Would you like your own, tailored evidence updates? Email the Clinical Librarian team to receive bulletins every two weeks on the topics of your choice.

To access resources click on the blue hyperlinks, if you are unable to read the full text of any item please contact the Clinical Librarian team.
Most recent guidance published:

Neonatal infection: antibiotics for prevention and treatment : guidance (NG195)

Atrial fibrillation: diagnosis and management NG196

Other Guidance/Reports

Latest guidance from other sources, including Royal College of Emergency Medicine

Summer to recover: Winter-proofing Urgent and Emergency Care for 2021 (PDF)
RCEM

Management of patients presenting to the Emergency Department/ Acute Medicine with symptoms: Covid-19 Vaccine induced Thrombosis and Thrombocytopenia (VITT) (PDF)
RCEM

Antimicrobial stewardship interventions: a practical guide (2021) (PDF)
WHO Regional Office for Europe

Severe fever with thrombocytopenia syndrome (SFTS): epidemiology, outbreaks and guidance
Public Health England

National guidance for the management of children with bronchiolitis and lower respiratory tract infections during COVID-19 - last updated 27 April 2021
RCPCH
Systematic reviews from other sources

Long-term Emergency Department Visits and Readmissions After Laparoscopic Roux-en-Y Gastric Bypass: a Systematic Review.
Obesity Surgery
“Conclusion: Emergency department visits and readmissions have been reported in up to almost one in three patients on the long-term after LRYGB. Both are mainly indicated for abdominal pain. The report on indications and risk factors is very concise. A better understanding of ED visits and readmissions after LRYGB is warranted to improve long-term care, in particular for patients with abdominal pains.”

Effect of budesonide on hospitalization rates among children with acute asthma attending paediatric emergency department: a systematic review and meta-analysis.
World Journal of Pediatrics
“Conclusion: The findings of this meta-analysis support the use of inhaled budesonide in reducing risk of hospitalization and the need for systemic corticosteroids among children with acute moderate-to-severe asthma exacerbation.”

Factors influencing emergency department observation time following anaphylaxis: a systematic review.
CJEM
“Conclusions: Observation time should be based on the provider’s best estimation of the risk of biphasic anaphylaxis, although no single factor can predict their occurrence. The identified factors will allow the development of an early discharge screening tool.”

Prevalence of musculoskeletal chest pain in the emergency department: a systematic review and meta-analysis.
Scandinavian Journal of Pain
“Conclusions: This review provides a reliable estimate of the prevalence of musculoskeletal chest pain in the emergency department. More studies providing age and gender-specific data for the prevalence of musculoskeletal chest pain in the emergency department should be carried out.”

Ultrasound-directed reduction of distal radius fractures in adults: a systematic review.
Emergency Medicine Journal
“Conclusion: There is a lack of evidence that using ultrasound in the closed reduction of distal radius fractures benefits patients. Properly conducted randomised controlled trials with patient-orientated outcomes are crucial to investigate this technology.”

Mortality benefit of crystalloids administered in 1–6 hours in septic adults in the ED systematic review with narrative synthesis
Emergency Medicine Journal
“This systematic review did not find high-quality evidence supporting the administration of 30 mL/kg crystalloid bolus to adult septic patients within 1 hour of presentation in the ED. Future research must investigate both the benefits and the potential harms of the recommended intervention.”

Everything in graduation: Arterial/end-tidal CO2 gradient and the diagnosis of pulmonary embolism.
BestBETS

Is the use of long acting neuromuscular blocking agents for intubation associated with reduced provision of sedation post-intubation?
BestBETS
What is the accuracy of rapid, point-of-care antigen and molecular-based tests for the diagnosis of SARS-CoV-2 infection?

AMU

Is Comprehensive Geriatric Assessment Admission Avoidance Hospital at Home an Alternative to Hospital Admission for Older Persons?
Annals of Internal Medicine
“The findings are most applicable to older persons referred from a hospital short-stay acute medical assessment unit; episodes of delirium may have been undetected.”

STEP-DOWN MEDICAL UNIT AS COHORTING STRATEGY FOR SUSPECTED COVID-19 CASES: A TERTIARY CENTRE EXPERIENCE
Internal Medicine Journal
Oral Presentation: “The clinical profile of suspected COVID patients was similar to the usual MAU cohort. Therefore, utilization of a step-down medical unit like MAU is achievable and appropriate for continuation of care while providing assistance in isolating and cohorting suspected COVID-19 patients, as long as the burden of COVID cases is manageable.”

Pediatric Emergency Medicine

Recent PEM studies, Click to view

Primary Research

A selection of articles from relevant journals and databases.

General
Psychological distress during the acceleration phase of the COVID-19 pandemic: a survey of doctors practising in emergency medicine, anaesthesia and intensive care medicine in the UK and Ireland
Emergency Medicine Journal
“Findings indicate that during the acceleration phase of the COVID-19 pandemic, almost half of frontline doctors working in acute care reported psychological distress as measured by the GHQ-12. Findings from this study should inform strategies to optimise preparedness and explore modifiable factors associated with increased psychological distress in the short and long term.”

The Needs of Families During Cardiac Arrest Care: A Survivor- and Family-led Scoping Review Protocol
Journal of Emergency Nursing
This protocol outlines a planned literature review to systematically examine the nature of existing evidence to describe what the care needs of families experiencing the cardiac arrest of a loved one are. Such evidence will contribute to the development of strategies to meet identified care needs.

**Sexual Assault Nurse Examiner/Forensic Nurse Hospital-based Staffing Solution: A Business Plan Development and Evaluation**
Journal of Emergency Nursing

“By creating a supportive structure that fosters and sustains sexual assault nurse examiners/forensic nurses, both medical and mental health concerns can be addressed through trauma-informed care techniques that will affect lifelong health and healing as well as engagement in the criminal justice process for patients who have experienced sexual assault, abuse, neglect, and violence.”

**Paediatrics**

How much time do doctors spend providing care to each child in the ED? A time and motion study
Emergency Medicine Journal

“Doctor time per patient increased with increasing acuity of triage category and exceeded estimated benchmarks for the highest and lowest acuities. The distinctive methodology can easily be extended to other settings and populations.”

Early prediction of serious infections in febrile infants incorporating heart rate variability in an emergency department: a pilot study
Emergency Medicine Journal

“An exploratory prediction model incorporating HRV and biomarkers improved prediction of SIs. Further research is needed to assess if HRV can identify which young febrile infants have an SI at ED triage.”

Hunger Games: Impact of Fasting Guidelines for Orthopedic Procedural Sedation in the Pediatric Emergency Department
The Journal of Emergency Medicine

“Length of stay in the PED was significantly longer if ASA fasting guidelines were followed for children requiring sedation for orthopedic procedures. This is a substantial delay in a busy PED where beds and resources are at a premium.”

Vaping-Associated Lung Injury During COVID-19 Multisystem Inflammatory Syndrome Outbreak
The Journal of Emergency Medicine

“Physician awareness of overlapping and differentiating EVALI and MIS-C features is essential to direct appropriate diagnostic evaluation and medical management of adolescents and young adults presenting with systemic inflammatory response during the unfolding pandemic of COVID-19.”

Sucralfate as an Adjunct to Analgesia to Improve Oral Intake in Children With Infectious Oral Ulcers: A Randomized, Double-Blind, Placebo-Controlled Trial
Annals of Emergency Medicine

Conclusion: Sucralfate as an adjunct to oral analgesics was not superior to placebo in improving oral intake in children with acute oral infectious ulcers.

**Adults**

A Prospective Study of Intramuscular Droperidol or Olanzapine for Acute Agitation in the Emergency Department: A Natural Experiment Owing to Drug Shortages
Annals of Emergency Medicine

“We found no difference in time to adequate sedation between intramuscular droperidol and olanzapine.”

Diagnostic accuracy of the HEART Pathway and EDACS-ADP when combined with a 0-hour/1-hour hs-cTnT protocol for assessment of acute chest pain patients
Emergency Medicine Journal

“The combination of the HEART Pathway or the EDACS-ADP with a 0-hour/1-hour hs-cTnT protocol allows safe and early rule-out in a large proportion of ED chest pain patients.”
Early Care of Adults With Suspected Sepsis in the Emergency Department and Out-of-Hospital Environment: A Consensus-Based Task Force Report
Annals of Emergency Medicine
“Sepsis is a major cause of hospital death in the United States (US) 1 and is associated with over 850,000 annual emergency department visits. 2 Despite advances in care, patients with serious infection continue to have a high inpatient mortality rate, reaching 20% or more in some settings.”

Non-invasive assessment of fluid responsiveness to guide fluid therapy in patients with sepsis in the emergency department: a prospective cohort study
Emergency Medicine Journal
“The results of the present study demonstrate that in patients with sepsis in the absence of shock, three out of four patients do not demonstrate a clinically relevant increase in CI after a standardised fluid challenge. Non-invasive CO monitoring in combination with a PLR test has the potential to identify patients who might benefit from fluid resuscitation and may contribute to a better tailored treatment of these patients.”

The Bucket Test Improves Detection of Stroke in Patients With Acute Dizziness
The Journal of Emergency Medicine
“The BT is an easy, cheap, safe, and quick test that is feasible and sensitive to screen acutely dizzy patients for stroke in the ED.”

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BMJ Best Practice Updates

- 29 Apr 2021 Topic: Pericarditis
- 29 Apr 2021 Topic: Placenta praevia
- 29 Apr 2021 Topic: Non-ST-elevation myocardial infarction
- 29 Apr 2021 Topic: Tetanus
- 29 Apr 2021 Topic: Assessment of syncope
- 27 Apr 2021 Topic: Assessment of acute motor deficit
- 27 Apr 2021 Topic: Cellulitis and erysipelas
- 27 Apr 2021 Topic: Assessment of upper gastrointestinal bleeding
- 27 Apr 2021 Topic: Insect bites and stings
- 22 Apr 2021 Topic: Deep vein thrombosis
- 22 Apr 2021 Topic: ST-elevation myocardial infarction
- 21 Apr 2021 Topic: New-onset atrial fibrillation
- 15 Apr 2021 Topic: Bacterial meningitis in adults
- 14 Apr 2021 Topic: Unstable angina
- 09 Apr 2021 Topic: Skull fractures
- 09 Apr 2021 Topic: Mild traumatic brain injury

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Dynamed Updates

5 Apr 2021

> 25% of patients presenting to the emergency department with elevated lipase have a condition other than pancreatitis (Am J Emerg Med 2020 May)

View in Elevated Serum Amylase or Lipase - Differential Diagnosis
What's new in emergency medicine –

**Serious adverse events during emergency intubation (April 2021)**

Serious adverse events are common during emergency intubation. In a prospective, international study of approximately 3000 consecutive intubations in critically ill adults in the intensive care unit, emergency department, or ward, 45 percent had at least one major adverse event, most commonly cardiovascular instability [1]. Cardiac arrest occurred in 3 percent of patients, with an associated 50 percent mortality. Use of ketamine or etomidate for induction was associated with a lower risk of cardiovascular instability compared with propofol or midazolam. (See "Complications of airway management in adults", section on 'Hemodynamic changes'.)

**Risk of unusual types of thrombotic events with COVID-19 vaccines (April 2021)**

Extremely rare cases of thrombotic events (e.g., cerebral venous sinus thrombosis) associated with thrombocytopenia have been reported following vaccination with ChAdOx1 nCoV-19/AZD1222 (AstraZeneca vaccine) and Ad26.COV2.S (Janssen/Johnson & Johnson vaccine), mainly among females <60 years old within the first two weeks of vaccine receipt [6,7]. After investigating these cases, medical licensing authorities in Europe and the United States have concluded that the benefits of these vaccines outweigh this very rare risk. These events are potentially related to autoantibodies directed against the PF4 platelet antigen, similar to those associated with heparin-induced thrombocytopenia (HIT). Patients with findings concerning for thrombosis or thrombocytopenia within a few weeks of receiving one of these vaccines should undergo complete blood count with differential, quantitative D-dimer, and HIT testing, as well as appropriate imaging. Treatment with a non-heparin/non-warfarin anticoagulant and intravenous immune globulin is suggested. (See "COVID-19: Vaccines to prevent SARS-CoV-2 infection", section on 'Risk of thrombosis with thrombocytopenia'.)

**Duration of antimicrobial therapy for CAP in nonhospitalized children (April 2021)**

Few randomized trials have evaluated the duration of antimicrobial therapy for community acquired pneumonia (CAP) in children in resource-abundant settings. Clinical practice guidelines typically suggest 7 to 10 days. In a pragmatic randomized trial in 280 children age 6 months to 10 years with CAP diagnosed in the emergency department and treated as outpatients, clinical cure rates were similar (approximately 85 percent) with 5 or 10 days of high-dose amoxicillin [15]. Approximately 8 percent of children in each group required additional antibiotics or hospitalization. Pending additional trials, for children with uncomplicated CAP, we generally suggest a seven-day course for antibiotics other than azithromycin although five days may be sufficient for children with mild disease and adequate follow-up. (See "Community-acquired pneumonia in children: Outpatient treatment", section on 'Duration'.)
Online Resources

BestBETs - BETs bring the evidence one step closer to the bedside, by providing answers to very specific clinical problems, using the best available evidence.

British National Formulary (BNF) and BNF for Children

The Royal College of Emergency Medicine

Royal College of Paediatrics and Child Health

The Royal Marsden Manual of Clinical Procedures – available via your Athens login

NHS - Behind the Headlines – the latest newspaper headlines debunked.

Journals & table of contents alerts

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