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## **Prevalence of Safer Needle Devices and Factors Associated with Their Adoption: Results of a National Hospital Survey**

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**Objectives.** We collected and analyzed data on the extent of adoption of safer needle devices by U.S. hospitals and on the degree to which selected factors influence the use of this technology. To our knowledge, this is the first time such data has been collected from a representative sample of U.S. hospitals. The timing of the data collection was such that we are able to characterize adoption of these devices before the passage of the federal Needlestick Prevention Act of 2000, but after the passage of similar legislation in 17 states.

**Methods.** We gathered data via a telephone survey of a random sample of 494 hospitals between November 1999 and February 2000. At each hospital, either the director of infection control or the director of in-service training was interviewed.

**Results.** While 83% of the sample reported some safer needle device adoption, adoption was inconsistent across types of devices. Fifty-two percent of the facilities reported that all of the appropriate units in the facility had adopted needleless IV delivery systems, but the hospitals reported using other types of safer needle devices less often. Approximately one third of the facilities reported that none of the appropriate units in the facility were using blood collection devices with safety features. More than half of the facilities reported that none of the appropriate units were using hypodermic syringes with safety features.

Forty-eight percent of the respondents said that their hospital would have difficulty with the higher cost of safer needle devices. Ninety-five percent said that safer needle devices would not reduce the quality of patient care. A respondent's perception that the cost of safer needle devices would be a problem for the hospital was the best predictor of non-adoption of safer devices in the facility, explaining 8% of the variance. Other predictors of adoption included the size of the hospital and the presence or absence of state legislative activity on the needlestick issue.

**Conclusion.** Smaller hospitals may require special encouragement and/or assistance from outside sources in order to adopt expensive, risk reduction innovations. Although use of safer needle devices is the mandated and preferred way to protect workers from needlesticks, complete adoption of this technology will depend upon the support of the social systems in which it is used and the people who use it.

**Learning Objectives:** After this presentation, the attendee will be able to: 1. Describe the prevalence of different safer needle devices in U.S. hospitals. 2. Discuss three variables that are associated with greater adoption of safer needle devices in U.S. hospitals. 3. Analyze the policy implications of the reported

survey results for both legislative initiatives and for innovation adoption strategies.

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Presenting author's disclosure statement:

Organization/institution whose products or services will be discussed: None

I do not have any significant financial interest/arrangement or affiliation with any organization/institution whose products or services are being discussed in this session.

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