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### Title

942How Do Hospitals Detect Outbreaks?

### Permalink

<https://escholarship.org/uc/item/5zh4t41q>

### Journal

Open forum infectious diseases, 1(Suppl 1)

### ISSN

2328-8957

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### Publication Date

2014-12-01

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Peer reviewed

#### 942. How Do Hospitals Detect Outbreaks?

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**Session:** 115, Outbreaks  
*Friday, October 10, 2014: 12:30 PM*

**Background.** Prevention and containment of hospital-associated outbreaks require timely identification, investigation, and response to infectious clusters that could represent transmission within healthcare facilities.

**Methods.** We designed a 20-question survey to explore current hospital outbreak detection practices. Surveys were distributed to a convenience sample of infection prevention programs at 30 hospitals.

**Results.** Surveys were returned from 26 geographically diverse facilities representing teaching (12), community (13) or long term acute care (1) hospitals with a mean bed size of 471, 198, and 230 respectively. Most (73%) were completed by a respondent with 5+ years of experience in infection control and prevention. Although 22 (85%) hospitals kept a log of possible clusters or outbreaks, only 4 (15%) had a specified definition of a cluster or outbreak. For all hospitals, outbreak detection methods were limited to a narrow set of mostly antibiotic-resistant pathogens. Despite this narrow focus, 54% of the programs reported that they were confident or very confident that all clusters were being identified by their current methods. Overall, 62% of the programs reported satisfaction with their current outbreak detection practices, although nearly all of the programs (96%) reported that they felt that an automated outbreak detection system for hospital-associated pathogens would improve the comprehensiveness of their infection prevention program.

**Conclusion.** Of a convenience sample of 26 hospitals, 85% did not have a formal definition of what constituted a cluster or outbreak. Current detection methods heavily rely upon temporal or spatial clustering of a limited number of pre-specified pathogens. Despite the fact that half of the hospitals were confident that all clusters were being identified, 96% of them reported that an automated outbreak detection system could improve their current practice.

**Disclosures.** All authors: No reported disclosures.