Out of 632 samples tested, 26 led to an invalid result (4.1%) due to a reduced signal for the sample control (SC). A weak PCR performance was observed in 3.5% of all samples tested. Interestingly, PCR failure rate was more prominent among anal specimens (21.1%).

Conclusion The high prevalence of HPV infections in men shows that routine testing is justified. FLOQSwabs® proved to be the main criterion for a robust HPV analysis allowing sufficient collection of cellular material. Further studies need to be conducted to improve collection and processing of anal samples to increase number of valid anal samples.

Objective Despite rises in sexually transmitted infection (STI) notifications among Australian women in the previous decade, limited STI surveillance data exists for women by sexual orientation. This study aimed to compare differences in sexual practices and STI positivity among women by sexual orientation, and whether these changed over time.

Methods In this retrospective repeated cross-sectional study, women attending the Melbourne Sexual Health Centre for the first time between 2011–2019 were categorised as ‘bisexual’, ‘lesbian’ or ‘heterosexual’ according to sexual practices in the previous 12 months. Demographic information, sexual practices and STI positivity were compared between the three groups and over time.

Results 36,147 women (2,618 bisexual, 534 lesbian and 32,995 heterosexual) were included. Bisexual women reported more sexual partners (median=6; IQR=4–10), followed by heterosexual (median=3; IQR=2–5) and lesbian (median=2; IQR=1–4) women. A higher proportion of bisexual women consistently used condoms with casual male partners compared to heterosexual women (20.4% vs 15.9%; p<0.001). Consistent condom use with casual male partners decreased over time in heterosexual women, (19.9% in 2011 to 15.2% in 2019, P[trend]<0.001) but not in bisexual women. Bacterial vaginosis was more common in lesbian women (14.8%) than in bisexual (11.8%) and heterosexual women (7.7%) (p<0.001). Chlamydia was more common in heterosexual women (9.3%) than in bisexual (6.6%) and lesbian women (1.2%) (p<0.001). Syphilis was more common in heterosexual women (1.0%) than in bisexual (0.3%) and lesbian women (0.0%) (p=0.004). Over time, chlamydia positivity in lesbian women increased (from 0.0% to 2.7%, P[trend]=0.014), and syphilis positivity in bisexual women increased (from 0.0% to 0.7%, P[trend]=0.028), but positivity of these STIs did not change in other groups.

Conclusion Sexual practices and STI positivity differed according to the sexual orientation of women. Knowledge of these differences is important to account for future changes in STI trends that may occur in these subpopulations.