Staffing and Structure of Infection Prevention and Control Programs in a National Sample of NHSN Hospitals.

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Background/Objective: The practice of infection prevention and control is changing, but little is known about current staffing and structure of infection prevention and control programs. The objective of this study was to determine the staffing and structure of hospital-based infection prevention and control programs in the United States.

Methods: A request to participate in a web-based survey was sent to 441 National Healthcare Safety Network (NHSN) hospitals. Each of the eligible hospitals must have: 1) participated in NHSN in 2007, 2) conducted device-associated infection surveillance in adult medical, medical/surgical, and/or surgical intensive care units, and 3) reported at least 500 device days. Characteristics of the infection prevention and control program such as staffing, infection control activities, and organizational support for the department were assessed. Descriptive statistics and Spearmen rho statistics for nonparametric data were computed. Regression analyses were used to examine variation in infection preventionist (IP) staffing level and proportion of certified staff by hospital size.

Results: The response rate was 66% (n = 289) resulting in data from 821 professionals. IP staffing was significantly negatively related to bed size, with higher staffing in smaller hospitals (p < .001). Median staffing was 1 IP per 167 beds. Forty-seven percent of IPs were CIC-certified and 55% had more than 5 years of experience. The largest percentage of IP time was spent collecting, analyzing, and interpreting data (mean = 44.5%), while teaching, isolation issues, and policy development each took 13% to 15% of the IPs’ time. Forty-nine percent of the hospitals reported the presence of a physician hospital epidemiologist (HE). Presence of a physician HE was significantly associated with hospital size (p <.0001), with larger hospitals more likely to have at least one HE. Most directors or HE reported having authority to close beds for outbreaks always or most of the time (n = 225, 78%). Only 32% (n = 92) reported using an electronic surveillance system to track infections.

Conclusions: This study provides a comprehensive description of current infection prevention and control staffing, organization, and support in a select group of hospitals across the nation. Further research is needed to identify effective staffing levels for various hospital types as well as examine how the IP role is changing over time.