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1. Introduction

Anaesthetic novices undergo structured training in how to perform safe anaesthetic care in theatre, culminating in the Initial Assessment of Competence (IAC) and starting on the on-call rota.

2222 **However, a significant proportion of on-call work occurs out-of-theatre, for which they typically receive no formalised training and is not prioritised by trainers [1].**

NAP4 recognised that non-theatre airway management is associated with serious complications and avoidable deaths, with training identified as a common contributing factor [2]. We designed a national teaching programme to improve novice preparation for remote on-call work.

3. Results

Novices (N=28) had low pre-course confidence and MCQ scores which increased following the course (Fig 1 & 2).
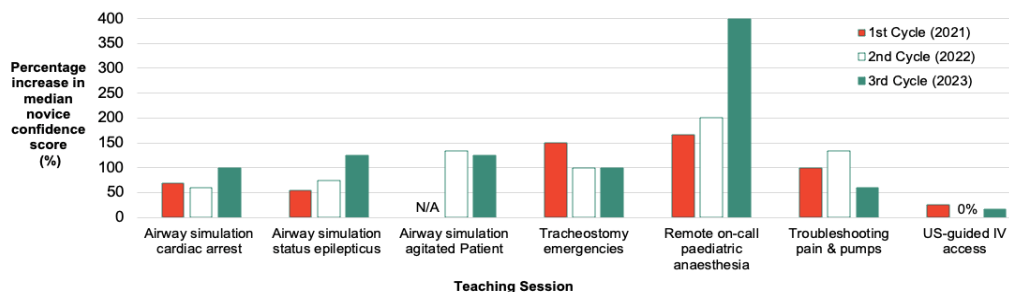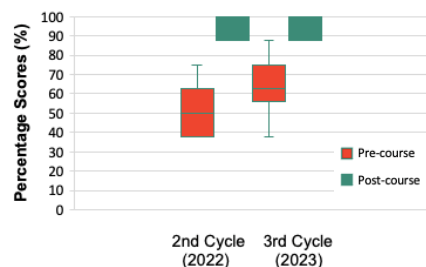

Fig 1: Percentage increase in median novice confidence level pre to post course (2021-23)

Confidence increase was greatest in paediatric anaesthesia and least in ultrasound (US)-guided IV access, although the latter had higher pre-course scores.

The median MCQ score rose to 100% post-course, from 50% and 62.5% pre-course in the second and third cycles respectively.

Fig 2: Novice MCQ percentage scores pre- and post-course (2022-23)

2. Methods

A 1-day teaching course incorporating simulation, workshops and tutorials on typical remote on-call work was delivered twice annually for 3 cycles (2021- 23).

Using anonymised questionnaires novices scored their confidence in managing scenarios out of ten (pre- and post-course, and at one year).

Post 1st Cycle:
- MCQ test introduced
- Additional simulation scenario
- Novice participation from all Trusts in the deanery

Post 2nd Cycle:
- Standardised session plans
- Algorithm cards
- Mentorship opportunity
- CPD accreditation
- Novice participation from multiple deaneries

4. Results continued

1 Year Follow Up …

- The high majority of novices had experienced remote airway emergencies (Fig 3), which they retrospectively scored the course highly in preparing them for.
- Airway scenarios encountered included cardiac arrest, altered GCS, cardio-respiratory failure and trauma.
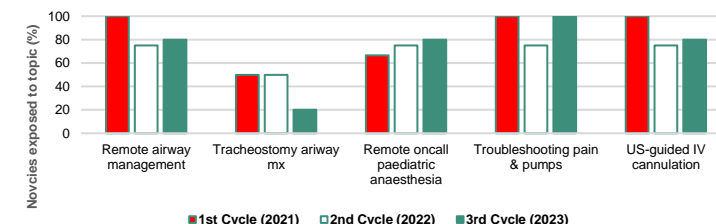

Fig 3: Percentage of novices exposed to teaching topic post one year of on-call experience (2021-23)

- Confidence levels at one year had reduced in some topics compared to post-course levels, but remained above pre-course levels.

5. Discussion

Remote on-call anaesthesia is common and high-risk, yet formal training opportunities are limited. Novice confidence and understanding in this area can be improved with structured teaching.

We recommend this should be incorporated in to the IAC and repeated across training.

We aim to improve the course with an emergency tracheostomy simulation, removing US- guided IV access training and creating a teaching package to facilitate the expansion of the course.

6. References

1. Lindkaer Jensen NH, Cook TM, Kelly FE. A national survey of practical airway training in UK anaesthetic departments. Time for a national policy? *Anaesthesia* 2016; 71: 1273-9.

2. Cook TM, Woodall N, Harper J, Benger J, Project FNA. Major complications of airway management in the UK: results of the Fourth National Audit Project of the Royal College of Anaesthetists and the Difficult Airway Society. Part 2: intensive care and emergency departments. *Br J Anaesth* 2011; 106: 632-42.

NOVICE SOS!