



**TITLE: Triage Patients from the Emergency Department to Other Medical Centres: A Review of the Clinical Evidence and Guidelines**

**DATE:** 19 December 2012

**CONTEXT AND POLICY ISSUES**

Emergency department overcrowding, generally defined as a situation where the demand for emergency services exceeds the ability to provide care in a reasonable amount of time, is an increasing problem.<sup>1,2</sup> In a 2006 survey of Canadian emergency department directors, 62 percent indicated that overcrowding was a major or severe problem and a majority perceived that overcrowding had a negative effect on stress levels among emergency department staff and increased the risk of poor patient outcomes.<sup>1</sup>

Strategies to reduce emergency department overcrowding include reorganization of emergency department staff, point of care diagnostic testing instead of central lab testing, a separate stream for fast-tracking non-urgent patients and those with minor injuries, ambulance diversion, and triage out of emergency.<sup>3</sup> Triage systems have been developed to identify patients who need to be seen immediately and those requiring less urgent care. The Canadian Triage and Acuity Scale (CTAS)<sup>4</sup> is a five level scale ranging from resuscitation (Level I) to non-urgent (Level V), with associated expected times to initial assessment. Patients assessed as Level IV or V are considered less- or non-urgent and may benefit from intervention within one to two hours, or be referred to other areas of the hospital or healthcare system.<sup>3,4</sup>

Between 2009 and 2010, 45 percent of emergency department visits were for less- or non-urgent conditions (CTAS level IV or V).<sup>5</sup> According to the Canadian Association of Emergency Physicians, non-urgent patients consume a small fraction of emergency department resources and may not be substantial contributors to overcrowding.<sup>2</sup> There is, however, some evidence that two to seven percent are admitted to hospital among patients assigned to the lowest triage levels. The literature, therefore, suggests that triage status alone may not be sufficient to make decisions with regards to transfer out of the emergency department.<sup>6</sup> In addition to potential safety concerns, there may be legal and ethical implications to the transfer of low-urgency patients from the emergency department to other healthcare centres.

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The purpose of this report is to review the clinical evidence and evidence-based guidelines regarding the transfer of adult patients presenting to the emergency department with low urgency to other healthcare centres.

## RESEARCH QUESTIONS

1. What is the clinical evidence regarding the practice of triaging low urgency adult patients from the emergency department to other medical centres during peak periods?
2. What are the evidence-based guidelines regarding the practice of triaging low urgency adult patients from the emergency department to other medical centres during peak periods?

## KEY MESSAGE

No clinical evidence or evidence-based guidelines were identified regarding the triage of low urgency adult patients from the emergency department to other medical centres.

## METHODS

### Literature Search Strategy

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2011, Issue 11), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. Filters were applied to limit the retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies and guidelines. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 01, 2006 and November 24, 2011.

### Selection Criteria and Methods

One reviewer screened citations to identify clinical evidence and evidence-based guidelines regarding the practice of triaging low urgency adult patients from the emergency department to other medical centres. Potentially relevant articles were ordered based on titles and abstracts, where available. Full-text articles were considered for inclusion based on the selection criteria listed below.

**Table 1: Selection Criteria**

|                      |                                                                                                                                                                                                                                               |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Population</b>    | Adult patients presenting to the emergency department with low urgency (for example, Canadian Triage Acuity Scale score of 4 or 5)                                                                                                            |
| <b>Intervention</b>  | Transfer of patient to another healthcare centre                                                                                                                                                                                              |
| <b>Comparator</b>    | Traditional care or no comparator                                                                                                                                                                                                             |
| <b>Outcomes</b>      | Efficacy, best practice, guidelines, patient safety, legal and ethical implications, patient indicators to signal they could be considered for transfer, timing of triage, who is most appropriate to make the decision (doctor versus nurse) |
| <b>Study Designs</b> | Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies.                                                                                                                       |

## **Exclusion Criteria**

Articles were excluded if they did not meet the selection criteria outlined in Table 1, were published prior to 2006, or did not provide methods to describe how the results or guidance was reached.

## **SUMMARY OF EVIDENCE:**

### **Quantity of Research Available**

The literature search yielded 340 citations. Upon screening titles and abstracts, 322 citations were excluded and 18 potentially relevant articles were retrieved for full-text review. An additional three potentially relevant reports were retrieved from grey literature and hand searching. Of the 21 potentially relevant reports, none met the inclusion criteria. The study selection process is outlined in a PRISMA flowchart (Appendix 1). Additional references of potential interest are provided in the appendix. The primary reason for exclusion was incorrect population (n = 11 studies). These studies focused on transfer of trauma patients to trauma centres, not low urgency patients.

## **CONCLUSIONS AND IMPLICATIONS FOR DECISION OR POLICY MAKING:**

No conclusions can be drawn regarding the transfer of low urgency adult patients from the emergency department to other healthcare centres as clinical evidence or evidence-based guidelines were not found.

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**APPENDIX 1: Selection of Included Studies**

