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Emergency Department Patient Flow

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November 2025

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The longest wait: our A&E crisis demands an emergency response

This report calls for urgent and decisive action from the government to stamp out corridor care and bring down the number of long waits in A&E. This report uses stories from older people who have had to face treatment, tests, and life-changing news in unsafe conditions and without privacy. It also highlights that in some hospitals, long waits and corridor care remain relatively unusual. Many older people continue to have a quick and very positive experience if they go to A&E – but there's a postcode lottery and too many others do not. It highlights that there is a lot that hospitals can do to minimise long waits and corridor care but strong national leadership from the Government is essential to drive change.

Hospital of the future: ending the patient gridlock.

Re:State; 2025.
[This final report of the 'Hospital of the Future' programme seeks to open up the black box of hospitals to examine exactly what is preventing patient flow. It explores how hospitals can transition to a model where patients flow seamlessly through the system, at less cost to themselves, the system and the taxpayer.]

The Longest Wait: Our A&E crisis demands an emergency response

Age UK- 10 years ago, waiting 12 hours in A&E was a rarity. Now long waits are routine, happening during 1 in 10 major A&E attendances.1 Long waits are horrible for patients and risky too: if you wait more than 12 hours in A&E you are more than twice as likely to die within 30 days of being discharged than if you are seen within two hours.2 And while overly busy A&E departments and long waits are bad for everyone and happen to people of all ages, they happen most often to older people, for whom the impact can be especially devastating. Corridor care is closely linked to these long waits. It happens when hospitals' lack of space and resources for those that need admitting forces people to wait for a bed, often for long periods, in other hospital areas which lack the usual facilities and supervision you get on a ward. These may be passages or repurposed cupboards or other co-opted overspill spaces, where people wait on a chair or a trolley. These places are often uncomfortable, noisy, anything but

private, and under-staffed. There is also commonly a lack of facilities: it's difficult to get food or water or access a toilet. In short, it's not where you want to be if you are very unwell, whatever your age.

'A national shame': Research reveals devastating reality of so called 'corridor care'

Almost one in five patients in Emergency Departments were being cared for in trolleys or chairs in corridors in England this summer, with so-called 'corridor care' leaving people feeling 'forgotten and vulnerable'.

That's among the key findings contained in a major report on the state of corridor care in A&Es, published today (10 November) by the All-Party Parliamentary Group (APPG) on Emergency Care.

Titled Corridor Care, the research, compiled by the Royal College of Emergency Medicine (RCEM) which acts as secretariat for the APPG, reveals what patients are experiencing when they seek urgent or emergency care in ED, the harm they are exposed to, and what needs to be done to address this crisis.

So-called 'corridor care' refers to the practice of providing patient care in clinically inappropriate areas such as corridors, waiting rooms or other temporary spaces which are not designed or equipped to treat patients in.

Corridor care is a visible symptom of the pressures facing the entire system. These pressures include shortages of staffed hospital beds and delays in discharging patients due to gaps in community and social care provision. This creates a bottleneck in hospitals, with those requiring admission remaining in Emergency Departments for extended periods and care being delivered wherever space can be found.

Between 30 July – 13 August 2025, RCEM polled Clinical leads – who oversee A&Es – to capture a snapshot of the prevalence of corridor care and the standard of care patients were receiving.

In total, representatives from 58 Type 1 Emergency Departments across England responded. They revealed:

- Across the EDs in our sample, 19% of patients were being treated on trolleys or chairs in the corridor. That's almost one in five attendances who were being cared for in an inappropriate setting, during a summer month, when there has historically been respite.
- 34.5% of respondents had patients being cared for in ambulances outside their department
- Over three quarters of respondents (78%) felt patients were coming into harm in their department due to the quality of care that can be delivered under current conditions

Given that corridor care has become a perennial issue, it is no surprise that this concern is impacting the public's confidence in Emergency Departments.

Exclusive public polling conducted on behalf of the APPG by Ipsos* across Great Britain found 58% of respondents are not confident that their A&E would provide a timely service.

Meanwhile, over a quarter (28%) of respondents to the nationally representative survey said that they were not confident that they would be treated in a clinically appropriate area, and 42% reported hesitancy around attending due to concerns about long waiting times.

Free text responses to a further RCEM survey, conducted in partnership with the Patient's Association, revealed testimonies about what people experienced in EDs.

One respondent said: "Corridor care has affected my confidence. I would think twice about going to A&E again unless it was absolutely unavoidable. The experience of being left on a corridor made me feel forgotten and vulnerable. I worry that if I went back, I might not be treated in a timely or safe way."

Another said: "While I know staff are doing their best, the environment didn't feel like the right place to receive care, and that has shaken my trust."

To improve the experience of patients in Emergency Departments, and teams working in them, the report makes a series of recommendations to address the crisis, including targeted improvements to patient through a reduction in delayed discharges, reforms to funding and focusing on 12-hour waits.

The APPG on Emergency Care pledged to look into corridor care earlier this year, after RCEM published analysis revealing there were more than 16,600 deaths associated with long A&E waits before admission in England last year.

The informal cross-party group brings together Parliamentarians who will engage with healthcare professionals and organisations outside government to advocate for improvements in Urgent and Emergency Care, with the secretariat function being provided by RCEM.

Dr Ian Higginson, President of The Royal College of Emergency Medicine said: "This report reveals the reality of so-called 'corridor care' in England. Put simply – it's a source of national shame.

"Every day, patients are counting the hours they have been in ED, on trolleys in corridors, on chairs in unsuitable spaces, or simply in any available spot.

"Emergency Care never used to look like this. It's incredibly disheartening for those working in our departments, who are doing everything they can to provide care under these conditions – and even more so for the patients through no fault of their own.

"It's distressing, undignified, and it's putting lives at risk.

"The situation is a visible sign that the system isn't operating as it should – whether it is hospitals not operating fully effectively, or the inability to discharge people from wards who are ready to go home, as there aren't appropriate social care options in place.

"This report, with its recommendations, is essential reading for all politicians, policy makers and healthcare leaders. We need meaningful change, before the crisis in our Emergency Departments deteriorates further. Lives depend on it."

Dr Rosena Allin-Khan, who is the Member of Parliament for Tooting, a working Emergency Medicine Doctor, and Chair of the APPG on Emergency Care, said: "In emergency departments across the country, patients are being let down; stuck waiting hours upon hours, with many left to be treated in hospital corridors. It is unsafe, undignified, and symptomatic of an NHS that is stretched, working desperately to support patients but struggling to cope with demand.

"As an A&E doctor, I know my colleagues across the NHS work tirelessly for their patients. Staff are defined by their dedication, empathy and steadfast commitment to those in their care. In Westminster, we need to match their resolve, support frontline staff and give the NHS the resources it needs so that it is always there, free at the point of use, when we need it.

"Every patient deserves privacy, compassion, and high-quality care, not on a trolley in a hallway. Our cross-party group of Parliamentarians looks forward to working collaboratively with the Government, Ministers and NHS leaders to reach our shared goal – ending corridor care for good."

Rachel Power, Chief Executive of the Patients Association, said: "Too many patients are being left and treated in corridors, waiting rooms and other unsuitable spaces for hours on end and it's causing a profound erosion of trust in emergency care. These aren't just statistics; they're real people feeling frightened, forgotten and undignified while trying to get help at their most vulnerable moments.

"This report highlights the deep health inequalities in corridor care. The greatest burden falls on people in deprived areas, older people, and those with mental health conditions. It should never be that the very patients who most need compassion and timely care are those far more likely to experience long waits in inappropriate settings.

"Every patient should expect to be treated in a timely, dignified and safe place. We fervently endorse the recommendations in this report and expect to see urgent action to eradicate corridor care."

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1. **Factors influencing pain management in patients presenting to the emergency department: A mixed-method systematic review**

Authors: Almutairi, Abdulmalik;Coyer, Fiona;Keogh, Samantha and Hughes, James

Publication Date: 2025

Journal: International Journal of Nursing Studies 172, pp. 105214

Abstract: Competing Interests: Declaration of competing interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.; Background: Up to 80 % of all presentations to the emergency department are due to pain. Although pain management practices have improved over time, suboptimal

pain management still occurs in the emergency department.; Objectives: To identify comprehensive factors influencing pain management outcomes among adult patients presenting to the emergency department with pain.; Design: A mixed-method systematic review was conducted following the Joanna Briggs Institute convergent segregated integration methodology.; Method: Six databases were searched from inception to October 2024 for relevant studies, including peer-reviewed primary studies in English. Empirical studies identifying factors influencing pain management outcomes were included. The databases were searched using Medical Subject Headings terms and keywords such as 'pain management' and 'disparities.' The included studies' methodological quality was assessed using Joanna Briggs Institute checklists. Data were synthesised through meta-analysis and narrative description, followed by the convergent segregated integration of quantitative and qualitative data. The Symptom Management Theory guided this review's synthesis, interpretation, and discussion.; Results: Included in this review were 109 studies, 107 quantitative and two qualitative, reporting on 45 contributing factors and 25 outcome measures representing the domains and dimensions of the Symptom Management Theory. Thirty papers were included in the meta-analysis for the most common factors (race, age, and sex) and outcome measures (receipt of analgesic medication and opioid medication). African Americans were less likely to receive analgesics (OR 0.80, 95 % CI 0.73-0.88, $p < 0.001$) and opioids (OR 0.62, 95 % CI 0.53-0.74, $p < 0.001$) compared to Non-Hispanic White patients. Hispanic patients were also less likely to receive opioids compared to Non-Hispanic White patients (OR 0.83, 95 % CI 0.75-0.92, $p = 0.04$). There was no evidence of a significant difference in the likelihood of receiving analgesics between the sexes. Older patients were less likely to receive analgesics and opioids compared to younger counterparts (OR 0.74, 95 % CI 0.67-0.83, $p < 0.001$; OR 0.90, 95 % CI 0.82-0.99, $p = 0.03$, respectively). The qualitative synthesis reinforced the quantitative findings, providing deeper insights into the role of spiritual and socioeconomic factors, as well as opioid legislation, which shaped patient experiences in the emergency department.; Conclusion: This mixed-method systematic review demonstrated that several groups of patients still experience potentially inadequate pain management due to factors unrelated to the presenting condition and severity. The lack of standardisation in reporting factors and outcome measures limited the extent to which we can fully identify these associations and their impact on pain management. Future research should incorporate more qualitative designs, patient-reported outcomes, and standardised data measurement and collection.; Systematic Review Registration Id: PROSPERO - CRD 42024601076.

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2. **Safety and accuracy of AI in triaging patients in the emergency department**

Authors: Alomari, Lama Mohammad;Alshammari, Mai Mamdouh;Arbaeen, Asal Osama;Alshehri, Raghad Abdullah and Almalki, Hanin Saad

Publication Date: 2025

Journal: International Journal of Emergency Medicine 18(1), pp. 243

Abstract: Competing Interests: Declarations. Ethics approval and consent to participate: The study was approved by the Institutional Review Board of King Saud Medical City. Written informed consent was obtained from all participants. Consent for publication: All authors gave consent for publication. Competing interests: The authors declare no competing interests.; Background: Artificial Intelligence (AI) has been increasingly explored in healthcare, particularly in emergency department (ED) triage. This study aimed to evaluate the effectiveness of the AI chatbot ChatGPT in triaging patients, focusing on its accuracy, safety, efficiency, and impact on patient care.; Methods: A prospective observational study was conducted at the ED of King Saud Medical City (KSMC) in Riyadh, Saudi Arabia, with a sample size of 138 patients. Patients requiring immediate resuscitation were excluded. ED physicians assigned triage scores using the Canadian Triage and Acuity Scale (CTAS), followed by AI-generated scores for the same patients. In cases of discrepancy, the final decision by the senior ED consultant was considered the gold standard. The study assessed inter-rater reliability between AI and human raters and evaluated the accuracy of each compared to the consultant's assessment.; Results: The results indicated a high agreement rate (85.61%) between ChatGPT and ED physicians, with substantial inter-rater reliability ($\kappa = 0.780$, 95% Confidence Interval CI] 0.676-0.884, $p < 0.001$). Agreement between ED physicians and consultants was at 63.9%, with moderate reliability ($\kappa = 0.406$,

95% CI 0.006-0.806, p = 0.018). Consultants assigned lower acuity levels than physicians in most cases. ChatGPT's accuracy compared to the consultant was 42.86%, with slight reliability, showing a tendency to overestimate acuity, particularly in critical cases. However, it performed better in mid-range acuity levels.; Conclusion: The findings suggested that AI could support ED triage by aligning closely with human decision-making. However, its overestimation of severity could lead to over-triaging and increased resource use. Limitations included a small sample size and the use of a general AI model not specifically trained for medical triage. Future research should focus on AI models tailored for ED triage to improve reliability and clinical applicability. (© 2025. The Author(s).)

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3. **A proposal for formal fairness requirements in triage emergency departments: publicity, accessibility, relevance, standardisability and accountability**

Authors: Battisti, Davide and Camporesi, Silvia

Publication Date: 2025

Journal: Journal of Medical Ethics 51(12), pp. 841–846

Abstract: Competing Interests: Competing interests: None declared.; This paper puts forward a wish list of requirements for formal fairness in the specific context of triage in emergency departments (EDs) and maps the empirical and conceptual research questions that need to be addressed in this context in the near future. The pandemic has brought to the fore the necessity for public debate about how to allocate resources fairly in a situation of great shortage. However, issues of fairness arise also outside of pandemics: decisions about how to allocate resources are structurally unavoidable in healthcare systems, as value judgements underlie every allocative decision, although they are not always easily identifiable. In this paper, we set out to bridge this gap in the context of EDs. In the first part, we propose five formal requirements specifically applied for ED triage to be considered fair and legitimate: publicity, accessibility, relevance, standardisability and accountability. In the second part of the paper, we map the conceptual and empirical ethics questions that will need to be investigated to assess whether healthcare systems guarantee a formally just ED triage. In conclusion, we argue that there is a vast research landscape in need of an in-depth conceptual and empirical investigation in the context of ED triage in ordinary times. Addressing both types of questions in this context is vital for promoting a fair and legitimate ED triage and for fostering reflection on formal fairness allocative issues beyond triage. (© Author(s) (or their employer(s)) 2025. No commercial re-use. See rights and permissions. Published by BMJ Group.)

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4. **The Effect of a Nursing Triage Protocol for Minor Orthopedic Trauma in an Emergency Department: A Randomized Controlled Trial**

Authors: Bombeek, Sanne;Lauwers, Rinaldo;Van Zundert, Tom,C.R.V. and Haegdorens, Filip

Publication Date: 2025

Journal: Nursing & Health Sciences 27(4), pp. e70261

Abstract: More than 90% of patients with minor orthopedic injuries are categorized as non-urgent which can result in prolonged waiting times in the emergency department. A total of 220 adults presenting between March and May 2023 with non-urgent orthopedic distal limb injuries were included in this single center, unblinded, randomized, parallel-group, controlled trial. A nurse performed the physical examination and initiation of X-ray during triage in the intervention group while an emergency physician performed these after triage in the usual care group. The results of 108/110 (intervention) and 107/110 participants (usual care) were analyzed. The intervention group had a significantly lower flow time between emergency department registration and X-ray request. The usual care group had significantly lower flow time between X-ray request and emergency department discharge. There was no difference in total length of stay, patient satisfaction and treatment adjustment between groups. The nursing triage protocol reduced flow time between registration and request for X-ray but did not affect total length of stay. (© 2025 John Wiley & Sons Australia, Ltd.)

5. **Quantitative evaluation of patients' digital capability evaluated in an emergency department setting: a cross-sectional study**

Authors: Bundsgaard Andersen, Louise;Juul Larsen, Jesper;Marsaa, Kristoffer;Rosenmai, Gry;Seemann, Helle and Andersen Schmidt, Thomas

Publication Date: 2025

Journal: Emergency Medicine Journal : EMJ 42(12), pp. 785–790

Abstract: Competing Interests: Competing interests: None declared.; Objectives: The main aim of the study was (1) to assess digital literacy among acutely admitted patients in an ED, (2) to provide quantitative data relating to the 'inverse information law'. We hypothesised that a large proportion of acutely admitted patients are digitally incapable, and there is a link between age, frailty, hospital admittances and digital incapability.; Design: This study is a single-centre, cross-sectional, prospective case-controlled questionnaire study. Clinical Frailty Scale (CFS), gender and age were collected from the patients' electronic medical reports. Information regarding smartphone usage, ability to access public mail/communication, educational level, living situation and number of admittances the last year were patient-reported bedside. Subsequently, ability to use a digital platform was tested.; Setting: A secondary care ED in Denmark, with a high level of broadband penetration, allows easy digital access.; Participants: A total of 588 patients were assessed for eligibility, hereof 468 patients were included. Inclusion criteria were age above 18 years, admitted for treatment of an internal medicine or surgical problem, triaged non-emergent in a stable condition, informed oral and written consent.; Main Outcome Measures: The proportions of acutely admitted patients who were digitally capable versus incapable whether there is a link between age, frailty, hospital admittances and digital incapability.; Results: Among patients included, 57% (n=265) had high digital literacy, while 43% (n=203) had low literacy Δ%=14. The high digital capability group was significantly younger by 23% (15.3, 20.5) p<0.001 and had lower CFS than the low digital capability group 2.3 versus 4.2 (1.7, 2.3) p<0.001. The low digital capability group had 1.6-fold more admittances the previous year (0.5, 1.2) p<0.001.; Conclusions: The proportion of digitally illiterate patients is high (43%), and they are older, frailer and have more hospital admittances and less high education than digitally literate patients. There is a significant digital divide that needs to be considered in health care.

6. **Adapting an emergency department fall prevention intervention for persons living with dementia through patient, caregiver, and expert interviews**

Authors: Goldberg, Elizabeth M.;Tietbohl, Caroline K.;García-Hernández, Sandra;Bounds, Megan;Picazo, Jonathan Gomez and Lum, Hillary D.

Publication Date: 2025

Journal: Scientific Reports 15(1), pp. 41399

Abstract: Competing Interests: Declarations. Competing interests: The authors declare no competing interests.; Study objective Although falls are up to three times more common in persons living with dementia (PLWD), limited fall prevention interventions exist for this population. Adapting promising interventions, such as the GAPcare intervention, which reduced fall-related ED visits by 66% and did not prolong ED length of stay, may address this need. In GAPcare patients receive pharmacy and physical therapy (PT) consultation to reduce modifiable risk factors for falls prior to ED discharge. In this qualitative descriptive study, we conducted semi-structured interviews with PLWD who recently visited the ED, their caregivers, and national experts in dementia care or ED operations to elicit perspectives on how GAPcare should be adapted for PLWD. Interviews were conducted in English and Spanish. We analyzed interviews using rapid qualitative analysis guided by Castro's framework for adapting prevention interventions. We interviewed 7 patients, 2 caregivers, and 15 experts (5 physicians, 3 nurses, 3 PTs, 3 pharmacists, 1 PhD scientist). Participants strongly supported improved

ED falls care for PLWD. They also indicated that tailoring at multiple levels (patient and caregiver, ED, and external factors, e.g., insurance status) would be required to support the complexities in PLWDs' circumstances (e.g., living arrangements, income) and cognitive abilities. Participants suggested training of ED staff in dementia care and caregiver support. PLWD, caregivers, and experts in dementia care and ED operations are supportive of adapting our existing GAPcare intervention for PLWD. Early feedback from relevant informants guided GAPcareAD intervention refinement and fit with ED workflows. (© 2025. The Author(s).)

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7. **Multicenter Trial of the Emergency Department Trigger Tool for Adverse Event Detection**

Authors: Griffey, Richard T.;Schneider, Ryan M.;Kwok, Edmund S. H.;Kocher, Keith E.;Salmo, Ellen;Watson, Laura;Rick, April;Clavet, Tamara;Smith, Carrie;Guarnaccia, Catie and Ancona, Rachel

Publication Date: 2025

Journal: Annals of Emergency Medicine 86(6), pp. 625–638

Abstract: Study Objectives: We previously developed and validated the Emergency Department Trigger Tool (EDTT) for detection of adverse events, featuring an automated screen for evidence-based triggers and high-yield sampling. We now report on a recently completed multicenter study of the EDTT, performance of the tool, event types detected, and site differences.; Methods: This retrospective, observational study used 18 months of data at 3 sites (452,719 records screened; 187,345 with more than or equal to 1 trigger). We performed 2-tiered dual independent review of a sample of 8,996 records (~3,000 per site), selected from a balanced set of records, based on trigger count per record. We characterized adverse events identified by occurrence (emergency department ED] or present on arrival), severity, and type, focusing here specifically on ED adverse events.; Results: In reviews of 8,996 records, we found 5,473 adverse events in 3,983 unique visits (yield: 44.3% of visits), including 2,359 ED adverse events and 3,114 present on arrival adverse events, with an ED adverse event rate of 0.26 per visit reviewed. ED adverse event yields using the EDTT were similar across sites (22.8%, 18.4%, 22.1%). Individual trigger performance was largely similar across sites and the EDTT performed well in detecting adverse events (area under the curve 78% across sites, range: 77% to 78%). Medication and patient-care related categories comprised the majority (81%) of ED adverse events, with some site differences.; Conclusion: The EDTT provides a robust approach for ED quality and safety review with performance in detecting ED adverse events that surpasses traditional approaches and demonstrates generalizability across academic centers. Results are consistent with those obtained in our previous single-center study and are now replicated in multiple sites using a different electronic medical record system and reviewers.

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8. **Accessibility, Barriers, and Care: An Integrative Literature Review of Deaf and Hard-of-Hearing Patients in Emergency Departments**

Authors: Hazelwood, Sarah;Dermer, Jennifer;Wood, Neil;Waldmann, Jana and Neville, Stephen

Publication Date: 2025

Journal: Journal of Emergency Nursing

Abstract: Introduction: Deaf and hard-of-hearing individuals encounter persistent barriers in emergency departments, where care often relies on rapid, spoken exchanges, auditory dominance, and limited willingness to adapt communication approaches. Without access to signed or visual communication, patient safety is compromised, informed consent becomes uncertain, and equitable care cannot be guaranteed.; Methods: This integrative review critically synthesizes empirical literature on the communication experiences of Deaf and hard-of-hearing patients in emergency settings. A systematic search of peer-reviewed and gray literature was conducted (1970 to March 10, 2025). Identifying 1929 records (967 after duplication), 7 studies met the inclusion criteria. Studies were appraised using the Joanna Briggs Institute and Mixed Methods Appraisal Tool checklists. Thematic

synthesis followed the principles of critical interpretive synthesis and the weight of evidence framework.; Results: Five key themes emerged: (1) communication barriers, (2) delays and disparities in care, (3) patient care experiences, (4) systemic exclusion, and (5) strategies for accessible care. Across the literature, interpreter provision was inconsistent, Deaf cultural awareness was limited, and few systems embedded protocols to support language access.; Discussion: Equitable emergency care for Deaf and hard-of-hearing patients requires systemic reform. Key priorities include Deaf awareness training, timely interpreter provision, and the codesign of communication-access protocols led by Deaf communities. These measures are essential for delivering lawful, safe, and patient-centered emergency care.

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9. **Hot Stuff: Exploring the Association Between Hot Days and Emergency Department Presentations Amongst Older Patients**

Authors: Hunter, Carol Lu;Moore, Nicholas;Middleton, Paul and Ni Chróinín, Danielle

Publication Date: 2025

Journal: Australasian Journal on Ageing 44(4), pp. e70100

Abstract: Objective: Climate change has contributed to fluctuating temperature extremes over recent years. Higher temperatures increase mortality and morbidity in older patients. This study aimed to investigate temporal trends over the week and the association between hot temperatures and emergency department (ED) presentations amongst older patients.; Methods: We conducted a retrospective observational study using ED presentation data of persons aged 65 years or older from 2010 to 2021 attending at multi-centre secondary and tertiary referral institutions (n = 6) within South Western Sydney Health District, serving a population of ~820,000. The primary outcome was the rate of ED presentations amongst older patients on hot/very hot days/nights, compared to non-hot days/nights.; Results: There were 693,620 ED presentations of people aged 65 years or older across study sites over the study period. During this time, there were 160 hot days and 331 hot nights. The seasonal Auto Regressive Integrated Moving Average (ARIMA) model (adjusted for weekends/public holidays/Mondays/Fridays) showed an inconsistent effect across the sites studied for hot days (estimate range -0.11 to 1.37) and hot nights (estimate range -0.81 to 1.17). There were also significantly decreased presentations on weekends/public holidays and increased presentations on Mondays (p = 0.003).; Conclusions: Although we did not observe an association between heat and presentations, this may reflect regional variation and thus the broader risks of climate change for older people remain undetermined. Factors that influence reduced weekend presentations and Monday surges, irrespective of temperature variations, should be further investigated to identify opportunities for intervention.

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10. **Reducing pathology testing in emergency departments: A scoping review**

Authors: Kazda, Luise;Pickles, Kristen;Colagiuri, Philomena;Bell, Katy;O'Connell, Brian and Mathieu, Erin

Publication Date: 2025

Journal: Australasian Emergency Care 28(4), pp. 250–263

Abstract: Competing Interests: Declaration of Competing Interest BOC is an unpaid board member of the Climate and Health Alliance Australia and unpaid executive member of the Sustainable Emergency Medicine and Climate Advocacy Network, Australasian College for Emergency Medicine. All other authors declare no conflict of interest.; Background: Pathology testing in emergency departments (EDs) is often unnecessary, leading to avoidable financial and environmental costs without improving clinical care. This overview summarises interventions to reduce pathology testing in EDs, their effectiveness, and any resulting financial, environmental, patient, or staff impacts.; Methods: We searched multiple databases up to February 2025 and conducted citation searches. Eligible studies included intervention and aetiological observational studies of pathology tests in EDs. Secondary studies and conference

abstracts were excluded.; Results: Of 1,755 records, 34 studies met inclusion criteria: 32 quality improvement studies, one cohort study, and one randomised controlled trial. Interventions included ordering system changes, education, audit & feedback, guideline development, penalties, and alternative care models. Significant reductions ranging from 1.5% to 99% (median: 29%) in targeted pathology tests were reported in 33 of 34 studies. All 25 studies reporting financial impacts found cost reductions, with potential savings up to AUS$1 million in one Australian ED over 18 months (median:US$247,000 per year for nine studies reporting annual savings in US$). No adverse patient or staff impacts were found. No studies reported on environmental impacts.; Conclusion: Nearly all interventions reduced test frequency with beneficial or no impacts on patient care and staff efficiency, along with notable cost savings. Future studies should include environmental impacts and assess clinical care co-benefits of reducing unnecessary pathology testing.

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11. **Antibiotic Stewardship in the Emergency Department Following Negative Urine Cultures for Treated UTI**

Authors: Kieffer, Peter;Rodriguez, Marcela;Rafaquat, Aysha;Jasti, Archana and Saleh, Ezzeldin

Publication Date: 2025

Journal: Clinical Pediatrics 64(12), pp. 1651–1655

Abstract: Competing Interests: Declaration of Conflicting InterestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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12. **Observational service evaluation of voice recognition technology in the emergency department: association with electronic note-writing efficiency**

Authors: Langmead, Taylor J.;Mimmack, Francis A. W.;Ukoumunne, Obioha C. and Appelboam, Andrew

Publication Date: 2025

Journal: Emergency Medicine Journal : EMJ 42(12), pp. 783–784

Abstract: Competing Interests: Competing interests: None declared.

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13. **Virtual discharge counseling: An assessment of scalability of a novel patient educational process across a multi-site urban emergency department**

Authors: Leybov, Victoria;Ross, Joshua;Grabinski, Zoe;Smith, Silas W.;Wang, Yelan;Wittman, Ian G.;Caspers, Christopher G.;Tse, Audrey Bree and Conroy, Nancy

Publication Date: 2025

Journal: Journal of Telemedicine and Telecare 31(10), pp. 1462–1467

Abstract: Competing Interests: Declaration of conflicting interestsThe author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.; BackgroundInadequate counseling at patient discharge from the emergency department can lead to adverse patient outcomes. Virtual discharge counseling can address gaps in discharge counseling and improve patients' understanding of instructions.MethodsA previously established virtual discharge counseling program was scaled across three emergency departments and expanded to 13 diagnoses. Utilizing a standardized protocol and script, counselors performed virtual discharge counseling via a remote, secure teleconference platform in the patients' preferred language.ResultsVirtual discharge counseling was performed with 166 patients. COVID-19, back pain, and headache were the most frequent diagnoses. The median counseling time was 14 min. Median counseling time for English was

11 min, versus 20 min for other languages (p < 0.001). Counseling times were the longest for COVID-19 and diabetes (18 min for each).ConclusionWe demonstrate the scalability of a virtual discharge counseling program. Our findings can assist in targeting virtual discharge counseling resources for limited English-proficiency patients and specific diagnoses that require longer counseling times.

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14. **Utilisation of an emergency medical services pathway into a virtual emergency department and the impact on non-transports and patient safety**

Authors: Mahony, Emily;Magnuson, Nicole;Thornton, Amanda;Nehme, Emily;Scott, Susanne;Talevski, Jason;Miller, Suzanne M.;Sher, Loren and Nehme, Ziad

Publication Date: 2025

Journal: Emergency Medicine Journal : EMJ

Abstract: Competing Interests: Competing interests: None declared.; Background: The establishment of an emergency medical services (EMS) pathway into a virtual emergency service-the Victorian Virtual Emergency Department (VVED)-introduced a video-enabled telehealth consultation service for patients assessed and treated by paramedics. This study examined the utilisation of the VVED by EMS in Victoria, Australia, including its impact on rates of non-transport to hospital and EMS reattendance.; Methods: A retrospective study of all presentations (aged ≥12 years) to EMS between October 2021 and May 2023. EMS data were linked to VVED records. Surveys were distributed following VVED consultation to explore patient experience. Interrupted time-series analyses were used to evaluate the impact of VVED on non-transport rates and EMS reattendance within 24 hours. Multivariable logistic regression analyses were used to determine predictors of non-transport and EMS reattendance.; Results: There were 914 747 EMS presentations within the study period, of which 30 433 (3.3%) were referred to VVED. Compared with those not referred, those referred to VVED were older with fewer vital sign derangements. Of VVED referrals, the median case time was 23 min shorter compared with cases not referred to VVED, and 74% were not transported. Compared with baseline, the VVED phase-in period was associated with a non-significant change in level (incident rate ratios (IRR): 1.03, 95% CI 0.99 to 1.06) and significant change in trend per 30 days (IRR: 1.01, 95% CI 1.01 to 1.02) for non-transports. Full implementation of VVED was associated with a step-reduction (IRR: 0.96, 95% CI 0.92 to 0.99) and downward trend per 30 days (IRR: 0.99, 95% CI 0.98 to 0.99). In both the VVED phase-in and full implementation periods, no associations were found for reattendance to EMS. After adjustment for clinical presentation and acuity, VVED referral was associated with a 16-fold (adjusted OR: 15.97 95% CI 15.53 to 16.43) increase in the odds of non-transport. Among the 8.9% of patients who responded to the survey, satisfaction of the VVED was high (91.1%).; Conclusion: The EMS-VVED referral pathway contributed to significant improvements in ambulance non-transports and case-time savings. (© Author(s) (or their employer(s)) 2025. No commercial re-use. See rights and permissions. Published by BMJ Group.)

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15. **The Impact of a Planned Change to Nurse Staffing Levels in Emergency Departments: A Pre-Test, Post-Test Design**

Authors: Mc Carthy, Vera,J.C.;Brady, Noeleen;Murphy, Ashling;Murphy, Aileen;Ball, Jane;Crouch, Robert;Duffield, Christine;Griffiths, Peter;Scott, Anne and Drennan, Jonathan

Publication Date: 2025

Journal: Journal of Advanced Nursing 81(12), pp. 8714–8723

Abstract: Aim: To examine burnout levels, nurse perceptions of the work environment, job satisfaction, intention to stay and quality of care for nurses working in emergency departments before and following a planned change to nurse staffing levels.; Design: A pre-post observational design.; Methods: A systematic approach (Nursing Hours per Patient Presentation) was introduced to determine nurse staffing levels based on patient presentations resulting in adjustments to nurse staffing. Data on burnout, the work environment, intention to stay, job satisfaction and quality of care were collected from

three emergency departments prior to and following the adjustments to nurse staffing.; Results: An adjustment to nurse staffing levels was made to all three emergency departments. Mean emotional exhaustion scores were significantly lower, and quality of work environment scores and levels of job satisfaction were significantly higher for nurses following staffing adjustments. There was an increase to the proportion of nurses who perceived an improvement in quality of care delivered. In general, the results indicated improvements in outcomes following adjustments to nurse staffing levels.; Conclusion: A more holistic organisational approach is required to address staffing in emergency departments. Initiatives that involve frontline nurses in resource planning facilitating a bottom-up approach to allow for improved work environments would be beneficial.; Impact: This study addressed a planned change to nurse staffing levels in emergency departments and staff outcomes pre and post changes to staffing levels. This study highlighted that staffing an emergency department, based on nursing hours per patient presentation, was associated with improvements in staff outcomes. The research will impact on nurses working in emergency departments as outcomes from this research were used to develop a Framework for Safe Nurse Staffing and Skill Mix in Emergency Care Settings.; Reporting Method: STROBE and SQUIRE checklist.; Patient or Public Contribution: No Patient or Public Contribution. (© 2025 The Author(s). Journal of Advanced Nursing published by John Wiley & Sons Ltd.)

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16. **Impact of artificial intelligence on hospital admission prediction and flow optimization in health services: a systematic review**

Authors: Nunes, Aline Lucas;Lisboa, Thiago;da Rosa, Bruna Nichele and Blatt, Carine Raquel

Publication Date: 2025

Journal: International Journal of Medical Informatics 204, pp. 106057

Abstract: Competing Interests: Declaration of competing interest The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.; Background: Artificial Intelligence (AI)-assisted prediction of hospital admission is an innovative tool that optimizes resource allocation and improves patient flow within emergency departments. Health institutions need to decongest these departments to maintain sustainability and become efficient. Increasing demand and excessive competition for limited resources directly contribute to these challenges.; Objective: This systematic review aims to evaluate the use of artificial intelligence in the prediction of hospital admissions, evaluating the accuracy of machine learning models, their impact on clinical decision- making, and their role in the optimization and allocation of resources.; Methods: A systematic review of studies published between 2019 and 2024 followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Studies were selected based on a pre-defined Population, Intervention, Comparison, and Outcome (PICO) framework, and methodological quality was assessed using the Quality In Prognosis Studies (QUIPS) and the Checklist for Artificial Intelligence in Medical Imaging (ChAMAI) tools.; Results: A total of 20 studies were included; most of the studies evaluated were retrospective. AI-based models demonstrated superior accuracy (85 % to 95 %) compared to traditional methods, with Random Forest (RF) and Neural Networks outperforming classical statistical models. Studies incorporating unstructured data through Natural Language Processing (NLP) have significantly improved patient flow and resource allocation. The integration of predictive analytics resulted in a reduction in avoidable hospitalizations, optimized bed occupancy, and a decrease in emergency room overcrowding.; Conclusion: AI-driven admission prediction is promising in the hospital setting, as it improves efficiency and allows for proactive and rapid decision-making, optimizing available resources. Future research is promising and should focus on prospective studies to validate practical applicability. (Copyright © 2025 Elsevier B.V. All rights reserved.)

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17. **Pediatric addictions and mental health boarding in emergency departments: a scoping review**

Authors: Ridout, Amelia;Schimert, Maya;Chisholm, Cassandra;Chow, Kristian;Ganshorn, Heather;Bolton, James M.;Nordstrom, Kimberly and Lang, Eddy

Publication Date: 2025

Journal: CJEM

Abstract: Competing Interests: Declarations. Conflict of interest: On behalf of all authors, the corresponding author states that there is no conflict of interest.; Objectives: Emergency departments (EDs) have seen growing rates of pediatric mental health presentations, a trend exacerbated by the COVID-19 pandemic. Many of these patients will 'board', remaining in the ED for prolonged periods of time while awaiting transfer to an inpatient bed. Boarding disproportionately impacts mental health patients and is associated with worse patient health outcomes and healthcare system inefficiency. The objective of this scoping review is to synthesize the extent and nature of evidence relating to pediatric mental health boarding, and to identify knowledge gaps.; Methods: Searches were conducted in MEDLINE, Embase, PsycINFO, and CINAHL for peer-reviewed literature involving mental health patients boarding in hospital EDs. Studies underwent eligibility screening for pediatric populations and data extraction by two reviewers. Results are reported per PRISMA-ScR guidelines.; Results: Three thousand four hundred and fifty-eight studies were screened for title and abstract eligibility, 386 of which were assessed at full-text. Twenty-eight studies met inclusion criteria. Of these, 19 assessed variables impacting boarding, 18 quantified boarding duration or prevalence, 6 measured the impacts of boarding, 5 assessed interventions to mitigate boarding, and 4 provided consensus recommendations. Eighty-two percent of studies were published within the last 5 years and all are from the United States. Reported mean ED boarding times ranged from 5 to 54 h across 5 studies. Of 7 studies assessing the impact of COVID-19 on pediatric mental health boarding, all reported that COVID-19 was associated with increased boarding prevalence and/or duration.; Conclusions: An emerging body of literature on the burden and impacts of ED boarding among pediatric mental health patients suggests that boarding is a pressing concern in the delivery of pediatric emergency healthcare that has worsened since COVID-19. This is the most comprehensive evidence synthesis on pediatric mental health boarding to date, highlighting the impacts of boarding and the solutions studied to address this problem. (© 2025. The Author(s), under exclusive licence to the Canadian Association of Emergency Physicians (CAEP)/ Association Canadienne de Médecine d'Urgence (ACMU).)

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18. **The surprise question: predictive accuracy in an unselected emergency department population - a prospective study in nurses and physicians**

Authors: Theunissen, Maurice;Lardenoye, Sacha;van den Beuken-van Everdingen, Marieke,H.J. and Stassen, Patricia M.

Publication Date: 2025

Journal: Annals of Medicine 57(1), pp. 2529575

Abstract: Background: The 'surprise question' (SQ) asks care professionals to assess the patient's mortality risk. In this prospective study, we investigated 1) the prognostic accuracy of the SQ regarding 3- and 12-month mortality (SQ 3 /SQ 12) answered by nurses and physicians in unselected adult emergency department (ED) patients, and in high risk subgroups (age ≥ 50 y; medical patients), 2) the agreement between these care professionals.; Patients and Methods: In this prospective study, the SQ 3 and SQ 12 were scored by nurses and physicians. AU-ROC, sensitivity, specificity, and negative predictive value (NPV) were calculated.Kappa values and absolute agreement were calculated.; Results: In total, 1958 patients were assessed. Mortality within 12 months was 13.9% in all patients (8.3% within 3 months), 22.9% in older and 20.1% in medical patients. The AU-ROC of the SQ 3 was 0.639 and 0.698 for nurses and physicians, resp., and that of the SQ 12 was 0.722 and 0.847, resp. For SQ 3 , sensitivity was 46.8-48.0%, and specificity 93.9-95.1%, with high NPV (95.6-97.0%). For SQ 12 , sensitivity was higher (54.1-60.8%), with specificity of 83.4-96.4%, and high NPV. AU-ROCs for the two high risk subgroups were comparable. Agreement was fair (kappa 0.255) for SQ 3 , and moderate (kappa 0.461) for SQ 12 , while absolute agreement was 91.4% and 80.5%, resp.; Conclusions: The study supports the SQ as a simple prognostic tool in the ED, with 12-month prognostic accuracy being especially reliable in high-risk patients. The agreement between nurses and physicians was fair-moderate. The SQ could play an important role in guiding ED care, especially in high-risk patients.

19. **Understanding traumatic injuries and suicide risk: A conceptual exploration for the emergency department**

Authors: Thomas, Y. T.;Swann, A. C.;Murtaza, S.;Kosten, T. R.;Murphy, N.;Mathew, S. J.;Verrico, C. D.;Davis, J. and Moukaddam, N.

Publication Date: 2025

Journal: Journal of Affective Disorders 391, pp. 119977

Abstract: Competing Interests: Declaration of competing interest There are no conflicts of interest for any of the authors.; Emergency departments (EDs) serve as critical points of care for individuals experiencing acute physical and psychological trauma, including those at heightened risk for suicidal behavior. This article explores the dynamic interplay between traumatic injuries, impulsivity, behavioral sensitization, and suicide risk, with a focus on the exacerbating role of repeated trauma exposure. Impulsivity and sensitization, driven by neurobiological and psychological responses to chronic stress, emerge as important factors underlying increased vulnerability to suicide, particularly under conditions of perceived inescapability. We emphasize the imperative role of EDs in the early identification of at-risk individuals and the implementation of timely, evidence-based interventions that extend beyond immediate stabilization. We highlight potential post-discharge follow-up strategies, including telehealth and digital health technologies, as important components of a continuum of care to provide sustained psychosocial support. A comprehensive, multidisciplinary ED framework is proposed, integrating trauma-informed care, impulsivity-targeted interventions, and advanced data-driven tools to reduce recurrent ED presentations and future suicide attempts. This model underscores the transformative potential of technology and collaboration in optimizing care pathways, improving outcomes, and mitigating the societal burden of suicide.

20. **Peripheral Intravenous Catheter Care at Australian Emergency Departments: A Cross-Sectional Observational Study**

Authors: Xu, Hui Grace;Doubrovsky, Anna;Rickard, Claire M.;Rockliff, Lauryn;Tang, Christopher and Ullman, Amanda J.

Publication Date: 2025

Journal: Journal of Advanced Nursing 81(12), pp. 8597–8607

Abstract: Background: Peripheral intravenous catheters (PIVCs) serve as crucial devices for essential care administration in emergency departments (ED). In Australia, to standardise clinical practice, the national PIVC Clinical Care Standard was introduced in 2021, however adherence to the Standard has not been adequately explored. Therefore, this study aims to investigate ED clinicians' adherence to the Standard via prospective audit.; Method: This cross-sectional observational study of PIVCs was conducted in three Australian EDs between 2022 and 2023. Data were collected in alignment with the quality indicators in the PIVC Clinical Care Standard. Research nurses collected the data from bedside observation and chart audit, with data analysed descriptively.; Findings: Out of 1568 episodes of PIVC care recorded, there were notable shortcomings. ED nurses and doctors provided minimal patient partnership during insertion episodes: PIVC self-care education (n = 4, 1.4%), discussion of potential risks/benefits (n = 8, 2.9%), and reporting of concerns (n = 16, 5.8%). Insertions primarily occurred at the antecubital fossa (n = 225, 81.2%), with a common issue being inadequate time for antiseptic solution to air dry (n = 156, 56.3%). Ongoing needs assessment was unable to be assessed due to documentation limitations, which were generally incomplete. Idle catheters (inserted but not used) were prevalent (n = 115, 41.8%), and only a quarter of inpatient ward admissions (n = 75, 27.3%) had clear indications for PIVC use.; Conclusion: These findings highlight the suboptimal ED PIVC practices that require attention and improvement. Innovative interventions and technology are necessary to address some of these suboptimal practices due to their complexity and persistent challenges, despite previous efforts by clinicians and researchers.; Implications for the Profession and Patient Care: The findings

underscore the need for well-resourced efforts to ensure adherence to evidence-based practices in dynamic clinical settings.; Reporting Method: The study is reported following the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Statement.; Patient or Public Contribution: None. (© 2025 The Author(s). Journal of Advanced Nursing published by John Wiley & Sons Ltd.)

21**. Drivers of low-value diagnostic tests in emergency medicine practice: a qualitative descriptive study.**

Authors: Gangathimmaiah V.

Publication Date: 2025

Journal: *Emergency Medicine Journal*;42(8):503-510.

Abstract: Check for full-text availability [Low-value diagnostic tests harm patients and healthcare systems. Elucidation of determinants of low-value tests is essential for their de-implementation. The aim of this study was to understand the drivers of low-value tests in emergency medicine (EM) practice. A qualitative descriptive study was conducted at an Australian academic ED. De-implementation of low-value tests will require behavioural change through contemporaneous navigation of multilevel drivers.]

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22. **Factors affecting diagnostic imaging decision-making in the emergency department during day and night shifts**

Authors: Klein RP.

Publication Date: 2025.

Journal: *Emergency Medicine Journal*;42(8):511-518.

Abstract: Check for full-text availability [This mixed methods study was conducted in 2021 at a major tertiary hospital in Western Sydney. Differing factors impact imaging decisions by ED medical officers (MOs) during day and night shifts. This needs consideration when designing and implementing targeted physician support strategies and interventions to reduce low-value imaging. Limited resources and MO fatigue should be considered when modifying guidelines/strategies aiming to support MOs during ED night shifts.

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23. **CEOs urged to 'walk the floor of A&E' this winter.**

Publication Date: 2025

Journal: *HSJ: Health Service Journal* (19 September):7040050.

Abstract: [Local NHS leaders should “step up personal visibility and leadership” in their emergency care services this winter, NHS England’s CEO has said. Sir Jim Mackey said chief executives and chief medical and nursing officers in particular should make personal leadership “more of a central focus” during periods of high demand and pressure.]

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24. **Enhancing patient flow through standardised discharge pathways for neurology and medicine services.**

Authors: McCrimmon C M.

Publication Date: 2025.

Journal: *BMJ Open Quality*;14(3):e003303

Abstract: Check for full-text availability [Poor discharge planning impairs hospital throughput, adds to the financial strain on health systems and diminishes patient and provider satisfaction. The authors developed consensus-based discharge criteria coupled with a standardised discharge pathway for four presenting diagnoses and tracked their effect on discharge timing and length of stay (LOS).]

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25. **Adoption of Boarding in Inpatient Hallways During Emergency Department Crowding.**

Authors: Franklin BJ.

Publication Date: 2025

Journal: *Annals of Emergency Medicine*;86(4):384-390.

Abstract: [Emergency department (ED) boarding is a critical threat to patient safety. ED leaders consider inpatient hallway boarding-moving admitted patients from the ED to inpatient unit corridors while awaiting inpatient beds-a best-practice countermeasure. However, the extent of inpatient hallway boarding usage in practice is unknown. Among hospitals adopting inpatient hallway boarding, the number of patients moved from the ED to inpatient hallways was minimal.]

26**. Role of emotions in change and change management in an emergency department: a qualitative study.**

Authors: Ratnapalan S; Lang D; Janzen K; Muzzin L,

Publication Date: 2025

Journal: BMJ Lead; Sep 25; Vol. 9 (3), pp. 247-255;

Abstract:

Competing Interests: Competing interests: None declared.
Background: Changes in emergency departments are frequently implemented to improve efficiency and reduce costs. However, staff acceptance and adoption are crucial for the intended success of **changes**.
Objectives: This study explored staff perceptions of factors influencing the implementation of **changes** and any common themes linking **changes** and factors influencing **changes** in an emergency department at a university teaching hospital in the UK.
Methods: We used constructivist grounded theory methodology to perform a secondary analysis of 41 interview transcripts of physicians, nurses, support workers and managers involved in paediatric emergency care.
Results: Participants identified leadership, communication and education as factors

impacting **change management**. They described many emotions associated with **changes** and with communication, leadership and education or the lack of any of them during **changes**. Both positive and negative emotions sometimes coexisted at individual, team or organisational levels. Negative emotions were due to real-life challenges and concern over compromised patient care. Professional values dictated the actions or inactions that transpired either because of these emotions or despite these emotions in health professionals.
Conclusions: Emotions to **change** should be acknowledged and addressed by credible leadership clear communication and education to improve the **change** process, its success and ultimately, patient care.