Abstracts

P08.29 WEB-TOOL TO ASSESS THE COST-EFFECTIVENESS OF CHLAMYDIA POINT-OF-CARE TESTS AT THE LOCAL LEVEL

Introduction There is a lack of data on the sexual behaviour of patients between being tested for chlamydia, receiving the test result, and being treated. This time-period may be important in the transmission of chlamydia, as infection could continue to be spread to sexual partners whilst awaiting the test result and treatment.

We aimed to investigate the sexual behaviours of patients in this time-period in order to investigate the benefits a point-of-care test (POCT) might bring to clinical practice.

Methods A cross-sectional clinical audit of Genito-Urinary Medicine (GUM) clinic attendees in England. Clinic staff conducted a notes review of patients returning for chlamydia treatment following a positive chlamydia test result, and of age- and sex-matched chlamydia negatives attending for initial consultation. Initial consultation data were available for all patients; data on behaviour between test and treatment were available only for chlamydia-positives. The data also served as a sexual history taking audit for the GUM clinics, following British Association of Sexual Health and HIV (BASHH) guidelines.

Results Five of nine GUM clinics approached participated (July–December 2014). The sexual history BASHH auditable outcomes completion rates varied from 0–100%. 775 patients (442 females, 333 males) were included in analyses. Males with 2–4 partners, and those who reported never using a condom, were more likely to be chlamydia positive. For 21/143 (14.7%) positive patients who provided data, last sexual contact was in the period between test and treatment.

Conclusion The BASHH 97% data recording target was only consistently met for one of six auditable outcomes, indicating required improvements in sexual history recording by GUM clinics.

Patients continue to form new sexual partnerships whilst awaiting chlamydia test results, allowing for the possibility of infecting new sexual partners. POCTs which remove the test to treatment delay could prevent this onward transmission.

P08.30 CHLAMYDIA TESTS ORDERED, BUT NOT UNDERTAKEN: SOCIO-DEMOGRAPHIC AND STRUCTURAL BARRIERS IN GENERAL PRACTICE

Introduction Point-of-care tests (POCTs) can eliminate the delay between being tested for chlamydia and receiving the result and treatment, potentially reducing loss to follow-up. However, the cost-effectiveness of POCT implementation depends on multiple factors, including cost-per-test, clinic time, sensitivity and specificity, and the epidemiological impact of POCT testing on transmission.

Decision-makers consider a complex range of information when determining potential impact of introducing a POCT. To enable commissioners, providers, POCT manufacturers and others to assess the advantages, disadvantages and uncertainty of POCTs for chlamydia in different local settings, we developed a user-friendly web-based tool (POCTiC): www.poctic.uk.net

Methods The web-tool is underpinned by a transmission-dynamic model for chlamydia, which uses behavioural and prevalence data from the National Survey of Sexual Attitudes and Lifestyle (NatSAL), and reproduces local coverage and diagnosis rates from Public Health England datasets. A user group consisting of industry, sexual health facilitators, sexual health commissioners, clinicians, public health experts, and healthcare consultants, provided input throughout. The model is pre-run, but certain variables (e.g. costs) are user-determined.

Results Users can estimate changes in the number of infections and diagnoses occurring under different scenarios, with uncertainty ranges. This allows total costs, and cost per infection averted, to be calculated, while accommodating the considerable variation in chlamydia testing coverage, positivity, and diagnosis rates observed at the local level across England. The epidemiological impact of POC testing is dependent on both test performance characteristics and assumptions about the implementation of the test across local services.

Conclusion This tool enables the uncertainties surrounding chlamydia epidemiology and screening implementation to be explored. It also complements local and national knowledge, and contributes to local-level management of chlamydia infection. Users can use the tool to determine the epidemiological impact and cost-effectiveness of implementing POCTs in a particular setting.

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