## P311 EXAMINING INTERACTIONS WITH ONLINE OUTREACH WORKERS FOR GAY, BISEXUAL AND OTHER MEN WHO HAVE SEX WITH MEN

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**Background** As the Internet is increasingly becoming a platform for sexual health education, gay, bisexual and other men who have sex with men (GBM) are having greater interactions with online outreach workers. However, little is known about the content or their assessment of these interactions.
**Methods** Recruitment of GBM aged 14+ into the #iCruise study occurred across Ontario from 07/2017–01/2018 via socio-sexual websites/apps. Participants reported details about the interactions they had with online outreach workers including what health topics were discussed and gave an assessment of the interaction via Likert scale questions.
**Results** A total of 910 GBM who completed baseline cross-sectional data collection were eligible for this analysis. Half of participants (49%) reported being under age 30, 62% White, 65% gay-identified, 12% HIV-positive, 44% with some university education, and 12% living in rural areas. Among the sample, nearly 10% (9.7%, n=88/910) reported having ever interacted with an online outreach worker: of these, 37 (42%) reported one interaction, 38 (43%) reported 2–5 interactions, and 8 (9%) reported 6+ interactions; 5 (6%) unsure. Healthy sex (34%) and HIV/STI testing (e.g., where to get tested; 34%) were the most popular topics discussed, followed by HIV/STI prevention (27%), pre-exposure prophylaxis (PrEP) (19%), HIV/sexually transmitted infection (STI) transmission risk (17%), HIV/STI treatment and care (13%), condoms (11%) and lube (11%). When rating the outreach interaction, GBM reported: it was easy to understand (92%), gay/bisexual friendly (88%), relevant to gay/bisexual guys (87%), 'didn't make me feel bad about myself' (79%), applicable (72%), and the interaction had fully answered their question (74%). Over half of the participants reported the information was transgender friendly (56%) and relevant to trans guys (52%).
**Conclusion** A significant minority of GBM had interactions with online outreach that covered a range of health topics. These interactions were generally very positive and rated understandable, applicable, and inclusive.
**Disclosure** No significant relationships.

## P312 EVALUATION OF AN ANTIRETROVIRAL THERAPY (ART) INTERRUPTION ALERT AND REFERRAL SYSTEM IN BRITISH COLUMBIA (BC), CANADA

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**Background** In mid-2016, the BC HIV Drug Treatment Program (DTP) expanded its province-wide prescriber alert system for ART interruptions to include direct referrals to public health offices for persons off treatment for >4 months. We examined outcomes before and after launch of this Re-Engagement and Engagement in Treatment for Antiretroviral Interrupted and Naïve populations (RETAIN) Initiative.
**Methods** We analyzed adult, DTP participants with ART interruptions triggering a physician-directed alert (ART refill >2 months late) in pre-RETAIN (Jul-2013 to Apr-2016) and post-RETAIN (May-2016 to Oct-2017) periods, based on the first alert issued within the study period. Follow-up continued until Oct-2018, excluding persons who moved or died within 90 days of an alert being sent. We compared the proportion of persons who were linked to care, re-started ART, or achieved viral suppression in the pre- and post-RETAIN periods, and the time to ART re-initiation using a generalized estimating equation model.
**Results** There were 3219 alerts sent for 1805 patients, 1374 related to first interruptions in the pre-RETAIN period and 431 post-RETAIN. Of these, 135/431 (31%) post-RETAIN cases were referred to public health within 4 months following the first alert. Patients were predominantly male (74%) with a median age of 47 years. We found no statistically significant differences in the proportions of persons who were linked to care (83% vs 83%), re-started ART within 4 months (73% vs 74%), or achieved viral suppression (61% vs 62%) between the two periods. Among persons who re-initiated ART >4 months following the initial alert, the median (Q1-Q3) time to ART restart declined significantly from 9 (6–15) months pre-RETAIN to 8 (6–11) months post-RETAIN (p=0.004), possibly influenced by public health intervention.
**Conclusion** We observed shorter time to re-initiation after the introduction of referrals for public health support. Similar systems could be considered in other jurisdictions.
**Disclosure** No significant relationships.

## P313 THE ROLE OF TEMPORAL DISCOUNTING IN A CONDITIONAL CASH TRANSFER INTERVENTION TO IMPROVE ENGAGEMENT IN HIV-CARE

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**Background** Understanding the mechanisms underlying health behaviors is crucial to optimize interventions to improve HIV-related outcomes. Temporal discounting (TD), the tendency to discount the value of future rewards relative to rewards received closer to the present, may lead to risky health behaviors. Conditional cash transfer (CCT) interventions were developed in part to mitigate these effects. Despite this, few studies assess the direct role of TD on the effect of CCT interventions on HIV treatment and prevention.
**Methods** Using data from a randomized controlled trial among 433 HIV-infected pregnant women in the Democratic Republic of Congo, we assessed three outcomes:1) retention to HIV care, 2) uptake of services for the prevention of mother-to-child transmission (PMTCT), and 3) viral suppression at 6 weeks postpartum. We used a delay discounting task to measure TD at baseline. We hypothesized that if CCT works by mitigating the harmful effects of TD, we would observe a positive interactive effect on the additive scale between high TD and CCT. We specified linear binomial regression models

to calculate the individual and joint effects of CCT and TD, and we calculated the interaction contrast (IC) to illustrate possible interaction between these effects.
**Results** The effect of CCT on uptake of PMTCT services was greater among women exhibiting high TD. The IC suggested a positive interactive effect between TD and the CCT intervention on uptake of PMTCT services (IC: 0.17; 95% CI: -0.15, 0.48). We observed no evidence of additive interaction between TD and the CCT intervention on retention or viral suppression.
**Conclusion** This CCT intervention may help mitigate the harmful effects of TD on uptake of PMTCT services, though this mechanism did not appear to play a role for retention or viral suppression. Alternative approaches could be developed to address the effects of TD on HIV-related outcomes.
**Disclosure** No significant relationships.

## P314 IDENTIFYING KEY STAKEHOLDERS AND THEIR ROLES IN THE INTEGRATION OF POCTS FOR STIS INTO CLINICAL SERVICES

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**Background** Despite potential to positively impact patient management, sequelae, and patient perceptions of services, few point-of-care tests (POCTs) to diagnose sexually transmitted infections (STIs) have been implemented into sexual health services (SHSs). Qualitative, in-depth research can be used to identify who the decision-makers are for adopting and implementing STI-POCTs in UK SHSs, and better understand these decision-makers' roles in these processes.
**Methods** We conducted a secondary analysis of data collected in two studies (*Precise* and *Facilitators to Adoption)*. Based on their self-identified role in the POCT adoption process, sexual healthcare professionals (HCPs) were invited to in-depth interviews and workshops where participant observation notes were taken. Using these data, we defined key stakeholders and, using a thematic approach in NVIVO 11, we explored the process of POCT integration into their services.
**Results** 8 SHS workshops took place in 2017 and 37 interviews in 11 UK SHS took place between 2015 and 2018. Participants included clinicians, nurses, clinic managers, laboratory staff and clinical commissioners. Lead clinicians and managers self-identified themselves as key stakeholders for the decision to purchase, while nurses self-identified themselves as change champions for POCT implementation following adoption. Although many participants considered senior clinical staff most likely to introduce and drive change, participants stressed the importance of engagement of all clinical staff, particularly when tackling resistance to change.
**Conclusion** Our data suggest that supportive interpersonal relationships, such as between clinical leads and commissioners when considering adoption, and between all levels of clinical staff during implementation, must be considered to ensure the successful integration of POCTs in SHSs.
**Disclosure** No significant relationships.

## P316 STRUCTURE-BASED DRUG DESIGN FOR *NEISSERIA GONORRHOEAE, CHLAMYDIA TRACHOMATIS,* AND *MYCOPLASMA GENITALIUM*

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**Background** The UW-STI consortium seeks to develop novel antimicrobials for the treatment of syndromically similar infections caused by *Neisseria gonorrhoeae* (GC), *Chlamydia trachomatis* (CT), and *Mycoplasma genitalium* (MG).
**Methods** We utilize a structure-based validation pipeline embedded with a gated series of criteria for progressing druggable enzyme targets, and for identifying and advancing compounds active against these protein targets. The pipeline includes orthologous and essential enzyme target identification, structure determination, compound library screening, antimicrobial susceptibility testing, hit optimization, and chemical-genetic target validation.
**Results** To date, we have identified over 80 enzyme candidates that are essential, single copy genes in both GC and MG; 7 GC structures, 1 CT structure and 1 MG structure have been solved by crystallography, and soluble expression has been achieved for 19 GC, 20 CT, and 3 MG recombinant enzymes. Several structures common to two bacteria have been solved including tryptophan-tRNA synthetase, lysyl-tRNA synthetase, and ribose-5-phosphate isomerase A/B. Phenylalanyl-tRNA synthetase (PheRS) is among our highest priority targets and is presented as a proof of concept for multi-organism drug development. PheRS is a validated drug target with divergence from its human counterpart, as modeled by the group. In lieu of crystal structures, the GC PheRS alpha and beta complex was modeled using the Rosetta software suite. Multiple cloning and expression strategies have been employed including surface mutations, solubility tags, engineered truncations, and co-expression of both subunits, in hopes of producing crystals. A PheRS001 inhibitor was synthesized from published literature and proved active against GC PheRS with an $IC_{50}$ of 93 nM, and in antimicrobial testing against all three bacteria: 120 µg/ml (CT MIC) and 18 µg/ml (MG and GC MIC).
**Conclusion** PheRS is a promising example of our pipeline capabilities in our three-pronged approach to produce 5–10 therapeutic leads and aid in the global fight against antibiotic resistance in sexually-transmitted bacterial infections.
**Disclosure** No significant relationships.