

Interventions to Reduce Overcrowding in Emergency Departments

Issue and Methods

Emergency department (ED) overcrowding can be defined as a situation where the demand for emergency services exceeds the ability to provide care in a reasonable amount of time. There is a need to understand the relative effectiveness of available interventions to reduce ED overcrowding. A systematic review of published literature on ED overcrowding was conducted, supplemented by a survey of 243 Canadian hospital ED directors (158 respondents; 65% response rate).

Implications for Decision Making

- **Fast track systems can reduce overcrowding.** Fast tracking patients with minor injuries or illnesses can reduce ED length of stay, waiting time, and the number of patients who leave without being seen. Establishing these systems, however, has resource and space implications. Sixty-two percent of Canadian ED directors surveyed reported having implemented some form of a fast track system
- **Triaging patients is of unproven benefit.** While triage is an important process to prioritize ED care, its influence on overcrowding and wait times is inconclusive.
- **Ambulance diversion strategies, short stay units, staffing changes, and system-wide complex interventions should also be explored.** Limited evidence suggests that these efforts to address overcrowding at an institutional level should be encouraged and monitored; they have a high chance of success. Furthermore, the results support current efforts to promote multi-component interventions based on a full understanding of the process of care in the ED.
- **No evidence of effectiveness could be identified for some interventions that have been adopted in Canada.** These include float nurse pools, senior ED physician flow shifts, home or community care workers assigned on-site to the ED, over-census on wards, establishment of orphan clinics, “coloured” codes to decongest ED, and “overload” units for in-patients.
- **The relative effectiveness of the reviewed overcrowding interventions is still unknown.** Most studies showed that for almost all outcomes, the interventions were effective to various degrees. A variety of outcomes were reported, however, and studies did not compare interventions to one another.

This summary is based on a comprehensive health technology assessment available from CADTH’s web site (www.cadth.ca): Bond K, Ospina MB, Blitz S, Friesen C, Innes G, Yoon P, Curry G, Holroyd B, Rowe BH. *Interventions to reduce overcrowding in emergency departments.*