

Evidence *in* Context

Issue: Single Use Devices
Released: October 2010

An expedited Contextualized
Health Research Synthesis
Project (E-CHRSP)

The Reprocessing and Reuse of Single-Use Medical Devices in Newfoundland and Labrador

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The Issue

Across Canada, the practice of reusing medical devices intended for single use is evolving. Health institutions that once routinely reused single-use devices (SUDs) that had been reprocessed in-house have moved away from such practices because of growing concerns about patient safety and potential legal liability.

In Newfoundland and Labrador (NL), since 2008, three of the four regional health authorities have issued policies that essentially prohibit the reprocessing and reuse of SUDs. Variation exists, however, in the wording of such policies and in the alignment of clinical practice with these policies.

The Findings

This report is based primarily on the evidence from a single systematic review produced in French by AETMIS¹ and subsequently contextualized by us for the province of NL with input from local stakeholders with expertise in infection prevention and control.

The study by AETMIS reviewed 19 types of critical² and semi-critical³ medical devices and found that, with the possible exception of the reuse of hemodialysis membranes in the same patient, there was insufficient evidence to support, in clinical practice, the reprocessing and reuse of the devices reviewed. Moreover, the economic evidence on cost-effectiveness was insufficient to support the reprocessing and reuse of SUDs.

Provincially, while most current policies prohibit reuse, local factors identified in the report appear to contribute to the continued potential risk of reuse of SUDs in both public and private health care settings. Reuse of devices reprocessed by third parties in the United States is currently done in several jurisdictions across Canada but, in the absence of strong scientific evidence to support this practice, it is fraught with regulatory, legal and ethical dilemmas as outlined in the full report.

The Research Question

What does the best currently available scientific evidence say about the effectiveness, safety, and potential economic benefits of reusing certain reprocessed single-use devices (SUDs)?

The Implications

Our analysis points to the following issues for consideration by decision makers:

- the local health system representatives who we consulted expressed a clear need for the development of a comprehensive, evidence-informed, province-wide policy and regulations on reprocessing and reuse of SUDs in all health care settings (public and private)
- health system representatives also expressed a need for auditing and reporting mechanisms to confirm compliance with existing policies and regulations
- in areas where the research evidence on select SUDs suggests the potential for safe reuse, the clinical- and cost-effectiveness of this practice can only be established through primary research specific to NL
- our consultations suggest a need for collaboration with other provinces and Health Canada to establish a Canada-wide regulatory body for the reprocessing and reuse of SUDs
- health care providers in all settings require continuing education on the reprocessing and reuse of medical equipment and devices

About this document

This is a summary of a full report on the reprocessing and reuse of single-use medical devices in Newfoundland and Labrador.

The full report is available on the NLCAHR website:
www.nlcahr.mun.ca/chrsp

Newfoundland & Labrador Centre for
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HEALTH
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¹ Martin G, Caron L, Obadia, A. La réutilisation du matériel médical à usage unique. Montreal: Agence d'évaluation des technologies et des modes d'intervention en santé (AETMIS); 2009. ² Critical medical devices penetrate the skin or sterile tissues. ³ Semi-critical medical devices come in contact with non-intact skin or mucous membranes without penetrating them.