The relative clinical effectiveness and cost-effectiveness of three contrasting approaches to partner notification for curable sexually transmitted infections: a cluster randomised trial in primary care

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Scientific summary

Approaches to partner notification for curable STIs

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Scientific summary

Background

Partner notification (PN) is the process of providing support for, informing and treating sexual partners to individuals who have been diagnosed with sexually transmitted infections (STIs). It is traditionally undertaken by specialist sexual health services, and may involve informing a partner on a patient's behalf, with consent. With an increasing proportion of STIs diagnosed in general practice and other community settings, there is a growing need to understand the best way to provide PN for people diagnosed with a STI in this setting. We sought to undertake a randomised controlled trial (RCT) to evaluate the effectiveness and cost-effectiveness of different methods of PN in primary care.

Objectives

1. To standardise, appropriately for the primary care setting, three contemporary and evidence-based models of PN for STIs (patient referral, provider referral and contract referral).
2. To compare the clinical effectiveness of these three models.
3. To compare the cost-effectiveness of these three models.
4. To enhance the efficiency of the trial through mathematical modelling of the potential impact of each modality of PN on outcomes for different types of partner (main, casual and ex-partners) and for men who have sex with men.
5. To determine the acceptability to patients of each approach to PN, and to identify means for improving PN rates for 'highly connected' partnerships.
6. To provide comprehensive, definitive evidence for policy-makers and public health practitioners on the implementation of clinically effective and cost-effective PN for patients diagnosed with STIs in the primary care setting.

Design

Cluster randomised controlled trial.

Setting

General practices in England (66 practices proposed) and, within these, patients tested for and diagnosed in that setting with genital chlamydia or other bacterial STIs, with a target of 934 individual participants diagnosed with an STI.

Interventions

Three different approaches to PN: patient referral alone, or the additional offer of either provider referral or contract referral.

Main outcome measures

1. Number of main partners per index patient treated for chlamydia and/or gonorrhoea/non-specific urethritis/pelvic inflammatory disease.
2. Proportion of index patients testing negative for the relevant STI at 3 months.

Results

In phase 1 we piloted the processes of the RCT as proposed above. Testing rates for chlamydia were far lower than expected in response to our initial strategy for recruitment which used a mailshot inviting young people aged 16–24 years to attend the practice for a chlamydia test, alongside opportunistic testing.

In phase 2 we identified strategies aimed at improving recruitment within general practice through a process of literature review, practice consultation and wider data analysis.

In phase 3 we implemented these changes, but they were not effective in improving recruitment to the extent necessary to scale up the trial.

Phase 4 was a feasibility pilot of intensive recruitment. This succeeded in generating chlamydia tests in general practice.

Economic evaluation was not possible because of recruitment failure; cost comparisons with other care pathways and the costs of intensive recruitment are presented.

We were not able to scale up the trial, which was concluded at pilot stage, and are not able to answer the original research questions.

It was not possible to standardise provider and contract referral separately, and we present results of qualitative work aimed at optimising these interventions for future research.

Conclusions

External recruitment may be required to facilitate the recruitment of young people to research in general practice, especially in sensitive areas, because of specific barriers experienced by general practice staff. Costs and feasibility conditions need to be taken into account.

Partner notification interventions for bacterial STIs may not be clearly separable into the three categories of patient, provider and contract referral. Future research is needed to operationalise the approaches of provider and contract PN if future trials are to provide generalisable information.

Given the highly distributed pattern of chlamydia and other STI testing among general practice surgeries, future research in this field should take into account the fact that PN interventions need to be suitable for very occasional delivery.

Trial registration

This trial is registered as ISRCTN24160819.

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