

**Introduction:** An emergency department visit may represent a sentinel event for someone who is older and frail, signalling a slide into dependence and functional decline. The gold standard for the treatment of frail older adults is a comprehensive geriatric assessment, involving consideration of multiple domains including mobility and function in activities of daily living. Despite this, when a chart audit was conducted in a Canadian metropolitan emergency department, none of the patients age 65 and older had a documented assessment of their function or mobility. In response, an occupational therapy program was implemented. The goals of this program were to reduce the number of unnecessary hospital admissions related to patient functional impairments, and to increase function, safety, and independence for patients upon discharge from the emergency department. **Methods:** The pilot project, which was completed in 2013, was evaluated using a mixed methods approach. Positive patient outcomes at that time included a reduction in avoidable admissions and better support for patients upon discharge from the emergency department. A survey of emergency department staff indicated that occupational therapy consultation added value to the diagnostic and discharge planning processes. However, due to changes in administrative priorities, several service redesigns were required. Multiple PDSA cycles were completed, and the development of a logic model guided and focused program development. **Results:** A reassessment of program objectives was conducted using 2015 data, which found that the number of patients seen by the occupational therapist remained the same, as did the percentage of patients discharged with support of occupational therapy intervention, such as provision of adaptive equipment or referral to community rehabilitation referrals. The percentage of patients discharged due to occupational therapy as a primary contributing factor rose slightly, and staff satisfaction with the program remained high. **Conclusion:** This evaluation proves that the provision of occupational therapy services in the emergency department is sustainable, benefits patients, and can be incorporated into the emergency department workflow and culture.

**Keywords:** quality improvement and patient safety, allied health care, frail elderly

#### P152

##### **Point of care biliary ultrasound in the emergency department (BUSED): implications for surgical referral and emergency department wait times**

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**Introduction:** Patients with uncomplicated biliary disease frequently present to the emergency department for assessment. To improve bedside clinical decision making many emergency medicine physicians have pursued specialized training to perform point of care biliary ultrasound in the emergency department (BUSED). The purpose of this study was to determine the usefulness of BUSED in predicting the need for surgical consultation and intervention for biliary disease. **Methods:** A retrospective study of 283 consecutive patients visiting the emergency department who received a BUSED scan from December 1, 2016 to July 16, 2017. Physician interpretations of the BUSED scans were collected from the electronic image storage and interpretation system. Additional data was collected from the electronic health record including lab values, the subsequent use of diagnostic imaging, and outcomes data including disposition, surgical consultation or intervention, and 28 day follow up for representation or complication. Descriptive statistics and logistic regression were performed. **Results:** Of the patients who received a biliary POCUS scan, 29% were referred to general surgery, and 43% of those referred proceeded to eventual cholecystectomy.

Factors found to be independently predictive of surgical intervention on point of care BUSED scans included presence of gall stones (OR 13.01, 95% CI 5.02 to 27.1) and increased gallbladder wall thickness (OR 6.01, 95% CI 1.7 to 11.1). A total of 30% of patients receiving BUSED required at least one additional, radiology based imaging test (CT or diagnostic US). Average emergency department length of stay was substantially longer for those who required additional imaging as compared to those who were able to be diagnosed by BUSED alone (16.1 versus 5.2 hours, 10.9 hours 95% CI 10.6 11.2,  $p < 0.05$ ). **Conclusion:** Point of care biliary ultrasound performed by emergency physicians provides timely access to diagnostic information. Positive findings of gall stones and increased gall bladder wall thickness are highly predictive of the need for surgical intervention. Future, prospective studies are warranted to determine if point of care sonography is sufficient to proceed to surgery in select cases of uncomplicated biliary disease.

**Keywords:** point-of-care ultrasound, biliary disease

#### P153

##### **Preparedness of Canadian physician offices for paediatric emergencies**

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**Introduction:** Background: Studies in the US have demonstrated that many primary care staff and offices are inadequately prepared for paediatric emergencies. Although the Canadian Paediatric Society (CPS) recently reaffirmed their Guidelines for Paediatric Emergency Equipment and Supplies for a Physicians Office, no evaluation has been made regarding the impact of publishing these recommendations, or on the state of preparedness for paediatric emergencies in family physician offices. Objectives: The aim of this study was to evaluate awareness and adherence of family physicians in Ontario to the CPS guidelines on preparedness for paediatric emergencies. **Methods:** We conducted a province-wide, cross-sectional survey of 749 randomly selected family physicians. Participants were asked to complete a 14-question survey regarding clinic characteristics, incidence of paediatric emergencies, and preparedness of the clinic in the case of a paediatric emergency. Ethics approval was obtained from the regional Ethics Review Board. **Results:** 104 physicians responded to our Ontario survey (response rate of 14.8%). 71.2% of respondents reported seeing more than 10 children per week, and 58.7% had experienced at least one paediatric emergency in the past year. The proportion of physicians reporting paediatric emergencies within the last year increased with the number of children seen - 37.9% of physicians who saw fewer than 10 children per week reported an emergency, compared to 85.7% of those who saw more than 40 children per week. 85.6% of respondents reported that they were unaware of the CPS guidelines on paediatric emergency preparedness. Only 9.6% of respondents were aware of the guidelines, and even fewer, 3.8% had read them. Of the physicians who were unaware of the guidelines, 4.5% [CI=0.2, -0.09] engaged in mock code sessions, 29.2% [CI=0.2, 0.2] were up-to-date on Paediatric Advanced Life Support (PALS), 1.1% [CI=0.03, -0.01] had written protocols outlining safe transport of children to hospitals, and 50.6% [CI=0.4, 0.6] stocked half or more of the recommended supplies. In comparison, of the physicians who were aware of the guidelines, 14.3% [CI=0.3, -0.04] engaged in mock code sessions, 35.7% [CI=0.1, 0.6] were up-to-date on PALS, 7.1% [CI=0.2, -0.06] had written protocols, and 78.6% [CI=0.8, 0.8] stocked half or more of the recommended supplies. **Conclusion:** A large proportion of respondents had experienced at least one paediatric emergency in the past year, but were overall under-prepared. The majority of respondents, 85.6%, were not aware of the