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Sexual and Reproductive Health Among Cisgender Women With HIV Aged 18–44 Years

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Abstract

Introduction: The sexual and reproductive health of cisgender women with HIV is essential for overall health and well-being. Nationally representative estimates of sexual and reproductive health outcomes among women with HIV were assessed in this study.

Methods: Data from the Centers for Disease Control and Prevention's Medical Monitoring Project—including data on sexual and reproductive health—were collected during June 2018−May 2021 through interviews and medical record abstraction among women with HIV and analyzed in 2023. Among women with HIV aged 18−44 years (n=855), weighted percentages were reported, and absolute differences were assessed between groups, highlighting differences ≥|5%| with CIs that did not cross the null.

Results: Overall, 86.4% of women with HIV reported receiving a cervical Pap smear in the past 3 years; 38.5% of sexually active women with HIV had documented gonorrhea, chlamydia, and syphilis testing in the past year; 88.9% of women with HIV who had vaginal sex used ≥1 form of contraception in the past year; and 53.4% had ≥1 pregnancy since their HIV diagnosis—of whom 81.5% had ≥1 unintended pregnancy, 24.6% had ≥1 miscarriage or stillbirth, and 9.8% had ≥1 induced abortion. Some sexual and reproductive health outcomes were worse among women with certain social determinants of health, including women with HIV living in households <100% of the federal poverty level compared with women with HIV in households ≥139% of the federal poverty level.

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SUPPLEMENTAL MATERIAL

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Conclusions: Many women with HIV did not receive important sexual and reproductive health services, and many experienced unintended pregnancies, miscarriages/stillbirths, or induced abortions. Disparities in some sexual and reproductive health outcomes were observed by certain social determinants of health. Improving sexual and reproductive health outcomes and reducing disparities among women with HIV could be addressed through a multipronged approach that includes expansion of safety net programs that provide sexual and reproductive health service coverage.

INTRODUCTION

Sexual and reproductive health (SRH) is an essential component of women's health and includes access to routine screening, family planning, prenatal and obstetric care, and postpartum care.[1] SRH can affect other aspects of a woman's physical, mental, or emotional health.[2] People with HIV (PWH) have the same SRH needs as other people but have complex considerations related to reducing HIV and sexually transmitted infection (STI) transmission risk and family planning. For instance, sexually active PWH are recommended to receive more frequent STI testing than other persons.[3] Furthermore, cisgender women with HIV (WWH), who represent nearly a quarter of all PWH,[4] have specific considerations with respect to family planning, conception, pregnancy, delivery, and infant feeding to limit HIV transmission risk perinatally, postnatally, and to their sexual partners.[5–8]

Understanding outcomes across the SRH spectrum among WWH—from STI screening and contraception through childbirth and beyond—may be helpful to improve accessibility of care services and overall health and well-being among WWH, but national estimates of SRH outcomes in this population are lacking. In addition, WWH experience high levels of certain social determinants of health (SDOH)—"conditions in the environments where people are born, live, learn, work, play, worship, and age"—that adversely affect health outcomes.[9,10] Identifying differences in SRH outcomes by SDOH could help to improve outcomes among WWH and address observed disparities. Using a national probability sample, outcomes across the SRH spectrum were described among cisgender women with diagnosed HIV infection in the U.S.—including receipt of a Pap smear, receipt of STI testing, use of contraception, pregnancy, and pregnancy outcomes—overall and by selected SDOH.

METHODS

Study Population

The Centers for Disease Control and Prevention (CDC) Medical Monitoring Project (MMP) is a surveillance system that collects annual, cross-sectional, nationally representative data on characteristics and outcomes—including those related to SRH—among adults with diagnosed HIV in the U.S. During the 2018–2020 annual data cycles, data were collected in June of each cycle year through May of the following year. MMP uses a complex sample survey design that includes two stages. First, 16 states and 1 territory were sampled from all U.S. states, the District of Columbia, and Puerto Rico with probabilities proportional to size on the basis of AIDS prevalence at the end of 2002. Next, a simple random sample of persons aged ≥18 years with diagnosed HIV was selected annually for each jurisdiction from the National HIV Surveillance System, a census of persons with diagnosed HIV in the U.S.

The response rate for jurisdictions was 100% and ranged from 40% to 45% at the person level by cycle year. More details on MMP methodology are described elsewhere.[4,11]

Data were collected by phone or face-to-face interviews, and medical records were abstracted for all respondents at the most frequent source of HIV care during the previous two years. MMP is conducted as a part of routine surveillance and is considered nonresearch. Participating jurisdictions obtained IRB approval as needed, and all respondents provided informed consent.

Measures

Cisgender women were defined as persons whose gender identity was female and who reported their sex at birth as female. WWH were asked about receipt of a cervical Pap smear in the past three years (or since testing positive for HIV for those who tested positive <3 years ago), types of contraceptive methods used during the past 12 months, and whether they had any pregnancies since HIV diagnosis. For each of the last five pregnancies since HIV diagnosis, respondents were asked whether they were trying to get pregnant (unintended pregnancy was defined as not trying to get pregnant) and about pregnancy outcomes (i.e., live birth, stillbirth, miscarriage, or induced abortion). WWH were considered to have received STI testing if they had tested for syphilis, gonorrhea, and chlamydia (all 3) during the past 12 months at their HIV care facility, per CDC guidelines.[3]

Demographic characteristics and SDOH—including those related to socioeconomic status (e.g., poverty), health-related factors (e.g., healthcare coverage and residence in a Medicaid expansion state), neighborhood and built environment (e.g., urbanicity of county of residence), and social and community context (e.g., English proficiency, lifetime experiences with physical violence by an intimate partner or forced sex)—were assessed through interview. More details on each demographic and SDOH measure can be seen in Appendix Table 1 (available online). All measures were based on the past 12 months unless otherwise specified.

Statistical Analysis

Among WWH aged 18−44 years (n=855), the prevalence of (1) receiving a Pap smear during the past 3 years; (2) receiving STI testing among persons who had vaginal or anal sex during the past 12 months (n=598); (3) using ≥1 form of contraception during the past 12 months among persons who engaged in vaginal sex, did not have a tubal ligation or hysterectomy, and were premenopausal (n=389); and (4) being pregnant ≥1 time since HIV diagnosis was assessed in 2023. The percentage of women who had ≥1 live birth, ≥1 unintended pregnancy, ≥1 miscarriage or stillbirth, or ≥1 induced abortion was assessed among persons who reported ≥1 pregnancy. Finally, SRH outcomes were compared across demographic characteristics and SDOH. On the basis of the findings, an ad hoc analysis was conducted comparing SDOH among WWH residing in Medicaid expansion states with those who did not.

Weighted percentages and corresponding 95% CIs accounting for the complex survey design were reported for all estimates. Predicted marginals from logistic regression models were used to calculate prevalence differences (PDs), which were used to assess absolute

differences between groups. PDs ≥|5| (i.e., ≤ −5 or ≥5 percentage points) with CIs that did not cross the null were highlighted. All analyses were conducted using SAS survey procedures (SAS 9.4, SAS Institute, Cary, NC) and SAS-callable SUDAAN, Version 11.0.3 (RTI International, Research Triangle Park, NC).

RESULTS

Overall, 62.1% of WWH of reproductive age were aged 35−44 years (Appendix Table 2, available online); 64.6% identified as Black or African American, and 58.1% had a household income <100% of the federal poverty level (FPL) (Appendix Table 2, available online). Over half (51.4%) had Medicaid coverage, and almost half (44.5%) had experiences with sexual or physical violence in their lifetime.

Overall, 86.4% of WWH reported receiving a cervical Pap smear in the past 3 years (Figure 1). Of sexually active WWH, 38.5% received STI testing in the past 12 months (gonorrhea: 48.4%, chlamydia: 48.4%, syphilis: 56.5%) (data not shown in tables or figures). Of WWH who engaged in vaginal sex, 88.9% used ≥1 form of contraception in the past 12 months. The most commonly reported forms of contraception included a male condom (75.9%), withdrawal (27.3%), birth control pills (17.7%), and long-acting reversible contraceptive (LARC) methods, including intrauterine devices or a hormonal implant (16.3%); 5.2% reported using emergency contraception or a morning after pill (Appendix Table 3, available online). Overall, over half (53.4%) of WWH had ≥1 pregnancy since their HIV diagnosis.

Among WWH who had ≥1 pregnancy since their HIV diagnosis, 83.2% had ≥1 live birth, 81.5% had ≥1 unintended pregnancy, 24.6% had ≥1 miscarriage or stillbirth, and 9.8% had ≥1 induced abortion (Figure 2). Compared with those with a household income ≥139% of the FPL, WWH who were living in households <100% of the FPL (PD= −9.13; 95% CI= −14.77, −3.50) were less likely to receive a Pap smear (Table 1). Persons who were insured by Medicaid were less likely to receive Pap smears than people who had any private coverage, but this association was only observed among women residing in non-Medicaid expansion states (PD= −12.39; 95% CI= −20.49, −4.29). Regardless of healthcare coverage, those residing in non-Medicaid expansion states (PD= −6.01; 95% CI= −11.30, −0.73) were less likely to receive a Pap smear than those who did not. WWH who had a history of incarceration were more likely to receive a Pap smear (PD=8.99; 95% CI=1.41, 16.58) than those who did not. WWH who identified as Black or African American (PD=13.50; 95% CI=3.91, 23.09) or who received care at a Ryan White HIV/AIDS Program (RWHAP)–funded facility (PD=20.08; 95% CI=10.55, 29.61) were more likely to receive STI testing in the past 12 months than those who identified as White or those who did not receive care at a RWHAP-funded facility, respectively.

Among WWH with ≥1 pregnancy since HIV diagnosis, women with a household income <100% of the FPL were more likely to have ≥1 live birth (PD=12.42; 95% CI=1.76, 23.09) and have ≥1 unintended pregnancy (PD=16.57; 95% CI=2.63, 30.50) (Table 2) than those with a household income ≥139% of the FPL. WWH with lower educational attainment were more likely to have had ≥1 unintended pregnancy (PR range=10.04–13.46) than those with greater than a high school education. WWH who relied on Medicaid were more

likely to have had ≥1 unintended pregnancy than those with any private insurance, but this association was only observed among women residing in non-Medicaid expansion states (PD=27.17; 95% CI=11.15, 43.19; this should be interpreted with caution; Table 2 presents more details). Regardless of healthcare coverage status, WWH residing in a non-Medicaid expansion state were more likely to have ≥1 unintended pregnancy than those who did not (PD=11.15; 95% CI=2.78, 19.51). People who received care at an RWHAP-funded facility (PD=15.43; 95% CI=2.87, 27.99) or had any lifetime experiences with physical violence by an intimate partner or forced sex (PD=8.83; 95% CI=1.11, 16.56) were more likely to have had ≥1 unintended pregnancy than other groups. Other than STI testing, no differences in outcomes were observed by race/ethnicity.

In an ad hoc analysis, WWH living in Medicaid nonexpansion states were more likely to identify as Black, be uninsured, receive care at an RWHAP-funded facility, and reside in less urban counties than those in in Medicaid expansion states (Appendix Table 4, available online). Distribution of poverty was similar between WWH with Medicaid in expansion and in nonexpansion states (data not shown).

DISCUSSION

Women's SRH is a vital component of health and quality of life, including among PWH. These findings demonstrated that many WWH did not receive important prevention services, including Pap smears and STI testing, and many did not use contraception. Of those who had ≥1 pregnancy since HIV diagnosis, many reported unintended pregnancies, miscarriages or stillbirths, or induced abortions. Disparities in certain SRH outcomes were observed by selected SDOH.

Although a large percentage of sexually active WWH reported using ≥1 form of contraception, over 8 in 10 WWH who had ≥1 pregnancy since HIV diagnosis reported ≥1 unintended pregnancy since HIV diagnosis. Comparatively, the prevalence of unintended pregnancies among all 2011 births among all U.S. women was 45%.[12] Women with unintended pregnancies are more likely to have preterm delivery, babies with low birth weight, and maternal stress and depression.[13–15] In addition, WWH with unintended pregnancies are more likely to have sexual or physical violence experiences—mirroring findings in studies among all U.S. women.[16] Experiences with violence could affect a woman's ability to negotiate contraception with sexual partners, subsequently affecting unintended pregnancy and pregnancy outcomes.[16–20] Nearly half of WWH reported lifetime experiences with physical violence by an intimate partner or forced sex, which is associated with many adverse outcomes.[21] Routine assessments of sexual and physical violence in the HIV and reproductive healthcare setting could be helpful in connecting WWH who experience violence with services they need. Publicly funded family planning efforts—including coverage of safe and effective forms of contraception—have prevented and saved on costs associated with unintended pregnancies.[22] However, unmet needs for family planning services or cost coverage of contraceptives may limit access to contraception and could be contributing factors related to unintended pregnancies.[23] Ensuring sufficient access to comprehensive family planning counseling in HIV care settings, such as RWHAP clinics, could ensure that WWH receive family planning services that they may need related to

unintended pregnancies. More effective forms of contraception among WWH, including LARCs and birth control pills,[24] were less commonly reported in this study than condom use, which could have contributed to a high prevalence of unintended pregnancies.[25] However, it should be noted that conversations around sexual health and prevention should include information about both pregnancy and family planning as well as HIV and STI prevention.

This study found that 86% of WWH of childbearing age received a Pap smear during the past 3 years, which far exceeds HHS's *Healthy People 2030* initiative target for 75% of females to receive cervical Pap testing according to clinical guidelines.[26] Clinical guidelines recommend more frequent cervical Pap testing among WWH given that they are disproportionately affected by cervical cancer,[27] which could explain higher levels of screening among WWH reported in this study.

However, less than half of WWH received screening for syphilis, gonorrhea, and chlamydia in the past year, which is recommended annually for all sexually active PWH.[3] STI screening was higher among WWH receiving HIV care at an RWHAP-funded facility—likely because of strong efforts to monitor and improve STI testing among people at risk for and with HIV.[5,28] Routine STI screening is particularly important with STI cases on the rise in the U.S.,[29] including among pregnant women, who may unknowingly transmit STIs to their babies. For instance, congenital syphilis and gonorrhea, which are also on the rise, could potentially result in miscarriage, stillbirth, prematurity, low birth weight, severe disability or comorbidities, or even death.[29,30]

This study found that some SDOH—including poverty and lower education—were associated with certain adverse SRH outcomes among WWH. Disparities in unintended pregnancies have also been observed among all U.S. women by poverty level and educational attainment.[12] SDOH often overlap with each other, which could drive disparities in health outcomes.[31–33] In the U.S., women may experience a higher prevalence of certain SDOH than men.[34] These patterns are rooted in generations of gender-based discrimination, social and cultural norms related to gender roles, and reproductive rights—all of which could directly affect patterns of violence against women and SRH outcomes.[6,35] The intersectionality of gender-based discrimination and racism has recently come to the forefront of public health issues.[36] Addressing gender-based discrimination and sociocultural norms promotes health equity and is now a CDC priority.[37] The American College of Obstetricians and Gynecologists recommends that SRH providers routinely assess SDOH and engage in cultural competency during care delivery.[36] Improving patient education around the importance of seeking SRH care and how to access services could empower women to advocate for their own health, take ownership of healthcare decisions, and reduce stigma associated with receiving services.[38] Providing culturally competent care, using language translation services when necessary, and providing patient-first care break down barriers and create more opportunities for patient education and open dialogue around patients' health and personal lives that is relevant for their care.[36]

Increasing access to safety net programs such as Medicaid, RWHAP, and Title X—the nation's only federal program dedicated to funding family planning services—including in

non-Medicaid expansion states, could help address gaps in healthcare access and improve SRH outcomes among WWH[39–41]—particularly among those who experience certain SDOH associated with adverse outcomes. These findings demonstrated that STI testing was higher among those receiving care at an RWHAP-funded clinic. The prevalence of unintended pregnancies and Pap smears was comparable between WWH with Medicaid living in expansion states and those with any private insurance. Select outcomes—including receipt of Pap smears and unintended pregnancies—were worse for those with Medicaid in nonexpansion states, reasons for which could be multifactorial and should be explored in future studies. Disparities observed among Medicaid-covered WWH in nonexpansion states could reflect differences in access to services between Medicaid expansion and nonexpansion states as well as distribution of other SDOH. Although Medicaid expansion states allow for expanded eligibility with respect to income requirements, poverty was comparable among Medicaid recipients in expansion and those in nonexpansion states in this study. However, women can qualify for Medicaid through many other pathways, including those related to pregnancy or disability status, which could also vary by state.[42,43] Recent studies found that Medicaid expansion was associated with improved outcomes among women after delivery.[40,44] Complex relationships between Medicaid expansion and SRH outcomes should be explored with additional studies that have the statistical power for adjustment.

Limitations

Most outcomes were self-reported and subject to information bias—including recall and social desirability bias. MMP response rates were suboptimal, but findings were adjusted for nonresponse and poststratified to known population totals of PWH using established, standard methodology.[11] Sample size limitations resulted in wide CIs for many estimates, which could have limited the ability to detect differences in outcomes and adjust associations for potential confounding. Data stratified by Medicaid expansion status are only representative of WWH residing in MMP jurisdictions in expansion and nonexpansion states.

Condom use may have been for HIV/STI prevention and not for contraceptive purposes. National guidelines on frequency of Pap smears for WWH vary depending on age, previous Pap test results, and human papilloma-virus cotesting.[45] This study's estimates of Pap testing in the past 3 years do not describe adherence to cervical cancer screening recommendations.[45] Pap screening was based on the past 3 years, whereas a majority of SDOH were assessed on the basis of the past 12 months. STI screening estimates could be underestimated if people received STI testing at facilities other than where they receive HIV care.[46]

Findings are based on MMP's cross-sectional study design and do not imply causality. Multiple comparisons of outcomes by SDOH could have resulted in Type I error due to multiple comparisons. The coronavirus disease 2019 (COVID-19) pandemic may have affected sampling and care engagement during the 2019 and 2020 MMP data cycles. However, a sensitivity analysis demonstrated that SRH estimates did not substantially differ over time, with overlapping CIs.

CONCLUSIONS

WWH's SRH matters and contributes to their overall health and well-being. However, these findings demonstrated that many WWH did not receive certain prevention services, including STI testing, and WWH experienced many different pregnancy outcomes. In addition, disparities in some SRH outcomes were observed by certain SDOH. Improving SRH outcomes and reducing inequities among WWH require a multipronged approach. Specifically, improving patient−provider relationships and enhancing capacity for safety net programs may help reduce SRH disparities, particularly in non-Medicaid expansion states.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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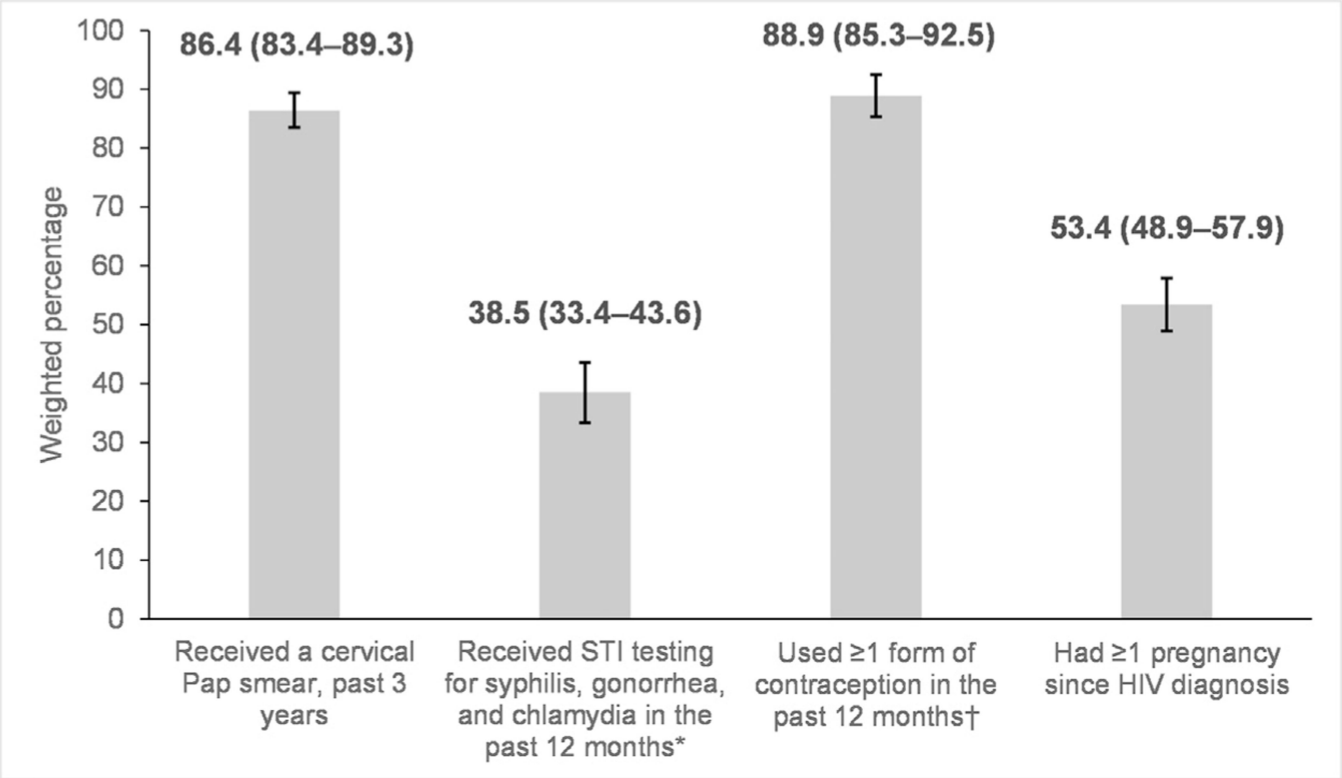

Figure 1.

Sexual and reproductive outcomes among WWH.

*Among women who had vaginal or anal sex during the past 12 months.

†Among women who had vaginal sex, did not have tubal ligation or hysterectomy, and were premenopausal.

STI, sexually transmitted infection; WWH, women with HIV.

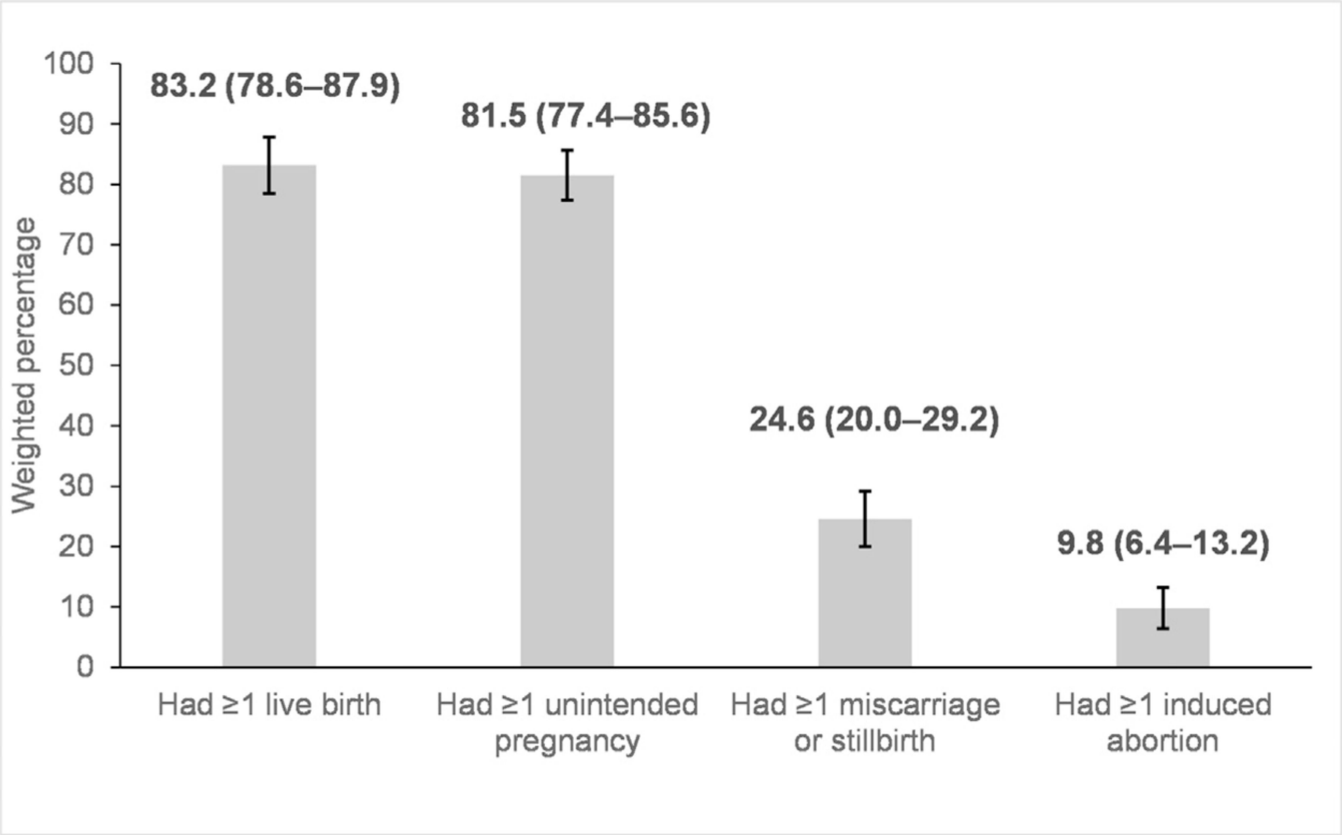

Figure 2.
Pregnancy outcomes among WWH who reported ≥1 pregnancy since HIV diagnosis.
WWH, women with HIV.

Table 1.

Sexual and Reproductive Health Outcomes by Demographic Characteristics and Social Determinants of Health Among WWH

Demographic characteristics and social determinants of health	Received a cervical Pap smear in the past 3 years				Received STI testing for syphilis, gonorrhea, and chlamydia in the past 12 months (among persons who engaged in vaginal or anal sex during the past 12 months)				Used ≥1 form of contraception in the past 12 months (among persons who engaged in vaginal sex during the past 12 months, did not have tubal ligation or hysterectomy, and were premenopausal)			
	n	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value
Demographic characteristics												
Age, time of interview												
18–29 years	130	80.3 (71.3, 89.4)	−8.04 (−17.51, 1.42)	0.096	52	45.6 (34.7, 56.4)	9.32 (−2.23, 20.87)	0.114	98	92.9 (89.1, 96.7)	4.37 (−1.91, 10.65)	0.173
30–34 years	133	85.7 (79.4, 91.9)	−2.73 (−9.38, 3.92)	0.421	45	37.9 (27.9, 47.9)	1.67 (−8.91, 12.25)	0.757	70	84.7 (76.3, 93.1)	−3.80 (−13.67, 6.07)	0.451
35–44 years	472	88.4 (85.4, 91.4)	ref		120	36.3 (30.6, 41.9)	ref		165	88.5 (83.0, 94.1)	ref	
Racial identity[b]												
American Indian and Alaska Native	—	—	—	—	—	—	—	—	—	—	—	—
Asian	—	—	—	—	—	—	—	—	—	—	—	—
Black or African American	465	85.9 (81.9, 89.9)	−0.71 (−7.13, 5.71)	0.828	148	43.3 (36.9, 49.6)	13.50 (3.91, 23.09)	0.006	213	90.9 (87.6, 94.2)	3.40(−4.36, 11.15)	0.391
Native Hawaiian and other Pacific Islander	—	—	—	—	—	—	—	—	—	—	—	—
White	192	86.6 (81.3, 91.9)	ref		48	29.8 (21.7, 37.8)	ref		86	87.5 (80.3, 94.7)	ref	
Multiracial	53	91.7 (85.1, 98.3)	5.11 (−3.56, 13.78)	0.248	17	40.7 (25.3, 56.0)[a]	10.90 (−6.65, 28.46)[a]	0.224	—	—	—	—
Hispanic, Latino/a, or Spanish origin												
Yes	121	85.2 (77.5, 92.8)	−1.46 (−9.40, 6.47)	0.718	40	38.1 (27.0, 49.2)	−0.48 (−12.19, 11.23)	0.936	58	86.7 (78.9, 94.4)	−2.79 (−11.45, 5.86)	0.527
No	614	86.6 (83.5, 89.7)	ref		177	38.6 (33.2, 44.0)	ref		275	89.5 (85.5, 93.4)	ref	

Demographic characteristics and social determinants of health	Received a cervical Pap smear in the past 3 years				Received STI testing for syphilis, gonorrhea, and chlamydia in the past 12 months (among persons who engaged in vaginal or anal sex during the past 12 months)				Used ≥1 form of contraception in the past 12 months (among persons who engaged in vaginal sex during the past 12 months, did not have tubal ligation or hysterectomy, and were premenopausal)			
	n	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value
Social determinants of health												
Socioeconomic status												
Unstable housing or homelessness, past 12 months												
Yes	183	83.9 (76.0, 91.9)	−3.22 (−12.14, 5.69)	0.479	52	32.4 (24.4, 40.3)	−8.35 (−18.84, 2.15)	0.119	90	92.2 (87.5, 97.0)	4.49 (−2.46, 11.44)	0.205
No	552	87.2 (83.9, 90.4)	ref		165	40.7 (34.3, 47.1)	ref		243	87.7 (83.0, 92.5)	ref	
Poverty level, past 12 months												
<100% FPL	374	83.8 (78.9, 88.7)	−9.13 (−14.77, −3.50)	0.001	112	39.3 (32.2, 46.4)	2.12 (−7.38, 11.62)	0.662	153	90.5 (86.5, 94.6)	5.00 (−4.45, 14.44)	0.300
≥100% to <139% FPL	91	91.2 (84.7, 97.6)	−1.77 (−9.80, 6.25)	0.665	32	45.0 (32.0, 58.1)	7.83 (−6.80, 22.46)	0.294	39	89.3 (78.1, 100)	3.77 (−8.37, 15.92)	0.543
≥139% FPL	192	93.0 (89.1, 96.8)	ref		58	37.2 (29.5, 45.0)	ref		107	85.6 (77.5, 93.6)	ref	
Food insecurity, past 12 months												
Yes	153	87.5 (82.6, 92.4)	1.50 (−4.77, 7.77)	0.639	45	38.0 (27.9, 48.0)	−0.70 (−10.62, 9.21)	0.890	71	91.0 (84.6, 97.4)	2.69 (−3.78, 9.16)	0.416
No	580	86.0 (82.4, 89.7)	ref		172	38.7 (33.5, 43.9)	ref		262	88.3 (84.5, 92.2)	ref	
Unemployed, time of interview												
Yes	129	84.1 (76.2, 92.1)	−2.69 (−10.97, 5.59)	0.524	43	43.9 (32.8, 54.9)	6.34 (−5.59, 18.28)	0.297	65	90.5 (82.6, 98.3)	1.90 (−5.83, 9.63)	0.630
No	605	86.8 (83.7, 89.9)	ref		174	37.5 (32.0, 43.0)	ref		268	88.6 (85.0, 92.2)	ref	
Educational attainment												

Demographic characteristics and social determinants of health	Received a cervical Pap smear in the past 3 years				Received STI testing for syphilis, gonorrhea, and chlamydia in the past 12 months (among persons who engaged in vaginal or anal sex during the past 12 months)				Used ≥1 form of contraception in the past 12 months (among persons who engaged in vaginal sex during the past 12 months, did not have tubal ligation or hysterectomy, and were premenopausal)			
	n	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value
Less than high school diploma	169	85.5 (79.1, 91.9)	−2.91 (−10.95, 5.13)	0.478	46	35.6 (25.8, 45.4)	−3.44 (−15.93, 9.05)	0.589	57	86.7 (78.1, 95.2)	−2.15 (−12.03, 7.73)	0.670
High school diploma or equivalent	262	84.5 (79.7, 89.3)	−3.89 (−11.33, 3.56)	0.306	83	39.5 (31.2, 47.9)	0.45 (−11.54, 12.43)	0.942	134	90.1 (85.2, 95.0)	1.30 (−5.86, 8.45)	0.723
Greater than high school	303	88.4 (83.2, 93.6)	ref		88	39.1 (31.3, 46.8)	ref		142	88.8 (82.9, 94.7)	ref	
Health-related factors (including outcomes related to social determinants of health)												
Health literacy (confidence in filling out medical forms)												
Extremely	389	88.2 (84.4, 92.0)	ref		108	37.1 (30.3−43.9)	ref		172	87.9 (83.2, 92.6)	ref	
Quite a bit	157	86.8 (79.6, 94.1)	−1.39 (−9.59, 6.80)	0.739	62	45.9 (37.4, 54.5)	8.87 (−2.09, 19.83)	0.113	89	91.0 (84.9, 97.0)	3.08 (−4.23, 10.39)	0.409
Somewhat/a little bit/not at all	187	82.1 (75.9, 88.3)	−6.12 (−13.47, 1.22)	0.102	47	34.2 (24.2, 44.3)	−2.82 (−13.19, 7.55)	0.594	72	89.0 (81.3, 96.7)	1.12 (−7.47, 9.72)	0.798
Healthcare coverage/ insurance, past 12 months												
Any private	185	91.0 (87.2, 94.8)	ref		49	33.7 (24.4, 43.1)	ref		103	88.7 (80.7, 96.6)	ref	
Medicaid (including dual coverage with Medicare)	389	84.9 (80.4, 89.4)	−6.11 (−12.05, −0.16)	0.044	114	38.2 (32.2, 44.3)	4.50 (−6.60, 15.60)	0.427	162	87.2 (81.8, 92.6)	−1.44 (−10.64, 7.76)	0.759
In Medicaid expansion states[c]	281	88.2 (83.8, 92.5)	−2.82 (−8.42, 2.78)	0.324	80	38.8 (32.4, 45.2)	5.08 (−5.87, 16.03)	0.363	120	88.7 (83.4, 94.1)	0.09 (−8.66, 8.85)	0.983
Not in Medicaid expansion states[c]	108	78.6 (71.2, 86.0)	−12.39 (−20.49, −4.29)	0.003	34	37.1 (25.0, 49.3)	3.41 (−12.37, 19.18)	0.672	42	85.1 (73.9, 96.3)	−3.56 (−17.85, 10.72)	0.625
Medicare	—	—	—	—	—	—	—	—	—	—	—	—

Demographic characteristics and social determinants of health	Received a cervical Pap smear in the past 3 years				Received STI testing for syphilis, gonorrhea, and chlamydia in the past 12 months (among persons who engaged in vaginal or anal sex during the past 12 months)				Used ≥1 form of contraception in the past 12 months (among persons who engaged in vaginal sex during the past 12 months, did not have tubal ligation or hysterectomy, and were premenopausal)			
	n	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value
Other	55	92.7 (84.4, 100)	1.69 (−7.72, 11.09)	0.725	23	65.6 (50.5, 80.7) [a]	31.86 (16.31, 47.41) [a]	<0.001	—	—	—	—
Uninsured (including RWHAP only)	83	84.4 (76.8, 91.9)	−6.62 (−15.07, 1.83)	0.124	28	41.0 (27.6, 54.5)	7.31 (−9.36, 23.97)	0.390	38	95.0 (88.7, 100)	6.33 (−3.53, 16.20)	0.208
Received care at an RWHAP-funded facility (based on the most frequent source of HIV care during the past 2 years)												
Yes	538	87.6 (83.8, 91.4)	2.64 (−6.12, 11.40)	0.555	189	43.2 (37.9, 48.5)	20.08 (10.55, 29.61)	<0.001	233	90.1 (86.1, 94.1)	3.41 (−3.20, 10.03)	0.312
No	161	85.0 (77.8, 92.1)	ref		28	23.1 (14.6, 31.6)	ref		73	86.7 (80.0, 93.4)	ref	
Has a disability												
Yes	286	85.7 (81.7, 89.8)	−0.99 (−7.44, 5.46)	0.763	80	37.1 (29.1, 45.0)	−2.47 (−11.99, 7.06)	0.612	107	87.7 (80.9, 94.5)	−1.76 (−9.19, 5.68)	0.644
No	448	86.7 (82.2, 91.2)	ref		137	39.5 (33.4, 45.7)	ref		226	89.4 (85.5, 93.4)	ref	
Currently resides in a Medicaid expansion state [c]												
Yes	479	88.9 (85.5, 92.3)	ref		134	38.9 (33.5, 44.3)	ref		223	88.4 (83.7, 93.2)	ref	
No	256	82.9 (78.6, 87.1)	−6.01 (−11.30, −0.73)	0.026	83	38.0 (29.4, 46.6)	−0.93 (−10.33, 8.48)	0.846	110	89.7 (84.3, 95.1)	1.23 (−5.82, 8.27)	0.733
Self-rated health, time of interview												
Good or better	528	86.7 (82.8, 90.7)	ref		160	38.2 (32.8, 43.6)	ref		251	89.8 (85.6, 94.0)	ref	
Worse than good	206	85.4 (80.7, 90.0)	−1.35 (−7.77, 5.07)	0.680	57	39.5 (30.3, 48.7)	1.31 (−8.19, 10.81)	0.787	82	86.0 (79.0, 93.0)	−3.79 (−11.98, 4.41)	0.365
Symptoms of depression or anxiety, past 2 weeks												

Demographic characteristics and social determinants of health	Received a cervical Pap smear in the past 3 years				Received STI testing for syphilis, gonorrhea, and chlamydia in the past 12 months (among persons who engaged in vaginal or anal sex during the past 12 months)				Used ≥1 form of contraception in the past 12 months (among persons who engaged in vaginal sex during the past 12 months, did not have tubal ligation or hysterectomy, and were premenopausal)			
	n	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value
Yes	188	86.6 (81.4, 91.8)	0.36 (−6.05, 6.78)	0.912	55	37.3 (28.3, 46.2)	−1.22 (−11.99, 9.54)	0.824	84	86.1 (78.0, 94.1)	−3.65 (−11.78, 4.49)	0.379
No	545	86.2 (82.6, 89.9)	ref		158	38.5 (32.3–44.7)	ref		247	89.7 (86.1, 93.3)	ref	
Neighborhood and built environment												
Unmet need for transportation assistance, past 12 months												
Yes	70	87.0 (79.1, 94.9)	0.72 (−8.23, 9.66)	0.875	20	37.8 (23.0, 52.6)	−0.55 (−16.84, 15.75)	0.948	—	—	—	—
No	665	86.3 (83.0, 89.6)	ref		194	38.4 (32.7, 44.0)	ref		299	88.9 (85.1, 92.7)	ref	
Social and community context												
English proficiency												
Speaks English less than well	64	90.9 (82.2, 99.6)	5.00 (−4.61, 14.60)	0.308	20	41.7 (27.6, 55.9)	3.55 (−10.33, 17.43)	0.616	—	—	—	—
Speaks English well	671	85.9 (82.7, 89.1)	ref		197	38.2 (33.1, 43.3)	ref		307	88.3 (84.4, 92.2)	ref	
HIV healthcare discrimination, past 12 months												
Yes	145	90.7 (85.5, 95.9)	3.08 (−2.94, 9.09)	0.316	44	44.2 (34.0, 54.4)	6.17 (−5.19, 17.53)	0.287	65	87.4 (79.5, 95.4)	−0.36 (−8.95, 8.22)	0.934
No	558	87.6 (84.7, 90.6)	ref		163	38.0 (32.1, 43.9)	ref		243	87.8 (83.2, 92.4)	ref	
Experiences with physical violence by an intimate partner or forced sex, lifetime												
Yes	322	86.9 (82.3, 91.5)	0.97 (−4.72, 6.66)	0.738	84	33.2 (26.4, 39.9)	−9.07 (−18.22, 0.09)	0.052	135	88.9 (83.8, 94.0)	0.15 (−5.41, 5.72)	0.957

Demographic characteristics and social determinants of health	Received a cervical Pap smear in the past 3 years				Received STI testing for syphilis, gonorrhea, and chlamydia in the past 12 months (among persons who engaged in vaginal or anal sex during the past 12 months)				Used ≥1 form of contraception in the past 12 months (among persons who engaged in vaginal sex during the past 12 months, did not have tubal ligation or hysterectomy, and were premenopausal)			
	n	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value
No	403	85.9 (82.3, 89.5)	ref		127	42.2 (35.2, 49.2)	ref		193	88.7 (84.5, 92.9)	ref	
History of incarceration, past 12 months												
Yes	38	94.9 (87.9, 100)	8.99 (1.41, 16.58)	0.020	—	—	—	—	—	—	—	—
No	695	85.9 (82.8, 89.0)	ref		203	37.7 (32.6, 42.9)	—		317	88.9 (85.3, 92.5)	ref	

Notes: Excluded are estimates with a coefficient of variation ≥0.30 and those based on a denominator sample size <30. Statistical testing associated with 1 or more suppressed categories also has questionable validity and thus has been suppressed. Definitions of variables are included in Appendix Table 1(available online). *p*-values are associated with PDs.

[a]Estimates have an absolute CI width ≥30 or an absolute CI width between 5 and 30 and a relative CI width >130% and thus should be interpreted with caution. Associated statistical testing should also be interpreted with caution.

[b]Estimates for race not generated for persons identifying as American Indian and Alaska Native, Asian, and Native Hawaiian and other Pacific Islander owing to small cell sizes.

[c]Medicaid expansion states reporting to MMP included California, Delaware, Illinois, Indiana, Michigan, New Jersey, New York, Oregon, Pennsylvania, Virginia, and Washington. Puerto Rico was considered to be a Medicaid expansion state owing to local programs that are similar to Medicaid expansion. Virginia expanded Medicaid in 2018, and expansion coverage subsequently became effective as of January 1, 2019. A majority of the study period (June 2018−May 2021) occurred after January 1, 2019, and therefore, Virginia was considered to be an expansion state. Non-Medicaid expansion states reporting to MMP included Florida, Georgia, Mississippi, North Carolina, and Texas. Data stratified by Medicaid expansion status are only representative of WWH in MMP jurisdictions in expansion and nonexpansion states and represent expansion status for the cycle years included in this analysis on the basis of information presented at https://www.kff.org/medicaid/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/.

FPL, federal poverty level; MMP, Medical Monitoring Project; PD, prevalence difference; RWHAP, Ryan White HIV/AIDS Program; WWH, women with HIV.

Table 2.

Pregnancy Outcomes by Selected Characteristics Among WWH Who Had ≥1 Pregnancy Since HIV Diagnosis

Demographic characteristics and social determinants of health	Had ≥1 live birth				Had ≥1 unintended pregnancy				Had ≥1 miscarriage or stillbirth				Had ≥1 induced abortion			
	n	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value
Demographic characteristics																
Age, time of interview																
18–29 years	—	—	—	—	66	81.9 (72.2, 91.6)	2.04 (−8.90, 12.97)	0.715	17	17.7 (8.3, 27.1)	−7.97 (−18.96, 3.03)	0.156	—	—	—	—
30–34 years	79	77.2 (68.5, 86.0)	−6.79 (−16.54, 2.97)	0.173	86	85.2 (77.3, 93.0)	5.29 (−4.43, 15.00)	0.286	27	27.9 (18.4, 37.3)	2.23 (−9.00, 13.46)	0.697	—	—	—	—
35–44 years	212	84.0 (78.1, 90.0)	ref		208	79.9 (74.4, 85.4)	ref		68	25.6 (19.5, 31.7)	ref		21	7.6 (3.8, 11.4)	—	
Racial identity																
American Indian and Alaska Native	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Asian	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Black or African American	226	82.7 (76.6, 88.7)	−2.76 (−11.45, 5.94)	0.535	223	81.6 (75.6, 87.5)	−0.64 (−12.11, 10.84)	0.914	71	24.8 (19.0, 30.5)	1.78 (−8.24, 11.80)	0.728	25	10.1 (5.6, 14.6)	1.01 (−6.34, 8.35)	0.789
Native Hawaiian and other Pacific Islander	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
White	95	85.4 (78.7, 92.2)	ref		98	82.2 (73.4, 91.0)	ref		28	23.0 (14.4, 31.6)	ref		—	—	—	—
Multiracial	—	—	—	—	—	—	—	—	12	31.1 (15.8, 46.4)[a]	8.09 (−10.09, 26.26)[a]	0.383	—	—	—	—
Hispanic, Latino/a, or Spanish origin																
Yes	64	82.7 (73.1, 92.4)	−0.63 (−11.94, 10.69)	0.914	—	—	—	—	19	24.9 (13.1, 36.6)	0.26 (−12.74, 13.27)	0.969	—	—	—	—
No	297	83.4 (77.9, 88.8)	ref		292	79.6 (74.7, 84.5)	—		93	24.6 (19.5, 29.7)	ref		33	9.0 (5.6, 12.3)	—	

Demographic characteristics and social determinants of health	Had ≥1 live birth				Had ≥1 unintended pregnancy				Had ≥1 miscarriage or stillbirth				Had ≥1 induced abortion			
	n	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value
Social determinants of health																
Socioeconomic status																
Unstable housing or homelessness, past 12 months																
Yes	88	80.2 (70.8, 89.6)	−4.16 (−13.54, 5.23)	0.385	97	86.1 (78.9, 93.4)	6.34 (−3.57, 16.25)	0.210	32	25.6 (15.3, 35.8)	1.26 (−9.80, 12.32)	0.823	—	—	—	—
No	273	84.4 (79.8, 88.9)	ref		263	79.8 (74.4, 85.2)	ref		80	24.3 (19.5, 29.1)	ref		34	9.8 (6.0, 13.6)	—	
Poverty level, past 12 months																
<100% FPL	206	85.6 (79.5, 91.8)	12.42 (1.76, 23.09)	0.022	204	85.6 (80.0, 91.1)	16.57 (2.63, 30.50)	0.020	64	25.9 (18.4, 33.5)	−6.57 (−17.45, 4.30)	0.236	19	8.1 (3.6, 12.6)	−6.49 (−13.69, 0.71)	0.077
≥100% to <139% FPL	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
≥139% FPL	75	73.2 (63.3, 83.1)	ref		80	69.0 (57.2, 80.8)	ref		32	32.5 (23.4, 41.7)	ref		17	14.6 (8.6, 20.5)	ref	
Food insecurity, past 12 months																
Yes	78	79.0 (68.3, 89.7)	−5.41 (−16.01, 5.19)	0.317	77	80.8 (72.2, 89.4)	−0.85 (−10.51, 8.81)	0.863	31	35.6 (24.7, 46.6)	14.01 (2.42, 25.60)	0.018	—	—	—	—
No	281	84.4 (80.0, 88.8)	ref		281	81.7 (77.1, 86.2)	ref		81	21.6 (16.9, 26.3)	ref		29	8.1 (4.5, 11.8)	ref	
Unemployed, time of interview																
Yes	74	81.7 (71.5, 91.9)	−1.89 (−12.10, 8.32)	0.717	68	75.2 (65.2, 85.2)	−8.13 (−18.87, 2.60)	0.138	23	25.9 (15.8, 36.1)	1.52 (−9.17, 12.21)	0.780	—	—	—	—
No	286	83.6 (78.9, 88.3)	ref		292	83.3 (79.0, 87.7)	ref		89	24.4 (19.5, 29.3)	ref		38	10.5 (6.7, 14.4)	—	
Educational attainment																

Demographic characteristics and social determinants of health	Had ≥1 live birth				Had ≥1 unintended pregnancy				Had ≥1 miscarriage or stillbirth				Had ≥1 induced abortion			
	n	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value
Less than high school diploma	94	85.7 (78.0, 93.4)	2.95 (−6.63, 12.52)	0.546	96	88.0 (82.0, 94.0)	13.46 (3.52, 23.40)	0.008	26	24.7 (15.4, 34.0)	−1.34 (−13.33, 10.64)	0.826	—	—	—	—
High school diploma or equivalent	131	82.0 (73.8, 90.2)	−0.71 (−9.59, 8.17)	0.876	131	84.6 (78.1, 91.1)	10.04 (0.19, 19.89)	0.046	41	23.1 (15.4, 30.7)	−3.00 (−13.27, 7.27)	0.567	11	6.3 (2.7, 9.8)	−7.37 (−14.31, −0.42)	0.038
Greater than high school	136	82.7 (76.8, 88.6)	ref		133	74.5 (66.8, 82.3)	ref		45	26.1 (19.0, 33.1)	ref		25	13.6 (7.6, 19.7)	ref	
Health status and healthcare access																
Health literacy (confidence in filling out medical forms)																
Extremely	189	83.0 (77.5, 88.4)	ref		193	80.0 (73.9, 86.0)	ref		63	25.2 (19.5, 30.9)	ref		27	10.3 (6.1, 14.5)	ref	
Quite a bit	82	90.1 (82.4, 97.8)	7.13 (−1.56, 15.83)	0.108	72	78.2 (67.7, 88.7)	−1.80 (−14.58, 10.98)	0.782	20	22.7 (12.9, 32.4)	−2.52 (−13.62, 8.58)	0.657	—	—	—	—
Somewhat/a little bit/not at all	89	78.3 (69.5, 87.1)	−4.64 (−14.15, 4.87)	0.339	94	87.1 (81.0, 93.1)	7.10 (−0.98, 15.18)	0.085	28	24.3 (15.0, 33.7)	−0.86 (−11.32, 9.60)	0.872	—	—	—	—
Health care coverage/insurance, past 12 months																
Any private	62	73.0 (60.9, 85.1)	ref		64	66.8 (52.7, 81.0)	ref		25	28.5 (18.0, 39.1)	ref		16	18.3 (8.5, 28.1)	ref	
Medicaid (including dual coverage with Medicare)	233	87.6 (82.6, 92.7)	14.64 (1.88, 27.41)	0.025	225	83.7 (78.4, 89.1)	16.86 (0.59, 33.13)	0.042	60	21.1 (15.8, 26.3)	−7.49 (−19.34, 4.35)	0.215	20	7.9 (3.8, 12.0)	−10.41 (−21.21, 0.38)	0.059
In Medicaid expansion states[c]	168	89.9 (85.1, 94.6)	16.87 (4.15, 29.59)	0.009	155	78.9 (72.2, 85.7)	12.10 (−4.07, 28.26)	0.142	39	17.4 (12.5, 22.4)	−11.10 (−22.52, 0.33)	0.057	—	—	—	—
Not in Medicaid expansion states[c]	65	82.8 (70.8, 94.8)	9.79 (−6.32, 25.91)	0.234	70	94.0 (88.2, 99.9)	27.17 (11.15, 43.19)[b]	<0.001	21	29.0 (15.7, 42.3)	0.43 (−17.29, 18.15)	0.962	—	—	—	—
Medicare	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Demographic characteristics and social determinants of health	Had ≥1 live birth				Had ≥1 unintended pregnancy				Had ≥1 miscarriage or stillbirth				Had ≥1 induced abortion			
	n	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value
Uninsured (including RWHAP only)	33	76.9 (61.5, 92.3)[a]	3.94 (−15.25, 23.14)[a]	0.687	—	—	—	—	16	35.7 (17.7, 53.8)[a]	7.18 (−13.53, 27.89)[a]	0.497	—	—	—	—
Received care at a RWHAP funded facility (on the basis of the most frequent source of HIV care during the past 2 years)																
Yes	255	83.7 (79.0, 88.3)	−2.24 (−10.01, 5.52)	0.572	262	85.1 (80.6, 89.6)	15.43 (2.87, 27.99)	0.016	76	22.8 (17.9, 27.8)	−2.87 (−12.90, 7.16)	0.575	29	9.4 (5.6, 13.3)	—	—
No	84	85.9 (78.8, 93.0)	ref		76	69.7 (58.8, 80.6)	ref		27	25.7 (17.0, 34.4)	ref		—	—	—	—
Has a disability																
Yes	137	80.2 (73.2, 87.1)	−4.73 (−12.38, 2.93)	0.226	142	84.5 (78.8, 90.3)	4.80 (−2.66, 12.27)	0.207	50	28.8 (21.9, 35.6)	6.76 (−1.67, 15.18)	0.116	20	11.8 (6.0, 17.5)	2.99 (−4.19, 10.17)	0.414
No	223	84.9 (79.6, 90.1)	ref		217	79.7 (74.5, 84.9)	ref		61	22.0 (16.3, 27.7)	ref		22	8.8 (4.5, 13.1)	ref	
Currently resides in a Medicaid expansion state[c]																
Yes	248	84.4 (79.6, 89.2)	ref		239	77.4 (72.1, 82.8)	ref		71	21.4 (16.6, 26.3)	ref		32	10.7 (6.2, 15.2)	—	
No	113	81.1 (72.1, 90.1)	−3.31 (−13.13, 6.51)	0.509	121	88.6 (82.4, 94.8)	11.15 (2.78, 19.51)	0.009	41	30.3 (20.6, 40.0)	8.87 (−2.28, 20.01)	0.119	—	—	—	—
Self-rated health, time of interview																
Good or better	250	85.0 (80.5, 89.5)	ref		245	80.6 (75.8, 85.5)	ref		69	20.6 (15.7, 25.5)	ref		24	8.0 (4.2, 11.7)	ref	
Worse than good	110	79.1 (69.7, 88.6)	−5.86 (−15.64, 3.92)	0.240	114	83.4 (75.1, 91.6)	2.74 (−7.07, 12.55)	0.584	42	33.5 (24.4, 42.5)	12.88 (2.83, 22.92)	0.012	18	14.1 (7.3, 20.9)	6.13 (−1.49, 13.74)	0.115
Symptoms of depression or																

Demographic characteristics and social determinants of health	Had ≥1 live birth				Had ≥1 unintended pregnancy				Had ≥1 miscarriage or stillbirth				Had ≥1 induced abortion			
	n	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value
anxiety, past 2 weeks																
Yes	89	77.4 (68.5, 86.3)	−7.86 (−17.70, 1.97)	0.117	98	82.0 (74.3, 89.8)	0.55 (−8.80, 9.89)	0.909	47	37.1 (28.2, 46.0)	17.18 (7.30, 27.06)	<0.001	17	15.5 (6.7, 24.3)	7.63 (−2.13, 17.38)	0.126
No	270	85.2 (80.1, 90.4)	ref		261	81.5 (76.6, 86.4)	ref		63	19.9 (14.8, 25.1)	ref		25	7.9 (4.2, 11.5)	ref	
Neighborhood and built environment																
Unmet need for transportation assistance, past 12 months																
Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No	323	82.7 (77.6, 87.8)	—		320	80.1 (75.7, 84.5)	ref		102	24.8 (19.9, 29.7)	—		36	9.6 (6.1, 13.1)	—	
Social and community context																
English proficiency																
Speaks English less than well	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Speaks English well	328	82.8 (77.9, 87.8)	—		331	81.1 (76.7, 85.5)	—		108	25.7 (20.8, 30.5)	ref		41	10.5 (6.8, 14.1)	ref	
HIV healthcare discrimination, past 12 months																
Yes	72	75.4 (65.7, 85.2)	−8.63 (−19.72, 2.47)	0.128	79	82.7 (72.9, 92.4)	0.45 (−10.62, 11.51)	0.937	27	30.1 (21.0, 39.1)	5.27 (−5.62, 16.17)	0.343	17	17.5 (9.0, 26.1)	10.88 (1.49, 20.26)	0.023
No	264	84.1 (78.4, 89.8)	ref		259	82.2 (77.4, 87.1)	ref		81	24.8 (19.1, 30.5)	ref		22	6.6 (3.5, 9.8)	ref	
Experiences with physical violence by an intimate partner or forced sex, lifetime																
Yes	172	81.2 (74.2, 88.1)	−3.74 (−11.77, 4.28)	0.361	187	86.2 (81.9, 90.5)	8.83 (1.11, 16.56)	0.025	62	27.7 (21.1, 34.3)	5.88 (−2.51, 14.28)	0.170	30	14.2 (8.5, 19.8)	—	—

Demographic characteristics and social determinants of health	Had ≥1 live birth				Had ≥1 unintended pregnancy				Had ≥1 miscarriage or stillbirth				Had ≥1 induced abortion			
	n	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value	*n*	Weighted row % (95% CI)	PD (95% CI)	*p*-value
No	186	84.9 (79.6, 90.2)	ref		171	77.4 (70.8, 83.9)	ref		49	21.8 (15.9, 27.7)	ref		—	—	—	—
History of incarceration, past 12 months																
Yes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
No	345	84.1 (79.4, 88.8)	—		343	81.7 (77.4, 86.0)	—		105	24.4 (19.6, 29.1)	—		40	9.9 (6.4, 13.4)	—	

Notes: Excluded are estimates with a CV≥0.30 and those based on a denominator sample size <30. Statistical testing associated with 1 or more suppressed categories also has questionable validity and thus has been suppressed. Definitions of variables are included in Appendix Table 1 (available online). *p*-values are associated with PDs.

[a]Estimates have an absolute CI width ≥30 or an absolute CI width between 5 and 30 and a relative CI width >130% and thus should be interpreted with caution. Associated statistical testing should also be interpreted with caution.

[b]Estimate for those who did not have unintended pregnancies among persons in Medicaid nonexpansion states has a CV>0.3. Therefore, the PD associated with having ≥1 unintended pregnancy among persons in Medicaid nonexpansion states may need to be interpreted with caution.

[c]Medicaid expansion states reporting to MMP included California, Delaware, Illinois, Indiana, Michigan, New Jersey, New York, Oregon, Pennsylvania, Virginia, and Washington. Puerto Rico was considered to be a Medicaid expansion state owing to local programs that are similar to Medicaid expansion. Virginia expanded Medicaid in 2018, and expansion coverage subsequently became effective as of January 1, 2019. A majority of the study period (June 2018−May 2021) occurred after January 1, 2019, and therefore, Virginia was considered to be an expansion state. Non-Medicaid expansion states reporting to MMP included Florida, Georgia, Mississippi, North Carolina, and Texas. Data stratified by Medicaid expansion status are only representative of WWH in MMP jurisdictions in expansion and nonexpansion states and represent expansion status for the cycle years included in this analysis on the basis of information presented at https://www.kff.org/medicaid/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/.

CV, coefficient of variation; FPL, federal poverty level; MMP, Medical Monitoring Project; PD, prevalence difference; RWHAP, Ryan White HIV/AIDS Program; WWH, women with HIV.