

patients, who have had an initially normal CT scan, are at risk of delayed tICH.

This systematic review and meta-analysis compares the incidence of early and delayed tICH in patients attending the Emergency Department on DOACs and warfarin.

Methods/Design A literature search was conducted using the Medline(OVID and PubMed), EMBASE, Web of Science and Cochrane libraries using defined keywords. Prospective studies and retrospective studies were included. The primary outcomes were the incidences of early and delayed tICH. Mortality rates were also assessed. Meta-analyses were performed to compare the rates of early and delayed tICH between the anticoagulant groups. The rates of injury were also compared to patients not receiving anticoagulation.

Results/Conclusions The literature search found 42 relevant studies. Twenty three studies investigated the incidence of early tICH and 26 assessed delayed tICH. The pooled incidence of early tICH was 5.7% for DOACs and 7.3% for warfarin. Odds ratio for early tICH on DOACs was 0.47% (95% CI 0.34–0.66) when compared to warfarin and 0.96 (95%CI 0.68–1.36) compared to no anticoagulation. The incidence of delayed tICH was 1.2% for DOACs and 1.8% for warfarin (OR 0.70 (95% CI 0.38–1.31)). Odds ratio of mortality following a head injury on DOACs compared to warfarin was 0.4 (95%CI 0.17–0.94).

The systematic review and meta-analysis suggests the rate of early tICH and mortality may be lower for patients on DOACs as compared to warfarin. It also finds that the rate of delayed tICH bleeding is low in both groups.

947

THE 'SILENT VIDEO' AS A TRAINING AID FOR EMERGENCY DEPARTMENT MAJOR INCIDENT MANAGEMENT

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Aims/Objectives/Background There is a specific need to refresh knowledge of and update Major Incident Protocols (MIP) but a department may have less than one Major Incident (MI) every 5 years.

As part of our department's COVID-19 pandemic response, a 'silent movie' of PPE donning-and-doffing techniques was

played on large screens in the background during clinical handovers. We theorised that this technique might be effective in training ED staff on the MIP.

Methods/Design We created a seven-minute silent video about our MIP using volunteer actors from ED Doctors, Nurses, and Ancillary Healthcare Staff. Brief captions describing key aspects of the MIP were overlaid on video clips and images.

The video was played on a continuous loop on wall mounted TVs for six continuous weeks, located within the handover room used by all ED staff members.

A questionnaire was sent out to all staff in ED to assess how the video's content improved understanding of the MIP. The design of the questionnaire was based on the Moore's Expanded Education Outcome Model.

Results/Conclusions 64 of the respondents viewed the video. From the cohort, 70% were satisfied with the format of the video and 84% believed the content to be useful. Using the Moore's outcome model there was an increase in 62.1% of the declarative knowledge post viewing, and a 47.8% increase in the confidence of knowing what to do in a MI. The confidence in being able to locate the MIP tray and perform well in a MI had also increased by 47.2% and 42.02% respectively.

The repeated silent video format was an effective teaching tool, as reflected in all aspects of Moore's model; majority of respondents showed improved confidence in all aspects of the MIP. Background training videos could form part of ED training, especially for topics which are not included in formal training programs.

925

MANAGEMENT OF OLDER MAJOR TRAUMA PATIENTS: THE IMPACT ON MORTALITY SINCE IMPLEMENTATION OF DEDICATED GUIDELINES

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Aims/Objectives/Background Older trauma is an increasing challenge for trauma networks and many clinical protocols do reflect age-related changes in physiology and management. In 2018 older trauma guidance was introduced in our trauma

Abstract 947 Table 1

Moore's Outcomes Framework	Measure/Question	Response
LEVEL 1 Participation	Participation in questionnaire	95 responses out of 851 staff.
	Have you seen the ED major Incident video in the Handover Room?	67% of respondents had seen the training video (90% of these watched the whole video).
LEVEL 2 Satisfaction	I was satisfied with the format, delivery and content of the video.	70% were satisfied with the format of the video
	I found the content of the video useful.	84% thought the content useful
LEVEL 3A Learning: Declarative Knowledge	I know how the ED is organised in a Major Incident.	Before 25%, After 66%.
LEVEL 3B Learning: Procedural Knowledge	I know what to do in a major incident.	Before 35%, After 67%
	I could locate the Major Incident tray in each area of the ED.	Before 28%, After 53%.
	I would be able to perform well in a Major Incident.	Before 40%, After increased to 69%

system to improve early recognition of injury, admission pathways, clinical management and outcomes for those aged ≥ 65 yrs (LMTS Older Trauma Guidance). The aim of our study was to assess the impact of the guideline on our trauma processes and patient outcomes.

Methods/Design This retrospective analysis of TARN compared process and outcome data for patients aged ≥ 65 yrs admitted to hospitals within the North East London and Essex Trauma Network, pre (01/01/2016–31/07/2018) and post (01/08/2018–31/07/2020) guidance introduction. The primary outcome was mortality at 30 days post injury.

Results/Conclusions There were 4317 patients pre and 3992 patient post guidance. Time to CT reduced on average by 57 minutes, Neurotrauma transfers decreased from 2116 patients to 1519 patients and more older patients were discharged for rehabilitation. Older trauma mortality reduced across the network post guidance (13.59% vs 10.64%). The greatest mortality reductions were seen in Trauma Units, (19.20% pre vs 6.99% post) with increasing benefit seen with advancing age: reduced 75–84 years by 2.20%; 85–94 years 2.41%; 95+ years by 7.44%.

This analysis suggests that dedicated guidance highlighting the special needs and risk profiles of older trauma patients significantly improves processes and outcomes. Improvements in early assessment and time to imaging appear to result in enhanced survival. Further research at a system level is required.

1087

A SERVICE EVALUATION OF THE IMPACT OF E-SCOOTERS ON EMERGENCY DEPARTMENTS IN BRISTOL (THE SEED STUDY)

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Aims/Objectives/Background E-scooters have risen in popularity worldwide. However, e-scooter associated injuries have become a growing area of concern. In the UK, rental e-scooters became legalised in 2020, and have been rolled out in several UK cities. There is no published UK literature reporting e-scooter related injuries. This service evaluation aims to evaluate the impact of e-scooters on Emergency Departments (ED) within one UK city.

Methods/Design Between May to June 2021, we conducted an approved (CE:74681) prospective observational service evaluation for a 4-week period across three EDs; one Adult Major Trauma centre (MTC), one city-centre Trauma Unit and one Paediatric MTC. All patients presenting to ED with an injury associated with an e-scooter (driver, passenger or bystander) were identified prospectively. Data collected included information on context of injury event and key clinical variables. Data was entered onto the online platform REDCap, and exported into Excel for analysis. Descriptive statistics are presented.

Results/Conclusions Ninety patients with an e-scooter related injury presented to ED during the evaluation. Median age was 25 years (IQR, 20–33). Findings demonstrate head, upper limbs and lower limbs were commonly injured. Of the 19% who experienced a head injury, two patients

sustained an intracranial haemorrhage and one a basal skull fracture. Fractures were diagnosed in 41% of patients. Only 7% of riders were helmeted and 28% were intoxicated with alcohol. In total 62 x-rays and 13 CTs were undertaken. Although the majority were discharged following minor injuries, 11% of patients required admission, including one major trauma.

Whilst e-scooters are a convenient mode of transport, riders are vulnerable to traumatic injuries of varying severity. Notably, low rates of helmet use and high prevalence of alcohol intoxication, suggest a need for targeted public health interventions. Future large-scale research is required to better evidence injury patterns and severity, identify modifiable risk factors and inform policy.

1062

DISEASE BURDEN, ACUITY AND PATIENT MANAGEMENT IN EMERGENCY CARE PRESENTATIONS TO UGANDAN FACILITIES

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Aims/Background Emergency care is being provided to, and utilised by, Ugandan patients despite there being no formal system capable of producing optimal outcomes. For the country's emergency care system to be appropriate and contextualised, there must first be an understanding of the actual utilisation of emergency care services. Current coding systems for analysing and comparing disease burden across sites do not adequately represent the patient population and resources required for quality emergency care to be delivered.

Objective To describe the burden of disease, acuity and management of emergency patients presenting to secondary Ugandan health facilities.

Methods/Design A retrospective review of 4704 emergency care patient charts from November 2018 to April 2019 was performed from 11 sites throughout Uganda. A novel diagnosis coding system was developed for use in LMIC emergency care context consisting of 482 codes, 158 sub-categories and 7 disease classes.

Results 6506 diagnoses were recorded, 34.98% of patients had 2 or more diagnoses. 33.8% were conditions of non-infective origin, 30.1% conditions of infective origin and 25.7% injury. Top 5 diagnoses were malaria, anaemia, pneumonia, head injury and soft tissue injury. Patient charts documented triage in 0.13% of cases, at least 1 vital sign in 42.3% of cases and at least 1 form of examination in 41.4% of cases. 62.3% patients had at least 1 form of investigation. 73.2% of patients received an IV treatment, most commonly antibiotics (52.5%) and IV crystalloids (33.1%).

Conclusion This is the first study of all-cause disease burden and management of emergency patients presenting across multiple Ugandan facilities. The development and application of an emergency care specific diagnostic coding system applicable to LMICs is a vital step to enable understanding and comparison across facilities. By appreciating the burden of emergency care disease, strategies can be put in place to implement an integrated emergency care system in Uganda.