*Invited Commentary*

# An epidemic we must address

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Emergency department (ED) crowding is a pressing complex issue that plagues emergency medicine and pediatric emergency medicine, and is associated with increased morbidity and mortality; however, so far, it seems immune to simple solutions. Using the pediatric emergency department (PED) frequently for care and return visits within 72 hours of ED care is a major contributor to overcrowding, and the return rate is a benchmark for quality of care in the ED.[1]

In the United States, data from the National Hospital Ambulatory Medical Care Survey revealed a 2.7%, 72-hour return rate nationally, with a constant increase in rate between 2001 and 2007 (almost 700,000 visits).[2] In Canada, where all comers are treated by ED providers with no out-of-pocket expenses, the rate is higher. For instance, in Toronto, ON, 5.2% and 0.4% of families returned within 72 hours after visiting an academic PED for a second and third visit, respectively.[3] Several years later, in the same PED, the rate of return was similar (4.4%) and was correlated with a high rate of inpatient admission (16.7%).[4] Whether admission was due to deterioration (there was a documented higher acuity triage score) or that providers thought those families were unable to cope with the illness at home or needed in-hospital monitoring or therapy is unknown. In our centre in Vancouver, BC, we recently reported a 7.3% return rate (within 7 days), with 71% of the visits unscheduled and 40% considered clinically unnecessary.[5] A detailed review of medical records suggested that most (94%) can be attributed to a mismatch between parental expectations and a natural resolution of disease.

That return visits consume scarce ED resources unnecessarily is highlighted in the report by Seguin and colleagues[6] in this issue of *CJEM*. They report that their PED at the Montreal Children's Hospital in Quebec is a source of frequent care (five or more visits per year). They report that 98 (4.7%) of their patients were frequent PED users, accounting for a staggering 17% of visits that year. It was not surprising that most visits were due to complaints associated with respiratory illnesses and were higher in families of lower socioeconomic status. No data were available on whether the families had access to a family physician or pediatrician, which may alleviate the need for frequent PED visits. These visits indicate suboptimal care in that these families likely need better community support and education in managing their children's illnesses.

Identifying the specific reasons for frequent ED use and returning to the ED has been difficult, despite attempts using qualitative and quantitative research methodology. Research in Canada to unravel the reasons indicate that younger age is the most common reason as reported in the present study from Quebec,[6] and the younger the child, the higher the likelihood of returning.[7] This suggests that we need a better Canadian support network for parents of children in the first year of life, but it also represents the higher rate of infectious conditions and parental concern of fever in young children.[8] Similarly, repeat visits for asthma in the cohort from Quebec was also common. In our experience, 82% of parents did not receive any printed asthma education material at any time prior to a visit to a tertiary PED.[9] Thus, this may be a pervasive Canadian problem with limited access to primary care, lack of continuity of care in the community, and long delays in getting outpatient appointments. Similar to the Quebec experience, vulnerable groups such as those in lower socioeconomic status and also families unable to communicate in our official languages are societal issues common in Canada and contribute to repeat visits to PEDs.

Finding solutions to reduce the frequent use and return to the PED is important but challenging. In a

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prospective, randomized study from Vancouver, BC, we compared return visits in a cohort who received follow-up telephone calls starting at 12 hours after discharge from the PED with those families that did not receive follow-up calls.[7] Contrary to what we expected, among 371 families (mean patient age 5.7 years), we found twice the rate of return visits to the ED among families that were called (14% v. 7%, respectively, $p < 0.03$) with no difference in other parameters. It is unknown whether the follow-up call was seen as an "invitation" to come and continue to seek care in the PED or an indication of limited access to primary care. Others in Ontario have had success with pre-printed order sheets and access to a pediatrician for consultation for asthma that resulted in a decrease in return visit rates from 6.9% to 4.4%, as compared with no sheets or consultation.[10] Thus, access and education may decrease PED return rates in respiratory illnesses and possibly also be successful in combatting "fever phobia" in younger children.[8]

More needs to be done to mitigate the significant burden from repeated visits and frequent use of the PED for non-urgent care and as a primary source of care. Emergency physicians need to seize the opportunity during the PED encounter to provide parents with information on their children's illnesses, educate them in regards to the anticipated course of illness, support their role in monitoring the children at home, and emphasize the need to adhere to evidence-based, recommended care at home.

As PED providers, our written discharge planning and communication with parents at discharge is sub-optimal[5,9] and likely contributes to parents' reliance on PEDs for their children's care. While only a fraction of the verbal recommendation is recalled by the tired, anxious parent, written discharge instructions that include simple relevant information on the illness, what to expect, guiding parents to the care needed at home, a clear plan for follow-up as well as explicit reasons to return may be the next step in an effort to trim avoidable and costly visits to the ED. We suggest that, in addition to the rate of return, the quality of a discharge process should become a quality measure of the PED and the individual provider. In addition, we need to be at the forefront to decrease inequity and advocate for vulnerable family access to appropriate care and support services.

Seguin et al.[6] are applauded for documenting frequent use of their ED, and raising awareness to a phenomenon likely exists in all Canadian PEDs. The heavy lifting entails the question: what are we going to do about it? It is an epidemic that we should not ignore.

**Keywords:** crowding, emergency services, frequent users, pediatric emergency department

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