

## Reprocessing of Single-Use Medical Devices: National Survey of Canadian Acute-Care Hospitals

### Technology

Reprocessing as an alternative to discarding medical devices intended for single-use

### Issue

Reprocessing is less expensive than single usage, but there are concerns that reprocessed single-use devices (SUDs) may have implications for patients' safety. In addition, there are ethical, legal, and health care environment concerns. There is also uncertainty regarding the cost-effectiveness of SUD reprocessing.

### Methods and Results

A survey was developed, drawing on information from previous Canadian surveys. The sample included 572 acute-care hospitals in Canada. It was pilot tested in November of 2006, in Ontario, with two community hospitals and one academic hospital. In December of 2006, a revised survey was mailed to contact persons in the sample. An electronic response was allowable. A modified Dillman approach was used for all contact and follow-up procedures. The useable response rate was 70% (398/572). Data were collected on the existence of a written institutional policy, the use of third-party reprocessing, types of devices reprocessed, and incident report mechanisms. Subgroup analyses were conducted by province or territory, hospital type, and size. Differences in proportions were tested using a chi-squared test, with a level of significance of 5%.

### Implications for Decision Making

- **Most hospitals do not reprocess SUDs.** The proportion of hospitals that reprocess (28%) is less than that reported in a 1986 survey (31%). Significant differences in reprocessing patterns were observed across provinces. Larger hospitals and academic centres were significantly more likely to reprocess SUDs.
- **In-house reprocessing is more common.** Most (85%) hospitals that reprocess SUDs do so in-house.
- **Documentation associated with SUD reprocessing has improved, but is still lacking.** Forty percent (40%) of hospitals that reprocess SUDs do not have a written policy, and 12% do not have an incident-reporting mechanism for SUDs adverse events at the hospital, suggesting a need for improved standards of documentation. The proportion of hospitals with written policies has improved compared to the number reported previously.

This summary is based on a comprehensive health technology assessment available from CADTH's web site ([www.cadth.ca](http://www.cadth.ca)): Polisen J, Hailey D, Moulton K, Noorani H, Jacobs P, Normandin S, Gardam M. *Reprocessing of Single-Use Medical Devices: National Survey of Canadian Acute-Care Hospitals*

Canadian Agency for Drugs and Technologies in Health (CADTH)

600-865 Carling Avenue, Ottawa ON Canada K1S 5S8 Tel: 613-226-2553 Fax: 613-226-5392 [www.cadth.ca](http://www.cadth.ca)

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