**Issue and Methods**

Effectively monitoring emergency department (ED) overcrowding may help with intra- and inter-institutional benchmarking, as well as designing and implementing interventions to reduce overcrowding in Canadian EDs. There is a need to understand the ability of EDs and of governments to quantify ED activity and report on measures of ED overcrowding. A survey of 243 Canadian hospital ED directors was conducted (158 respondents, 65% response rate). A survey of vendors of ED information systems (EDIS); provincial and territorial governments; and the Canadian Institute for Health Information (CIHI) was also conducted.

**Implications for Decision Making**

- **Measures of ED overcrowding and their collection require consistency.** Inconsistent methods of acquiring, collecting, and defining data, as well as using different data elements and measures of overcrowding create a confusing picture of problems facing EDs. Measures thought to be important by those delivering ED services, such as the percentage of ED occupied by in-patients, are infrequently collected.

- **The electronic collection of relevant data to measure and address overcrowding should be considered.**

Only 39% of ED directors surveyed reported using EDIS, one way of gathering electronic ED data. As of 2005, nine (69%) provincial and territorial ministries reported collecting some form of ED data, but most (78%) obtained all or part from medical records. Alberta, Ontario, and Yukon reported having a comprehensive, jurisdictional ED database in 2005. Six jurisdictions, however, expected to change the way that they collect ED data within two years.

- **Contributions to the national data system would be valuable for policy makers.** As of 2005, Ontario and Yukon reported providing comprehensive ED data to CIHI’s National Ambulatory Care Reporting System; several other provinces have individual institutions that contribute local data.

- **Electronic ED information systems are broadly available in Canada.** Seven of 11 EDIS vendors (64%) surveyed in 2005 reported that their software was in use by Canadian EDs. Most vendors provide a similar package of basic EDIS options (100% tracking and mapping functions, 91% electronic triage); however, more advanced informatics (e.g., electronic charts, discharge information, order entry) are less commonly available as part of the standard software package or are available only as add-on features.

This summary is based on a comprehensive health technology assessment available from CADTH’s web site (www.cadth.ca): Rowe BH, Bond K, Ospina MB, Blitz S, Schull M, Sinclair D, Bullard M. *Data collection on patients in emergency departments in Canada.*