Background Men who have sex with men (MSM) have one of the highest HIV prevalence rates of any high risk population in Central America. Since 2007, the Sentinel Surveillance and Control of Sexually Transmitted Infections (VICITS) strategy has been implemented in two public health clinics targeting MSM in Guatemala City. This combination prevention strategy provides diagnosis and treatment of STIs, HIV testing, condom distribution, and educational activities.

Method From 2007 to 2012, MSM were recruited through the Internet or by community-based organisation staff to attend two VICITS clinics in Guatemala City. Clinic attendees were asked demographic and behavioural information and tested for HIV and syphilis. Variables included in trend analysis included HIV and syphilis test results and condom use with casual partner in the past month. All analyses were performed using Stata 9.0.

Results A total of 433 MSM attended VICITS clinics from 2007 to 2012. HIV prevalence was 10.3% from 2009–2010 (n = 117, 95% CI: 5.4–17.2) and 11.7% from 2011–2012 (n = 179, 95% CI: 7.4–17.4). Syphilis prevalence was 6.6% from 2009–2010 (n = 106, 95% CI: 2.7–13.1) and 5.9% from 2011–2012 (n = 153, 95% CI: 2.7–10.9). Consistent condom use with a casual partner in the last month was 61.9% (n = 56, 95% CI: 49.1–74.7) from 2009–2010 and 62.7% (n = 72, 95% CI: 51.7–73.8) from 2011–2012. No significant changes in attendance from 2007 to 2012 were noted at both clinics.

Discussion No changes in HIV and syphilis prevalence among MSM attending VICITS clinics in Guatemala City were observed. Consistent condom use should be continued to be emphasised in casual relationships. Routine monitoring of sentinel surveillance data allows for timely feedback of HIV prevention services and provides key information for early HIV diagnosis, as an intervention that has shown evidence of effectiveness programme.

**P3.434** WITHDRAWN BY AUTHOR

**P3.435** OPT-OUT RECTAL SCREENING FOR CHLAMYDIA AND GONORRHEA IN YOUNG MEN WHO HAVE SEX WITH MEN (YMSM)


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Objective In the United States, almost 20% of new HIV infections in 2010 occurred in young MSM (YMSM) aged 13–24 years old. YMSM also have high rates of other sexually transmitted infections (STIs). STIs can facilitate HIV transmission and acquisition, and indicate unsafe sexual behaviour that might be conducive to HIV transmission. CDC recommends risk-based rectal chlamydia and gonorrhoea screening of MSM who report receptive anal intercourse (RAI), to protect their health and prevent HIV transmission. However, screening rates have been low. Opt-out screening of all YMSM during clinical encounters might be an effective approach to STI screening.

Methods We used a cohort decision analysis model to compare two screening algorithms of YMSM aged 18–24 years: (1) risk-based screening of YMSM who report RAI, and (2) screening YMSM unless they opt-out. Based on published data, we assumed that 61% of YMSM disclosed same-sex behaviour to providers and that 67% of YMSM had RAI. Among YMSM who had RAI, 16% underwent risk-based rectal screening for chlamydia and/or gonorrhoea, and the prevalence of infection was 12%. Outcomes included the number of rectal infections identified and number of tests required to identify one infection.

Results Among 1000 YMSM, opt-out screening identified 59% of infections versus 16% with risk-based screening. Opt-out screening required 10.4 tests to identify one infection versus 8.4 with risk-based screening. Both screening approaches missed 39% of infections because providers were unaware that patients were MSM.

Conclusions Although opt-out screening required two additional tests to identify one case, it identified 3.7 times more infections. Increased diagnosis and treatment of STIs can lead to decreased STI prevalence and HIV transmission, facilitate provider interventions for at-risk youth, and increase patient awareness of the risks associated with unsafe sexual practices. Increased awareness of patients’ sexual behaviour among providers is needed to provide optimal care.

**P3.436** IMPROVING STRATEGIES IN IDENTIFYING TRANSGENDER WOMEN CLIENTS TOWARDS DATA DISAGGREGATION IN THE PHILIPPINE INTEGRATED HIV BEHAVIOURAL AND SEROLOGICAL SURVEILLANCE (IHBBSS)


Since 2007, the Philippine Integrated HIV Behavioral and Serological Surveillance (IHBBSS) still lump the transgender (TG) women population with men having sex with men (MSM), which is a preferred strategy when the incidence of syphilis was above 0.5 per 100 person-years. Findings were robust in wide-ranging deterministic sensitivity analyses, including assumptions around reduced adherence to screening recommendations. In probabilistic sensitivity analysis, the probability that enhanced screening was cost-effective exceeded 85%, assuming a willingness-to-pay of up to $50,000 per QALY.

Conclusions Our model suggests that in populations with moderate to high rates of syphilis acquisition, enhanced syphilis screening alongside HIV medical care has the potential to improve health and save costs.

**P3.433** COST-EFFECTIVENESS OF ENHANCED SYPHILIS SCREENING AMONG HIV-POSITIVE MEN WHO HAVE SEX WITH MEN


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Background Syphilis co-infection has increased substantially among HIV-positive men who have sex with men (MSM). Screening rates in this population remain below recommended guidelines for screening frequency. We evaluated the cost-effectiveness of increasing the frequency and coverage of screening to recommended levels in HIV-positive MSM receiving HIV care.

Methods We developed a Markov cohort model to evaluate the cost-effectiveness of enhanced syphilis screening in a cohort of HIV-positive MSM with baseline characteristics (including current screening coverage) reflective of men enrolled in an observational cohort study of individuals receiving medical care for HIV in Ontario, Canada. We compared usual care (50% of the population screened annually) to enhanced screening (100% screened every 3 months). Model parameters were from the health literature and the observational cohort database. Both strategies incorporated a treponemal screening test followed by a confirmatory non-treponemal test; test characteristics varied at each stage of syphilis infection. Outcomes were quality-adjusted life years (QALYs), lifetime costs (2011 Canadian dollars), and incremental cost-effectiveness ratios. The model used the perspective of a public health care payer and a lifetime time horizon, with a base case discount rate of 5% applied to future costs and outcomes.

Results Compared to usual care, enhanced screening increased quality-adjusted life expectancy by 0.016 QALYs and decreased costs by $1437 per person. Enhanced screening remained the preferred strategy when the incidence of syphilis was above 0.5 per 100 person-years. Findings were robust in wide-ranging deterministic sensitivity analyses, including assumptions around reduced adherence to screening recommendations. In probabilistic sensitivity analysis, the probability that enhanced screening was cost-effective exceeded 85%, assuming a willingness-to-pay of up to $50,000 per QALY.