during the first round of interviews at the University of Toronto during phase one. Results from phase one were used to refine the interview guide, to be used in phase two, to ensure that all potential areas of thematic generation were touched upon. Phase two occurred at the University of Toronto and McMaster University using the refined interview guide. All transcripts were coded, analyzed, and collapsed into themes. Data analysis was guided by a constructivist grounded theory based in a relativist paradigm. **Results:** Thematic analysis revealed five themes. Residents and staff alike described acquiring the skills of supervision and assessment passively, primarily through modeling the behaviours of others; the training that is available in these areas is variably used, creating a diversity of physician comfort levels within these two competencies; the many competing priorities in the emergency department represent significant barriers to improving supervision and assessment; providing negative feedback is universally difficult and often avoided, sometimes resulting in struggling trainees not being identified until late in residency; the move towards competency based education (CBE) will act as an impetus for more formal curriculum being required in these areas. **Conclusion:** As residency programs transition to a CBE model, there will be a greater need for formal training in supervision and assessment to achieve a standard level of comfort and competence among senior residents physicians in independent practice. These competencies will also need an emphasis on how to identify struggling trainees, and how to approach negative and constructive feedback.

Keywords: supervision, assessment, competency-based education

P080

Clinical lead nurse practitioner Strathcona Community Hospital

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Introduction: Prior to opening Strathcona Community Hospital (STCH) site leadership were tasked to develop an innovative care model. The central aim was quality improvement and patient safety optimization in the emergency department (ED) utilizing a nurse practitioner (NP) model. They developed 3 pillars: collaboration, multidisciplinary approach, and integration with the plan of improving patient satisfaction and ensuring no patient gets lost to follow up. NPs work in the STCH ED and the NP led Emergency Department Transition (EDT) Clinic in Ambulatory Care. In the ED NPs provide direct clinical care, judicious review of DI and microbiology reports, and care coordination for patients at risk of lost to follow up. The EDT clinic is an innovative NP lead clinic with the purpose of providing timely, high-quality follow up care for ED patients. **Methods:** Data for the service delivery indicators came from data repository and manual data collection looking at the following outcomes: timely review of DI/micro results; decreased ED visits for non-urgent/emergent issues; safe transitions in care and improved patient satisfaction. Quantitative data from service delivery, patient and surveys were analyzed using Microsoft Excel and SPSS 19. **Results:** From June 2016 to January 2017 ED NPs at STCH reviewed 3000 positive microbiology reports and made 517 f/u calls to those patients, and reviewed 3181 DI results. This has freed up approximately 2 hrs per day of ED physician time. When NPs were working in the ED, the number of patients who left without treatment (LWT) was approximately 50% less, and improved STCH ED wait times to be among the lowest in the Edmonton Zone. From June 2016 to January 2017, EDT NPs completed 837 patient visits; 371 letters to family physicians (FPs); 215 referrals; and connected 520 patients to a new FP. Patient satisfaction survey show 88-90% of the patients were satisfied with their care. **Conclusion:** NPs are integral members of the ED team at STCH, providing direct clinical care and several valuable follow up services for ED patients. The EDT clinic provides urgent follow up for ED patients unable to get a timely appointment with their FP or no access to primary care. The clinic also prevents unnecessary returns to ED, and aids to bridge ED services to family physicians or specialist. NPs are the common thread through all departments at STCH, contributing to quality improvement and high patient satisfaction.

Keywords: quality improvement and patient safety, judicious review of DI and microbiology reports, NP led emergency transition clinic

P081

ICD-10 coding of free text diagnoses is not reliable for the diagnosis of PE in Calgary zone emergency department patients

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Introduction: Administrative data are attractive for research, policy and quality improvement initiatives as large amounts of data can often be obtained quickly and at low cost. Unfortunately, administrative data often have significant limitations owing to how they were collected and coded. In many cases, free text, often hand written, diagnoses provided by physicians are converted into ICD-10 (International Statistical Classification of Diseases and Related Health Problems, 10th Revision) codes by trained nosologists for administrative purposes. However, because of the large data sets often obtained from administrative sources, it is difficult to verify the accuracy of the data, which may lead researchers to misleading or false conclusions. The objective of this study was to evaluate the accuracy of ICD-10 codes for the diagnosis of pulmonary embolism (PE) in emergency department (ED) patients. **Methods:** As part of a larger study examining the effectiveness of a clinical decision support intervention on CT utilization and diagnostic yield for ED patients with suspected PE, all patients with an ICD-10 code corresponding to PE (126.0 and 126.9) on ED discharge were obtained from four adult urban EDs and one urgent care center from August 2016 to March 2017. PE diagnosis was confirmed by reviewing electronic medical records and imaging reports for all patients. Discrepancies between coded ICD-10 diagnoses and actual imaging findings were quantified. This study was REB approved. **Results:** Of 584 ED patients with ICD-10 codes identifying PE as a discharge diagnosis, 535 had imaging that could be reviewed. Of these, 225 (42.1%) did not have clinical diagnoses of PE, and thus were incorrectly coded, resulting in false positive ICD-10 codes. Common coding errors included physician free text diagnoses of rule out PE or query PE being coded as positive for PE. **Conclusion:** Administrative data are subject to errors in coding. In this study ICD-10 codes were not reliable for the diagnosis of PE, with 42.1% of PE diagnoses being false positives. Similar coding errors are likely for other diagnoses that require waits for confirmatory imaging (e.g. appendicitis). Nosologist coding of physician free text diagnoses is challenging and prone to errors. Consequently, validation of ICD-10 coding prior to analysis of administrative datasets is crucial for meaningful results.

Keywords: pulmonary embolism, miscoding, administrative data

P082

Kingston emergency department utilization of adults who have experienced adverse childhood experiences

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Introduction: It is critical for planning, clinical care and resource optimization to understand patterns of emergency department (ED) utilization. Individuals who have experienced adverse childhood experiences (ACE) are known to have more unhealthy behaviors and worse health outcomes as adults and therefore may be more frequent ED users. Adverse childhood experiences include physical, sexual and emotional abuse or neglect, substance abuse in the family, witnessing violence, having a parent incarcerated or parents getting divorced or separated. To date there are few studies exploring the relationship between ACE and ED utilization. **Methods:** This a mixed qualitative and quantitative study. It includes analysis of data collected through a survey, a retrospective chart review and focus group discussions. The survey was administered to a convenience sample of adult patients (CTAS 2-5) presenting to EDs in Kingston Ontario, and consisted of two validated tools that measured exposure to ACE and resiliency. Demographic data and ED utilization frequency for 12 months prior to the index visit were extracted from an electronic medical record for each patient completing the survey. A sample of participants with a high ACE burden (ACE score >4) were invited to participate in focus groups to explore their experiences of care in the ED. Demographic, ED utilization and health status data were summarized and statistically significant patterns between high ACE and lower ACE patients were determined using Chi2t or t-tests. Transcripts from the focus groups were thematically analyzed using NVivo software by 2 independent researchers. **Results:** 1693 surveys were collected, 301 (18%) were deemed to have a high ACE score, data analysis is ongoing. The primary outcome is the relationship between ACE and the frequency of ED utilization among adult patients presenting to EDs in Kingston, ON. Secondary outcomes include evaluating the role of resilience as a potential mitigating factor, describing the demographics of high ACE burden frequent ED visitors, and the experiences of care for individuals with high ACE burden in the ED. These outcomes will be utilized to inform hypotheses for future studies and potential interventions aimed at optimizing ED utilization and patient care experience. **Conclusion:** This study provides novel insight into the relationship between ACE burden and ED utilization while also describing the demographics and experiences of care for ED patients with a high ACE score. Data analysis is on-going.

Keywords: abuse, utilization, resilience

P083

Developing an interview guide to explore physicians perceptions about unmet palliative care needs in Albertas emergency departments

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Introduction: Many patients with advanced or end-stage diseases spend months or years in need of optimal physical, spiritual, psychological, and social care. Despite efforts to provide community care, those with severe illness often present to emergency departments (EDs). This abstract presents preliminary results on the qualitative component of an ED-based mixed methods pilot study. The objective of this qualitative component is to develop and test an interview guide to collect qualitative data on physicians perceptions about unmet palliative care (PC) and end of life care (EOLC) needs in EDs. **Methods:** A scan of the literature on PC and EOLC in EDs was conducted to develop propositions about what might be expected through the clinician interviews, as well as an interview guide. The interview guide will be piloted with up to four ED physicians. During the interview each physician will describe a case where a PC patient had unmet care needs and the impacts they believe these unmet needs had on patients and families. Interview transcripts will be coded descriptively and then conceptually themed by the researcher who conducted the interview. Interpretations drawn from the interview data, with supporting quotations and comparison to initial propositions, will be presented to members of the research team with experience providing ED care, for further interpretation. Advice of a second trained qualitative researcher will be sought on the richness and relevance of data obtained and how the interview guide could be improved to elicit richer and/or more relevant data. A revised interview guide will be produced alongside rationales for why the proposed revisions will elicit richer data. **Results:** After reviewing 27 articles on PC and EOLC, propositions and an initial interview guide were developed based on themes from the literature and the study groups experiences. One of the primary results of this pilot work will be an enhanced understanding of PC and EOLC in our local ED context, as reflected in an interview guide revised to elicit richer data than achieved through the initial interview guide. **Conclusion:** The comparison between our propositions and the study findings will help identify how biases may have influenced interview questions and/or the interpretation of the data. This pilot work to develop an interview guide enhances the rigour of this qualitative work on unmet PC and EOLC needs in EDs.

Keywords: palliative care, end of life, emergency department

P084

Substituting capillary blood for urine in point-of-care pregnancy tests

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Introduction: When a female presents with abdominal pain and vaginal bleeding, a positive b-hcg level helps in the diagnosis of an ectopic pregnancy. A timely diagnosis as well as management is required for these cases. In many emergency departments, there can be delays in laboratory processing of quantitative b-hcg levels as well as qualitative urine pregnancy tests. In others, especially in rural hospitals in Canada, the laboratory closes at night and these tests cannot be processed until the morning. This may also help decrease length of stay for some patients in the emergency department. There are currently new point-of-care b-hcg tests on the market using capillary blood, but these are expensive and not readily available. The purpose of the study is to validate the most inexpensive point of care urine pregnancy tests readily available on the market for use with capillary blood samples. These point-of-care tests have only been studied with urine and whole blood. If validated with capillary blood, it would allow for a very practical, rapid, and inexpensive test which could help doctors and nurses to triage patients in a timely and more efficient fashion. **Methods:** In our emergency department, 385 patients between the ages of 18-50 with possible pregnancy, abdominal pain or vaginal bleeding will be included in the study. A capillary blood sample will be taken and applied to a cassette point-of-care pregnancy test with four drops of saline. Two independent investigators will assess the test. The results will be compared to a quantitative serum hCG assay and urine. If these tests are not done as part of the patients medical care, the patient will be contacted one month after to enquire if the patient is pregnant or not. The sensitivity, specificity, positive and negative predictive values will be calculated. **Results:** Data colleciton will begin in January 2018. **Conclusion:** No conclusions can yet be drawn.

Keywords: ectopic pregnancy, point-of-care testing, triage