

# PHOTON Newsletter



## Welcome to our 3rd newsletter!

Despite a longer gap between newsletters than Prime Ministers, the PHOTON team and wider network have been hard at work growing PHEM research, progressing our portfolio studies and adding new ones. Our chair will say so again, but we would like to thank everyone for their support, enthusiasm and dedication in support of pre-hospital research. Some new faces join the committee, but our commitment to develop and deliver research in our community is as strong as ever.

Our **PHOTON website is now live!** For further information or details on anything PHOTON please visit us at: <https://photogroup.wixsite.com/photon>

## Project progress updates

### eFONA

This qualitative study examines cognitive processes in the decision making to perform an emergency front of neck airway in Pre-Hospital Emergency Medicine. The aim is to develop a greater understanding of any cognitive processes and barriers, and causes for any reluctance to perform this life-saving intervention in the pre-hospital setting. By identifying these issues and disseminating this information, the project aims to inform strategies to help overcome these issues. This is now in the final stages of recruitment. Thank you to those who put themselves forward for interview.

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# Project progress updates continued

## Penetrating Neck Injury - National Delphi Project

The penetrating neck injury patient cohort is one of the most challenging attended by UK HEMS services. Currently there exists no national guideline or consensus on the management of this patient group in the pre-hospital setting.

This national Delphi project aims to bring together the available pre-hospital, and extrapolated in hospital research, along with the consensus of current UK pre-hospital practitioners to develop a set of consensus statements on the management of this patient group. The project also aims to develop a penetrating neck injury specific management algorithm to guide pre-hospital care.

## Trauma Emergency Thoracotomy for Resuscitation in Shock (TETRIS) study

The data has all been collected for the TETRIS study, thank you to all PHOTON members and others who worked so hard to collect data at the Air Ambulance Charities. The final stages of data analysis and write up are now in progress. We will share the final publication with you when it is published'

## Obstetric training in PHEM survey

'Thank you for those of you who completed the survey on obstetric training in PHEM. The data has been collected and is in the process of being collated and analysed. The project will be presented later in the year. We will share the results with you when they become available.'

# Project progress updates continued

## Calcium in patients with suspected traumatic haemorrhage: A multicentre service evaluation

This service evaluation aims to establish the current standard of care being delivered across a cohort of five UK PHEM services with respect to calcium levels in patients receiving pre-hospital blood products in trauma.

There is no agreed protocol for prehospital calcium replacement in patients given prehospital blood products with a recent survey showing widely varying practice across the UK. It has been shown that both hypo and hypercalcaemia are associated with poor patient outcomes and in an era when few services carry means to measure calcium prehospitally further research is required to guide practice.

The objective is to investigate the association between pre-hospital blood product and calcium administration, ionised calcium levels at hospital admission, and 30-day mortality. This study will help to assess the feasibility of gathering key data points, including details of blood products and calcium given in hospital prior to a first point-of-care sample being taken.

## PANDA-PHEM (PAediatric National Database of Airway Management) study

This study is a national service evaluation of all prehospital paediatric advanced airway management to evaluate practice and complications for emergency advanced airway management for critically unwell or injured children. It will run alongside the in-hospital study PANDA-PIC evaluating paediatric advanced airway management in non-specialist centres. This is novel and important work, providing insight at a national level into prehospital advanced paediatric airway management.



# A message from the PHOTON chair



Dr Anna Forbes

“I have been in post for just over 6 months now and it has been great to see the enthusiasm of PHOTON members, the committee and participating air ambulance charities in supporting and proposing projects as well as participating in them. It has been inspiring to work with such dedicated individuals. We currently have projects live at all stages, from those that are just being set up to those that have completed data collection and are nearing publication, which I believe represent valuable additions to the evidence base in pre-hospital care.

The new website is now live and contains all the information about current projects as well as information about how to submit a project. A huge thank you to all the committee who were involved in getting it live and to Dr Kirsten Raphael for her help with its construction. Finally I would like to take this opportunity to welcome Dr Nick Haslam and Dr Govind Oliver to the committee. They both have a wealth of research experience which will be invaluable to our future projects.

Wishing you a relaxing festive period and a happy and healthy 2025.”

## **PHEM dates for your diary**

**27th Annual Trauma Care Conference 10-13th March 2025 Yarnfield**

**Retrieval 1st & 2nd May 2025 Glasgow**

**Local Air Ambulance Clinical Governance Days.** Check your Local Air Ambulance Charity's Website for details of how to join them for their Clinical Governance Days.

**FPHC Conference 10-11th November 2025 TBC Save the date**

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## Pre-Hospital Research DELPHI

This PHOTON coordinated national delphi study involved stakeholders across the PHEM research space. It identified 20 research priorities from 192 research questions for focus over the next 5 years. The top research priority was 'Which cardiac arrest patients should critical care teams be dispatched to; how do we identify these patients during the emergency call?'



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## TETRIS



The Trauma Emergency Thoracotomy for Resuscitation in Shock study evaluates UK Pre-hospital and Emergency Department thoracotomies over a 12 month period and give an invaluable analysis of current practice. This publication outlines the study methodology.

## PHEA cohort study

The observational study of PHEA practice across all 20 eligible UK HEMS units gives a vital helicopter view of current practice. The median time to pre-hospital emergency anaesthesia was 55 min (inter-quartile range: 45-70); anaesthesia within 45 min of the initial emergency call was achieved in 25% cases



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## Geo-temporal provision of PHEA



This retrospective observational study assessed the geo-temporal variation of UK PHEA delivery capability in line with NICE guidelines. Analysis of current UK HEMS PHEA provision on randomly selected week and weekend days showed marked geo-temporal variation in the ability of HEMS organisations to deliver PHEA.

## PHEM POCUS study

This questionnaire-based study collated current perspectives and practice amongst UK HEMS and Community Emergency Medicine clinicians on POCUS in PHEM. There was a good response rate. The study showed that POCUS is being used and believed to be beneficial to pre-hospital care but governance structures varied and were relatively limited. The most frequent use was for ECHO in cardiac arrest.



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# Who can join PHOTON?

We are a group of non-consultant grade pre-hospital doctors and AHP's who are passionate about undertaking high-quality pre-hospital research to inform future practice. In order to achieve this, we have formed collaborations and networks to facilitate multicentre pre-hospital research. PHOTON is an independent group supported by the Faculty of Pre-Hospital Care.

## How to join PHOTON

Email [PHOTONchair@rcsed.net](mailto:PHOTONchair@rcsed.net)  
or scan our QR code:



## How to initiate a project:

Please just get in touch with any research ideas or proposals. We have a wealth of experience resource with support from national experts. We are passionate about our PHEM research community and will give support and guidance where we can. We review every proposal submitted on a quarterly basis and consider which would benefit from PHOTON's resources and be best suited to be added to the PHOTON research portfolio