# Too old for STIs? Examining chlamydia, gonorrhoea, and syphilis trends among older women in Australia 2000-2018

## Authors:

Bourchier L<sup>1</sup>, Malta S<sup>1,2</sup>, Temple-Smith M,<sup>3</sup> Hocking J<sup>1</sup>

<sup>1</sup>Melbourne School of Population and Global Health, The University of Melbourne, 207 Bouverie Street, Carlton, VIC, Australia

<sup>2</sup>National Ageing Research Institute, Poplar Road, Parkville, VIC, Australia <sup>3</sup>Department of General Practice, The University of Melbourne, 780 Elizabeth Street, Melbourne, VIC, Australia

### **Background:**

Research suggests that STIs are rising among older adults in some Western countries. This study examined STI trends among older women in Australia between 2000-2018. We looked at rates of chlamydia, gonorrhoea and syphilis, and also at chlamydia testing and test positivity over this time period.

### Methods:

Two older age brackets (55-64 and 65-74) were compared with two younger age brackets (15-24 and 25-34), using Australia-wide nationally notifiable disease data and Medicare rebate data. We used Poisson regression to map trends for 2000-2018, and undertook an additional analysis of 2014-2018 to focus on the most recent timeframe.

### **Results:**

STI rates increased for all age groups over the time period studied. While rates remained highest among the younger age groups, they increased the most sharply among the older age groups. From 2014-2018, chlamydia rates increased the most among those aged 55-64 years (IRR=1.06; 95%CI:1.02, 1.10) and declined in those aged 15-24 years (IRR=0.99; 95%CI: 0.99, 0.99). For gonorrhoea, rates increased the most among those aged 65-74 years (IRR=1.47; 95%CI: 1.23, 1.77) and least in those aged 15-24 years (IRR=1.12; 95%CI: 1.10, 1.13). For syphilis, rates increased the most among those aged 55-64 years (IRR=1.58; 95%CI: 1.25, 1.99) and least in those aged 15-24 years (IRR=1.29; 95%CI: 1.23, 1.35). Chlamydia testing increased across all four age groups. Among young women chlamydia test positivity declined, while for older women it remained stable.

### **Conclusion:**

While STIs predominantly affect young adults, increasing rates among older adults in Australia suggest they may be more at risk of STIs than previous older cohorts. Monitoring is important. Primary care is likely best positioned to meet the sexual health needs of this demographic. Sexual health conversations, sexual history taking, and STI testing may need to become more frequent in GP consultations with older patients.

### **Disclosure of Interest Statement:**

The authors declare no conflicts of interest. This research did not receive any specific funding.