

P050**Unplanned return visits to the paediatric emergency department: Caregiver and physician perspectives**

K. Gardner, BSc, MD, MSc, B. Taylor, BSc, MD, MSc, IWK Health Centre, Halifax, NS

Introduction: Unplanned return visits to the pediatric emergency department contribute to overcrowding and are used as a quality measure. They have not been well characterized in the literature making it difficult to design interventions to reduce unnecessary return visits. The aim of this study was to understand the reasons for return from the caregiver and physician perspective. **Methods:** This was a cross sectional survey performed on a convenience sample of unplanned return visits within 72 hours at the IWK Health Centre ED between February and October 2016. Exclusion criteria were: planned return visit, admission during the index visit, or triaged as Canadian Triage and Acuity Score (CTAS) 1 on return visit. Caregiver and physician surveys were developed based on themes identified in published literature. The caregiver was approached to complete a survey after triage and the most responsible physician from the return visit was asked to complete a survey immediately after discharge of the patient from their care. Demographic and clinical data were collected from the ED record from the index and return visits. The primary outcome measure was most important reason for return from the caregiver perspective. **Results:** There were 461 return visits during the study period and 67 caregivers (14.5%) were included in the final analysis. The response rate for the physician survey was 71%. Caregivers and physicians reported that the most important reason for return was a perceived progression of illness requiring reassessment (79.1% and 66.7% respectively). The majority of caregivers had a family physician on record (95%) but a minority attempted to access their family physician (19.4%) or a walk-in clinic (11.9%). Of those who contacted their family physician only 3 (23%) were offered an appointment within 48 hours and of those who did not contact their family physician 21 (38.2%) stated they would not be able to get an appointment in a reasonable amount of time. Despite this 97% would have trusted their family physician to manage their child's illness. Physicians surveyed stated that the return visit was necessary in 64.6% of cases. **Conclusion:** Caregivers returned to the ED due to a perceived progression of disease. While some cases may have been appropriate for management in a primary care setting, perceived difficulty with timely access was a barrier. Improved caregiver education about the natural history of disease and the urgency of follow up may reduce return ED visits.

Keywords: communication, pediatrics, unplanned return visits

P051**Interventions to improve emergency department consultation processes: a systematic review**

L. Gaudet, MSc, S. Kirkland, MSc, D. Keto-Lambert, MLIS, B. Rowe, MD, MSc, University of Alberta, Edmonton, AB

Introduction: Emergency Department (ED) consultations are often necessary for safe and effective patient care. Delays in throughput related to ED consultations can increase a patient's ED length of stay (LOS) and contribute to ED crowding. This review aimed to characterize and evaluate interventions to improve consultation metrics. **Methods:** Eight primary literature databases and the grey literature were comprehensively searched. Comparative studies of interventions to improve ED consultation metrics were included.

Unique citations were screened for relevance and the full-texts of relevant articles were reviewed by two independent reviewers. Data on study characteristics and outcomes were extracted in duplicate onto standardized forms. Disagreements were resolved through consensus. Categorical variables are reported as proportions. Continuous variables are reported as the median of the means and total range. **Results:** After screening 2632 unique citations and 19 from the grey literature items, 24 studies were included. Seventeen interventions targeted specific conditions or speciality services, while the remainder targeted all ED presentations. Interventions fell into three broad categories: strategies to expedite patient care, including clinical pathways (42%); interventions to improve consultant responsiveness (33%); and addition of a specialized care team to the ED (25%). Overall, eight studies reported on the overall proportion of consults in the ED, of which six reported an increase in the consultation proportion (median: +0.6%, range: -11.3% to +49.6%). Six studies reported the proportion of consulted patients who were admitted, of which four reported an increase (median: +1.1%, range: -5.9% to +3.5%). On the other hand, six of seven studies reporting on time from request to consult arrival reported a decrease (median: -25 minutes, range: -66 to +3.8 minutes). Similarly, overall ED LOS was reported to be lower in 17/19 studies reporting this metric (median: -47.6 minutes, range: -600 minutes to +59 minutes). **Conclusion:** A variety of strategies have been employed to improve ED consultation processes and outcomes. Neither the proportion of consulted patients in the ED nor the proportion of admissions were improved; however, interventions appeared successful at improving consultant arrival times and overall ED LOS. Improvements in consultation processes may be an effective strategy to improve ED throughput and thereby reduce ED crowding.

Keywords: consultation, ED throughput, systematic review

P052**Breaking down the pieces: A scoping review exploring the components of image ordering interventions and trends in their outcomes in pediatric emergency medicine**

L. Gaudet, MSc, L. Krebs, MSc, MPP, M. Carr, M. Kruhlak, BSc, A. Hall, PhD, K. Mahoney, PhD, B. Sevcik, MD, B. Rowe, MD, MSc, University of Alberta, Edmonton, AB

Introduction: Clinicians treating children in the emergency department (ED) are especially concerned with the efficacy and safety of imaging. Interventions to limit imaging have been proposed to maximize benefits and avoid risks; however, the types and effectiveness of interventions employed in pediatric EDs have not been examined in detail. **Methods:** Electronic databases and grey literature were systematically searched by a medical librarian. Comparative studies of ED-based interventions reporting computed tomography (CT), radiography (XR), or ultrasound (US) outcomes were included. Interventions introducing new imaging equipment or personnel to the ED, ED diversion strategies, and pre-admission protocols were excluded. At least two independent reviewers assessed each study for inclusion based on pre-defined criteria and extracted data. Disagreements were resolved through consensus. Descriptive results are reported. **Results:** Overall, 38 pediatric studies were included. Most (66%) interventions implemented two or more components; the most common intervention components were clinical guidelines or pathways (87%) and education or information (66%). Studies were categorized by presentation type: traumatic (n = 27); non-traumatic (n = 19), or combined 'all-comers' (n = 2). Included studies reported 62 imaging