



UNIVERSITY OF SASKATCHEWAN

2019 EMERGENCY MEDICINE

RESEARCH DAY

AGENDA AND ABSTRACTS

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RESEARCH DAY AGENDA

GRAND ROUNDS LECTURE DR. SHAWN DOWLING..... 10:00-11:00
*“FROM KNOWLEDGE TO ACTION–
WHY WE NEED QUALITY IMPROVEMENT IN THE ED”*

RESEARCH PRESENTATIONS (PART 1)

- *EMERGENCY MEDICAL SERVICES.....* 11:00-11:15
- *EDUCATION.....* 11:15-12:00

EMERGENCY MEDICINE TEACHING AWARDS..... 12:00-12:15

LUNCH..... 12:15-1:00

RESEARCH PRESENTATIONS (PART 2)

- *EDUCATION (cont'd)* 1:00-2:30

BREAK..... 2:30-2:45

RESEARCH PRESENTATIONS (PART 3)

- *CLINICAL MEDICINE.....* 2:45-3:00
- *QUALITY IMPROVEMENT.....* 3:00-4:00

RESEARCH AWARDS..... 4:00-4:30
PRESENTED BY DRS. DOWLING, DAVIS & VERRALL

OUTCOMES OF OUT OF HOSPITAL CARDIAC ARREST IN FIRST NATIONS VS. NON-FIRST NATIONS PATIENTS IN SASKATOON

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INTRODUCTION: One in nine (11.7%) people in Saskatchewan identifies as First Nations. In Canada, First Nations people experience a higher burden of cardiovascular disease when compared to the general population, but it is unknown whether they have different outcomes in out of hospital cardiac arrest (OHCA).

METHODS/METHODOLOGY: We reviewed pre-hospital and inpatient records of patients sustaining an OHCA between January 1st, 2015 and December 31st, 2017. The population consisted of patients aged 18 years or older with OHCA of presumed cardiac origin occurring in the catchment area of Saskatoon's EMS service. Variables of interest included, age, gender, First Nations status (as identified by treaty number), EMS response times, bystander CPR, and shockable rhythm. Outcomes of interest included return of spontaneous circulation (ROSC), survival to hospital admission, and survival to hospital discharge.

RESULTS: In all, 372 patients sustained OHCA, of which 27 were identified as First Nations. First Nations patients with OHCA tended to be significantly younger (mean age 46 years vs. 65 years, $p < 0.0001$) and had shorter EMS response times (median times 5.3 minutes vs. 6.2 minutes, $p = 0.01$). There were no differences between First Nations and non-First Nations patients in terms of incidence of shockable rhythms (24% vs. 26%, $p = 0.80$), ROSC (42% vs. 41%, $p = 0.87$), survival to admission (27% vs 33%, $p = 0.53$), and survival to hospital discharge (15% vs. 12%, $p = 0.54$).

CONCLUSIONS: In Saskatoon, First Nations patients sustaining OHCA appear to have similar survival rates when compared with non-First Nations patients, suggesting similar baseline care. Interestingly, First Nations patients sustaining OHCA were significantly younger than their non-First Nations counterparts. This may reflect a higher burden of cardiovascular disease, suggesting a need improved prevention strategies.

TRAUMA EXPERIENCES OF RURAL PRACTITIONERS: A SELF ASSESSMENT

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INTRODUCTION: The purpose of this study was to identify, through self-assessment, how comfortable rural emergency medicine (EM) physicians are in treating critically ill trauma patients, the resources available to treat such patients and their comfort with performing trauma procedures. Our goal is to enhance rural trauma care by identifying obstacles EM physicians practicing rural trauma medicine face in Saskatchewan.

METHODS: An online survey was emailed to family physicians practicing rural EM in Saskatchewan. Participants were identified and contacted through the Saskatchewan Medical Association database of rural Family Physicians. Inclusion criteria included physicians who are providing EM care currently or have provided EM care within the past year in Saskatchewan. Rural was assumed to be communities in Saskatchewan that were outside of the major trauma centers in Saskatchewan that included Saskatoon and Regina. The survey was an anonymous self-assessment asking questions related to demographics, training, hospital resources and self-reported comfort with specific trauma-related management.

RESULTS: We contacted a total of 325 rural physicians with 109 (34%) agreeing to participate out of which 78 (24%) met our inclusion criteria. Results and analysis to be completed.

CONCLUSIONS: This self-assessment helped us identify accurately which aspects of rural trauma medicine are the most challenging for rural practitioners. It gave us an understanding of the procedures related to trauma medicine that are the most difficult and which critical resources are available to rural trauma medicine providers.

HOW CAN WE BEST TRAIN RESIDENTS IN TRAUMA CARE?

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INTRODUCTION: The medical community in Saskatchewan has shown its investment in trauma care as evidenced by advancing trauma services in both Saskatoon and Regina, though a formal trauma curriculum at all sites is not yet established. Competency-based medical education (CBME) is a new educational paradigm that will change the way we deliver medical education by focusing on multiple low stakes assessments with a greater focus on direct observation of residents. As trauma is truly multidisciplinary and holds the challenge of ensuring that the needs of multiple programs' residents are met, a rigorous approach to curriculum development within CBME is essential.

METHODS: The primary purpose of this project was to use Kern's Six-Step Approach to Curriculum Development to provide a rigorous educational consultation to advise the development of a provincial trauma curriculum. A literature search, program director consultations, multidisciplinary focus groups, and curriculum mapping sessions were conducted. The retrieved data and input was collated and thematically summarized to provide a rich narrative of all that can be considered in the development of a trauma curriculum, with final recommendations being made.

RESULTS: The literature review reviewed fifteen articles and one abstract. Thirteen program directors of trauma-affiliated residency programs were consulted with discussion notes being summarized. Eight focus groups were completed with both physicians and non-physicians, from a variety of specialties and levels of training. Curriculum maps were created for four resident programs. A list of eight recommendations were gleaned from the rigorous data collection methods.

CONCLUSION: This project presents a thorough educational consultation for the purposes of developing a successful multidisciplinary trauma curriculum. Steps one through four of Kern's Six-Step Approach to Curriculum Development were completed which could guide future curriculum development (steps five and six).

CULTURALLY INTELLIGENT MEDICAL EDUCATION

Benjamin P & Stempien J

INTRODUCTION: Ethnocentrism is an evaluation of another culture according to preconceptions originating in the standards and practices of one's own culture. Social scientists are effective at communicating with other cultures when they recognize that their personal preferences are being superimposed. This principle is especially important for Physicians seeking to educate a different culture.

METHODS: An Emergency Physician and an EM resident administered exams to EM trainees at Tribhuvan University Teaching Hospital, in Kathmandu. EM is one of the newest recognized specialties in Nepal and there is no standardized process for obtaining EM certification. Two objectives for this educational experience were (i) Constructing EM oral exams that were clinically and culturally relevant. (ii) Examining the political nature of cultural partnerships and how to best forge them.

RESULTS: The majority of time was spent at TUTH Hospital. Additional ED visits included Patan & Duhlikhel Hospital. There exists a genuine interest for knowledge and evidenced based practices amidst the younger generation of EM Physicians and Trainees. A strategy to enhance medical education crossing international boundaries has been adapted from Cultural Intelligence (CQ) Capabilities developed by Soon Ang & Lynn Van Dyne. The Four Tenants include (i) Drive –a genuine curiosity and self-confidence to function within a different cultural domain. (ii) Knowledge –an understanding of the similarities and differences that exist between cultures. (iii) Strategy – the ability to interpret diverse experiences and a willingness to be flexible. (iv) Action – the capability to adjust to verbal and non-verbal cues and to operate with ease in unpredictable circumstances.

CONCLUSION: The potential exists for a mutually beneficial partnership in Nepal regarding the advancement of EM. Empowering nationals to excel in the practise of medicine may be a strategic way to have a lasting impact on global health.

A NATIONAL NEEDS ASSESSMENT ON QUALITY IMPROVEMENT AND PATIENT SAFETY EDUCATION IN CANADIAN EMERGENCY MEDICINE RESIDENCY PROGRAMS

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INTRODUCTION: Quality improvement and patient safety (QIPS) are increasingly recognized as integral to the provision and advancement of emergency medicine (EM) care. In 2015, QIPS were added to the Canadian Medical Education Directives for Specialists (CanMEDS) framework. However, the level of QIPS education and support that Canadian EM residents receive is unknown. We sought to assess the current state of QIPS education and support in Canadian EM residency programs.

METHODS: This descriptive, cross-sectional electronic survey was disseminated to all 535 Canadian EM residents from both Royal College (RC) and Family Medicine - EM programs. The survey consisted of multiple-choice, Likert and free-text entry questions. Themes included a) familiarity with QIPS; b) local opportunities for QIPS projects and mentorship; and c) desire for further QIPS education and involvement.

RESULTS: 189 (35%) of 535 current EM residents completed the survey, representing all 17 medical schools. 77% of respondents were from the RC stream. 54.7% of respondents reported being “somewhat” or “very” familiar with QIPS. 47.2% of respondents reported “not knowing” or “not having readily available” QIPS projects to participate in their local environment, and 51.5% had equivalent responses with respect to QIPS mentorship opportunities. Only 17.5% of respondents reported that QIPS methodologies were already formally taught in their residency program, and 66.9% indicated a desire for increased teaching. The majority of respondents were either “slightly” (35.9%), “moderately” (23.2%) or “very” (11.3%) interested in becoming involved with QIPS training and initiatives.

CONCLUSIONS: Canadian EM residents are interested in obtaining greater QIPS education, project and mentorship opportunities, but many perceive they do not have adequate access to these. As the importance of QIPS increases in EM, more robust educational infrastructures may be necessary. Future efforts may include the standardizing of QIPS postgraduate curricula and improving access to QIPS opportunities nation-wide.

PERCEIVED NEEDS AND BARRIERS TO SIMULATION EXPERIENCES IN RESUSCITATION MEDICINE AT DISTRIBUTED FAMILY MEDICINE SITES AT THE UNIVERSITY OF SASKATCHEWAN

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INTRODUCTION: As postgraduate medicine training programs in Canada move towards competency based medical education, the implementation of a regulated simulation curriculum may serve as a tool to teach and assess residents on a program-wide level. Currently, there is no standardized simulation experience offered to family medicine residents at the University of Saskatchewan's widely distributed residency programs. While all sites have access to simulation training, there is belief that simulation experiences vary significantly from site to site. This survey aims to collect the attitudes and perceptions towards needs and barriers to simulation experiences in resuscitation medicine to distributed family resident sites at the University of Saskatchewan.

METHODS: An online questionnaire was distributed by email to the current family medicine residents and 30 faculty within the University of Saskatchewan's Department of Family Medicine. Questions relating to demographics, training site, level of comfort with resuscitation scenarios, as well as past simulation experiences were highlighted in the questionnaire.

RESULTS: Twenty two faculty and twenty one residents responded to the email survey, with rural residents representing 71% of resident responses. Both residents and faculty responded that simulation was highly beneficial for teaching resuscitative medicine. However, 76% faculty had not taken any formal simulation training and only 9.5% responded they were very comfortable with teaching using simulation. The most common perceived barriers to using simulation is a lack of faculty leading it (47.6%), lack of access to simulation materials (38.1%), and lack of resident and faculty awareness regarding simulation opportunities at their respective sites(23.8%, 28.6%)

CONCLUSION: This study highlighted that both residents and faculty believe that simulation is beneficial in teaching resuscitative medicine and should be a regular educational opportunity. However, there were several perceived barriers to implementing simulation including lack of access and faculty ability to lead simulation. With the data collected from this quality improvement project, we hope to enhance the implementation and standardization of simulation into the USask family medicine curriculum to improve resuscitation medicine skills.

THE DEVELOPMENT OF REFERENCE CARDS AND A CURRICULUM BOARD TO SUPPORT THE IMPLEMENTATION OF COMPETENCE BY DESIGN IN EMERGENCY MEDICINE

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INTRODUCTION: Competence by Design (CBD) was recently implemented for Royal College Emergency Medicine (EM) residents. Transition to CBD requires residents to be familiar with Entrustable Professional Activities (EPAs) for each clinical rotation. We created practical resources to facilitate EPA completion.

METHODS: An intervention mapping framework was used to design practical, low-cost, and aesthetically pleasing resources for residents' use including rotation- and phase-specific reference cards (which list EPAs likely to be encountered during specific rotations) and a curriculum board (which was based upon our program's curriculum map and allowed residents to organize cards by phase and view EPAs associated with clinical rotations at a glance). We surveyed all Saskatchewan Royal College EM residents using multiple choice and narrative questions regarding their utilization. The survey was hosted on SurveyMonkey and distributed after residents completed 36 weeks within the CBD program. Results were analyzed using descriptive statistics and a qualitative content analysis.

RESULTS: 100% (14/14) of residents completed the survey. 79% of residents agreed that the rotation-specific cards and curriculum board were helpful and 50% of residents agreed that the phase-specific cards were helpful. 64% of residents used rotation-specific cards at least once per rotation whereas only 36% used the phase-specific cards and curriculum board at least once per rotation. The resources were felt to be most helpful early on in the CBD transition and at the start of new rotations to guide learning plans.

CONCLUSION: The use of an intervention mapping framework allowed the creation of resources that facilitated this transition in our program. We hope that other programs will use these findings to develop similar resources when rolling out CBD within their programs.

“CODE PURPLE”: DEVELOPMENT OF AN ESCAPE ROOM FOR MEDICAL STUDENTS

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INTRODUCTION: Escape rooms are an immersive experience where individuals must work together to complete a series of problems and puzzles that lead to the ‘escape’ of a room. The rooms can be conducive to medical teaching and as a result, have become an emerging tool to build teamwork and review medical knowledge. The objective of this event was to: 1) design an escape room to improve the clinical knowledge and teamwork skills of medical students, 2) to evaluate this escape room for future iterations.

METHODS: “Code Purple” was developed by our student run simulation interest group. We delivered a linear escape room involving three rooms containing various puzzles to test critical clinical knowledge and skills. Examples of puzzles included are: use of laparoscopic box trainers, ECG interpretation, anion gap calculation, lidocaine toxic dose calculation, intubation, and POCUS. Medical students were mixed into groups of three or four. Participants were debriefed after the escape room and asked for feedback.

RESULTS: Eight first-year and thirteen second-year medical students participated in the escape room. Feedback from our participants were largely positive, with enjoyment and fun being the most common responses. The students felt that they were able to learn from their teammates and gained clinical knowledge and consolidated skills through this event. When asked for areas of improvement, comments around group sizes, clarity of instructions/boundaries, and the desire for puzzles being tied together by one overarching clinical case were given.

CONCLUSIONS: Escape rooms are an emerging educational tool with the potential to improve clinical knowledge and teamwork skills. Information gathered from this event can be used to develop future medical escape rooms.

GIVING MEDICAL STUDENTS A RIGOROUS, REPRODUCIBLE AND DEFENSIBLE CARMS APPLICATION REVIEW PROCESS

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INTRODUCTION: The Canadian Residency Matching Service selection process is under scrutiny due to rising rates of unmatched medical students and reports of bias and subjectivity. We describe how the University of Saskatchewan Royal College Emergency Medicine program uses standardized, reproducible and defensible techniques to identify 32 applicants to invite to interview for three positions.

METHODS: Each application is reviewed by two attendings and two to four residents. Reviewers use standardized, criterion-based scoring rubrics to rate each application. Ratings are recorded within a secure, online spreadsheet in a reviewer-specific tab. Reviewer scores are z-scored and combined to create a weighted application z-score (attendings 41.7%, residents 41.7%, CaSPER 16.7%) for each applicant. Single measures intraclass correlation coefficients (ICCs) track the reliability of the raw scores, while heat mapping provides a visual aid to identify inter-rater scoring discrepancies that are subsequently discussed by all reviewers.

RESULTS: In 2017, 2018, and 2019 our program received 75, 90, and 87 applications respectively. The ICCs for the raw scores were 0.38 (poor) in 2017, 0.52 (fair) in 2018, and 0.43 (fair) in 2019, indicating that there was significant variability in the ratings despite the use of a scoring rubric. Weighted application z-scores of 0.24, 0.32, and 0.27 or greater were required to be rated within the top 32 applicants in each year.

CONCLUSION: Our application review combines well-known best practices (the use of a standardized scoring rubric and multiple reviewers for each application) with innovations that ensure reliable scoring: z-scoring each reviewer and identifying rating discrepancies using a heat map. We believe that this application review process is standardized, reproducible, and defensible, and could be adopted by other programs for the selection of residents.

GAUGING PHYSICIAN COMFORT WITH THE PRACTICE OF EMERGENCY MEDICINE IN RURAL SASKATCHEWAN: A SELF REPORT

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INTRODUCTION: There is a renewed debate of how to best assess, train, and maintain competence amongst rural physicians who provide emergency medical care as part of their practice. There are many questions within the national emergency medicine (EM) community as to how to best to proceed. To aid in answering this question we wish to assess the degree to which family physicians practicing EM in rural Saskatchewan feel comfortable in a) their ability to perform key EM procedures and b) their ability to provide initial management of patients presenting with common critical illnesses.

METHODS: A survey was sent to all rural family physicians practicing in Saskatchewan. For the purpose of this study, rural is defined as a population of less than 10,000. To be classified as practicing EM they must have worked within the past year in EM. This survey contains 19 questions related to demographics and background of training. The EM based questions will be answered on a 7-point Likert scale. Topics to be assessed include airway, trauma and resuscitation, common EM procedures, and other areas within EM care. We also asked participants to quantify specific procedures performed in the past year. Data will be analyzed using descriptive statistics.

RESULTS: The survey is currently collecting responses. We anticipate that there will be varying degrees of self-reported comfort based on training background, as well as number of years in clinical practice. The full results and analysis will be presented on full at EM Research Day.

CONCLUSION: As the results are pending, we cannot at this time make definitive conclusions. The results of this study will lay the foundation for future research directed at the need for enhanced support/coaching of currently practicing physicians, as well as the need for changes to resident education and competence assessment for those wishing to practice in a rural setting.

EMERGENCY DEPARTMENT ULTRASOUND CONCORDANCE WITH FORMAL IMAGING, A RETROSPECTIVE ANALYSIS

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BACKGROUND: Emergency physicians are increasingly using Emergency Department Ultrasound (EDUS) for assistance in diagnosis and management of their patients. With increasing adoption of clinical ultrasonography across all acute care specialties, employing a quality improvement/assurance framework is necessary to optimize use. Since 2014, the Department of Emergency Medicine at the University of Saskatchewan has performed a series of plan-do-study-act (PDSA) cycles as a means of establishing a process for ongoing assessment of our EDUS program. For this clinical research study, we built on previous research hypothesizing that EDUS has a high concordance with formal imaging and using the EDUS wireless image capture system (QPATH) we examined the saved discordant scans and assessed for trends among users.

METHODS: Records were retrieved from Saskatoon Health Region electronic medical records “SCM” for patients visiting the Royal University Hospital emergency department from April 2017 through January 2019 and whose charts contained the completed SCM EDUS documentation. This is a retrospective chart review.

RESULTS: Interpreted data included a total of 200 charts, of which there were 180 with documented EDUS scans and of these 116 had formal imaging completed. 91% of scans were concordant with formal imaging (105/116), 9 % were discordant scans (11/116), including 7 false negative scans and 4 false positive scans. No discordant images were saved.

CONCLUSION: The majority of EDUS scans were concordant with consultative imaging. However, a small proportion were discordant, suggesting a potential for quality improvement and feedback delivery to EDUS sonographers. Regardless of scan concordance, clinical care was executed appropriately according to guidelines. We have identified that EDUS documentation is often lacking descriptive detail for later physicians to interpret and there is no indicator to identify whether there is an associated saved image for review. These results will guide further growth of EDUS for clinical care.

SAFER TRANSITIONS IN THE CARE OF THE ELDERLY: IDENTIFICATION OF ESSENTIAL INFORMATION IN TRANSITIONAL CARE

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INTRODUCTION: Emergency Department (ED) care of elderly patients from Long Term Care (LTC) can be complicated by threats to patient safety created by ineffective transitions. In this study, we surveyed relevant stakeholders in order to assess the current handover culture and identify what information is essential in the transitions of care for this vulnerable population.

METHODS: This cross sectional electronic survey was distributed to physicians and nurses in ED and LTC settings, paramedics, and patient advocates in two Canadian cities. Questions were generated after performing a literature review which assessed the current landscape of transitional care in this population. Questions were either multiple choice or free text entry and were aimed at identifying what information is essential in transitional periods.

RESULTS: 191 health care providers (HCP) and 22 patient advocates (PA) responded to the survey. Within the HCP group, 38% were paramedics, 38% worked in the ED, and 24% were in LTC. 41% of the HCP respondents were aware of existing handover protocols. Of the proposed informational items, 100% of the respondents within both groups indicated that items including reason for transfer, advanced care directives were essential. Other important areas identified were past medical history and baseline functional status. A majority of PAs recommended that identified that items such as primary language, bowel and bladder incontinence and spiritual beliefs should be included.

CONCLUSION: The survey results demonstrated a need for an improved handover culture to be established when caring for LTC patients in the ED as many HCPs are unaware of existing protocols. Results from the survey will be used to create a simple, one page handover form which will respect the priorities of both HCPs and PAs. The next iteration of this project will pilot this handover form in an attempt to create safer transitions to the ED in this at-risk population.

NURSE-PHYSICIAN TEAMS IN THE EMERGENCY DEPARTMENT

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INTRODUCTION: In the standard Emergency Department (ED) structure, nurses and physicians work as a team, but independently when it comes to assessments and aspects of patient care. Patients are often handed over among multiple nurses during their time in the ED, and physicians work with multiple groups of nurses across the ED. In this pilot project, we looked to create a functional nurse-physician team that operated together for all aspects of patient care from triage to final disposition plan. Each patient was cared for by the same nurse-physician team, regardless of the patient's location in the department, and through the use of regular scrum sessions, the entire team was continually updated on the care needs and plan. It was hypothesized that this structure would lead to improved patient care, less nurse to nurse handover, and improved flow through the department.

METHODS: Initial data gathering included multiple trials of nurse-physician teams that consisted of one physician and 3-4 nurses and gathering feedback using a validated survey consisting of 5-point Likert scales . Surveys were gathered from all members of the multidisciplinary team in the ED.

RESULTS: Due to the limited implementation of this pilot project, comparison group data of our pre-post study was not possible. Likert scale and free text responses suggested that some participants felt this new structure improved communication and work satisfaction. Some responses suggest increased workload on nursing staff under this structure.

CONCLUSION: Our limited-implementation of a planned pilot study of nurse-physician teams suggests subjectively improved communication and work satisfaction and subjectively increased nursing workload.

EVALUATION OF THE UTILIZATION AND UTILITY OF A STANDARDIZED TERTIARY SURVEY IN A TERTIARY TRAUMA PROGRAM

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INTRODUCTION: Recognizing all injuries sustained in a trauma patient remains difficult for care providers and non-life-threatening injuries are often missed or identified late. The tertiary trauma survey (TTS) is one tool in which missed injuries can be identified. This study aimed to determine the rate of TTS completion and gather data on missed injuries in Regina's new trauma program.

METHODS: Chart reviews were conducted for patients admitted to the Trauma Team at Regina General Hospital during 2018 (N=150). Descriptive statistics were produced. Mean Injury Severity Score (ISS) was calculated for ISS>12; all scores below this threshold were categorized as "ISS ≤12." Separate Chi-squares were calculated for tertiary survey completion and for missed injuries on cases for which a tertiary survey was completed, both examining the impact of learner presence on the unit and high vs. low volume months.

RESULTS: Tertiary surveys were completed for one-third (n=50) of patients admitted to the Trauma Team. Of those, injuries were missed on one-third of patients (n=17). Approximately two-thirds (n=96) of patients had an ISS ≤12. Of those with an ISS >12 (n=47), mean ISS was 24.4 (SD = 8.1). Tertiary surveys were completed significantly more frequently when a learner was present (n=39; 41.9%) than not (n=11; 19.3%), $\chi^2_1=8.149$, $p = .004$. Volume of cases did not significantly impact the number of tertiary surveys conducted. There were no significant differences according to learner presence or volume with regard to missed injuries.

CONCLUSIONS: A standardized TTS is a useful, yet underutilized, tool in our hospital's trauma program that identifies significant missed injuries. More education is needed on appropriate completion of these forms and what constitutes as a missed injury.

INVESTIGATING VOLUNTEER PERSPECTIVES ON LEADING PATIENT-CENTERED PRACTICES IN THE EMERGENCY DEPARTMENT

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INTRODUCTION: Patient satisfaction is an essential component of effective delivery of quality care in the emergency department (ED). The Ontario Hospital Association (OHA) outlined five ‘Leading Practices’ (LPs) targeted to increase patient satisfaction in this setting. The ED volunteers are a group of individuals who have unique perspectives on ED practices that are unbiased by confounders affecting patients and staff. The goal of this study was to explore the unique perspectives of ED volunteers involving what they believe will improve the delivery of patient-centered care, as well as to examine to what extent Saskatoon EDs are embracing the principles outlined in the OHA LPs.

METHODS: A two-phase mixed methods approach, with a survey followed by interviews that allowed participants to expand on survey findings was used. The pool of 45 ED volunteers was extended the opportunity to participate resulting in 36 survey responses and 6 interviews. 13 Likert-grade survey questions were generated to align to each of the LPs and allowed room for qualitative feedback. Interview questions were generated following 15 survey responses to expand on the LPs that were rated below average.

RESULTS: Analysis of responses identified inefficient ED processes leading to increased waiting times, inefficient patient location, inadequate signage, a lack of physical space, and unclean environments. Themes reduced from interviews yielded patient frustration, disorganization, uncomfortable environment, overcrowding, prolonged wait times, and patient misconception of ED processes at Site 1. Themes common to Site 2 included organization, patient-friendly environment, patient misconception of ED processes, and prolonged wait times.

CONCLUSION: Saskatoon EDs comply reasonably well to the OHA Leading practices. Surveying ED volunteers provides important insight into current practices and areas for improvement, and should be considered at other sites to improve adherence to the OHA LPs.