The NIAA Perioperative Clinical Trials Group
New horizons for UK perioperative medicine research

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Introduction
Research and innovation drive improvements in healthcare and underpin audit and quality improvement. Improving the evidence base for all aspects of perioperative medicine should be a shared goal of healthcare professionals working in this area.

The founding partners of the National Institute of Academic Anaesthesia (NIAA) have recently agreed to support the formation of a UK Perioperative Clinical Trials Group (CTG) to develop and deliver world-class, multi-centre clinical trials in the UK. Core funding is coming from the four NIAA founding partners and the Rosetrees Trust: a philanthropic family trust that supports medical research.

Why do we need better evidence to guide patient care?
The scale of adverse outcome following major surgery is of a magnitude that constitutes a global public health issue, and the care of patients undergoing major surgery is an area of substantial unmet healthcare need. Nearly a quarter of a billion patients undergo surgery worldwide each year. Assuming hospital mortality of 1%, major surgery is associated with around 2.5 million deaths worldwide each year, and complication rates are up to ten times this figure. Improvements in perioperative care may therefore have a substantial impact on public health, and the RCoA has responded to this challenge with the recent launch of the Perioperative Medicine Programme. However, large-scale changes in healthcare policy and delivery should be underpinned by a robust evidence base, something that is relatively lacking in perioperative care. Comparison with medical specialties such as cardiology and oncology suggest that large clinical effectiveness trials remain the primary source of practice-changing evidence. At present, very few large randomised controlled trials are conducted in anaesthesia and perioperative medicine, either in the UK or worldwide.

Why do we need a trials group in anaesthesia and perioperative medicine?
The principal obstacle to the successful completion of major trials is patient recruitment. In other specialties, national clinical trials groups have proved the most effective way to organise and coordinate the activities of investigators to ensure patient recruitment targets are met in a timely manner. In any large collaborative trial the skills, experience and contributions of individual investigators vary widely. Clinical trials groups allow the organisation of these many and varied contributors into effective collaborative teams with a shared focus on the wider objectives of the group, and a shared sense of ownership of successful projects. Experience from other clinical areas shows that the high rates of successful trial completion that result from such an approach generate confidence amongst major funding organisations, both in terms of trial design and trial feasibility. Over time, settled relationships with funders lead to high rates of funding success whilst the sense of ownership amongst grassroots clinicians promotes the speedy implementation of findings.

In recent years we have seen a significant increase in patient recruitment to large clinical studies of perioperative care. UK researchers have either led or made major contributions to several major multi-centre studies including POISE, VISION, ENIGMA II, EuSOS, OPTIMISE, ISOS RELIEF and METS. These successes demonstrate an enthusiasm to contribute to large-scale research projects in anaesthesia and perioperative medicine throughout the UK. The time is right to build on these collaborations through a national clinical trials group to ensure the UK plays a leading role in clinical research in our field.

What will the Clinical Trials Group do?
The role of the Director and the Executive Board will be to define the core aims and objectives of the CTG. The vision is to create an environment that allows anyone and everyone with an interest in perioperative care to make a contribution to clinical trials. By creating shared ownership of these projects, the CTG will promote engagement with the research itself and with the research findings. Hopefully such an approach will also help to drive the implementation of positive findings. To achieve this we will need to be inclusive, creating meaningful

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1 NIAA Founding Partners: Anaesthesia, Association of Anaesthetists of Great Britain and Ireland, British Journal of Anaesthesia, Royal College of Anaesthetists.