

was primarily physician dependent. **Conclusion:** Primary barriers to decision rule integration are timing of application, hesitation surrounding patient input, and uncertainty over data. Physicians often make decisions prior to order entry. Mobile copies of decision rules should be available to better facilitate compliance. Concerns over patient influence on ordering are common. Patient-friendly materials on clinical decision rules should be available to better facilitate shared decision making while still promoting decision rules. While overuse is agreed upon, many prefer to see and track their own ordering data before supporting a physician-targeted intervention. Data reports to physicians may help affirm physician-associated overuse, and reinforce their role in responsible resource utilization.

**Keywords:** clinical decision making, resource utilization, imaging

### P135

#### Canadian emergency medicine residents' training and competency in end-of-life care: a needs assessment

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**Introduction:** Emergency Physicians (EPs) face growing numbers of palliative care patients presenting to the emergency department (ED). Formal training for EM residents across Canada in this area is not well described. We sought to describe the training Canadian emergency medicine (EM) residents receive in end of life care issues, their attitudes toward it, self-reported knowledge and skills, and the importance they place on further training in this domain. **Methods:** We conducted an electronic survey across Canada. We collected demographic data, previous education in palliative care, attitudes toward end of life care, and a self-assessment of competency and desires for further training in the main components of palliative care pertinent to EM. We used simple descriptive statistics, a Mann-Whitney test to assess whether previous formal training in palliative care affected current comfort level, and a combination of self-reported knowledge and importance levels placed on key areas. **Results:** We received 112 responses from 17 different Universities in Canada, with 42% from the CCFP training stream, and 58% from the FRCP stream. Fifty-four percent of respondents had not completed a palliative care rotation during residency or fellowship, which was overwhelming accounted for by FRCP residents (13%, vs. 82% among CCFPs). Having completed formal training in palliative care was significantly associated with general comfort in managing terminally ill patients ( $p < 0.0001$ ). Sixty percent of subjects felt a lack of knowledge and skills was their main limiting factor in providing ideal care for terminally ill patients in the ED. The skills deemed highest priority with lowest comfort level among residents included discussing withdrawing and withholding care, prognosticating, pharmacology and other symptom control. Preferred methods of receiving palliative care teaching included simulation, bedside teaching and small groups. **Conclusion:** The care of acute illness among palliative care patients is substantially underrepresented in the Canadian EM curriculum, particularly for FRCP trainees. Formal training is associated with increased comfort in caring for patients at the end of their life. High yield teaching interventions could be directed toward knowledge of withdrawing, prognosticating and symptom control. Simulation, bedside teaching and small groups are the preferred method for receiving such teaching.

**Keywords:** palliative care, end-of-life care, education

### P136

#### A quality improvement initiative to optimize appropriate testing for venous thromboembolism in the emergency department

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**Introduction:** Venous thromboembolism (VTE) is a common diagnostic consideration among patients presenting to the emergency department (ED) and often requires the use of diagnostic testing. A normal d-dimer (DD) blood test can exclude VTE and eliminate the need for costly imaging and the associated contrast medium and radiation exposure. The purpose of this quality improvement initiative was to increase the use of DD testing for patients with a low and intermediate clinical pretest probability of VTE, increase the use of ventilation perfusion scans (VQ) as an alternative to CT pulmonary angiogram (CTPA) and decrease the use of CTPA and venous doppler ultrasound (VDUS) at St. Michael's hospital. **Methods:** A multi-specialty team developed an ED specific algorithm set for appropriate VTE testing that were posted on the ED online portal along with a poster in each zone of the ED after an ED launch campaign with request for feedback. A run chart was used to track DD, CTPA, VQ and VDUS utilization. Two-sided T-test comparison was conducted to compare pre- and post-implementation utilization. **Results:** Physician feedback was positive regarding the use of: DD in VTE intermediate risk patients and the VTE algorithm set. Feedback was negative for DD turnaround time. We found a significant increase in DD use (77 tests per month to 93;  $p = 0.013$ ), but no significant change in the use of CTPA (27.3 per month to 30;  $p = 0.38$ ), VDUS, or VQ. Number of monthly ED visits remained constant. **Conclusion:** This intervention increased DD utilization, but measuring appropriateness will require prospective collection of clinical pre-test probability. Integrated risk stratification and decision aids into computer physician order entry may be necessary to track and improve appropriateness.

**Keywords:** quality improvement, venous thromboembolism, utilization

### P137

#### Emergency department discharge information sheets - a prescription for success?

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**Introduction / Innovation Concept:** Effective communication between health providers and patients is central to patient safety, health education and patient empowerment. Previous studies in the Calgary Zone demonstrated that less than fifty percent of emergency department patients thought discharge handouts communicated health information well and even fewer thought the handout information would aid them in care at home. A partnership between the Department of Information Design, Mount Royal University and the Department of Emergency Medicine, University of Calgary, seeks to provide an innovative solution to this problem. **Methods:** The Calgary Zone Department of Emergency Medicine has partnered with the Mount Royal University Department of Information Design community service learning course. Information design students will work to develop infographics based on the "Choosing Wisely Alberta" Campaign Topics, with content expertise provided by the Department of Emergency Medicine. **Curriculum, Tool, or Material:** The five "Choosing Wisely Alberta" topics are: CT scans for adults with head injuries, CT scans to find Blood Clots in the lung, Imaging Tests for Headaches, Imaging tests for lower back pain, Treating Sinusitis. The target audience for the project will involve staff physicians, patients, public and government. Student involvement will direct their individual projects to these target audiences and will consider important issues such as non-English speaking patients, patients with low health-