

**Keywords:** older patients, patient experience, volunteers

#### LO59

##### Reliability of patient reported exposure and outcome data in a prospective cohort study of older adults presenting to the emergency department

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**Introduction:** Participant interviews are often considered the ‘gold standard’ for measuring outcomes in diagnostic and prognostic studies. Participant exposure data are frequently collected during study interviews, but the reliability of this information often remains unknown. The objective of this study was to compare patient-reported medication exposures and outcomes to data extracted from electronic medical records (EMRs) to determine reliability. **Methods:** This was a secondary data analysis from a prospective observational cohort study enrolling older ( $\geq 65$  years) patients who presented to one of three emergency departments after a fall. After patients had consented to participate in the study, they were asked about their use of antiplatelet and anticoagulation medications (exposures of interest). During follow up, participants were asked if a physician had told them they had bleeding in their head (diagnosis of intracranial hemorrhage). Patient-reported responses were compared to data extracted from a structured EMR review. Trained research assistants extracted medication exposure and outcome data from the hospital EMRs in duplicate for all visits to any hospital within 42 days. Inter-rater agreement was estimated using Cohen’s kappa (K) statistics with 95% confidence intervals (CIs). **Results:** 1275 patients completed study interviews. 1163 (91%) responded to questioning about antiplatelet use and 1159 (91%) to anticoagulant use. Exact agreement between patient reported antiplatelet use compared to EMR review was 77%, with  $K = 0.50$  (95% CI: 0.44 to 0.55). For anticoagulation use, exact agreement was 87%, with  $K = 0.68$  (95% CI: 0.63 to 0.72). 986 (78%) patients had a follow up interview after 42 days. Exact agreement between patient reported intracranial bleeding and EMR review was 95%, with  $K = 0.30$  (95% CI: 0.15 to 0.45). Using the EMR review as the reference standard, the sensitivity and specificity of patient reported intracranial bleeding was 34% (95% CI: 20 to 52%) and 97% (95% CI: 96 to 98%), respectively. **Conclusion:** In this population of older adults who presented to the ED after a fall, patient reported use of antiplatelet and anticoagulant medications was not a reliable method to identify medication use. Patients who were diagnosed with intracranial bleeding were particularly poor at reporting this diagnosis.

**Keywords:** intracranial bleeding, measurement, patient-reported

#### LO60

##### Frailty and associated prognosis among older emergency department patients with suspected infection – a prospective, observational cohort study

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**Introduction:** Prognostication and disposition among older Emergency Department (ED) patients with suspected infection remains challenging. Frailty is increasingly recognized as a predictor of poor prognosis among critically ill patients, however its association with

clinical outcomes among older ED patients with suspected infection is unknown. **Methods:** We conducted a multicentre prospective cohort study at two tertiary care EDs. We included older ED patients ( $\geq 75$  years) presenting with suspected infection. Frailty at baseline (prior to index illness) was explicitly measured for all patients by the treating physicians using the Clinical Frailty Scale (CFS). We defined frailty as a CFS 5-8. The primary outcome was 30-day mortality. We used multivariable logistic regression to adjust for known confounders. We also compared the prognostic accuracy of frailty against the Systemic Inflammatory Response Syndrome (SIRS) and Quick Sequential Organ Failure Assessment (qSOFA) criteria. **Results:** We enrolled 203 patients, of whom 117 (57.6%) were frail. Frail patients were more likely to develop septic shock (adjusted odds ratio [aOR]: 1.83, 95% confidence interval [CI]: 1.08-2.51) and more likely to die within 30 days of ED presentation (aOR 2.05, 95% CI: 1.02-5.24). Sensitivity for mortality was highest among the CFS (73.1%, 95% CI: 52.2-88.4), as compared to SIRS  $\geq 2$  (65.4%, 95% CI: 44.3-82.8) or qSOFA  $\geq 2$  (38.4, 95% CI: 20.2-59.4). **Conclusion:** Frailty is a highly prevalent prognostic factor that can be used to risk-stratify older ED patients with suspected infection. ED clinicians should consider screening for frailty in order to optimize disposition in this population.

**Keywords:** frailty, geriatrics, sepsis

#### LO61

##### A modified Delphi study to identify trauma care modifiers for older adults

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**Introduction:** Older (age  $\geq 65$  years) trauma patients suffer increased morbidity and mortality. This is due to under-triage of older trauma victims, resulting in lack of transfer to a trauma centre or failure to activate the trauma team. There are currently no Canadian guidelines for the management of older trauma patients. The objective of this study was to identify modifiers to the prehospital and emergency department (ED) phases of major trauma care for older adults based on expert consensus. **Methods:** We conducted a modified Delphi study to assess senior-friendly major trauma care modifiers based on national expert consensus. The panel consisted of 24 trauma care providers across Canada, including medical directors, paramedics, emergency physicians, emergency nurses, trauma surgeons and trauma administrators. Following a literature review, we developed an online Delphi survey consisting of 16 trauma care modifiers. Three online survey rounds were distributed and panelists were asked to score items on a 9-point Likert scale. The following predetermined thresholds were used: appropriate (median score 7-9, without disagreement); inappropriate (median score 1-3; without disagreement), and uncertain (any median score with disagreement). The disagreement index (DI) is a method for measuring consensus within groups. Agreement was defined a priori as a DI score  $< 1$ . **Results:** There was a 100% response rate for all survey rounds. Three new trauma care modifiers were suggested by panelists. Of 19 trauma care modifiers, the expert panel achieved consensus agreement for 17 items. The prehospital modifier with the strongest agreement to transfer to a trauma centre was a respiratory rate  $< 10$  or  $> 20$  breaths/minute or needing ventilatory support (DI = 0.24). The ED modifier with the strongest level