

PrEP prescription, and if they seroconverted, from 2015–2018.

**Results** Over 50,000 unique patients were included, with median age 30.5; patients were 48% White, 47% men who have sex with men (MSM), and 7% transwomen. Overall, there were 14.6 patients on PrEP for each incident HIV infection (PrEP:Need). PrEP:Need was 24.5 among White patients, compared to 6.6 among Black patients. PrEP:Need was low for Medicaid/Medicare patients (7.9), transwomen (10.0), and particularly Black transwomen (4.6). Low PrEP:Need ratios were usually driven by low Identification:Need ratios, with large differences: among MSM, 23.2 patients were indicated for PrEP per incident infection compared to 7.2 among transwomen. Uptake, measured by PrEP:Identification ratios, were lowest among patients without insurance and highest among those with private insurance.

**Conclusion** We found high variation in PrEP:Need ratios across race, gender, and insurance status. This may be due to a poor fit between current PrEP indications and actual HIV incidence in key populations; there may also be gaps in patient-provider communication and documentation of PrEP indications in certain populations. We also found evidence of barriers to uptake, particularly related to insurance status. We will discuss ways to improve PrEP detection and uptake, which attendees can apply to their practice.

**Disclosure** No significant relationships.

#### 010.2 IMPACT OF HIV-PRP FOR FEMALE SEX WORKERS ON COMMUNITY-WIDE AWARENESS, UPTAKE, AND PERCEPTIONS IN A RURAL-AREA KWAZULU-NATAL

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10.1136/sextrans-2019-sti.159

**Background** Between 2016–2018 a targeted roll-out of pre-exposure prophylaxis (PrEP) for 15–24-year-old female-sex-workers (FSW) was conducted in a sub-district of rural KwaZulu-Natal, South Africa where antenatal HIV-prevalence is 40%. We use an HIV-prevention cascade framework to understand how implementation impacted the first two steps at a population-level, i.e. demand for, access to and community members' attitudes towards PrEP.

**Methods** We conducted participatory community mapping of four purposively sampled communities and enrolled a representative nested cohort of adolescent girls and young women (AGYW) aged 13–22 in 2017–2018. We conducted group discussions (14), key-informant interviews (9), in-depth interviews (94) and participatory observations (4). All interviews were recorded, transcribed and analysed using thematic content analysis.

**Results** Among n=2184 AGYW in the nested cohort, n=965 reported being sexually active, of whom 13.4% reported transactional-sex and 10.6% sex-for-money (therefore PrEP-eligible). PrEP awareness significantly increased from 2% in 2017 to 9% in 2018 (p<0.001). Among PrEP-eligible AGYWs

(n=194), 11.3% were aware of, and <1% had used PrEP. Interview respondents were generally unaware of PrEP but imagined it would benefit young people, discordant couples and those with long-distance partners. Condoms were described by young people as undesirable, 'killing your babies' or 'eating sweets in a wrapper', in contrast to PrEP which '...will be in their system' so not act as a barrier. Teachers and healthcare providers were apprehensive: while acknowledging PrEP's effectiveness, they worried it would lower personal responsibility for sexual health (e.g., abstinence, condoms). Targeting FSWs was portrayed as further stigmatizing PrEP, already tarnished by association with HIV.

**Conclusion** The narrow focus of public-sector PrEP contributed to implementation challenges in this high HIV-prevalence setting. PrEP reach was low, even amongst self-identifying eligible FSW. Community-based approaches to PrEP education and provision, including engagement of youth and key stakeholders, may help improve demand for, access to, and optimise the PrEP cascade.

**Disclosure** No significant relationships.

#### 010.3 HIGH CURABLE STI PREVALENCE AND INCIDENCE AMONG YOUNG AFRICAN WOMEN INITIATING PREP IN HPTN 082

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10.1136/sextrans-2019-sti.160

**Background** African women face overlapping HIV and STI risks. PrEP programs among men who have sex with men have seen high STI incidence, but few data from African women taking PrEP are available

**Methods** HPTN 082 was conducted in Cape Town, Johannesburg (South Africa) and Harare (Zimbabwe) to evaluate uptake and adherence to daily oral PrEP in young African women. Sexually active HIV-negative women ages 16–25 were enrolled. Enrollment vaginal swabs were tested for gonorrhoea (GC) and chlamydia (CT) by nucleic acid amplification, and trichomonas (TV) by rapid test. Syphilis serology was assessed. All women with positive test results received treatment. Repeat testing was conducted at 6 and 12 months.

**Results** Of the 412 women who initiated PrEP, median age was 21 years, 84% reported a primary sex partner and a median of 4 vaginal sex acts (IQR 2,8) in the prior month; 35% reported that they never or rarely used condoms. At enrollment 29% of women had CT, 8% GC, 7% TV and 2% reactive syphilis serology. STI incidence was 29.6 per 100 person-years (py) for CT (95% CI 24.3, 35.4), 11.8 per 100 py for GC (95% CI 8.7, 15.7), and 7.1 per 100 py for TV

(95% CI 4.7, 10.2). The majority of incident STIs were new infections: 79 of 119 CT infections, 41 of 48 GC infections, and 23 of 29 TV infections diagnosed were in women who did not have these infections at enrollment. The majority of these infections were asymptomatic.

**Conclusion** The prevalence and incidence of treatable STIs were high among young African women initiating PrEP. Diagnostic STI testing is important and innovative strategies that reduce STI acquisition, complications, and their potential impact on future fertility, need evaluation within the context of PrEP services where currently syndromic STI management is the standard of care.

**Disclosure** No significant relationships.

#### 010.4 SCALING UP HCV SCREENING AND TREATMENT FOR ELIMINATING HCV AMONG MSM IN UK IN THE ERA OF HIV PRE-EXPOSURE PROPHYLAXIS

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10.1136/sextrans-2019-sti.161

**Background** Routine HIV pre-exposure prophylaxis (PrEP) and HIV care appointments provide opportunities for screening men who have sex with men (MSM) for hepatitis C virus infection (HCV). However, levels of screening required for achieving the WHO elimination target of reducing HCV incidence by 90% by 2030 among all MSM are unknown.

**Methods** An HCV/HIV transmission model was calibrated to UK prevalence of HIV (5.9%) and chronic HCV infection among HIV-positive MSM (10.0%). Assuming 12.5% coverage of PrEP among HIV-negative MSM, we evaluated the impact on HCV incidence (2018–2030) of HCV screening every 12/6/3-months (and completing treatment within 6 months of diagnosis) in PrEP users and/or HIV-diagnosed MSM. We then estimated the additional screening required among HIV-negative non-PrEP users to achieve a 90% reduction in overall incidence by 2025/2030. The effect of a 50% reduction in condom use among PrEP users (risk compensation) was estimated.

**Results** Without risk compensation, PrEP scale-up decreases HCV incidence by 9.5% by 2030, whereas it increases by 26.5% with risk compensation. Screening and treating PrEP users for HCV every 12/6/3-months decreases HCV incidence by 41/46/48%, respectively, increasing to 74/81/83% if HIV-diagnosed MSM are also screened at the same frequencies. Risk compensation reduces these latter projections by <5%. To achieve a 90% reduction in HCV incidence by 2030 (values in bracket are with risk compensation), HIV-negative MSM not on PrEP require screening every 5.2 (4.5) years if MSM on PrEP and HIV-diagnosed MSM are screened every 6-months, decreasing to every 2.6 (2.3) years for the 2025 target. For 25% PrEP coverage, then the 2030 HCV

elimination target may be reached without screening HIV-negative MSM not on PrEP.

**Conclusion** Increased screening of all MSM (particularly HIV-diagnosed MSM and MSM on PrEP) is required to achieve the WHO HCV-elimination targets for MSM in the UK.

**Disclosure** No significant relationships.

#### 010.5 PATTERNS OF HIV PRE-EXPOSURE PROPHYLAXIS CARE ONE YEAR AFTER INITIATING PREP, BALTIMORE CITY, MARYLAND 2015–2018

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10.1136/sextrans-2019-sti.162

**Background** Persistent HIV pre-exposure prophylaxis (PrEP) use is critical to preventing HIV acquisition. U.S. Centers for Disease Control and Prevention (CDC) recommends quarterly clinical evaluation for individuals using PrEP. Individual-level adherence to quarterly PrEP-care visits is largely unknown. Our objective was to describe patterns of quarterly PrEP-care visit attendance among individuals enrolled in a large demonstration project to increase PrEP delivery in Baltimore City, Maryland.

**Methods** The project was a collaboration between a city health department, an academic evaluation partner, 6 clinical sites and one community based organization (CBO). Demographic and quarterly PrEP-care visit information from individuals initiating PrEP between October 1, 2015 and August 31, 2017 was abstracted from medical records using standardized forms. Participants were followed for one year. PrEP-care was categorized as ‘Persistent’ (attending all quarterly PrEP-care visits), ‘Episodic’ (missing  $\geq 1$  PrEP-care visit and re-engaging PrEP-care visit), or ‘Discontinued’ (lost to follow-up after missing  $\geq 1$  PrEP-care visit).

**Results** During the study period, 333 individuals initiated PrEP, among whom 52.9% (176) were Black/African-American, 82.3% (274) cisgender male, 73.6% (245) men who have sex with men (MSM), and 47.7% (159) aged 25–24 years. 9.0% (30), 40.5% (135), and 50.5% (168) were persistent, episodic and discontinued PrEP-care users, respectively. Over half (51.1%, 69/135) of episodic users missed the first quarterly visit; mean time to PrEP re-engaging was 6.3 months (SD: 2.18). About half (45.2%, 76/168) of those discontinuing PrEP-care did so within 3-months.

**Conclusion** Over one year, < 10% of individuals initiating PrEP were persistently in PrEP-care, and half discontinued PrEP-care completely. This suggests PrEP’s effectiveness in