

Conclusions *C trachomatis* screening of pregnant women in the Netherlands is cost-saving.

O2-S4.03 THE COST-EFFECTIVENESS OF HUMAN PAPILLOMAVIRUS VACCINATION OF FEMALES OVER AGE 12 YEARS IN THE USA

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Background Although the recommended age for Human Papillomavirus (HPV) vaccination of females is 11 to 12 years in the USA, "catch-up" vaccination is recommended for females aged 13–26 years who have not been previously vaccinated. The objective of this study was to evaluate the cost-effectiveness of catch-up vaccination strategies for females aged 13–30 years in the USA.

Method We revised and updated a previously-published, spreadsheet-based model of HPV vaccination to estimate the costs and benefits of female HPV vaccination. The health outcomes we included were: cervical intraepithelial neoplasia, genital warts, recurrent respiratory papillomatosis, and HPV associated cancers (cervical, vaginal, vulvar, anal, oropharyngeal, and penile). We examined the cost-effectiveness of catch-up vaccination for three age groups: ages 13–21 years, ages 21–26 years, and ages 27 to 30 years. We examined a 100-year time horizon. Routine vaccination of 12 year olds was assumed to occur in all 100 years, with coverage set at 20%, 30%, or 75%. The annual probability of receiving catch-up vaccination was 5% for ages 13 to 18 years and 1.25% for ages 19 years and older. The duration of the catch-up vaccination program was varied from 1 to 20 years.

Results Catch-up vaccination generally became less cost-effective as routine coverage increased and as the duration of the catch-up program increased. When vaccine coverage and the duration of the catch-up program were varied (and all other parameters were set to their base case values), the incremental cost per QALY gained by extending the duration of catch-up vaccination ranged from \$5000 to \$40 000 for ages 13 to 21, from \$50 000 to \$85 000 for ages 21 to 26, and was >\$140 000 for ages 27 to 30 years. The relatively favourable cost-effectiveness ratios for vaccination of ages 13 to 21 years and the relatively unfavourable cost-effectiveness ratios for vaccination of ages 27 to 30 years were consistent regardless of routine vaccine coverage and the duration of the catch-up vaccine program.

Conclusion Our preliminary findings support the current recommendations of the Advisory Committee on Immunisation Practices (ACIP) for female vaccination. However, although catch-up vaccination for ages 21 to 26 years might be considered cost-effective now, the cost per QALY gained by catch-up vaccination may increase as time goes by and as vaccine coverage increases.

O2-S4.04 THE COST OF EXPEDITED PARTNER THERAPY COMPARED TO THE COST OF STANDARD PARTNER REFERRAL FOR THE TREATMENT OF CHLAMYDIA OR GONORRHOEA

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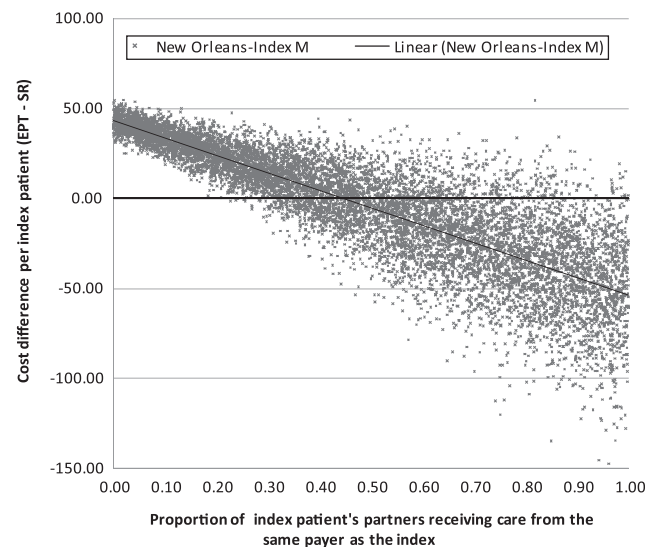
Background Partner treatment is an important component of sexually transmitted disease (STD) control. Several randomised controlled trials (RCTs) have compared expedited partner treatment (EPT) to unassisted standard partner referral (SR). All of these trials found that EPT significantly increased partner treatment over SR, and some found that EPT significantly lowered re-infection rates in index patients.

Methods We collected cost data to assess the payer-specific, health care system, and societal-level cost of EPT and SR. We used data on

partner treatment and index patient re-infection rates from two RCTs examining EPT and SR for patients diagnosed with chlamydia or gonorrhoea. Additional elements were estimated or drawn from the literature, such as the likelihood of progression to and QALY impact of sequelae. We used a Monte Carlo simulation (10 000 iterations) to assess the impact on cost and effectiveness of varying several variables simultaneously, and calculated threshold values for selected variables at which EPT and SR costs per patient were equal. Sensitivity analyses assessed the impact of varying settings in which EPT might be employed, such as one in which no patient counselling or data entry costs were incurred when employing either EPT or SR.

Results From a health care system or societal perspective, EPT was less costly and treated more partners than SR. From the perspective of an individual payer, EPT was less costly than SR if $\geq 40\%$ – 45% of male index patients' female partners or $\geq 38\%$ of female index patients' male partners received care from the same payer. The Abstract O2-S4.04 figure 1 shows the Monte Carlo results for New Orleans and depicts the relationship between the cost difference between EPT and SR and the proportion of partners of the index patient who receive care from the same payer as the index. Negative values in the figure indicate EPT is less costly per patient. In sensitivity analyses, EPT was less costly than SR from all payer perspectives when counselling and data entry costs were eliminated; when counselling costs were applied to EPT alone, the payer-perspective cost of EPT was greater than SR for index women, but the additional cost was less than \$2600 per QALY gained over SR.

Conclusions EPT has a lower cost from a societal or health care system perspective than SR and treats more partners. Individual payers may find EPT to be more costly than SR, depending on how many of their patients' partners receive care from the same payer.



Abstract O2-S4.04 Figure 1 Payer-perspective cost difference per index patient: Expedited partner therapy (EPT)-standard referral (SR).

O2-S4.05 SEROSORTING BEHAVIOURS AND BELIEFS AMONG MSM AT AN URBAN LGBT HEALTH CENTER

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Background Serosorting, preferentially engaging in unprotected anal intercourse (UAI) with partners of the same HIV status, is practiced by some MSM as a risk reduction strategy.