

CJEM Debate Series: #EDRedirection – Efforts to divert patients from the emergency department – Stop blaming the patients! An argument against redirection

Brian H. Rowe, MD, MSc^{*}; Howard Ovens, MD^{†‡}; Michael J. Schull, MD, MSc^{†§¶}

INTRODUCTION

AGAINST #EDRedirection: Brian Rowe, Howard Ovens (@HowardOvens), Michael Schull (@docschull)

To many Canadians, our healthcare system is one of the social programs that helps define our national identity. “We The North” are different from those countries without a single-payer publicly funded healthcare system whereby the Canada Health Act (“the Act”) provides for equal, transparent, transferrable, and free care for most essential health services. Nowhere in the healthcare system are these principles more relevant than in the emergency department (ED). Canadians decide to seek ED care for a variety of reasons¹; however, they are generally related to the fact that their acute medical, injury, or mental health care needs cannot be met elsewhere. Canadians trust the healthcare system and its providers and services, and that trust is something that we should respect and protect.

In most regional, high-volume, and urban EDs, Canadians have also grown accustomed to long waits to access this care.² In some circumstances, such as when waits become extreme, people are in pain, or when they are forced to occupy the hallway (or a closet), these conditions are unacceptable in a first world health system. At other times, such as when effective and time-sensitive therapies exist for patient conditions, delays can impact outcomes. Sobering data from Ontario’s Institute of Clinical Evaluative Sciences demonstrate that patients discharged from EDs at times of greater crowding are

more likely to be admitted to a hospital or die within 7 days.³ In almost all other ED visits, waits frustrate healthcare workers, patients, and family members because of the anxiety and suffering associated with the presenting problem. The overcrowding in Canadian EDs is a national disgrace and a failure of the healthcare system; however, it is *not the patients’ fault*. Moreover, the state of crowding in Canadian EDs should not inconvenience patients further. We disagree with our colleagues⁴ and suggest that diversion of patients away from the ED is simply a dangerous and ineffective strategy.

1. Why are so many Canadians accessing ED care?

Prior to the 2019–20 coronavirus (COVID-19) pandemic, almost every province and region in Canada were experiencing increased ED patient volumes, with predictable bursts during seasonal epidemics; compared with other countries, our ED use is high.⁵ When asked, most patients have actually attempted other alternatives, such as calling their family physician, seeking an alternative provider (either physician or other health professional), calling a provincial health line, and/or waiting for their symptoms to resolve.¹ In the end, when surveyed, once again, most patients feel that the ED is the appropriate location for care, and they are willing to wait to obtain the expertise of trained emergency providers. In fact, tech savvy millennials have often searched their symptoms online (“there’s an app for that”), consulted with others, and made a conscious decision to use the ED when necessary.

From the ^{*}Department of Emergency Medicine and School of Public Health, University of Alberta, Edmonton, AB; [†]University of Toronto, Toronto, ON; [‡]Sinai Health System and Schwartz/Reisman Emergency Medicine Institute, Mount Sinai Hospital, Toronto, ON; [§]ICES, Toronto, ON; and the [¶]Sunnybrook Health Sciences Centre, Toronto, ON.

Correspondence to: Dr. Brian Rowe, Department of Emergency Medicine, University of Alberta, 1G1.43, WMC, 8440-112 Street NW, Edmonton, AB T6G 2B7; Email: brian.rowe@ualberta.ca.

Readers can follow the debate on Twitter and vote for either perspective, by going to @CJEMonline or by searching #CJEMDebate or #EDRedirection.

You may ask: why not visit another provider? For a variety of reasons, access to other providers may not be possible. Firstly, for the most recent period for which statistics were available (2015–2016), Statistics Canada reported approximately 15% of the population age 12 years and older had no regular healthcare provider. In EDs where research on this topic has been conducted, that percentage approximately doubles to 30%.¹ There are many reasons for these observations. Canada appears to have slightly fewer physicians per 1,000 population (2.5 v. 3.5 for other countries) in the Commonwealth Fund Survey; however, the maldistribution of family physicians limits access for many patients, especially inner city, remote and rural, and many disadvantaged populations.

Even when patients have a family physician, timely access is a major issue. This is further borne out by the Commonwealth Fund Survey, a comparison of 11 high-income countries, which suggested that patients age 18 years and older in Canada receive poor healthcare on the basis of metrics associated with wait times for family physicians, specialists, and emergency physicians.⁵ Importantly, Canada ranks last with more than 57% of citizens not being able to obtain a same day or next day appointment at their regular place of care.

2. What is the rationale for diversions?

One healthcare zombie idea (i.e., ideas that refuse to die, despite being refuted) is the myth long popularized by politicians, administrators, and the media that ED overcrowding results from large numbers of patients seeking “unnecessary” or “inappropriate” care. The diversion of such patients away from the ED has gained widespread popularity with bureaucrats, health consultants, and even with some physician groups.⁴ The term *diversion* was first used to describe patients transported by emergency medical services (EMS) with serious conditions where this approach was shown to be detrimental to patients and some unfortunately died. While some patients with simple presentations are treated and released by EMS staff, there is consensus on what constitutes safe practice. For example, patients with treated and resolving hypoglycemia and those with minor trauma who are ambulatory are routinely and appropriately treated and released. The application of this approach to all comers seems both unnecessarily complex and risky.

3. Why can't we agree on low-acuity presentations?

In a systematic review on the topic, the definitions of low-acuity care or avoidable ED visits varied widely.⁶

Three approaches have been taken: patient triage, provider triage, and outcomes (discharge); however, these provide incomplete pictures of ED encounters. Firstly, there is good evidence that patients both underestimate and overestimate the severity of their illnesses; these decisions can be deadly in conditions like acute strokes, myocardial infarction, and sepsis. Secondly, the five-level Canadian Triage and Acuity Scale (CTAS) used in Canadian EDs is not a scale for appropriateness; it simply sorts patients to determine priority of assessment based on a brief assessment. Patient complexity and comorbidities, which contribute to resource use, are not measured by CTAS. Indeed, it has been demonstrated that patients in all CTAS levels may require imaging, consultation, and hospitalization for their conditions.⁷ New algorithms for diverting patients are being deployed in some Canadian EDs; however, until they are carefully tested, everything is an unproven proxy for proper clinical assessment by a trained provider. Thirdly, the outcomes in administrative data (e.g., discharge status) are provided *after* the ED assessment and treatment, and cannot be used to determine who can safely be diverted elsewhere for care.

4. What is the evidence supporting these diversion strategies?

The most important reason for not diverting patients is the complete lack of high-quality evidence to support the practice. A recent systematic review of both EMS and ED diversions found poor methods/biased evidence, disparate outcome reporting, and heterogeneity. Importantly, many patients who arrived in the ED refused the alternative option.⁶ Clearly, we can learn from patients! Secondly, diversion failed to reduce ED presentations and admissions. With the known risks associated with diversion after a brief encounter, it's hard to understand why so much effort is directed at this issue. Wouldn't it be more appropriate to see this same level of effort directed at strategies that have evidence to support their implementation?⁸ Finally, patient satisfaction scores suggest that, despite waits, the quality of ED care is rated highly. This is even more impressive since prolonged wait times often decrease satisfaction scores.

5. What are the alternatives?

Given that there is no acceptable definition, the intervention may be unsafe, and it's not what patients want, what alternatives are there? At a health system level, a focus on strategies that pull patients towards appropriate

care alternatives may be more successful than those that push them away from the ED. Increasing same-day access to family physicians, improving urgent care models so they integrate with primary care and ensure continuity post-visit, and creating information systems that share real-time patient data among providers may help. Moreover, planned seasonal pop-up “fever clinics” that can be set during anticipated annual influenza/cough/cold outbreaks could all provide patients with alternatives that they could choose to use, while still enabling those patients to choose the ED when that is their best option.

Within the ED, there are also strategies proven to help, some with quite strong evidence to support them. For example, nurse-directed orders, especially for musculoskeletal conditions, can expedite care and have been found to be safe.⁹ In addition, most EDs now have a fast-track area for more minor problems. The use of triage liaison physicians have been shown in systematic reviews⁸ to be effective. Finally, intake areas or clinical decision units have been used successfully by many Canadian EDs. These are but a few of the options available to Canadian decision-makers; however, it’s important to recognize that every ED has its own signature, and adopting interventions or strategies needs to be tailored to the specific ED.

During the current COVID-19 pandemic, some Canadian EDs are experimenting with virtual care where physicians provide advice to patients or their referring physicians based on a telephone or a video/phone assessment, resulting in a suggestion to proceed to the ED in person or the provision of an alternative. This happened during times when ED volumes were low, when physicians on duty had time, and avoidance of in-person assessments, where possible, was encouraged to conserve personal protective equipment and limit viral spread. If the logistics, including payment models, are resolved, this approach has the potential to safely triage patients to alternative care based on a true, albeit virtual, emergency assessment.

CONCLUSION

In summary, as emergency providers, we endorse the opinion that patients come to the ED for appropriate reasons, all require and deserve our care, and that we should, within reason, provide that care in a timely, efficient, and effective fashion. Attempts at diversion away from the ED after presentation have been fraught with problems, are potentially harmful to patients, and misdirect the attention of ED staff. Let’s study the ED-based interventions more carefully to ensure

effectiveness, ensure that what we do does not create unintended consequences, and not rely on others to do our job. Canadians want and expect that, and we should listen, especially to the existing evidence!^{10,11}

Keywords: Diversions, emergency medicine, overcrowding

Acknowledgements: The authors would like to thank Dr. Paul Atkinson for his assistance in facilitating and coordinating this debate.

Competing interests: None declared.

REFERENCES

1. Krebs LD, Kirkland SW, Chetram R, et al. Low-acuity presentation to the emergency department in Canada: exploring the alternative attempts to avoid presentation. *Emerg Med J* 2017;34(4):249–55.
2. Affleck A, Parks P, Drummond A, Rowe BH, Ovens HJ. CAEP position statement on emergency department overcrowding and access block. *CJEM* 2013;15(6):359–70.
3. Gutmann A, Gutmann A, Schull MJ, Vermeulen MJ, Stukel TA. Association between waiting times and short term mortality and hospital admission after departure from emergency department: population based cohort study from Ontario, Canada. *BMJ* 2011;342:d2983.
4. Berthelot S, Lang ES, Messier A. Low acuity patients should be redirected from the emergency department for more appropriate care. *CJEM* 2020 (in press).
5. Canadian Institute for Health Information. *How Canada compares: results from the Commonwealth Fund’s 2016 International Health Policy Survey of Adults in 11 Countries*. Ottawa, ON: CIHI; 2017.
6. Kirkland SW, Soleimann A, Rowe BH, Newton AS. A systematic review examining the impact of redirecting low acuity patients who seek emergency department care: is the juice worth the squeeze? *Emerg Med J* 2018;epub:207045. doi:207010.207011.
7. Dong SL, Bullard MJ, Meurer DP, et al.. Predictive validity of a computerized emergency triage tool. *Acad Emerg Med* 2007;14:16–21.
8. Rowe BH, Guo X, Villa-Roel C, et al. The role of triage liaison physicians on mitigating overcrowding in emergency departments: a systematic review. *Acad Emerg Med* 2011;18:111–20.
9. Rowe BH, Villa-Roel C, Guo X, et al. The role of triage nurse ordering on mitigating overcrowding in emergency departments: a systematic review. *Acad Emerg Med* 2011;18(12):1349–57.
10. Webber EJ, Mason S, Freeman JV, Coster J. Implications of England’s four-hour target for quality of care and resource use in the emergency department. *Ann Emerg Med* 2012;60(6):699–706.
11. Webber EJ, Mason S, Carter A, Hew RL. Emptying the corridors of shame: organizational lessons from England’s 4-hour emergency throughput target. *Ann Emerg Med* 2011;57(2):79–88.