

The Royal College of
Emergency Medicine



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Priority Setting Partnerships

The James Lind Alliance Emergency Medicine Priority Setting Partnership

Public question prioritisation

We are asking YOU, as the public and emergency medicine community, to prioritise the questions that haven't been answered by the systematic reviews we've been doing over the last few months.

You should choose which questions in each category you think should be researched as a priority.

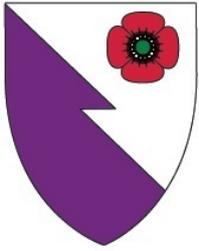
There are no right or wrong answers. You all have different interests and knowledge, which is why you're so important to us!

Some of the research questions can be difficult to understand if you don't work in that area. To help explain these questions, we have added a lay summary and/or a three part question after some of the questions.

If you have any problems using this form or have any questions, please contact sam.mcintyre@rcem.ac.uk

The research questions have been grouped into categories, and each category will start on a new page. To make sure this stage is as fair as possible, the order you see the categories in will be random. The categories you will see are:

- Cardiology
- Communication
- Elderly
- Emergency care systems
- End of Life care
- General
- Head injury
- Major trauma
- Mental health
- Pain
- Sepsis
- Staff working patterns - careers
- Toxicology
- Training and education
- Triage
- VTE



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About you

We would like to ask a few questions about you. This helps us know who is responding to the questionnaire and to check if any groups are under or over-represented.

This section is optional, just click **next** if you don't want to fill it out.

If you leave your contact details we will keep you informed about the progress of the project, including opportunities to get involved or attend project events.

All information submitted will be encrypted and held securely in line with the Data Protection Act. Contact details you provide will never be shared with 3rd parties.

1. Which best describes your role?

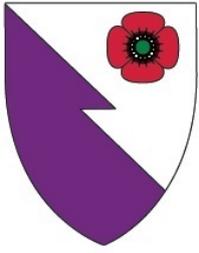
- Consultant in Emergency Medicine
- Trainee (Doctor) in Emergency Medicine
- Nurse or Allied Health Professional working in an Emergency Department
- Patient
- Friend, family or carer
- Member of the public or lay person
- Other (please specify)

2. Contact details

Name

Email

Twitter



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Category:
GENERAL

On this page you can see the questions within the GENERAL category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. QUESTION: In adult patients with wrist injury and clinical suspicion of a scaphoid fracture, is early definitive imaging (CT or MRI scan) better than routine care with immobilisation and review at 2 weeks?

LAY SUMMARY: In patients who have injured their wrist but have normal Xrays, but in whom a break is still suspected, is it better to do a scan immediately to rule out a break or to put on a splint for 2 weeks, then bring back for review?

THREE PART QUESTION: In [adult patients with wrist injury and clinical suspicion of a scaphoid fracture], is [early definitive imaging (CT or MRI scan) better than routine care with immobilisation and review at 2 weeks] at [optimising pain and functional outcome]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

2. QUESTION: A prospective evaluation of a CT head scan rule out pathway (within 6hrs of headache onset) without recourse to lumbar puncture in ED patients with acute severe headache.

LAY SUMMARY: In patients with acute severe headache, can an early CT scan accurately identify those patients who might have suffered a bleed into the brain without needing to take a sample of spinal fluid through a needle at the base of the back?

THREE PART QUESTION: In [adults presenting to ED with thunderclap headache], is [the absence of blood on CT head performed within 6 hours of onset of symptoms] enough to reliably [exclude SAH without needing LP]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

3. QUESTION: What is the best way to prescribe drugs in the ED (e.g. using hospital drug chart or an ED specific drug chart, writing once only or ongoing prescriptions)?

LAY SUMMARY: Sometimes hospitals use different drug charts in the ED or on the wards, and the ED drug chart may be combined with or separate from the rest of the ED notes. What is the best way to ensure mistakes are avoided in ED prescribing?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

4. QUESTION: There is a clear need for meaningful research surrounding clinical decision making in Emergency Medicine. Understanding differences in the decision making processes of emergency physicians with different levels of experience may help target interventions to improve diagnostic process and decrease over investigation.

LAY SUMMARY: Do we need to study how doctors of different grades make the decisions they do about patient diagnosis and treatment?

THREE PART QUESTION: In [Emergency Medicine physicians or students] does [teaching cognitive debiasing, cognitive forcing strategies or metacognition] lead to [a reduction in error attributable to cognition]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

5. QUESTION: In patients with syncope, can a novel high-sensitivity troponin I assay along with a brain natriuretic peptide (BNP) biomarker identify patients at low and high risk of adverse outcome for immediate discharge or hospitalisation for further investigation?

LAY SUMMARY: In patients who suffer a collapse, can blood tests be used to decide who is safe to go home?

THREE PART QUESTION: In [patients presenting to the ED with syncope] does [combined troponin and BNP assay] predict [safe discharge]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

6. QUESTION: Can the use of an ambulatory patch monitor, in Emergency Department patients with syncope whose cause is unexplained after Emergency Department evaluation, detect serious subsequent arrhythmia?

LAY SUMMARY: In patients who suffer a collapse, does wearing a portable heart monitor help to detect subsequent serious problems with heart rhythm?

THREE PART QUESTION: In 'patients presenting to the ED with syncope' does 'an ambulatory patch monitor that can record the ECG for 14 days' lead to 'increased detection of significant arrhythmia that requires treatment compared to standard diagnostic strategies.'

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

7. QUESTION: Is topical tranexamic acid (using TXA soaked gauze, 500mg in 5ml) effective at stopping bleeding from minor wounds in patients who are on anticoagulant medication?

LAY SUMMARY: Is it possible to stop bleeding from minor wounds in patients on blood thinning treatment with a simple treatment using a drug, normally given either by mouth or into the veins to stop bleeding, soaked onto a piece of gauze swab and applied directly to the wound?

THREE PART QUESTION: In [anticoagulated patients presenting to the ED with a superficial, non life threatening bleed] does [topical TXA] reduce [the need for reversal of anticoagulation]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

8. QUESTION: For patients with wrist fracture, can we reliably identify which patients should go directly to ORIF rather than undergo MUA first in the ED to prevent the need for two procedures (using a clinical decision tool)?

LAY SUMMARY: For patients with a broken wrist, can we reliably identify which patients should go directly to an operating theatre to have their fracture fixed rather than undergo a procedure in the ED?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

9. QUESTION: Is there a role for intravenous levetiracetam (rather than phenytoin) in patients with status epilepticus?

LAY SUMMARY: Does levetiracetam (a drug used to control seizures or fits) control seizures better than the standard treatment?

THREE PART QUESTION: In [adult patients in status epilepticus] is [levetiracetam better than phenytoin] at [safely terminating seizure activity]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

10. QUESTION: What is the impact of intoxicated patients on the ED environment, other patients and staff? What else could be done to better manage patients who are acutely intoxicated through alcohol?

THREE PART QUESTION: In patients [presenting to the Emergency Department with uncomplicated acute alcohol intoxication (AAI)], what [interventions (both service interventions and clinical interventions)] are available to [hasten safe discharge]?

Do you think this should be researched as a priority?

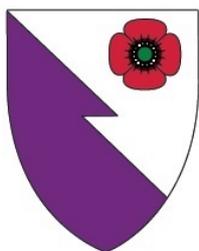
- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

11. QUESTION: In fluid resuscitation, should we be using specific biochemical targets rather than mechanical for patients who are shocked to prevent the massive fluid accumulation that can be seen in critical care patients. Should inotropes be initialised much sooner in the process as fluid sparing tools?

LAY SUMMARY: In patients needing lots of fluid as part of their treatment, should we be using blood tests to guide the amount of fluid needed?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know



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Category: CARDIOLOG

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On this page you can see the questions within the CARDIOLOGY category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. QUESTION: In adults with symptoms suggestive of an acute coronary syndrome (NSTEMI) presenting to an Emergency Department, is emergent revascularisation guided by a clinical prediction model better than medical therapy at improving survival?

LAY SUMMARY: In patients who are having a heart attack (where a blood vessel supplying oxygen to the heart muscle is typically blocked), is it better to unblock the vessel with a wire and balloon through a tube placed in an artery, or is it better to give drug treatment?

THREE PART QUESTION: In [adults with symptoms suggestive of an acute coronary syndrome presenting to an Emergency Department], is [emergent revascularisation guided by a clinical prediction model better than medical therapy] at [improving survival]?

Do you think this should be researched as a priority?

Definitely not Maybe not Maybe Definitely

I don't have the expertise to answer / don't know

2. QUESTION: The effects of implementing new techniques in assessing patients with chest pain (which include new ways of using high sensitivity troponin tests, and decision rules such as the MACS rule and the HEART score) in practice. Would patients like a say in what is an acceptable risk, and should these tools be used alongside shared decision making to provide safe and appropriate care, minimise unnecessary risk and inconvenience for patients?

LAY SUMMARY: Patients who present to EDs with chest pain are often admitted for investigation, but many are not having a heart attack. This research proposes a way of trying to find out which patients should be admitted, and which could be safely discharged.

THREE PART QUESTION: In [adults with chest pain presenting to an ED] do [1. The Manchester Acute Coronary Syndromes (MACS) decision rule 2. The HEART score 3. High sensitivity troponin tests using a 'limit of detection' and '1-hour' rule out strategy] reduce [MACE]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

3. QUESTION: Can the Ottawa Aggressive Protocol for recent onset atrial fibrillation (RAF) be implemented in the UK? The Ottawa Aggressive Protocol (OAP) is a treatment approach involving procainamide instead of flecainide and IV diltiazem for rate control in patients with RAF.

LAY SUMMARY: In patients with an irregular heart beat, is one type of treatment pathway (used in other countries such as Canada) better than what is currently recommended in the UK?

THREE PART QUESTION: In [adults with recent-onset atrial fibrillation (RAF)] does [the Ottawa Aggressive Protocol] improve [cardioversion; symptom control; mortality]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

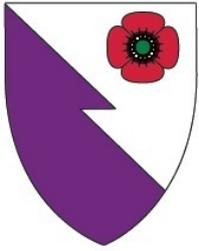
4. QUESTION: Do patients who attend the ED with atrial fibrillation have the same risk as the greater population of patients in AF or does the combination of being in AF and attending the ED create a higher risk population that needs investigation in its own right? Should more patients have anticoagulants started in the ED rather than deferring to in patient specialties or the GP, and would this have an impact on morbidity/mortality?

LAY SUMMARY: Do patients who are found to have an irregular heart beat have more problems when they attend the ED, and do they need any specific treatment to thin the blood to prevent stroke?

THREE PART QUESTION: In [patients in AF attending the ED] does [starting anticoagulants in the ED if CHADSVASC score is elevated] reduce [morbidity and mortality]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know



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Category: COMMUNICATIO
N

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Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. QUESTION: Can patient handover between doctors and nurses be streamlined (ED handovers across all staff can lack quality) e.g. using the SBAR approach - short and concise.

LAY SUMMARY: Can patient handover between doctors and nurses be streamlined (ED handovers across all staff can lack quality) e.g. using a standardised approach.

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

2. QUESTION: What characterises a well-structured and safe clinical handover from an ambulance service clinician to the ED (including which mnemonics to use, pre-alerting procedures, medicines handover and accessing the correct ED staff member first time)?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

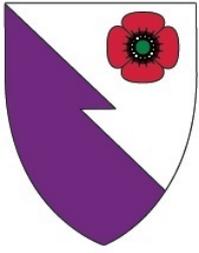
3. QUESTION: Patient comprehension of discharge advice when leaving emergency departments.

LAY SUMMARY: How much of the advice that patients are given when they leave EDs do they remember and understand?

THREE PART QUESTION: In [patients given discharge advice] how does [what they remember] compare to [what advice was given]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know



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Category:
ELDERLY

On this page you can see the questions within the ELDERLY category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. QUESTION: Is a traditional ED the best place to care for frail elderly patients? Would a dedicated service for these patients be better (involving either a geriatric ED, or geriatric liaison services within the ED), or given that this population is expanding should our current services be tailored towards this group?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

2. QUESTION: Do we need geriatric nurse specialists within our emergency departments to assist with person-centred care, clinical decision making and patient flow in elderly patients with acute mental health problems including delirium.

LAY SUMMARY: Do we need geriatric nurse specialists within our emergency departments to assist with person-centred care, treatment decisions and patient flow in elderly patients with mental health problems including delirium.

THREE PART QUESTION: In [elderly patients with acute mental health problems including delirium] what is the impact of [geriatric nurse specialists] on [management of acute environment].

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

3. QUESTION: What information can be used to accurately predict which older, frail patients attended by an ambulance crew can be safely and effectively managed at home, without the need to take them to hospital?

THREE PART QUESTION: Which screening tools for frailty best predict older, frail patients attended by an ambulance crew who can be safely and effectively managed at home, without the need to take them to hospital?

Do you think this should be researched as a priority?

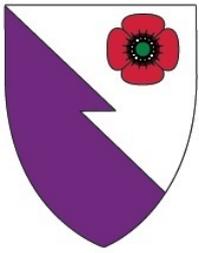
- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

4. QUESTION: With regard to elderly patients, how should we recognise delirium in the ED effectively within the pressure of time and amount of patients, and what are the consequences if we don't?

THREE PART QUESTION: In [elderly patients presenting to the ED] does [a Delirium recognition tool] improve [length of stay, mortality]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know



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Category: EMERGENCY CARE SYSTEMS

On this page you can see the questions within the EMERGENCY CARE SYSTEMS category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. **QUESTION: What is the best way to care for people who attend emergency departments very frequently?**

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

2. **QUESTION: In adults with critical illness and injury does a physician prehospital response compared to standard paramedic response improve survival?**

LAY SUMMARY: Does the addition of a doctor to the prehospital team add benefit or save lives in serious illness and injury?

THREE PART QUESTION: In [adults with critical illness and injury] does a [physician prehospital response compared to standard paramedic response] improve [survival]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

3. QUESTION: What is the best way to reduce the harms of emergency department crowding and exit block? We need a better measure of crowding that drives sensible improvements for the seriously ill and injured, adolescents and the frail elderly.

LAY SUMMARY: What is the best way to reduce the harms of overcrowding (more patients than there are spaces to see them) in emergency departments?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

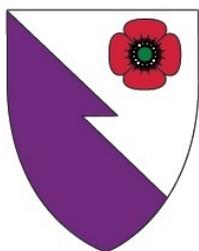
4. QUESTION: What role is there for an outreach Physician Response Unit on diverting potential ambulance disposals to ED/hospital from patients who have called for/had an ambulance dispatched to them.

LAY SUMMARY: Does the addition of a doctor to the prehospital team add benefit to patients who call for an ambulance?

THREE PART QUESTION: In [patients who call an ambulance] does [an EM PRU compared to normal ambulance response] reduce [time to discharge / attendance / cost]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know



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Category: END OF LIFE
CARE

On this page you can see the questions within the END OF LIFE CARE category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. QUESTION: How can we achieve excellence in delivering end of life care in the ED; from the recognition that a patient is dying, through symptomatic palliative treatment, potentially using a dedicated member of staff to work with palliative patients and their relatives, and handling associated bereavement issues?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

2. QUESTION: In End of Life Care Decision Making, which factors should influence ceilings of care, palliation and extended resuscitation?

LAY SUMMARY: How should we best manage patients who are dying and who present as emergency patients (in terms of how much active treatment should be given, and how best to control symptoms)?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

3. QUESTION: What factors can help prognostication when making 'do not resuscitate' or treatment escalation plan decisions, and make them more evidence based?

Do you think this should be researched as a priority?

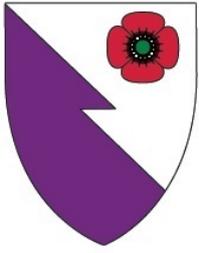
- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

4. QUESTION: What is the experience of palliative care patients attending an emergency department? Why do patients with a known terminal illness attend the ED and how well are their expectations met on having to attend?

THREE PART QUESTION: In [palliative care patients] does [communication to identify ideas, concerns and expectations] achieve [patient preference]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know



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Category: HEAD
INJURY

On this page you can see the questions within the HEAD INJURY category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. **QUESTION: What is the optimal management strategy for patients taking anticoagulants who sustain head injuries?**

LAY SUMMARY: What is the best way to treat patients taking blood thinning medicines who sustain a head injury

THREE PART QUESTION: In [adult patients attending the ED with head injury] does [taking existing anticoagulants] affect [the optimal management strategy]

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

2. QUESTION: Does early administration of candesartan (which has been shown to modify local anti-inflammatory and apoptotic pathways, and has beneficial effects on mood and cognition) in patients with mild traumatic brain injury (mTBI) improve outcome?

LAY SUMMARY: Does a drug called candesartan improve outcome in patients who had suffered a minor head injury?

THREE PART QUESTION: In [adult patients presenting to EDs with mTBI defined as lack of evidence of intracranial injury on CT] does [candesartan versus placebo] improve [neurological outcome]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

3. QUESTION: Does candesartan (vs placebo) improve outcome in patients with isolated severe traumatic brain injury (TBI). There is now evidence that candesartan has clinically important local neuroprotective effects in injured brain tissue, and could reduce the development of secondary brain injury.

LAY SUMMARY: Does a drug called candesartan improve outcome in patients who had suffered a minor head injury?

THREE PART QUESTION: In [adult patients presenting to EDs with severe TBI] does [candesartan versus placebo] improve [neurological outcome]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

4. QUESTION: Validation and use of concussion assessment tools (e.g. the SCAT3 or cog sport) in the ED, and follow up for patients with head injuries with symptoms but no structural injury on CT scan.

LAY SUMMARY: Can a simple tool used in the ED to assess people who suffer head injury during sport improve diagnosis of concussion and subsequent outcome?

THREE PART QUESTION: In [patients with head injury caused during sport] does [the use of concussion assessment tools in the ED] improve [diagnosis / neurological outcome]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

5. QUESTION: Use of biomarkers in adult patients with minor traumatic brain injury (mTBI) in particular protein S-100B, incorporation into NICE adult head injury guidance; There is evidence to suggest that the use of this biomarker may decrease rate of neuroimaging by up to 30% It has a very high sensitivity (reported >97%) and therefore is a good 'rule out' option. Of particular benefit to patients with a minor head injury who are: anticoagulated (warfarin); intoxicated; or the elderly patient (with background dementia or cognitive decline).

LAY SUMMARY: For patients with minor head injuries, can a blood test detect significant bleeding in the brain?

THREE PART QUESTION: In [adult patients with minor traumatic brain injury] is [protein S-100B] an effective way to [rule out significant intracranial injury]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

6. QUESTION: Which factors predict significant traumatic brain injury in head injury patients that present more than 24 hours after the injury?

LAY SUMMARY: Which factors predict significant head injuries for patients that present more than 24 hours after the injury?

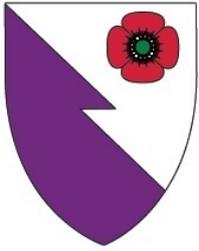
Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

7. QUESTION: Could more be done in the initial few hours in the ED to prevent secondary damage in patients with head injury (e.g. reducing intracranial pressure).

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know



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Category: MAJOR TRAUMA
(INJURIES)

On this page you can see the questions within the MAJOR TRAUMA (INJURIES) category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. QUESTION: In adults who are fully alert (GCS 15) following trauma does cervical spine immobilisation (when compared to no cervical spine immobilisation) reduce the incidence of neurological deficit, and what is incidence of complications?

LAY SUMMARY: Should we put injured patients who are fully alert in a neck collar (which may cause complications themselves) in case they have a spinal injury or should we leave them without a collar?

THREE PART QUESTION: In [adults who are fully alert (GCS 15) following trauma] does [cervical spine immobilisation versus no cervical spine immobilisation] reduce the incidence of [neurological deficit]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

2. QUESTION: Does early high-dose fibrinogen supplementation with cryoprecipitate reduce mortality in adult trauma patients who have haemorrhagic shock and active bleeding?

LAY SUMMARY: In patients with severe bleeding following injury, does giving them a concentrated dose of a protein involved in blood clotting (called fibrinogen) reduce death?

THREE PART QUESTION: In [adult patients suffering major trauma haemorrhage and requiring activation of the local major haemorrhage protocol] does [the administration of cryoprecipitate] reduce [mortality]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

3. QUESTION: In adult patients with small closed haemothorax secondary to trauma , does attempted drainage v's conservative management result in improved long term morbidity and mortality?

LAY SUMMARY: In patients who have suffered a chest injury, and have a small amount of blood in their chest cavity, should we place a drain into the chest to allow the blood to drain away, or is it best left alone?

THREE PART QUESTION: In [adults with a closed small (e.g. less than 250ml) haemothorax secondary to chest trauma] does [intercostal drainage] improve [survival; infection; lung function]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

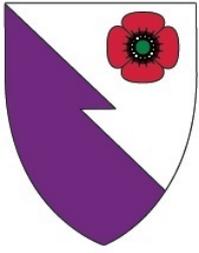
4. QUESTION: How can viscoelastic studies guide transfusion in trauma and other haemorrhage states? Viscoelastic studies allow us to go one step further and effectively offer a bespoke transfusion to the bleeding patient. This allows the patient to receive the products they need, but also allows greater control over limited resources in the blood bank.

LAY SUMMARY: Does the use of a blood test to check blood clotting at the bedside improve the amount of blood needed and survival in injured patients?

THREE PART QUESTION: In [trauma patients] does [viscoelastic near patient coagulopathy testing] reduce [blood product use, length of stay, mortality]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know



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Category: MENTAL
HEALTH

On this page you can see the questions within the MENTAL HEALTH category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. QUESTION: How do we optimise care for mental health patients; including appropriate space to see patients, staff training, early recognition of symptoms, prioritisation compared to physical illness, and patient experience?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

2. QUESTION: Improving how we work with mental health (MH) patients - risk assessing the patients we see in the ED, before referring them onto to psychiatry.

THREE PART QUESTION: In [an adult who presents with suicidal ideation or self-harm] is [a risk tool] available to [detect those who are at medium to high risk of further self-harm if discharged]

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

3. QUESTION: Patients presenting with acute behavioural disorder/delirium present a mental and physical risk to themselves, staff and patients. They also present a challenge in gaining control of the situation safely. Is there a role for national guidance to provide uniformity across EDs in terms of approach and medications/dose ranges, as well as some legal framework?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

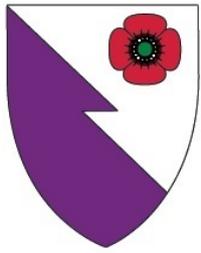
4. QUESTION: How may we best tackle the challenge of people who use the emergency department very frequently in the UK?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

5. QUESTION: For patients with mental health problems, what is the most effective way for EDs to involve and hand over to psychiatric staff?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know



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Category: PAIN

On this page you can see the questions within the PAIN category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. QUESTION: In adult patients presenting to the emergency department with acute moderate to severe pain is intra-nasal diamorphine delivered by metered dose spray, according to body weight (either estimated or actual) a rapid and effective way of providing excellent analgesia?

LAY SUMMARY: Can we use morphine and other similar painkillers delivered by squirting the drug up the nostrils to relieve pain in emergency patients?

THREE PART QUESTION: In [patients in the emergency department in pain] does [intranasal diamorphine versus routine care] improve [pain score].

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

2. QUESTION: Patients with lower back pain are treated with a variety of analgesia regimes including paracetamol, NSAIDs, opiates, amitryptilline, gabapentin and diazepam to name a few. What is the optimum treatment regime in the ED?

LAY SUMMARY: Patients with lower back pain are treated with a variety of painkillers including paracetamol, ibuprofen, morphine, amitryptilline, gabapentin and diazepam to name a few. What is the optimum treatment regime in the ED?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

3. QUESTION: What is the best form of pain relief for patients having manipulation of a broken wrist in the emergency department?

THREE PART QUESTION: In [elderly patients with uncomplicated Colles fractures] is [Biers block or haematoma block or sedation better] at [reducing pain during manipulation, reducing the need for multiple manipulations and improving long term function]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

4. QUESTION: Propofol Target-controlled infusion (TCI) is commonly successfully used for sedation in other areas in the hospital and allows the operator to more accurately target a specific clinical effect for that particular patient and procedure, potentially eliminating the risk of 'over shooting' and reducing the rate of adverse events. Should it be used in ED patients?

LAY SUMMARY: Propofol is an anaesthetic drug used to put people off to sleep, but it is also used in the ED to sedate people who need a painful procedure (such as putting a dislocated shoulder back in joint). This suggests a way of slowly giving the drug to achieve the desired state of sedation, rather than giving a larger one-off dose.

THREE PART QUESTION: In [adults undergoing reduction of their anterior shoulder dislocation in the Emergency Department] does [Target-controlled infusion of Propofol] vs [bolus administration of Propofol] reduce the [incidence and severity of adverse events] during their sedation?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

5. QUESTION: In adult patients with suspected renal colic (kidney stones) does salbutamol improve pain?

LAY SUMMARY: In adult patients with suspected renal colic (kidney stones) does salbutamol (a drug usually given to patients with asthma through an inhaler) improve pain?

THREE PART QUESTION: In [adult patients with suspected renal colic] does [IV or nebulised salbutamol] improve [pain]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

6. QUESTION: Do femoral nerve blocks benefit demented patients with femoral neck fracture in terms of meaningful outcomes such as use of morphine, mortality or length of stay?

LAY SUMMARY: Does an injection of local anaesthetic, given to patients with a broken hip, help to improve care for these patients?

THREE PART QUESTION: In [patients with dementia who suffer hip fracture] does [regional anaesthesia] reduce [mortality; confusion; pain]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

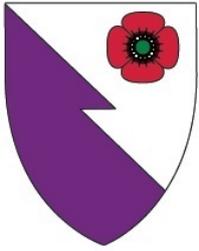
7. QUESTION: In patients with acute pain, does inhaled methoxyflurane provide effective pain relief compared to entonox?

LAY SUMMARY: In patients with acute pain, does one type of inhaled painkiller (methoxyflurane) provide better pain relief than the usual 'gas and air' typically given in ambulances (entonox)?

THREE PART QUESTION: In [patients with acute pain in any setting], does [Inhaled methoxyflurane] provide [effective pain relief] compared to entonox?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know



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Category: SEPSIS

On this page you can see the questions within the SEPSIS category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. QUESTION: Do early undifferentiated (broad spectrum) antibiotics in suspected severe sepsis have a greater benefit and cause less harm to patients than delayed focussed antibiotics in the ED?

LAY SUMMARY: Does giving antibiotic treatment earlier in a patient's treatment pathway improve outcome following infection?

THREE PART QUESTION: In [patients with severe sepsis] does [administration of early antibiotic treatment compared to delayed treatment] improve [survival]?

Do you think this should be researched as a priority?

Definitely not Maybe not Maybe Definitely

I don't have the expertise to answer / don't know

2. QUESTION: In adult patients with presumed sepsis in the prehospital environment does the administration of prehospital antibiotics compared to no antibiotics decrease mortality?

LAY SUMMARY: In adult patients with presumed severe infection does the administration of antibiotics (given by the ambulance crew rather than when the patient arrives at hospital) decrease mortality?

THREE PART QUESTION: In [adult patients with presumed sepsis in the prehospital environment] does [administration of prehospital antibiotics] improve [survival]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

3. QUESTION: In patients with sepsis does a liberal fluid resuscitation strategy versus early vasopressor use result in increased morbidity and mortality?

LAY SUMMARY: In patients with severe infection does the use of medication to raise the blood pressure, or just giving fluids intravenously, have a better outcome?

THREE PART QUESTION: In [adults with sepsis or severe infection] does [early vasopressor use compared to liberal fluids alone] improve [survival]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

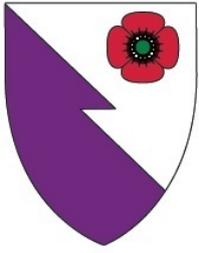
4. QUESTION: We should have a better idea of the end-points of fluid resuscitation in a variety of pathological states, particularly sepsis. In patients with severe sepsis, does non-invasive cardiac output monitoring help to guide fluid therapy to optimise fluid balance? We need a study that utilises a standardised non-invasive cardiac output monitor to assess fluid responsiveness, and the effects of fluid therapy on mortality.

LAY SUMMARY: In patients with severe infection does the use of a monitor that measures the volume of blood pumped by the heart help to guide fluid treatment?

THREE PART QUESTION: In [adults attending the emergency department with sepsis] does [non-invasive cardiac output guided fluid therapy] improve [mortality, organ failure, length of stay, or impact on fluid balance] compared to [standard care]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know



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Category: STAFF WORKING PATTERNS - CAREERS

On this page you can see the questions within the STAFF WORKING PATTERNS - CAREERS category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. QUESTION: How can we improve work/life balance amongst ED staff to better retain our staff, including rota design and other working conditions.

Do you think this should be researched as a priority?

Definitely not Maybe not Maybe Definitely

I don't have the expertise to answer / don't know

2. QUESTION: What is the impact of emergency medicine Consultant presence in the clinical area on patients, staff and performance of the ED (including quality and safety) - including an assessment of the benefit of 24 hour cover?

LAY SUMMARY: What is the impact of having a consultant (the most senior grade of doctor) present in the emergency department 24/7?

Do you think this should be researched as a priority?

Definitely not Maybe not Maybe Definitely

I don't have the expertise to answer / don't know

3. QUESTION: Does increased use of clinical 'support' staff (physician assistants, extended role Health Care Assistants) improve efficiency of doctors and nurses, improve flow and is it financially sound?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

4. QUESTION: With regards to how ED staff development is managed, what initiatives can improve staff engagement, resilience, retention, satisfaction, individuality and responsibility.

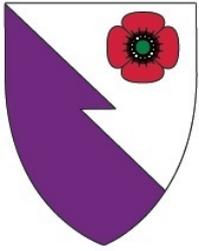
Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

5. QUESTION: What is the ideal staffing for current UK EM practice, including doctors, nurses, health care assistants, porters, radiographers, clerical and reception staff.

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know



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Category: TOXICOLOGY

On this page you can see the questions within the TOXICOLOGY category and choose which you personally think should be researched as a priority.

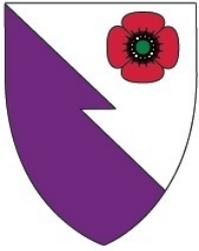
Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. **QUESTION: What is the optimal treatment for patients with paracetamol overdose?**

THREE PART QUESTION: In [patients who have taken a paracetamol overdose] can [new biomarkers and treatment protocols] reduce [unnecessary admission, length of stay]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know



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Category: TRAINING AND EDUCATION

On this page you can see the questions within the TRAINING AND EDUCATION category and choose which you personally think should be researched as a priority.

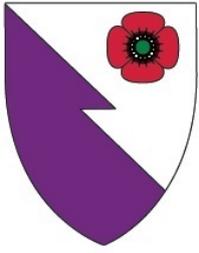
Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. **QUESTION: Does a departmental simulation and team training program reduce medical error and improve quality of patient care?**

LAY SUMMARY: Does a departmental simulation training program (where mannequins are used to simulate patients) reduce medical error and improve quality of patient care?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know



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Category: TRIAGE

On this page you can see the questions within the TRIAGE category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. **QUESTION: Could point-of-care lactate, used to measure illness severity, revolutionise triage, by being the 6th vital sign?**

LAY SUMMARY: Can a blood test done at triage (on arrival at the ED) predict a patient's severity of illness?

THREE PART QUESTION: In [patients attending the emergency department (ED)], could [point-of-care capillary lactate] be used to [measure illness severity]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

2. QUESTION: Which physiological early warning score should be used for adult ED patients? Three are currently used - mEWS, NEWS, and REMS. It may be possible to derive a new ED-based score that out-performs the three models.

LAY SUMMARY: Doctors use scores of severity of illness, using measurements like pulse and blood pressure, to help guide their assessment and treatment, but several scores are available. Which is the best?

THREE PART QUESTION: In unwell (non-injured) adult Emergency Department patients which physiological early warning score best predicts adverse patient outcomes?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

3. QUESTION: Which trauma patients should be transferred to a Major Trauma Centre rather than going to another hospital first?

THREE PART QUESTION: In [adults sustaining traumatic injury] [which triage tool] correctly identifies the need for [treatment at a major trauma centre]?

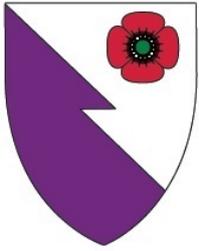
Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

4. QUESTION: Does rapid assessment and triage by a senior doctor improve time to admit or discharge? Is there an optimum time to do it? Is it appropriate for both minors and majors patients?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know



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Category: VTE (venous thromboembolism - a condition where a blood clot forms in a vein)

On this page you can see the questions within the VTE (venous thromboembolism - a condition where a blood clot forms in a vein) category and choose which you personally think should be researched as a priority.

Remember: there are no right or wrong answers, we want to know which questions you think are important to be researched as a priority.

1. **QUESTION: In adults diagnosed with isolated sub-segmental pulmonary embolism is treatment with anti-coagulation required?**

LAY SUMMARY: In patients who have small blood clots in their lungs is blood thinning treatment necessary?

THREE PART QUESTION: In (a patient with an isolated subsegmental pulmonary embolism) does (anticoagulation therapy or no treatment) lead to (lower rates of mortality and recurrent venous thromboembolism?)

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know

2. QUESTION: Should we anticoagulate all patients with isolated pulmonary embolism?

LAY SUMMARY: Should we give blood thinning treatment to all patients who have blood clots on their lungs?

THREE PART QUESTION: In [patients with isolated pulmonary embolism], is [aspirin or placebo as effective as anticoagulation (current standard of care)] at reducing [mortality].

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

3. QUESTION: The use of prophylactic anticoagulation for patients with lower limb injury and temporary immobilisation is a key issue for which international equipoise continues. These patients are a common presentation to emergency departments worldwide and a lack of definitive evidence has led to a state of variable practice with little understanding of the clinical or cost effectiveness of local regimens. Should we give VTE prophylaxis in these patients?

LAY SUMMARY: In patients who injure their leg requiring them to go into plaster, should we give treatment to thin the blood in case they develop a blood clot in their leg (or lungs) as a result of being immobile in plaster?

THREE PART QUESTION: In [a patient with lower limb injury who needs immobilisation] does [VTE prophylaxis] reduce [clinically relevant VTE]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
 I don't have the expertise to answer / don't know

4. QUESTION: There have been many proposed interventions within the last decade designed to streamline diagnosis of suspected pulmonary embolism and avoid costly hospital admissions or problems related from overtesting. These interventions have not been assessed as a composite and the risk benefit profile of their introduction when compared to standard care is unclear.

LAY SUMMARY: How should we best investigate people who may have a blood clot in their lungs?

THREE PART QUESTION: In [adult patients with suspected PE] does [a diagnostic strategy incorporating the PERC rule, use of age adjusted d-dimer thresholds and ambulatory management based on the SPESI criteria] reduce [adverse outcomes e.g. missed diagnosis, cost, mortality]?

Do you think this should be researched as a priority?

- Definitely not Maybe not Maybe Definitely
- I don't have the expertise to answer / don't know



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The
End

Thank you! You have now rated all the questions and reached the end of the public prioritisation. We would be grateful if you could help us spread the word about this survey to as many people as possible.

Please press '**Done**' to send your priorities over to the Royal College of Emergency Medicine.

If you have any questions or comments, please email sam.mcintyre@rcem.ac.uk