

(eligible patients who received an ambulatory CTCA). Secondary outcomes included location and length of stay, time to CTCA, and PCI. We summarised data using descriptive statistics.

Results and Conclusion We identified 1,341 patients eligible for ambulatory CTCA (524 pre-implementation of pathway; 817 post-implementation; 820 [61%] male; mean age 57 [SD 14]). Pre-implementation, 46.6% (n=244) of these patients were admitted to the Ambulatory Care Unit (ACU). Post-implementation, 32% (n=258) were admitted to the ACU; only 7 (1.3%) eligible patients received ambulatory CTCA after implementation of the service. A further 25 'moderate risk' patients received an inpatient CTCA. The median time to ambulatory CTCA from admission was 1 (IQR 0.75–3) day. Five (71.4%) ambulatory CTCAs were abnormal, identifying coronary artery disease. Three patients with abnormal CTCA underwent PCI; only one followed the ambulatory CTCA pathway.

Conclusions Clinicians continued to admit patients to inpatient areas, indicating suboptimal utilisation of the pathway. Future work should focus on identifying barriers to adherence.

1559

BACKGROUND NOISE IN AN EMERGENCY DEPARTMENT: AN OBSERVATIONAL STUDY FROM STAFF AND PATIENT PERSPECTIVES

¹Timothy Coats, ²Murad Emar, ³Ella Smith. ¹University of Leicester, ²University Hospital of Leicester NHS Trust, ³University of Bristol

10.1136/emered-2022-RCEM2.39

Aims, Objectives and Background Noise is a contributing factor to miscommunication, which may be exacerbated by wearing personal protective equipment. There has been little research on noise in the Emergency Department (ED).

We aimed to (1) identify the noise levels experienced by staff and patients in different areas of an emergency department over the 24-hour cycle, (2) examine the impact of cubicle doors on the background noise experienced by the patient, and (3) assess the impact of monitor alarms on staff and patient noise levels.

Method and Design Using a standardised protocol, an observational study monitoring of staff and patient experience of noise was carried out in 3 areas of the ED (a resuscitation room, an area of patient cubicles with solid doors and an area of patient cubicles with curtains).

Abstract 1559 Table 1

Area	Overall noise level (dB). Median (IQ range)	Proportion of time >45dB (raised voice)	Proportion of time >65dB (shouting)
Blue Patient Cubicle (curtain)	45 (41 – 51)	51%	2%
Red Patient Cubicle (door)	41 (37 – 47)	30%	2%
ER Patient Cubicle (door)	50 (49 – 54)	100%	6%
Blue Staff Desk	53 (48 – 58)	88%	7%
Red Staff Desk	55 (51 – 60)	96%	7%
ER Staff Desk	50 (45 – 56)	76%	5%

The overall distributions of noise levels in each area were described and circadian variation plotted. The proportion of time that background noise was above key cutoff values known to impair communication was calculated (45dB and 65dB).

Non-parametric methods were used to compare: (1) a patient cubicle with curtains compared to a solid door, (2) having the door open or closed, and (3) staff and patient exposure a monitor alarm.

Results and Conclusion In a large urban teaching hospital Emergency Department noise was greater than 45dB for staff between 76% and 96% of the time (30% to 100% for patients). There was little difference across the 24hr cycle. A door decreased the noise experienced by patients, but only if left closed. In the resuscitation rooms monitor alarms were much louder for patients than for staff.

Noise levels likely to impair communication are present in the ED for most of the time. Staff awareness and improved design of both buildings and equipment might mitigate this negative acoustic environment.

1695

WHICH CLINICAL FEATURES BEST PREDICT OCCULT SCAPHOID FRACTURE? A SYSTEMATIC REVIEW AND META-ANALYSIS

¹Laura Coventry, ¹Ilaria Oldrini, ²Alex Novak, ²Ben Dean, ¹David Metcalfe. ¹University of Warwick; ²Oxford University Hospitals NHS Foundation Trust

10.1136/emered-2022-RCEM2.40

Aims, Objectives and Background Scaphoid fractures require early identification to avoid complications such as painful non-union, avascular necrosis, and chronic wrist pain. Unfortunately, plain radiographs are insufficiently sensitive and so patients may require immobilisation and further imaging (e.g. MRI) despite normal initial radiographs.

The aim of this systematic review was to determine which clinical features best predict the presence of an occult scaphoid fracture that warrants immobilisation and further imaging.

Method and Design A systematic review of diagnostic test accuracy studies was undertaken. All study designs were included if they evaluated predictors of scaphoid fracture amongst patients with normal initial scaphoid radiographs. Quality assessment was undertaken using the Quality Assessment of Diagnostic Accuracy Studies 2 (QUADAS-2) tool. Depending on the number of studies, data were presented as individual data points, ranges, or meta-analysed by fitting either univariate random effects or multi-level mixed effects logistic regression models.

Results and Conclusion Eight studies reported data on 1,685 wrist injuries. The prevalence of scaphoid fracture despite normal radiographs was 7.3%. The most accurate predictors of occult scaphoid fracture were pain with supination against resistance (sensitivity 100%, specificity 97.9%, LR 45.0 [95% CI 6.5–312.5], supination strength <10% of contralateral side (sensitivity 84.6%, specificity 76.9%, LR 3.7 [95% CI 2.2–6.1]), pain on ulnar deviation (sensitivity 55.2%, specificity 76.4%, LR 2.3 [95% CI 1.8–3.0]), and pronation strength <10% of contralateral side (sensitivity 69.2%, specificity 64.6%, LR 2.0 [95% CI 1.2–3.2]). The absence of anatomical snuffbox tenderness significantly reduced the likelihood of an