Partner notification for syphilis: a randomized, controlled trial of three approaches

Record Status
This is a critical abstract of an economic evaluation that meets the criteria for inclusion on NHS EED. Each abstract contains a brief summary of the methods, the results and conclusions followed by a detailed critical assessment on the reliability of the study and the conclusions drawn.

Health technology
The health technologies used in the study consisted of using one of three strategies for partner notification in patients with infectious syphilis.

Type of intervention
Primary prevention; diagnosis.

Economic study type
Cost-effectiveness analysis.

Study population
Patients with primary, secondary, or early latent syphilis.

Setting
Community. The economic study was carried out in Florida and New Jersey, USA.

Dates to which data relate
The effectiveness data were collected from December 1990 to March 1993. The data for four variables of the resources used (travel time and mileage to interview the index patient, travel time and mileage to interview the index patient’s partners) were gathered from 1 April 1992 through March 1993. The price year used was not stated.

Source of effectiveness data
The evidence for the final outcomes was derived from a single study.

Link between effectiveness and cost data
The costing was undertaken prospectively on the same sample as that used for the effectiveness analysis.

Study sample
Power calculations determined the sample size. In order to achieve a power of 80% to detect a difference with P=0.025, 172 patients were required in each arm of the study. A total of 1,996 patients were randomly assigned to the alternative groups. There were 586 patients in the contract referral group, 742 in the field notification group, and 638 in the field testing group. 9 subjects (0.46%) refused to participate in the study.

Study design
The study was a randomised controlled trial carried out in three different sites. No blinding method was used in the
process of randomisation.

**Analysis of effectiveness**
The analysis of the clinical study was based on intention to treat. The main health outcomes were the success rate in locating partners and the rate of treating partners. The groups were shown to be comparable in age, race, types of syphilis, interview period and patients’ stage of syphilis.

**Effectiveness results**
The study demonstrated similar rates of success for the three groups of the study (1.1-1.2 per index patient). The rates of treating partners were also similar, the rate being 0.67 for the contract referral group, 0.61 for the field notification group, and 0.62 for the field testing group.

**Clinical conclusions**
The study discovered no difference in the effectiveness of three approaches to syphilis partner notification.

**Measure of benefits used in the economic analysis**
The benefits were measured by the success rate in locating partners and the rate of treating partners.

**Direct costs**
The quantities were reported separately. The overall and site-specific direct costs per partner treated were reported. Direct costs of interviewing index patients, finding and interviewing partners, and overhead were calculated. The costs of blood test, specialists’ time spent waiting for clients to come to the clinic, time in conference, and down-time between tasks were not considered in the study. It was not specified from whose point of view the cost calculations were undertaken. The dates of the price data were not specified.

**Indirect Costs**
Not reported.

**Currency**
Us dollars ($).

**Sensitivity analysis**
Not carried out.

**Estimated benefits used in the economic analysis**
The study demonstrated similar rates of success for the three groups of the study (1.1-1.2 per index patient). The rates of treating partners were also similar, the rate being 0.67 for the contract referral group, 0.61 for the field notification group, and 0.62 for the field testing group.

**Cost results**
The overall cost per partner treated was $317 for contract referral group, $362 for field notification group and $343 for field testing group. The cost results were very site-specific, for example, contract referral was the least costly strategy with $298 in one study site and the most costly at $586 in the other.
Synthesis of costs and benefits
A synthesis was not carried out by the authors since no strategy was significantly superior in terms of costs or benefits.

Authors' conclusions
Partner notification identified many infected and potentially infected people. The cost and effectiveness of the three types of provider notification were similar. Alternative approaches are needed to reach infected partners, who could not be notified.

CRD COMMENTARY - Selection of comparators
Not applicable.

Validity of estimate of measure of benefit
As the authors noted, the study may have overestimated the benefits of the intervention for the contract referral and field notification groups due to the occurrence of some protocol violations.

Validity of estimate of costs
The resource quantities were reported separately from the costs. Adequate details of the methods of the quantity/cost estimation were given. As the authors noted, the cost calculations underestimated the costs of specialists' time due to the omission of relevant cost items.

Other issues
The lack of sensitivity analysis and statistical analysis of the costs may make it difficult to generalise the results of the study to other settings.

Source of funding
None stated.

Bibliographic details

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9339968

Other publications of related interest
Comment in: Sexually Transmitted Diseases 1997;24(9):519-21.

Indexing Status
Subject indexing assigned by NLM

MeSH
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