

EHR training and support, the majority of clinicians did not feel adequately trained or confident using Epic and reported moderate to high burnout. These findings will inform optimization efforts and they represent key considerations for other EDs planning future implementations.

Keywords: burnout, electronic health records, health informatics

P047

Emergency department practice patterns of UTI investigation among the delirious elderly: a retrospective chart review

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Introduction: Delirium is a common emergency department (ED) presentation in elderly patients. Urinary tract infection (UTI) investigation and treatment are often initiated in delirious patients in the absence of specific urinary symptoms, despite a paucity of evidence to support this practice. The purpose of this study is to describe the prevalence of UTI investigation, diagnosis and treatment in delirious elderly patients in the ED. **Methods:** We performed a retrospective chart review of elderly patients presenting to the ED at The Ottawa Hospital between January 15-July 30, 2018 with a chief complaint of confusion or similar. Exclusion criteria were pre-existing and current UTI diagnosis, Glasgow Coma Scale <13, current indwelling catheter or nephrostomy tube, transfers between hospitals, and leaving without being seen. The primary outcome was the proportion of patients for whom urine tests (urinalysis or culture) or antibiotic treatment were ordered. Secondary outcomes were associations between patient characteristics, rates of UTI investigation, and patient outcomes. Descriptive values were reported as proportions with exact binomial confidence intervals for categorical variables and means with standard deviations for continuous variables. Comparisons were conducted with Fischer's exact test for categorical variables and t-tests for continuous variables. **Results:** After analysis of 1039 encounters with 961 distinct patients, 499 encounters were included. Urine tests were conducted in 324 patients (64.9% [60.6-69.1]) and antibiotics were prescribed to 176 (35.2% [31.1-39.6]). Overall 57 patients (11.4% [8.8-14.5]) were diagnosed with UTI, of which only 12 (21.1% [11.4-33.9]) had any specific urinary symptom. For those patients who had no urinary symptoms or other obvious indication for antibiotics (n = 342), 199 (58.2% [52.8-63.5]) received urine tests and 62 (18.1% [14.2-22.6]) received antibiotics. Patients who received urine tests were older (82.4 ± 8.8 vs. 78.3 ± 8.4 years, p < 0.001) but did not differ in sex distribution from those than those who did not. Additionally, patients who received antibiotics were more likely to be admitted (OR = 2.6 [1.48-4.73]) and had higher mortality at 30 days (OR = 4.2 [1.35-12.91]) and 6 months (OR = 3.2 [1.33-7.84]) than those who did not. **Conclusion:** Delirious patient without urinary symptoms in the ED were frequently investigated and treated for UTI despite a lack of evidence regarding whether this practice is beneficial.

Keywords: delirium, practice patterns, urinary tract infection

P048

Brief online educational intervention improves emergency physicians' and general surgeon's ability to interpret focused gallbladder ultrasound

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Introduction: Biliary colic is a frequent cause for emergency department visits. Ultrasound is the initial test of choice for gallstone disease. We evaluated the effectiveness of a brief online educational module aimed to improve Emergency Physicians' (EP) and General Surgeons' (GS) accuracy in interpreting gallbladder ultrasound. **Methods:** EPs and GSs (resident/fellow and attending) from a single academic tertiary care hospital were invited to participate in a pre- and post- assessment of the interpretation of gallbladder ultrasound. Demographic information was obtained in a standardized survey. All questions developed for the pre- and post- assessment were reviewed for content and clarity by 3 EP and GS experts. Participants were asked 22 multiple-choice questions and then directed to a 7-minute video-tutorial on gallbladder ultrasound interpretation. After a 3-week period, participants then completed a post-intervention assessment. Following pre- and post- assessment, participants were surveyed on their confidence in gallbladder ultrasound interpretation. Data was analyzed using descriptive statistics and paired t-test. **Results:** The overall response rate of the pre-intervention was 50.9% (116/228) and 40.8% (93/228) for the post-intervention. In pre-intervention assessment, 27.7% of participants reported they were "not at all confident" in interpreting gallbladder ultrasound. This contrasted with post-intervention confidence level, where only minority (7.8%) reported "not at all confident". There was a significant increase from the pre- to post- intervention (75.7% to 85.4%; p < 0.01) in correct interpretations. The greatest improvement was seen in those with previous experience interpreting gallbladder ultrasound (from 79.6% to 91.1%; p < 0.01). EPs scored significantly higher than GSs in the pre-intervention (EPs 78.2% compared to GSs 71.0%; p < 0.01). This trend was also observed in post-intervention, although the difference was no longer significant (EPs 88.9% compared to GSs 82.8%; p = 0.05). There was no significant difference in performance between residents/fellows compared to attendings. **Conclusion:** This brief, online intervention improved the accuracy of EPs' and GSs' interpretation of gallbladder ultrasound. This is an easily accessible tutorial that can be used as part of a comprehensive ultrasound educational program. Further studies are required to determine if EPs' and GSs' interpretations of gallbladder ultrasound impacts patient-oriented outcomes.

Keywords: cholecystitis, gallstone complication, point-of-care ultrasound

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Goals of care discussion in the emergency department: is it possible

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Introduction: The Institut national d'excellence en santé et en services sociaux in Quebec published guidelines suggesting that emergency physicians should establish emergency department (ED) patients' goals of care when appropriate. The objective of this study was to explore emergency physicians' opinions about leading goals of care discussion (GCD) in their daily practice. **Methods:** This study used a qualitative design based on the Normalisation Process Theory (NPT); a middle-range theory used to explain the sustainability of implementing complex healthcare interventions. It was conducted in a single academic ED in Lévis, Québec. We planned to recruit a minimal convenience sample of 10 participants. Between April and May 2018, we conducted semi-structured interviews and