Sexually transmitted diseases (STDs) are an important public health problem in the US, with 20 million new HIV and STD infections per year and annual direct medical costs of $16 billion. Partner Services, a disease intervention activity which includes counseling, partner notification, and linkage to care and treatment, is a critical public health activity to improve access to care and reduce disease transmission. However, as public health departments face chronic resource constraints, agencies must identify the most efficient way to allocate resources.

**Research Objectives**

In conjunction with the New York State Practice-Based Research Network (NYS PBRN), this project aimed to address the knowledge gap on the effort related to delivering HIV/STD partner services by conducting a real-world evaluation of the time for local and regional health departments workers to conduct HIV/STD case investigations in New York State.

Specific research questions are:

- Does case processing time between chlamydia, gonorrhea, HIV and syphilis partner services investigations vary?
- Is there within-site variation in time and effort spent on a HIV and STD partner services investigations?
- How is effort allocated between the original (index case) and partner notification activities?

**Data Sets and Sources**

Key informant interviews with HIV/STD partner services staff elicited the tasks related to processing cases, assessed instrument validity and usability, and allowed for a Case Assessment tool to be selected using a systematic stratified random sample of infections diagnosed.

Disease investigators (N=52) from 9 sites across New York State completed forms on 518 HIV and STD cases (261 chlamydia, 156 gonorrhea, 42 HIV, and 59 syphilis) assigned between June and November 2014.

All time study data were collected and entered into an Access database for data cleaning and analysis. Descriptive and bivariate analyses were conducted to assess variation between case processing time (in days and minutes) and allocation of effort across HIV, syphilis, gonorrhea, and chlamydia cases. Kruskal-Wallis one-way analysis of variance by rank was used to test differences across diseases.

**Principal Findings**

The majority of time (70.3%) spent on the partner services case investigation was on activities related to the index (original) case, with 16.7% of time spent on partner notification activities.

**Conclusion**

- Partner services case processing time, in minutes and days to process, varies significantly based on the type of infection being investigated, with more time spent on HIV and syphilis cases.
- Significant variation also existed within and between sites, indicating practice variation between local and regional health departments conducting HIV/STD investigations.
- On average, the proportion of time spent on case activities was similar across infections, with 70% of time spent investigating the index case, and 17% on partner notification.

**Implications for Programs and Research**

This research contributes to practice by building the evidence base to support the anecdotal understanding of the “real world” work of HIV/STD partner services. By empirically measuring the time and effort spent on case investigations, program managers can use this data to prioritize case work more effectively, identify areas for improvement, and disseminate best practices.

These results will be used to model return on investment from HIV/STD partner services, building off previous cost assessment research conducted by the NYS PBRN. This contributes to the literature base by providing concrete estimates of the time and effort spent on HIV/STD partner services work, which can inform the development of more accurate cost-effectiveness models of public health programs.

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