



Ultrasound use in Air Ambulance Kent Surrey Sussex: A survey

Air Ambulance
Kent Surrey Sussex

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INTRODUCTION

- Air Ambulance KSS carry a portable ultrasound (US) scanning machine with a high frequency linear probe
- Current standard operating procedure (SOP) states it should be used as an adjunct to chest assessment and support the decision to carry out pre-hospital thoracostomy
- Pre-hospital US use is not yet established as standard practice and little conclusive evidence exists about indications for use [1]

METHODS

Survey drafted with input of research and audit lead developed to investigate training, experience and attitudes towards pre-hospital US

Survey of 17 air ambulance practitioners who attended clinical governance days

- 9 doctors
- 8 paramedics/ critical care paramedics

AIMS

- To assess the use of ultrasound in pre-hospital care
- To survey views on indications for pre-hospital US
- To audit US training and confidence levels within KSS Air Ambulance

RESULTS

- **Ultrasound training level varied widely**
- **77.8 % doctors** had done Level 1 course – not all had received formal qualification
- **87.5% paramedics** only had in house HEMS crew course training
- **53% practitioners** had 0- 25% of pre- hospital care ultrasounds supervised
- **69% practitioners** estimated they used US before thoracostomy in 0- 25% cases

FIGURE 1: Personal opinions on indications for US scanning in the pre-hospital environment – survey of opinions

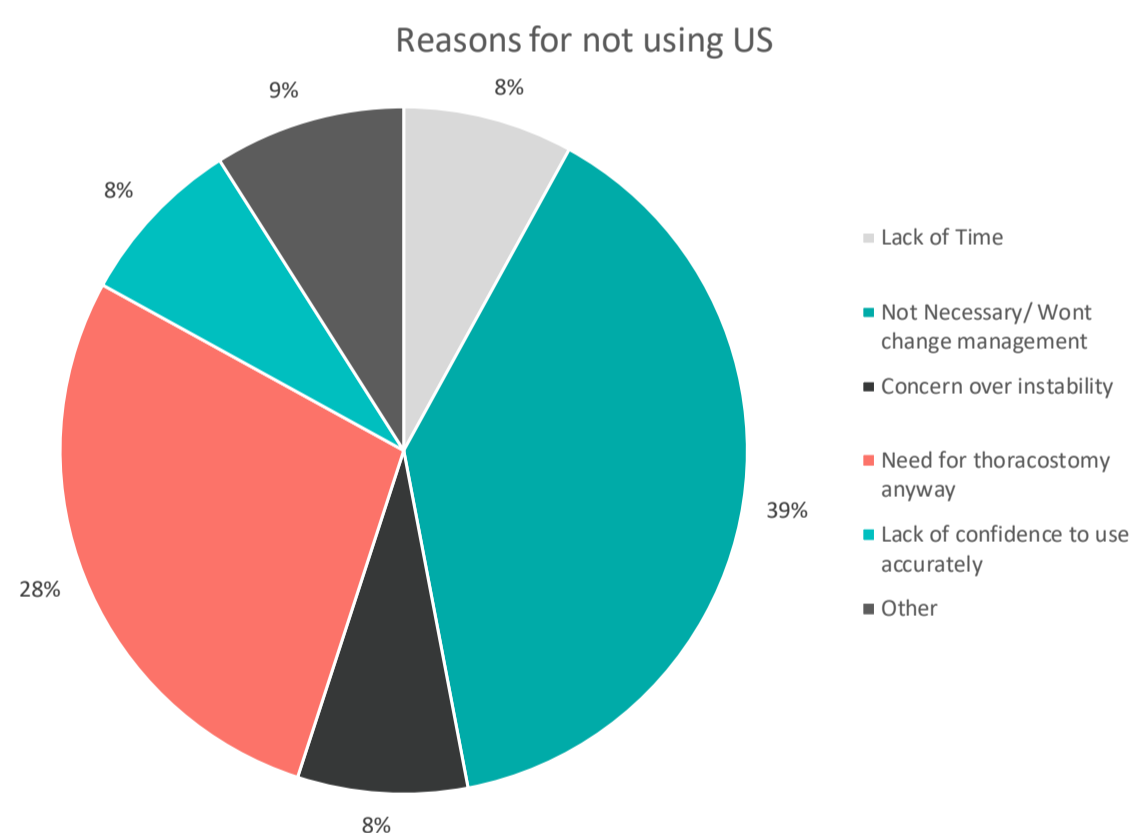
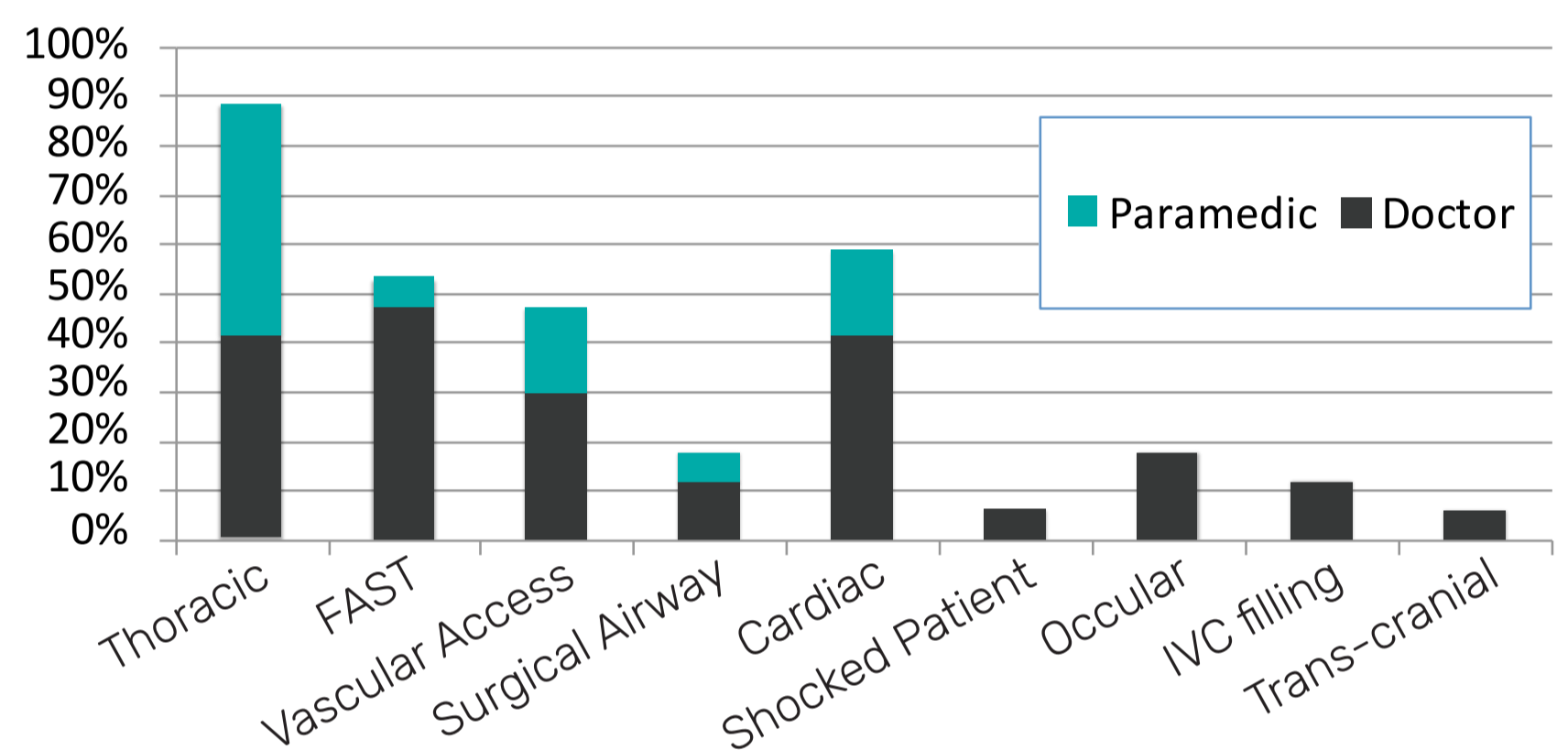
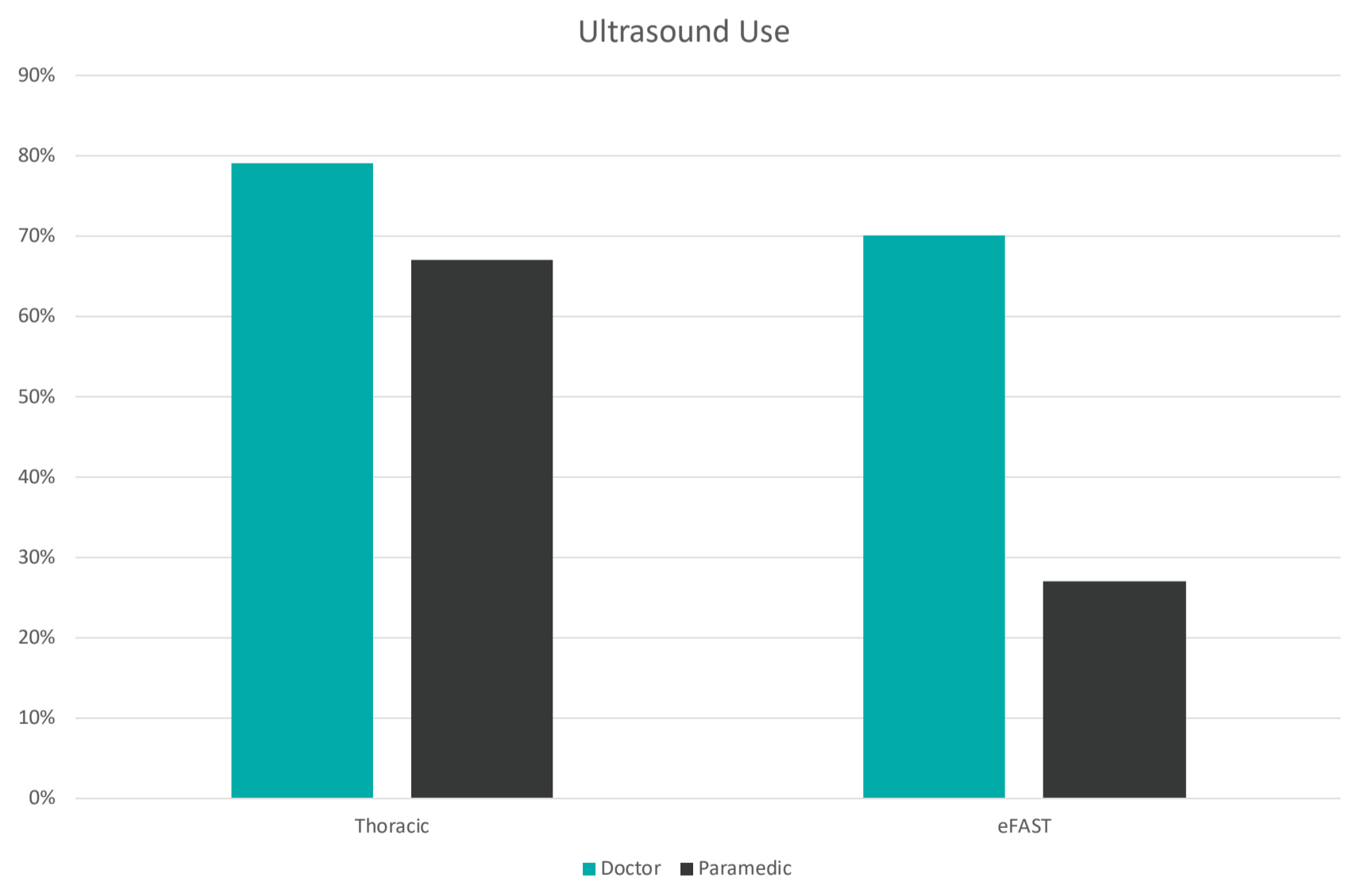
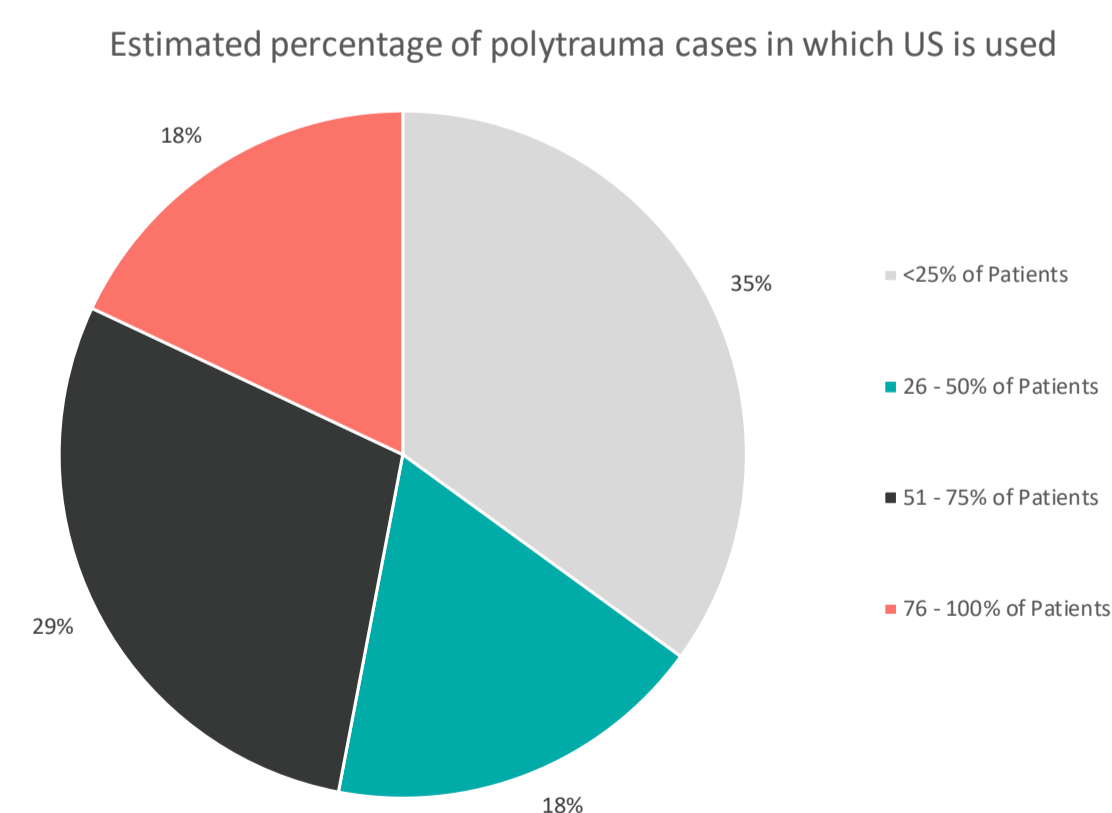


FIGURE 3: Confidence in using US in the pre- hospital environment



LIMITATIONS

- Unable to survey all staff due to time limitations
- Survey written by non-expert

CONCLUSIONS

- Use of US is inconsistent, despite inclusion in the standard operating procedure
- Reasons behind inconsistency multifactorial
- Increased training, support and supervision could improve confidence, increase and aid decision making
- Specific formal training required to increase confidence in practitioners
- Many possible applications for pre-hospital US
- Need for well designed clinical trials to help define the role of pre hospital US

REFERENCES