

eSTI2 being embedded within NHS services, incorporating personal support from clinicians when necessary.

**Conclusions** Concern around long waits and lack of privacy within traditional settings created a barrier to STI testing for these young people. Electronic self-testing for STIs, linked to Internet/mobile-App based clinical management and support (eSTI2) and embedded within NHS services appears highly acceptable to this group of high-risk young people and could increase their access to STI testing and care.

#### 022.5 PROVIDING DISCRETE AND RELIABLE STD TESTING IN ALASKA VIA A WEB-BASED AT-HOME SERVICE

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**Background** Alaska has one of the highest rates of *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (GC) in the United States. Alaska Native people, women and youth (ages 15–29) are disproportionately affected. Alaska Native health organisations have jurisdictions over large geographic areas, containing small isolated communities where a perceived lack of confidentiality and privacy is an identified barrier to accessing Sexually Transmitted Disease (STD) testing. The Alaska Native Tribal Health Consortium (ANTHC) has partnered with the “*I Want the Kit*” programme (IWTK) at Johns Hopkins University (JHU) to provide a discrete and reliable STD testing alternative.

**Methods** Alaska residents 14 years of age and older can request a no-cost STD testing kit online or by phone, which is mailed via U.S. Postal Service. After collection, the kit is returned in a pre-paid envelope to JHU where it is tested for Chlamydia, gonorrhoea and Trichomonas. JHU reports all testing results to ANTHC, where a nurse notifies all participants of their results and refers positive cases for treatment. IWTK Alaska focuses its advertising efforts in rural Alaskan areas where the disease burden can be high and the barriers to accessing confidential health-care are greatest.

**Results** In 2012, JHU received a total of 439 home testing kit requests from Alaska of which 161 (37%) were returned. Alaska Native and/or American Indian participants comprised 30% and Whites 53% of kits tested; other minority groups made up the remaining 17% of kits tested. The ages of individuals who returned kits ranged from 16 to 63 years, with a median age of 28 years. Among the 161 kits tested, 14 (8.6%) tested positive for Chlamydia, two of these also tested positive for gonorrhoea, and four kits were positive for Trichomonas.

**Conclusion** This web-based STD testing option increases access to STD testing by alleviating privacy and confidentiality concerns.

#### 022.6 FIELD EVALUATION OF THREE POINT-OF-CARE TESTS FOR CHLAMYDIA AND GONORRHOEA IN REMOTE HEALTH SERVICES IN AUSTRALIA

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**Introduction** Control of sexually transmissible infections (STIs) can be compromised by delays in time to diagnosis and treatment. Point-of-care (POC) tests can provide results at time of consultation. We conducted field evaluations of three POC tests (one new molecular-based and two best-performing immunochromatographic tests [ICT] identified from preliminary laboratory evaluations) for diagnosis of gonorrhoea (NG) and chlamydia (CT) at selected remote health services in Australia to identify the most suitable device for a larger randomised trial.

**Methods** Urine specimens collected from patients attending health services for routine STI screening were aliquotted and tested onsite with: GeneXpert® CT/NG (simultaneous detection of CT and NG), Diaquick CT (CT only), and Gonorrhoea Card (NG only). We compared results to routine laboratory reference results (commercial nucleic-acid amplification test) and calculated sensitivity (Sn) and specificity (Sp) by standard methods. We assessed selected operational characteristics.

**Results** For GenXpert (n = 99): Sn and Sp for CT were: 100% (95% confidence interval [CI]: 56.1–100) and 98.9% (CI: 93.1–99.9); for NG: 100% (CI: 56.1–100) and 100% (CI: 95.0–100). For Diaquick (n = 50), Sn and Sp were: 42.9% (CI: 11.8–79.8) and 97.7% (CI: 86.2–99.9). For Gonorrhoea Card (n = 15), Sn and Sp were: 66.7% (CI: 12.5–98.2) and 75.0% (CI: 42.8–93.3). Urine volume required: GeneXpert = 1ml; both ICTs = 15ml. Mean preparation time: GeneXpert = 1 minute and ICTs = 18 minutes. Time to result: GeneXpert = 88 minutes, Diaquick = 10 minutes and Gonorrhoea Card = 15 minutes. Results from additional evaluation sites occurring in early 2013 will also be presented.

**Conclusions** The GeneXpert is highly accurate for detection of CT and NG from urine in these field settings. Similar performance has been reported from the laboratory. Despite longer time to results than traditional ICTs, the exceptional accuracy and operational benefits makes the GeneXpert device appealing for use where delays to treatment are frequent. This device will be further evaluated in a cluster-randomised controlled trial (TTANGO) to commence mid-2013.

#### 022.7 HOME-BASED SAMPLE COLLECTION INCREASES CHLAMYDIA RETESTING AND DETECTS ADDITIONAL REPEAT POSITIVE TESTS: A RANDOMISED CONTROLLED TRIAL IN THREE RISK GROUPS

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**Background** Chlamydia retesting at three months after treatment is recommended to detect reinfections, but retesting rates are low. We assessed the impact of combining home-collection with SMS reminders on retesting rates in three risk groups.

**Methods** A randomised controlled trial was undertaken, involving 600 participants diagnosed with chlamydia: 200 men who have sex with men (MSM), 200 women and 200 heterosexual men. Participants were recruited from two Australian sexual health clinics and randomised to the home group (3-month SMS reminder and home-collection) or the clinic group (SMS reminder). The mailed