women without a change in the proportion positive by culture, suggesting that screening for gonorrhea by nucleic acid amplification test (NAAT) is not recommended in low prevalence populations due to low specificity of detection. This study aimed to identify whether there is a change in the rates of gonorrhea positivity by culture in heterosexual men in Victoria, consistent with increased notifications.

Methods Three data sources from 2007 to 2014 were used: notification data from the Victorian Department of Health, Medicare Item numbers for single and duplex chlamydia NAATs, and the proportion of new patients attending Melbourne Sexual Health Centre (MSHC) with gonorrhea diagnosed by culture. Multivariate logistic regression analyses were used to examine the association between gonorrhea positivity and known risk factors.

Results Gonorrhea notifications by NAAT in heterosexual men in Victoria increased from 38 in 2007 to 169 in 2014. There has been a five-fold increase in annual Medicare Items for chlamydia and a second NAAT, whilst only a modest increase in chlamydia only NAAT. A total of 28,014 heterosexual men attended MSHC for first consultation between 2007 and 2014, and the overall gonorrhea positivity by culture at MSHC was 0.93% (n = 260). No significant trend in annual gonorrhea positivity (aOR 1.04, 95% CI: 0.97–1.10, p = 0.270) was observed after adjusting for age, number of female sexual partners and condom use in the last three months, recent arrival in Australia, and previous sex overseas.

Conclusion These data suggest gonorrhea positivity in heterosexual men is stable, despite increasing notification rates. An increase in false positive results due to low specificity of gonorrhea NAAT may explain the observed trend.

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P09.28 SURVEY ON THE DATA QUALITY OF SYPHILIS CASES REPORTED IN 5 PROVINCES OF CHINA

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Introduction The results of syphilis surveillance showed that there were some significant problems in syphilis stage diagnosis and case-reporting in China. In order to assess the data quality of syphilis case reported in the country, and identify the problems for improving the quality, we conducted this sampling survey.

Methods According to the national protocol and syphilis diagnostic criteria, checking data with original reporting cards, clinical and laboratory logs of syphilis cases reported, assessment of diagnosis correctness were conducted by related experts at 43 medical hospitals/institutions sampled in 13 counties of 10 prefectures in 5 provinces based on geographic distribution to evaluate the data quality, and Excel 2003 and SPSS18.0 software were employed in data analysis.

Results The proportions of the reporting cards timely reported, completely filled, correctly filled, correctly entered by web for syphilis cases were as high as with 99.82% (1691/1694), 97.05% (1644/1694), 96.22% (1630/1694) and 96.22% (1630/1694), respectively, and the one of the reporting cards repeatedly reported was very low with 1.42%(24/1694) in 5 provinces. The proportions of correct diagnosis for syphilis cases was high with 95.40% (2491/2611), however, the ones of correct stage for primary, secondary and latent syphilis were not high with 42.49% (167/393), 77.46% (275/355) and 85.89% (1497/1743), respectively. There was the severe bias of misclassification in primary and secondary syphilis, the reason of which was that some latent syphilis cases were falsely classified into primary and secondary ones by non dermatological/STD and in-patients department doctors.

Conclusion The indicators of data quality related to reporting information and correct diagnosis of syphilis cases were high, however proportion of correct stage for primary and secondary syphilis cases was low, which directly affected on analysis of syphilis incidence. It is urged that the training on related doctors in syphilis diagnosis criteria should be strengthened to substantially improve the data quality.
Introduction Sexually Transmitted Infections (STIs) remain prevalent in urban populations and are often diagnosed in emergency departments (ED). However, the burden of STI-care on urban EDs is not well characterised.

Methods We conducted a retrospective study of patients seeking acute care for STI-related complaints at a large urban academic ED in the Midwestern US from July, 2012 to June, 2014. All ED patients evaluated for Neisseria gonorrhoeae (GC) and Chlamydia trachomatis (Ct) infection by nucleic acid amplification testing were examined for demographic characteristics, testing rates, and STI prevalence.

Results Approximately 183,000 ED patient visits occurred during the study period. Of these, 6,518 visits (3.6%) resulted in STI testing for 5,431 patients. For tested patients, 77% were female, 83% African-American, and median age was 26.3 (IQR 22.1–34.5). Overall prevalence was 6.8% for GC and 11.8% for Ct among patients tested. Among patients positive for GC, Ct, or both, 55.04–74.5% were female and 60.5–72.2% were ≤24 years. A total of 758 patients (14%) were tested more than once in the ED during the study period and defined as “super-users”. These super-users made up 28% of the total visits during the study period. Super-users were more likely to be female, African American and older adolescents (age 20–24) (p < 0.001). Super-users were more likely than non-super-users to have a positive test for GC (p < 0.001) and Ct (p < 0.001), and had GC prevalence more than twice that of non-super-users (13.1% vs 5.7%, p < 0.001).

Conclusion Our study revealed a significant burden of STI-related diagnoses, especially GC, in the urban ED setting. ED super-users were more likely to have a positive test than those tested patients only once, and may represent a higher risk population. Additional research is needed to understand the unique patient population presenting to urban EDs for STI care and inform tailored intervention strategies.

Disclosure of interest statement No potential conflicts of interest.

Disclosure of interest All authors report no disclosures.