

Highlights from this issue

doi:10.1136/sextrans-2012-050988

Katherine M E Turner, Matthew Golden

Welcome to this special issue of sexually transmitted infection (STI) on reinfection and retesting. This collection was inspired by a number of presentations at ISSTD in Quebec City, 2011 discussing reinfection and retesting, well, repeatedly. We are grateful to the authors who have submitted their work to this issue.

One of the most consistent observations in clinical epidemiology is that the strongest risk factor for most repeatable diseases or adverse outcomes is a history of that same disease or outcome. People with STI get STIs. This has been a central tenant of STI epidemiology for decades, and at least intermittently studied and discussed as a basis for public health intervention.¹ Retesting people with STIs capitalises on the well-described persistence of risk.

Frequent repeat testing can identify individuals soon after infection; aiding partner notification, minimising unwitting infection transmission, enabling prompt treatment and targeted prevention efforts. Internationally, national guidelines vary: some countries recommend routinely retesting positives at 3 months,^{2,3} 6 months^{4,5} or 3–12 months⁶ and others do not. Although there is some uncertainty about when to retest persons following STI treatment, the larger issue is how to operationalise retesting. The articles in this issue of STI provide new information demonstrating the consistent high risk of STI observed in persons with recent STIs, the current state of retesting and how retesting might be increased.

Several papers demonstrate that, despite easily accessible testing, reinfection with bacterial STI remains common. Woodhall *et al*⁷ examined repeat testing within the English chlamydia screening programme and found that the risk of infection at retest was approximately twice as high in persons who initially tested positive compared to those negative. Turner *et al* similarly found a doubling of risk in a study of retesting in Cornwall (Turner *et al*⁸). Despite the high risk of reinfection observed, the overall rate of repeat testing was relatively low, with 75% of individuals in Cornwall only testing once between 2003–2009⁸ and 85% only tested once in England within 2010 only.⁷ Heijne *et al*⁹ address the question of when retesting should occur, using data from the USA and a mathematical model. As in other studies, they observed high rates of reinfection in those who initially tested positive compared with those who tested negative. Their model estimated the optimal retesting interval for chlamydial

infection to be between 2 and 5 months following an initial test, a period that accords with current US, Australian and Scottish Guidelines.^{2,3,6}

New technologies offer low-cost, automated methods for active recall of patients for retesting. Here, two studies (Guy *et al*¹⁰ and Downing *et al*¹¹) explore the use of SMS technologies to remind patients to retest. Both studies were based in Australia, where guidelines recommend a retest at 3 months.³ Downing *et al*¹¹ showed that SMS reminders increased retesting; obtaining retest rates of 27%–28% in the intervention arms compared with 6% in the standard care arm. They found that the addition of an incentive payment to the SMS reminder did not increase the uptake of retesting, a finding also previously observed in the USA.¹² A limitation of the technology was a high rate of undeliverable messages. Downing's findings are corroborated by Guy and colleagues¹⁰ in Melbourne, who found that SMS reminders increased retesting from 21% to 30%. A large-scale register based intervention in The Netherlands involved automatically sending test-kits by post to all persons identified with chlamydial infection through annual screening. Although initial screening through this mailed effort did not result in high rates of testing, among those who accepted initial testing, the uptake of retesting was high, with two thirds of persons returning test kits.¹³ Together, these findings provide promising evidence for a low-cost approach to increasing rescreening, but also demonstrate that SMS and mailed test kits alone are unlikely to result in very high levels of rescreening. We will need to do more.

Frequent HIV testing is important in high risk groups such as MSM, though little data exist to define the optimal frequency of testing. Katz *et al*¹⁴ calculated the frequency of retesting in MSM in Seattle. Overall, they observed high rates of retesting in this population. At the same time, half of all newly HIV diagnosed MSM had not tested in the preceding year, and one third had not tested in the prior 2 years, highlighting the need to increase testing frequency.¹⁴ At least among MSM, the occurrence of gonorrhoea, syphilis and, to a lesser extent, chlamydial infection, identify a population at high risk for HIV acquisition.¹⁵ Future work should address how to combine HIV and STI retesting efforts in critical populations.

We hope you enjoy this special issue and that next time we will be able to

bring you a special issue on effective interventions to prevent reinfection.

Provenance and peer review Commissioned; internally peer reviewed.

REFERENCES

1. Eaton JW, Johnson LF, Salomon JA, Bärnighausen T, Bendavid E, *et al*. HIV treatment as prevention: systematic comparison of mathematical models of the potential impact of antiretroviral therapy on HIV incidence in South Africa. *PLoS Med* 2012; **9**:e1001245.
2. Centres for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2010. *Morb Mortal Wkly Rep* 2010; **59**.
3. Australia Sexual Health Society of Victoria. National Management Guidelines for Sexually Transmitted Infections. <http://www.mshc.org.au/portals/6/NMGSTI.pdf>. 2008. Australia. 2011.
4. Public Health Agency of Canada. Canadian Guidelines on Sexually Transmitted Infections, 2010.
5. Ministry of Health. Chlamydia Management Guidelines. <http://www.moh.govt.nz/moh.nsf/pagesmh/8210>. 2008.
6. Scottish Intercollegiate Guidelines Network. *Management of genital Chlamydia trachomatis infection. A national clinical guidelines (109)*. Edinburgh: Scottish Intercollegiate Guidelines Network, 2009.
7. Woodhall SC, Atkins JL, Soldan K, *et al*. Repeat genital Chlamydia trachomatis testing rates in young adults in England, 2010. *Sex Transm Infect* 2013; **89**:51–6.
8. Turner KME, Horner PJ, Trela-Larsen L, *et al*. Chlamydia screening, retesting and repeat diagnoses in Cornwall, UK 2003–2009. *Sex Transm Infect* 2013; **89**:70–5.
9. Heijne JCM, Herzog SA, Althaus CL, *et al*. Insights into the timing of repeated testing after treatment for Chlamydia trachomatis: data and modelling study. *Sex Transm Infect* 2013; **89**:57–62.
10. Guy R, Wand H, Knight V, *et al*. SMS reminders improve re-screening in women and heterosexual men with Chlamydia infection at Sydney Sexual Health Centre: a before-and-after study. *Sex Transm Infect* 2012; **89**:11–15.
11. Downing SG, Cashman C, McNamee H, *et al*. Increasing chlamydia test of re-infection rates using SMS reminders and incentives. *Sex Transm Infect* 2012; **89**:16–19.
12. Malotte CK, Ledsky R, Hogben M, *et al*. GCAP Study Group. Comparison of methods to increase repeat testing in persons treated for gonorrhea and/or chlamydia at public sexually transmitted disease clinics.
13. Götz HM, van den Broek IVF, Hoebe CJPA, *et al*. High yield of reinfections by home-based automatic rescreening of Chlamydia positives in a large-scale register-based screening programme and determinants of repeat infections. *Sex Transm Infect* 2013; **89**:63–9.
14. Katz DA, Dombrowski JC, Swanson F, *et al*. HIV intertest interval among MSM in King County, Washington. *Sex Transm Infect* 2013; **89**:32–7.
15. Menza TW, Hughes JP, Celum CL, *et al*. Prediction of HIV acquisition among men who have sex with men. *Sex Transm Dis* 2009; **36**:547–55.

Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.

Sex Transm Infect: first published as 10.1136/sextrans-2012-050988 on 21 January 2013. Downloaded from <http://sti.bmj.com/> on May 23, 2025 at Department GEZ-L-TA Erasmus Hogeschool.