure 2; Table 1). The percentage of PWH living in a household with an income <100% of the FPL was lowest in 2020 (36%) and highest in 2015 (46%).

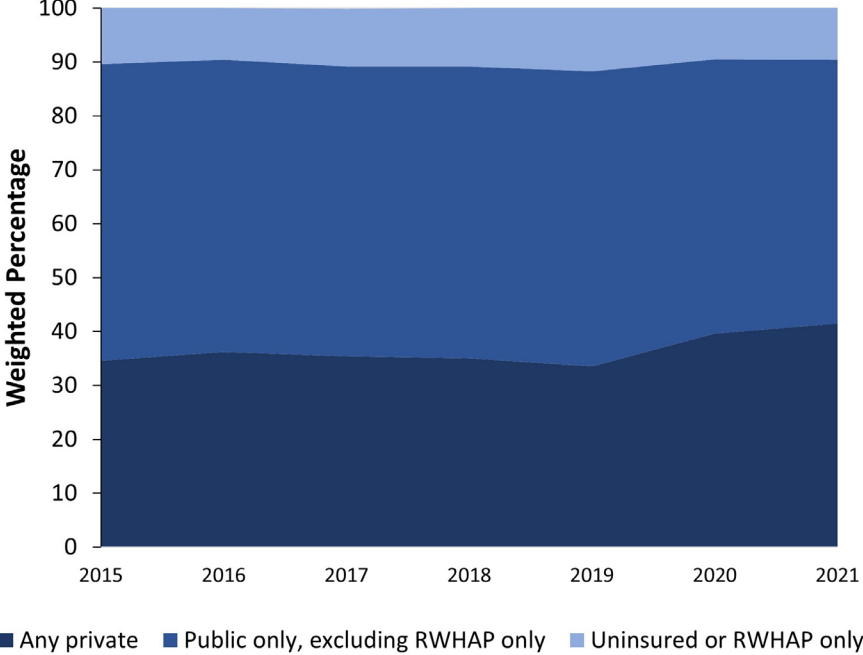
Figure 2. Household poverty level of adults with diagnosed HIV—Medical Monitoring Project, United States, 2015–2021



Note. Poverty guidelines as defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

During the past 12 months, 42% had any private insurance coverage, 49% had public insurance or coverage only (excluding those who had Ryan White HIV/AIDS Program [RWHAP] assistance only), and 10% were uninsured or received RWHAP assistance only (Figure 3; Table 1). The percentage of PWH who had any private insurance was lowest during 2019 (34%) and highest during 2021 (42%). In addition, 47% received any RWHAP assistance during the past 12 months (Table 1).

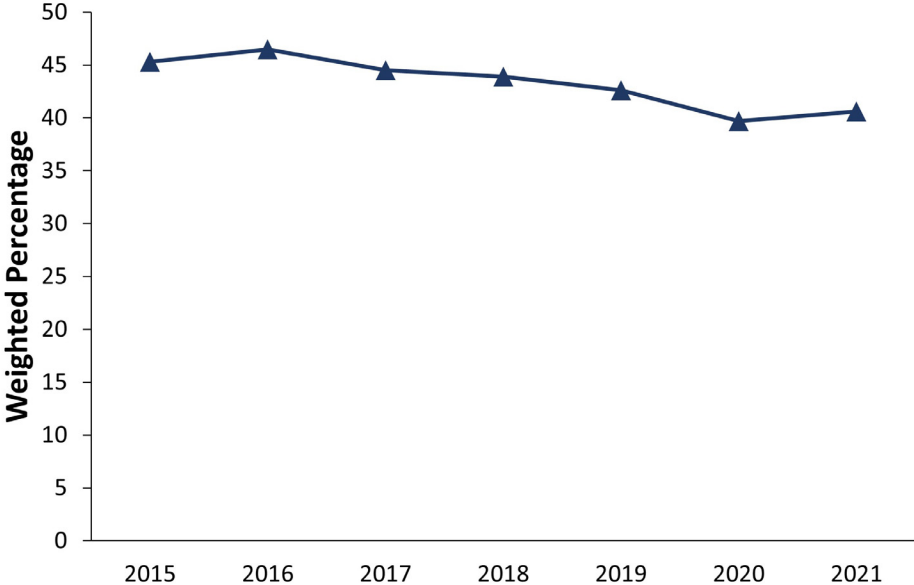
Figure 3. Health insurance or coverage among adults with diagnosed HIV—Medical Monitoring Project, United States, 2015–2021



Abbreviation: RWHAP, Ryan White HIV/AIDS Program.

During 2021, 41% of PWH reported a physical, mental, or emotional disability; the percentage of PWH with one or more disabilities was lowest during 2020 (40%) and highest during 2016 (47%).

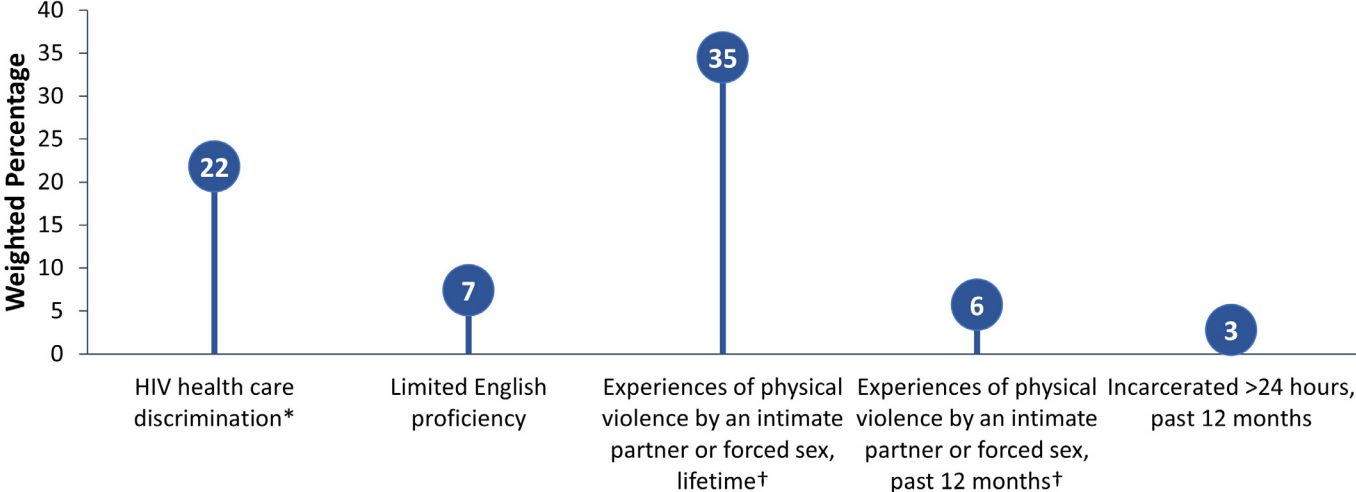
Figure 4. Disability among adults with diagnosed HIV—Medical Monitoring Project, United States, 2015–2021



Note. Disabilities are self-reported, and include physical, mental, and emotional disabilities.

During 2021, 22% of PWH experienced HIV health care discrimination during the past 12 months, and 7% reported speaking English “less than well” (Figure 5; Table 1). Overall, 35% had experiences of physical violence by an intimate partner or forced sex during their lifetime, and 6% had these experiences during the past 12 months. Three percent of PWH reported being incarcerated during the past 12 months.

Figure 5. HIV health care discrimination, limited English proficiency, experiences with physical violence by an intimate partner or forced sex, and incarceration among adults with diagnosed HIV—Medical Monitoring Project, United States, 2021



* HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Participants were asked if they experienced this never, rarely, some of the time, most of the time, or all the time. Participants who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all of time were considered to have experienced discrimination in an HIV health care setting.

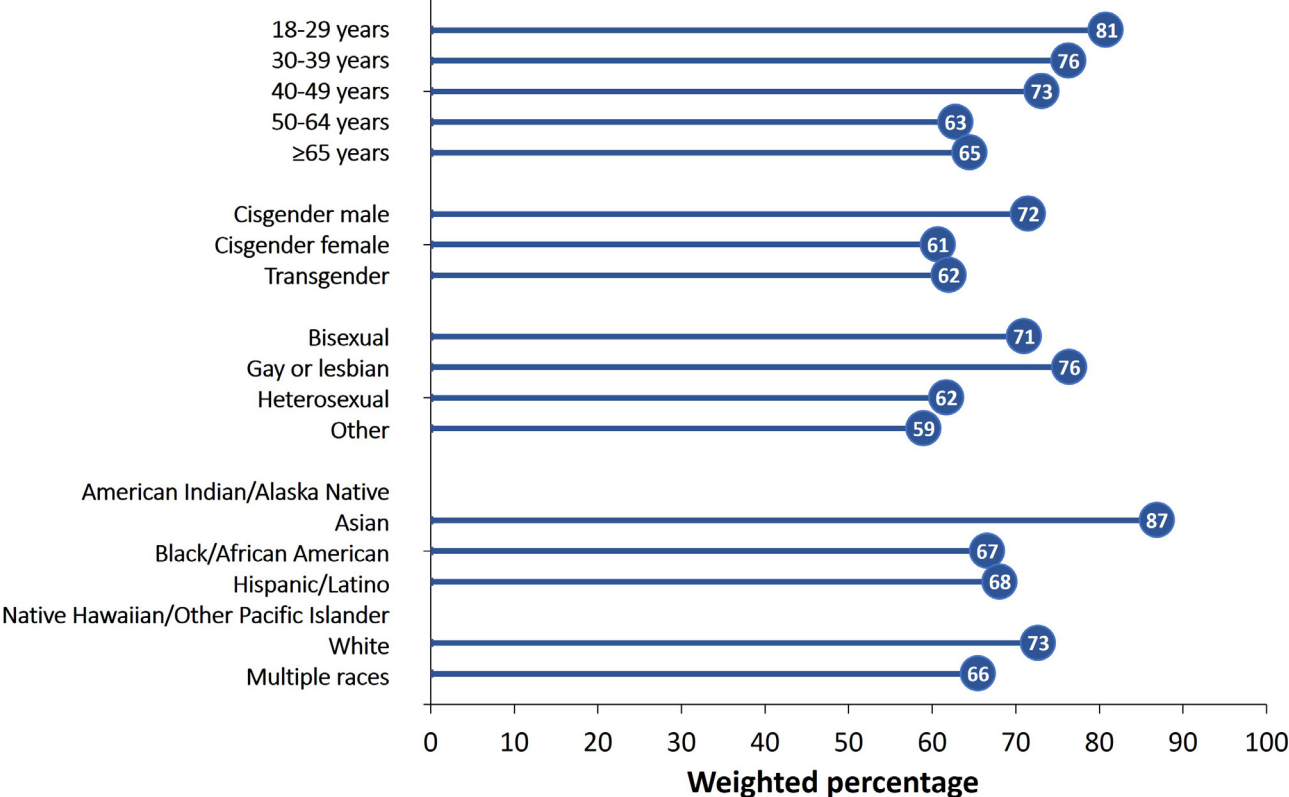
† Physical violence by an intimate partner was defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex was defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

NHAS Indicators and Other Individual-level SDOH by Demographic Characteristics

Estimates of all NHAS indicators and other individual-level SDOH are reported by demographic characteristics. Absolute and relative disparities (using prevalence differences and prevalence ratios, respectively) were used to quantify differences in indicators and other SDOH by demographic characteristics, which are reported in Tables 2–5.

Good or better self-rated health varied by age, current gender identity, sexual orientation, and race/ethnicity (Tables 2–5, Figure 6). When stratified by age, good or better self-rated health was highest among persons aged 18–29 years (81%) and lowest among persons aged 50–64 years (63%). When stratified by current gender identity, good or better self-rated health was highest among cisgender males (72%) and lowest among cisgender females (61%). When stratified by sexual orientation, good or better self-rated health was highest among persons who identified as gay or lesbian (76%) and lowest among persons who identified as another sexual orientation (i.e., not lesbian or gay, straight, or bisexual; 59%). When stratified by race/ethnicity, good or better self-rated health was highest among persons who identified as Asian (87%) and lowest among persons who identified as multiple races (66%).

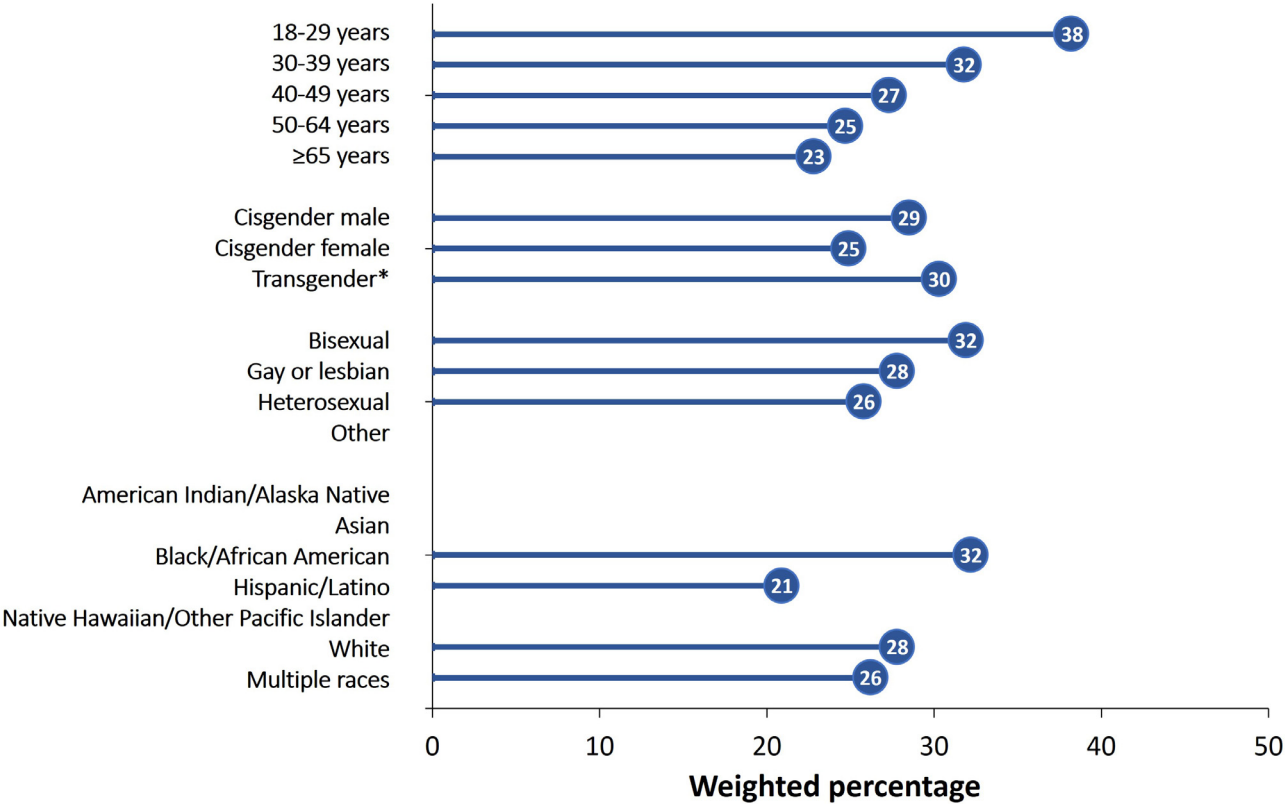
Figure 6. Good or better self-rated health among adults with diagnosed HIV, by age, gender, sexual orientation, and race/ethnicity—Medical Monitoring Project, United States, 2021



Note. “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview. Estimates were suppressed if they had a coefficient of variation ≥ 0.30 or were based on a denominator sample size < 30 . Persons were classified as cisgender if sex at birth and gender reported by the person were the same. Persons were classified as transgender if sex at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender. Hispanics or Latinos can be of any race. Persons are classified in only 1 race/ethnicity category.

Unmet needs for services from a mental health professional among those who needed them varied by age, current gender identity, sexual orientation, and race/ethnicity (Tables 2–5, Figure 7). When stratified by age, unmet needs for mental health services among those who needed them were highest among persons aged 18–29 years (38%) and lowest among persons aged ≥65 years (23%). When stratified by current gender identity, unmet needs for mental health services among those who needed them were highest among transgender persons (30%*) and lowest among cisgender females (25%). When stratified by sexual orientation, unmet needs for mental health services among those who needed them were highest among persons who identified as bisexual (32%) and lowest among persons who identified as heterosexual (26%). When stratified by race/ethnicity, unmet needs for mental health services among those who needed them were highest among persons who identified as Black/African American (32%) and lowest among persons who identified as Hispanic/Latino (21%).

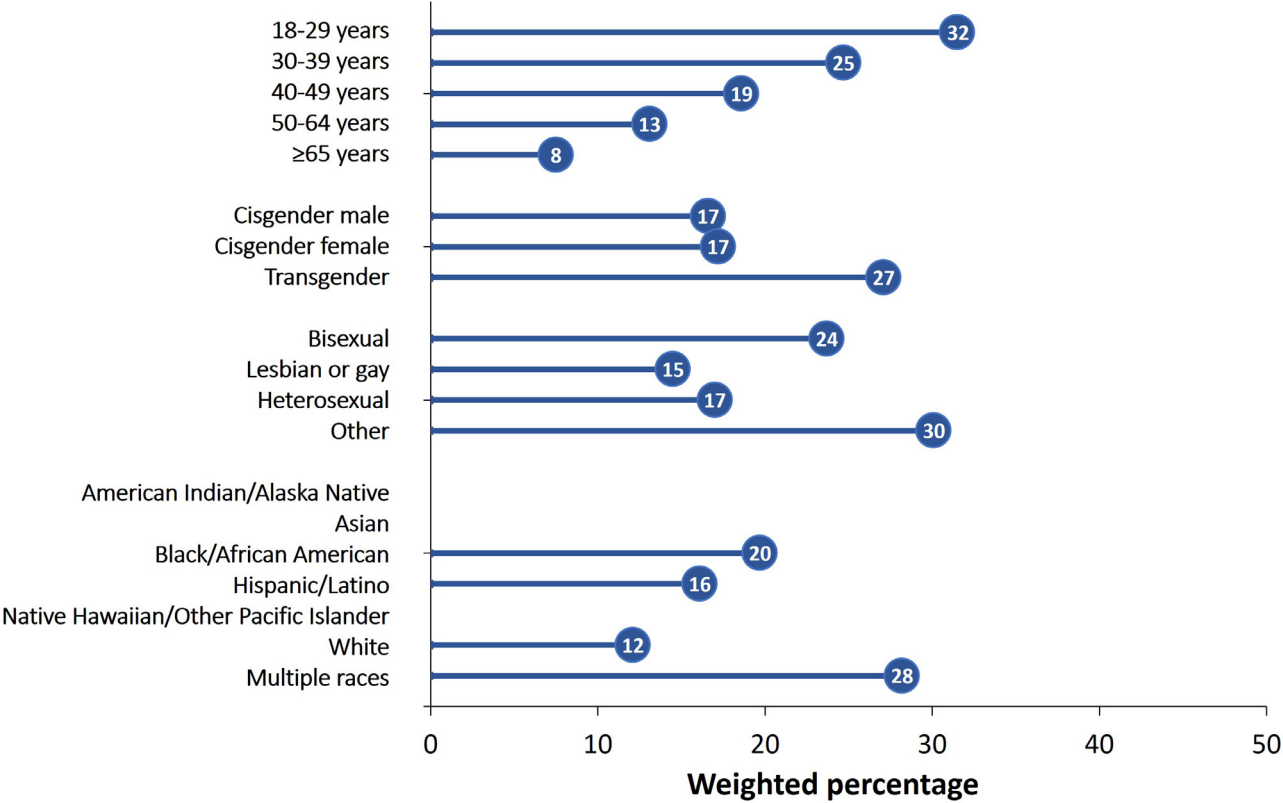
Figure 7. Unmet needs for services from a mental health professional among adults with diagnosed HIV with a need for services, by age, gender, sexual orientation, and race/ethnicity—Medical Monitoring Project, United States, 2021



Note. “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months. Estimates were suppressed if they had a coefficient of variation ≥ 0.30 or were based on a denominator sample size < 30 . Estimates with an absolute CI width > 30 , estimates with an absolute CI width between 5 and 30 and a relative CI width $> 130\%$, and estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution. Persons were classified as cisgender if sex at birth and gender reported by the person were the same. Persons were classified as transgender if sex at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender. Hispanics or Latinos can be of any race. Persons are classified in only 1 race/ethnicity category.

Unstable housing or homelessness varied by age, current gender identity, sexual orientation, and race/ethnicity (Tables 2–5, Figure 8). When stratified by age, unstable housing or homelessness was highest among persons aged 18–29 years (32%) and lowest among persons aged ≥ 65 years (8%). When stratified by current gender identity, unstable housing or homelessness was highest among transgender persons (27%) and lowest among cisgender males (17%). When stratified by sexual orientation, unstable housing or homelessness was highest among persons who identified as another sexual orientation (30%) and lowest among persons who identified as gay or lesbian (15%). When stratified by race/ethnicity, unstable housing or homelessness was highest among persons who identified as multiple races (28%) and lowest among persons who identified as White (12%).

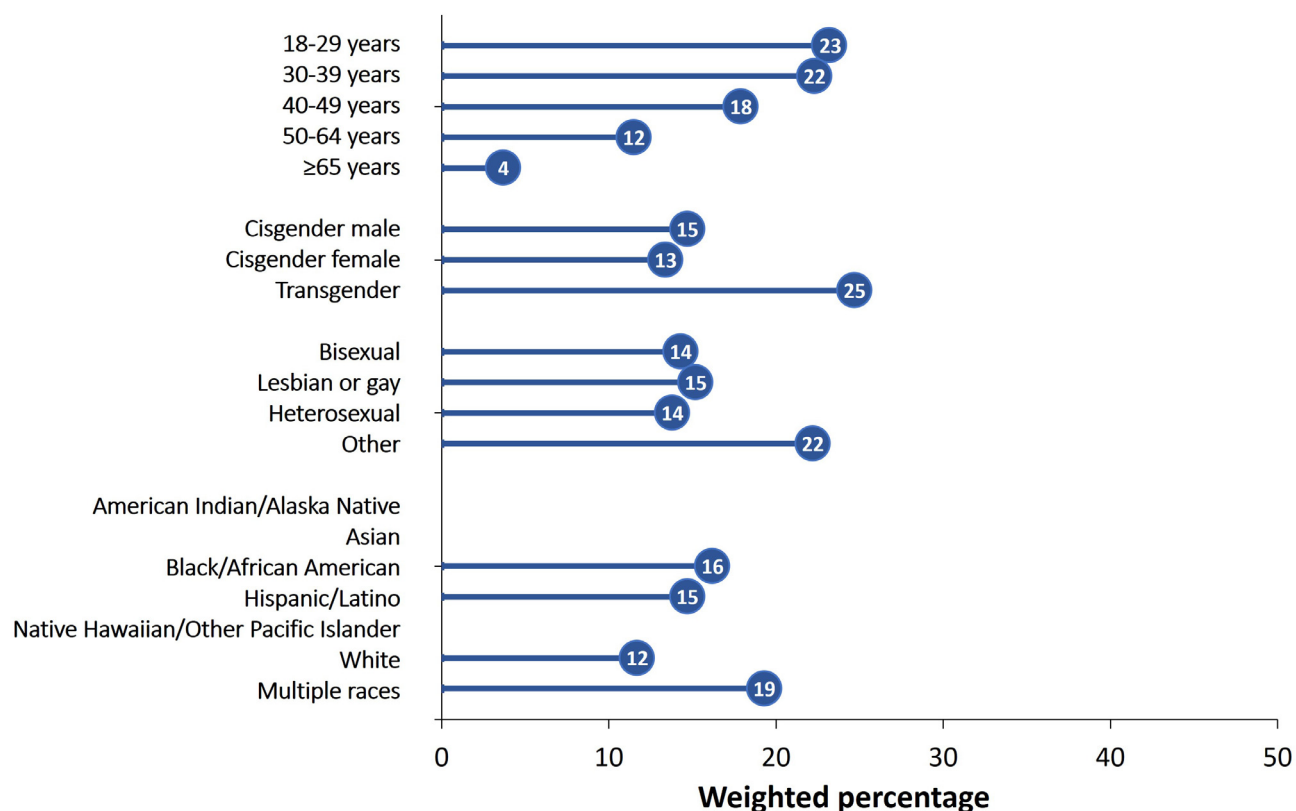
Figure 8. Unstable housing or homelessness among adults with diagnosed HIV, by age, gender, sexual orientation, and race/ethnicity—Medical Monitoring Project, United States, 2021



Note. “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room–occupancy hotel, or in a car) at any time during the past 12 months. Estimates were suppressed if they had a coefficient of variation ≥ 0.30 or were based on a denominator sample size < 30 . Persons were classified as cisgender if sex at birth and gender reported by the person were the same. Persons were classified as transgender if sex at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender. Hispanics or Latinos can be of any race. Persons are classified in only 1 race/ethnicity category.

Unemployment varied by age, current gender identity, sexual orientation, and race/ethnicity (Tables 2–5, Figure 9). When stratified by age, unemployment was highest among persons aged 18–29 years (23%) and lowest among persons aged ≥ 65 years (4%). When stratified by current gender identity, unemployment was highest among transgender persons (25%) and lowest among cisgender females (13%). When stratified by sexual orientation, unemployment was highest among persons who identified as another sexual orientation (22%) and lowest among persons who identified as heterosexual (14%). When stratified by race/ethnicity, unemployment was highest among persons who identified as multiple races (19%) and lowest among persons who identified as White (12%).

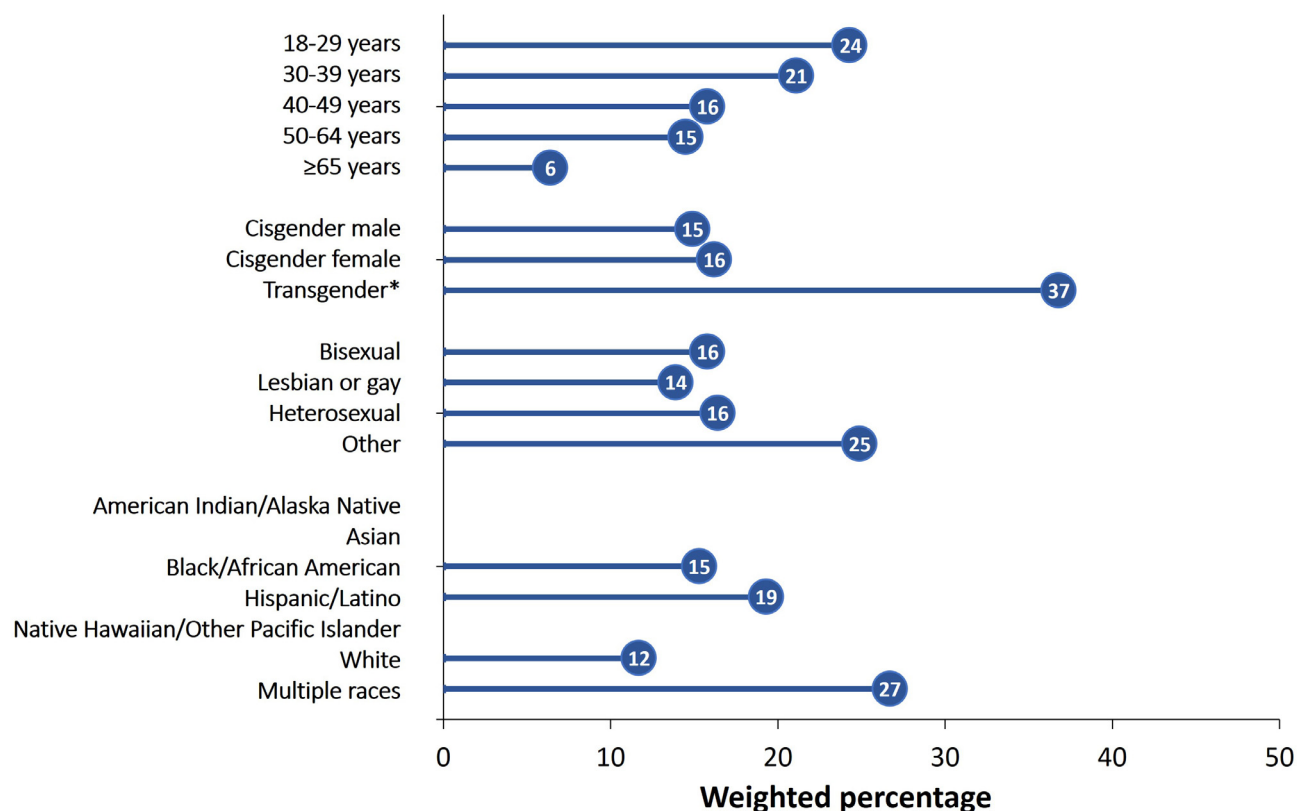
Figure 9. Unemployment among adults with diagnosed HIV, by age, gender, sexual orientation, and race/ethnicity—Medical Monitoring Project, United States, 2021



Note. Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV. Estimates were suppressed if they had a coefficient of variation ≥ 0.30 or were based on a denominator sample size < 30 . Persons were classified as cisgender if sex at birth and gender reported by the person were the same. Persons were classified as transgender if sex at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender. Hispanics or Latinos can be of any race. Persons are classified in only 1 race/ethnicity category.

Hunger or food insecurity varied by age, current gender identity, sexual orientation, and race/ethnicity (Tables 2–5, Figure 10). When stratified by age, hunger or food insecurity was highest among persons aged 18–29 years (24%) and lowest among persons aged ≥ 65 years (6%). When stratified by current gender identity, hunger or food insecurity was highest among transgender persons (37%*) and lowest among cisgender males (15%). When stratified by sexual orientation, hunger or food insecurity was highest among persons identifying as another sexual orientation (25%) and lowest among persons who identified as gay or lesbian (14%). When stratified by race/ethnicity, hunger or food insecurity was highest among persons who identified as multiple races (27%) and lowest among persons who identified as White (12%).

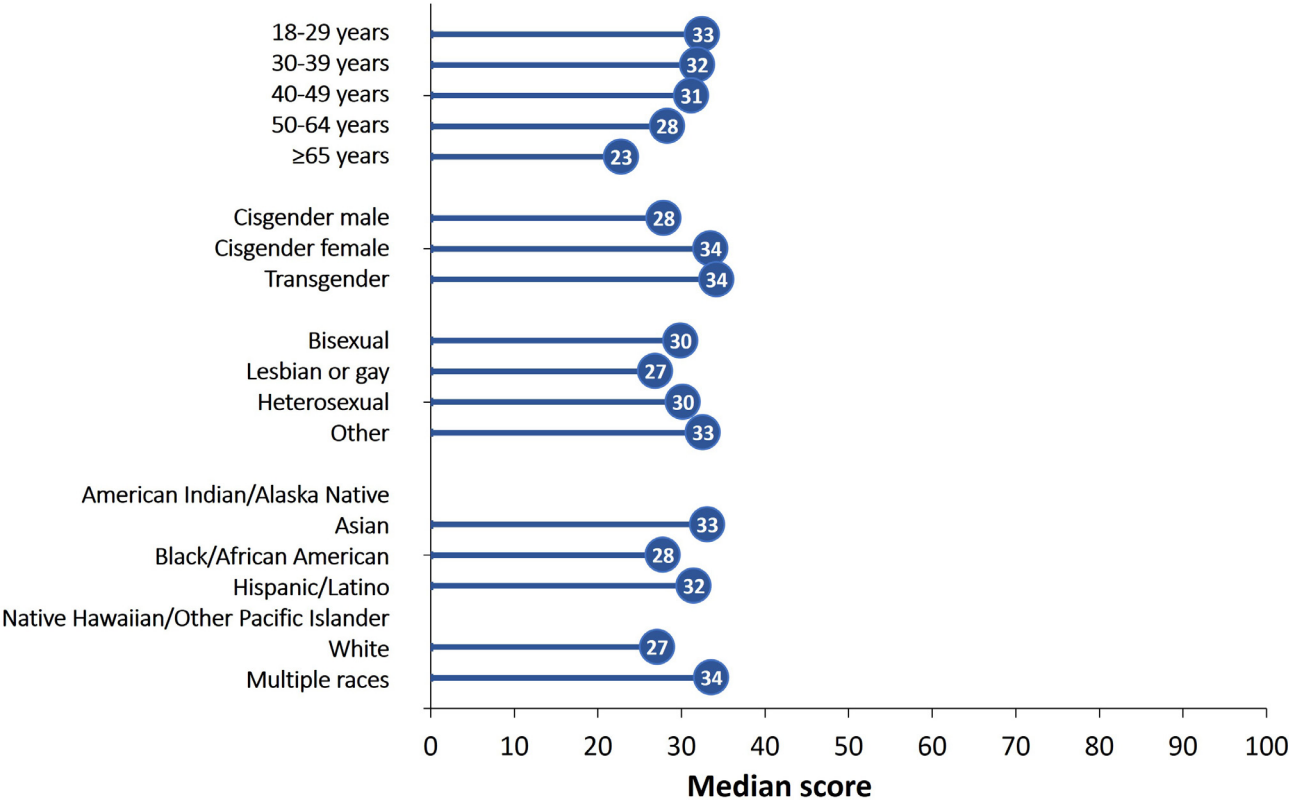
Figure 10. Hunger or food insecurity among adults with diagnosed HIV, by age, gender, sexual orientation, and race/ethnicity—Medical Monitoring Project, United States, 2021



Note. “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months. Estimates were suppressed if they had a coefficient of variation ≥ 0.30 or were based on a denominator sample size < 30 . Estimates with an absolute CI width > 30 , estimates with an absolute CI width between 5 and 30 and a relative CI width $> 130\%$, and estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution. Persons were classified as cisgender if sex at birth and gender reported by the person were the same. Persons were classified as transgender if sex at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender. Hispanics or Latinos can be of any race. Persons are classified in only 1 race/ethnicity category.

Median HIV stigma scores varied by age, current gender identity, sexual orientation, and race/ethnicity (Tables 2–5, Figure 11). When stratified by age, the median HIV stigma score was highest among persons aged 18–29 years (33) and lowest among persons aged ≥65 years (23). When stratified by current gender identity, the median HIV stigma score was highest among transgender persons (34) and lowest among cisgender males (28). When stratified by sexual orientation, the median HIV stigma score was highest among persons identifying as another sexual orientation (33) and lowest among persons who identified as gay or lesbian (27). When stratified by race/ethnicity, the median HIV stigma score was highest among persons who identified as multiple races (34) and lowest among persons who identified as White (27).

Figure 11. Median HIV stigma scores among adults with diagnosed HIV, by age, gender, sexual orientation, and race/ethnicity—Medical Monitoring Project, United States, 2021



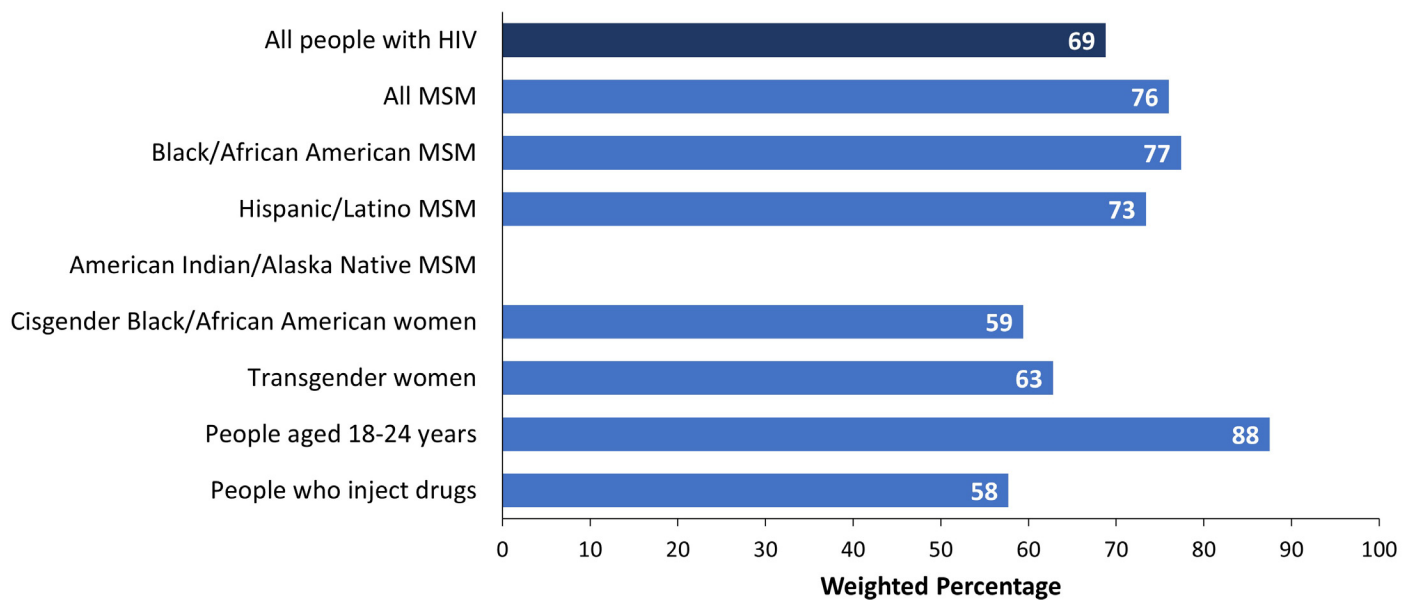
Note. “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥18 years with diagnosed HIV infection living in the United States and Puerto Rico. Estimates were suppressed if they had a coefficient of variation ≥0.30 or were based on a denominator sample size <30. Persons were classified as cisgender if sex at birth and gender reported by the person were the same. Persons were classified as transgender if sex at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender. Hispanics or Latinos can be of any race. Persons are classified in only 1 race/ethnicity category.

Stratifications of other SDOH by age, current gender identity, sexual orientation, and race/ethnicity are reported in Tables 2–5.

NHAS Indicators and Other SDOH by NHAS Priority Populations

Table 6 shows that patterns in NHAS indicators and SDOH differed for each NHAS priority population during the 2021 MMP cycle. For instance, good or better self-rated health was highest among persons aged 18–24 years (88%) and lowest among persons who inject drugs (58%) (Table 6, Figure 12). Unmet needs for services from a mental health professional among persons who needed services were highest among Black or African American MSM (35%) and lowest among Hispanic or Latino MSM (24%; Figure 13). Unstable housing or homelessness was highest among persons who inject drugs (46%) and lowest among MSM (16%) (Table 6, Figure 14). Unemployment was highest among persons who inject drugs (39%) and lowest among cisgender Black or African American women (14%) (Figure 15). Hunger or food insecurity was highest among transgender women (40%*) and lowest among MSM (14%) (Figure 16). Median HIV stigma score was highest among persons aged 18–24 years (42) and lowest among Black or African American MSM (25; Table 6, Figure 17).

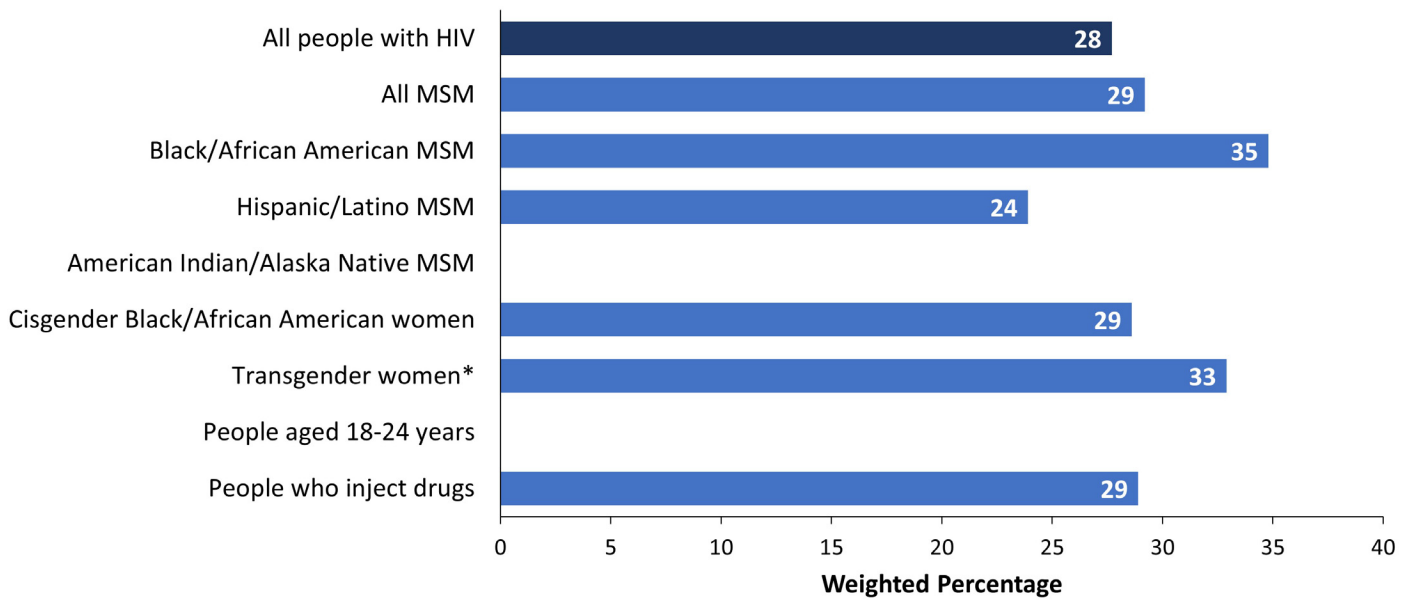
Figure 12. Good or better self-rated health among adults with diagnosed HIV, by NHAS priority population—Medical Monitoring Project, United States, 2021



Abbreviations: NHAS, National HIV/AIDS Strategy; MSM, cisgender men who have sex with cisgender men.

Note. “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview. Estimates were suppressed if they had a coefficient of variation ≥ 0.30 or were based on a denominator sample size < 30 .

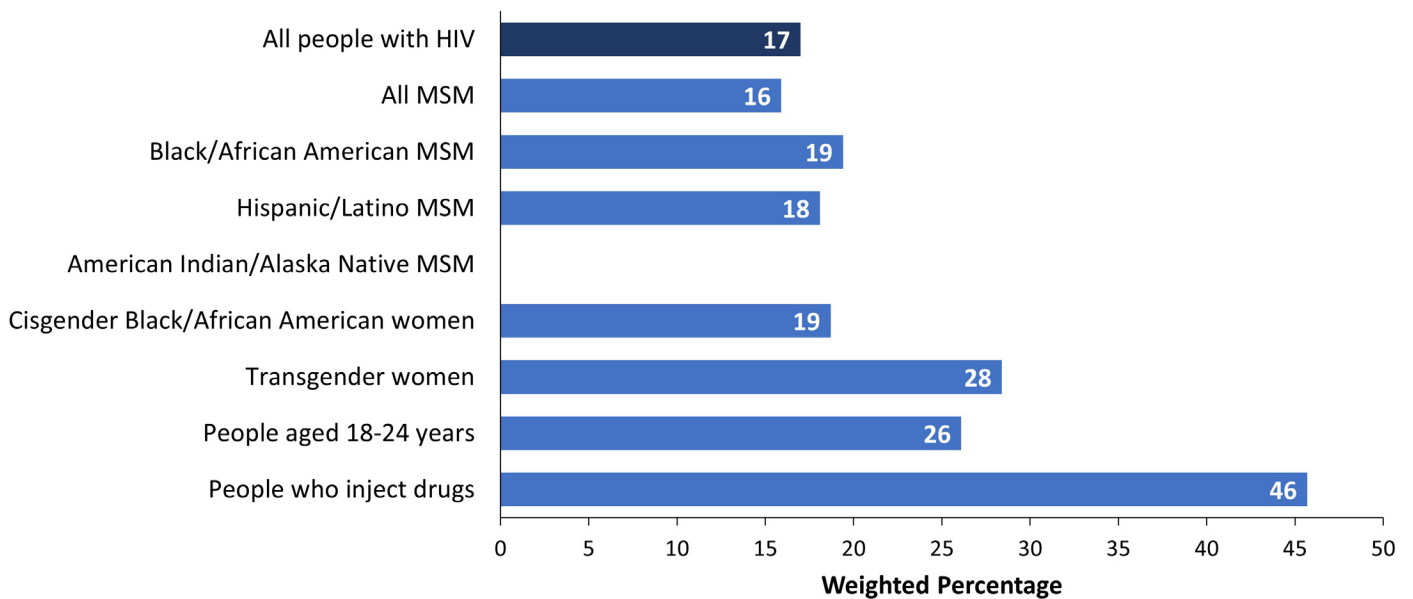
Figure 13. Unmet needs for services from a mental health professional among adults with diagnosed HIV who needed services, by NHAS priority population—Medical Monitoring Project, United States, 2021



Abbreviations: NHAS, National HIV/AIDS Strategy; MSM, cisgender men who have sex with cisgender men.

Note. “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months. Estimates were suppressed if they had a coefficient of variation ≥ 0.30 or were based on a denominator sample size < 30 . Estimates with an absolute CI width > 30 , estimates with an absolute CI width between 5 and 30 and a relative CI width $> 130\%$, and estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution.

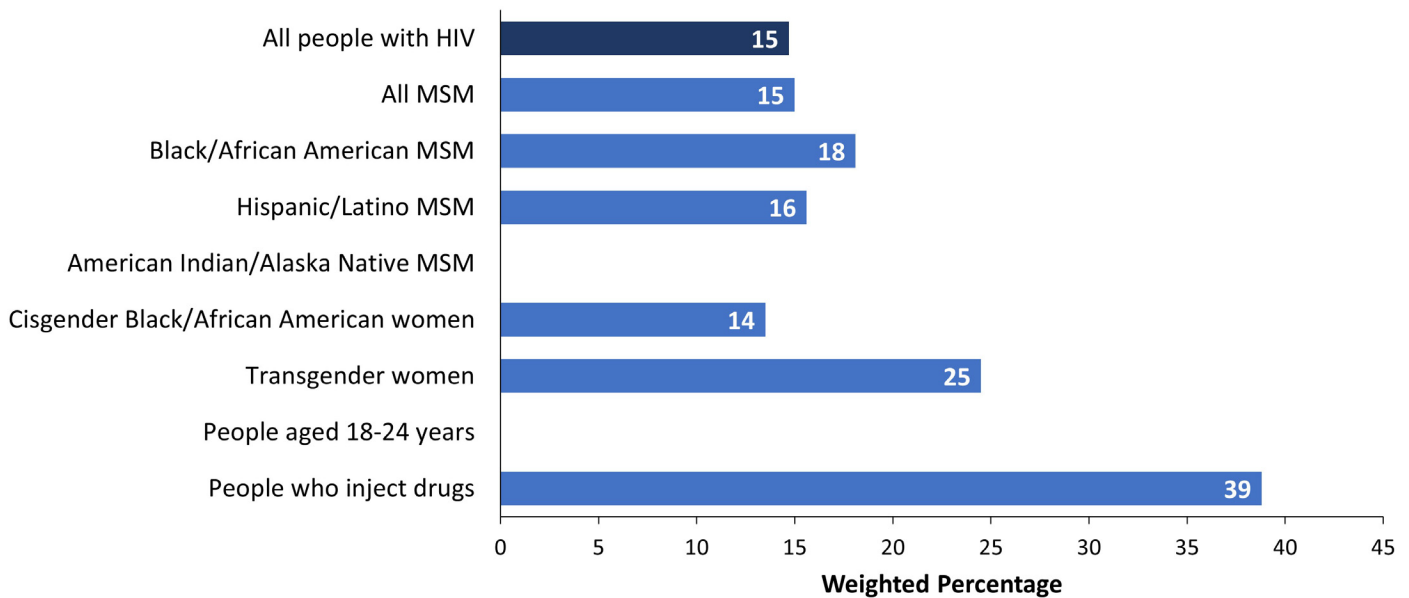
Figure 14. Unstable housing or homelessness among adults with diagnosed HIV, by NHAS priority population—Medical Monitoring Project, United States, 2021



Abbreviations: NHAS, National HIV/AIDS Strategy; MSM, cisgender men who have sex with cisgender men.

Note. “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room-occupancy hotel, or in a car) at any time during the past 12 months. Estimates were suppressed if they had a coefficient of variation ≥ 0.30 or were based on a denominator sample size < 30 .

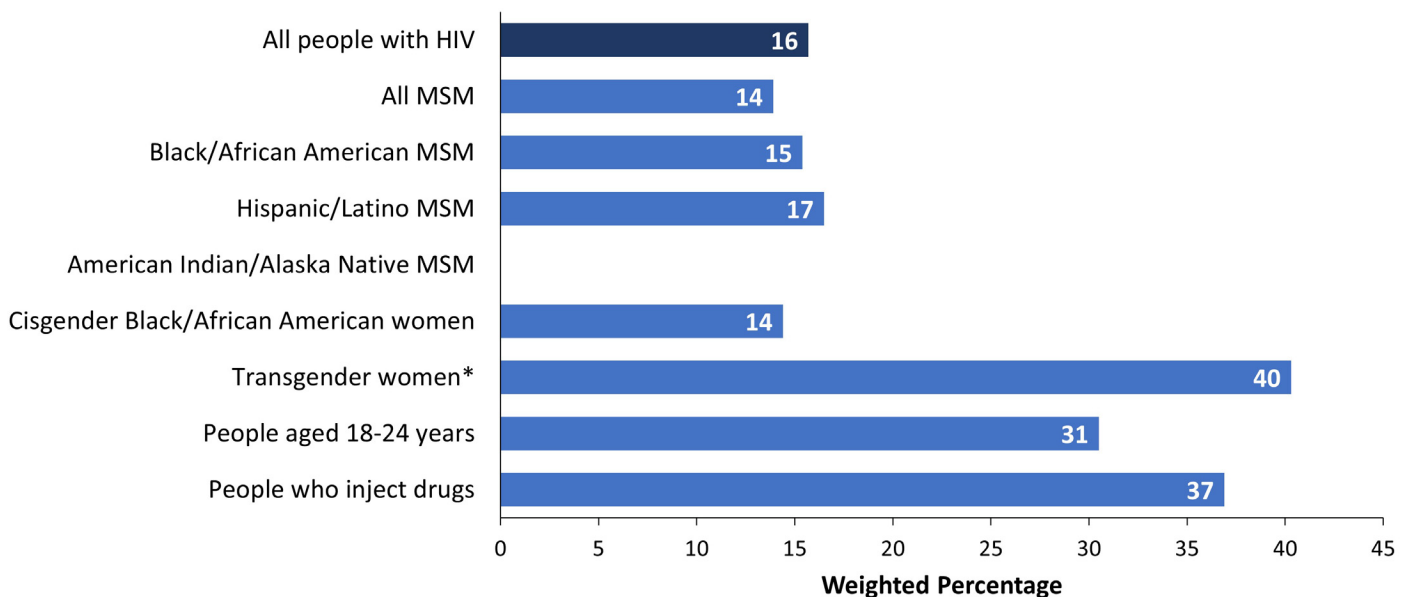
Figure 15. Unemployment among adults with diagnosed HIV, by NHAS priority population—Medical Monitoring Project, United States, 2021



Abbreviations: NHAS, National HIV/AIDS Strategy; MSM, cisgender men who have sex with cisgender men.

Note. Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV. Estimates were suppressed if they had a coefficient of variation ≥ 0.30 or were based on a denominator sample size < 30 .

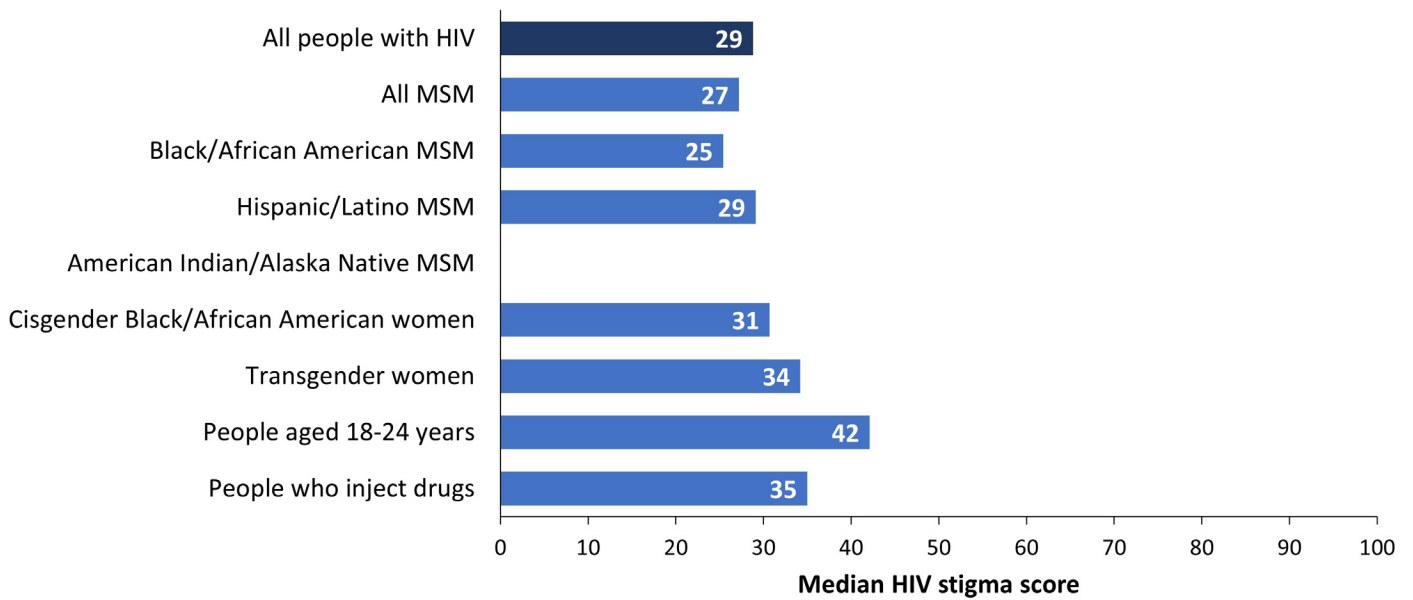
Figure 16. Hunger or food insecurity among adults with diagnosed HIV, by NHAS priority population—Medical Monitoring Project, United States, 2021



Abbreviations: NHAS, National HIV/AIDS Strategy; MSM, cisgender men who have sex with cisgender men.

Note. “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months. Estimates were suppressed if they had a coefficient of variation ≥ 0.30 or were based on a denominator sample size < 30 . Estimates with an absolute CI width > 30 , estimates with an absolute CI width between 5 and 30 and a relative CI width $> 130\%$, and estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution.

Figure 17. Median HIV stigma scores among adults with diagnosed HIV, by NHAS priority population—Medical Monitoring Project, United States, 2021



Abbreviations: NHAS, National HIV/AIDS Strategy; MSM, cisgender men who have sex with cisgender men.

Note. “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥ 18 years with diagnosed HIV infection living in the United States and Puerto Rico. Estimates were suppressed if they had a coefficient of variation ≥ 0.30 or were based on a denominator sample size < 30 .

Estimates for other SDOH for each NHAS priority population are presented in Table 6.

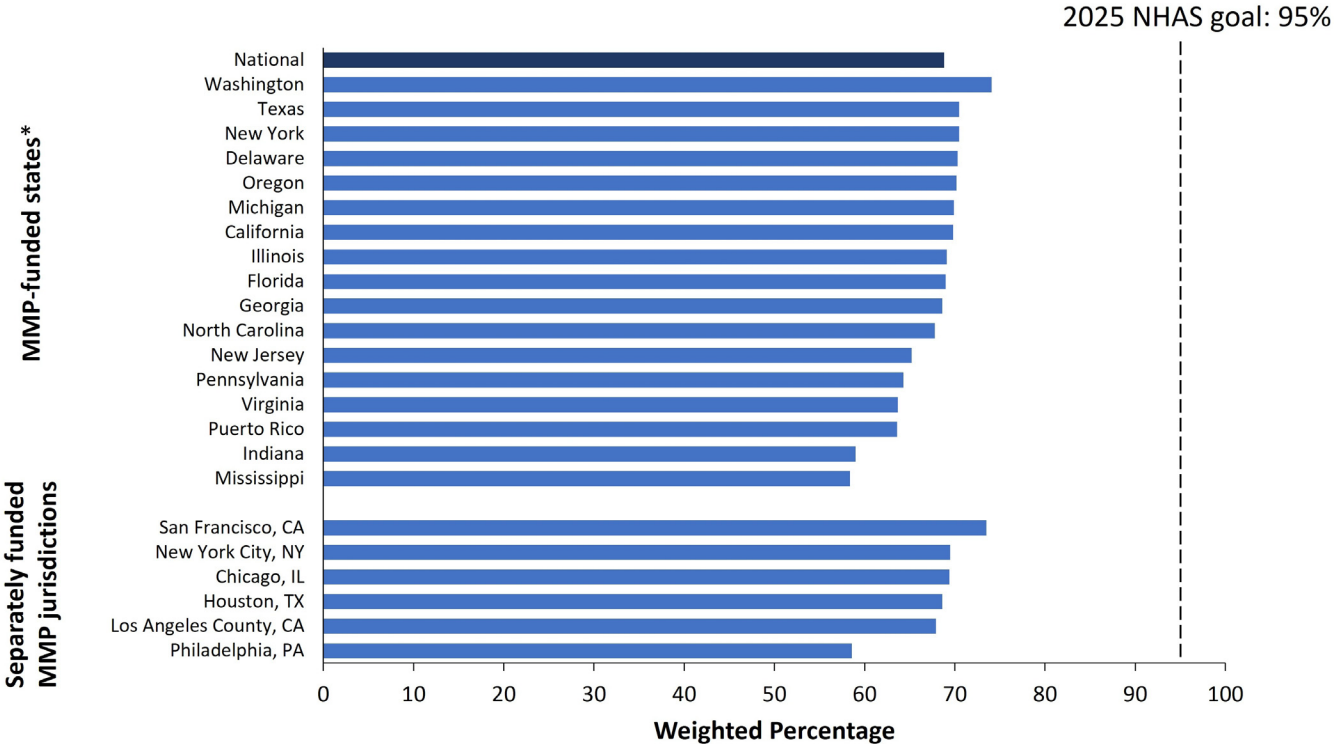
NHAS Indicators by Individual SDOH

During the 2021 MMP cycle, NHAS indicators related to QoL and HIV stigma varied by other SDOH related to economic stability, education, health-related factors, neighborhood and built environment, and social and community context (Table 7).

NHAS Indicators by MMP Jurisdictions

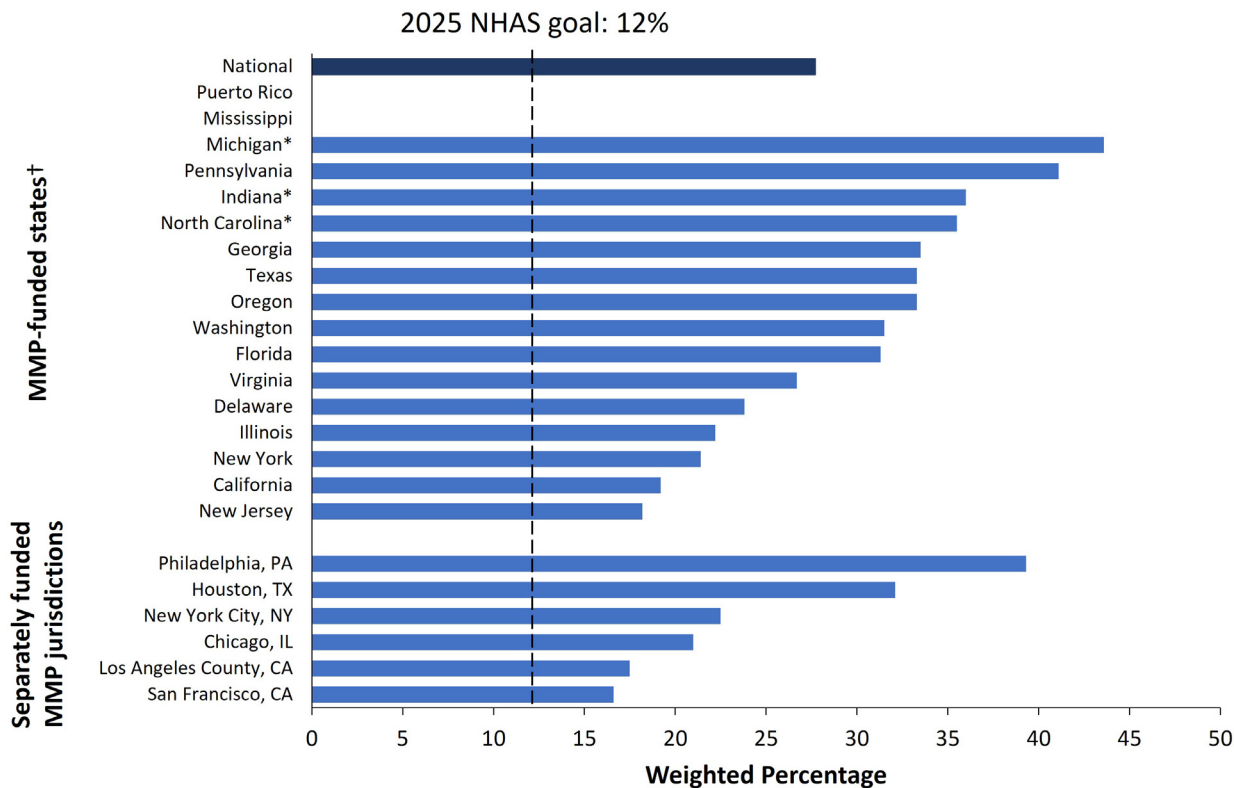
NHAS indicators related to QoL and HIV stigma varied by jurisdiction. During the 2021 MMP cycle, the percentage of persons with good or better self-rated health ranged from 58% in Mississippi to 74% in Washington (Table 8; Figure 18). The percentage of persons with unmet needs for services from a mental health professional during the past 12 months among those who needed them ranged from 17% in San Francisco to 44%* in Michigan (Table 8; Figure 19). The percentage of persons who experienced unstable housing or homelessness during the past 12 months ranged from 11% in Illinois to 26% in Houston (Table 8; Figure 20). Illinois and Oregon were the only jurisdictions to have met the 2025 NHAS goal of 11% for unstable housing or homelessness. Unemployment ranged from 7% in Puerto Rico to 24% in New York City; only Puerto Rico (7%) and Florida (8%) met the 2025 NHAS goal of 8% for unemployment (Table 8; Figure 21). Hunger or food insecurity ranged from 9% in Washington to 25% in Philadelphia; only Washington met the 2025 NHAS goal of 11% for hunger or food insecurity (Table 8; Figure 22). Median HIV stigma scores ranged from 23 in Oregon to 37 in Michigan (Table 8; Figure 23). During the 2021 cycle, no jurisdiction met the 2025 NHAS goals for good or better self-rated health, unmet needs for services from a mental health professional among those who needed it, or HIV stigma.

Figure 18. Good or better self-rated health among adults with diagnosed HIV, by jurisdiction—Medical Monitoring Project, United States, 2021



Abbreviations: NHAS, National HIV/AIDS Strategy; MMP, Medical Monitoring Project.
 Note. “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.
 * Includes separately funded jurisdictions within each state.

Figure 19. Unmet needs for services from a mental health professional among adults with diagnosed HIV who needed services, by jurisdiction—Medical Monitoring Project, United States, 2021

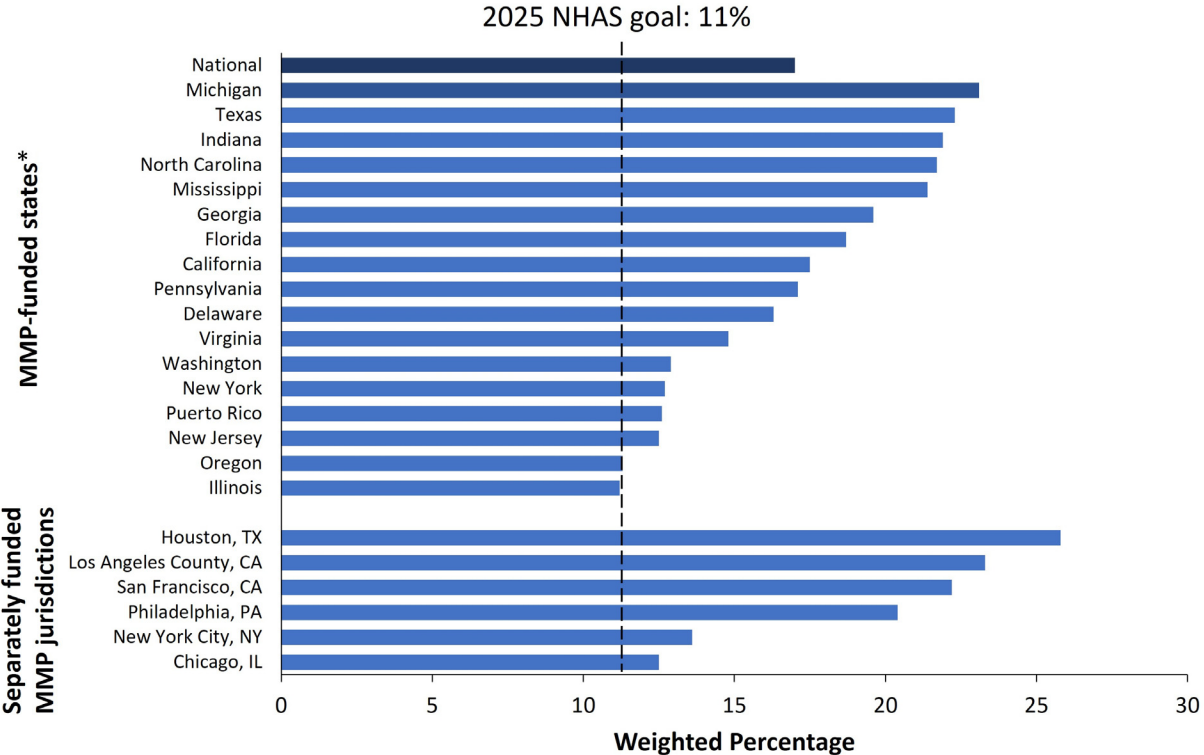


Abbreviations: NHAS, National HIV/AIDS Strategy; MMP, Medical Monitoring Project.

Note. “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months. Estimates were suppressed if they had a coefficient of variation ≥ 0.30 or were based on a denominator sample size < 30 . Estimates with an absolute CI width > 30 , estimates with an absolute CI width between 5 and 30 and a relative CI width $> 130\%$, and estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution.

† Includes separately funded jurisdictions within each state.

Figure 20. Unstable housing or homelessness among adults with diagnosed HIV, by jurisdiction—Medical Monitoring Project, United States, 2021

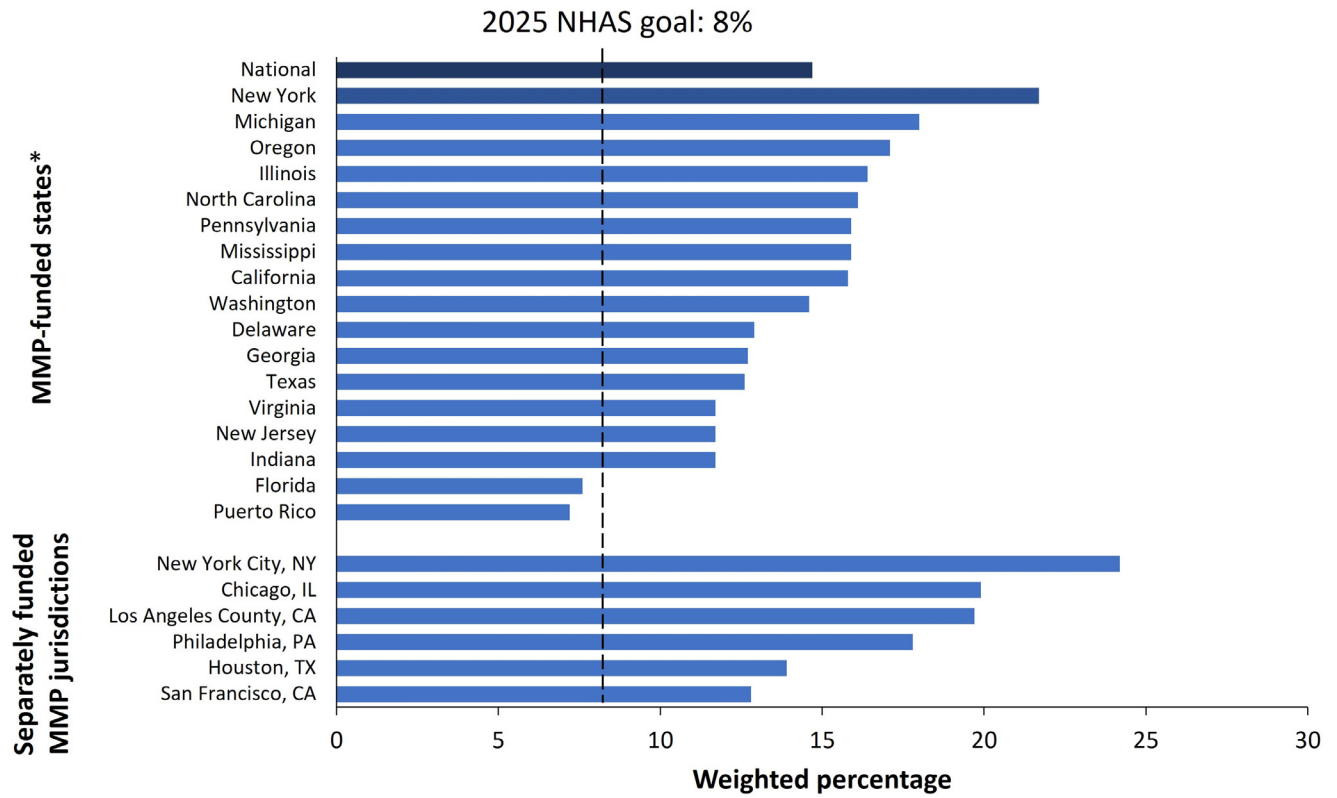


Abbreviations: NHAS, National HIV/AIDS Strategy; MMP, Medical Monitoring Project.

Note. “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room-occupancy hotel, or in a car) at any time during the past 12 months.

* Includes separately funded jurisdictions within each state.

Figure 21. Unemployment among adults with diagnosed HIV, by jurisdiction—Medical Monitoring Project, United States, 2021

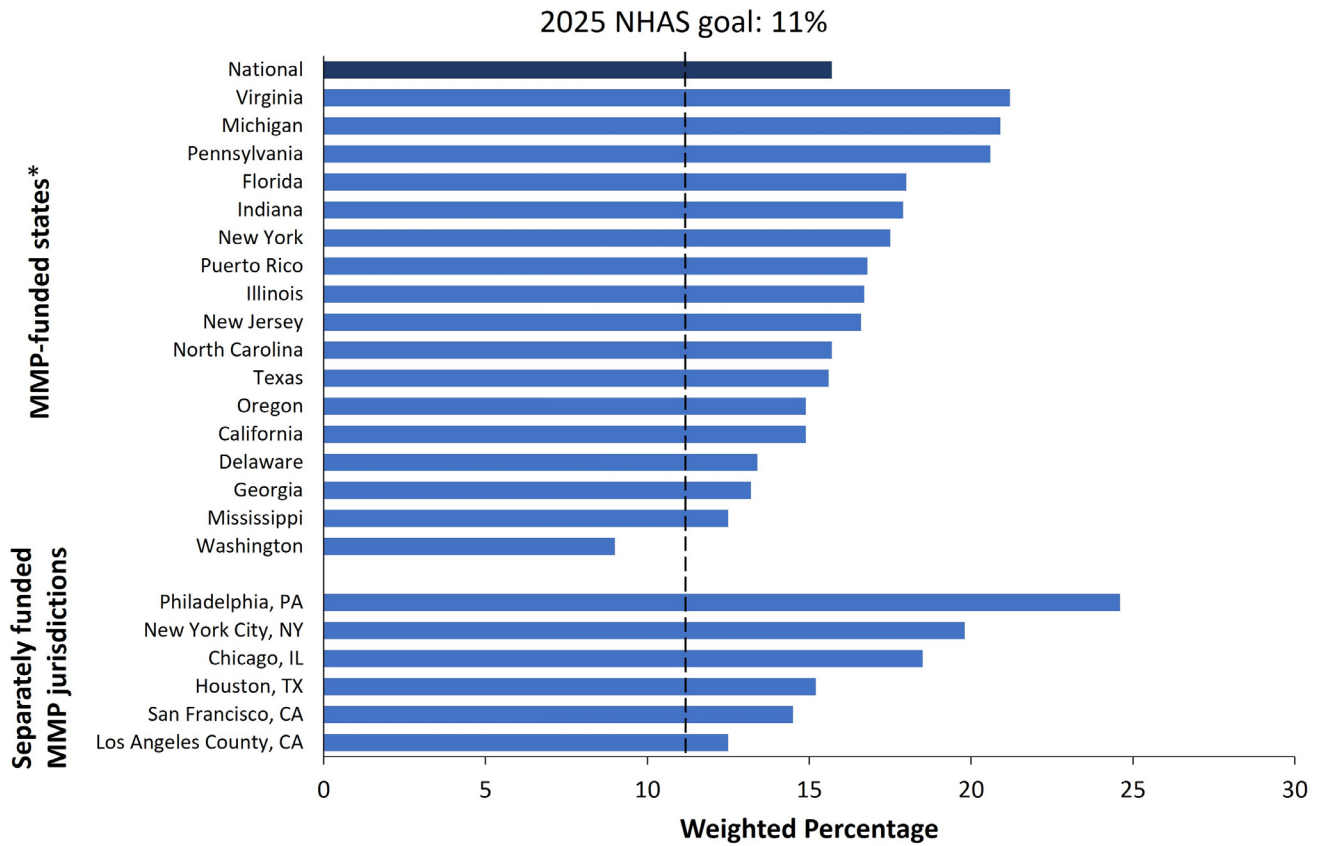


Abbreviations: NHAS, National HIV/AIDS Strategy; MMP, Medical Monitoring Project.

Note. Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

* Includes separately funded jurisdictions within each state.

Figure 22. Hunger or food insecurity among adults with diagnosed HIV, by jurisdiction—Medical Monitoring Project, United States, 2021

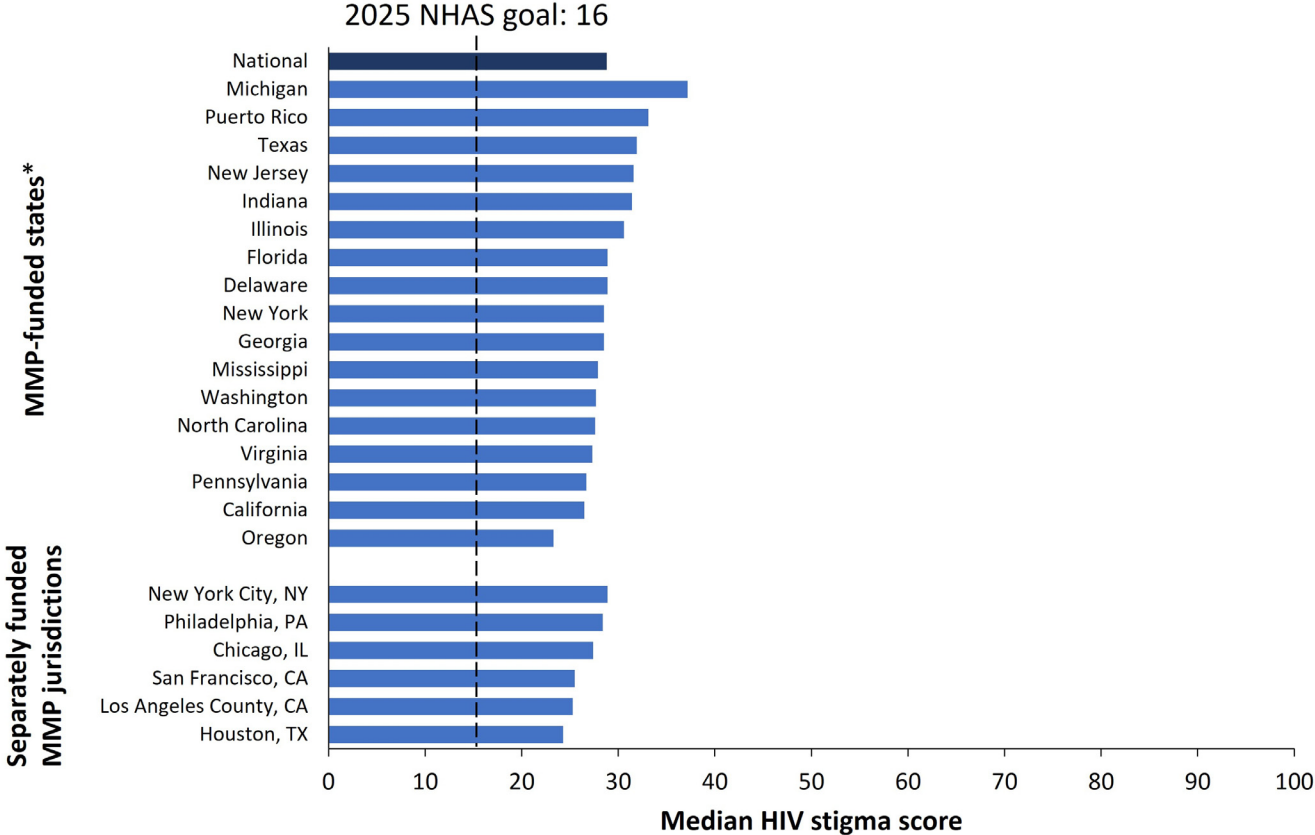


Abbreviations: NHAS, National HIV/AIDS Strategy; MMP, Medical Monitoring Project.

Note. “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

* Includes separately funded jurisdictions within each state.

Figure 23. Median HIV stigma score among adults with diagnosed HIV, by jurisdiction—Medical Monitoring Project, United States, 2021



Abbreviations: NHAS, National HIV/AIDS Strategy; MMP, Medical Monitoring Project.

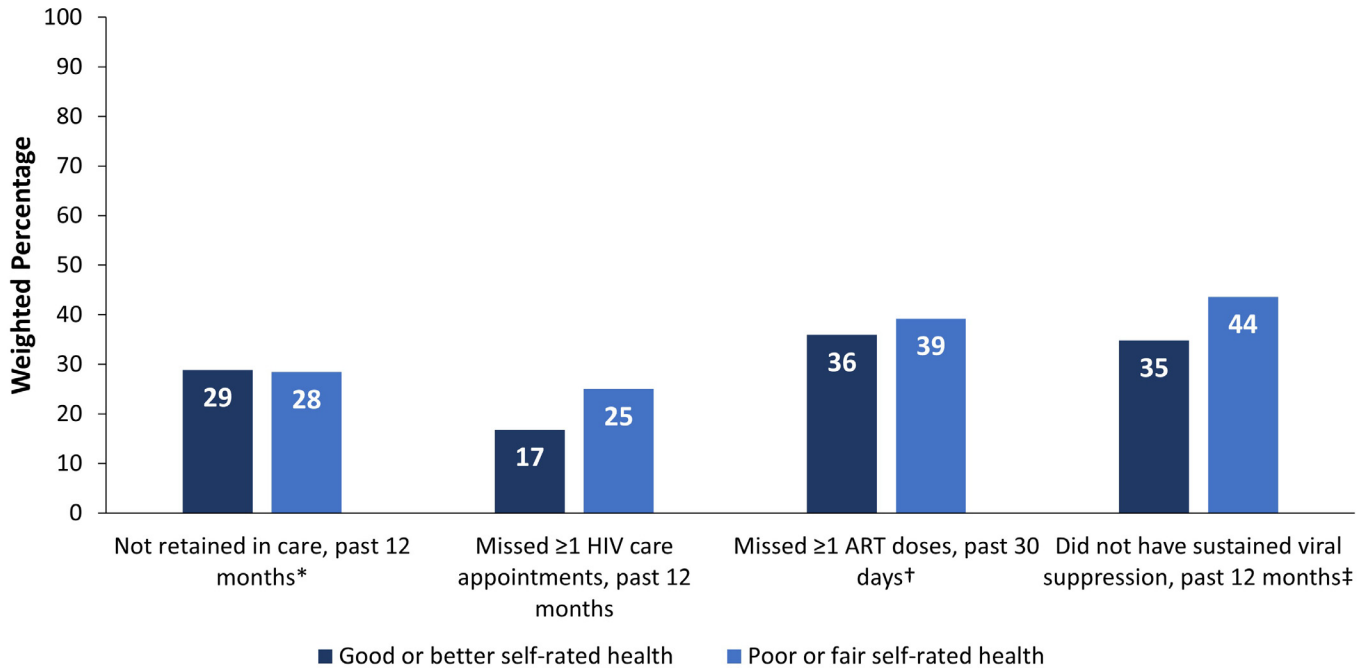
Note. “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥18 years with diagnosed HIV infection living in the United States and Puerto Rico.

* Includes separately funded jurisdictions within each state.

Prevalence of Adverse HIV Outcomes by NHAS QoL Indicators

The prevalence of not being retained in care was similar among those who had good or better self-rated health (29%) and those who had poor or fair self-rated health (28%) (Table 9; Figure 24). The prevalence of certain adverse HIV outcomes was lower among persons with good or better self-rated health than those with poor or fair self-rated health, including missing ≥ 1 HIV care appointments during the past 12 months (17% vs. 25%), missing ≥ 1 ART doses during the past 30 days (36% vs. 39%), and not having sustained viral suppression during the past 12 months (35% vs. 44%).

Figure 24. Prevalence of adverse clinical outcomes among adults with diagnosed HIV, by self-rated health—Medical Monitoring Project, United States, 2021



Note. Self-rated health evaluated at the time of interview.

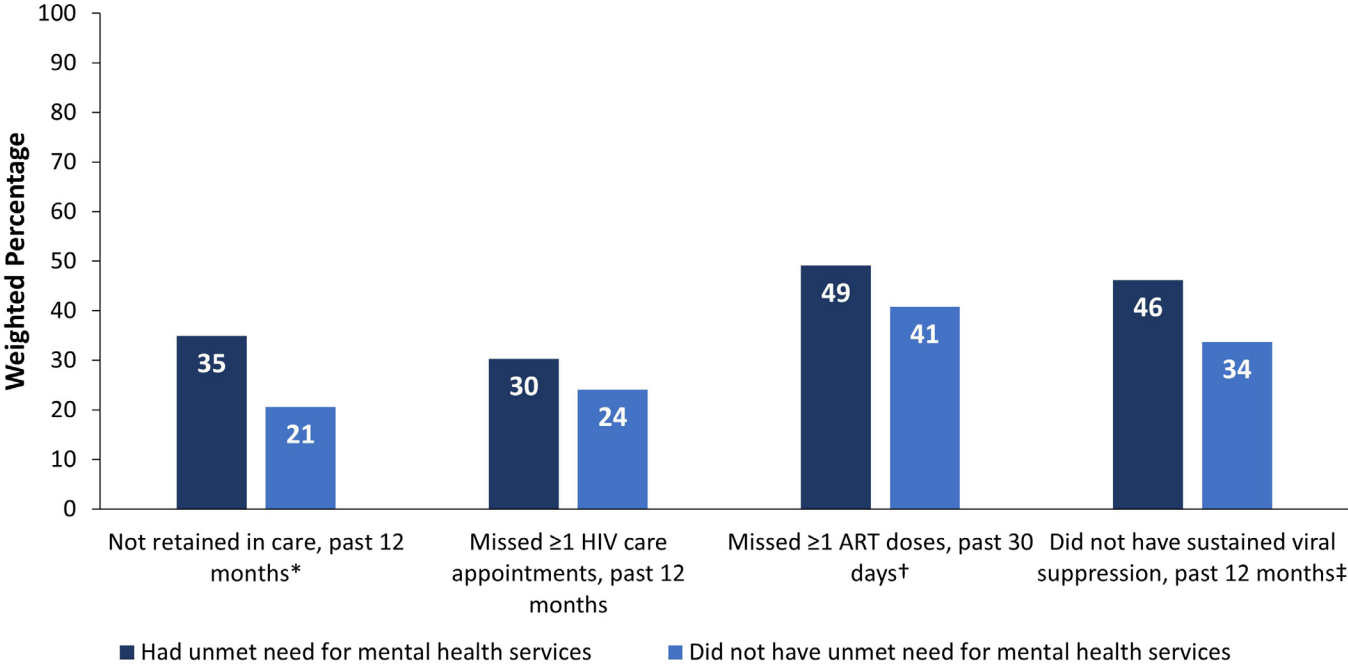
* Defined as having < 2 elements of outpatient HIV care at least 90 days apart in the past 12 months.

† Based on self-report.

‡ Defined as having ≥ 1 viral load measurements documented detectable or ≥ 200 copies/mL during the past 12 months.

The prevalence of certain adverse HIV outcomes was higher among persons with unmet needs for services from a mental health professional among those who needed it than those who did not, including not being retained in care during the past 12 months (35% vs. 21%), missing ≥ 1 HIV care appointments during the past 12 months (30% vs. 24%), missing ≥ 1 ART doses during the past 30 days (49% vs. 41%), and not having sustained viral suppression during the past 12 months (46% vs. 34%) (Table 9; Figure 25).

Figure 25. Prevalence of adverse clinical outcomes among adults with diagnosed HIV, by whether or not persons experienced unmet needs for mental health services among those who needed them—Medical Monitoring Project, United States, 2021



Note. “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

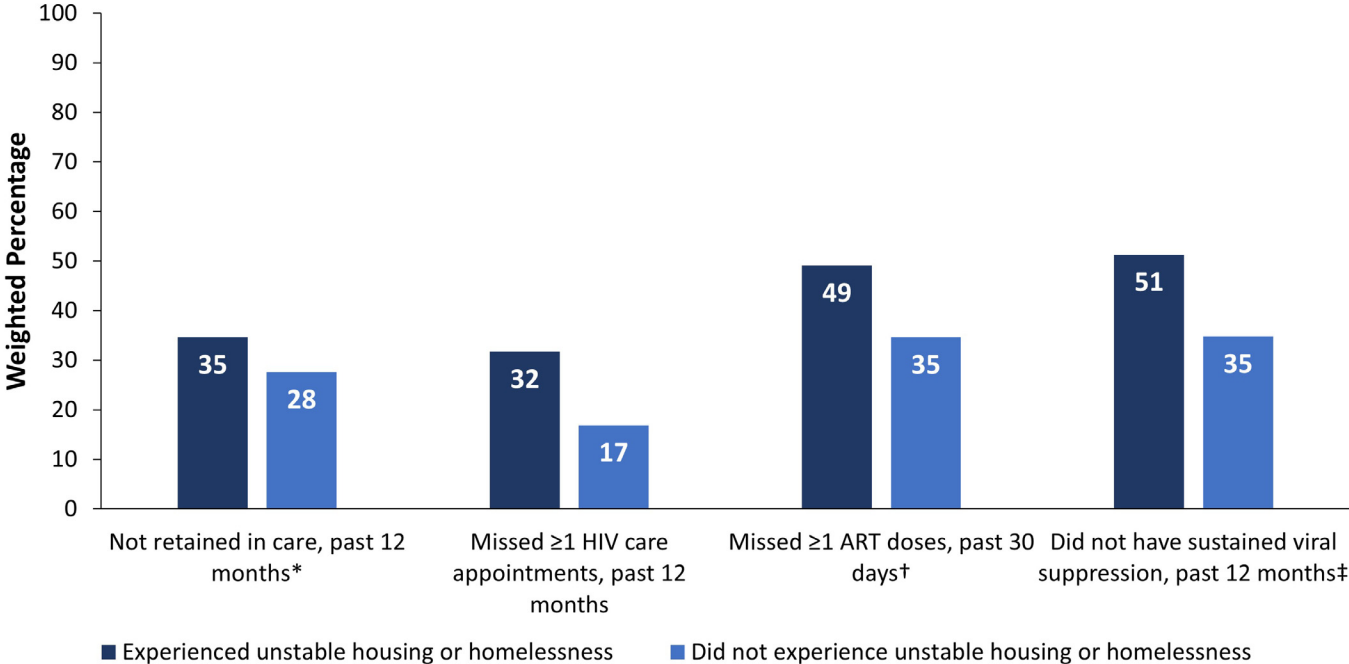
* Defined as having < 2 elements of outpatient HIV care at least 90 days apart in the past 12 months.

† Based on self-report.

‡ Defined as having ≥ 1 viral load measurements documented detectable or ≥ 200 copies/mL during the past 12 months.

The prevalence of certain adverse HIV outcomes was higher among persons who experienced unstable housing or homelessness during the past 12 months than those who did not, including not being retained in HIV care during the past 12 months (35% vs. 28%), missing ≥ 1 HIV care appointments during the past 12 months (32% vs. 17%), missing ≥ 1 ART doses during the past 30 days (49% vs. 35%), and not having sustained viral suppression during the past 12 months (51% vs. 35%) (Table 9; Figure 26).

Figure 26. Prevalence of adverse clinical outcomes among adults with diagnosed HIV, by whether or not persons experienced unstable housing or homelessness—Medical Monitoring Project, United States, 2021



Note. “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room–occupancy hotel, or in a car) at any time during the past 12 months.

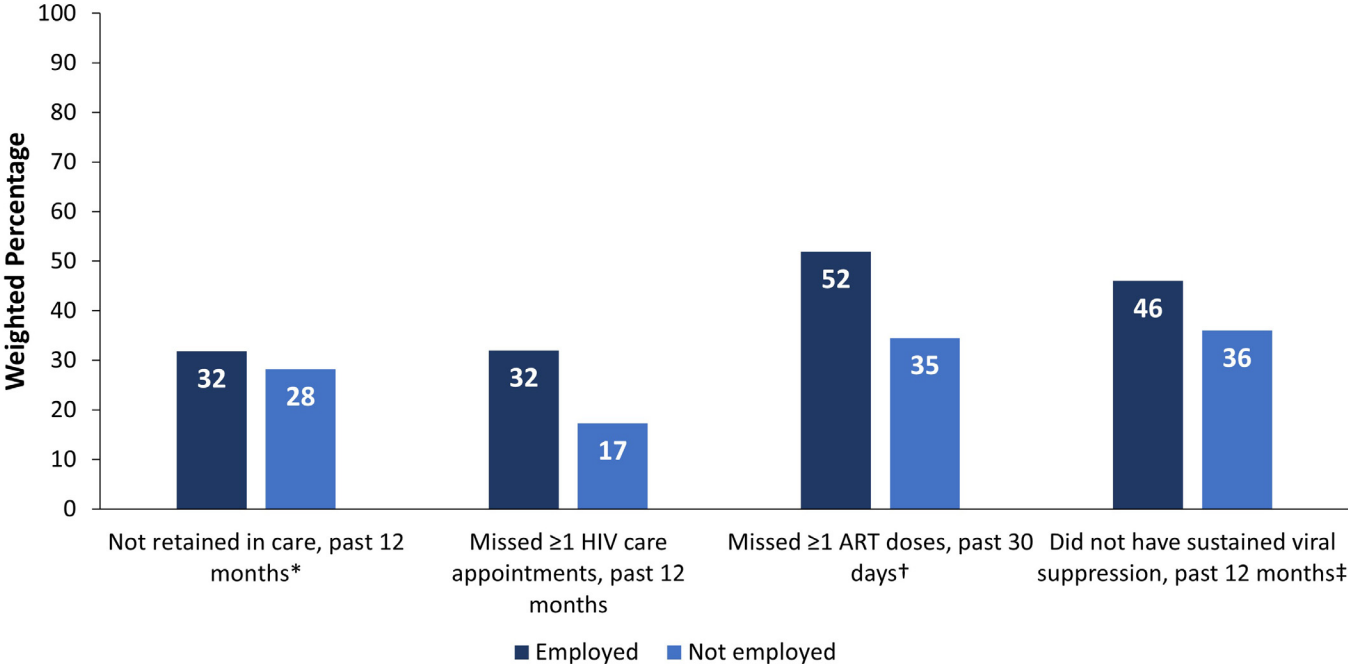
* Defined as having < 2 elements of outpatient HIV care at least 90 days apart in the past 12 months.

† Based on self-report.

‡ Defined as having ≥ 1 viral load measurements documented detectable or ≥ 200 copies/mL during the past 12 months.

The prevalence of certain adverse HIV outcomes was also higher among persons who were unemployed than those who were not, including not being retained in care during the past 12 months (32% vs. 28%), missing ≥ 1 HIV care appointments during the past 12 months (32% vs. 17%), missing ≥ 1 ART doses during the past 30 days (52% vs. 35%), and not having sustained viral suppression during the past 12 months (46% vs. 36%) (Table 9; Figure 27).

Figure 27. Prevalence of adverse clinical outcomes among adults with diagnosed HIV, by whether or not persons were unemployed—Medical Monitoring Project, United States, 2021



Note. Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

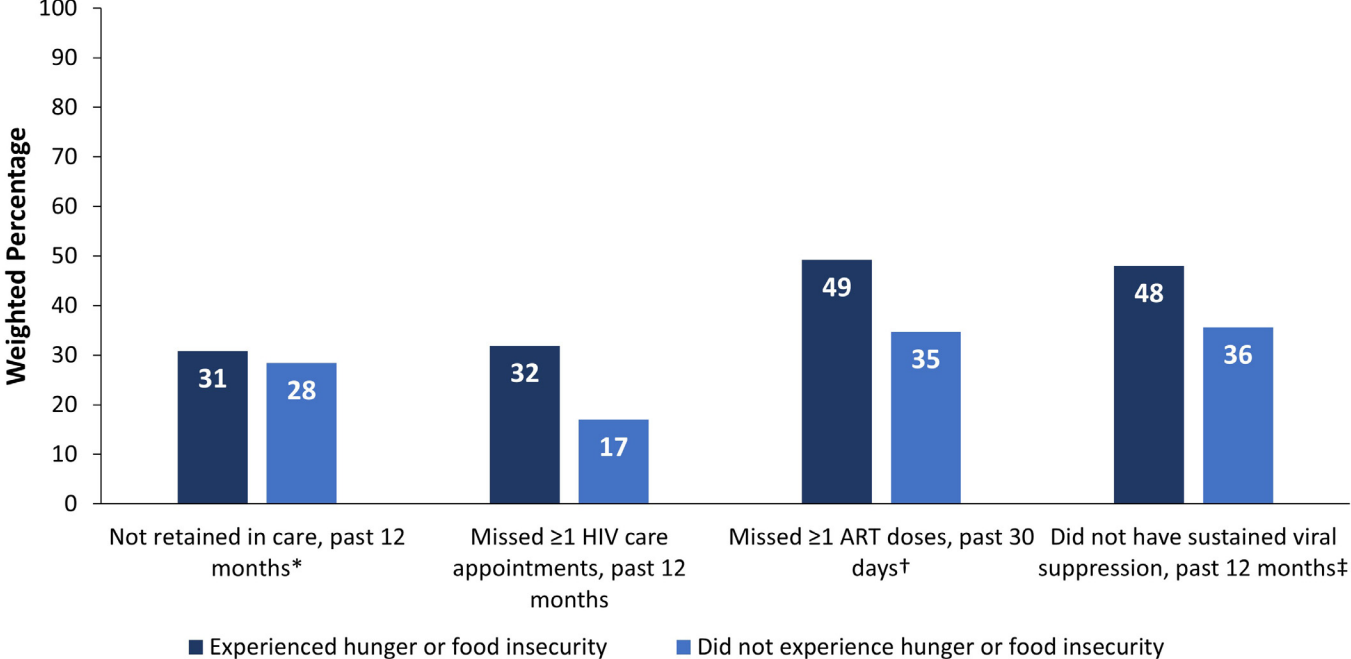
* Defined as having < 2 elements of outpatient HIV care at least 90 days apart in the past 12 months.

† Based on self-report.

‡ Defined as having ≥ 1 viral load measurements documented detectable or ≥ 200 copies/mL during the past 12 months.

The prevalence of certain adverse HIV outcomes was higher among persons who experienced hunger or food insecurity during the past 12 months than those who did not, including not being retained in care during the past 12 months (31% vs. 28%), missing ≥ 1 HIV care appointments during the past 12 months (32% vs. 17%), missing ≥ 1 ART doses during the past 30 days (49% vs. 35%), and not having sustained viral suppression during the past 12 months (48% vs. 36%) (Table 9; Figure 28).

Figure 28. Prevalence of adverse clinical outcomes among adults with diagnosed HIV, by whether or not persons experienced hunger or food insecurity—Medical Monitoring Project, United States, 2021



Note. “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

* Defined as having < 2 elements of outpatient HIV care at least 90 days apart in the past 12 months.

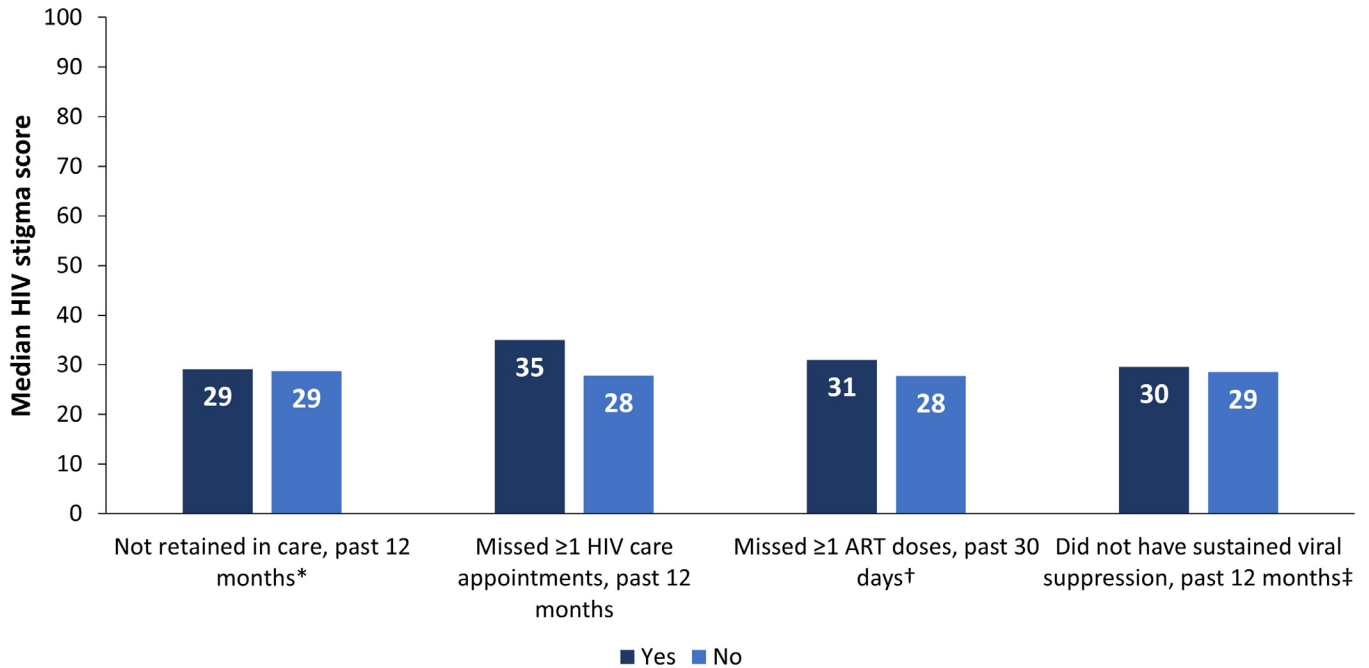
† Based on self-report.

‡ Defined as having ≥ 1 viral load measurements documented detectable or ≥ 200 copies/mL during the past 12 months.

HIV Stigma by HIV Outcomes

Median HIV stigma scores were higher among those who missed ≥ 1 HIV care appointments during the past 12 months versus those who did not (35 vs. 28) or missed ≥ 1 ART doses during the past 30 days versus those who did not (31 vs. 28; Figure 29). Median scores were similar by retention in care (not retained in care: 29, retained in care: 29) and viral suppression status (did not have sustained viral suppression: 30, had sustained viral suppression: 29).

Figure 29. Median HIV stigma scores among adults with diagnosed HIV, by selected HIV outcomes—Medical Monitoring Project, United States, 2021



Note. “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥ 18 years with diagnosed HIV infection living in the United States and Puerto Rico.

* Defined as having < 2 elements of outpatient HIV care at least 90 days apart in the past 12 months.

† Based on self-report.

‡ Defined as having ≥ 1 viral load measurements documented detectable or ≥ 200 copies/mL during the past 12 months.

Table 1. Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by cycle year—Medical Monitoring Project, United States, 2015–2021

	2015			2016			2017			2018			2019			2020			2021		
	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI
Total	3,654			4,038			4,222			4,050			4,100			3,710			3,995		
National HIV/AIDS Strategy indicators related to social determinants of health																					
<i>Quality of life</i>																					
Physical health																					
Self-reported health status^a																					
Good, very good, excellent	—	—	—	—	—	—	—	—	—	2,825	71.5	(69.4–73.6)	2,848	70.6	(68.7–72.5)	2,621	71.5	(70.0–73.1)	2,697	68.8	(67.4–70.3)
Poor, fair	—	—	—	—	—	—	—	—	—	1,196	28.5	(26.4–30.6)	1,233	29.4	(27.5–31.3)	1,071	28.5	(26.9–30.0)	1,275	31.2	(29.7–32.6)
Mental or emotional health																					
Unmet needs for services from a mental health professional among those who needed services, past 12 months^b																					
Yes	347	24.0	(20.9–27.1)	350	23.8	(20.7–26.9)	372	24.2	(21.0–27.5)	317	19.8	(17.1–22.5)	336	20.8	(17.4–24.3)	275	21.0	(18.2–23.8)	389	27.7	(22.9–32.5)
No	1,206	76.0	(72.9–79.1)	1,274	76.2	(73.1–79.3)	1,311	75.8	(72.5–79.0)	1,346	80.2	(77.5–82.9)	1,352	79.2	(75.7–82.6)	1,124	79.0	(76.2–81.8)	1,120	72.3	(67.5–77.1)
Structural or subsistence factors																					
Unstable housing or homelessness, past 12 months^c																					
Yes	—	—	—	—	—	—	—	—	—	870	21.0	(19.5–22.6)	791	19.8	(18.0–21.6)	630	17.2	(15.2–19.2)	651	17.0	(15.3–18.6)
No	—	—	—	—	—	—	—	—	—	3,157	79.0	(77.4–80.5)	3,298	80.2	(78.4–82.0)	3,061	82.8	(80.8–84.8)	3,330	83.0	(81.4–84.7)
Unemployment^d																					
Yes	574	16.8	(15.2–18.5)	640	15.7	(14.2–17.3)	634	14.9	(13.5–16.4)	550	13.9	(12.6–15.1)	556	13.7	(12.2–15.3)	644	18.1	(16.5–19.7)	558	14.7	(13.4–16.0)
No	3,061	83.2	(81.5–84.8)	3,386	84.3	(82.7–85.8)	3,566	85.1	(83.6–86.5)	3,483	86.1	(84.9–87.4)	3,522	86.3	(84.7–87.8)	3,039	81.9	(80.3–83.5)	3,417	85.3	(84.0–86.6)
Hunger or food insecurity, past 12 months^e																					
Yes	771	21.5	(19.6–23.3)	865	21.2	(19.6–22.9)	866	21.1	(19.2–22.9)	802	19.5	(18.2–20.8)	781	19.9	(18.0–21.8)	592	16.4	(15.2–17.6)	607	15.7	(14.2–17.3)
No	2,862	78.5	(76.7–80.4)	3,164	78.8	(77.1–80.4)	3,340	78.9	(77.1–80.8)	3,234	80.5	(79.2–81.8)	3,302	80.1	(78.2–82.0)	3,101	83.6	(82.4–84.8)	3,369	84.3	(82.7–85.8)
HIV stigma, past 12 months (n, median score, 95% CI)^f																					
—	—	—	—	—	—	—	—	—	—	3,824	31.2	(30.3–32.1)	3,904	30.7	(29.2–32.1)	3,518	28.4	(27.7–29.2)	3,712	28.8	(27.6–30.1)
Other factors important for health, including those that affect quality of life																					
<i>Economic stability</i>																					
Household income with respect to poverty guidelines^g																					
<100% FPL	1,608	46.4	(42.4–50.4)	1,633	42.1	(37.7–46.5)	1,661	41.6	(37.0–46.3)	1,651	42.9	(40.1–45.6)	1,593	41.6	(38.4–44.9)	1,189	35.6	(31.9–39.2)	1,373	38.0	(33.3–42.8)
100%–138% FPL	294	8.7	(7.5–9.9)	314	8.3	(7.5–9.1)	329	8.7	(7.8–9.6)	455	13.0	(11.7–14.3)	422	11.4	(10.3–12.5)	443	13.2	(11.9–14.6)	383	10.9	(9.2–12.7)
139%–399% FPL	1,109	33.4	(30.5–36.3)	1,291	35.5	(33.1–37.9)	1,383	35.7	(32.1–39.3)	1,186	33.2	(31.1–35.3)	1,235	34.3	(32.0–36.7)	1,218	35.8	(33.5–38.0)	1,279	36.5	(33.9–39.1)
≥400% FPL	416	11.5	(9.6–13.5)	508	14.1	(11.2–16.9)	554	14.0	(11.4–16.5)	414	10.9	(8.8–13.0)	488	12.6	(11.1–14.2)	526	15.4	(13.4–17.4)	543	14.5	(12.0–17.0)
<i>Education</i>																					
Educational attainment																					
Less than high school diploma	721	19.9	(17.4–22.3)	724	17.2	(14.8–19.6)	691	16.6	(15.1–18.1)	715	16.9	(14.9–18.9)	688	16.3	(15.0–17.6)	550	14.6	(12.9–16.3)	583	14.9	(12.4–17.4)
High school diploma or equivalent	916	24.2	(22.3–26.0)	1,029	25.6	(23.7–27.4)	1,116	27.3	(25.2–29.5)	1,088	27.1	(25.2–29.0)	1,103	26.7	(25.0–28.5)	899	25.0	(22.8–27.3)	1,039	25.9	(24.1–27.7)
Greater than high school	1,995	55.9	(52.7–59.2)	2,273	57.2	(53.9–60.6)	2,396	56.1	(53.3–58.8)	2,237	56.1	(53.0–59.2)	2,296	57.0	(54.7–59.2)	2,240	60.4	(57.7–63.1)	2,354	59.2	(56.0–62.5)
<i>Health-related factors</i>																					
Health insurance or coverage (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 months^h																					
Any private	1,224	34.6	(31.4–37.7)	1,406	36.2	(33.3–39.1)	1,483	35.4	(32.0–38.9)	1,383	35.0	(31.8–38.3)	1,388	33.5	(30.7–36.2)	1,445	39.6	(37.2–42.0)	1,609	41.5	(38.7–44.3)
Public only, excluding RWHAP only	2,061	55.0	(50.4–59.6)	2,247	54.2	(51.1–57.2)	2,315	53.8	(50.3–57.4)	2,248	54.2	(49.7–58.8)	2,259	54.8	(50.8–58.8)	1,912	50.9	(47.5–54.3)	1,990	48.9	(44.3–53.6)
Uninsured or RWHAP only	309	10.4	(6.8–14.1)	335	9.6	(7.2–12.1)	381	10.7	(7.5–14.0)	373	10.8	(7.6–13.9)	396	11.7	(8.9–14.5)	295	9.5	(7.7–11.3)	314	9.6	(6.5–12.7)
Received RWHAP assistance, past 12 months																					
Yes	1,693	45.1	(42.8–47.4)	1,900	44.4	(42.1–46.7)	1,988	45.9	(42.9–49.0)	1,925	45.7	(44.1–47.2)	1,950	46.1	(43.4–48.8)	1,796	47.2	(44.6–49.8)	1,897	47.1	(44.2–50.0)
No	1,854	54.9	(52.6–57.2)	2,051	55.6	(53.3–57.9)	2,116	54.1	(51.0–57.1)	2,007	54.3	(52.8–55.9)	2,030	53.9	(51.2–56.6)	1,791	52.8	(50.2–55.4)	1,926	52.9	(50.0–55.8)
Confidence in completing health forms																					
Somewhat, a little bit, not at all	802	23.0	(21.0–25.0)	907	22.6	(20.8–24.5)	957	23.0	(21.4–24.7)	1,113	27.2	(25.5–28.9)	1,078	26.5	(24.9–28.2)	998	27.1	(24.9–29.3)	952	24.1	(22.2–25.9)
Extremely, quite a bit	2,826	77.0	(75.0–79.0)	3,104	77.4	(75.5–79.2)	3,237	77.0	(75.3–78.6)	2,916	72.8	(71.1–74.5)	2,999	73.5	(71.8–75.1)	2,689	72.9	(70.7–75.1)	3,017	75.9	(74.1–77.8)
Has a disabilityⁱ																					
Yes	1,633	45.3	(42.4–48.3)	1,879	46.5	(43.8–49.2)	1,886	44.5	(42.7–46.4)	1,815	43.9	(41.5–46.3)	1,797	42.6	(40.7–44.4)	1,507	39.7	(36.8–42.6)	1,674	40.6	(38.4–42.9)
No	1,994	54.7	(51.7–57.6)	2,146	53.5	(50.8–56.2)	2,316	55.5	(53.6–57.3)	2,222	56.1	(53.7–58.5)	2,288	57.4	(55.6–59.3)	2,178	60.3	(57.4–63.2)	2,303	59.4	(57.1–61.6)
Any unmet HIV ancillary service need, past 12 months^j																					
Yes	—	—	—	—	—	—	—	—	—	1,880	47.3	(44.7–50.0)	1,757	45.0	(41.0–49.1)	1,467	41.4	(39.6–43.2)	1,815	47.5	(44.9–50.1)
No	—	—	—	—	—	—	—	—	—	2,143	52.7	(50.0–55.3)	2,316	55.0	(50.9–59.0)	2,208	58.6	(56.8–60.4)	2,138	52.5	(49.9–55.1)

Table 1. Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by cycle year—Medical Monitoring Project, United States, 2015–2021 (cont)

	2015			2016			2017			2018			2019			2020			2021		
	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI
Neighborhood and built environment																					
Any met or unmet need for transportation assistance, past 12 months^k																					
Yes	1,222	32.1	(29.9–34.3)	1,301	30.4	(28.4–32.3)	1,352	31.4	(29.4–33.4)	1,408	32.9	(31.0–34.9)	1,335	32.1	(30.2–34.1)	999	26.1	(24.5–27.7)	1,108	27.1	(25.6–28.6)
No	2,406	67.9	(65.7–70.1)	2,705	69.6	(67.7–71.6)	2,838	68.6	(66.6–70.6)	2,604	67.1	(65.1–69.0)	2,730	67.9	(65.9–69.8)	2,675	73.9	(72.3–75.5)	2,838	72.9	(71.4–74.4)
Social and community context																					
HIV health care discrimination among persons who received care, past 12 months^l																					
Yes	—	—	—	—	—	—	—	—	—	967	24.6	(21.9–27.2)	843	21.7	(18.9–24.4)	724	20.4	(17.3–23.4)	815	21.8	(19.3–24.4)
No	—	—	—	—	—	—	—	—	—	2,883	75.4	(72.8–78.1)	3,061	78.3	(75.6–81.1)	2,734	79.6	(76.6–82.7)	2,858	78.2	(75.6–80.7)
Speaks English less than well																					
Yes	—	—	—	—	—	—	283	5.9	(2.6–9.2)	—	—	—	292	7.1	(2.9–11.3)	284	7.1	(3.4–10.7)	327	7.4	(3.9–10.9)
No	3,379	93.0	(88.2–97.8)	3,775	93.6	(88.8–98.4)	3,924	94.1	(90.8–97.4)	3,770	93.3	(89.3–97.4)	3,794	92.9	(88.7–97.1)	3,411	92.9	(89.3–96.6)	3,657	92.6	(89.1–96.1)
Experiences of physical violence by an intimate partner or forced sex, lifetime^m																					
Yes	1,217	33.2	(30.5–36.0)	1,330	33.0	(30.5–35.6)	1,347	32.0	(29.3–34.7)	1,337	34.0	(30.6–37.4)	1,291	31.4	(29.1–33.8)	1,138	31.9	(28.2–35.5)	1,292	34.5	(32.2–36.8)
No	2,390	66.8	(64.0–69.5)	2,654	67.0	(64.4–69.5)	2,810	68.0	(65.3–70.7)	2,637	66.0	(62.6–69.4)	2,736	68.6	(66.2–70.9)	2,492	68.1	(64.5–71.8)	2,586	65.5	(63.2–67.8)
Experiences of physical violence by an intimate partner or forced sex, past 12 months^m																					
Yes	192	5.7	(4.8–6.6)	200	4.9	(4.2–5.5)	185	4.8	(4.1–5.5)	187	4.7	(3.8–5.6)	208	5.1	(4.4–5.9)	161	4.8	(4.0–5.6)	182	5.7	(4.6–6.7)
No	3,407	94.3	(93.4–95.2)	3,767	95.1	(94.5–95.8)	3,961	95.2	(94.5–95.9)	3,775	95.3	(94.4–96.2)	3,806	94.9	(94.1–95.6)	3,456	95.2	(94.4–96.0)	3,673	94.3	(93.3–95.4)
Incarcerated >24 hours, past 12 months																					
Yes	188	5.1	(3.9–6.2)	198	5.2	(4.3–6.2)	213	5.4	(4.5–6.4)	181	4.7	(3.7–5.8)	148	3.9	(3.0–4.8)	107	3.5	(2.4–4.6)	93	2.8	(2.2–3.5)
No	3,447	94.9	(93.8–96.1)	3,829	94.8	(93.8–95.7)	3,993	94.6	(93.6–95.5)	3,853	95.3	(94.2–96.3)	3,938	96.1	(95.2–97.0)	3,588	96.5	(95.4–97.6)	3,886	97.2	(96.5–97.8)

Abbreviations: n, number; col, column; CI, confidence interval; FPL, federal poverty level; RWHP, Ryan White HIV/AIDS Program; HHS, Department of Health and Human Services [footnotes only]; VA, Veterans Administration [footnotes only].

Note. Unweighted numbers and weighted percentages are presented. CIs incorporate weighted percentages. Excluded are estimates with a coefficient of variation ≥0.30 and those based on a denominator sample size <30.

^a “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

^b “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

^c “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room-occupancy hotel, or in a car) at any time during the past 12 months.

^d Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

^e “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

^f “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].

^g Poverty guidelines defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

^h Persons could select more than 1 response for health insurance or coverage. Mutually exclusive categories are presented based on responses. Private coverage defined as receiving health insurance through a person’s employer or a family member’s employer or purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance includes Medicaid, Medicare, VA, RWHP, or other city, county, or state-funded insurance. Uninsured or RWHP only category includes those who did not report having any insurance, or received RWHP assistance only, without coverage through any other insurance categories.

ⁱ Self-reported, and includes physical, mental, and emotional disabilities.

^j Represents those who needed, but did not receive, ≥1 HIV ancillary services, among all persons.

^k Represents those who needed transportation assistance, regardless of whether that assistance was received, among all persons.

^l HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Respondents were asked if they experienced these forms of discrimination never, rarely, some of the time, most of the time, or all the time. Respondents who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all of time were considered to have experienced discrimination in an HIV health care setting.

^m Physical violence by an intimate partner defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

Table 2a. Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by age—Medical Monitoring Project, United States, 2021

	18–29 years			30–39 years			40–49 years			50–64 years			≥65 years		
	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI
Total (row %)	261	7.4	(5.9–8.9)	641	18.2	(16.5–20.0)	756	19.8	(17.8–21.7)	1,778	42.5	(39.8–45.2)	559	12.1	(10.9–13.3)
National HIV/AIDS Strategy indicators related to social determinants of health															
Quality of life															
Physical health															
Self-reported health status^a															
Good, very good, excellent	215	80.8	(75.7–85.9)	482	76.3	(72.2–80.4)	532	73.1	(69.4–76.8)	1,100	62.8	(60.5–65.0)	368	64.5	(59.2–69.9)
Poor, fair	45	19.2	(14.1–24.3)	155	23.7	(19.6–27.8)	216	26.9	(23.2–30.6)	671	37.2	(35.0–39.5)	188	35.5	(30.1–40.8)
Mental or emotional health															
Unmet needs for services from a mental health professional among those who needed services, past 12 months^b															
Yes	42	38.2	(25.6–50.7)	91	31.8	(25.8–37.8)	71	27.3	(19.8–34.7)	149	24.7	(18.8–30.6)	36	22.8	(12.9–32.7)
No	74	61.8	(49.3–74.4)	193	68.2	(62.2–74.2)	219	72.7	(65.3–80.2)	519	75.3	(69.4–81.2)	115	77.2	(67.3–87.1)
Structural or subsistence factors															
Unstable housing or homelessness, past 12 months^c															
Yes	82	31.5	(25.7–37.4)	155	24.7	(19.4–30.0)	148	18.6	(14.9–22.4)	226	13.1	(11.3–14.8)	40	7.5	(4.9–10.1)
No	178	68.5	(62.6–74.3)	484	75.3	(70.0–80.6)	602	81.4	(77.6–85.1)	1,547	86.9	(85.2–88.7)	519	92.5	(89.9–95.1)
Unemployment^d															
Yes	65	23.2	(17.0–29.3)	139	22.3	(18.9–25.8)	131	17.9	(14.7–21.1)	199	11.5	(9.8–13.2)	24	3.7	(2.3–5.0)
No	195	76.8	(70.7–83.0)	500	77.7	(74.2–81.1)	618	82.1	(78.9–85.3)	1,572	88.5	(86.8–90.2)	532	96.3	(95.0–97.7)
Hunger or food insecurity, past 12 months^e															
Yes	62	24.3	(18.2–30.4)	145	21.1	(16.9–25.4)	128	15.8	(12.7–18.8)	237	14.5	(12.4–16.7)	35	6.4	(4.0–8.7)
No	197	75.7	(69.6–81.8)	491	78.9	(74.6–83.1)	621	84.2	(81.2–87.3)	1,536	85.5	(83.3–87.6)	524	93.6	(91.3–96.0)
HIV stigma, past 12 months (n, median score, 95% CI) ^f	251	32.5	(29.1–36.0)	601	31.9	(29.0–34.8)	702	31.2	(28.4–33.9)	1,650	28.3	(26.4–30.2)	508	22.8	(20.3–25.2)
Other factors important for health, including those that affect quality of life															
Economic stability															
Household income with respect to poverty guidelines^g															
<100% FPL	66	31.8	(20.7–43.0)	192	34.0	(28.4–39.6)	265	37.7	(31.9–43.6)	670	40.7	(35.9–45.5)	180	38.2	(31.3–45.2)
100%–138% FPL	21	12.8	(6.0–19.5)	61	11.4	(8.2–14.6)	55	7.6	(5.5–9.7)	184	11.4	(9.4–13.4)	62	12.8	(9.8–15.9)
139%–399% FPL	101	49.7	(41.8–57.5)	231	40.3	(36.6–44.1)	253	41.5	(35.9–47.1)	508	31.4	(29.2–33.5)	186	34.4	(29.3–39.5)
≥400% FPL	—	—	—	80	14.2	(10.9–17.6)	91	13.1	(9.7–16.5)	273	16.5	(13.2–19.8)	82	14.5	(11.3–17.8)
Education															
Educational attainment															
Less than high school diploma	—	—	—	82	13.7	(9.3–18.1)	129	18.5	(14.2–22.7)	265	14.1	(11.5–16.8)	89	17.6	(13.1–22.0)
High school diploma or equivalent	89	34.8	(28.9–40.6)	171	25.4	(21.7–29.1)	190	23.6	(19.5–27.7)	469	26.6	(24.0–29.2)	120	22.3	(19.1–25.5)
Greater than high school	153	57.1	(50.6–63.7)	385	60.9	(55.9–65.8)	431	58.0	(54.0–61.9)	1,036	59.3	(55.2–63.3)	349	60.2	(55.2–65.1)
Health-related factors															
Health insurance or coverage (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 months^h															
Any private	116	47.3	(41.7–53.0)	257	41.7	(37.6–45.9)	327	45.3	(40.1–50.5)	695	39.7	(36.2–43.2)	214	37.8	(33.0–42.7)
Public only, excluding RWHAP only	98	35.2	(29.3–41.2)	293	44.3	(38.0–50.6)	317	39.8	(32.4–47.2)	949	53.9	(49.6–58.2)	333	61.5	(56.7–66.4)
Uninsured or RWHAP only	42	17.4	(10.8–24.1)	75	14.0	(9.8–18.2)	93	14.8	(9.9–19.8)	101	6.4	(3.8–9.0)	—	—	—
Received RWHAP assistance, past 12 months															
Yes	132	51.0	(44.0–57.9)	347	52.9	(49.0–56.8)	358	46.6	(41.0–52.1)	814	45.2	(41.4–48.9)	246	43.8	(38.0–49.5)
No	120	49.0	(42.1–56.0)	257	47.1	(43.2–51.0)	368	53.4	(47.9–59.0)	891	54.8	(51.1–58.6)	290	56.2	(50.5–62.0)
Confidence in completing health forms															
Somewhat, a little bit, not at all	52	23.8	(16.4–31.3)	119	20.9	(17.6–24.3)	181	25.2	(21.5–28.8)	458	24.8	(22.3–27.3)	142	24.3	(20.0–28.6)
Extremely, quite a bit	207	76.2	(68.7–83.6)	518	79.1	(75.7–82.4)	569	74.8	(71.2–78.5)	1,309	75.2	(72.7–77.7)	414	75.7	(71.4–80.0)
Has a disabilityⁱ															
Yes	71	27.8	(20.6–35.0)	213	30.8	(26.4–35.2)	271	36.1	(31.7–40.5)	839	46.5	(44.1–48.8)	280	50.4	(44.7–56.1)
No	189	72.2	(65.0–79.4)	426	69.2	(64.8–73.6)	479	63.9	(59.5–68.3)	932	53.5	(51.2–55.9)	277	49.6	(43.9–55.3)
Any unmet HIV ancillary service need, past 12 months^j															
Yes	146	56.4	(47.1–65.6)	346	53.4	(46.3–60.4)	366	50.6	(46.5–54.7)	755	45.0	(41.5–48.4)	202	37.2	(33.4–40.9)
No	112	43.6	(34.4–52.9)	280	46.6	(39.6–53.7)	382	49.4	(45.3–53.5)	1,008	55.0	(51.6–58.5)	356	62.8	(59.1–66.6)

Table 2a. Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by age—Medical Monitoring Project, United States, 2021 (cont)

	18–29 years			30–39 years			40–49 years			50–64 years			≥65 years		
	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI
Neighborhood and built environment															
Any met or unmet need for transportation assistance, past 12 months^k															
Yes	56	21.7	(16.3–27.0)	176	25.1	(21.5–28.7)	188	25.0	(21.6–28.4)	531	29.8	(27.5–32.1)	157	27.1	(23.7–30.5)
No	202	78.3	(73.0–83.7)	453	74.9	(71.3–78.5)	556	75.0	(71.6–78.4)	1,225	70.2	(67.9–72.5)	402	72.9	(69.5–76.3)
Social and community context															
HIV health care discrimination among persons who received care, past 12 months^l															
Yes	57	22.9	(15.9–29.9)	141	22.4	(17.1–27.8)	191	25.0	(21.4–28.6)	341	21.1	(17.7–24.4)	85	17.8	(14.2–21.3)
No	180	77.1	(70.1–84.1)	439	77.6	(72.2–82.9)	505	75.0	(71.4–78.6)	1,298	78.9	(75.6–82.3)	436	82.2	(78.7–85.8)
Speaks English less than well															
Yes	—	—	—	39	5.6	(3.0–8.2)	68	8.1	(4.4–11.8)	—	—	—	57	9.8	(4.3–15.3)
No	252	96.9	(94.8–99.1)	600	94.4	(91.8–97.0)	684	91.9	(88.2–95.6)	1,619	92.1	(87.4–96.8)	502	90.2	(84.7–95.7)
Experiences of physical violence by an intimate partner or forced sex, lifetime^m															
Yes	104	45.1	(37.0–53.2)	263	42.9	(37.5–48.2)	269	38.8	(34.2–43.5)	558	32.0	(28.6–35.3)	98	17.3	(12.4–22.3)
No	151	54.9	(46.8–63.0)	354	57.1	(51.8–62.5)	458	61.2	(56.5–65.8)	1,172	68.0	(64.7–71.4)	451	82.7	(77.7–87.6)
Experiences of physical violence by an intimate partner or forced sex, past 12 months^m															
Yes	36	15.1	(10.4–19.8)	47	8.4	(5.8–11.0)	44	6.6	(4.1–9.1)	50	3.8	(2.7–4.8)	—	—	—
No	217	84.9	(80.2–89.6)	566	91.6	(89.0–94.2)	679	93.4	(90.9–95.9)	1,669	96.2	(95.2–97.3)	542	99.0	(97.9–100)
Incarcerated >24 hours, past 12 months															
Yes	—	—	—	23	3.9	(2.2–5.7)	—	—	—	33	2.5	(1.6–3.4)	—	—	—
No	243	93.0	(87.0–99.0)	614	96.1	(94.3–97.8)	736	97.7	(96.3–99.1)	1,738	97.5	(96.6–98.4)	555	99.3	(98.5–100)

Abbreviations: n, number; col, column; CI, confidence interval; FPL, federal poverty level; RWHP, Ryan White HIV/AIDS Program; HHS, Department of Health and Human Services [footnotes only]; VA, Veterans Administration [footnotes only].

Note. Unweighted numbers and weighted percentages are presented. CIs incorporate weighted percentages. Excluded are estimates with a coefficient of variation ≥ 0.30 and those based on a denominator sample size < 30 .

^a “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

^b “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

^c “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room-occupancy hotel, or in a car) at any time during the past 12 months.

^d Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

^e “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

^f “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥ 18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].

^g Poverty guidelines defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

^h Persons could select more than 1 response for health insurance or coverage. Mutually exclusive categories are presented based on responses. Private coverage defined as receiving health insurance through a person’s employer or a family member’s employer or purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance includes Medicaid, Medicare, VA, RWHP, or other city, county, or state-funded insurance. Uninsured or RWHP only category includes those who did not report having any insurance, or received RWHP assistance only, without coverage through any other insurance categories.

ⁱ Self-reported, and includes physical, mental, and emotional disabilities.

^j Represents those who needed, but did not receive, ≥ 1 HIV ancillary services, among all persons.

^k Represents those who needed transportation assistance, regardless of whether that assistance was received, among all persons.

^l HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Respondents were asked if they experienced these forms of discrimination never, rarely, some of the time, most of the time, or all the time. Respondents who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all of time were considered to have experienced discrimination in an HIV health care setting.

^m Physical violence by an intimate partner defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

Table 2b. Relative and absolute differences in individual-level social determinants of health and quality of life among adults with diagnosed HIV, by age—Medical Monitoring Project, United States, 2021

	18–29 years vs. ≥65 years				30–39 years vs. ≥65 years				40–49 years vs. ≥65 years				50–59 years vs. ≥65 years			
	PR	95% CI	PD	95% CI	PR	95% CI	PD	95% CI	PR	95% CI	PD	95% CI	PR	95% CI	PD	95% CI
Total (row %)																
National HIV/AIDS Strategy indicators related to social determinants of health																
<i>Quality of life</i>																
Physical health																
Self-reported health status^a																
Good, very good, excellent	1.25	(1.16–1.35)	16.27	(11.02–21.52)	1.18	(1.06–1.32)	11.76	(4.19–19.33)	1.13	(1.05–1.22)	8.53	(3.46–13.60)	0.97	(0.89–1.07)	-1.77	(-7.67–4.13)
Poor, fair	0.54	(0.43–0.68)	-16.27	(-21.52–-11.02)	0.67	(0.52–0.87)	-11.76	(-19.33–-4.19)	0.76	(0.65–0.89)	-8.53	(-13.60–-3.46)	1.05	(0.89–1.24)	1.77	(-4.13–7.67)
Mental or emotional health																
Unmet needs for services from a mental health professional among those who needed services, past 12 months^b																
Yes	1.67	(0.95–2.93)	15.34	(-1.12–31.81)	1.39	(0.87–2.22)	8.98	(-2.42–20.39)	1.20	(0.76–1.88)	4.49	(-6.33–15.31)	1.08	(0.72–1.64)	1.87	(-7.66–11.40)
No	0.80	(0.63–1.03)	-15.34	(-31.81–1.12)	0.88	(0.76–1.03)	-8.98	(-20.39–2.42)	0.94	(0.82–1.09)	-4.49	(-15.31–6.33)	0.98	(0.86–1.10)	-1.87	(-11.40–7.66)
Structural or subsistence factors																
Unstable housing or homelessness, past 12 months^c																
Yes	4.19	(2.98–5.90)	24.03	(18.38–29.68)	3.28	(2.25–4.78)	17.17	(11.66–22.68)	2.48	(1.63–3.77)	11.12	(6.35–15.89)	1.74	(1.25–2.41)	5.55	(2.96–8.13)
No	0.74	(0.68–0.80)	-24.03	(-29.68–-18.38)	0.81	(0.76–0.87)	-17.17	(-22.68–-11.66)	0.88	(0.83–0.93)	-11.12	(-15.89–-6.35)	0.94	(0.91–0.97)	-5.55	(-8.13–-2.96)
Unemployment^d																
Yes	6.35	(3.92–10.30)	19.54	(13.07–26.00)	6.11	(4.07–9.18)	18.67	(14.92–22.42)	4.90	(3.29–7.31)	14.25	(10.87–17.64)	3.15	(2.07–4.81)	7.85	(5.49–10.22)
No	0.80	(0.73–0.87)	-19.54	(-26.00–-13.07)	0.81	(0.77–0.85)	-18.67	(-22.42–-14.92)	0.85	(0.82–0.89)	-14.25	(-17.64–-10.87)	0.92	(0.90–0.94)	-7.85	(-10.22–-5.49)
Hunger or food insecurity, past 12 months^e																
Yes	3.82	(2.53–5.75)	17.92	(11.81–24.04)	3.32	(2.22–4.98)	14.78	(10.14–19.42)	2.48	(1.67–3.69)	9.41	(5.80–13.02)	2.28	(1.53–3.41)	8.18	(4.98–11.38)
No	0.81	(0.75–0.88)	-17.92	(-24.04–-11.81)	0.84	(0.80–0.89)	-14.78	(-19.42–-10.14)	0.90	(0.86–0.94)	-9.41	(-13.02–-5.80)	0.91	(0.88–0.95)	-8.18	(-11.38–-4.98)
HIV stigma, past 12 months (n, median score, 95% CI)^f																
Other factors important for health, including those that affect quality of life																
<i>Economic stability</i>																
Household income with respect to poverty guidelines^g																
<100% FPL	0.83	(0.60–1.16)	-6.40	(-17.28–4.49)	0.89	(0.75–1.05)	-4.22	(-10.32–1.88)	0.99	(0.85–1.15)	-0.50	(-6.28–5.28)	1.06	(0.92–1.23)	2.45	(-3.09–7.99)
100%–138% FPL	0.99	(0.55–1.81)	-0.08	(-7.74–7.58)	0.89	(0.64–1.24)	-1.41	(-5.34–2.52)	0.59	(0.43–0.82)	-5.20	(-8.48–-1.92)	0.89	(0.67–1.18)	-1.42	(-4.97–2.12)
139%–399% FPL	1.44	(1.21–1.73)	15.28	(7.43–23.13)	1.17	(1.00–1.37)	5.95	(0.29–11.60)	1.21	(1.03–1.42)	7.15	(1.07–13.23)	0.91	(0.79–1.06)	-3.02	(-8.12–2.07)
≥400% FPL	0.39	(0.21–0.73)	-8.81	(-13.05–-4.56)	0.98	(0.73–1.31)	-0.32	(-4.51–3.88)	0.90	(0.66–1.23)	-1.45	(-5.76–2.86)	1.14	(0.89–1.46)	2.00	(-1.80–5.80)
<i>Education</i>																
Educational attainment																
Less than high school diploma	0.46	(0.23–0.95)	-9.44	(-16.46–-2.42)	0.78	(0.58–1.05)	-3.85	(-8.29–0.59)	1.05	(0.81–1.37)	0.90	(-3.86–5.65)	0.81	(0.65–0.99)	-3.42	(-7.00–0.15)
High school diploma or equivalent	1.56	(1.24–1.97)	12.48	(5.58–19.39)	1.14	(0.95–1.37)	3.15	(-1.16–7.46)	1.06	(0.87–1.28)	1.31	(-3.13–5.74)	1.19	(1.00–1.42)	4.34	(0.19–8.49)
Greater than high school	0.95	(0.83–1.09)	-3.04	(-10.99–4.90)	1.01	(0.93–1.10)	0.70	(-4.43–5.83)	0.96	(0.88–1.05)	-2.20	(-7.25–2.84)	0.98	(0.91–1.06)	-0.91	(-5.41–3.59)
<i>Health-related factors</i>																
Health insurance or coverage (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 months^h																
Any private	1.25	(1.04–1.50)	9.50	(1.71–17.30)	1.10	(0.96–1.27)	3.89	(-1.75–9.53)	1.20	(1.03–1.39)	7.49	(1.30–13.68)	1.05	(0.94–1.17)	1.86	(-2.35–6.08)
Public only, excluding RWHAP only	0.57	(0.47–0.70)	-26.27	(-34.30–-18.24)	0.72	(0.62–0.84)	-17.19	(-24.74–-9.64)	0.65	(0.53–0.79)	-21.67	(-30.06–-13.28)	0.88	(0.80–0.96)	-7.61	(-12.66–-2.57)
Uninsured or RWHAP only	26.07	(7.76–87.61)	16.76	(10.06–23.47)	20.89	(6.50–67.15)	13.30	(9.03–17.57)	22.20	(6.93–71.10)	14.18	(9.23–19.12)	9.60	(2.83–32.56)	5.75	(3.01–8.49)
Received RWHAP assistance, past 12 months																
Yes	1.16	(0.97–1.40)	7.17	(-1.53–15.87)	1.21	(1.06–1.38)	9.12	(2.95–15.28)	1.06	(0.94–1.20)	2.78	(-2.54–8.09)	1.03	(0.90–1.18)	1.38	(-4.59–7.35)
No	0.87	(0.74–1.03)	-7.17	(-15.87–1.53)	0.84	(0.75–0.94)	-9.12	(-15.28–-2.95)	0.95	(0.86–1.05)	-2.78	(-8.09–2.54)	0.98	(0.88–1.09)	-1.38	(-7.35–4.59)
Confidence in completing health forms																
Somewhat, a little bit, not at all	0.98	(0.75–1.29)	-0.45	(-6.96–6.06)	0.86	(0.69–1.08)	-3.35	(-8.52–1.82)	1.04	(0.80–1.33)	0.88	(-5.36–7.12)	1.02	(0.88–1.19)	0.54	(-3.20–4.27)
Extremely, quite a bit	1.01	(0.92–1.10)	0.45	(-6.06–6.96)	1.04	(0.98–1.12)	3.35	(-1.82–8.52)	0.99	(0.91–1.07)	-0.88	(-7.12–5.36)	0.99	(0.95–1.04)	-0.54	(-4.27–3.20)
Has a disabilityⁱ																
Yes	0.55	(0.40–0.75)	-22.60	(-33.04–-12.16)	0.61	(0.50–0.74)	-19.56	(-27.15–-11.97)	0.72	(0.61–0.84)	-14.33	(-21.15–-7.51)	0.92	(0.80–1.06)	-3.94	(-10.79–2.91)
No	1.46	(1.22–1.73)	22.60	(12.16–33.04)	1.39	(1.22–1.60)	19.56	(11.97–27.15)	1.29	(1.13–1.46)	14.33	(7.51–21.15)	1.08	(0.94–1.24)	3.94	(-2.91–10.79)
Any unmet HIV ancillary service need, past 12 months^j																
Yes	1.52	(1.25–1.83)	19.18	(9.33–29.03)	1.44	(1.23–1.67)	16.18	(8.71–23.64)	1.36	(1.19–1.55)	13.40	(7.68–19.11)	1.21	(1.08–1.36)	7.80	(3.08–12.51)
No	0.69	(0.56–0.86)	-19.18	(-29.03–-9.33)	0.74	(0.64–0.87)	-16.18	(-23.64–-8.71)	0.79	(0.71–0.87)	-13.40	(-19.11–-7.68)	0.88	(0.81–0.95)	-7.80	(-12.51–-3.08)

Table 2b. Relative and absolute differences in individual-level social determinants of health and quality of life among adults with diagnosed HIV, by age—Medical Monitoring Project, United States, 2021 (cont)

	18–29 years vs. ≥65 years				30–39 years vs. ≥65 years				40–49 years vs. ≥65 years				50–59 years vs. ≥65 years			
	PR	95% CI	PD	95% CI	PR	95% CI	PD	95% CI	PR	95% CI	PD	95% CI	PR	95% CI	PD	95% CI
Neighborhood and built environment																
Any met or unmet need for transportation assistance, past 12 months^k																
Yes	0.80	(0.61–1.04)	-5.45	(-11.55–0.64)	0.93	(0.76–1.13)	-2.00	(-7.09–3.09)	0.92	(0.77–1.10)	-2.13	(-6.83–2.57)	1.10	(0.94–1.28)	2.65	(-1.55–6.85)
No	1.07	(0.99–1.16)	5.45	(-0.64–11.55)	1.03	(0.96–1.10)	2.00	(-3.09–7.09)	1.03	(0.97–1.10)	2.13	(-2.57–6.83)	0.96	(0.91–1.02)	-2.65	(-6.85–1.55)
Social and community context																
HIV health care discrimination among persons who received care, past 12 months^l																
Yes	1.29	(0.92–1.81)	5.14	(-2.20–12.48)	1.26	(0.96–1.67)	4.66	(-1.14–10.46)	1.41	(1.13–1.75)	7.21	(2.69–11.74)	1.18	(0.92–1.52)	3.28	(-1.47–8.03)
No	0.94	(0.85–1.03)	-5.14	(-12.48–2.20)	0.94	(0.88–1.02)	-4.66	(-10.46–1.14)	0.91	(0.86–0.97)	-7.21	(-11.74–2.69)	0.96	(0.91–1.02)	-3.28	(-8.03–1.47)
Speaks English less than well																
Yes	0.31	(0.11–0.91)	-6.72	(-13.41–-0.02)	0.57	(0.37–0.90)	-4.17	(-8.50–0.17)	0.83	(0.56–1.23)	-1.68	(-5.52–2.16)	0.81	(0.62–1.05)	-1.85	(-4.26–0.56)
No	1.07	(1.00–1.16)	6.72	(0.02–13.41)	1.05	(1.00–1.10)	4.17	(-0.17–8.50)	1.02	(0.98–1.06)	1.68	(-2.16–5.52)	1.02	(0.99–1.05)	1.85	(-0.56–4.26)
Experiences of physical violence by an intimate partner or forced sex, lifetime^m																
Yes	2.60	(1.82–3.72)	27.77	(17.69–37.85)	2.47	(1.76–3.48)	25.56	(17.29–33.83)	2.24	(1.64–3.05)	21.48	(14.66–28.30)	1.84	(1.44–2.36)	14.62	(10.33–18.91)
No	0.66	(0.56–0.78)	-27.77	(-37.85–-17.69)	0.69	(0.61–0.78)	-25.56	(-33.83–-17.29)	0.74	(0.67–0.82)	-21.48	(-28.30–-14.66)	0.82	(0.78–0.87)	-14.62	(-18.91–-10.33)
Experiences of physical violence by an intimate partner or forced sex, past 12 months^m																
Yes	14.37	(5.21–39.63)	14.03	(9.20–18.87)	8.03	(2.98–21.62)	7.37	(4.62–10.13)	6.32	(2.23–17.92)	5.58	(2.87–8.30)	3.58	(1.26–10.20)	2.71	(1.15–4.28)
No	0.86	(0.81–0.91)	-14.03	(-18.87–-9.20)	0.93	(0.90–0.95)	-7.37	(-10.13–-4.62)	0.94	(0.92–0.97)	-5.58	(-8.30–-2.87)	0.97	(0.96–0.99)	-2.71	(-4.28–-1.15)
Incarcerated >24 hours, past 12 months																
Yes	10.16	(2.30–44.84)	6.32	(0.26–12.38)	5.70	(1.50–21.63)	3.24	(1.28–5.21)	3.37	(0.95–11.96)	1.63	(0.15–3.11)	3.61	(1.09–11.99)	1.80	(0.73–2.87)
No	0.94	(0.88–1.00)	-6.32	(-12.38–-0.26)	0.97	(0.95–0.99)	-3.24	(-5.21–-1.28)	0.98	(0.97–1.00)	-1.63	(-3.11–-0.15)	0.98	(0.97–0.99)	-1.80	(-2.87–-0.73)

Abbreviations: PR, prevalence ratio; PD, prevalence difference; CI, confidence interval; FPL, federal poverty level; RWHP, Ryan White HIV/AIDS Program; HHS, Department of Health and Human Services [footnotes only]; VA, Veterans Administration [footnotes only].

Note. persons aged ≥65 years were the referent group for each disparity assessment. Excluded are estimates with a coefficient of variation ≥0.30 and those based on a denominator sample size <30.

^a “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

^b “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

^c “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room-occupancy hotel, or in a car) at any time during the past 12 months.

^d Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

^e “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

^f “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].

^g Poverty guidelines defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

^h Persons could select more than 1 response for health insurance or coverage. Mutually exclusive categories are presented based on responses. Private coverage defined as receiving health insurance through a person’s employer or a family member’s employer or purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance includes Medicaid, Medicare, VA, RWHP, or other city, county, or state-funded insurance. Uninsured or RWHP only category includes those who did not report having any insurance, or received RWHP assistance only, without coverage through any other insurance categories.

ⁱ Self-reported, and includes physical, mental, and emotional disabilities.

^j Represents those who needed, but did not receive, ≥1 HIV ancillary services, among all persons.

^k Represents those who needed transportation assistance, regardless of whether that assistance was received, among all persons.

^l HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Respondents were asked if they experienced these forms of discrimination never, rarely, some of the time, most of the time, or all the time. Respondents who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all the time were considered to have experienced discrimination in an HIV health care setting.

^m Physical violence by an intimate partner defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

**Table 3a. Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by current gender identity—
Medical Monitoring Project, United States, 2021**

	Cisgender male ^a			Cisgender female ^a			Transgender ^a		
	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI
Total (row %)	2,918	74.8	(71.6–78.0)	983	22.9	(19.8–26.0)	91	2.3	(1.9–2.7)
National HIV/AIDS Strategy indicators related to social determinants of health									
Quality of life									
Physical health									
Self-reported health status^b									
Good, very good, excellent	2,070	71.5	(70.1–73.0)	569	60.7	(55.6–65.7)	57	62.0	(52.3–71.8)
Poor, fair	832	28.5	(27.0–29.9)	408	39.3	(34.3–44.4)	34	38.0	(28.2–47.7)
Mental or emotional health									
Unmet needs for services from a mental health professional among those who needed services, past 12 months^c									
Yes	287	28.5	(23.9–33.1)	91	24.9	(16.6–33.3)	10	30.3*	(13.4–47.1)
No	785	71.5	(66.9–76.1)	304	75.1	(66.7–83.4)	30	69.7*	(52.9–86.6)
Structural or subsistence factors									
Unstable housing or homelessness, past 12 months^d									
Yes	471	16.6	(14.7–18.4)	158	17.2	(14.5–19.8)	21	27.1	(17.1–37.1)
No	2,436	83.4	(81.6–85.3)	823	82.8	(80.2–85.5)	70	72.9	(62.9–82.9)
Unemployment^e									
Yes	420	14.7	(13.3–16.2)	118	13.4	(10.9–15.9)	20	24.7	(15.3–34.2)
No	2,482	85.3	(83.8–86.7)	862	86.6	(84.1–89.1)	71	75.3	(65.8–84.7)
Hunger or food insecurity, past 12 months^f									
Yes	423	14.9	(13.1–16.7)	156	16.2	(13.6–18.8)	28	36.8*	(20.0–53.5)
No	2,481	85.1	(83.3–86.9)	824	83.8	(81.2–86.4)	62	63.2*	(46.5–80.0)
HIV stigma, past 12 months (n, median score, 95% CI)^g	2,726	27.9	(26.4–29.4)	899	33.5	(30.4–36.5)	85	34.2	(28.6–39.9)
Other factors important for health, including those that affect quality of life									
Economic stability									
Household income with respect to poverty guidelines^h									
<100% FPL	857	32.4	(28.3–36.5)	471	55.5	(47.6–63.5)	45	57.9	(44.4–71.4)
100%–138% FPL	273	10.9	(9.1–12.6)	101	11.5	(8.6–14.4)	—	—	—
139%–399% FPL	1,031	39.1	(36.9–41.4)	228	28.4	(21.9–34.9)	19	25.0	(15.3–34.7)
≥400% FPL	491	17.6	(14.9–20.2)	46	4.5	(2.6–6.4)	—	—	—
Education									
Educational attainment									
Less than high school diploma	324	11.8	(9.4–14.2)	238	24.4	(21.4–27.4)	20	20.7	(10.8–30.5)
High school diploma or equivalent	684	23.1	(21.2–25.0)	322	33.7	(29.0–38.3)	32	37.2	(25.8–48.7)
Greater than high school	1,896	65.1	(62.2–68.0)	420	42.0	(36.5–47.4)	38	42.1	(29.1–55.1)
Health-related factors									
Health insurance or coverage (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 monthsⁱ									
Any private	1,302	45.1	(42.2–48.1)	278	30.5	(24.9–36.0)	28	33.6	(20.2–47.1)
Public only, excluding RWHAP only	1,309	44.8	(40.3–49.3)	628	61.7	(54.3–69.1)	52	55.2	(44.2–66.1)
Uninsured or RWHAP only	245	10.1	(6.6–13.6)	60	7.8	(4.6–11.0)	—	—	—
Received RWHAP assistance, past 12 months									
Yes	1,388	47.4	(44.6–50.3)	454	44.7	(39.1–50.4)	53	59.8	(48.1–71.6)
No	1,404	52.6	(49.7–55.4)	492	55.3	(49.6–60.9)	30	40.2	(28.4–51.9)
Confidence in completing health forms									
Somewhat, a little bit, not at all	657	23.0	(21.3–24.7)	263	26.7	(21.6–31.9)	32	32.2	(22.5–42.0)
Extremely, quite a bit	2,243	77.0	(75.3–78.7)	713	73.3	(68.1–78.4)	59	67.8	(58.0–77.5)
Has a disability^j									
Yes	1,092	37.0	(34.6–39.4)	530	50.7	(46.2–55.1)	51	57.9	(46.0–69.7)
No	1,813	63.0	(60.6–65.4)	449	49.3	(44.9–53.8)	40	42.1	(30.3–54.0)
Any unmet HIV ancillary service need, past 12 months^k									
Yes	1,275	45.6	(43.1–48.2)	487	52.4	(47.2–57.6)	51	56.5	(45.3–67.6)
No	1,613	54.4	(51.8–56.9)	486	47.6	(42.4–52.8)	39	43.5	(32.4–54.7)

**Table 3a. Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by current gender identity—
Medical Monitoring Project, United States, 2021 (cont)**

	Cisgender male ^a			Cisgender female ^a			Transgender ^a		
	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI
Neighborhood and built environment									
Any met or unmet need for transportation assistance, past 12 months^l									
Yes	688	23.5	(21.9–25.2)	380	36.9	(33.2–40.5)	39	43.4	(32.6–54.2)
No	2,197	76.5	(74.8–78.1)	590	63.1	(59.5–66.8)	50	56.6	(45.8–67.4)
Social and community context									
HIV health care discrimination among persons who received care, past 12 months^m									
Yes	597	22.1	(19.7–24.5)	196	20.5	(15.8–25.1)	21	24.2	(13.9–34.5)
No	2,087	77.9	(75.5–80.3)	704	79.5	(74.9–84.2)	66	75.8	(65.5–86.1)
Speaks English less than well									
Yes	201	6.5	(3.2–9.8)	110	9.7	(4.3–15.1)	16	13.9	(8.2–19.6)
No	2,709	93.5	(90.2–96.8)	871	90.3	(84.9–95.7)	75	86.1	(80.4–91.8)
Experiences of physical violence by an intimate partner or forced sex, lifetimeⁿ									
Yes	840	30.9	(28.5–33.3)	404	43.6	(39.4–47.7)	46	61.3	(50.9–71.8)
No	2,003	69.1	(66.7–71.5)	543	56.4	(52.3–60.6)	40	38.7	(28.2–49.1)
Experiences of physical violence by an intimate partner or forced sex, past 12 monthsⁿ									
Yes	127	5.1	(4.1–6.1)	42	6.2	(4.0–8.4)	12	18.7	(9.4–28.1)
No	2,706	94.9	(93.9–95.9)	892	93.8	(91.6–96.0)	74	81.3	(71.9–90.6)
Incarcerated >24 hours, past 12 months									
Yes	75	3.1	(2.2–4.0)	15	2.0	(0.8–3.1)	—	—	—
No	2,831	96.9	(96.0–97.8)	966	98.0	(96.9–99.2)	87	96.3	(91.8–100)

Abbreviations: n, number; col, column; CI, confidence interval; FPL, federal poverty level; RWHP, Ryan White HIV/AIDS Program; HHS, Department of Health and Human Services [footnotes only]; VA, Veterans Administration [footnotes only].

Note. Unweighted numbers and weighted percentages are presented. CIs incorporate weighted percentages. Excluded are estimates with a coefficient of variation ≥ 0.30 and those based on a denominator sample size < 30 . Estimates with an absolute CI width > 30 , estimates with an absolute CI width between 5 and 30 and a relative CI width $> 130\%$, and estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution.

^a Persons were classified as cisgender if sex at birth and gender reported by the person were the same. Persons were classified as transgender if sex at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender.

^b “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

^c “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

^d “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room–occupancy hotel, or in a car) at any time during the past 12 months.

^e Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

^f “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

^g “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥ 18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].

^h Poverty guidelines defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

ⁱ Persons could select more than 1 response for health insurance or coverage. Mutually exclusive categories are presented based on responses. Private coverage defined as receiving health insurance through a person’s employer or a family member’s employer or purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance includes Medicaid, Medicare, VA, RWHP, or other city, county, or state-funded insurance. Uninsured or RWHP only category includes those who did not report having any insurance, or received RWHP assistance only, without coverage through any other insurance categories.

^j Self-reported, and includes physical, mental, and emotional disabilities.

^k Represents those who needed, but did not receive, ≥ 1 HIV ancillary services, among all persons.

^l Represents those who needed transportation assistance, regardless of whether that assistance was received, among all persons.

^m HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Respondents were asked if they experienced these forms of discrimination never, rarely, some of the time, most of the time, or all the time. Respondents who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all of the time were considered to have experienced discrimination in an HIV health care setting.

ⁿ Physical violence by an intimate partner defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

Table 3b. Relative and absolute differences in individual-level social determinants of health and quality of life among adults with diagnosed HIV, by current gender identity—Medical Monitoring Project, United States, 2021

	Cisgender females vs. cisgender males ^a				Transgender persons vs. cisgender males ^a			
	PR	95% CI	PD	95% CI	PR	95% CI	PD	95% CI
Total (row %)								
National HIV/AIDS Strategy indicators related to social determinants of health								
<i>Quality of life</i>								
Physical health								
Self-reported health status^b								
Good, very good, excellent	0.85	(0.78–0.93)	-10.89	(-16.31– -5.48)	0.87	(0.74–1.02)	-9.51	(-19.40– 0.39)
Poor, fair	1.38	(1.20–1.60)	10.89	(5.48– 16.31)	1.33	(1.03–1.74)	9.51	(-0.39– 19.40)
Mental or emotional health								
Unmet needs for services from a mental health professional among those who needed services, past 12 months^c								
Yes	0.88	(0.65–1.17)	-3.56	(-10.91– 3.79)	1.06*	(0.61–1.84)	1.79*	(-14.78– 18.37)
No	1.05	(0.95–1.16)	3.56	(-3.79– 10.91)	0.97*	(0.77–1.24)	-1.79*	(-18.37– 14.78)
Structural or subsistence factors								
Unstable housing or homelessness, past 12 months^d								
Yes	1.03	(0.85–1.26)	0.58	(-2.73– 3.89)	1.63	(1.16–2.29)	10.48	(1.12– 19.85)
No	0.99	(0.95–1.03)	-0.58	(-3.89– 2.73)	0.87	(0.77–0.99)	-10.48	(-19.85– -1.12)
Unemployment^e								
Yes	0.91	(0.74–1.11)	-1.35	(-4.15– 1.44)	1.68	(1.13–2.50)	9.99	(0.39– 19.59)
No	1.02	(0.98–1.05)	1.35	(-1.44– 4.15)	0.88	(0.78–1.00)	-9.99	(-19.59– -0.39)
Hunger or food insecurity, past 12 months^f								
Yes	1.09	(0.91–1.30)	1.28	(-1.53– 4.10)	2.46*	(1.54–3.94)	21.83*	(4.96– 38.69)
No	0.98	(0.95–1.02)	-1.28	(-4.10– 1.53)	0.74*	(0.57–0.97)	-21.83*	(-38.69– -4.96)
HIV stigma, past 12 months								
(n, median score, 95% CI)^g								
Other factors important for health, including those that affect quality of life								
<i>Economic stability</i>								
Household income with respect to poverty guidelines^h								
<100% FPL	1.71	(1.55–1.90)	23.13	(17.43– 28.83)	1.79	(1.36–2.35)	25.50	(11.07– 39.94)
100%–138% FPL	1.06	(0.88–1.27)	0.63	(-1.48– 2.73)	0.66	(0.29–1.50)	-3.71	(-9.95– 2.53)
139%–399% FPL	0.73	(0.59–0.89)	-10.71	(-16.30– -5.12)	0.64	(0.42–0.96)	-14.15	(-24.70– -3.59)
≥400% FPL	0.26	(0.18–0.37)	-13.05	(-15.42– -10.68)	0.56	(0.25–1.26)	-7.65	(-15.66– 0.36)
<i>Education</i>								
Educational attainment								
Less than high school diploma	2.07	(1.69–2.54)	12.62	(9.43– 15.80)	1.76	(1.15–2.68)	8.90	(-0.08– 17.88)
High school diploma or equivalent	1.46	(1.24–1.71)	10.54	(5.55– 15.53)	1.61	(1.15–2.26)	14.11	(2.07– 26.15)
Greater than high school	0.64	(0.57–0.73)	-23.16	(-28.88– -17.44)	0.65	(0.48–0.87)	-23.01	(-35.65– -10.37)
<i>Health-related factors</i>								
Health insurance or coverage (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 monthsⁱ								
Any private	0.67	(0.57–0.81)	-14.67	(-20.27– -9.08)	0.75	(0.50–1.10)	-11.50	(-24.61– 1.61)
Public only, excluding RWHAP only	1.38	(1.27–1.49)	16.93	(11.99– 21.86)	1.23	(1.00–1.52)	10.38	(-0.76– 21.53)
Uninsured or RWHAP only	0.78	(0.53–1.14)	-2.25	(-5.64– 1.13)	1.11	(0.65–1.88)	1.12	(-4.89– 7.12)
Received RWHAP assistance, past 12 months								
Yes	0.94	(0.84–1.07)	-2.67	(-8.13– 2.79)	1.26	(1.04–1.54)	12.42	(0.72– 24.11)
No	1.05	(0.95–1.16)	2.67	(-2.79– 8.13)	0.76	(0.57–1.02)	-12.42	(-24.11– -0.72)
Confidence in completing health forms								
Somewhat, a little bit, not at all	1.16	(0.95–1.43)	3.74	(-1.69– 9.17)	1.40	(1.04–1.90)	9.24	(-0.44– 18.93)
Extremely, quite a bit	0.95	(0.88–1.02)	-3.74	(-9.17– 1.69)	0.88	(0.76–1.02)	-9.24	(-18.93– 0.44)
Has a disability^j								
Yes	1.37	(1.26–1.49)	13.66	(9.60– 17.73)	1.56	(1.26–1.94)	20.86	(8.77– 32.95)
No	0.78	(0.72–0.85)	-13.66	(-17.73– -9.60)	0.67	(0.50–0.89)	-20.86	(-32.95– -8.77)
Any unmet HIV ancillary service need, past 12 months^k								
Yes	1.15	(1.05–1.26)	6.78	(2.10– 11.45)	1.24	(1.00–1.53)	10.84	(-0.83– 22.50)
No	0.88	(0.79–0.97)	-6.78	(-11.45– -2.10)	0.80	(0.61–1.04)	-10.84	(-22.50– 0.83)

Table 3b. Relative and absolute differences in individual-level social determinants of health and quality of life among adults with diagnosed HIV, by current gender identity—Medical Monitoring Project, United States, 2021 (cont)

	Cisgender females vs. cisgender males ^a				Transgender persons vs. cisgender males ^a			
	PR	95% CI	PD	95% CI	PR	95% CI	PD	95% CI
Neighborhood and built environment								
Any met or unmet need for transportation assistance, past 12 months^l								
Yes	1.57	(1.39–1.76)	13.31	(9.43–17.19)	1.84	(1.41–2.40)	19.84	(8.74–30.94)
No	0.83	(0.78–0.88)	-13.31	(-17.19–-9.43)	0.74	(0.61–0.90)	-19.84	(-30.94–-8.74)
Social and community context								
HIV health care discrimination among persons who received care, past 12 months^m								
Yes	0.93	(0.75–1.15)	-1.64	(-6.01–2.74)	1.09	(0.72–1.66)	2.09	(-7.94–12.12)
No	1.02	(0.97–1.08)	1.64	(-2.74–6.01)	0.97	(0.85–1.11)	-2.09	(-12.12–7.94)
Speaks English less than well								
Yes	1.50	(1.09–2.07)	3.25	(-0.06–6.55)	2.14	(1.19–3.85)	7.42	(1.42–13.42)
No	0.97	(0.93–1.00)	-3.25	(-6.55–0.06)	0.92	(0.86–0.99)	-7.42	(-13.42–-1.42)
Experiences of physical violence by an intimate partner or forced sex, lifetimeⁿ								
Yes	1.41	(1.29–1.54)	12.67	(9.00–16.35)	1.99	(1.67–2.36)	30.44	(20.20–40.69)
No	0.82	(0.77–0.87)	-12.67	(-16.35–-9.00)	0.56	(0.43–0.73)	-30.44	(-40.69–-20.20)
Experiences of physical violence by an intimate partner or forced sex, past 12 monthsⁿ								
Yes	1.21	(0.85–1.72)	1.07	(-1.07–3.21)	3.67	(2.20–6.10)	13.62	(4.37–22.87)
No	0.99	(0.97–1.01)	-1.07	(-3.21–1.07)	0.86	(0.76–0.96)	-13.62	(-22.87–-4.37)
Incarcerated >24 hours, past 12 months								
Yes	0.63	(0.32–1.25)	-1.14	(-2.66–0.39)	1.20	(0.37–3.91)	0.60	(-3.77–4.98)
No	1.01	(1.00–1.03)	1.14	(-0.39–2.66)	0.99	(0.95–1.04)	-0.60	(-4.98–3.77)

Abbreviations: PR, prevalence ratio; PD, prevalence difference; CI, confidence interval; FPL, federal poverty level; RWHAP, Ryan White HIV/AIDS Program; HHS, Department of Health and Human Services [footnotes only]; VA, Veterans Administration [footnotes only].

Note. Cisgender males were the referent group for each disparity assessment. Excluded are estimates with a coefficient of variation ≥ 0.30 and those based on a denominator sample size < 30 . Associations derived from one or more estimates with an absolute CI width > 30 , estimates with an absolute CI width between 5 and 30 and a relative CI width $> 130\%$, and estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution.

^a Persons were classified as cisgender if sex at birth and gender reported by the person were the same. Persons were classified as transgender if sex at birth and gender reported by the person were different, or if the person chose “transgender” in response to the question about self-identified gender.

^b “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

^c “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

^d “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room-occupancy hotel, or in a car) at any time during the past 12 months.

^e Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

^f “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

^g “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥ 18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].

^h Poverty guidelines defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

ⁱ Persons could select more than 1 response for health insurance or coverage. Mutually exclusive categories are presented based on responses. Private coverage defined as receiving health insurance through a person’s employer or a family member’s employer or purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance includes Medicaid, Medicare, VA, RWHAP, or other city, county, or state-funded insurance. Uninsured or RWHAP only category includes those who did not report having any insurance, or received RWHAP assistance only, without coverage through any other insurance categories.

^j Self-reported, and includes physical, mental, and emotional disabilities.

^k Represents those who needed, but did not receive, ≥ 1 HIV ancillary services, among all persons.

^l Represents those who needed transportation assistance, regardless of whether that assistance was received, among all persons.

^m HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Respondents were asked if they experienced these forms of discrimination never, rarely, some of the time, most of the time, or all the time. Respondents who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all of time were considered to have experienced discrimination in an HIV health care setting.

ⁿ Physical violence by an intimate partner defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

**Table 4a. Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by sexual orientation—
Medical Monitoring Project, United States, 2021**

	Bisexual			Gay or lesbian			Heterosexual			Other		
	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI
Total (row %)	382	10.4	(8.9–11.9)	1,691	43.3	(38.6–47.9)	1,733	42.7	(38.9–46.5)	126	3.6	(3.0–4.1)
National HIV/AIDS Strategy indicators related to social determinants of health												
Quality of life												
Physical health												
Self-reported health status^a												
Good, very good, excellent	260	71.0	(65.7–76.2)	1,286	76.4	(74.5–78.2)	1,044	61.7	(58.7–64.7)	76	59.0	(49.8–68.2)
Poor, fair	118	29.0	(23.8–34.3)	403	23.6	(21.8–25.5)	684	38.3	(35.3–41.3)	50	41.0	(31.8–50.2)
Mental or emotional health												
Unmet needs for services from a mental health professional among those who needed services, past 12 months^b												
Yes	45	31.9	(20.7–43.2)	180	27.8	(23.2–32.5)	142	25.8	(18.8–32.8)	—	—	—
No	113	68.1	(56.8–79.3)	499	72.2	(67.5–76.8)	457	74.2	(67.2–81.2)	42	73.3*	(51.2–95.4)
Structural or subsistence factors												
Unstable housing or homelessness, past 12 months^c												
Yes	88	23.7	(18.0–29.5)	231	14.5	(12.3–16.6)	287	17.0	(15.2–18.8)	38	30.1	(20.3–39.9)
No	294	76.3	(70.5–82.0)	1,459	85.5	(83.4–87.7)	1,444	83.0	(81.2–84.8)	88	69.9	(60.1–79.7)
Unemployment^d												
Yes	55	14.3	(10.6–17.9)	247	15.2	(12.9–17.5)	228	13.8	(11.6–16.0)	25	22.2	(14.3–30.1)
No	326	85.7	(82.1–89.4)	1,442	84.8	(82.5–87.1)	1,503	86.2	(84.0–88.4)	100	77.8	(69.9–85.7)
Hunger or food insecurity, past 12 months^e												
Yes	67	15.8	(12.1–19.6)	219	13.9	(12.0–15.9)	276	16.4	(14.5–18.2)	32	24.9	(14.6–35.3)
No	312	84.2	(80.4–87.9)	1,468	86.1	(84.1–88.0)	1,456	83.6	(81.8–85.5)	94	75.1	(64.7–85.4)
HIV stigma, past 12 months (n, median score, 95% CI)^f	353	29.9	(27.0–32.8)	1,614	26.9	(25.3–28.5)	1,588	30.2	(28.1–32.2)	120	32.6	(25.1–40.1)
Other factors important for health, including those that affect quality of life												
Economic stability												
Household income with respect to poverty guidelines^g												
<100% FPL	125	34.6	(28.0–41.3)	386	25.6	(21.7–29.4)	792	51.5	(44.6–58.5)	47	38.4	(26.2–50.6)
100%–138% FPL	42	13.4	(8.9–18.0)	140	9.0	(7.2–10.7)	179	11.7	(9.0–14.5)	—	—	—
139%–399% FPL	141	42.8	(36.7–48.8)	629	40.7	(37.7–43.7)	462	30.9	(26.6–35.2)	39	36.4	(24.5–48.3)
≥400% FPL	34	9.2	(6.2–12.1)	405	24.8	(21.0–28.5)	93	5.9	(4.4–7.3)	—	—	—
Education												
Educational attainment												
Less than high school diploma	39	10.3	(7.3–13.3)	106	7.0	(5.2–8.7)	420	24.3	(21.0–27.6)	—	—	—
High school diploma or equivalent	101	24.5	(20.4–28.7)	305	18.8	(16.7–20.8)	580	33.0	(30.5–35.5)	35	28.2	(21.1–35.4)
Greater than high school	242	65.2	(60.4–69.9)	1,279	74.2	(71.9–76.6)	728	42.7	(39.0–46.4)	82	60.8	(48.3–73.4)
Health-related factors												
Health insurance or coverage (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 months^h												
Any private	153	41.6	(34.5–48.8)	883	52.1	(48.0–56.3)	514	31.2	(27.6–34.9)	46	40.0	(27.2–52.8)
Public only, excluding RWHAP only	193	50.6	(41.6–59.7)	639	37.8	(32.7–43.0)	1,061	59.4	(53.4–65.4)	68	51.0	(39.4–62.6)
Uninsured or RWHAP only	29	7.7	(3.9–11.5)	141	10.0	(6.1–13.9)	124	9.4	(6.0–12.7)	—	—	—
Received RWHAP assistance, past 12 months												
Yes	187	47.8	(40.0–55.6)	820	48.0	(44.8–51.1)	802	46.2	(42.4–49.9)	63	45.4	(36.4–54.4)
No	178	52.2	(44.4–60.0)	817	52.0	(48.9–55.2)	848	53.8	(50.1–57.6)	59	54.6	(45.6–63.6)
Confidence in completing health forms												
Somewhat, a little bit, not at all	89	22.0	(16.9–27.1)	285	17.1	(14.9–19.3)	520	30.3	(26.8–33.8)	39	36.8	(26.8–46.8)
Extremely, quite a bit	291	78.0	(72.9–83.1)	1,403	82.9	(80.7–85.1)	1,205	69.7	(66.2–73.2)	87	63.2	(53.2–73.2)
Has a disabilityⁱ												
Yes	160	41.1	(34.3–48.0)	546	31.9	(29.4–34.4)	870	48.2	(44.8–51.6)	72	53.2	(44.7–61.6)
No	221	58.9	(52.0–65.7)	1,143	68.1	(65.6–70.6)	858	51.8	(48.4–55.2)	54	46.8	(38.4–55.3)
Any unmet HIV ancillary service need, past 12 months^j												
Yes	192	51.7	(44.9–58.5)	683	42.6	(39.9–45.2)	834	50.0	(46.0–53.9)	79	62.9	(53.2–72.6)
No	186	48.3	(41.5–55.1)	998	57.4	(54.8–60.1)	882	50.0	(46.1–54.0)	47	37.1	(27.4–46.8)

**Table 4a. Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by sexual orientation—
Medical Monitoring Project, United States, 2021 (cont)**

	Bisexual			Gay or lesbian			Heterosexual			Other		
	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI
Neighborhood and built environment												
Any met or unmet need for transportation assistance, past 12 months^k												
Yes	114	29.4	(23.4–35.3)	316	18.3	(16.5–20.1)	606	33.9	(31.6–36.2)	52	40.7	(31.9–49.4)
No	264	70.6	(64.7–76.6)	1,362	81.7	(79.9–83.5)	1,106	66.1	(63.8–68.4)	73	59.3	(50.6–68.1)
Social and community context												
HIV health care discrimination among persons who received care, past 12 months^l												
Yes	89	23.3	(18.3–28.4)	352	22.1	(19.3–24.9)	323	20.0	(16.8–23.2)	40	34.2	(24.7–43.7)
No	261	76.7	(71.6–81.7)	1,229	77.9	(75.1–80.7)	1,267	80.0	(76.8–83.2)	74	65.8	(56.3–75.3)
Speaks English less than well												
Yes	20	4.5	(2.0–6.9)	—	—	—	208	11.0	(6.5–15.4)	—	—	—
No	362	95.5	(93.1–98.0)	1,610	95.4	(91.9–98.9)	1,525	89.0	(84.6–93.5)	122	97.2	(94.7–99.8)
Experiences of physical violence by an intimate partner or forced sex, lifetime^m												
Yes	127	33.0	(27.3–38.6)	596	38.3	(35.7–40.9)	502	29.8	(26.6–33.0)	53	48.4	(38.0–58.8)
No	246	67.0	(61.4–72.7)	1,065	61.7	(59.1–64.3)	1,178	70.2	(67.0–73.4)	68	51.6	(41.2–62.0)
Experiences of physical violence by an intimate partner or forced sex, past 12 months^m												
Yes	30	8.2	(5.2–11.3)	86	6.3	(4.6–8.0)	55	4.1	(2.8–5.5)	—	—	—
No	340	91.8	(88.7–94.8)	1,569	93.7	(92.0–95.4)	1,612	95.9	(94.5–97.2)	110	89.9	(83.6–96.2)
Incarcerated >24 hours, past 12 months												
Yes	17	4.9	(2.2–7.5)	31	2.2	(1.4–3.0)	37	2.6	(1.7–3.4)	—	—	—
No	365	95.1	(92.5–97.8)	1,659	97.8	(97.0–98.6)	1,692	97.4	(96.6–98.3)	120	92.7	(87.0–98.3)

Abbreviations: n, number; col, column; CI, confidence interval; FPL, federal poverty level; RWHAP, Ryan White HIV/AIDS Program; HHS, Department of Health and Human Services [footnotes only]; VA, Veterans Administration [footnotes only].

Note. Unweighted numbers and weighted percentages are presented. CIs incorporate weighted percentages. Excluded are estimates with a coefficient of variation ≥ 0.30 and those based on a denominator sample size < 30 . Estimates with an absolute CI width > 30 , estimates with an absolute CI width between 5 and 30 and a relative CI width $> 130\%$, and estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution.

^a “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

^b “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

^c “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room-occupancy hotel, or in a car) at any time during the past 12 months.

^d Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

^e “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

^f “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥ 18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].

^g Poverty guidelines defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

^h Persons could select more than 1 response for health insurance or coverage. Mutually exclusive categories are presented based on responses. Private coverage defined as receiving health insurance through a person’s employer or a family member’s employer or purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance includes Medicaid, Medicare, VA, RWHAP, or other city, county, or state-funded insurance. Uninsured or RWHAP only category includes those who did not report having any insurance, or received RWHAP assistance only, without coverage through any other insurance categories.

ⁱ Self-reported, and includes physical, mental, and emotional disabilities.

^j Represents those who needed, but did not receive, ≥ 1 HIV ancillary services, among all persons.

^k Represents those who needed transportation assistance, regardless of whether that assistance was received, among all persons.

^l HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Respondents were asked if they experienced these forms of discrimination never, rarely, some of the time, most of the time, or all the time. Respondents who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all of time were considered to have experienced discrimination in an HIV health care setting.

^m Physical violence by an intimate partner defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

Table 4b. Relative and absolute differences in individual-level social determinants of health and quality of life among adults with diagnosed HIV, by sexual orientation—Medical Monitoring Project, United States, 2021

	Bisexual vs. gay or lesbian persons				Heterosexual vs. gay or lesbian persons				Persons who identify as other sexual orientation vs. gay or lesbian persons			
	PR	95% CI	PD	95% CI	PR	95% CI	PD	95% CI	PR	95% CI	PD	95% CI
Total (row %)												
National HIV/AIDS Strategy indicators related to social determinants of health												
<i>Quality of life</i>												
Physical health												
Self-reported health status^a												
Good, very good, excellent	0.93	(0.86–1.01)	-5.38	(-11.26–0.49)	0.81	(0.76–0.85)	-14.68	(-18.31–-11.04)	0.77	(0.66–0.91)	-17.38	(-26.88–-7.89)
Poor, fair	1.23	(1.00–1.51)	5.38	(-0.49–11.26)	1.62	(1.45–1.82)	14.68	(11.04–18.31)	1.74	(1.36–2.21)	17.38	(7.89–26.88)
Mental or emotional health												
Unmet needs for services from a mental health professional among those who needed services, past 12 months^b												
Yes	1.15	(0.81–1.64)	4.12	(-7.04–15.28)	0.93	(0.72–1.19)	-2.01	(-8.58–4.57)	0.96*	(0.42–2.20)	-1.13*	(-23.27–21.01)
No	0.94	(0.80–1.11)	-4.12	(-15.28–7.04)	1.03	(0.94–1.12)	2.01	(-4.57–8.58)	1.02*	(0.75–1.37)	1.13*	(-21.01–23.27)
Structural or subsistence factors												
Unstable housing or homelessness, past 12 months^c												
Yes	1.64	(1.28–2.11)	9.26	(3.65–14.87)	1.17	(0.97–1.42)	2.52	(-0.38–5.43)	2.08	(1.47–2.94)	15.65	(5.77–25.52)
No	0.89	(0.83–0.96)	-9.26	(-14.87–-3.65)	0.97	(0.94–1.00)	-2.52	(-5.43–0.38)	0.82	(0.71–0.94)	-15.65	(-25.52–-5.77)
Unemployment^d												
Yes	0.94	(0.72–1.22)	-0.95	(-4.70–2.80)	0.91	(0.72–1.14)	-1.41	(-4.69–1.87)	1.46	(0.96–2.23)	7.00	(-1.82–15.82)
No	1.01	(0.97–1.06)	0.95	(-2.80–4.70)	1.02	(0.98–1.06)	1.41	(-1.87–4.69)	0.92	(0.82–1.03)	-7.00	(-15.82–1.82)
Hunger or food insecurity, past 12 months^e												
Yes	1.14	(0.88–1.46)	1.91	(-1.99–5.81)	1.17	(0.99–1.39)	2.44	(-0.06–4.94)	1.79	(1.17–2.73)	11.01	(0.72–21.30)
No	0.98	(0.93–1.02)	-1.91	(-5.81–1.99)	0.97	(0.94–1.00)	-2.44	(-4.94–0.06)	0.87	(0.76–1.00)	-11.01	(-21.30–-0.72)
<i>HIV stigma, past 12 months (n, median score, 95% CI)^f</i>												
Other factors important for health, including those that affect quality of life												
<i>Economic stability</i>												
Household income with respect to poverty guidelines^g												
<100% FPL	1.35	(1.05–1.74)	9.03	(1.17–16.89)	2.01	(1.76–2.31)	25.95	(20.18–31.72)	1.50	(1.09–2.06)	12.81	(0.92–24.70)
100%–138% FPL	1.50	(1.02–2.22)	4.49	(-0.37–9.35)	1.31	(1.07–1.60)	2.79	(0.53–5.05)	2.00	(0.91–4.36)	8.92	(-4.82–22.65)
139%–399% FPL	1.05	(0.91–1.22)	2.09	(-4.21–8.39)	0.76	(0.65–0.89)	-9.82	(-15.17–-4.47)	0.89	(0.65–1.23)	-4.27	(-15.78–7.23)
≥400% FPL	0.37	(0.28–0.50)	-15.60	(-19.29–-11.91)	0.24	(0.19–0.29)	-18.92	(-22.15–-15.69)	0.30	(0.12–0.70)	-17.45	(-24.52–-10.38)
<i>Education</i>												
Educational attainment												
Less than high school diploma	1.47	(1.02–2.13)	3.31	(-0.04–6.66)	3.48	(2.84–4.25)	17.30	(14.59–20.01)	1.56	(0.69–3.56)	3.93	(-4.88–12.74)
High school diploma or equivalent	1.31	(1.09–1.56)	5.77	(1.62–9.93)	1.76	(1.54–2.01)	14.22	(10.93–17.52)	1.50	(1.13–2.00)	9.47	(1.84–17.09)
Greater than high school	0.88	(0.81–0.95)	-9.09	(-14.20–-3.98)	0.58	(0.53–0.63)	-31.52	(-35.74–-27.31)	0.82	(0.67–1.00)	-13.39	(-25.25–-1.54)
<i>Health-related factors</i>												
Health insurance or coverage (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 months^h												
Any private	0.80	(0.65–0.98)	-10.47	(-19.52–-1.42)	0.60	(0.54–0.67)	-20.89	(-25.02–-16.77)	0.77	(0.55–1.07)	-12.11	(-25.80–1.59)
Public only, excluding RWHAP only	1.34	(1.11–1.61)	12.80	(3.98–21.61)	1.57	(1.42–1.74)	21.55	(16.95–26.15)	1.35	(1.08–1.68)	13.12	(2.19–24.04)
Uninsured or RWHAP only	0.77	(0.48–1.22)	-2.33	(-6.29–1.64)	0.93	(0.69–1.27)	-0.66	(-3.67–2.36)	0.90	(0.47–1.73)	-1.01	(-7.03–5.01)
Received RWHAP assistance, past 12 months												
Yes	1.00	(0.85–1.17)	-0.19	(-7.78–7.41)	0.96	(0.88–1.06)	-1.80	(-6.16–2.55)	0.95	(0.77–1.16)	-2.54	(-11.76–6.69)
No	1.00	(0.87–1.16)	0.19	(-7.41–7.78)	1.03	(0.95–1.12)	1.80	(-2.55–6.16)	1.05	(0.88–1.24)	2.54	(-6.69–11.76)
Confidence in completing health forms												
Somewhat, a little bit, not at all	1.29	(0.99–1.67)	4.89	(-0.57–10.36)	1.77	(1.49–2.11)	13.20	(9.05–17.35)	2.15	(1.60–2.90)	19.71	(9.54–29.89)
Extremely, quite a bit	0.94	(0.88–1.01)	-4.89	(-10.36–0.57)	0.84	(0.79–0.89)	-13.20	(-17.35–-9.05)	0.76	(0.65–0.89)	-19.71	(-29.89–-9.54)
Has a disabilityⁱ												
Yes	1.29	(1.09–1.53)	9.27	(2.42–16.12)	1.51	(1.37–1.67)	16.35	(12.48–20.22)	1.67	(1.41–1.98)	21.29	(12.72–29.87)
No	0.86	(0.77–0.97)	-9.27	(-16.12–-2.42)	0.76	(0.71–0.81)	-16.35	(-20.22–-12.48)	0.69	(0.57–0.82)	-21.29	(-29.87–-12.72)
Any unmet HIV ancillary service need, past 12 months^j												
Yes	1.21	(1.06–1.39)	9.13	(2.28–15.97)	1.17	(1.06–1.30)	7.41	(2.62–12.20)	1.48	(1.24–1.76)	20.35	(9.87–30.83)
No	0.84	(0.73–0.97)	-9.13	(-15.97–-2.28)	0.87	(0.79–0.96)	-7.41	(-12.20–-2.62)	0.65	(0.49–0.85)	-20.35	(-30.83–-9.87)

Table 4b. Relative and absolute differences in individual-level social determinants of health and quality of life among adults with diagnosed HIV, by sexual orientation—Medical Monitoring Project, United States, 2021 (cont)

	Bisexual vs. gay or lesbian persons				Heterosexual vs. gay or lesbian persons				Persons who identify as other sexual orientation vs. gay or lesbian persons			
	PR	95% CI	PD	95% CI	PR	95% CI	PD	95% CI	PR	95% CI	PD	95% CI
Neighborhood and built environment												
Any met or unmet need for transportation assistance, past 12 months^k												
Yes	1.60	(1.28–2.00)	11.03	(4.86–17.21)	1.85	(1.65–2.07)	15.56	(12.83–18.28)	2.22	(1.78–2.76)	22.34	(13.74–30.93)
No	0.86	(0.79–0.94)	-11.03	(-17.21–-4.86)	0.81	(0.78–0.84)	-15.56	(-18.28–-12.83)	0.73	(0.63–0.84)	-22.34	(-30.93–-13.74)
Social and community context												
HIV health care discrimination among persons who received care, past 12 months^l												
Yes	1.06	(0.85–1.31)	1.25	(-3.67–6.16)	0.91	(0.79–1.05)	-2.07	(-5.02–-0.88)	1.55	(1.17–2.05)	12.11	(2.81–21.41)
No	0.98	(0.92–1.05)	-1.25	(-6.16–3.67)	1.03	(0.99–1.07)	2.07	(-0.88–5.02)	0.84	(0.73–0.97)	-12.11	(-21.41–-2.81)
Speaks English less than well												
Yes	0.98	(0.51–1.88)	-0.10	(-3.08–2.88)	2.38	(1.54–3.69)	6.35	(4.28–8.43)	0.60	(0.19–1.93)	-1.85	(-6.05–2.36)
No	1.00	(0.97–1.03)	0.10	(-2.88–3.08)	0.93	(0.91–0.96)	-6.35	(-8.43–-4.28)	1.02	(0.98–1.07)	1.85	(-2.36–6.05)
Experiences of physical violence by an intimate partner or forced sex, lifetime^m												
Yes	0.86	(0.71–1.04)	-5.37	(-11.91–1.17)	0.78	(0.69–0.88)	-8.49	(-12.35–-4.64)	1.26	(1.01–1.58)	10.08	(-0.47–20.64)
No	1.09	(0.98–1.20)	5.37	(-1.17–11.91)	1.14	(1.07–1.21)	8.49	(4.64–12.35)	0.84	(0.68–1.03)	-10.08	(-20.64–0.47)
Experiences of physical violence by an intimate partner or forced sex, past 12 months^m												
Yes	1.31	(0.79–2.15)	1.93	(-1.84–5.70)	0.66	(0.46–0.94)	-2.17	(-4.02–-0.32)	1.60	(0.79–3.23)	3.78	(-2.90–10.45)
No	0.98	(0.94–1.02)	-1.93	(-5.70–1.84)	1.02	(1.00–1.04)	2.17	(0.32–4.02)	0.96	(0.89–1.03)	-3.78	(-10.45–2.90)
Incarcerated >24 hours, past 12 months												
Yes	2.25	(1.19–4.26)	2.71	(-0.01–5.44)	1.19	(0.75–1.91)	0.42	(-0.69–1.53)	3.37	(1.32–8.59)	5.14	(-0.75–11.03)
No	0.97	(0.94–1.00)	-2.71	(-5.44–0.01)	1.00	(0.98–1.01)	-0.42	(-1.53–0.69)	0.95	(0.89–1.01)	-5.14	(-11.03–0.75)

Abbreviations: PR, prevalence ratio; PD, prevalence difference; CI, confidence interval; FPL, federal poverty level; RWHAP, Ryan White HIV/AIDS Program; HHS, Department of Health and Human Services [footnotes only]; VA, Veterans Administration [footnotes only].

Note. Gay or lesbian persons were the referent group for each disparity assessment. Excluded are estimates with a coefficient of variation ≥ 0.30 and those based on a denominator sample size < 30 . Associations derived from one or more estimates with an absolute CI width > 30 , estimates with an absolute CI width between 5 and 30 and a relative CI width $> 130\%$, and estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution.

^a "Good or better self-rated health" defined as rating one's health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

^b "Unmet need for mental health services from a mental health professional" defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

^c "Unstable housing or homelessness" defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room-occupancy hotel, or in a car) at any time during the past 12 months.

^d Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

^e "Hunger/food insecurity" defined as going without food due to lack of money during the past 12 months.

^f "Median HIV stigma score" defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥ 18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].

^g Poverty guidelines defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

^h Persons could select more than 1 response for health insurance or coverage. Mutually exclusive categories are presented based on responses. Private coverage defined as receiving health insurance through a person's employer or a family member's employer or purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance includes Medicaid, Medicare, VA, RWHAP, or other city, county, or state-funded insurance. Uninsured or RWHAP only category includes those who did not report having any insurance, or received RWHAP assistance only, without coverage through any other insurance categories.

ⁱ Self-reported, and includes physical, mental, and emotional disabilities.

^j Represents those who needed, but did not receive, ≥ 1 HIV ancillary services, among all persons.

^k Represents those who needed transportation assistance, regardless of whether that assistance was received, among all persons.

^l HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Respondents were asked if they experienced these forms of discrimination never, rarely, some of the time, most of the time, or all the time. Respondents who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all of time were considered to have experienced discrimination in an HIV health care setting.

^m Physical violence by an intimate partner defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

Table 5a. Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by racial/ethnic identity—Medical Monitoring Project, United States, 2021

	American Indian/ Alaska Native			Asian			Black/African American			Hispanic/Latino ^a			Native Hawaiian/ other Pacific Islander			White			Multiple races		
	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI
Total (row %)	—	—	—	42	1.4	(0.8–1.9)	1,592	41.1	(32.0–50.2)	992	24.2	(16.8–31.6)	—	—	—	1,165	28.0	(22.4–33.5)	179	4.7	(3.7–5.8)
National HIV/AIDS Strategy indicators related to social determinants of health																					
<i>Quality of life</i>																					
Physical health																					
Self-reported health status^b																					
Good, very good, excellent	—	—	—	37	86.9	(74.1–99.6)	1,041	66.6	(64.3–68.9)	653	68.1	(64.4–71.7)	—	—	—	846	72.7	(69.9–75.5)	107	65.5	(58.2–72.8)
Poor, fair	—	—	—	—	—	—	543	33.4	(31.1–35.7)	333	31.9	(28.3–35.6)	—	—	—	312	27.3	(24.5–30.1)	70	34.5	(27.2–41.8)
Mental or emotional health																					
Unmet needs for services from a mental health professional among those who needed services, past 12 months^c																					
Yes	—	—	—	—	—	—	149	32.2	(26.3–38.1)	86	20.9	(12.5–29.3)	—	—	—	121	27.8	(22.8–32.7)	23	26.2	(17.4–35.0)
No	—	—	—	—	—	—	350	67.8	(61.9–73.7)	347	79.1	(70.7–87.5)	—	—	—	358	72.2	(67.3–77.2)	56	73.8	(65.0–82.6)
Structural or subsistence factors																					
Unstable housing or homelessness, past 12 months^d																					
Yes	—	—	—	—	—	—	297	19.7	(17.4–22.0)	172	16.1	(13.3–18.8)	—	—	—	121	12.1	(9.5–14.8)	49	28.2	(18.8–37.6)
No	—	—	—	36	87.9	(75.1–100)	1,290	80.3	(78.0–82.6)	817	83.9	(81.2–86.7)	—	—	—	1,039	87.9	(85.2–90.5)	129	71.8	(62.4–81.2)
Unemployment^e																					
Yes	—	—	—	—	—	—	240	16.2	(13.8–18.5)	141	14.7	(11.3–18.2)	—	—	—	135	11.7	(9.6–13.8)	36	19.3	(14.1–24.6)
No	—	—	—	36	83.0	(68.5–97.6)	1,345	83.8	(81.5–86.2)	846	85.3	(81.8–88.7)	—	—	—	1,024	88.3	(86.2–90.4)	142	80.7	(75.4–85.9)
Hunger or food insecurity, past 12 months^f																					
Yes	—	—	—	—	—	—	239	15.3	(13.5–17.1)	191	19.3	(16.4–22.2)	—	—	—	116	11.7	(9.6–13.7)	52	26.7	(19.0–34.5)
No	—	—	—	41	94.3	(83.2–100)	1,345	84.7	(82.9–86.5)	797	80.7	(77.8–83.6)	—	—	—	1,044	88.3	(86.3–90.4)	125	73.3	(65.5–81.0)
HIV stigma, past 12 months (n, median score, 95% CI)^g																					
	—	—	—	35	33.1	(25.1–41.2)	1,476	27.8	(25.9–29.8)	916	31.5	(29.8–33.3)	—	—	—	1,096	27.1	(24.6–29.6)	166	33.6	(31.1–36.2)
Other factors important for health, including those that affect quality of life																					
<i>Economic stability</i>																					
Household income with respect to poverty guidelines^h																					
<100% FPL	—	—	—	—	—	—	618	44.9	(38.6–51.1)	427	45.6	(38.0–53.1)	—	—	—	249	23.7	(20.1–27.2)	62	39.4	(28.7–50.2)
100%–138% FPL	—	—	—	—	—	—	153	11.0	(7.7–14.2)	90	9.7	(7.9–11.6)	—	—	—	116	11.5	(8.1–14.9)	14	8.2	(3.5–12.9)
139%–399% FPL	—	—	—	19	52.6*	(32.8–72.4)	486	35.2	(31.6–38.7)	284	34.9	(28.8–41.0)	—	—	—	423	38.6	(35.6–41.5)	61	39.3	(31.3–47.2)
≥400% FPL	—	—	—	—	—	—	127	9.0	(6.8–11.2)	85	9.8	(6.3–13.2)	—	—	—	298	26.2	(22.6–29.9)	—	—	—
<i>Education</i>																					
Educational attainment																					
Less than high school diploma	—	—	—	—	—	—	270	17.0	(13.8–20.3)	243	25.1	(19.3–31.0)	—	—	—	48	4.5	(2.9–6.1)	—	—	—
High school diploma or equivalent	—	—	—	—	—	—	513	32.1	(29.5–34.8)	244	23.1	(19.6–26.6)	—	—	—	230	19.9	(16.6–23.1)	40	23.7	(16.1–31.2)
Greater than high school	—	—	—	32	79.3	(66.2–92.3)	802	50.8	(47.2–54.5)	499	51.8	(47.0–56.6)	—	—	—	884	75.6	(72.4–78.9)	118	66.1	(53.6–78.6)
<i>Health-related factors</i>																					
Health insurance or coverage (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 monthsⁱ																					
Any private	—	—	—	22	47.8*	(27.4–68.3)	571	37.7	(34.4–41.1)	323	35.2	(29.8–40.7)	—	—	—	608	52.0	(48.4–55.6)	78	43.1	(28.5–57.8)
Public only, excluding RWHAP only	—	—	—	—	—	—	833	50.1	(43.6–56.6)	543	52.7	(42.9–62.5)	—	—	—	501	44.2	(40.2–48.2)	84	51.5	(38.8–64.2)
Uninsured or RWHAP only	—	—	—	—	—	—	157	12.1	(7.8–16.5)	103	12.1	(6.5–17.6)	—	—	—	39	3.8	(1.9–5.7)	—	—	—
Received RWHAP assistance, past 12 months																					
Yes	—	—	—	20	51.5*	(26.4–76.6)	740	44.9	(40.9–49.0)	532	55.1	(48.6–61.5)	—	—	—	497	42.2	(36.1–48.3)	94	52.6	(42.3–63.0)
No	—	—	—	21	48.5*	(23.4–73.6)	797	55.1	(51.0–59.1)	389	44.9	(38.5–51.4)	—	—	—	635	57.8	(51.7–63.9)	74	47.4	(37.0–57.7)
Confidence in completing health forms																					
Somewhat, a little bit, not at all	—	—	—	—	—	—	379	25.4	(23.1–27.6)	316	31.4	(27.7–35.0)	—	—	—	191	16.2	(13.4–19.1)	50	23.7	(16.4–31.0)
Extremely, quite a bit	—	—	—	33	80.2*	(64.1–96.4)	1,204	74.6	(72.4–76.9)	667	68.6	(65.0–72.3)	—	—	—	967	83.8	(80.9–86.6)	128	76.3	(69.0–83.6)
Has a disability^j																					
Yes	—	—	—	—	—	—	655	39.7	(36.6–42.7)	441	41.8	(37.5–46.0)	—	—	—	461	39.7	(36.0–43.4)	94	53.7	(47.3–60.1)
No	—	—	—	32	75.3*	(58.8–91.8)	931	60.3	(57.3–63.4)	547	58.2	(54.0–62.5)	—	—	—	697	60.3	(56.6–64.0)	84	46.3	(39.9–52.7)
Any unmet HIV ancillary service need, past 12 months^k																					
Yes	—	—	—	19	50.0*	(30.8–69.2)	781	50.6	(45.4–55.9)	450	46.5	(40.9–52.0)	—	—	—	442	40.8	(36.6–45.1)	111	65.0	(52.4–77.5)
No	—	—	—	23	50.0*	(30.8–69.2)	790	49.4	(44.1–54.6)	533	53.5	(48.0–59.1)	—	—	—	713	59.2	(54.9–63.4)	67	35.0	(22.5–47.6)

Table 5a. Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by racial/ethnic identity—Medical Monitoring Project, United States, 2021 (cont)

	American Indian/ Alaska Native			Asian			Black/African American			Hispanic/Latino ^a			Native Hawaiian/ other Pacific Islander			White			Multiple races		
	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI
Neighborhood and built environment																					
Any met or unmet need for transportation assistance, past 12 months^l																					
Yes	—	—	—	—	—	—	536	32.6	(30.0–35.3)	279	26.5	(23.2–29.9)	—	—	—	205	18.4	(14.9–21.8)	70	34.6	(28.0–41.3)
No	—	—	—	35	84.0	(70.7–97.3)	1,032	67.4	(64.7–70.0)	705	73.5	(70.1–76.8)	—	—	—	946	81.6	(78.2–85.1)	107	65.4	(58.7–72.0)
Social and community context																					
HIV health care discrimination among persons who received care, past 12 months^m																					
Yes	—	—	—	—	—	—	297	19.3	(15.8–22.8)	204	22.3	(19.2–25.3)	—	—	—	255	24.4	(21.1–27.7)	49	29.6	(18.9–40.2)
No	—	—	—	30	94.4	(87.3–100)	1,157	80.7	(77.2–84.2)	710	77.7	(74.7–80.8)	—	—	—	830	75.6	(72.3–78.9)	115	70.4	(59.8–81.1)
Speaks English less than well																					
Yes	—	—	—	—	—	—	31	1.6	(0.9–2.3)	285	26.8	(19.7–33.9)	—	—	—	—	—	—	—	—	—
No	—	—	—	38	92.0	(85.5–98.5)	1,557	98.4	(97.7–99.1)	704	73.2	(66.1–80.3)	—	—	—	1,159	99.8	(99.4–100)	174	98.3	(96.7–99.9)
Experiences of physical violence by an intimate partner or forced sex, lifetimeⁿ																					
Yes	—	—	—	—	—	—	426	28.8	(25.7–31.8)	316	33.8	(30.1–37.5)	—	—	—	450	41.2	(37.6–44.9)	85	49.8	(41.8–57.9)
No	—	—	—	34	77.4*	(59.6–95.1)	1,114	71.2	(68.2–74.3)	641	66.2	(62.5–69.9)	—	—	—	695	58.8	(55.1–62.4)	88	50.2	(42.1–58.2)
Experiences of physical violence by an intimate partner or forced sex, past 12 monthsⁿ																					
Yes	—	—	—	0	0.0*	—	72	6.0	(4.1–7.9)	51	5.5	(4.0–7.0)	—	—	—	38	4.2	(2.2–6.3)	19	13.3	(6.9–19.6)
No	—	—	—	40	100*	(100–100)	1,460	94.0	(92.1–95.9)	900	94.5	(93.0–96.0)	—	—	—	1,099	95.8	(93.7–97.8)	153	86.7	(80.4–93.1)
Incarcerated >24 hours, past 12 months																					
Yes	—	—	—	0	0.0*	—	46	3.4	(2.2–4.6)	19	2.1	(1.1–3.0)	—	—	—	20	2.3	(1.2–3.3)	—	—	—
No	—	—	—	42	100*	(100–100)	1,539	96.6	(95.4–97.8)	969	97.9	(97.0–98.9)	—	—	—	1,141	97.7	(96.7–98.8)	170	93.8	(89.1–98.4)

Abbreviations: n, number; col, column; CI, confidence interval; FPL, federal poverty level; RWHAP, Ryan White HIV/AIDS Program; HHS, Department of Health and Human Services [footnotes only]; VA, Veterans Administration [footnotes only].

Note. Unweighted numbers and weighted percentages are presented. CIs incorporate weighted percentages. Excluded are estimates with a coefficient of variation ≥0.30 and those based on a denominator sample size <30. Estimates with an absolute CI width >30, estimates with an absolute CI width between 5 and 30 and a relative CI width >130%, and estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution.

^a Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.

^b “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

^c “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

^d “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room–occupancy hotel, or in a car) at any time during the past 12 months.

^e Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

^f “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

^g “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].

^h Poverty guidelines defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

ⁱ Persons could select more than 1 response for health insurance or coverage. Mutually exclusive categories are presented based on responses. Private coverage defined as receiving health insurance through a person’s employer or a family member’s employer or purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance includes Medicaid, Medicare, VA, RWHAP, or other city, county, or state-funded insurance. Uninsured or RWHAP only category includes those who did not report having any insurance, or received RWHAP assistance only, without coverage through any other insurance categories.

^j Self-reported, and includes physical, mental, and emotional disabilities.

^k Represents those who needed, but did not receive, ≥1 HIV ancillary services, among all persons.

^l Represents those who needed transportation assistance, regardless of whether that assistance was received, among all persons.

^m HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Respondents were asked if they experienced these forms of discrimination never, rarely, some of the time, most of the time, or all the time. Respondents who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all of time were considered to have experienced discrimination in an HIV health care setting.

ⁿ Physical violence by an intimate partner defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

Table 5b. Relative and absolute differences in individual-level social determinants of health and quality of life among adults with diagnosed HIV, by racial/ethnic identity—Medical Monitoring Project, United States, 2021

	Black/African American persons vs.											
	White persons				Hispanic/Latino ^a persons vs. White persons				Multiracial persons vs. White persons			
	PR	col %	PD	95% CI	PR	col %	PD	95% CI	PR	col %	PD	95% CI
Total (row %)												
National HIV/AIDS Strategy indicators related to social determinants of health												
Quality of life												
Physical health												
Self-reported health status^b												
Good, very good, excellent	0.92	(0.86–0.97)	-6.10	(-10.17–-2.03)	0.94	(0.87–1.01)	-4.64	(-9.97–0.69)	0.90	(0.80–1.02)	-7.19	(-15.48–1.10)
Poor, fair	1.22	(1.07–1.40)	6.10	(2.03–10.17)	1.17	(0.98–1.40)	4.64	(-0.69–9.97)	1.26	(0.98–1.62)	7.19	(-1.10–15.48)
Mental or emotional health												
Unmet needs for services from a mental health professional among those who needed services, past 12 months^c												
Yes	1.16	(0.94–1.43)	4.46	(-1.93–10.85)	0.75	(0.49–1.15)	-6.87	(-16.29–2.55)	0.94	(0.64–1.38)	-1.57	(-11.74–8.60)
No	0.94	(0.86–1.03)	-4.46	(-10.85–1.93)	1.10	(0.97–1.24)	6.87	(-2.55–16.29)	1.02	(0.89–1.17)	1.57	(-8.60–11.74)
Structural or subsistence factors												
Unstable housing or homelessness, past 12 months^d												
Yes	1.62	(1.23–2.15)	7.56	(3.52–11.60)	1.33	(1.01–1.74)	3.98	(0.28–7.67)	2.33	(1.59–3.40)	16.07	(6.57–25.57)
No	0.91	(0.87–0.96)	-7.56	(-11.60–-3.52)	0.95	(0.91–1.00)	-3.98	(-7.67–-0.28)	0.82	(0.72–0.93)	-16.07	(-25.57–-6.57)
Unemployment^e												
Yes	1.38	(1.07–1.79)	4.48	(0.94–8.02)	1.26	(0.94–1.69)	3.03	(-0.96–7.02)	1.65	(1.19–2.30)	7.65	(1.96–13.35)
No	0.95	(0.91–0.99)	-4.48	(-8.02–-0.94)	0.97	(0.92–1.01)	-3.03	(-7.02–0.96)	0.91	(0.85–0.98)	-7.65	(-13.35–-1.96)
Hunger or food insecurity, past 12 months^f												
Yes	1.31	(1.08–1.59)	3.63	(1.18–6.09)	1.66	(1.33–2.06)	7.64	(4.26–11.03)	2.29	(1.77–2.98)	15.08	(8.02–22.13)
No	0.96	(0.93–0.99)	-3.63	(-6.09–-1.18)	0.91	(0.88–0.95)	-7.64	(-11.03–-4.26)	0.83	(0.75–0.91)	-15.08	(-22.13–-8.02)
HIV stigma, past 12 months (n, median score, 95% CI)^g												
Other factors important for health, including those that affect quality of life												
Economic stability												
Household income with respect to poverty guidelines^h												
<100% FPL	1.89	(1.54–2.33)	21.18	(13.99–28.38)	1.93	(1.55–2.39)	21.91	(13.81–30.00)	1.67	(1.23–2.26)	15.75	(4.61–26.88)
100%–138% FPL	0.95	(0.66–1.36)	-0.57	(-4.64–3.49)	0.85	(0.57–1.25)	-1.78	(-6.09–2.52)	0.71	(0.34–1.48)	-3.31	(-10.01–3.39)
139%–399% FPL	0.91	(0.79–1.06)	-3.40	(-8.81–2.01)	0.90	(0.74–1.11)	-3.68	(-10.99–3.63)	1.02	(0.82–1.26)	0.68	(-7.58–8.94)
≥400% FPL	0.34	(0.27–0.44)	-17.21	(-20.88–-13.53)	0.37	(0.26–0.54)	-16.44	(-21.37–-11.52)	0.50	(0.26–0.96)	-13.11	(-21.59–-4.64)
Education												
Educational attainment												
Less than high school diploma	3.76	(2.73–5.18)	12.49	(9.55–15.43)	5.56	(3.80–8.13)	20.61	(14.86–26.37)	2.25	(1.02–5.00)	5.67	(-1.67–13.01)
High school diploma or equivalent	1.62	(1.39–1.89)	12.29	(8.85–15.74)	1.16	(0.91–1.49)	3.26	(-2.10–8.62)	1.19	(0.88–1.61)	3.83	(-3.20–10.85)
Greater than high school	0.67	(0.62–0.73)	-24.78	(-29.55–-20.02)	0.68	(0.62–0.76)	-23.87	(-29.87–-17.87)	0.87	(0.74–1.04)	-9.50	(-20.86–1.86)
Health-related factors												
Health insurance or coverage (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 monthsⁱ												
Any private	0.73	(0.65–0.81)	-14.26	(-18.83–-9.68)	0.68	(0.57–0.81)	-16.78	(-23.65–-9.92)	0.83	(0.59–1.16)	-8.88	(-23.55–5.80)
Public only, excluding RWHAP only	1.13	(1.00–1.29)	5.91	(-0.29–12.11)	1.19	(0.97–1.46)	8.52	(-1.96–19.00)	1.16	(0.90–1.51)	7.28	(-5.92–20.48)
Uninsured or RWHAP only	3.20	(2.16–4.75)	8.35	(4.89–11.81)	3.18	(1.92–5.28)	8.27	(3.27–13.26)	1.42	(0.71–2.86)	1.60	(-2.23–5.43)
Received RWHAP assistance, past 12 months												
Yes	1.06	(0.88–1.29)	2.74	(-5.48–10.96)	1.30	(1.08–1.58)	12.86	(3.80–21.92)	1.25	(0.97–1.61)	10.43	(-1.96–22.82)
No	0.95	(0.82–1.10)	-2.74	(-10.96–5.48)	0.78	(0.65–0.93)	-12.86	(-21.92–-3.80)	0.82	(0.64–1.05)	-10.43	(-22.82–1.96)
Confidence in completing health forms												
Somewhat, a little bit, not at all	1.56	(1.31–1.87)	9.14	(5.92–12.35)	1.93	(1.57–2.39)	15.16	(10.54–19.78)	1.46	(0.99–2.16)	7.51	(-0.96–15.98)
Extremely, quite a bit	0.89	(0.86–0.93)	-9.14	(-12.35–-5.92)	0.82	(0.77–0.87)	-15.16	(-19.78–-10.54)	0.91	(0.82–1.02)	-7.51	(-15.98–0.96)
Has a disability^j												
Yes	1.00	(0.90–1.12)	-0.02	(-4.40–4.35)	1.05	(0.92–1.21)	2.10	(-3.56–7.75)	1.35	(1.17–1.57)	14.01	(6.70–21.31)
No	1.00	(0.93–1.08)	0.02	(-4.35–4.40)	0.97	(0.88–1.06)	-2.10	(-7.75–3.56)	0.77	(0.66–0.89)	-14.01	(-21.31–-6.70)
Any unmet HIV ancillary service need, past 12 months^k												
Yes	1.24	(1.06–1.45)	9.81	(2.79–16.83)	1.14	(0.97–1.34)	5.66	(-1.62–12.94)	1.59	(1.26–2.01)	24.15	(10.25–38.05)
No	0.83	(0.73–0.95)	-9.81	(-16.83–-2.79)	0.90	(0.79–1.03)	-5.66	(-12.94–1.62)	0.59	(0.41–0.86)	-24.15	(-38.05–-10.25)

Table 5b. Relative and absolute differences in individual-level social determinants of health and quality of life among adults with diagnosed HIV, by racial/ethnic identity—Medical Monitoring Project, United States, 2021 (cont)

	Black/African American persons vs.											
	White persons				Hispanic/Latino ^a persons vs. White persons				Multiracial persons vs. White persons			
	PR	col %	PD	95% CI	PR	col %	PD	95% CI	PR	col %	PD	95% CI
Neighborhood and built environment												
Any met or unmet need for transportation assistance, past 12 months^l												
Yes	1.78	(1.45–2.18)	14.26	(9.90–18.63)	1.44	(1.13–1.84)	8.16	(2.99–13.32)	1.88	(1.49–2.38)	16.25	(9.56–22.95)
No	0.83	(0.78–0.87)	-14.26	(-18.63–-9.90)	0.90	(0.84–0.96)	-8.16	(-13.32–-2.99)	0.80	(0.72–0.89)	-16.25	(-22.95–-9.56)
Social and community context												
HIV health care discrimination among persons who received care, past 12 months^m												
Yes	0.79	(0.63–1.00)	-5.11	(-10.05–-0.17)	0.91	(0.78–1.06)	-2.16	(-5.69–1.37)	1.21	(0.86–1.71)	5.14	(-5.06–15.34)
No	1.07	(1.00–1.14)	5.11	(0.17–10.05)	1.03	(0.98–1.08)	2.16	(-1.37–5.69)	0.93	(0.81–1.08)	-5.14	(-15.34–5.06)
Speaks English less than well												
Yes	6.40	(1.21–33.80)	1.35	(0.51–2.19)	107.27	(28.65–401.68)	26.55	(19.76–33.34)	6.69	(1.03–43.49)	1.42	(-0.24–3.09)
No	0.99	(0.98–0.99)	-1.35	(-2.19–-0.51)	0.73	(0.67–0.81)	-26.55	(-33.34–-19.76)	0.99	(0.97–1.00)	-1.42	(-3.09–0.24)
Experiences of physical violence by an intimate partner or forced sex, lifetimeⁿ												
Yes	0.70	(0.61–0.79)	-12.46	(-16.85–-8.06)	0.82	(0.73–0.93)	-7.44	(-11.92–-2.97)	1.21	(1.03–1.42)	8.62	(0.84–16.39)
No	1.21	(1.13–1.30)	12.46	(8.06–16.85)	1.13	(1.05–1.21)	7.44	(2.97–11.92)	0.85	(0.73–1.00)	-8.62	(-16.39–-0.84)
Experiences of physical violence by an intimate partner or forced sex, past 12 monthsⁿ												
Yes	1.42	(0.80–2.50)	1.77	(-0.97–4.51)	1.30	(0.73–2.33)	1.28	(-1.38–3.95)	3.14	(1.58–6.23)	9.05	(2.34–15.76)
No	0.98	(0.95–1.01)	-1.77	(-4.51–0.97)	0.99	(0.96–1.01)	-1.28	(-3.95–1.38)	0.91	(0.84–0.98)	-9.05	(-15.76–-2.34)
Incarcerated >24 hours, past 12 months												
Yes	1.52	(0.80–2.89)	1.18	(-0.58–2.93)	0.91	(0.47–1.76)	-0.21	(-1.65–1.23)	2.76	(1.12–6.82)	3.99	(-0.85–8.82)
No	0.99	(0.97–1.01)	-1.18	(-2.93–0.58)	1.00	(0.99–1.02)	0.21	(-1.23–1.65)	0.96	(0.91–1.01)	-3.99	(-8.82–0.85)

Abbreviations: PR, prevalence ratio; PD, prevalence difference; CI, confidence interval; FPL, federal poverty level; RWHAP, Ryan White HIV/AIDS Program; HHS, Department of Health and Human Services [footnotes only]; VA, Veterans Administration [footnotes only].

Note. White persons were the referent group for each disparity assessment. Due to sample size issues with other racial/ethnic groups, disparities could only be assessed for Black/African American persons and Hispanic/Latino persons, versus White persons. Excluded are estimates with a coefficient of variation ≥ 0.30 and those based on a denominator sample size < 30 .

- ^a Hispanic or Latino persons can be of any race. Persons are classified in only 1 race/ethnicity category.
- ^b “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.
- ^c “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.
- ^d “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room–occupancy hotel, or in a car) at any time during the past 12 months.
- ^e Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.
- ^f “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.
- ^g “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥ 18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].
- ^h Poverty guidelines defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.
- ⁱ Persons could select more than 1 response for health insurance or coverage. Mutually exclusive categories are presented based on responses. Private coverage defined as receiving health insurance through a person’s employer or a family member’s employer or purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance includes Medicaid, Medicare, VA, RWHAP, or other city, county, or state-funded insurance. Uninsured or RWHAP only category includes those who did not report having any insurance, or received RWHAP assistance only, without coverage through any other insurance categories.
- ^j Self-reported, and includes physical, mental, and emotional disabilities.
- ^k Represents those who needed, but did not receive, ≥ 1 HIV ancillary services, among all persons.
- ^l Represents those who needed transportation assistance, regardless of whether that assistance was received, among all persons.
- ^m HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Respondents were asked if they experienced these forms of discrimination never, rarely, some of the time, most of the time, or all the time. Respondents who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all of time were considered to have experienced discrimination in an HIV health care setting.
- ⁿ Physical violence by an intimate partner defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

Table 6. Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by National HIV/AIDS Strategy priority populations—Medical Monitoring Project, United States, 2021

	All MSM ^a			Black/African American MSM ^b			Hispanic/Latino MSM ^c			AI/AN MSM ^d			Black/African American cisgender women ^e			Transgender women ^f			Persons aged 18–24 years ^g			Persons who inject drugs ^h		
	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI
Total (row %)	2,022	51.7	(47.5–56.0)	552	14.9	(11.8–18.0)	520	13.2	(9.1–17.4)	—	—	—	537	13.1	(9.5–16.8)	82	2.1	(1.6–2.5)	59	1.7	(1.2–2.3)	107	2.7	(2.1–3.4)
National HIV/AIDS Strategy indicators related to social determinants of health																								
<i>Quality of life</i>																								
Physical health																								
Self-reported health statusⁱ																								
Good, very good, excellent	1,525	76.0	(74.2–77.8)	419	77.4	(74.0–80.7)	372	73.4	(69.0–77.8)	—	—	—	311	59.4	(53.4–65.4)	52	62.8	(52.1–73.5)	50	87.5	(82.0–93.0)	61	57.7	(46.5–68.8)
Poor, fair	491	24.0	(22.2–25.8)	131	22.6	(19.3–26.0)	147	26.6	(22.2–31.0)	—	—	—	223	40.6	(34.6–46.6)	30	37.2	(26.5–47.9)	9	12.5	(7.0–18.0)	46	42.3	(31.2–53.5)
Mental or emotional health																								
Unmet needs for services from a mental health professional among those who needed services, past 12 months^j																								
Yes	226	29.2	(24.7–33.7)	67	34.8	(28.5–41.2)	54	23.9	(15.2–32.5)	—	—	—	45	28.6	(17.0–40.3)	10	32.9*	(14.9–51.0)	—	—	—	20	28.9	(14.9–42.9)
No	583	70.8	(66.3–75.3)	125	65.2	(58.8–71.5)	173	76.1	(67.5–84.8)	—	—	—	135	71.4	(59.7–83.0)	28	67.1*	(49.0–85.1)	—	—	—	54	71.1	(57.1–85.1)
Structural or subsistence factors																								
Unstable housing or homelessness, past 12 months^k																								
Yes	302	15.9	(13.5–18.2)	104	19.4	(14.1–24.7)	101	18.1	(14.1–22.1)	—	—	—	90	18.7	(14.7–22.7)	19	28.4	(18.2–38.7)	17	26.1	(14.5–37.7)	44	45.7	(34.8–56.6)
No	1,719	84.1	(81.8–86.5)	447	80.6	(75.3–85.9)	419	81.9	(77.9–85.9)	—	—	—	446	81.3	(77.3–85.3)	63	71.6	(61.3–81.8)	42	73.9	(62.3–85.5)	63	54.3	(43.4–65.2)
Unemployment^l																								
Yes	292	15.0	(12.8–17.1)	96	18.1	(14.1–22.0)	82	15.6	(11.8–19.4)	—	—	—	59	13.5	(9.9–17.0)	19	24.5	(15.6–33.3)	—	—	—	40	38.8	(25.9–51.6)
No	1,726	85.0	(82.9–87.2)	456	81.9	(78.0–85.9)	438	84.4	(80.6–88.2)	—	—	—	477	86.5	(83.0–90.1)	63	75.5	(66.7–84.4)	46	83.7	(73.8–93.6)	67	61.2	(48.4–74.1)
Hunger or food insecurity, past 12 months^m																								
Yes	274	13.9	(12.1–15.7)	89	15.4	(12.3–18.5)	93	16.5	(13.2–19.9)	—	—	—	72	14.4	(11.0–17.8)	28	40.3*	(23.8–56.8)	19	30.5	(18.0–43.1)	39	36.9	(27.2–46.5)
No	1,743	86.1	(84.3–87.9)	462	84.6	(81.5–87.7)	425	83.5	(80.1–86.8)	—	—	—	463	85.6	(82.2–89.0)	54	59.7*	(43.2–76.2)	40	69.5	(56.9–82.0)	68	63.1	(53.5–72.8)
HIV stigma, past 12 months (n, median score, 95% CI)ⁿ																								
Other factors important for health, including those that affect quality of life																								
<i>Economic stability</i>																								
Household income with respect to poverty guidelines^o																								
<100% FPL	465	25.1	(21.6–28.6)	136	27.4	(22.3–32.4)	169	34.8	(26.5–43.1)	—	—	—	252	57.7	(50.1–65.3)	44	60.2	(46.4–73.9)	18	33.8	(20.2–47.4)	46	44.1	(32.5–55.7)
100%–138% FPL	173	9.6	(8.2–11.0)	58	12.0	(8.4–15.7)	40	8.0	(5.7–10.3)	—	—	—	44	8.0	(5.5–10.5)	—	—	—	—	—	—	10	11.4	(5.1–17.7)
139%–399% FPL	785	42.7	(39.5–45.9)	218	43.4	(38.0–48.8)	194	43.3	(36.7–50.0)	—	—	—	133	30.7	(23.9–37.5)	16	23.2	(13.7–32.7)	22	52.0	(37.8–66.3)	30	34.5	(23.3–45.7)
≥400% FPL	443	22.6	(19.3–26.0)	87	17.2	(12.3–22.1)	66	13.9	(9.2–18.6)	—	—	—	22	3.6	(2.0–5.1)	—	—	—	—	—	—	—	—	
<i>Education</i>																								
Educational attainment																								
Less than high school diploma	123	6.8	(5.3–8.4)	42	8.4	(4.6–12.2)	63	13.4	(8.4–18.5)	—	—	—	121	22.7	(19.4–26.1)	19	21.4	(11.8–31.0)	—	—	—	19	15.6	(7.2–23.9)
High school diploma or equivalent	386	19.2	(17.0–21.4)	140	24.4	(19.5–29.3)	106	19.8	(16.2–23.4)	—	—	—	187	36.8	(31.3–42.4)	26	34.8	(22.5–47.1)	23	32.7*	(15.5–50.0)	12	9.6	(4.5–14.8)
Greater than high school	1,512	74.0	(71.9–76.0)	370	67.3	(63.2–71.3)	350	66.7	(60.9–72.6)	—	—	—	227	40.5	(34.2–46.7)	36	43.8	(29.6–58.1)	29	57.3*	(40.7–73.9)	76	74.8	(65.4–84.2)
<i>Health-related factors</i>																								
Health insurance or coverage (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 months^p																								
Any private	1,034	51.1	(48.0–54.2)	260	48.0	(43.3–52.6)	218	43.1	(37.0–49.2)	—	—	—	165	32.1	(26.8–37.3)	26	34.1*	(18.6–49.5)	27	52.4	(38.2–66.5)	31	28.5	(18.2–38.8)
Public only, excluding RWHAP only	787	39.4	(34.9–44.0)	215	37.7	(28.8–46.5)	229	44.0	(34.7–53.3)	—	—	—	325	58.1	(50.7–65.5)	45	53.6	(40.6–66.6)	23	36.6*	(20.5–52.7)	69	65.3	(54.1–76.5)
Uninsured or RWHAP only	166	9.5	(6.0–12.9)	68	14.4	(7.8–20.9)	61	13.0	(7.0–18.9)	—	—	—	41	9.9	(5.6–14.2)	—	—	—	—	—	—	—	—	
Received RWHAP assistance, past 12 months																								
Yes	973	47.3	(44.0–50.6)	274	46.6	(42.1–51.1)	278	54.2	(47.6–60.8)	—	—	—	240	43.8	(37.2–50.3)	49	60.7	(49.3–72.1)	28	46.5	(31.9–61.1)	56	51.1	(41.0–61.2)
No	982	52.7	(49.4–56.0)	264	53.4	(48.9–57.9)	211	45.8	(39.2–52.4)	—	—	—	280	56.2	(49.7–62.8)	25	39.3	(27.9–50.7)	29	53.5	(38.9–68.1)	43	48.9	(38.8–59.0)
Confidence in completing health forms																								
Somewhat, a little bit, not at all	356	18.0	(16.2–19.8)	87	17.4	(13.6–21.2)	129	24.8	(20.5–29.0)	—	—	—	139	27.6	(21.6–33.6)	29	31.1	(22.3–39.9)	15	28.4	(16.0–40.8)	25	26.8	(14.7–38.8)
Extremely, quite a bit	1,661	82.0	(80.2–83.8)	464	82.6	(78.8–86.4)	390	75.2	(71.0–79.5)	—	—	—	396	72.4	(66.4–78.4)	53	68.9	(60.1–77.7)	43	71.6	(59.2–84.0)	82	73.2	(61.2–85.3)
Has a disability^q																								
Yes	675	32.9	(30.5–35.4)	152	26.6	(22.2–31.0)	189	34.8	(29.9–39.7)	—	—	—	270	47.0	(42.5–51.6)	48	59.4	(46.8–72.0)	15	22.2	(9.4–34.9)	61	57.7	(46.8–68.7)
No	1,344	67.1	(64.6–69.5)	400	73.4	(69.0–77.8)	330	65.2	(60.3–70.1)	—	—	—	266	53.0	(48.4–57.5)	34	40.6	(28.0–53.2)	44	77.8	(65.1–90.6)	46	42.3	(31.3–53.2)
Any unmet HIV ancillary service need, past 12 months^r																								
Yes	856	44.4	(41.6–47.2)	262	49.1	(44.2–54.0)	234	44.0	(39.0–49.1)	—	—	—	270	52.9	(44.5–61.3)	48	58.1	(44.7–71.5)	33	57.1	(43.6–70.5)	78	74.8	(66.3–83.3)
No	1,154	55.6	(52.8–58.4)	286	50.9	(46.0–55.8)	283	56.0	(50.9–61.0)	—	—	—	261	47.1	(38.7–55.5)	33	41.9	(28.5–55.3)	25	42.9	(29.5–56.4)	29	25.2	(16.7–33.7)

Table 6. Individual-level social determinants of health and quality of life among adults with diagnosed HIV, by National HIV/AIDS Strategy priority populations—Medical Monitoring Project, United States, 2021 (cont)

	All MSM ^a			Black/African American MSM ^b			Hispanic/Latino MSM ^c			AI/AN MSM ^d			Black/African American cisgender women ^e			Transgender women ^f			Persons aged 18–24 years ^g			Persons who inject drugs ^h		
	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI	n	col %	95% CI
Neighborhood and built environment																								
Any met or unmet need for transportation assistance, past 12 months^s																								
Yes	401	19.6	(17.7–21.5)	132	23.0	(19.7–26.2)	118	21.3	(17.3–25.2)	—	—	—	217	39.5	(33.7–45.4)	36	45.8	(35.5–56.0)	21	32.6	(20.8–44.4)	50	45.9	(36.0–55.9)
No	1,607	80.4	(78.5–82.3)	415	77.0	(73.8–80.3)	400	78.7	(74.8–82.7)	—	—	—	311	60.5	(54.6–66.3)	44	54.2	(44.0–64.5)	37	67.4	(55.6–79.2)	57	54.1	(44.1–64.0)
Social and community context																								
HIV health care discrimination among persons who received care, past 12 months^t																								
Yes	434	22.9	(20.4–25.4)	101	19.2	(14.6–23.9)	115	23.0	(19.6–26.5)	—	—	—	96	17.6	(12.4–22.9)	18	24.9	(13.0–36.7)	—	—	—	32	34.4	(21.9–47.0)
No	1,447	77.1	(74.6–79.6)	410	80.8	(76.1–85.4)	370	77.0	(73.5–80.4)	—	—	—	394	82.4	(77.1–87.6)	60	75.1	(63.3–87.0)	42	79.8	(67.3–92.2)	66	65.6	(53.0–78.1)
Speaks English less than well																								
Yes	—	—	—	0	0.0*	—	87	16.3	(9.1–23.6)	—	—	—	18	2.7	(1.2–4.1)	16	15.3	(9.4–21.2)	—	—	—	—	—	—
No	1,935	95.8	(92.9–98.7)	552	100*	(100–100)	433	83.7	(76.4–90.9)	—	—	—	518	97.3	(95.9–98.8)	66	84.7	(78.8–90.6)	58	98.6	(95.8–100)	104	97.2	(93.9–100)
Experiences of physical violence by an intimate partner or forced sex, lifetime^u																								
Yes	695	36.2	(34.1–38.3)	180	33.6	(29.7–37.4)	165	32.7	(28.0–37.4)	—	—	—	169	33.8	(29.0–38.6)	43	61.1	(50.3–71.9)	18	35.1	(22.6–47.6)	60	54.2	(43.1–65.2)
No	1,290	63.8	(61.7–65.9)	362	66.4	(62.6–70.3)	341	67.3	(62.6–72.0)	—	—	—	346	66.2	(61.4–71.0)	35	38.9	(28.1–49.7)	39	64.9	(52.4–77.4)	45	45.8	(34.8–56.9)
Experiences of physical violence by an intimate partner or forced sex, past 12 months^u																								
Yes	109	6.2	(4.9–7.5)	39	8.2	(5.4–11.0)	32	5.3	(3.6–7.1)	—	—	—	20	6.2	(3.2–9.1)	12	20.5	(10.8–30.1)	—	—	—	22	23.2	(14.6–31.8)
No	1,869	93.8	(92.5–95.1)	500	91.8	(89.0–94.6)	473	94.7	(92.9–96.4)	—	—	—	491	93.8	(90.9–96.8)	66	79.5	(69.9–89.2)	48	82.2	(71.7–92.8)	80	76.8	(68.2–85.4)
Incarcerated >24 hours, past 12 months																								
Yes	44	2.5	(1.8–3.3)	19	3.6	(1.6–5.6)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No	1,976	97.5	(96.7–98.2)	531	96.4	(94.4–98.4)	512	98.7	(97.6–99.7)	—	—	—	527	97.7	(96.0–99.5)	79	96.0	(91.2–100)	57	98.1	(95.4–100)	95	88.7	(83.9–93.5)

Abbreviations: MSM, men who have sex with men; AI/AN, American Indian/Alaska Native; n, number; col, column; CI, confidence interval; FPL, federal poverty level; RWHP, Ryan White HIV/AIDS Program; HHS, Department of Health and Human Services [footnotes only]; VA, Veterans Administration [footnotes only].

Note. Unweighted numbers and weighted percentages are presented. CIs incorporate weighted percentages. Excluded are estimates with a coefficient of variation ≥0.30 and those based on a denominator sample size <30. Estimates with an absolute CI width >30, estimates with an absolute CI width between 5 and 30 and a relative CI width >130%, and estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution.

- ^a Includes cisgender men with diagnosed HIV who reported having sex with ≥1 cisgender men in the past 12 months (among persons who had sex during the past 12 months) and cisgender men with diagnosed HIV who reported identifying as gay or bisexual (among those who did not have sex during the past 12 months).
- ^b Includes MSM with diagnosed HIV who identified as non-Hispanic/Latino Black/African American race/ethnicity.
- ^c Includes MSM who identified as Hispanic/Latino race/ethnicity. Hispanic or Latino MSM can be of any race.
- ^d Includes MSM who identified as American Indian/Alaska Native race/ethnicity.
- ^e Includes cisgender women with diagnosed HIV who identified as non-Hispanic Black/African American race/ethnicity.
- ^f Persons with diagnosed HIV were classified as transgender women if the person reported that their sex assigned at birth was male but identified as female or transgender.
- ^g Priority population for youths includes persons with diagnosed HIV aged 13–24 years; however, data from MMP are only available and presented for persons aged 18–24 years.
- ^h Includes persons with diagnosed HIV who reported injecting drugs during the past 12 months.
- ⁱ “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.
- ^j “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.
- ^k “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room–occupancy hotel, or in a car) at any time during the past 12 months.
- ^l Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.
- ^m “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.
- ⁿ “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].
- ^o Poverty guidelines defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.
- ^p Persons could select more than 1 response for health insurance or coverage. Mutually exclusive categories are presented based on responses. Private coverage defined as receiving health insurance through a person’s employer or a family member’s employer or purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance includes Medicaid, Medicare, VA, RWHP, or other city, county, or state-funded insurance. Uninsured or RWHP only category includes those who did not report having any insurance, or received RWHP assistance only, without coverage through any other insurance categories.
- ^q Self-reported, and includes physical, mental, and emotional disabilities.
- ^r Represents those who needed, but did not receive, ≥1 HIV ancillary services, among all persons.
- ^s Represents those who needed transportation assistance, regardless of whether that assistance was received, among all persons.
- ^t HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Respondents were asked if they experienced these forms of discrimination never, rarely, some of the time, most of the time, or all the time. Respondents who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all of time were considered to have experienced discrimination in an HIV health care setting.
- ^u Physical violence by an intimate partner defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

Table 7. National HIV/AIDS Strategy indicators among adults with diagnosed HIV, by other individual-level social determinants of health—Medical Monitoring Project, United States, 2021

	Good or better self-rated health ^a			Unmet needs for services from a mental health professional among those who needed services ^b			Unstable housing or homelessness ^c			Unemployment ^d			Hunger/food insecurity ^e			Median HIV stigma score ^f		
	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	score	95% CI
Total (row %)	2,697	68.8	(67.4–70.3)	389	27.7	(22.9–32.5)	651	17.0	(15.3–18.6)	558	14.7	(13.4–16.0)	607	15.7	(14.2–17.3)	3,712	28.8	(27.6–30.1)
<i>Economic stability</i>																		
Household income with respect to poverty guidelines^g																		
<100% FPL	709	53.2	(49.8–56.5)	147	23.2	(18.3–28.1)	360	27.0	(23.3–30.6)	267	20.7	(18.0–23.3)	347	25.6	(22.0–29.1)	1,272	30.3	(27.5–33.2)
100%–138% FPL	235	59.0	(54.0–64.0)	45	38.6	(26.6–50.5)	52	15.7	(9.7–21.7)	42	12.1	(8.0–16.2)	50	14.8	(9.3–20.2)	368	33.4	(29.0–37.8)
139%–399% FPL	996	78.9	(76.6–81.2)	130	32.1	(24.4–39.8)	140	10.5	(8.7–12.4)	138	11.0	(9.3–12.8)	136	10.8	(8.7–13.0)	1,195	28.4	(26.6–30.2)
≥400% FPL	478	89.3	(86.3–92.3)	38	24.3	(16.6–32.0)	20	4.1	(2.0–6.2)	29	4.8	(2.5–7.1)	—	—	—	520	24.7	(23.0–26.4)
<i>Education</i>																		
Educational attainment																		
Less than high school diploma	310	55.2	(50.2–60.2)	65	30.9	(24.0–37.7)	140	25.6	(22.0–29.2)	98	18.0	(13.1–22.9)	142	25.9	(21.1–30.7)	528	32.6	(27.6–37.6)
High school diploma or equivalent	651	64.5	(61.7–67.4)	100	28.2	(21.5–34.8)	209	19.4	(16.5–22.2)	178	18.1	(14.9–21.4)	178	17.1	(14.6–19.5)	969	29.1	(26.2–31.9)
Greater than high school	1,732	74.2	(72.4–75.9)	224	26.9	(21.6–32.1)	300	13.8	(12.2–15.3)	282	12.4	(10.7–14.0)	286	12.6	(10.9–14.3)	2,211	28.2	(26.8–29.6)
<i>Health-related factors</i>																		
Health insurance or coverage (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 months^h																		
Any private	1,315	81.9	(79.4–84.3)	141	29.7	(24.0–35.4)	148	10.5	(8.3–12.6)	137	8.6	(6.8–10.3)	149	10.1	(7.9–12.3)	1,519	28.2	(26.6–29.7)
Public only, excluding RWHAP only	1,113	56.9	(54.5–59.3)	204	24.9	(18.8–30.9)	403	20.7	(18.4–23.0)	328	17.2	(15.2–19.2)	380	19.5	(17.4–21.6)	1,839	29.5	(27.2–31.8)
Uninsured or RWHAP only	228	74.3	(68.9–79.6)	35	40.8	(29.0–52.6)	81	24.6	(20.3–28.9)	83	28.3	(22.2–34.5)	63	19.1	(13.9–24.4)	294	27.7	(23.3–32.1)
Received RWHAP assistance, past 12 months																		
Yes	1,252	66.8	(64.8–68.9)	200	27.1	(21.0–33.2)	355	19.6	(17.7–21.5)	275	14.9	(12.9–16.9)	338	18.3	(16.4–20.2)	1,779	28.7	(27.0–30.5)
No	1,345	71.0	(68.6–73.5)	174	28.4	(24.3–32.5)	261	14.2	(11.9–16.6)	253	13.9	(12.0–15.8)	236	12.9	(10.4–15.4)	1,796	28.9	(27.5–30.3)
Confidence in completing health forms																		
Somewhat, a little bit, not at all	466	51.4	(48.0–54.8)	103	27.0	(20.2–33.8)	218	23.0	(19.5–26.5)	137	16.6	(13.8–19.3)	242	25.5	(22.1–28.8)	877	34.8	(32.1–37.5)
Extremely, quite a bit	2,224	74.3	(72.8–75.8)	286	28.1	(23.4–32.8)	428	15.0	(13.4–16.6)	419	14.0	(12.7–15.3)	361	12.5	(11.2–13.9)	2,831	27.8	(26.5–29.1)
Has a disabilityⁱ																		
Yes	808	49.9	(47.6–52.2)	217	28.0	(23.1–32.8)	380	23.8	(21.1–26.4)	257	16.6	(14.7–18.6)	406	25.8	(23.7–28.0)	1,543	33.2	(30.7–35.6)
No	1,886	81.8	(80.0–83.6)	172	27.5	(21.3–33.7)	268	12.3	(10.6–14.0)	301	13.4	(11.2–15.6)	199	8.7	(6.9–10.5)	2,165	26.7	(25.1–28.3)
Any unmet HIV ancillary service need, past 12 months^j																		
Yes	1,100	62.3	(59.9–64.6)	—	—	—	434	24.0	(21.7–26.4)	350	20.4	(18.5–22.3)	465	26.2	(23.8–28.7)	1,693	33.6	(31.5–35.7)
No	1,579	74.8	(72.8–76.9)	—	—	—	206	10.3	(8.1–12.5)	205	9.4	(7.4–11.4)	135	6.1	(5.1–7.1)	2,010	25.0	(23.5–26.4)
<i>Neighborhood and built environment</i>																		
Any met or unmet need for transportation assistance, past 12 months^k																		
Yes	530	50.1	(46.5–53.7)	154	27.5	(22.6–32.5)	317	29.4	(26.5–32.4)	222	21.8	(19.2–24.5)	332	30.9	(27.8–34.0)	1,046	33.2	(30.2–36.1)
No	2,144	75.7	(73.8–77.6)	234	27.8	(21.5–34.0)	319	12.0	(10.3–13.7)	329	11.9	(10.4–13.4)	266	10.0	(8.6–11.3)	2,662	27.9	(26.5–29.2)

Table 7. National HIV/AIDS Strategy indicators among adults with diagnosed HIV, by other individual-level social determinants of health—Medical Monitoring Project, United States, 2021

	Good or better self-rated health ^a			Unmet needs for services from a mental health professional among those who needed services ^b			Unstable housing or homelessness ^c			Unemployment ^d			Hunger/food insecurity ^e			Median HIV stigma score ^f		
	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	score	95% CI
Social and community context																		
HIV health care discrimination among persons who received care, past 12 months^l																		
Yes	480	61.0	(58.0–64.1)	128	31.2	(26.1–36.4)	164	20.7	(17.6–23.9)	134	16.3	(13.3–19.3)	204	25.2	(21.8–28.7)	765	37.4	(34.4–40.4)
No	2,022	71.6	(69.9–73.4)	221	22.6	(17.1–28.2)	418	15.0	(13.1–17.0)	372	13.4	(11.7–15.0)	346	12.4	(10.8–13.9)	2,704	27.1	(25.8–28.4)
Speaks English less than well																		
Yes	186	58.9	(53.7–64.1)	—	—	—	51	14.6	(7.7–21.6)	36	11.2	(5.8–16.5)	69	22.0	(12.6–31.4)	283	34.4	(31.5–37.2)
No	2,511	69.6	(68.1–71.1)	376	29.2	(25.4–33.1)	600	17.2	(15.6–18.7)	522	14.9	(13.6–16.2)	538	15.2	(13.5–16.9)	3,429	28.5	(27.2–29.9)
Experiences of physical violence by an intimate partner or forced sex, lifetime^m																		
Yes	826	65.2	(62.4–68.1)	185	28.5	(22.7–34.3)	284	23.1	(20.1–26.1)	224	18.7	(16.4–21.1)	304	24.3	(21.2–27.5)	1,228	33.9	(32.0–35.9)
No	1,808	71.0	(69.0–73.0)	198	27.1	(21.9–32.4)	343	13.7	(11.9–15.5)	319	12.5	(10.7–14.2)	282	11.0	(9.6–12.4)	2,421	26.3	(24.7–27.9)
Experiences of physical violence by an intimate partner or forced sex, past 12 months^m																		
Yes	110	62.2	(53.4–70.9)	31	26.1	(18.2–34.0)	78	38.9	(29.2–48.6)	56	33.4	(23.6–43.2)	77	41.1	(32.9–49.2)	175	38.2	(30.1–46.3)
No	2,511	69.4	(67.9–71.0)	349	28.1	(22.7–33.4)	539	15.5	(13.7–17.2)	483	13.5	(12.1–14.9)	498	13.9	(12.4–15.4)	3,454	28.4	(27.0–29.8)
Incarcerated > 24 hours, past 12 months																		
Yes	58	59.0	(49.6–68.4)	12	26.5	(11.8–41.2)	43	44.9	(32.1–57.7)	32	33.4	(21.5–45.3)	32	37.6	(23.9–51.3)	84	43.2	(30.1–56.3)
No	2,637	69.2	(67.7–70.6)	376	27.8	(23.0–32.5)	605	16.1	(14.6–17.6)	525	14.1	(12.7–15.4)	575	15.1	(13.7–16.5)	3,625	28.6	(27.4–29.9)

Abbreviations: n, number; CI, confidence interval; FPL, federal poverty level; RWHAP, Ryan White HIV/AIDS Program; HHS, Department of Health and Human Services [footnotes only]; VA, Veterans Administration [footnotes only].

Note. Unweighted numbers and weighted percentages are presented. CIs incorporate weighted percentages. Excluded are estimates with a coefficient of variation ≥ 0.30 and those based on a denominator sample size < 30 .

^a “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

^b “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

^c “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room–occupancy hotel, or in a car) at any time during the past 12 months.

^d Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

^e “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

^f “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥ 18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].

^g Poverty guidelines defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

^h Persons could select more than 1 response for health insurance or coverage. Mutually exclusive categories are presented based on responses. Private coverage defined as receiving health insurance through a person’s employer or a family member’s employer or purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance includes Medicaid, Medicare, VA, RWHAP, or other city, county, or state-funded insurance. Uninsured or RWHAP only category includes those who did not report having any insurance, or received RWHAP assistance only, without coverage through any other insurance categories.

ⁱ Self-reported, and includes physical, mental, and emotional disabilities.

^j Represents those who needed, but did not receive, ≥ 1 HIV ancillary services, among all persons.

^k Represents those who needed transportation assistance, regardless of whether that assistance was received, among all persons.

^l HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Respondents were asked if they experienced these forms of discrimination never, rarely, some of the time, most of the time, or all the time. Respondents who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all of time were considered to have experienced discrimination in an HIV health care setting.

^m Physical violence by an intimate partner defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

Table 8. National HIV/AIDS Strategy indicators among adults with diagnosed HIV, by project area—Medical Monitoring Project, United States, 2021

Jurisdiction ^g	Good or better self-rated health ^a			Unmet needs for services from a mental health professional among those who needed services ^b			Unstable housing or homelessness ^c			Unemployment ^d			Hunger/food insecurity ^e			Median HIV stigma score ^f		
	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	Median score	95% CI	
California	404	69.8	(65.4–74.2)	41	19.2	(12.7–25.7)	98	17.5	(13.7–21.3)	86	15.8	(12.2–19.4)	80	14.9	(11.3–18.5)	537	26.5	(23.9–29.0)
Chicago, IL	134	69.4	(62.3–76.5)	14	21.0	(10.8–31.1)	24	12.5	(7.3–17.8)	37	19.9	(13.5–26.3)	31	18.5	(11.9–25.0)	185	27.4	(22.6–32.2)
Delaware	136	70.3	(63.4–77.3)	22	23.8	(14.4–33.1)	30	16.3	(10.5–22.1)	25	12.9	(7.8–18.1)	27	13.4	(8.3–18.6)	192	28.9	(25.7–32.0)
Florida	168	69.0	(62.4–75.7)	24	31.3	(19.7–42.9)	44	18.7	(13.1–24.2)	16	7.6	(3.4–11.8)	43	18.0	(12.4–23.5)	226	28.9	(25.5–32.3)
Georgia	126	68.6	(62.0–75.3)	23	33.5	(22.1–44.8)	35	19.6	(13.7–25.6)	22	12.7	(7.6–17.8)	23	13.2	(8.1–18.4)	182	28.5	(25.1–31.9)
Houston, TX	115	68.6	(61.3–75.9)	18	32.1	(19.0–45.2)	43	25.8	(18.6–33.0)	24	13.9	(8.5–19.4)	26	15.2	(9.5–20.9)	155	24.3	(19.9–28.7)
Illinois	197	69.1	(63.3–74.9)	22	22.2	(13.3–31.0)	34	11.2	(7.4–15.0)	45	16.4	(11.5–21.2)	42	16.7	(11.6–21.8)	267	30.6	(26.6–34.7)
Indiana	81	59.0	(49.3–68.7)	16	36.0*	(20.2–51.9)	25	21.9	(13.2–30.5)	17	11.7	(6.1–17.4)	22	17.9	(10.3–25.5)	131	31.4	(26.3–36.5)
Los Angeles County, CA	119	67.9	(60.4–75.4)	12	17.5	(8.1–26.9)	38	23.3	(15.9–30.8)	34	19.7	(12.9–26.5)	26	12.5	(7.8–17.2)	172	25.3	(21.5–29.1)
Michigan	135	69.9	(61.3–78.5)	22	43.6*	(26.4–60.8)	36	23.1	(14.3–31.8)	28	18.0	(9.5–26.4)	32	20.9	(12.3–29.6)	184	37.2	(32.9–41.6)
Mississippi	103	58.4	(50.1–66.7)	—	—	—	37	21.4	(14.8–27.9)	29	15.9	(10.3–21.5)	20	12.5	(6.8–18.2)	164	27.9	(23.0–32.8)
New Jersey	152	65.2	(56.9–73.4)	17	18.2	(9.7–26.7)	28	12.5	(6.6–18.3)	33	11.7	(7.5–15.8)	35	16.6	(10.0–23.3)	204	31.6	(28.5–34.6)
New York	238	70.5	(65.0–76.0)	36	21.4	(14.4–28.5)	46	12.7	(8.7–16.7)	72	21.7	(16.6–26.8)	60	17.5	(12.9–22.1)	299	28.5	(25.8–31.3)
New York City, NY	173	69.5	(62.9–76.1)	30	22.5	(14.4–30.6)	36	13.6	(8.7–18.4)	61	24.2	(18.2–30.3)	47	19.8	(13.9–25.7)	217	28.9	(26.0–31.9)
North Carolina	124	67.8	(59.9–75.7)	18	35.5*	(20.5–50.5)	37	21.7	(14.8–28.5)	27	16.1	(10.0–22.2)	26	15.7	(9.5–22.0)	171	27.6	(23.8–31.4)
Oregon	129	70.2	(63.5–76.9)	25	33.3	(22.4–44.2)	20	11.3	(6.5–16.0)	29	17.1	(11.3–22.8)	27	14.9	(9.5–20.3)	177	23.3	(19.9–26.7)
Pennsylvania	126	64.3	(57.1–71.6)	35	41.1	(28.9–53.3)	37	17.1	(11.3–22.9)	31	15.9	(9.7–22.1)	40	20.6	(14.2–27.0)	197	26.7	(22.0–31.4)
Philadelphia, PA	81	58.6	(49.1–68.0)	22	39.3	(24.5–54.2)	26	20.4	(12.0–28.7)	22	17.8	(9.5–26.1)	28	24.6	(15.3–33.9)	136	28.4	(24.0–32.7)
Puerto Rico	120	63.6	(55.8–71.3)	—	—	—	22	12.6	(7.3–18.0)	15	7.2	(3.3–11.0)	30	16.8	(10.9–22.8)	174	33.1	(29.3–36.8)
San Francisco, CA	112	73.5	(66.3–80.8)	13	16.6	(7.8–25.3)	26	22.2	(13.0–31.3)	19	12.8	(6.3–19.2)	21	14.5	(8.4–20.6)	149	25.5	(20.1–30.8)
Texas	241	70.5	(65.2–75.8)	36	33.3	(23.5–43.2)	79	22.3	(17.4–27.2)	46	12.6	(8.9–16.4)	56	15.6	(11.3–19.9)	322	31.9	(27.6–36.2)
Virginia	92	63.7	(54.5–72.8)	15	26.7	(13.4–40.1)	21	14.8	(8.2–21.3)	13	11.7	(5.1–18.2)	27	21.2	(13.4–29.0)	127	27.3	(23.7–31.0)
Washington	125	74.1	(66.7–81.5)	20	31.5	(19.7–43.4)	22	12.9	(7.6–18.2)	24	14.6	(8.5–20.8)	17	9.0	(4.7–13.4)	158	27.7	(23.9–31.4)
National	2,697	68.8	(67.4–70.3)	389	27.7	(22.9–32.5)	651	17.0	(15.3–18.6)	558	14.7	(13.4–16.0)	607	15.7	(14.2–17.3)	3,712	28.8	(27.6–30.1)

Abbreviations: n, number; CI, confidence interval.

Note. Unweighted numbers and weighted percentages are presented. CIs incorporate weighted percentages. Excluded are estimates with a coefficient of variation ≥ 0.30 and those based on a denominator sample size < 30 . Estimates with an absolute CI width > 30 , estimates with an absolute CI width between 5 and 30 and a relative CI width $> 130\%$, and estimates of 0% or 100% are marked with an asterisk (*) and should be interpreted with caution.

^a “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

^b “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

^c “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room–occupancy hotel, or in a car) at any time during the past 12 months.

^d Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

^e “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

^f “Median HIV stigma score” defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥ 18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is available at <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2001277/> [Wright K, Naar-King S, Lam P, Templin T, Frey M. Stigma scale revised: reliability and validity of a brief measure of stigma for HIV+ youth. *J Adolesc Health* 2007;40(1):96–98].

^g States include separately funded jurisdictions within those states.

Table 9. Key clinical outcomes among adults with diagnosed HIV, by individual-level social determinants of health and quality of life—Medical Monitoring Project, United States, 2021

	Not retained in HIV care, past 12 months ^a			Missed ≥1 appointments, past 12 months			Missed ≥1 ART doses, past 30 days ^b			Virally unsuppressed at last test, past 12 months ^c			Did not have sustained viral suppression, past 12 months ^d			Had ≥1 unmet needs for HIV ancillary services, past 12 months ^e			Had ≥1 emergency room visits, past 12 months			Had ≥1 hospitalizations, past 12 months					
	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI
	Total (row %)	880	28.8	(25.7–31.9)	756	19.4	(17.7–21.0)	1,407	36.9	(35.4–38.4)	1,125	33.8	(31.3–36.3)	1,290	37.6	(35.4–39.8)	1,815	47.5	(44.9–50.1)	1,472	36.5	(34.5–38.6)	684	16.7	(15.2–18.1)		
National HIV/AIDS Strategy indicators related to social determinants of health																											
Quality of life																											
Physical health																											
Self-reported health status^f																											
Good, very good, excellent	607	28.8	(25.2–32.4)	427	16.8	(15.0–18.6)	921	35.9	(34.2–37.7)	699	31.1	(28.0–34.2)	802	34.8	(32.1–37.5)	1,100	42.9	(40.0–45.8)	794	29.5	(27.7–31.3)	307	11.4	(10.1–12.6)			
Poor, fair	263	28.4	(24.8–32.1)	327	25.0	(21.7–28.3)	484	39.2	(36.6–41.8)	413	39.5	(36.0–42.9)	475	43.6	(40.4–46.7)	710	57.5	(53.9–61.1)	673	51.9	(48.1–55.7)	374	28.2	(25.1–31.3)			
Mental or emotional health																											
Unmet needs for services from a mental health professional among those who needed services, past 12 months^g																											
Yes	98	34.9	(26.1–43.6)	117	30.3	(25.0–35.6)	175	49.1	(40.5–57.6)	123	41.5	(32.9–50.1)	145	46.2	(38.5–53.9)	—	—	—	160	42.6	(37.0–48.2)	69	18.1	(13.7–22.5)			
No	186	20.6	(16.8–24.4)	268	24.1	(20.8–27.5)	449	40.8	(38.0–43.7)	280	28.6	(24.3–32.9)	338	33.7	(29.6–37.7)	—	—	—	519	45.6	(40.5–50.7)	272	24.1	(20.7–27.6)			
Structural or subsistence factors																											
Unstable housing or homelessness, past 12 months^h																											
Yes	171	34.6	(28.8–40.4)	209	31.7	(28.0–35.3)	271	49.1	(44.9–53.4)	248	45.1	(40.5–49.7)	294	51.3	(47.5–55.2)	434	67.8	(62.2–73.5)	321	50.3	(45.9–54.7)	160	23.7	(19.4–28.1)			
No	706	27.6	(24.4–30.8)	547	16.9	(15.0–18.9)	1,136	34.6	(33.0–36.3)	872	31.5	(28.9–34.2)	991	34.8	(32.5–37.2)	1,380	43.4	(40.7–46.1)	1,150	33.7	(31.2–36.2)	524	15.2	(14.0–16.5)			
Unemploymentⁱ																											
Yes	128	31.8	(27.1–36.4)	174	32.0	(27.2–36.8)	252	51.9	(46.9–56.9)	186	41.2	(35.6–46.8)	217	46.4	(41.7–51.0)	350	66.2	(60.0–72.4)	242	45.6	(39.5–51.7)	115	21.8	(17.1–26.5)			
No	745	28.2	(24.9–31.6)	581	17.3	(15.6–18.9)	1,153	34.5	(33.0–36.1)	933	32.6	(30.1–35.1)	1,066	36.2	(33.8–38.5)	1,460	44.2	(41.5–46.9)	1,228	35.1	(33.3–36.9)	568	15.8	(14.5–17.1)			
Hunger or food insecurity, past 12 months^j																											
Yes	140	30.8	(24.3–37.4)	202	31.9	(28.0–35.8)	267	49.2	(44.6–53.9)	214	41.7	(36.0–47.5)	255	48.0	(42.5–53.6)	465	79.7	(76.2–83.1)	318	53.4	(48.8–58.1)	164	27.3	(22.3–32.3)			
No	735	28.4	(25.6–31.2)	552	17.0	(15.2–18.9)	1,137	34.7	(33.2–36.3)	902	32.3	(29.8–34.8)	1,026	35.6	(33.4–37.8)	1,348	41.5	(39.0–44.0)	1,151	33.4	(31.5–35.3)	518	14.7	(13.5–15.9)			
Other factors important for health, including those that affect quality of life																											
Economic stability																											
Household income with respect to poverty guidelines^k																											
<100% FPL	284	27.4	(22.9–31.9)	364	26.7	(23.5–29.8)	502	39.1	(36.5–41.7)	406	36.0	(32.9–39.2)	485	41.8	(38.4–45.2)	758	57.1	(52.5–61.7)	627	45.0	(41.6–48.5)	307	21.2	(18.3–24.2)			
100%–138% FPL	76	27.7	(20.4–35.0)	63	16.7	(12.6–20.9)	145	41.5	(35.5–47.4)	103	33.3	(24.0–42.6)	111	34.7	(25.7–43.7)	197	53.8	(47.8–59.7)	135	37.2	(31.9–42.5)	76	20.2	(15.5–24.9)			
139%–399% FPL	277	27.3	(23.9–30.6)	209	16.7	(13.7–19.6)	455	36.7	(33.8–39.5)	335	30.3	(26.5–34.1)	377	33.0	(29.1–36.8)	563	45.8	(41.7–49.9)	422	31.9	(28.9–35.0)	177	13.6	(11.8–15.4)			
≥400% FPL	142	33.8	(29.1–38.5)	36	8.2	(5.3–11.1)	173	30.1	(24.9–35.3)	141	33.7	(29.3–38.1)	152	35.6	(31.0–40.3)	124	23.5	(19.8–27.2)	133	24.8	(20.1–29.6)	49	8.3	(5.7–10.9)			
Education																											
Educational attainment																											
Less than high school diploma	105	25.6	(19.9–31.3)	154	26.9	(22.5–31.3)	211	40.3	(36.3–44.3)	149	32.6	(27.3–37.9)	180	37.6	(32.7–42.4)	319	56.8	(50.7–62.9)	245	40.2	(34.8–45.6)	129	20.2	(14.7–25.7)			
High school diploma or equivalent	232	30.0	(25.8–34.2)	239	22.4	(19.8–25.1)	360	35.0	(31.8–38.1)	320	35.4	(31.3–39.6)	374	40.5	(36.8–44.1)	522	51.0	(46.4–55.6)	406	39.6	(36.4–42.7)	170	16.1	(13.4–18.8)			
Greater than high school	539	29.1	(26.0–32.2)	363	16.2	(14.0–18.5)	835	37.0	(34.8–39.2)	650	33.5	(31.1–35.9)	730	36.5	(34.0–38.9)	969	43.6	(40.5–46.7)	819	34.4	(31.7–37.0)	383	16.0	(14.3–17.7)			
Health-related factors																											
Health insurance or coverage (including Ryan White HIV/AIDS Program [RWHAP] assistance), past 12 months^l																											
Any private	407	32.0	(27.7–36.3)	207	13.2	(11.3–15.0)	547	34.2	(31.5–36.9)	433	31.9	(28.3–35.5)	479	34.4	(30.9–37.8)	579	38.3	(35.6–40.9)	493	30.8	(28.6–33.1)	204	13.1	(11.4–14.8)			
Public only, excluding RWHAP only	387	26.4	(22.9–29.9)	446	22.9	(20.3–25.6)	735	39.4	(37.1–41.7)	571	35.1	(31.7–38.5)	657	38.9	(35.2–42.6)	1,031	53.6	(49.8–57.3)	863	43.5	(41.0–46.0)	437	20.9	(18.6–23.2)			
Uninsured or RWHAP only	68	27.6	(22.1–33.1)	87	27.0	(21.1–32.9)	101	35.6	(30.4–40.7)	93	34.5	(29.0–39.9)	122	42.6	(36.5–48.7)	168	53.7	(43.6–63.8)	94	26.8	(22.3–31.4)	33	9.9	(6.4–13.3)			
Received RWHAP assistance, past 12 months																											
Yes	329	21.9	(18.4–25.3)	407	22.0	(20.2–23.9)	719	38.8	(36.2–41.4)	454	27.9	(24.6–31.2)	553	32.7	(29.7–35.8)	872	47.5	(43.3–51.8)	703	36.4	(33.9–38.9)	328	16.8	(15.1–18.5)			
No	512	35.3	(32.2–38.4)	311	16.7	(14.1–19.4)	640	35.5	(33.0–38.1)	625	39.4	(36.1–42.6)	686	42.2	(39.3–45.1)	860	46.8	(44.0–49.5)	709	36.2	(33.6–38.9)	327	16.2	(14.2–18.3)			
Confidence in completing health forms																											
Somewhat, a little bit, not at all	188	26.2	(22.6–29.8)	238	25.3	(21.4–29.2)	343	39.8	(36.8–42.9)	259	32.8	(29.6–36.1)	309	37.7	(34.5–40.9)	523	55.7	(52.2–59.3)	395	40.8	(36.5–45.1)	198	20.3	(17.0–23.6)			
Extremely, quite a bit	683	29.5	(25.9–33.2)	516	17.5	(15.4–19.6)	1,061	36.1	(34.4–37.7)	854	34.0	(31.1–36.9)	968	37.5	(35.0–40.0)	1,289	44.9	(42.1–47.7)	1,073	35.2	(33.2–37.2)	483	15.5	(14.1–16.8)			
Has a disability^m																											
Yes	337	26.8	(23.5–30.1)	422	26.0	(23.5–28.5)	633	40.2	(37.2–43.1)	500	35.9	(32.8–39.0)	580	40.4	(37.6–43.2)	972	60.7	(57.5–63.9)	813	48.9	(46.1–51.8)	435	26.3	(23.6–28.9)			
No	539	30.2	(26.6–33.7)	331	14.8	(12.8–16.7)	772	34.8	(32.4–37.1)	618	32.4	(29.2–35.6)	702	35.7	(32.7–38.7)	840	38.5	(35.4–41.6)	654	28.0	(25.9–30.1)	247	10.1	(8.8–11.4)			
Any unmet HIV ancillary service need, past 12 monthsⁿ																											
Yes	419	30.5	(26.0–34.9)	470	25.7	(23.3–28.0)	771	45.7	(42.9–48.5)	549	36.7	(32.4–41.0)	639	41.4	(37.6–45.2)	—	—	—	784	43.2	(40.1–46.3)	385	21.2	(18.8–23.7)			
No	445	27.0	(23.6–30.3)	280	13.6	(11.7–15.6)	633	29.5	(27.4–31.5)	552	30.7	(28.2–33.2)	627	33.8	(31.6–36.0)	—	—	—	677	30.4	(28.5–32.3)	294	12.4	(11.3–13.6)			

Table 9. Key clinical outcomes among adults with diagnosed HIV, by individual-level social determinants of health and quality of life—Medical Monitoring Project, United States, 2021 (cont)

	Not retained in HIV care, past 12 months ^a			Missed ≥1 appointments, past 12 months			Missed ≥1 ART doses, past 30 days ^b			Virally unsuppressed at last test, past 12 months ^c			Did not have sustained viral suppression, past 12 months ^d			Had ≥1 unmet needs for HIV ancillary services, past 12 months ^e			Had ≥1 emergency room visits, past 12 months			Had ≥1 hospitalizations, past 12 months					
	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI	n	row %	95% CI
	Neighborhood and built environment																										
Any met or unmet need for transportation assistance, past 12 months^o																											
Yes	213	25.8	(21.6–29.9)	326	30.6	(27.5–33.8)	457	43.8	(40.3–47.3)	340	37.0	(33.0–41.0)	408	42.5	(39.1–45.9)	734	68.0	(64.0–72.0)	558	49.7	(45.8–53.5)	311	28.0	(24.7–31.2)			
No	654	29.8	(26.1–33.6)	422	15.2	(13.3–17.0)	944	34.4	(32.4–36.5)	761	32.4	(30.0–34.8)	858	35.6	(33.4–37.8)	1,079	40.1	(37.2–42.9)	899	31.6	(29.7–33.5)	369	12.6	(11.4–13.7)			
Social and community context																											
HIV health care discrimination among persons who received care, past 12 months^p																											
Yes	170	24.4	(20.8–28.0)	213	26.0	(22.2–29.9)	385	48.6	(45.3–51.9)	232	32.6	(27.9–37.3)	266	36.9	(32.3–41.4)	511	64.1	(60.6–67.7)	379	45.8	(42.4–49.1)	180	22.0	(18.7–25.3)			
No	521	23.2	(20.7–25.8)	479	17.3	(15.8–18.8)	940	33.7	(31.7–35.7)	719	29.0	(26.8–31.2)	845	33.0	(30.9–35.2)	1,165	42.1	(39.5–44.7)	984	34.0	(32.0–36.0)	453	15.2	(13.5–16.9)			
Speaks English less than well																											
Yes	43	16.1	(10.4–21.8)	74	22.7	(18.9–26.5)	89	28.0	(22.4–33.5)	64	21.8	(16.0–27.6)	78	26.6	(20.5–32.7)	128	40.1	(31.6–48.5)	116	33.6	(28.0–39.2)	61	16.6	(13.0–20.2)			
No	834	29.8	(26.8–32.8)	682	19.1	(17.4–20.8)	1,318	37.6	(35.9–39.4)	1,056	34.8	(32.0–37.5)	1,207	38.5	(36.1–40.9)	1,686	48.1	(45.4–50.7)	1,356	36.8	(34.6–39.0)	623	16.7	(15.1–18.2)			
Experiences of physical violence by an intimate partner or forced sex, lifetime^q																											
Yes	284	29.4	(25.7–33.0)	307	22.9	(20.1–25.8)	565	46.3	(43.3–49.3)	367	34.1	(30.3–37.9)	426	38.4	(34.9–41.9)	745	59.2	(55.5–62.9)	557	42.1	(37.4–46.8)	250	18.7	(16.1–21.3)			
No	567	28.5	(25.1–31.9)	423	17.2	(15.6–18.9)	814	32.4	(30.4–34.4)	708	33.2	(30.7–35.7)	810	36.8	(34.5–39.1)	1,032	41.3	(38.6–44.1)	873	33.3	(31.5–35.1)	418	15.6	(14.2–16.9)			
Experiences of physical violence by an intimate partner or forced sex, past 12 months^q																											
Yes	48	31.5	(22.7–40.2)	70	32.9	(20.7–45.1)	101	60.7	(52.8–68.5)	61	36.2	(28.1–44.3)	76	44.3	(36.9–51.6)	130	72.7	(66.5–78.9)	96	50.5	(40.4–60.6)	48	27.1	(19.6–34.5)			
No	796	28.5	(25.3–31.8)	653	18.3	(16.6–20.1)	1,268	35.7	(34.2–37.2)	1,008	33.4	(30.9–35.8)	1,153	36.9	(34.7–39.2)	1,630	45.8	(43.1–48.5)	1,324	35.4	(33.4–37.5)	614	16.0	(14.5–17.4)			
Incarcerated >24 hours, past 12 months																											
Yes	20	27.4	(13.3–41.5)	37	39.3	(26.9–51.8)	45	52.7	(38.5–66.9)	31	38.4	(26.8–49.9)	37	45.7	(33.9–57.6)	64	73.3	(63.2–83.4)	48	52.5	(38.3–66.7)	24	29.3	(15.8–42.8)			
No	856	28.8	(25.9–31.8)	718	18.8	(17.1–20.5)	1,359	36.4	(34.9–38.0)	1,088	33.7	(31.2–36.2)	1,247	37.4	(35.2–39.5)	1,746	46.7	(44.1–49.3)	1,423	36.1	(34.2–38.0)	660	16.3	(14.9–17.7)			

Abbreviations: n, number; CI, confidence interval; FPL, federal poverty level; RWHAP, Ryan White HIV/AIDS Program; CD4, CD4+ T-lymphocyte count (cells/mm³ or cells/μL) or percentage [footnotes only]; ART, antiretroviral therapy [footnotes only]; PCP, *Pneumocystis pneumonia* [footnotes only]; MAC, *Mycobacterium avium* complex [footnotes only]; ADAP, AIDS Drug Assistance Program [footnotes only]; SNAP, Supplemental Nutrition Assistance Program [footnotes only]; WIC, Special Supplemental Nutrition Program for Women, Infants, and Children [footnotes only]; HHS, Department of Health and Human Services [footnotes only]; VA, Veterans Administration [footnotes only].

Note. Unweighted numbers and weighted percentages are presented. CIs incorporate weighted percentages. Excluded are estimates with a coefficient of variation ≥0.30 and those based on a denominator sample size <30.

^a Defined as having <2 elements of outpatient HIV care at least 90 days apart in the past 12 months. Outpatient 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.

^b Based on self-report.

^c Defined as having most recent viral load documented in medical record as detectable or ≥200 copies/mL.

^d Defined as having ≥1 viral load measurements documented as detectable or ≥200 copies/mL.

^e Defined as needing, but not receiving, ≥1 HIV ancillary services related to HIV support (i.e., HIV case management, medicine through ADAP, adherence support, patient navigation, HIV peer group support), non-HIV medical services (i.e., dental care, mental health services, drug or alcohol counseling or treatment, domestic violence services), or subsistence services (i.e., SNAP or WIC, meal or food services, transportation assistance, shelter or housing services). Calculated among all persons.

^f “Good or better self-rated health” defined as rating one’s health as good, very good, or excellent (as opposed to poor or fair) at the time of interview.

^g “Unmet need for mental health services from a mental health professional” defined as needing, but not receiving, services from a mental health professional among those who indicated needing mental health services (i.e., receiving or needing but not receiving) during the past 12 months.

^h “Unstable housing or homelessness” defined as experiencing unstable housing (i.e., moving in with others due to financial issues, moving 2 or more times, or being evicted) or homelessness (living on the street, in a shelter, in a single-room-occupancy hotel, or in a car) at any time during the past 12 months.

ⁱ Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.

^j “Hunger/food insecurity” defined as going without food due to lack of money during the past 12 months.

^k Poverty guidelines defined by HHS. For persons interviewed in a particular calendar year, the HHS poverty guidelines from the previous year were used. For instance, the 2020 guidelines were used for persons interviewed in 2021. More information regarding HHS poverty guidelines can be found at <https://aspe.hhs.gov/frequently-asked-questions-related-poverty-guidelines-and-poverty>.

^l Persons could select more than 1 response for health insurance or coverage. Mutually exclusive categories are presented based on responses. Private coverage defined as receiving health insurance through a person’s employer or a family member’s employer or purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance included Medicaid, Medicare, VA, RWHAP, or other city, county, or state-funded insurance. Uninsured or RWHAP only category includes those who did not report having any insurance, or received RWHAP assistance only, without coverage through any other insurance categories.

^m Self-reported, and includes physical, mental, and emotional disabilities.

ⁿ Represents those who needed, but did not receive, ≥1 HIV ancillary services, among all persons.

^o Represents those who needed transportation assistance, regardless of whether that assistance was received, among all persons.

^p HIV health care discrimination among those who received HIV care during the previous 12 months was assessed based on seven forms of discrimination, including: being treated with less courtesy than other persons, being treated with less respect than other persons, receiving poorer service than others, having a doctor or nurse act as if he or she believed they were not smart, having a doctor or nurse act as if he or she were afraid of them, having a doctor or nurse act as if he or she were better than them, and having a doctor or nurse not listen to what they were saying. Respondents were asked if they experienced these forms of discrimination never, rarely, some of the time, most of the time, or all the time. Respondents who reported experiencing at least one form of health care discrimination rarely, some of the time, most of the time, or all of time were considered to have experienced discrimination in an HIV health care setting.

^q Physical violence by an intimate partner defined as ever being slapped, punched, shoved, kicked, choked, or otherwise physically hurt by a romantic or sexual partner. Forced sex defined as ever being threatened with harm or physically forced to have unwanted vaginal, anal, or oral sex.

Table 10. Median HIV stigma scores by key clinical outcomes among adults with diagnosed HIV—Medical Monitoring Project, 2021

	n	Median score	95% CI
Not retained in care, past 12 months^a			
Yes	815	29.1	(26.7–31.5)
No	2,764	28.7	(27.4–30.0)
Missed ≥1 HIV care appointments, past 12 months			
Yes	708	35.0	(31.6–38.3)
No	2,982	27.8	(26.6–29.1)
Missed ≥1 ART doses, past 30 days^b			
Yes	1,325	31.0	(28.4–33.5)
No	2,255	27.7	(26.7–28.8)
Virally unsuppressed at last test, past 12 months^c			
Yes	1,043	29.8	(27.5–32.1)
No	2,669	28.5	(27.4–29.5)
Did not have sustained viral suppression, past 12 months^d			
Yes	1,194	29.6	(27.4–31.8)
No	2,518	28.5	(27.4–29.6)
Had ≥1 unmet needs for HIV ancillary services, past 12 months^e			
Yes	1,693	33.6	(31.5–35.7)
No	2,010	25.0	(23.5–26.4)
Had ≥1 emergency room visits, past 12 months			
Yes	1,379	30.6	(28.0–33.1)
No	2,329	28.0	(26.7–29.2)
Had ≥1 hospitalizations, past 12 months			
Yes	649	31.1	(28.3–33.8)
No	3,057	28.5	(27.3–29.6)

Abbreviation: n, number; CI, confidence interval; ART, antiretroviral therapy; CD4, CD4+ T-lymphocyte count (cells/mm³ or cells/ μ L) or percentage [footnotes only]; PCP, *Pneumocystis pneumonia* [footnotes only]; MAC, *Mycobacterium avium* complex [footnotes only]; ADAP, AIDS Drug Assistance Program [footnotes only]; SNAP, Supplemental Nutrition Assistance Program [footnotes only]; WIC, Special Supplemental Nutrition Program for Women, Infants, and Children [footnotes only].

Note. Unweighted numbers and weighted median scores are presented. CIs incorporate weighted medians.

^a Defined as having <2 elements of outpatient HIV care at least 90 days apart in each 12-month period. Outpatient 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.

^b Based on self-report.

^c Defined as having most recent viral load documented in medical record as detectable or ≥ 200 copies/mL.

^d Defined as having ≥ 1 viral load measurements documented as detectable or ≥ 200 copies/mL.

^e Defined as needing, but not receiving, ≥ 1 HIV ancillary services related to HIV support (i.e., HIV case management, medicine through ADAP, adherence support, patient navigation, HIV peer group support), non-HIV medical services (i.e., dental care, mental health services, drug or alcohol counseling or treatment, domestic violence services), or subsistence services (i.e., SNAP or WIC, meal or food services, transportation assistance, shelter or housing services). Calculated among all persons.

Technical Notes & Appendix

TECHNICAL NOTES

Population of Inference

For the 2021 Medical Monitoring Project (MMP) data collection cycle (data collected June 1, 2021–May 31, 2022), the population of inference was adults with diagnosed HIV (aged ≥ 18 years) living in the United States.

A total of 23 areas were funded to conduct data collection for the 2021 cycle: California (including the separately funded jurisdictions of Los Angeles County and San Francisco), Delaware, Florida, Georgia, Illinois (including the separately funded jurisdiction of Chicago), Indiana, Michigan, Mississippi, New Jersey, New York (including the separately funded jurisdiction of New York City), North Carolina, Oregon, Pennsylvania (including the separately funded jurisdiction of Philadelphia), Puerto Rico, Texas (including the separately funded jurisdiction of Houston), Virginia, and Washington.

Data Collection

Persons with diagnosed HIV were sampled for MMP by using data from the National HIV Surveillance System (NHSS). Sampled persons were recruited by mail, by telephone, or in person. To be eligible to be included in MMP's 2021 data cycle, the person had to be, as of December 31, 2020: living with diagnosed HIV infection, aged ≥ 18 years, and residing in an MMP project area. The participant eligibility criteria were the same in all participating project areas.

A trained interviewer conducted an interview via telephone, in-person, or video format. English and Spanish versions of the questionnaire were used in the 2021 cycle. Persons speaking a language other than English or Spanish were offered an interview in their native language if an interpreter was available.

Persons who agreed to participate were offered an interview over the telephone or in person or video in a private location (e.g., at home or in a clinic). The interview (approximately 40 minutes) included questions about demographic characteristics, social determinants of health, health care use, met and unmet needs for ancillary services, sexual behavior, symptoms of depression and anxiety, gynecologic and reproductive history, substance use, and use of HIV/STD prevention services. Respondents were given a token of appreciation of no more than \$50 in cash or the equivalent for participation; tokens differed by project area according to local considerations.

After the interview, MMP staff abstracted clinical data from the medical records of respondents at the health care facility identified by the respondents as their most frequent source of HIV care. Abstracted information included diagnoses of AIDS-defining conditions, prescription of antiretroviral therapy (ART) medications, laboratory results, and health care use in the 24 months before the interview.

For further technical details, please see the appendix.

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APPENDIX

Methods

The Medical Monitoring Project (MMP) uses a stratified, 2-stage sampling design. States were sampled first, with probability proportional to size (PPS). All 50 states, the District of Columbia, and Puerto Rico (defined as primary sampling units [PSUs]) were eligible for selection.

From these 52 PSUs, 20 were selected by using PPS sampling based on AIDS prevalence at the end of 2002. According to the PPS sampling method, states with a higher AIDS prevalence had a higher probability of selection, and those with a lower AIDS prevalence had a lower probability of selection [1, 2]. Six municipal jurisdictions receive separate funding for HIV surveillance (Chicago, Illinois; Houston, Texas; Los Angeles County, California; New York City, New York; Philadelphia, Pennsylvania; and San Francisco, California); these areas were included with the state for first-stage sampling and constituted a city-state unit. If a state included a city with independent HIV surveillance authority (e.g., Texas, which includes Houston), selection of the state included selection of the city (i.e., city-state units were selected together).

In 2004, 19 states (including the 6 separately funded areas within those states) and Puerto Rico were selected from the 52 PSUs, resulting in 26 MMP project areas. Because of funding constraints for the 2009 data collection cycle, 3 project areas (Maryland, Massachusetts, and South Carolina) were randomly selected to discontinue participation in MMP, and the total number of MMP areas was reduced to 23.

Analyses carried out in 2014 and subsequently in 2021 found that the original measure of size with which states were originally sampled (i.e., AIDS prevalence in 2002) was still a reasonable proxy for the distribution of HIV prevalence. The selected sample of states was still sufficiently representative of the population of persons with diagnosed HIV; consequently, selecting a new sample for the 2015 and subsequent data collection cycles was unwarranted. In addition, the change in the sampling frame and the availability of national totals from the National HIV Surveillance System (NHSS) presented new options for calibrating weights, further lessening the need for any adjustments to the sample of states.

At the second stage, persons with a reported diagnosis in NHSS were sampled after the selection of the states. The sampling frame was the national case surveillance data set containing records submitted to the Centers for Disease Control and Prevention (CDC) as of December 31, 2020. Using NHSS data, the initial national frame dataset was created for persons who were alive, had diagnosed HIV infection, were aged 18 years or older, and were living in the United States, the District of Columbia, or Puerto Rico on the sampling date (i.e., December 31, 2020). Each case was assigned to a surveillance jurisdiction based on the most recently reported residence in NHSS. These addresses primarily came from case report forms and HIV-related laboratory reports. From this initial national frame, CDC staff drew simple random samples for each of the 23 project areas; project area staff then linked their samples to local case surveillance systems and extracted contact information for use in locating sampled persons, whom they then attempted to recruit.

Eligibility and Response Classifications

Persons were eligible for participation if, as of the sampling date, they had received a diagnosis of HIV, were aged ≥ 18 years, were alive, and were a resident of an MMP project area. Sampled persons were presumed to be eligible based on their information in NHSS unless data from another source contradicted this status. Persons were classified into 4 categories: (1) eligible respondents, (2) contacted nonrespondents, (3) nonrespondents who were not contacted, and (4) ineligible persons. These categories were used in calculating final response rates and contact rates following standard formulas [3].

Weighting

Overview

For the 2021 MMP cycle, sets of weights were produced nationally, for the city-state combinations, and for each project area. This report presents national weighted data and, thus, represents all adults with diagnosed HIV infection living in the United States. Nationally, data were weighted based on known probabilities of selection at the state or jurisdiction level and person level and then adjusted for multiplicity and nonresponse. After adjusting for nonresponse, the weights were poststratified to population totals from the NHSS frame. Extreme weights, if present, were trimmed, and the weights were adjusted to the same population totals.

For the weighting process, an updated sampling frame was obtained from NHSS data approximately a year and a half after sampling, during which time additional information reported to NHSS may have become available for sampled persons and additional diagnoses may have been reported. This updated sampling frame added records that would have been eligible if their information had been reported to NHSS on the date the initial sample was drawn; primarily, these were diagnoses that occurred during the year prior to the MMP sampling date (for the 2021 cycle, December 31, 2020). Additionally, some persons were found to have had multiple records at the time of sampling that were later identified as duplicate records. In some cases, updated information indicated that a person originally judged eligible and included on the original frame was ineligible. The updated sampling frame data also provided descriptive information for all sampled persons regardless of response and were the source of data used for nonresponse analysis and weighting.

Adjustments for unequal selection probabilities

The first step in the computation of weights was the calculation of base weights that reflect the sampling design probabilities. The base weight for each sampled person incorporates both the probability of selecting a project area and the probability of selecting a person within a project area. A person who was sampled from one jurisdiction but lived in another area at the time of sampling retained the original base weight. Prior to weighting, such cross-jurisdictional records were grouped with their project area of residence at the time of sampling. This moving of records did not affect the national weights but did affect the project area weight totals, increasing some while decreasing others.

Adjustments for multiplicity

A multiplicity factor was applied to the person weight for persons with records found to be present more than once after the original frame was compared to the updated sampling frame. This factor, which accounts for some persons' multiple opportunities for being sampled, was capped at 2.0 and was applicable for only 29 persons.

Adjustments for nonresponse

A nonresponse adjustment factor was applied to the multiplicity-adjusted base weight based on an analysis of nonresponse. In 2021, updated sampling frame data provided descriptive information about all sampled persons, which was used to assess how these characteristics were associated with nonresponse. The potential predictors of nonresponse were: race/ethnicity, male-to-male sexual contact (MMSC) HIV transmission category, HIV/AIDS disease stage, disease progression measured by most recent viral load test reported to NHSS, time since HIV diagnosis, age of most recent contact information, the person's frequency of receipt of HIV care (as indicated by NHSS records), movement to a different MMP jurisdiction since the time of sampling, non-U.S. birthplace, sex at birth, and age at sampling date. The nonresponse analysis followed a 2-step process. First, a bivariate analysis was conducted to determine which characteristics were potential predictors of nonresponse; then, a multivariate analysis using the significant characteristics from the bivariate analysis was conducted to identify independent predictors of nonresponse. Three significant predictors from this multivariate analysis were used to create weighting classes for the national data. In 2021, the significant predictors of nonresponse were: the person's frequency of receipt of HIV care (as indicated by NHSS records), sex at birth, and age of latest contact information. Within weighting classes, the adjustment factor

for nonresponse was the ratio of the sum of the multiplicity-adjusted base weights for eligible sampled cases to the sum of these weights for eligible respondents. The multiplicity adjusted weight within each nonresponse weighting class was then multiplied by the nonresponse adjustment factor to produce the nonresponse adjusted weights.

Poststratification and trimming

Poststratification methods ensure that weighted totals sum to known population totals and, therefore, minimize the potential for biases due to nonresponse and noncoverage. However, poststratification can also add additional variance to the weights. Thus, trimming procedures are used to control weight variability and reduce its impact on survey variances. MMP used an iterative approach that combines poststratification and trimming so that trimmed weights retain their variance-reducing features after poststratification and ensures that poststratified weights add up to known population totals.

The nonresponse adjusted weights were first poststratified to population totals from the updated sampling frame. The poststratification cells were defined by crossing sex at birth, race/ethnicity, and age group. Nationally, there were 32 poststratification cells. Poststratification adjustments were performed within each poststratification cell so that the weighted sum was preserved in each cell. To reduce additional variance added to poststratified weights, cells were collapsed and the need for weight trimming was evaluated. Poststratified cells were collapsed when cells had 2 or fewer respondents or had an extreme adjustment factor (≥ 1.75). The need for trimming was then assessed. If the design effect due to weighting (measured as $1 + CV^2$, where CV is the coefficient of variation of the weights) had exceeded 1.75, we would have capped the weights at the median weight plus 4 times the interquartile range of the weights; where trimming occurred, the weights were redistributed and poststratified again to the population totals. However, no trimming was needed for the 2021 MMP national weights.

Design variables

Nationally, design variables indicating strata and cluster membership for each participating person accounting for the sample design were created. Many project areas were sampled with certainty because of higher AIDS prevalence, and each of these was defined as its own stratum. Elsewhere, strata were created by grouping 2 to 3 project areas (PSUs in the stratified PPS design) that had similar selection probabilities. Among the 23 project areas, 14 were sampled with certainty. The 14 certainty project areas each represent a stratum, and each person within the stratum is a cluster. The remaining 9 noncertainty project areas were grouped to create strata, and each noncertainty project area was a cluster within the stratum. Multiple project areas within certainty states were effectively substrata, and each project area remained its own stratum. For local estimates, variance estimation was conditional on the initial sampling of states as PSUs, meaning that this stage of sampling was ignored. Respondents were treated as having come from a simple random sample with replacement, although the various adjustment factors induced unequal weights.

Definitions

NHAS indicators

- **Self-rated health:** Self-rated health is assessed using a single question that captures the respondent's self-perceived general health at the time of interview using a Likert-type scale with the following responses: poor, fair, good, very good, or excellent. Self-rated health was dichotomized as good or better health (i.e., good, very good, or excellent) versus less than good health (i.e., poor, fair). This measure is also used in several other national initiatives and surveys examining self-rated health among the general U.S. population (e.g., Healthy People 2030, National Health and Nutrition Examination Survey [NHANES], Behavioral Risk Factor Surveillance System [BRFSS]) [4, 5, 6].
- **Unmet needs for mental health services from a mental health professional among persons who needed services:** This measure was assessed through 2 questions. First, respondents were asked if they saw or talked

to a mental health professional (e.g., psychologist, psychiatrist, psychiatric nurse, or clinical social worker) about their health during the past 12 months. Next, they were asked if they needed to see or talk to a mental health professional about their health. The denominator represents persons who needed mental health services (i.e., those with a met or unmet need), and was defined as those who received services (met need) and those who needed, but did not receive, services (unmet need). The numerator represents those who needed, but did not receive, services (unmet need).

- **Hunger/food insecurity:** Persons who reported being hungry and not eating because there was not enough money for food in the past 12 months were considered to be food insecure.
- **Unemployment:** Unemployed persons included those who reported being unemployed at the time of interview, excluding persons who are unable to work, calculated among all adults with HIV.
- **Unstable housing or homelessness:** Persons were considered to have experienced unstable housing if they reported moving in with others due to financial issues, moving 2 or more times, or being evicted at any time during the past 12 months. Persons were considered to have experienced homelessness if they reported living on the street, in a shelter, in a single-room-occupancy hotel, or in a car during the past 12 months. Persons were considered to have experienced unstable housing or homelessness if they reported any form of unstable housing or homelessness during the past 12 months.
- **HIV stigma:** Defined as the weighted median score on a 10-item scale ranging from 0 (no stigma) to 100 (high stigma) that measures 4 dimensions of HIV stigma: personalized stigma during the past 12 months, current disclosure concerns, current negative self-image, and current perceived public attitudes about persons living with HIV, measured among persons aged ≥ 18 years with diagnosed HIV infection living in the United States and Puerto Rico. The HIV stigma scale used for this indicator is discussed in Wright, et al [7].

Demographic characteristics and additional social determinants of health

- **Gender:** Categories were cisgender male, cisgender female, and transgender. Respondents were classified as transgender if reported sex at birth and current gender as reported by the respondent were not the same or if the respondent answered “transgender” to the interview question regarding self-identified gender.
- **Race/ethnicity:** Respondents were asked about whether they considered themselves as being of Hispanic, Latino/a, or Spanish origin. They were also asked about racial groups they identified as; respondents could check all categories that applied to them. These data were used to create the following analytic racial/ethnic categories: American Indian/Alaska Native, Asian, Black/African American, Hispanic/Latino, Native Hawaiian/other Pacific Islander, White, and multiple races. Hispanic/Latino persons could be of any race.

NHAS priority populations

- **Gay, bisexual, or other men who had sex with men (MSM):** Included cisgender men with diagnosed HIV who reported having sex with ≥ 1 cisgender man in the past 12 months (among persons who had sex during the past 12 months) and cisgender men with diagnosed HIV who reported identifying as gay or bisexual (among those who did not have sex during the past 12 months).
- **Black/African American MSM:** Included MSM with diagnosed HIV who identified as non-Hispanic/Latino Black/African American race/ethnicity.
- **Hispanic/Latino MSM:** Included MSM with diagnosed HIV who identified as Hispanic/Latino race/ethnicity. Hispanic or Latino MSM could be of any race.
- **American Indian/Alaska Native MSM:** Included MSM with diagnosed HIV who identified as American Indian/Alaska Native race/ethnicity.
- **Black/African American cisgender women:** Included cisgender women with diagnosed HIV who identified as non-Hispanic Black/African American race/ethnicity.

- Transgender women: Persons with diagnosed HIV were classified as transgender women if the person reported that their sex assigned at birth was male but identified as female or transgender.
- Persons aged 18–24 years: Priority population for youths includes persons with diagnosed HIV aged 13–24 years; however, data from MMP are only available and presented for persons aged 18–24 years.
- Persons who inject drugs: Included persons with diagnosed HIV who reported injecting drugs for non-medical purposes during the past 12 months.

Other factors related to social determinants of health

- Federal poverty guidelines: Respondents were asked about their combined monthly or yearly household income (in U.S.\$) from all sources during the calendar year prior to the interview date. The number of persons meeting the current federal poverty threshold was determined by using the U.S. Department of Health and Human Services poverty guidelines that corresponded to the calendar year for which income was asked. These guidelines are issued yearly for the 48 contiguous states and Washington, D.C., and are an indicator used for determining eligibility for many federal and state programs. The 2020 guidelines [8] were used for respondents interviewed in 2021, and the 2021 guidelines [9] were used for persons interviewed in 2022. Because the poverty guidelines are not defined for the territory of Puerto Rico, the guidelines for the contiguous states and Washington, D.C. were used for this jurisdiction. Respondents were asked to specify their income range, and household income was assumed to be the midpoint of the income range.
- Health insurance or coverage (including receipt of Ryan White HIV/AIDS Program [RWHAP] assistance): Respondents were asked whether they had health insurance or coverage during the 12 months before interview—including assistance through the RWHAP, a federally-funded comprehensive care program that provides HIV primary care, medications, and essential support services for low-income persons with HIV [10]. Respondents could select more than 1 response for health insurance or coverage. Responses to these questions were combined and categorized as having any private health insurance; having public insurance only; and being uninsured or being covered through RWHAP only. Private insurance included receipt of health insurance through a person’s employer or family member’s employer, or health insurance purchased through the Health Insurance Marketplace or directly from a health insurance company. Public insurance included Medicaid, Medicare, TRICARE/CHAMPUS, Veterans Administration insurance, and other public health insurance plans. Those who only received RWHAP assistance were considered to not have health insurance.
- Disability: Defined as having a physical, mental, and/or emotional disability. Respondents were considered to have a disability if they reported being deaf or having serious difficulty hearing; being blind or having serious difficulty seeing, even when wearing glasses; having serious difficulty concentrating, remembering, or making decisions because of a physical, mental, or emotional condition; having serious difficulty walking or climbing stairs; having difficulty dressing or bathing; or having difficulty completing errands alone such as visiting a doctor’s office or shopping because of a physical, mental, or emotional condition.

Clinical outcomes

- Outpatient HIV medical care: Defined as documentation of any of the following at the most frequent source of HIV care: encounter with an HIV care provider, viral load test result, CD4 test result, HIV resistance test or tropism assay, ART prescription, pneumocystis pneumonia (PCP) prophylaxis, or Mycobacterium avium complex (MAC) prophylaxis. All were measured through documentation in the person’s medical record; an encounter with an HIV care provider was also measured based on interview self-report.
- Retention in HIV care: Persons were considered to be retained in care if they had 2 elements of outpatient HIV care at least 90 days apart in each 12-month period reviewed.
- ART dose adherence: Respondents were asked about how many days they missed at least 1 dose of their HIV medicines during the 30 days before interview as part of a 3-item ART adherence scale developed by

Wilson and colleagues [11]. Respondents were considered ART dose adherent if they reported not missing any doses of their HIV medicines during the 30 days before interview.

- **Viral suppression:** Viral loads were abstracted from medical records from the facility where respondents most frequently received HIV care. Lack of viral suppression was assessed based on two measures. Lack of viral suppression at last test was defined as having the viral load measurement at last test documented as detectable or ≥ 200 copies/mL. Lack of sustained viral suppression was defined as having any viral load measurement during the past 12 months documented as detectable or ≥ 200 copies/mL. Those with no viral load tests were considered to be unsuppressed.
- **Unmet needs for HIV ancillary services:** HIV ancillary services were defined as services that support retention in routine HIV medical care and viral suppression, such as HIV case management, dental care, and mental health services [12]. HIV ancillary services include services that support HIV medical care more directly, or those that support a person's general health through other types of services. HIV ancillary services included: HIV case management; medicine through ADAP; adherence support services; HIV peer group support; and patient navigation services (patient navigation services could have been for HIV medical care or other types of care); dental care; mental health services; drug or alcohol counseling or treatment; and domestic violence services; Supplemental Nutrition Assistance Program (SNAP) or Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); transportation assistance; meal or food services; and shelter or housing services. Needs for SSI, SSDI, interpreter services, and lawyer/legal services were dropped after the 2017 cycle and could not be incorporated in estimates for unmet needs for ≥ 1 HIV ancillary service from 2018 cycle onwards. For this reason, estimates for unmet needs for ≥ 1 HIV ancillary service were not reported from 2015–2017.

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