

# An Introduction to Trauma for Core Anaesthetic Trainees: a simulation based training day

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## INTRODUCTION

- Access to traditional trauma training courses such as Advanced Trauma Life Support (ATLS) was significantly impacted by the COVID-19 pandemic.
- Our survey found over 70% of Stage One anaesthetic trainees in the South West were unable to secure a place.
- Additionally, centralisation of trauma care and the evolution of consultant lead major trauma services has resulted in a dramatic decline in junior anaesthetic trainee exposure.
- A direct consequence for trainees was an inability to complete mandatory elements of the RCoA curriculum.

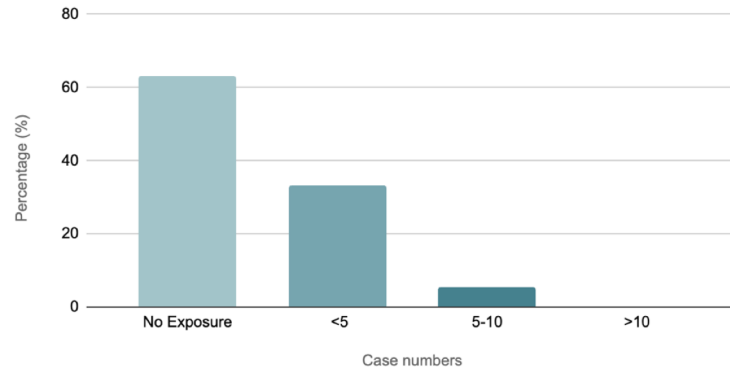
## METHODS

- In the summer of 2021, we surveyed all Stage One anaesthetic trainees in the South West to determine clinical exposure and confidence managing trauma patients.
- We confirmed educational need for a bespoke simulation-based trauma course directly targeting the RCoA curriculum and the clinical skills expected of junior anaesthetic registrars attending trauma calls.
- Our course was recognised by regional trauma module leads for successful Stage One sign off.
- Our course combined interactive talks lead by experienced Major Trauma Consultants and simulated procedural skills training. For procedural skills we use both mannequins and medical meat.
- We performed pre and post course surveys to ensure educational value and gain suggestions for future improvement.

# RESULTS

Stage One trainees in the South West have very limited clinical experience

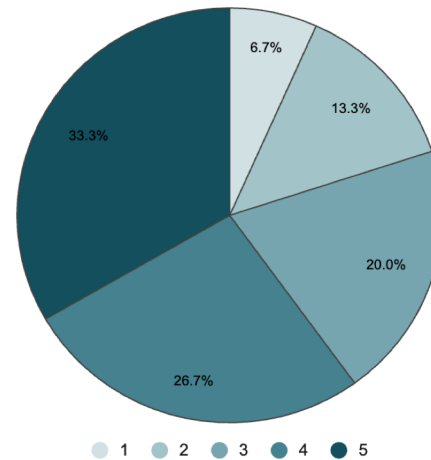
Pre course: exposure to anaesthetic management of trauma cases



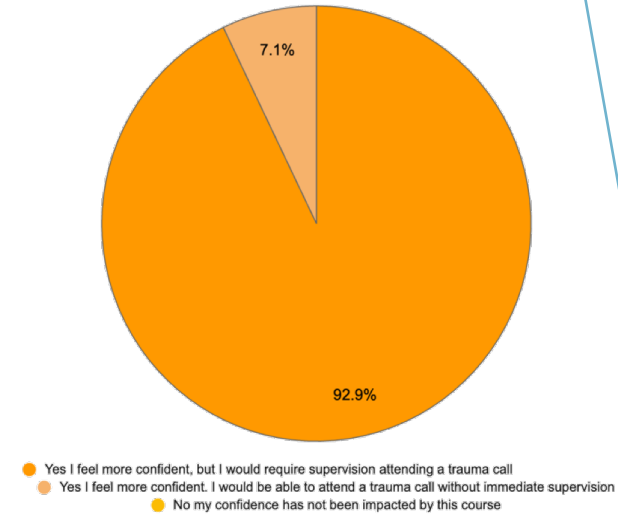
Lack of clinical exposure resulted in poor trainee confidence which improved greatly following the course.

Trainees were asked to rate their confidence from 1-5. 1: not confident and in need of further training and 5: confident, no supervision required.

Pre course: confidence managing trauma patients in an emergency

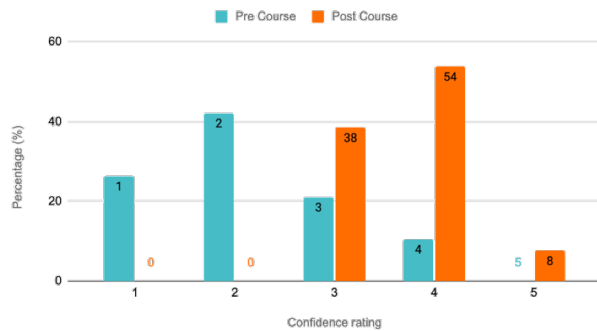


Post course: confidence attending a trauma call

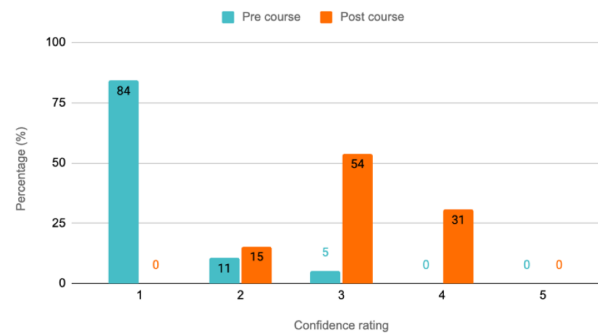


## Confidence in procedural skills also improved significantly

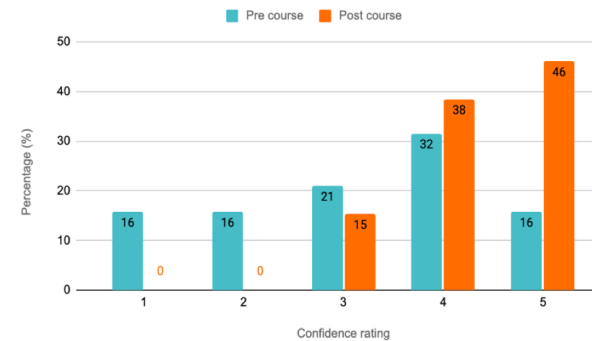
Procedural confidence: Chest Drains



Procedural Confidence: Subclavian Line Insertion



Procedural Confidence: Interosseous Needle Insertion



## CONCLUSION

We highlighted a significant deficit in the Stage One anaesthetic curriculum which this course begins to address. Simulation based training that specifically caters to the needs of anaesthetic trainees helps to build confidence and bridge the gap created by lack of clinical exposure. Historically, a benchmark of trauma training is the ATLS Course. However, as one trainee highlighted 'ATLS is not fully transferrable to working as an anaesthetist in a trauma team'. Our course focuses on the practical knowledge and skills required to manage a real-life trauma patient as the attending anaesthetist.

Adequate training and competence in the management of major trauma is essential for all anaesthetic trainees, particularly those working independently. The implementation of the 2021 RCoA curriculum presents a further challenge to Stage One training with the removal of the module 'trauma and stabilisation'. Whilst other core modules have dedicated supervised training time, major trauma patients often present out of hours to potentially inexperienced registrars, working without immediate supervision. This is a high-risk patient group with unique pathophysiology and often modifiable morbidity and mortality. Further consideration is needed to increase clinical exposure of Stage One trainees in preparation for transition to registrar roles. This course begins to address this need but cannot fully replace in situ clinical experience.

## ACKNOWLEDGEMENTS

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