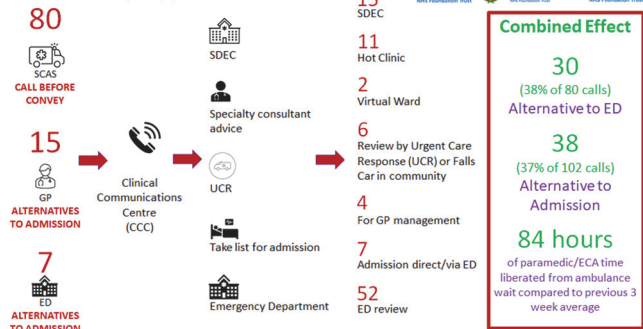
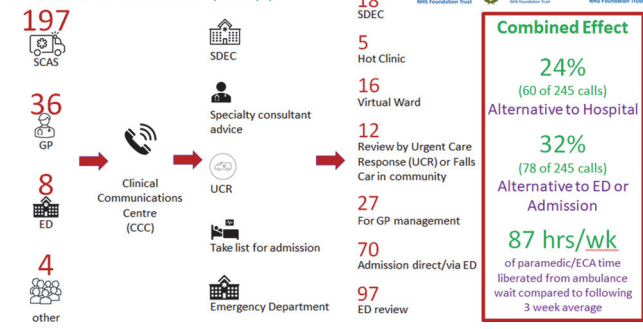


Pilot Week (5 days) Outcomes



Abstract 2046 Figure 2

2nd Pilot Outcomes (15 days)



Abstract 2046 Figure 3

In addition these pathways could be utilised by GPs referring via CCC, and ED where a patient could be given an alternative to admission.

We used daily huddles to enact rapid cycle PDSA changes. After a first pilot we added additional pathways for a second pilot, converting to business as usual within 6 months.

Results and Conclusion Across the pilots, 32-38% were given an alternative to ED attendance or admission. 24% avoided hospital entirely. We reduced ambulance lost minutes by 84-87 hours compared to the previous 3 week average.

Streamlining access to urgent care pathways with a single point of access benefits these patients but also those who do attend by reducing harm from overcrowding through better ED and hospital flow by offering alternatives to ED attendance and admission.

2351

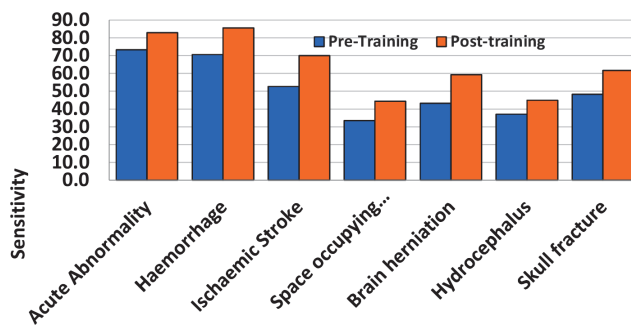
MULTICENTRE RANDOMISED CONTROLLED TRIAL TO ASSESS THE IMPACT OF ONLINE TRAINING ON CT HEAD INTERPRETATION PERFORMANCE: THE SIMULATION TRAINING FOR EMERGENCY DEPARTMENT IMAGING 2 (STEDI2) TRIAL

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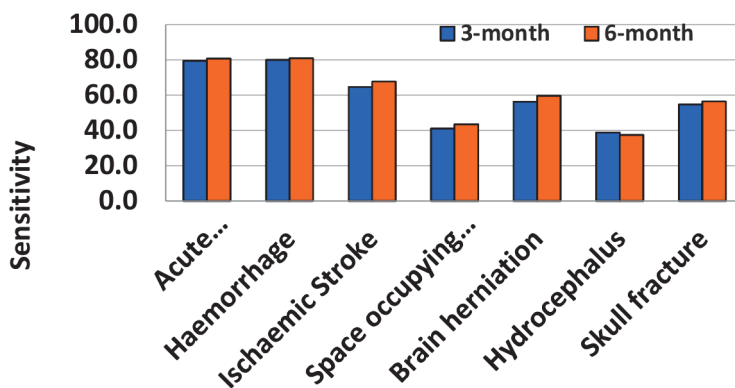
10.1136/emj-2023-RCEM.23

Aims and Objectives CT Head scans are commonly requested in the Emergency Department (ED), but the increasing demand has led to longer radiology report turnaround times, affecting ED flow. This study aims to assess the accuracy of ED clinicians in interpreting CT head images, evaluate the impact of an online training simulation, and estimate the effects of clinician-led interpretation on patient flow.

Method and Design Methods A multicentre randomized controlled trial was conducted across six hospitals in the Thames Valley Emergency Medicine Research Network. Emergency medicine clinicians of various grades and backgrounds participated. In the online phase, participants completed a blinded baseline assessment of accuracy by interpreting 50 CT Head scans. Non-control participants received online training and practiced with 50 cases. They then retook the assessment to measure changes in reporting accuracy and confidence. Follow-up assessments were conducted at 3 and 6 months to assess knowledge retention. Training and assessment were



Abstract 2351 Figure 1



Abstract 2351 Figure 2

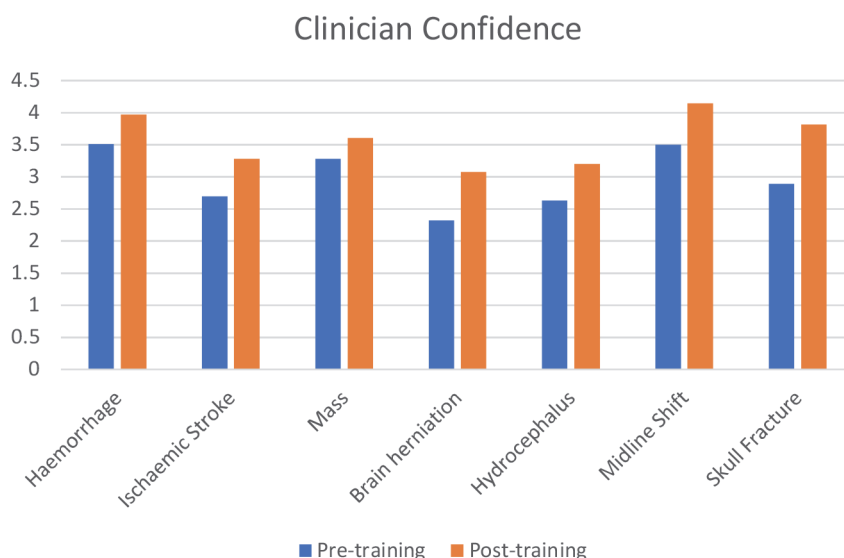


Figure 3

Abstract 2351 Figure 3

conducted through the online platform www.raiqc.com. In the prospective phase, participants interpreted 30 CT head scans during their clinical practice, and their findings and interpretation times were compared to radiology reports.

Registration ClinicalTrials.gov ID NCT05427838

Results and Conclusion Results

A total of 206 participants took part in the study. The online phase showed a significant increase in pooled sensitivity (73.3% to 83%) and specificity (65.8% to 89.1%) in detecting acute abnormalities. Similar improvements were observed across all pathology subgroups. At six months post training, overall diagnostic performance remained elevated (sensitivity 80.6%, specificity 79.1%). In the prospective phase, 4,815 CT Head interpretations with linked radiology reports were recorded, and data analysis is ongoing.

Discussion and Conclusion Dedicated training significantly improved the interpretation accuracy of ED clinicians. Web-based self-directed simulation-based learning platforms can effectively deliver training, particularly in departments with high staff turnover. Further analysis of prospective results will assess accuracy and impact in a live ED setting.

2348

MODELLING 111 DEMAND FOR PRIMARY CARE SERVICES USING DISCRETE EVENT SIMULATION

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10.1136/emj-2023-RCEM.24

Aims and Objectives Almost half of the 16,650,745 calls to NHS 111 each year are triaged to a primary care disposition. However, there is evidence that contact with a primary care service occurs in less than 50% of cases and triage time frames are frequently not met. This can result in increased utilisation of other healthcare services.

This study aimed to model in-silico the current healthcare system for patients triaged to a primary care disposition and

determine the effect of reconfiguring the system to ensure a timely primary care service contact.

Method and Design Data from the Connected Yorkshire research database, consisting of all 111 calls made in 2021 by callers registered with Bradford or Airedale GP who were triaged to a primary care disposition, and subsequent healthcare system access in the 72 hours after the index 111 call, were used to develop a model and Discrete Event Simulation in Python, using the SimPy package.

We simulated 100 runs of one year of 111 calls and calculated the mean difference and 95% confidence intervals in primary care contacts, 999 calls and avoidable ED attendances.

Results and Conclusion The simulation of the current system estimated that there would be 39,485 (95%CI 39,437–39,534) primary care contacts, 2,059 (95%CI 2,050–2,068) 999 calls and 1,137 (95%CI 1,129–1,145) avoidable ED attendances. Modifying the model to ensure a timely primary care response resulted in a mean increase in primary care contacts of 37,755 (95%CI 37,675–37,835), a mean reduction in 999 calls of 443 (95%CI 430–456) and a mean reduction in avoidable ED attendance of 39 (95%CI 29–49).

The model suggests that timely contact with a primary care service reduces 999 calls, but has minimal impact on avoidable ED attendance, and is likely impractical given that primary care service capacity would need to double.

2033

RESULTS OF THE CESSATION OF SMOKING TRIAL IN THE EMERGENCY DEPARTMENT (COSTED)

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10.1136/emj-2023-RCEM.25

Aims and Objectives Emergency Departments (EDs) offer a valuable opportunity to support people to change their behaviour to improve health. Smoking remains the leading cause of morbidity and mortality. E-cigarettes are effective for supporting smoking cessation, yet there have been no randomised