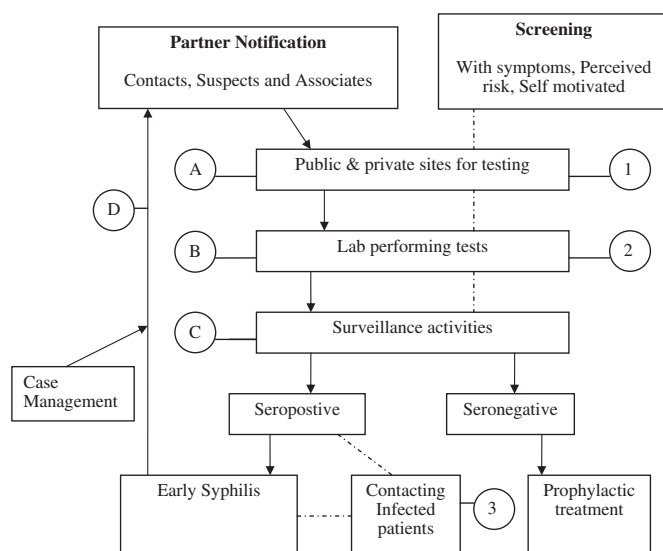


case, and \$1127 per early syphilis case identified. ICE of identifying partner showed a decline with the increase in number of attempts but the ICE values of case detection through partner notification did not show any systematic pattern.

Conclusion This study demonstrates that adding partner notification with SS is more CE in syphilis detection in Louisiana compared to case detection by SS alone. In terms of intensity of partner notification, it was found that increasing the number of attempts to contact the partners remained cost effective but due to variability in the number of attempts to contact cases, it was not possible to determine the optimal number of attempts.



Abstract 05-S3.03 Figure 1 Steps involved in syphilis case detection by partner notification and selective screening and cost associated in each method. Partner notification: A- cost for phlebotomy B- cost of tests C- cost for surveillance D- cost for case management including travel. Selective screening: 1- cost for phlebotomy, 2- cost of tests, 3- cost to contact infected patients including phone call and letter or field visit related supplies and travel.

05-S3.04 INDIVIDUAL AND POPULATION LEVEL EFFECTS OF PARTNER NOTIFICATION FOR CHLAMYDIA TRACHOMATIS

doi:10.1136/sextrans-2011-050109.166

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Background Partner notification (PN) is an essential part of the case management of sexually transmitted infections (STI), including Chlamydia trachomatis. Failure to notify current partners might cause re-infection of the index case, whilst failure to notify previous partners could result in ongoing transmission in the population. The impact of PN at both the individual and population level is, however, unclear.

Methods We developed an individual-based modelling framework called Rstisim, which can simulate transmission of any STI through a dynamic sexual network and track the history of an individual's partnerships. The effect of different PN strategies for *C trachomatis* was investigated in three models with increasing levels of complexity of the sexual partnership dynamics: a) an instantaneous contact model which is based on the widely used assumption that

sexual contacts happen instantaneously; b) a pair model where sexual partnerships last for a certain period; c) a triple model in which individuals can have up to two concurrent partnerships. We used data from the National Survey of Sexual Attitudes and Life-styles (Natsal) 2000 for 16–25-year-old women and men to parameterise the sexual behaviour of young adults.

Results The models all have a baseline chlamydia prevalence of 3%. In the triple model, chains of contacts can be seen at cross-section, whereas there are, by definition, no ongoing partnerships in the instantaneous contact model. In all three models, we find that a substantial proportion of partners (>10%) from partnerships that ended as far back as 18 months is infected with *C trachomatis*. We then investigated the population level effect of PN (with 50% success) as a complementary strategy to screening (at a rate of 0.1 per year). Increasing both the number of notified partners and the PN period results in lower levels of *C trachomatis*. Under the most realistic assumptions of the sexual partnership dynamic, most of the effect of PN results from notifying the current partner.

Conclusions We found that extended PN periods can efficiently identify new chlamydia-infected cases. At low screening levels, the additional benefit of PN in decreasing chlamydia prevalence is minor and primarily derives from notifying the current partners in order to prevent re-infection. This study exemplifies the differences between individual and population level outcomes of PN as an intervention for the management of *C trachomatis* infections.

05-S3.05 PARTNER NOTIFICATION FOR STI AND HIV: PATIENTS' VIEWS AND EXPERIENCES OF NOTIFYING PARTNERS

doi:10.1136/sextrans-2011-050109.167

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Background Partner notification (PN) involves contacting the sexual and needle-sharing partners of patients diagnosed with STI/HIV. Effective PN can prevent onward STI/HIV transmission. However, little is known about the socio-cultural factors affecting PN. We synthesised qualitative literature on views and experiences of PN among people recently diagnosed with STI/HIV and their contacts.

Methods We conducted a systematic search of 4 electronic databases for PN literature from 1990 to August 2009. Meta-ethnography was used to synthesise data from the 16 studies that met our inclusion criteria. We identified key metaphors and themes from individual studies and compared them and their explanations with other studies to enable further interpretations. We then examined the emerging concepts that have implications for STI/HIV PN policy and programs.

Results Our synthesis revealed that PN is influenced not only by type of partnership or infection but also by the socio-cultural, religious, and legal framework governing sex and sexuality. Paradoxically while PN is perceived as altruistic, and as a moral responsibility towards partners, it is also feared as 'social suicide'. 'Breaking the bad news' is perceived as a difficult and potentially troublesome task; however, patient referral is preferred to provider referral. STI/HIV diagnosis invokes 'embodied shame' which can result in non-disclosure, or selective disclosure, or confronting and blaming the partner, especially a main current partner. While the experience of notifying partners is typically not as bad as expected, it occasionally results in violence against women. Injecting drug users felt less able to notify drug-using partners due to legal implications. Provider-led

notification is considered protective against fear of violence and social stigma.

Conclusions Meta-ethnography enabled the synthesis of qualitative literature to derive new interpretations and comparative explanations from these data. Our synthesis reveals that PN should be voluntary and confidential and a choice of patient and provider referral methods should be offered. PN programmes should support patients in coping with feelings of shame and guilt to assist notification and facilitate timely testing and treatment of sexual partners. Further research on the sexual health outcomes of PN, its effect on partnerships and how best to reduce the fear of stigma and discrimination associated with STI and PN is needed.

05-S3.06 TESTING FOR STIS IN POPULATION-BASED SEXUAL HEALTH SURVEYS WITHOUT RETURNING RESULTS: DEVELOPMENT OF AN ETHICAL AND PRAGMATIC APPROACH

doi:10.1136/sextrans-2011-050109.168

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Background Sexual health surveys are enhanced by biological measures, such as non-invasive testing for STIs. The Third British National Survey of Sexual Attitudes and Lifestyles (Natsal 3) will estimate the population prevalence of five STIs (*C. trachomatis*, *N. gonorrhoeae*, type-specific Human Papilloma Virus, HIV and *M. genitalium*) in a probability sample aged 16–44 y. This raises complex ethical issues, including return of results, testing in under-18s, appropriate consent and confidentiality. We describe the development of an ethically sound and acceptable approach to urine testing for STIs, without returning results, in Natsal 3.

Methods The Natsal team considered the following: (1) more appropriate settings to obtain free STI testing and advice are now widely available, (2) survey conditions and sample type limit accuracy and timeliness, (3) for some STIs, the clinical and public health implications are unknown, (4) a uniform approach is easier to explain and be understood, (5) non-return of results is more cost efficient, enabling wider STI testing, (6) practical difficulties in returning results, (7) non-clinical interviewers. This rationale was subjected to peer-review as part of the funding process, stakeholders were engaged, and it was then submitted to a research ethics committee (REC). Piloting was performed in the general population to test acceptability and feasibility. Findings The agreed approach involved written consent for voluntary anonymised testing with the knowledge that results are not returned and the option of sample storage for future research. Confidentiality was assured by keeping STI data and personal identifiers at separate institutions, and a detailed protocol was designed to ensure that STI data were irreversibly unlinked after 3 months. In piloting, 61% (68/111) of participants agreed to provide a sample and 93% (63/68) agreed to sample storage for future research. All participants were given information about accessing clinical tests and STI advice.

Conclusions The testing of STIs and the decision not to return results was accepted by a REC, in the context of a stakeholder consensus, and was acceptable to participants in developmental pilot work. Our experiences, both in developing the approach, and in the mechanisms to achieve this, may inform the ethical considerations of researchers, RECs and funders in study design and ethical approaches to population-based biological sampling.

Health services and policy oral session 4—Screening

05-S4.01 REGISTER-BASED CHLAMYDIA SCREENING: DOES IT MAKE A DIFFERENCE IF THE INVITATION IS SENT BY GP OR BY MUNICIPAL HEALTH SERVICE?

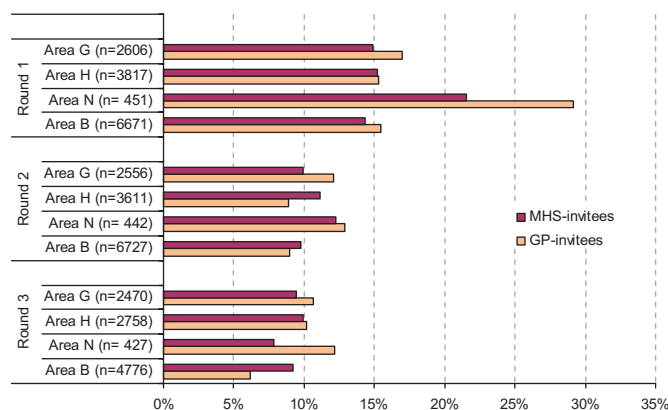
doi:10.1136/sextrans-2011-050109.169

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Background In cervical cancer screening, uptake of screening is approximately 10% higher if a woman is invited by her General Practitioner (GP) compared to invitation by Municipal Public Health Service (PHS). A large register-based selective Chlamydia Screening Programme is implemented in Amsterdam (Netherlands) since 2008 by the PHS. We wanted to evaluate whether response rates in Chlamydia screening were higher if invitational letters are sent by a persons' GP and not by PHS.

Methods Based on the municipal registers, annually all 140 000 persons in Amsterdam aged 16–29 yr are invited with a postal letter to participate. Further procedures are internet-based: requesting test-packages, obtaining results, even partner-referral, can be realised via the internet and the unique identifier provided in the personal letter. In one part of the city, the Southeast inner-city area, GP-registers of six health centre are matched with the list of invitees extracted from the municipal register. In the invitational letter these matched eligible's are personally addressed by their GP and not by the physician of the PHS. Participation rates from invitees of GP and PHS in the same geographical town area are compared in three screenings-rounds (r 3 not yet fully completed).

Results In these four town area's in each screening round annually 13 500 persons are invited, of which 35% by the GP and 65% by PHS. In screenings-round 1, the response to invitations by the GP was slightly higher than the response to invitations sent by the PHS in 3 out of 4 neighbourhoods where this was piloted (overall GPs: 16.2% [range: 15.3%–29.1%]; overall PHS: 14.9% [14.4%–21.6%], $p=0.023$). In round 2 and 3 the difference was not significant (GP vs MHS: r2 10.3%–10.2%; r3 9.5% vs 9.4%). (Abstract 05-S4.01 figure 1).



Abstract 05-S4.01 Figure 1 Participation rate comparing response among GP- and MHS-invitees in 4 town-areas of Amsterdam Southeast.

Conclusions In the first screening-round uptake was slightly higher among GP-invited, but this effect was lost in subsequent screening-rounds. Inviting universally via the PHS is logistically easier and yields the same response rate.