

involved in the care of a patient that has been readmitted. This alert is sent within hours of a readmission occurring and contains meaningful visit detail (discharge diagnosis, readmit diagnosis, patient name, etc) to help support practice reflection. An average of 15 alerts per day are generated and have been sent since implementation in April 2017. Although an old technology, the use of email is a central component of the solution because it allows physicians to receive notifications at home and outside the hospital network where they routinely perform administrative tasks. A secondary notification is sent to personal email accounts (Gmail, Hotmail, etc) to indicate an unplanned admission has occurred, but without visit detail or identifiable information. It also allowed implementation with no new hardware or software cost. **Results:** A simple thumbs up/down rating system is used to adjust the sensitivity of the alert over time. More than 66% of those providing feedback have indicated the alert is helpful for practice reflection (i.e., thumbs up). And of those that indicated it was not helpful, comments were often entered indicating satisfaction with the alert generally, or suggestions for improvement. For example, consulted admitting physicians are often responsible for discharge decisions and should be added as recipients of the alert. **Conclusion:** Many physicians have indicated appreciation in knowing about return patients, and that they will reflect on their care, further review the chart, or contact the admitting physician for further discussion. Most are accepting of some 'expected' or 'false positive' alerts that aren't helpful for practice reflection. Further tuning and expansion of the alert to specialist and consult services is needed to ensure all physicians involved in a discharge decision are adequately notified.

Keywords: quality improvement and patient safety, readmission, analytics

P097

Making emergency room crash carts useful

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Introduction: Human factors are a neglected when it comes to crash cart design and function. Using observational assessments and in-house surveys, the process improvement team found that staff use of the crash carts in the University of Alberta ED had significant redundancy, inefficiency and often leading to confusion during use. The process improvement team assessed the layout of the adult crash cart and redesigned the cart format based on observational problems/inefficiencies staff had during resuscitations. It was hoped that staff found the new design more efficient and effective during resuscitations when compared to the old cart. **Methods:** To effect change, the Rapid result change theory method was utilized to implement the new crash cart prototype. The model was used to evoke excitement and staff participation in front line process improvement. With input from senior staff, the cart was redesigned and placed in resus area where it stood the greatest chance of being used frequently. Once a prototype crash cart had gone live, surveys, based on a 7 point Likert scale compared the old and new cart systems. The resus area housed both old and new carts to facilitate the comparison. The survey assessed 6 domains; visibility of the medications, locating medications, overall organization, time savings, mixing medications and comfort level of using each cart. **Results:** After the trial, the surveys were collected and analyzed using T-test; the results were significant. There was an overwhelming positive result within all domains when comparing the two carts. There was mean difference ranging from 1.7 to 3.5 comparing when comparing the two carts to each domain. **Conclusion:** The results were so positive; all seven carts were changed to the same format. The overall impact of the new cart design saved time in both application and turnaround time in restocking. **Keywords:** crash cart, resuscitation, redesign

P098

Solid organ donation from the emergency department - a systematic review

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Introduction: There is a significant gap between the number of organ donors and people awaiting an organ transplant; therefore it is essential that all potential donors are identified. Given the nature of Emergency Medicine it is a potential source of organ donors. The purpose of this study is to determine what percent of successful donors come from the Emergency Department (ED) and whether there are any missed potential donors. **Methods:** Electronic searches of EMBASE, MEDLINE, and CINAHL were performed July 7, 2017 using PRISMA guidelines. Primary literature in human adults were included if they described identification of patients in the ED who went on to become successful solid organ donors, or described missed potential donors in the ED. Data on the total population of actual or missed donors was required to allow calculation of a percentage. Studies describing non-solid organ donation, consent, ethics, survey of attitudes, teaching curricula, procurement techniques, donation outside the ED, and recipient factors were excluded. 2 authors independently screened articles for inclusion and discrepancies were resolved through consensus. Quality was assessed using STROBE for observational studies. Heterogeneity of patient populations precluded pooling of the data to conduct a meta-analysis. **Results:** 1058 articles were identified, 17 duplicates were removed, 800 articles were excluded based on title and abstract, and 217 full text articles were excluded, yielding 24 articles for the systematic review. For neurologic determination of death (NDD), ED patients comprised 44% of successful donors. ED death reviews revealed 84% of patients dying in the ED are missed as potential donors and hospital-wide death reviews revealed 80.9% of missed donors die in the ED. For donation after cardiac death (DCD), 20% of successful donors came from the ED and studies investigating potential donors suggest 36% of patients dying in the ED could be potential DCD donors. The most common population of successful DCD organ donors was in traumatic cardiopulmonary arrest (TCPA), with 8.9% of TCPA patients presenting to the ED becoming successful donors. **Conclusion:** Patients dying in the Emergency Department are a significant source of both successful organ donors and missed potential donors. Emergency physicians should be familiar with their local organ donation protocol to ensure potential organ donors are not missed.

Keywords: organ donation, systematic review

P099

Evaluating the potential impact of an ECPR program at The Ottawa Hospital: a retrospective health records review

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Introduction: Extracorporeal Life Support in the context of cardiac arrest (ECPR) is an emerging resuscitative therapy which has shown promising results for patients who may not otherwise survive. As a resource-intensive intervention, ECPR requires carefully selected patients to maximize its potential benefits and mitigate undue harm. This retrospective health records review sought to identify the characteristics of cardiac arrest patients presenting to two academic tertiary care Emergency Departments (EDs) in order to assess the feasibility and impact of an ECPR program. **Methods:** We reviewed charts for all patients aged 18-75 years old presenting to two Academic Teaching