In an ICOM setting, we demonstrated 100% intubation success in adult trauma patients undergoing PHEA. There was no significant difference in first-pass intubation success between physicians and CCPs.

A MULTI-CENTRE PROSPECTIVE OBSERVATIONAL STUDY TO EVALUATE HEALTHCARE IMPACTS OF E-SCOOTERS ON EMERGENCY DEPARTMENTS

Tom Roberts, Trainee Emergency Research Network Collaborators (TERN), Southmead Hospital
10.1136/emermed-2022-RCEM2.5

Aims, Objectives and Background This study aims to report the prevalence of E-scooter related injuries, delineate the impact of rental schemes on Emergency Departments (ED) and report associated ED resource use and cost.

E-scooters have risen in popularity since the expansion of rental schemes and there is rising concern over the healthcare impact of faster illegal private E-scooters. Current literature is limited on the healthcare related impact of E-scooters by retrospective design and focus on specific injury patterns (e.g. orthopaedic or maxillofacial).

This study presents prospective data on E-scooter related injury presenting to the ED, comparing sites with and without rental schemes.

Method and Design A prospective observational study for four weeks of recruitment across twenty EDs across the United Kingdom (12 with rental schemes and 8 without). All patients presenting to ED with an E-scooter associated injury were identified.

A prospective observational design was chosen to more accurately collect data on E-scooter injury patterns and behaviours. Sites with and without rental schemes were chosen to compare the impact of rental schemes.

Results and Conclusion E-scooter related injury was found in 250 ED patients. Fractures were diagnosed in 30.4% of patients and 19.4% sustained a head injury (4.2% classified as severe traumatic brain injury). Only 6.4% of riders were helmeted and 19.8% were intoxicated with alcohol. Mean unadjusted ED costs per patient were £297.31. The mean Injury Severity Score (ISS) was 2.8 in rental E-scooter incidents and 3.0 in private E-scooter incidents. From multiple linear regression modelling, helmet use, alcohol use and private or rental E-scooters were not predictive of ISS.

In conclusion, E-scooter riders are vulnerable to injuries of varying severity. Low rates of helmet use and high prevalence of alcohol intoxication suggest a need for targeted public health interventions, but improved data collection is required. Health service costs should be considered when reviewing the suitability of rental schemes.