

942. How Do Hospitals Detect Outbreaks?

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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.

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