

fractures to the wrist or hand had shorter ED LOS (mean = 2.50, SD  $\pm$  5.83) than those without (mean = 10.95, SD  $\pm$  92.54),  $t(3478) = 2.64$ ,  $p = 0.008$ . Among admitted patients, results were similar, with elevated inpatient LOS for patients over the age of 65 (mean = 171.71, SD  $\pm$  508.35) compared to younger patients (mean = 45.45, SD  $\pm$  39.53),  $t(3478) = -3.41$ ,  $p = 0.001$ . Patients with radius fractures had shorter LOS (mean = 61.87, SD  $\pm$  210.37) compared to those without (mean = 288.83, SD  $\pm$  632.29),  $t(3478) = 3.87$ ,  $p < 0.001$ . With respect to volume and weather, night-freezing events (below-freezing temperatures the preceding day, followed by freezing temperatures prior to 0600 hours the following day) were more likely to result in high FI volume (OR, 8.08; 95% CI, 5.14, 12.07;  $p < 0.001$ ) as were recent Chinook events (OR, 1.39; 95% CI, 1.06, 1.81;  $p = 0.017$ ).

**Conclusion:** Chinook-induced meteorological mass-casualty events can be severe, but do not target populations distinct from winter averages. They can be predicted based on forecasted weather variations and should be considered for population-level alerts utilizing cellular technology.

**Keywords:** fall, mass-casualty incident, weather

#### P146

##### Does a communications skills intervention improve emergency department staff coping skills and burnout?

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**Introduction:** Emergency department (ED) staff carry a high risk for the burnout syndrome of increased emotional exhaustion, depersonalization and decreased personal accomplishment. Previous research has shown that task-oriented coping skills were associated with reduced levels of burnout compared to emotion-oriented coping. ED staff at one hospital participated in an intervention to teach task-oriented coping skills. We hypothesized that the intervention would alter staff coping behaviors and ultimately reduce burnout.

**Methods:** ED physicians, nurses and support staff at two regional hospitals were surveyed using the Maslach Burnout Inventory (MBI) and the Coping Inventory for Stressful Situations (CISS). Surveys were performed before and after the implementation of communication and conflict resolution skills training at the intervention facility (I) consisting of a one-day course and a small group refresher 6 to 15 months later. Descriptive statistics and multivariate analysis assessed differences in staff burnout and coping styles compared to the control facility (C) and over time.

**Results:** 85/143 (I) and 42/110 (C) ED staff responded to the initial survey. Post intervention 46 (I) and 23 (C) responded. During the two year study period there was no statistically significant difference in CISS or MBI scores between hospitals (CISS: (Pillai's trace = .02,  $F(3,63) = .47$ ,  $p = .71$ , partial  $\eta^2 = .02$ ); MBI: (Pillai's trace = .01,  $F(3,63) = .11$ ,  $p = .95$ , partial  $\eta^2 = .01$ )) or between pre- and post-intervention groups (CISS: (Pillai's trace = .01,  $F(3,63) = .22$ ,  $p = .88$ , partial  $\eta^2 = .01$ ); MBI: (Pillai's trace = .09,  $F(3,63) = 2.15$ ,  $p = .10$ , partial  $\eta^2 = .01$ )).

**Conclusion:** We were not able to measure improvement in staff coping or burnout in ED staff receiving communication skills intervention over a two year period. Burnout is a multifactorial problem and environmental rather than individual factors may be more important to address. Alternatively, to demonstrate a measurable effect on burnout may require more robust or inclusive interventions.

**Keywords:** burnout, emergency department

#### P147

##### Why emergency department journey: piloting a patient poster explaining the emergency department care process

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**Introduction:** Qualitative research with emergency department (ED) patients in Alberta has revealed that some patients have limited understanding of the ED care process and that this increases the anxiety, frustration and confusion experienced throughout their visit. The objective of this study was to design, implement, and test the usefulness of a poster explaining the ED care process.

**Methods:** As part of a stepped-wedge ED intervention trial in Alberta, a 4' x 3' poster portraying the patient ED care process was developed and posted in 15 study site waiting rooms. Trained research assistants approached patients in 3 urban ED waiting areas and invited them to complete a short paper-based survey on the acceptability and usefulness of the poster. Results are reported as proportions.

**Results:** A total of 316 patients agreed to participate in this study. Approximately half of the participants were male and 60% were between the ages of 17 and 49. The majority of participants identified themselves as white (72%) and nearly half (49%) were accompanied by someone. A third (37%) of patients had read the wall poster prior to being approached to complete the survey. Most patients (62%) who had not read it prior to being approached hadn't noticed the poster or couldn't see it because of its location. Once patients reviewed the poster, the vast majority (92%) reported completely or largely understanding the information and most (84%) found it at least moderately helpful in preparing them for their ED journey. Approximately 45% of respondents agreed that they learned something new about the ED care process by reading the poster and 20% wanted additional information added to the poster; largely, wait time estimates (53% of responses).

**Conclusion:** Placing posters in the ED is one method for equipping patients for their ED care process; however, this study revealed the potential limited utility of this engagement method by the small number of patients who noticed the poster and read the information. Location and content (e.g., time estimates) were identified as key factors for implementation. Condition-specific guides may need to supplement general ED process guides to better prepare patients for their individual ED journey and to actively engage them in their ED care.

**Keywords:** care process, emergency department, patient education

#### P148

##### Emergency physicians' perception on engaging patients in their emergency department care

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**Introduction:** Patient engagement in health decision-making is an important research area within emergency medicine. Studies suggest that patients are often not highly engaged in care decisions, and may not be aware that there are decisions in which they can be involved. This study explored emergency physicians (EPs) perceptions of their patient engagement practices.

**Methods:** As part of a stepped-wedge randomized controlled trial, an introductory seminar was