Background In 2007, a national school-based vaccination program for human papillomavirus (HPV) among 12–13-year-olds was introduced in Australia, as well as a catch-up program for women aged ≥26. We examined associations between vaccine initiation and sexual activity to address concerns among some members of society that vaccination implies approval for sexual activity and could lead to early or risky sexual behaviour.

Methods Computer-assisted telephone interviews were conducted with a random sample of the Australian population aged 16–69 years during 2012–2013. Participants were surveyed about their sexual behaviour and HPV vaccine initiation. We restricted to women aged 16–20 years at the time of interview who would have been eligible for school-based vaccination. Responses were weighted based on study design, location, and the age-sex distribution of Australia. We used Pearson’s chi-square tests and logistic regression to look at vaccine initiation and sexual behaviour, and report results as odds ratios (OR) and 95% Confidence Intervals (CI).

Results Among 920 women aged 16–20, 76.7% had initiated the vaccine. Proportions were higher among women born in Australia (81.2% versus 49.2% overseas-born, p<0.001), and who reported any sexual experience (84.7% versus 69.9% with no sexual experience; p<0.01). After adjusting for age, there was no association between vaccine initiation and any sexual activity before 16 years (early sexual behaviour) (OR=1.40; 95% CI: 0.63–3.13; p=0.41), or being diagnosed with an STI (OR=1.73; 95% CI: 0.38–7.86; p=0.48).

Those initiating the vaccine were more likely to have had more than one partner in the last year (OR=2.31; 95% CI: 1.09–4.88; p=0.03) but this effect was attenuated after adjusting for age, rurality, religiosity, education, overseas-born, and income level (OR=1.69; 95% CI: 0.74–3.86; p=0.21).

Conclusion Differences in sexual activity between vaccinated and unvaccinated women were explained by confounding by characteristics such as age, overseas-born and income level. We found no evidence of an independent association between initiating the HPV vaccine and high-risk or early sexual behaviour.

Disclosure No significant relationships.
at baseline, 12, 24, and 48 weeks. We used generalized estimating equations to describe sexual behavior over 48 weeks for each study arm, and Cox proportional hazards to compare STI risk between arms.

Results After randomization, 209 HIV-positive participants completed at least 12 weeks of study. The number of anal sex partners (in the prior 3 months) declined in both arms (Immediate: 12-week IRR=0.66; 95%CI=0.45–0.97, 48-week IRR=0.73; 95%CI=0.51–1.12; Deferred: 12-week IRR=0.68; 95%CI=0.53–0.88, 48-week IRR=0.56; 95%CI=0.40–0.79). The proportion reporting >50% condom use with main partners (in the prior 30 days) doubled among Deferred participants (12-week RR=2.04; 95%CI=1.40–2.95, 48-week RR=1.97; 95%CI=1.35–2.87) and increased by 75% among Immediate participants (12-week RR=1.75; 95%CI=1.31–2.35, 48-week RR=1.74; 95%CI=1.26–2.41). Condom use with casual partners increased in both arms (Immediate: 12-week RR=1.37; 95%CI=1.16–1.61, 48-week RR=1.23; 95% CI=1.02–1.49; Deferred: 12-week RR=1.47; 95%CI=1.20–1.79, 48-week RR=1.25; 95%CI=0.99–1.58). Relative to Immediate participants, Deferred participants had higher risk of chlamydia (Hazard Ratio=1.85; 95%CI=1.09–3.15), with a trend toward higher risk of gonorrhea (HR=1.62; 95% CI=0.88–2.97), and syphilis (HR=2.05; 95%CI=0.82–5.16).

Conclusion Despite reporting protective behavior at levels similar to or slightly higher than those of participants who started ART immediately, participants who deferred ART initiation had increased risk of bacterial STIs. This warrants further investigation.

Disclosure No significant relationships.