from the pre-intervention period was abstracted from clinic records. Multilevel logistic regression models with random intercepts to account for clustering within clinics were used to compare rates of syphilis case detection (number of confirmed positive cases over the total number of clinic attendees) in the 6-month periods prior to and during the intervention. Estimates were adjusted for age and sex of clinic attendees.

**Results** A total of 7900 patients (49.0% male; 17.7% under the age of 25) sought care at one of the five STD clinics over the course of the study. Adjusted odds of a positive syphilis screen were greater during the intervention period compared to the pre-intervention interval (odds ratio, 1.33; 95% confidence interval, 1.14–1.56). Variability in clinic-level effects were substantial given the small number of sites of this pilot study.

**Conclusion** Results of a conditional pay-for-performance pilot study demonstrate the feasibility and preliminary effectiveness of a conditional P4P strategy to improve syphilis case detection in Chinese clinical settings. Plans are underway for a fully powered randomized trial, findings from which could inform the utility of this approach for improving detection of common STDs in other resource constrained settings.

**Disclosure** No significant relationships.

---

**P725 FREQUENCY AND CHARACTERISTICS OF BIOLOGIC FALSE POSITIVE TESTS FOR SYPHILIS, REPORTED IN FLORIDA AND NEW YORK CITY, 2013–2017**

James Matthias*, Ellen Klingler, Julia Schillinger, Thomas Peterman, Craig Wilson. 1Centers for Disease Control and Prevention, Tallahassee, USA; 2New York City Department of Health and Mental Hygiene, New York City, USA; 3Centers for Disease Control and Prevention, New York City, USA; 4Centers for Disease Control and Prevention, Division of STD Prevention, Atlanta, USA; 5Florida Department of Health, STD and Viral Hepatitis Section, Tallahassee, USA

**Background** Biologic false positive (BFP) non-treponemal test results, defined as specimens with reactive non-treponemal (NT) and non-reactive treponemal test results are received and processed by United States public health surveillance programs. Non-treponemal BFPs can be attributed to a variety of infectious and non-infectious diseases. However, little is known about the distribution of BFP NT titers. We describe the frequency, NT titer distribution, and descriptive characteristics of people with BFP NT results reported in Florida and New York City (NYC).

**Methods** Reactive NTs and BFPs (reactive NT test and non-reactive treponemal test results) were extracted from Florida’s and NYC’s sexually transmitted diseases surveillance systems for 2013–2017. Results were de-duplicated by specimen collection date, test type, and titer value. For individuals, BFPs were stratified by site, patient characteristics, and highest reported titer during study period.

**Results** A total of 52,654 reactive NTs were reported. Among these were 57,850 BFPs (28,183 Florida and 29,397 NYC), 11% of all reactive NTs, from 39,920 individuals (19,313 Florida and 20,607 NYC).Titers of 1:1 accounted for 55% (n=31,580) of all BFPs, but 5,250 (9%) were ≥1:8, including 654 (1.1%) ≥1:32. Persons with BFP were most often women 68% (n=27,161/39,920). Individuals 40+ years were at increased odds (OR 2.12; 95% C.I. 1.78–2.55) of having a high titer BFP (≥ 1:32 titer).

**Conclusion** Syphilis BFPs (non-cases) account for a substantial number of reported tests that require processing. Some countries classify titers ≥1:8 as presumptive syphilis without treponemal testing, thus may over-count cases. Areas requiring both treponemal and NT tests for syphilis case reporting may benefit from requiring laboratories to report negative treponemal tests when they are associated with reactive NT tests. Review of patient histories might identify underlying conditions that contribute to high-titer BFP results.

**Disclosure** No significant relationships.