follow-up time was 472 days (sd 292 days). Homelessness was associated with lower odds of GC-CT testing during follow-up (aOR 0.60; 95% CI 0.40, 0.96 p-value 0.032). 28% of first GC-CT tests were positive in homeless vs. 12% in housed patients (p-value 0.025).

**Conclusion.** Homeless patients had a higher rate of positive GC-CT on first test but lower odds of having GC-CT testing at primary care visits despite controlling for visit frequency, recent testing and history of positive GC-CT. Further evaluation of disparities in GC-CT testing for homeless patients is warranted.

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**2255. Earlier Detection of Latent Syphilis: Every 3 Month Screening with MSM and HIV**

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**Background.** Since this data was last presented, there has been a continued resurgence of syphilis despite increasing screening efforts, especially neurosyphilis and an increased number of high-risk populations, such as men who have sex with men (MSM) and those infected with HIV. In 2015, based on data from an older Australian study and a recent Canadian study, the screening recommendation changed from yearly to every 3–6 months. We determined that high-risk patients should be screened even more frequently, at least every 3 months, to identify patients earlier in the disease course and prevent the development of symptomatic syphilis.

**Methods.** A retrospective chart review of the HIV Clinic Care Registry at the Jerry L. Pettis Memorial VA Medical Center (JLPP VAMC) was conducted from 2002 to 2016. Patients were classified according to the stage of syphilis, epidemiologic characteristics, and HIV control. In 2004, screening with RPR was changed from yearly to every 3 months.

**Results.** From 2002 to 2016, among HIV-infected men, there were 155 cases of syphilis, 126 indigent individuals. Of these, 16 (12.5%) were before the implementation of RPR in 2004. 62.3% (5) were symptomatic at the time of diagnosis. After increasing the screening to every 3 months, only 41.6% (62) had symptomatic infection. The majority of subjects were MSM (81%) and Caucasian (71%). Sixty-nine percent of patients who developed infection had a history of prior infection. As many as 54.8% of patients had a viral load <50 copies/mL and 57.1% had CD4 counts of over 400. There were 27 cases of neurosyphilis, with 33% having ocular involvement. Among patients with neurosyphilis, 19% had an RPR in 3 months, and 31% had not had an RPR in 6 months. Primary and secondary syphilis incidence rates in San Bernardino compared with San Bernardino in 2015 were 8.4 and 389 per 100,000 respectively.

**Conclusion.** This study showed a significant decrease in the amount of symptomatic syphilis with every 3-month screening compared with yearly screening. This is important for preventing progression to neurosyphilis, especially ocular involvement, given the higher morbidity associated with neurosyphilis, and it allows for earlier treatment. This study provides information on ocular and neurological complications, but data on cochleovesibular dysfunction is limited. Otosyphilis is a potentially reversible cause of hearing loss in HIV infected individuals.

**Disclosures.** All authors: No reported disclosures.

**2256. Self-Testing Is a Feasible and Acceptable Option for Identifying Extra-genital Gonorrhea (GC) and Chlamydia (CT) Infections in HIV-Infected Persons**

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**Background.** Compliance with guidelines recommending extra-genital testing for GC/CT in HIV-infected men who have sex with men is variable. Proposed barriers to testing, such as patient reluctance and provider discomfort, could be eliminated by self-testing. In this study, we evaluate the feasibility and acceptability of extra-genital self-testing and assess the adequacy of an oral rinse for the diagnosis of GC/CT infections.

**Methods.** HIV-infected subjects receiving care at one of three military treatment facilities participated in this study. Subjects received standardized instructions on sample collection and participated in a questionnaire designed to evaluate acceptability of provider swabs. Subjects underwent testing by their provider. Gen Probe Aptima Combo 2 assay was used for testing the swabs and the rinse.

**Results.** A total of 148 HIV-infected subjects (median age 43 years, 40% African-Americans and 35% Caucasians) enrolled in the study. Test results are tabulated below. Of the 12 oral rinses tested, 6 (4.7%) positive tested for GC and 4 for CT (0.8%). Of the 6 rinses testing positive for GC, 2 tested negative on the concurrently collected swabs, and 1 swab testing positive for GC was negative on the rinse. Of note, 2 swabs testing positive for GC on self-collection but negative on provider swabs tested positive on the rinse. Over 95% of the subjects indicated that they understood the instructions and had collected the swabs as instructed. Most subjects (98%) indicated that they were comfortable collecting the swabs and oral rinses at home. Approximately15% of the subjects preferred that their providers collected the swabs.

**Conclusion.** In this study, self-collected samples yielded more positive results than provider collected samples, and the performance of oral rinses and pharyngeal swabs were similar. Our results suggest self-testing is a feasible and acceptable method for testing in general samples. Adoption of self-testing could improve compliance with the guidelines.

**Test Results By Anatomical Site and Collection Method**

| Provider Self | Self | Provider |
|----------------|-----|---------|
| Rectal GC5 (3.4%) (3.4%) | Concordant Pharyngeal B (5.4%) (4.1%) | Discordant GC |
| Rectal CT (2.7%) (4.1%) | Discordant Pharyngeal A (0.7%) (2.1%) | Discordant CT |

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**2257. Clinical Characteristics and Outcomes of Patients with OtoSyphilis and HIV Infection**

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**Background.** The increased rates of syphilis in HIV infected individuals has provided information on ocular and neurological complications, but data on cochleovesibular dysfunction is limited. Otosyphilis is a potentially reversible cause of hearing loss in HIV infected individuals.

**Methods.** We performed a retrospective chart review from 2007 through 2016 and identified six patients who met inclusion criteria of a diagnosis of otosyphilis and HIV infection. We collected the following data: demographics, clinical characteristics, laboratory findings, treatment courses, and outcomes.

**Results.** We identified a total of six patients with HIV and otoSyphilis. All patients were male with a mean age of 36 (range 23–53) without known predisposing factors for hearing loss. The mean CD4 count was 323 (range 17–547) with all but two patients having a viral load of less than 50 copies. Four of the patients were receiving combination antiretroviral therapy at the time of diagnosis of otoSyphilis. All patients had a normal T. pallidum reagin (TPR) titer of at least 1:16 (range 1:6–1:128). Three patients presented with unilateral hearing loss and two with bilateral; with one patient having just vestibular dysfunction. The mean duration of symptoms prior to presentation was about seven weeks (range one week to 16 weeks). Three of six patients had objective hearing loss on audiometric testing, one had no detectable hearing loss, and two did not have formal audiometric testing. All had lumbar puncture performed at diagnosis with a CSF mean white blood cell count of 23 (range 0–129) and a mean total protein level of 38 (range 28–57). Only one patient had a positive CSF VDRL test. Five patients were treated with intravenous penicillin for 14 days and one with ceftriaxone for 14 days due to a penicillin allergy. Five patients received a corticosteroid taper. Three out of the six patients noted subjective hearing improvement with treatment in six months.

**Conclusion.** HIV infected patients with a diagnosis of syphilis should be asked screening questions to identify hearing symptoms or vestibular dysfunction, as otoSyphilis is an important cause of reversible hearing loss.

**Disclosures.** All authors: No reported disclosures.

**2258. Risk Factors Associated with Sexually Transmitted Infections among Pre-Exposure Prophylaxis Users in an Urban Multi-Clinic Healthcare System**

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**Background.** Compliance with guidelines recommending extra-genital testing for GC/CT in HIV-infected men who have sex with men is variable. Proposed barriers to testing, such as patient reluctance and provider discomfort, could be eliminated by self-testing. In this study, we evaluate the feasibility and acceptability of
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Background. While the efficacy of Pre-Exposure Prophylaxis (PrEP) in the prevention of HIV is well established in clinical trials, its utility in clinical practice needs to be defined. In contrast to lifelong HIV treatment, the use of PrEP should be only for those who remain at continued risk of HIV infection. Using sexual transmitted infection (STI) diagnosis as an indicator of continued high-risk sexual behavior, this study aimed to evaluate risk factors associated with STIs in PrEP users in New York City.

Methods. This retrospective cohort study included electronic health records of patients who initiated PrEP at Mount Sinai Health System from 2013 to 2016. Patients were screened for syphilis and urethral, rectal and pharyngeal gonorrhea and chlamydia every 6 months with additional testing at providers’ discretion.

Results. During the study period, 599 patients (95% male) initiated PrEP at 34.3 years of age on average (SD=9.8; range=17–75). Of the 516 with information on sexual orientation, 91% was MSM, 17% Hispanic, and 12% Black. Nearly 35% of the 450 tested for STIs had at least one STI with 9% receiving 3 or more positive results. A total of 278 STIs were detected over 460 person-years of follow-up among 328 patients with a known PrEP initiation date; STI incidence was 39.7/100 person-years (95% CI: 48.68–70.63). There were no significant differences by race or ethnicity. Rectal STIs were significantly higher among those aged 25–30 (P < .01) than the other age groups and among those with PrEP-AP or Medicaid insurance coverage (P < .05) compared with private insurance. A greater number of men who reported alcohol or drug use tested positive for STIs than men who did not report substance use (P < .05). Adjusted logistic regression analysis showed the odds of being diagnosed with any STI or a rectal STI were 1.78 (95% CI: 1.14–2.77) and 2.56 (95% CI: 1.30–5.05) times among those reporting substance use.

Conclusion. STI incidence, including rectal STIs, was significantly higher among men who reported alcohol or drug use. This study highlights a group within this cohort of PrEP users that remain at high risk for HIV and would benefit from continued adherence to PrEP as well as enhanced counseling on substance use and reducing high-risk sexual behaviors.

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2259. High Rate of Asymptomatic Bacterial Sexually Transmitted Infections (STIs) in Men Who Have Sex with Men on Pre Exposure Prophylaxis (PrEP)
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Background. High rates of bacterial STIs have been reported in high-risk MSM receiving tenofovir/emtricitaine (TDF/FTC) pre-exposure prophylaxis against HIV (PrEP) in clinical trials. However, systematic screening for STIs may amplify the diagnosis of asymptomatic infections in this population. We report the results of STI incidence in MSM enrolled in a PrEP program in Lyon University Hospital.

Methods. All patients addressed for PrEP in the department were enrolled. Baseline assessment included HIV serology, serum creatinine and STI screening (syphilis, HAV, HBV and HCV serology and N. gonorrhoeae/C. trachomatis PCR assay on urine, anal and pharyngeal swab). HIV test, creatinine, bacterial STIs and HCV screening were repeated every 3 months. Incidence rates were determined per 100 patient-year (/100PY).

Results. From January to September 2016, 211 patients were enrolled. All patients were MSM reporting unprotected anal sex (median age 36.4 years). Median condom use was 50%. 6% were escorts or prostitutes, 46% participate in sex parties, 53% used chemsex. Nine patients did not start PrEP, including 3 patients with HIV primary infection at baseline. 32 patients were lost to follow-up (FU). Median FU was 6.3 months for the remaining 170 patients (97 PY). No patient acquired HIV and 3 patients had acute HCV during FU.

Conclusion. A high prevalence and incidence of bacterial STIs were observed in high-risk MSM engaged in a PrEP program. All prevalent STIs and 80% of incident STIs were asymptomatic. Frequent screening and test of asymptomatic STI are warranted to reduce the spread of STIs in this population.

| STI history (%) | Baseline prevalence (%) | Incidence rate (/100PY) |
|----------------|-------------------------|------------------------|
| Syphilis       | 37.9                    | 3.8 (0)                | 14.8 (18.7)          |
| N. gonorrhoeae | 48.2                    | 7.6 (0)                | 58.7 (22.5)          |
| Anal           | 3.9 (0)                 | 22.5 (0)               |
| Urine          | 1.0 (0)                 | 12.0 (41.2)            |
| C. trachomatis | 3.9 (0)                 | 34.4 (25.0)            |
| Pharyngeal     | 40.5                    | 47.8 (16.0)            |
| Urine          | 1.0 (0)                 | 9.6 (0)                |
| Anal           | 5.8 (0)                 | 8.4 (30.0)             |
| All bacterial STIs | 74.2                  | 16.5 (0)               | 86.5 (19.7)          |

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2260. Improving Extra-genital GC/CT Screening Among HIV-positive Patients at the University of North Carolina Infectious Diseases Clinic
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Background. Asymptomatic rectal and pharyngeal gonococcal (GC) and chlamydial (CT) infections are common among HIV-positive men who have sex with men (MSM) and women. However, screening for extra-genital gonococcal and chlamydial infections among HIV-positive patients is low. While urigenital screening is more common, this method may miss more than 70% of extra-genital infections among MSM and more than 15% of rectal infections among women.

Methods. We initiated a quality improvement project with 4 plan-do-study-act (PDSA) cycles, beginning in 3/2016, to increase screening for extra-genital infections among HIV-positive patients attending the UNC Infectious Diseases clinic by 10%. The first PDSA cycle initiated nurse-based counseling on GC and CT testing. The second PDSA cycle increased verbal nursing prompts to providers about screening for extra-genital GC and CT. The third cycle placed screening supplies out on Mayo stands in each examination room. The final PDSA cycle introduced a self-screening program for extra-genital sample collection. Our outcome of interest was the percentage of patients seen in clinic in the prior 12 months who had screening for GC and CT in that same 12-month period. We also assessed the acceptability of self-collection of extra-genital samples with an anonymous survey.

Results. For the year prior to the initiation of PDSA cycles, 33% of patients were screened for GC and CT at any anatomic site. Since the initiation of the PDSA cycles, screening at any site increased to 40%. For MSM, screening increased from 44% in the year prior to project initiation to 52%. Of 35 patients who underwent self-screening and completed an acceptability survey, over 90% agreed or strongly agreed that screening was easy, that they preferred to collect their own samples, that they would collect their own samples at home, and that they would recommend self-screening to a friend.

Conclusion. We observed a 7% increase in GC and CT screening since the initiation of our quality improvement project. Self-collection of extra-genital GC and CT samples is an acceptable screening method and may have potential to further increase screening with both in-clinic and at-home sample collection, especially when combined with interventions that prompt routine screening.