



What we do and why we do it

Research plays an important role in the treatment options and service developments within EEAST. The Research Support Services team work alongside other Ambulance Services, Universities and Health and Social Care agencies to provide high quality, ethical and clear research which aims to improve staff wellbeing and patient outcomes.

Our newsletter will keep you up to date on what we are working on and how you can become involved in research.

Find out more



https://www.eastamb.nhs.uk/ab out-us/research-supportservices.htm



@EEAST_Research

We regularly have NeedtoKnow articles, sharing research news and opportunities.

Meet the team

If you wish to discuss any aspect of research, please do not hesitate to contact us:

<u>research@eastamb.nhs.uk</u> Or directly:

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Current Opportunities to Get Involved With:

PARAMEDIC 3

The PARAMEDIC 3 study aims to find out if IO access first strategy compared with an IV



access first strategy, is clinically and cost-effective. Trial paramedics are identifying patients in cardiac arrest and gaining either IV or IO access via a process of randomisation. The study is sponsored by the University of Warwick, and 9 Ambulance Trusts, including EEAST are working with the Trial team. EEAST will be collaborating with selected hospitals across Essex and Suffolk.

PARAMEDIC 3 is now live across the five areas located close to the partner hospitals: Ipswich, Colchester, Broomfield, Southend, and Basildon. Since going live, we have recruited 13 participants, which is a positive start for the study.

So far, we have 43 Paramedics trained - but we need more!

Are you a frontline Paramedic based at the above surrounding areas?

If you are and would like to take part in PARAMEDIC 3, please get in touch with Shona Brown, Research Paramedic (shona.brown@eastamb.nhs.uk).

This month (August), EEAST clinicians were offered the opportunity to attend a free Webinar hosted by the University of Warwick. The event featured presentations about pre-hospital cardiac arrest management (including drug routes) and the previous PARAMEDIC trials (PARAMEDIC and PARAMEDIC 2). This was a great success and there are plans for further events in the future. We will keep you updated.

Further information can be found here: PARAMEDIC-3 Trial (warwick.ac.uk)

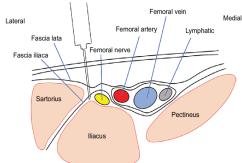


RAPID2

Hip fractures are a very common injury for older adults and patients first contact with



health services is usually the ambulance service. Current pain relief options are limited and often inadequate with the possibility of side effects slowing down recovery. Hip fractures can result in patients losing their mobility and independence with approximately 1 in 3 patients dying within a year of the injury.



study which aims to test the safety, clinical and cost-effectiveness of Paramedics providing fascia iliaca compartment block (FICB) as pain relief to patients with suspected hip fractures in the prehospital environment.

Working with James Paget University Hospitals, comparisons will be made from patients' pain levels, length of stay in hospital, time on scene, quality of life, mobility, and costs of healthcare at the time of injury and up to four months - between those allocated FICB (intervention group) and those allocated usual care (control).

Study training, which will give Paramedics the opportunity to become competent in administering a FICB in the pre-hospital setting as well as training with an anesthetist, will begin shortly for Paramedics in Waveney. If you are interested in taking part in RAPID2 please contact Emma Duncan – emma.duncan@eastamb.nhs.uk.



VITALS



The Vitamin D Ambulance Wellbeing Study (VITALS) is a study to determine the incidence and impact of vitamin D deficiency in shift and indoor-workers across the EEAST workforce and to suggest possible vitamin D-related interventions to enhance wellbeing.

This October and November, the VITALS team will be holding vitamin D testing clinics at:

- Norwich (Hellesdon and Longwater)
- Bedford (Hammond Road and Kempston)
- Chelmsford (Broomfield and Chelmer Valley)
- Melbourn
- Additional stations across EEAST

The VITALS study plans to test 400 staff in **patient-facing** and **office-based** roles to identify those with or at risk of vitamin D deficiency.

Sixteen VITALS participants with or at risk of vitamin D deficiency will also be invited to take part in a study interview.

It is hoped VITALS will raise awareness of occupational vitamin D deficiency, particularly for the ambulance setting but also for other healthcare shift and indoor workers.

Please look out for dates/times of VITALS clinics!

Further details about VITALS can be found via: research@eastamb.nhs.uk



Updates to Current Studies:

CESSATION

CESSATION, an East of England Ambulance CESSATION N
Service NHS Trust research study, aimed to identify the current menopause guidance offered by UK ambulance services; understand the impacts of the menopause on UK female ambulance staff; and identify service interventions that may best support staff during the menopause transition.

The preliminary findings:

- UK ambulance services vary in their provision of either a Menopause Policy or Guidance, as well as their offering of organisation, manager and staff menopause-related education, wellbeing, practical support, and absence management guidance.
- All 12 eligible ambulance services participated in the UK-wide CESSATION survey and more than 1900 responses were received. The majority of survey participants were female, aged 45 – 54 years, either in the peri-menopause or menopause phase of the menopause transition, and worked in emergency operational service delivery with a shift-based work pattern.
- Participants' menopause symptoms were numerous and varied, and often individuals were not prepared for their symptoms and/or their severity. Tiredness or low energy levels, difficulty sleeping, night sweats, mood changes (including anxiety and depression), hot flushes and memory/concentration problems were the six most severely experienced.
- Various self-care strategies and professional menopause support services, in particular General Practitioners, were sought by participants to support their menopause transition experience.
- The impacts of menopause symptoms were wide-reaching: detrimental effects on working lives and personal wellbeing were noted. Despite this, only a minority of participants reported feeling supported in the workplace.



- Further insight of participant experiences was provided by numerous additional free-text comments, the themes of which were: impact of work role; awareness of preparedness for menopause transition; personal impact of symptoms; desired support; appropriate sickness and menopause policy; managerial development; compassion and dignity; impact of working environment; personal and patient safety; and lack of choice. Further exploration of these findings is underway utilising semi-structured research interviews involving twenty-two study participants.
- Exploring the experiences and menopause transition knowledge of managers from one ambulance service (CESSATION-EEAST survey) revealed limited menopause training completion and menopause policy awareness. In addition, these survey participants reported varying comfort levels for managing menopausal female staff and variable knowledge regarding menopausal female work and health concerns. Their main managerial concerns were staff personal health and wellbeing, sickness management and lack of Trust guidance.
- Managerial participants also provided additional free-text comments
 with the following themes: access to guidance to inform management
 and staff; training and awareness of symptoms; suggested workplace
 adjustments; negative perception of menopausal women; provision of
 specialist information for female staff; and male manager focus.

The CESSATION team are now preparing the study results for publication in the British Paramedic Journal.



KARMA2





The KARMA2 diabetes study, based in Cambridgeshire, aims to improve pre-hospital hyperglycaemia care. This study incorporates blood ketone assessment and intra-vascular fluid therapy for patients at high-risk of diabetic ketoacidosis (DKA), based on hospital-based guidelines.

By the end of August approximately 400 patients will have been taken part in KARMA2, and a further 20 EEAST and ED staff from Addenbrookes, Peterborough City and Hinchingbrooke hospitals will be taking part in a semistructured research interview to further understand hyperglycaemic emergencies and DKA management.

The KARMA2 team have now begun the study data analysis and preparing the findings for publication. We'll be sure to make this available to all of you as soon as we can!

SEE IT

Researchers at the University of Surrey and South East Coast Ambulance Service (SECAmb) are conducting a feasibility trial to test the use of live streaming from the scene of trauma incidents via 999 callers' smartphones (the SEE-IT study).

The SECAmb ambulance dispatch centre is using GoodSAM live streaming for six weeks across June to November 2022, to see how it might help decision-making about ambulance dispatch for trauma incidents. The first week of the study has now been completed.

The aim of this study is to see if live-streaming from 999 callers' smartphones helps determine more quickly which emergency medical resources are needed at the scene of trauma incidents (e.g., ambulance, air ambulance).

This research endeavours to address the following questions:

- Does live streaming help decide what type and how many ambulances are needed?
- Is using live streaming acceptable to both 999 callers and ambulance service staff?
- Are there any impacts on caller and call staff wellbeing?
- Does the technology work in the dark and where there is limited phone signal?
- Does live streaming differ in densely populated areas?

As EEAST is an ambulance service that doesn't currently use live streaming, it is participating in SEE-IT as a study control site. The psychological wellbeing of EEAST call staff will be compared to that of staff at SECAmb.

More information is available: www.surrey.ac.uk/SEEITstudy



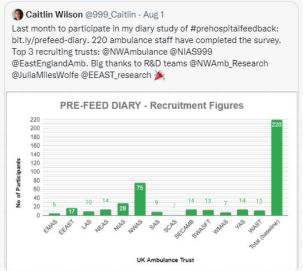
PRE-FEED

The Research team would like to thank all EEAST clinicians who have participated in the PRE-FEED research study.



The aims of this study are to explore the characteristics and effects of prehospital feedback in the United Kingdom and to describe differences in the desire for enhanced feedback.

PRE-FEED is being conducted by Caitlin Wilson, a PhD student at the University of Leeds.



Maternity Research Study

The University of Bath has collaborated with EEAST to gain an insight into Paramedics' experiences of providing pre-hospital maternity care. This research aims to understand the challenges faced by Paramedics, so changes in practice can be made to make caring for maternity patients easier.

20 EEAST staff have completed in a study interview, and the study Lead, Melissa, would like to thank all those who participated!

If you would like to know more about this research, please contact Melissa via man57@bath.ac.uk.

When the study findings are published, we will share them with Trust staff.



Article Review:

Are there disparities in the location of automated external defibrillators in England?

Terry P Brown, Gavin D Perkins, Christopher M Smith, Charles D Deakin, Rachael Fothergill Available at: https://pubmed.ncbi.nlm.nih.gov/34757059/

Community accessed automated external defibrillators (AEDs) are of most benefit when placed in areas with the highest need for them. However, new research in which EEAST participated has found that they are more often placed in wealthier areas and where people work; they are less common in deprived areas.

With ambulance services under the highest pressures ever seen, response times to cardiac arrests are increasing way past the accepted targets. A community accessed AED is therefore becoming an even more essential part of the chain of survival.

This paper analysed the location of over 32,000 community access defibrillators in England and identified the following:

- >1 device present in 45% of the most affluent areas vs 27% of the most deprived areas
- >1 device present in 64% of urban areas vs 36% of rural areas
- AED's more common in predominantly White area's
- AED's more common in places of work compared to residential area's
- More common in the South of England vs the North
- More common in areas with an older population (>65 years)
- Inconsistent distribution amongst ambulance services regions
 - e.g., AEDs present in 20% of areas covered by NEAS vs 64% of areas covered by EMAS

Cardiac Arrests occur more frequently in deprived areas and residential areas which isn't reflected in the distribution described above. However, community fundraising efforts, First Aid training/knowledge, and other socioeconomic factors are also likely to be heavily influencing these findings.

The conclusions of this paper lead the researchers to call for an evidence-based strategy to ensure these devices are placed where there is greatest need and where they can help most people. They should ideally be in prominent places which are easily accessed at all times. It is also suggested that guidance on applying for funding for automated defibrillators needs to be more widely publicised to allow for more equitable distribution of these essential devices.

Synopsis by Tom Strudwick, Research Paramedic.



More Ways to Get Involved with Research:

Research Involvement Group (RIG)



Our EEAST RIG meetings are up and running and is a great opportunity for members to learn how they could become involved in ambulance research and discuss a variety of current research opportunities. Alongside hearing about research within EEAST, guest speakers are also invited to discuss research and other opportunities available!

The public members of RIG are keen to open membership to Trust staff. If you are interested in joining this group, or know someone who might be, please complete our Expression of Interest form: <u>EEAST Research</u> Involvement Group: Expression of Interest (office.com)

Other Research News:

Fundamentals of Clinical Research Delivery in the Ambulance Setting

We are proud to announce 'Fundamentals of Clinical Research Delivery in the Ambulance Setting' is now National Institute for Health and Care Research (NIHR) accredited!

To access the training, you will need an NIHR Learn Account: Identity Gateway (nihr.ac.uk)





Fundamentals of Clinical Research Delivery in the Ambulance Setting

Who is this training for?

 All ambulance staff who will be taking an active role in clinical research delivery

Learning objectives:

- Understand the context for clinical research in the NHS
- Recognise the importance of clinical research delivery in the ambulance service
- Demonstrate a level of Good Clinical Practice (GCP) knowledge appropriate to ambulance staff
- Consider your own role and contribution to ambulance clinical research

A certificate will be issued following successful completion of the eLearning.

To begin, visit NIHR Learn

or scan the QR code on your smartphone





Needing help with research articles?

The LKS ASE library service (https://ambulance.libguides.com/home1) provides free access to articles, journals, and databases for all EEAST staff. Here you can:

- Request articles by completing an online form
- Request a literature search by completing an online form
- Sign up for monthly Current Awareness updates
- Access a variety of Guides and help on topics related to searching, research and paramedic practice.

Next edition of the research newsletter will be in Spring 2023.

Do let us know if there is anything you would like us to include in future newsletters.

