

clinical areas as a potential strategy, of which one was our outpatient department (OPD); housed one minute away on the same floor this closes at 1700. Through the 2018/19 winter this opened between 1800–2330; we evaluated impact on service provision and staff morale.

Method and results Continuous PDSA cycles were initiated; a living standard operational policy evolved based on staff/patient feedback. Flow and patient acuity markers were monitored using electronic tracking systems. Staff were surveyed to explore opinions and impact on morale.

Conclusions During November 2018–April 2019 the OPD opened on 76 days (50%), with 1082 patients seen. Opening was more frequent during November–February; during peak activity >10% all daily attendances were seen in this stream. Mean time to see clinicians was 77 minutes and mean time to discharge was 133 minutes; both compared favourably with patients remaining in ED. This partly reflects lower patient acuity, but other crowding measures including total patients in department, and total patient minutes, also improved. The most common diagnoses were soft tissue injury, fracture, head injury, and URTI. No safety incidents occurred and <1% left without being seen. Staff feedback reflected increased morale, and lower stress and noise levels during peak activity.

Novel use of mothballed clinical areas during peak ED activity is an attractive option for families and staff, and appears to improve safety and effectiveness. Use of existing staff was cost effective, with total additional cost pressures for nurses (£20K) and support staff (£500), in comparison to projected costs of £100K for one embedded evening GP over the same period.

A & E Patient Survey NHS

Please answer the questions by ticking the box that best describes your view or provide written answers in the box provided.

- When I leave A&E today I expect:
(Please tick all that apply)
Advice on how to manage my illness/injury
A prescription for painkillers
Neither of the above
- Over the next 24 hours I expect my pain to be:
(Please tick one box only)
Completely gone
Almost completely gone
Still there but bearable
Still there and severe
Very severe
- Some painkillers are known to lead to addiction when taken regularly. Which of the following painkillers do you believe could lead to addiction?
(Please tick all that apply)
Paracetamol
Ibuprofen
Co-codamol
Morphine
None of the above
- If a painkiller could lead to addiction, would you expect your A&E doctor to tell you about this risk before giving you the painkiller?
(Please tick one box only)
Yes No Not sure
- Do you have any comments on the treatment you have received so far today?

Thank you for completing this questionnaire.

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Abstract 046 Figure 1

046

WHOSE PAIN ARE WE TREATING? A STUDY COMPARING ED PATIENTS' EXPECTATIONS OF ANALGESIA WITH ED DOCTORS' PRECONCEPTIONS

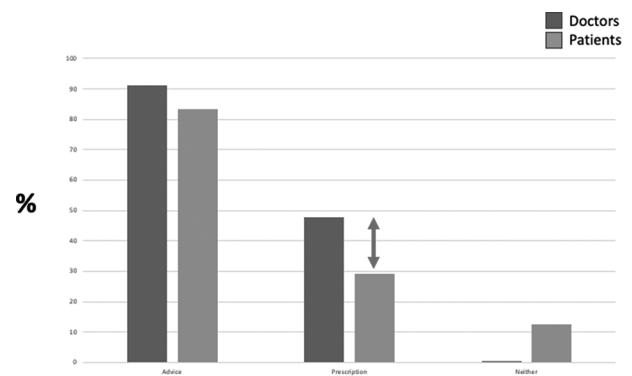
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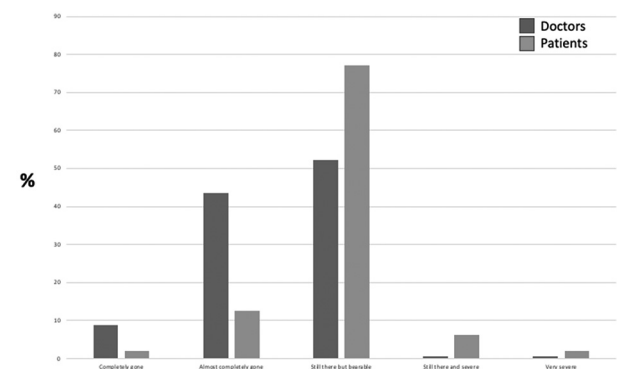
An audit at a Scottish DGH found that large numbers of Emergency Department (ED) patients were being sent home with 'To Take Out' (TTO) boxes of Co-Codamol (30/500 mg) – a concerning finding given rising rates of prescription opioid addiction in the UK. Informal conversations suggested that many clinicians were prescribing high-dose codeine because 'patients expect to be given something they can't buy over the counter'. A survey-based study was therefore designed to explore this assumption.

A short survey (figure 1) was developed to explore ED patients' expectations of analgesia and knowledge of common painkillers. In the first stage of the study, the survey was circulated among 25 ED prescribers who were asked how they thought 'most patients' with mild to moderate pain would answer these questions. In the second stage, 50 ED patients with mild to moderate pain were asked to complete the survey. Prescribers' and patients' answers were then compared.

There was a significant difference between how prescribers thought 'most patients' would answer and how most patients actually answered the questions. Fewer patients expected to be sent home with painkillers than the



Abstract 046 Figure 2



Abstract 046 Figure 3

prescribers predicted (figure 2), and patients were prepared to tolerate significantly more pain than prescribers expected (figure 3). A relatively high number of patients were aware of the addictive potential of codeine, yet some were unaware of the addictive potential of morphine, while others thought that paracetamol and ibuprofen were also addictive. Almost all patients indicated that if a painkiller could lead to addiction, they would expect their ED doctor to inform them of this risk.

These results suggest that strong painkillers are sometimes given out on the mistaken assumption that this is what patients expect. Involving patients in shared decision making about TIO analgesia may be a useful strategy to reduce ED opioid dispensing.

Rod Little Prize

047 A REVIEW OF REVIEWS OF EMERGENCY DEPARTMENT INTERVENTIONS FOR OLDER PEOPLE: OUTCOMES, COSTS AND IMPLEMENTATION FACTORS

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Background Older people's emergency care is an international public health priority and remains sub-optimal in the UK. Strategies are needed to manage older patients sensitively and effectively. We reviewed emergency care interventions, evaluating evidence for outcomes, costs, and implementation.

Method and results We developed and registered (with PROSPERO, CRD42018111461) a review of reviews protocol. Screening was according to inclusion criteria for subject and reporting standards. Data were extracted and summarised in tabular and narrative form. Quality was assessed using AMSTAR2 and Joanna Briggs Institute tools. Due to intervention and outcome heterogeneity, findings were synthesised narratively. McCusker's Elder-Friendly Emergency Department assessment tool was used as a classification framework.

Conclusions Eighteen review articles and three conference abstracts fulfilled inclusion criteria. The majority were systematic reviews, with four using meta-analysis. Fourteen reviews reported interventions initiated or wholly delivered within the ED, and four focussed on quality indicators or patient preferences.

Confidence was limited to each review's interpretation of primary studies. Descriptions of interventions were inconsistent, and there was high variability in reporting standards. Interventions mostly focussed on screening and assessment, discharge planning, referrals and follow-up, and multi-disciplinary team composition and professional activities. 26 patient and health service outcomes were reported, including admissions and readmissions, length of stay, mortality, functional decline, and quality of life.

Our review of reviews demonstrated that the current, extensive evidence base of review studies lacks complexity, with limited or no evidence for the effectiveness of

interventions; reviews commonly called for more primary research using rigorous methods. There is little review evidence for factors influencing implementation.

There was evidence that among interventions initiated in ED, those continued into the community yielded better outcomes. Service metrics (as valued by care commissioners) were evaluated as intervention outcomes more frequently than person-centred attributes (as valued by older people). Interventions were broadly holistic in nature.

048 COMPUTER BEATS DOCTOR? ESTIMATING THE PROBABILITY OF ACUTE CORONARY SYNDROME FOR INDIVIDUAL PATIENTS

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Chest pain is one of the most common reasons for patients attending the Emergency Department (ED). Accurately assessing for Acute Coronary Syndromes (ACS) remains a challenge. There is strong evidence supporting use of the Troponin-only Manchester Acute Coronary Syndrome (T-MACS) risk prediction model. How clinicians perform compared to these models is unknown.

We aimed to externally validate the diagnostic accuracy of clinicians' estimated probability of ACS (gestalt) compared to the T-MACS calculated probability of ACS.

The Bedside Evaluation of Sensitive Troponin prospective multi-centre diagnostic accuracy study included adults presenting to the ED with potential ACS. Alongside clinical, ECG and blood sample data, the emergency clinician recorded their estimated probability of ACS (%) following review. The probability of ACS was also calculated using T-MACS. The primary outcome was Major Adverse Cardiac Events (MACE) within 30-days. For this planned secondary analysis, patients from sites using the high-sensitivity cardiac troponin T (Roche Diagnostics Elecsys) were eligible.

Of 782 included, 116 (14.8%) had MACE. The C-statistic for clinician gestalt and T-MACS were 0.76 (95% CI 0.71–0.81) and 0.93 (0.90–0.95) respectively ($p < 0.0001$). Compared to T-MACS, clinicians overestimated the probability of ACS (positive bias 18.0%) and were less likely to stratify patients to extremes of probability. For 'rule out' of ACS, clinicians identified 72 (9.3%) patients as 'very low risk' (<2%) compared to 385 (49.2%) with T-MACS. For 'rule in' of ACS, clinicians identified 16 (2.1%) patients as 'high risk' of ACS ($\geq 95\%$) in comparison with 50 (6.4%) with T-MACS. Assessment of model calibration comparing observed against predicted outcomes gave an R square of 0.78 and 0.97 for clinicians and T-MACS respectively.

Clinician gestalt has inferior diagnostic accuracy to T-MACS. T-MACS requires a clinician's skill for appropriate application. Our conclusion is therefore not that computers are better, but that clinician performance can be augmented using T-MACS.