**Methods** A comprehensive search of published studies was carried out in six electronic databases followed by a manual search of studies from references of selected papers. Data were extracted using a template. The results were synthesised, and a meta-analysis based on a random-effects model was conducted. Subgroup and sensitivity analyses were undertaken to explore sources of heterogeneity.

**Results** Of 30,273 citations, 14 studies with a total of 97,030 study participants were identified. The pooled CHTC uptake was 31.48% (95%CI: 23.55–40.00) with significant heterogeneity between studies ($I^2=99.98\%$, $p<0.001$). The Egger’s and Begg’s tests showed there was no evidence of publication bias ($p=0.08$). However, the sensitivity analysis showed that two studies highly influenced the overall estimate. After omitting these two studies, the pooled estimate for CHTC uptake was 24.05% (95%CI: 16.65, 32.34, $I^2=99.86\%$, $p<0.001$). The sub-group analysis indicated the pooled CHTC uptake was higher among pregnant women and their partners (OR=1.66, 95%CI: 1.58, 1.84) compared with heterosexual couples in general. Similarly, the uptake was higher when one person in the dyad first tested individually without the knowledge of their partner, and then suggested to their partner that they take CHTC together, compared to an approach of undertaking CHTC together as the first testing option for both people (OR=3.16, 95%CI: 2.69, 3.72).

**Conclusion** The findings confirmed that more than three-quarters of study participants who were in ongoing heterosexual relationships chose not to, or were unable to, undertake CHTC. These findings suggest people are cautious of what could amount to harmful risks when couples test together, particularly if their HIV sero-status is shown to be discordant. Further studies are required to explore how couples intend to use HIV testing services including CHTC.

**Disclosure** No significant relationships.

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**P012** A PROCESS EVALUATION OF AN INCENTIVIZED HOME-BASED INTERVENTION TO TEST AND START (HITS) IN RURAL KWAZULU-NATAL, SOUTH AFRICA

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Background Despite freely available HIV testing and treatment, many men do not access HIV testing and care in South Africa. We conducted home-based intervention to test and start (HITS) - a factorial design randomised controlled trial (ClinicalTrials.gov #NCT03757104). HITS is designed to assess the effectiveness of two financial micro-incentives (R50 [$3] food vouchers) for home-based HIV testing and, following a HIV-positive test, to link to HIV care; and/or a male-targeted counselling application to support home-based testing (EPIC-HIV) and to support men linking to care (EPIC-HIV2). The research was conducted in an HIV-hyperendemic setting in rural KwaZulu-Natal.

**Methods** We conducted a process evaluation to understand the impact of HITS intervention on the decision of men to test for HIV and/or engage in HIV care. Thirty men (16–73 years) were purposively selected in the three intervention arms (ten per arm) and interviewed between August and December 2018. Emerging themes were thematically analysed following an interpretivist approach.
Results Although participants welcomed the male-centred intervention, some felt that the voucher amount was too small. Overall, many participants described the voucher, EPIC-HIV, and the convenience and privacy of home-based testing as ‘catalysts’ to test or link to care irrespective of their reported intrinsic motivations to know their status or concerns around HIV related sexual risk behaviours. One-third of the interviewees were first-time testers. Despite the incentives, two out of the five men who tested positive reported that they have not linked to care because they feared stigmatisation at local clinics.

Conclusion Generally, the HITS intervention influenced men’s motivation to test and access care, but some respondents felt the incentive was insufficient to overcome some barriers of accessing HIV care at fixed clinics. To achieve the 90–90–90 targets among men in our setting, provision of decentralised, non-judgmental and convenient incentivised HIV care services could increase uptake of HIV testing and treatment.

Disclosure No significant relationships.

Background Clinical prediction rules (CPRs) estimate the probability of a health outcome to support decision-making in intervention and service delivery. Previously, a CPR was derived to maximize detection of chlamydia and/or gonorrhoea (CT/GC) infections and minimize the number of screening tests offered among asymptomatic women and heterosexual men attending sexually-transmitted infection (STI) clinics in Vancouver, British Columbia, Canada. We assessed the external validity of using this clinic-derived CPR within GetCheckedOnline (GCO), a provincial online STI testing program in British Columbia.

Methods Data used for calculating CPR scores, including age, race/ethnicity, number of sexual partners and previous CT/GC diagnoses, were collected prospectively on GCO from October 2015 to June 2018. Model calibration and discrimination were evaluated using the Hosmer-Lemeshow (H-L) statistic and the area under the receiver operating characteristic curve (AUC), respectively. Sensitivity and proportion of GCO clients screened were calculated at different CPR cut-off scores. In the original derivation population, the CPR had an AUC=0.74, with a cut-off risk score ≥6 identifying 91% of infections and screening 68% of testers.

Results Among 2703 GCO CT/GC test episodes, the prevalence of CT/GC infection was 2.1%. The clinic CPR showed reasonable calibration (H-L p=0.952) and discrimination (AUC=0.64, 95%CI: 0.57–0.71). Using a CPR cut-off risk score of ≥6, we would have detected 79% of infections and screened 64% of testers. Lowering the cut-off risk score to ≥4 would have increased sensitivity to 95% while screening 85% of testers.

Conclusion This is the first study validating the use of a clinic-derived CPR within an online setting. Our CPR showed reasonable accuracy and performance when applied to GCO data. Differences in model performance online compared with clinic-based settings highlight important differences in the populations who use online testing. Use of CPRs in online contexts offers unique and novel opportunities for public health and STI testing.

Disclosure No significant relationships.