

transitions (90/247), and were completed most often by staff in the LTC (57/90, 63%). Survey results indicated that ED and EMS staff felt the information on the form was useful to them, although they rarely completed their sections of the form. Implementation challenges included low awareness/recognition of the form among healthcare providers, belief that the form distracted from patient care, lack of time for form completion, negative reinforcement for LTC staff (who saw little return for the time they invested in completing the form), and mistrust among clinicians who work in different settings. **Conclusion:** Future efforts to improve healthcare communications must be acceptable for all clinicians. Innovation should balance the workload required among sites/clinicians and the benefits that the intervention offers to sites/clinicians should be explicitly tracked and reported. For this intervention, more effort should be made to inform LTC sites that the transfer information they provide is useful for EMS and ED clinicians. Moreover, gaps in perspectives and lack of trust among clinicians who work in different settings must be recognized and addressed in any multi-site communication intervention.

**Keywords:** handover, communication, seniors

#### MP18

##### A patient focused information design intervention to support the mTBI Choosing Wisely recommendation

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**Introduction:** Within Alberta, 30% of patients presenting to emergency with minor traumatic brain injury (mTBI) will receive a CT scan before being sent home, regardless of whether it was clinically indicated. Choosing Wisely (CW) Canada recommends using validated clinical decision support to determine whether a CT scan is necessary for patients presenting with a mTBI. In order to provide patients with information on the risks and benefits of CT scans in mTBI and to encourage discussions between patients and their doctor, the Emergency Strategic Clinical Network (ESCN) designed a patient focused information visualization on CT scans for head injuries. **Methods:** The ESCN, Physician Learning Program and CW Alberta partnered with the Mount Royal University Department of Information Design to develop a patient information visualization (infographic) intervention. Students spent a semester developing these infographics on Choosing Wisely recommendations, which were then presented to stakeholders. A student was then selected to develop a final design. Refinement of the design took place in consultation with clinical experts and tested in two patient focus groups. The final design was evaluated against the International Patient Decision Aid Standards checklist. The infographic was posted in 2 local emergency department waiting rooms. A survey was administered to any patients in the waiting room when volunteers were available. The survey was designed to evaluate whether the tool influenced patient beliefs about the risks and benefits of CT scans, and their willingness to engage in a discussion with their doctor. **Results:** In a 26 day period, 90 patients consented and completed the survey. Before reading the infographic, 33% of patients thought that after a head injury a CT was always a good idea and 63% thought it was sometimes a good idea. 82% and 91% of patients stated the poster helped them understand the indications and risks of CT imaging for mTBI. After viewing the poster, only 15% of patients felt that a CT was always a good idea after a mTBI. **Conclusion:** The mTBI patient infographic significantly changed patient perceptions regarding the need for CT scans in the setting of mTBI. This study demonstrates that targeted patient education materials can help support CW recommendations.

**Keywords:** Choosing Wisely, head injury, patient education

#### MP19

##### Comparison of the psychometric properties of the VAS, FPS-R and CAS in the pediatric emergency department

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**Introduction:** Appropriate pain management relies on the use of valid, reliable and age-appropriate tools that are validated in the setting in which they are intended to be used. The aim of the study was to assess the psychometric properties of pain scales commonly used in children presenting to the pediatric emergency department (PED) with an acute musculoskeletal injury. **Methods:** Convergent validity was assessed by determining the Spearman's correlations and the agreement using the Bland-Altman method between the Visual Analogue Scale (VAS), Faces Pain Scale-Revised (FPS-R) and Color Analogue Scale (CAS). Responsiveness to change was determined by performing the Wilcoxon signed-rank test between the pre-post analgesia mean scores. Reliability of the scales was estimated using relative (Spearman's correlation, Intraclass Correlation Coefficient) and absolute indices (Coefficient of Reliability). **Results:** A total of 495 participants was included in the analyses. Mean age was  $11.9 \pm 2.7$  years and participants were mainly boys (55.3%). Correlation between each pair of scales was 0.79 (VAS/FPS-R), 0.92 (VAS/CAS) and 0.81 (CAS/FPS-R). Limits of agreement (80%CI) were -2.71 to 1.27 (VAS/FPS-R), -1.13 to 1.15 (VAS/CAS) and -1.45 to 2.61 (CAS/FPS-R). Responsiveness to change was demonstrated by significant differences in mean pain scores, among the three scales, between pre- and post-medication administration ( $p < 0.0001$ ). ICC and CR estimates suggested acceptable reliability for the three scales at 0.79 and  $\pm 1.49$  for VAS, 0.82 and  $\pm 1.35$  for CAS, and 0.76 and  $\pm 1.84$  for FPS-R. **Conclusion:** The scales demonstrated good psychometric properties with a large sample of children with acute pain in the PED. The VAS and CAS showed a stronger convergent validity, while FPS-R was not in agreement with the other scales. Clinically, VAS and CAS scales can be used interchangeably to assess pain intensity of children with acute pain.

**Keywords:** pain, pediatrics, pain intensity scale

#### MP20

##### Prevalence of incidental findings on chest computed tomography in patients with suspected pulmonary embolism in the ED

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**Introduction:** Computed tomographic pulmonary angiograms (CTPAs) are often ordered to evaluate pulmonary embolism (PE) in the emergency department (ED). However, these studies often yield alternative diagnoses and report incidental findings that lead to additional unnecessary investigations. Our objective was to assess the prevalence and significance of such findings and their implications in patient management. **Methods:** This is a retrospective cohort study of adults presenting to two tertiary care EDs in 2015, being evaluated with CTPA for PE. Data was extracted by two reviewers from electronic CT records with inter-rater reliability reported using kappa statistic. We measured prevalence of PE, incidental findings and alternative diagnoses with data reported as mean and standard deviation (SD). Univariate analyses were performed with t-test for continuous variables and Mantel-Haenszel test for categorical variables. A sample size of 770 was calculated based on an expected difference in prevalence between significant and