# What now for NAP?

## The future of the National Audit Projects

This article aims to summarise briefly the recent changes in the organisation of the National Audit Projects (NAPs), and explain the process for selecting the topic for NAP5 and beyond.

Dr T Cook

Consultant Anaesthetist, Royal United Hospital, Bath, and RCoA Lead for NAPs 3 and 4

### The Health Services Research Centre and NAPs

NAPs 1–4 were supported and managed by the Professional Standards Department of the Royal College of Anaesthetists. In 2011, the Health Services Research Centre (HSRC) of the National Institute of Academic Anaesthesia (NIAA) was launched, with the aim of being a hub for world-class anaesthesia research (including perioperative, pain related and sub-specialty research). Now, the responsibility for management of the NAPs has been transferred to the HSRC, with oversight by Council of the College. My future role is one of co-ordinating lead (as opposed to project lead) of the NAPs.

The NAPs now have a national (arguably international) profile, and it is important that the momentum gained by the recent NAP reports is maintained. It is equally important that future NAPs are relevant, well supported, well conducted and deliver a high quality product, addressing a clinically relevant issue.

### NAP3 and NAP4

NAP3 and NAP4 examined infrequent events (NAP3 – permanent harm caused by neuraxial anaesthesia, NAP4 – major complications of airway management during anaesthesia, in emergency departments and in intensive care) and attempted to determine the incidence of such events. Both projects, in addition to refining quantitative aspects of these problems, also collected a large number of case histories which were examined in depth to identify qualitative learning from such rare complications. Another achievement common to both projects has been to focus the attention of the profession and other specialties on the problems under examination: in effect to 'shine a light' on the problem. Both projects have led to changes in practice and have likely already contributed to improved care in the areas studied.

A model similar to those used for NAP3 and NAP4 appears logical for subsequent NAPs, and is likely to continue the focus on rare complications. For the chosen topic, this involves first determining a denominator, if not already known, and then identifying and reviewing a cohort of index events to determine a numerator. NAP3 reviewed 90 events in one year, and included 30 in (pessimistic) incidence calculations. NAP4 identified 280 events in one year, and included 186 in final analyses. Events that occur either too rarely or too frequently may be difficult to study, and NAP3 and NAP4 perhaps represent useful indicative limits of what is both informative and manageable. Other methodologies might be suitable for NAP5, and will not be excluded from future projects.

Another important aspect of the NAPs relates to the bi-partite partnerships central to their conduct. For NAP3 the College was joined by the National Confidential Acute Pain Critical Incidents Audit of the British Pain Society and, for NAP4, the Difficult Airway Society was the College's partner. Whilst many other partner organisations contributed significantly to both projects, such partnerships have an important role, with NAP-leads from both organisations working together to steer the project in the right direction.

### NAP5 'out to tender'

In late 2010, a call was made for proposals for NAP5, through advertisements in anaesthetic journals and on the College website. The advertisement emphasised that, as with recent NAPs, the topic recommended would likely meet the following criteria, being:

- important to patients
- important to anaesthetists

- a topic that is currently incompletely studied in incidence or nature.

Those responding to the article were asked to complete a proforma indicating:

- a clear definition of the proposed topic with a clearly defined question
- a topic of broad interest to anaesthetists (in other words relevant, and able to engage interest)
- a topic for which the question to be answered is currently unanswered.

The proposer was also asked to indicate their interest in leading NAP5, or to recommend a potential lead.

## NAP5 proposals

There were a total of 43 proposals covering 35 separate topics (Table 1), and several were suggested on multiple occasions (Table 2). Some proposals were well worked up with a clear structure, identified individuals capable of delivering the project and included the backing of an appropriate specialty or sub-specialty organisation. Others were considerably less well developed.

The list of topics and submitted full proposals was considered by the HSRC executive and a short-list produced. Reasons for not short-listing topics included:

- more suitable for research methodology (for example, a prospective cohort study) rather than registry
- suitable for specialist society audit rather than national audit
- complications not significant enough to generate national interest and compliance with NAP
- impracticality of study of subject
- previous study undertaken by other audit programmes (for instance ICNARC, NCEPOD, SHOT).

**Table 1**
Topics proposed for NAP5 presented in alphabetical order

| Topic |
|---|
| Anaphylaxis |
| Asthma management |
| Awareness |
| Cardiopulmonary bypass: complications of perfusion |
| Cardiothoracic critical care risk assessment |
| Central line complications |
| CME and CPD: compliance and benefits |
| Coronary stents: complications in the perioperative period |
| Dental damage |
| Elderly: complications of anaesthesia |
| Fractured neck of femur: reasons for cancellation |
| Hypotension during anaesthesia: use of vasopressors and other agents |
| Long-term sequelae of anaesthesia |
| Obesity: incidence and complications |
| Paediatric delivery and complications during anaesthesia |
| Patient information at time of anaesthesia: delivery and quality |
| Percutaneous dilatational tracheostomy: early complications |
| Perioperative myocardial infarction |
| Perioperative patient preparation: fasting, nutrition, pre-medication practices and compliance |
| Perioperative relief: practice and quality |
| Peripheral nerve block complications |
| Peripheral nerve injury from patient positioning during general anaesthesia |
| Post operative nausea and vomiting |
| Pregnancy at the time of surgery: compliance with national guidance |
| Recovery room complications |
| Recovery room indicators of quality |
| Robotic and laparoscopic surgery with prolonged steep head-down positioning: complications |
| Sedation: major complications throughout hospital |
| Tracheal stenosis and permanent harm following airway instrumentation |
| Tracheostomy: complications |
| Transfusion complications |
| Transfusion requirements and practices during cardiac surgery |
| Transport: complications of transport, particularly oxygen failure |
| Unplanned ICU admissions from theatre |

The shortlisted topics were reviewed in greater depth to assess:

- importance: is the question important to patients and clinicians?
- novelty: is the posed question currently unanswered?
- practicality: would a NAP be able to answer the posed question?
- suitability: would a different methodology be better suited to answering the question?
- difficulty: are there factors making the proposal difficult or impractical?

The favoured topic for NAP5 was selected and a series of planning meetings were devised to refine the topic and question to be answered, and to identify partner groups and potential leads for the project as well as to formally plan the project. At the time of writing, these meetings are still in place and the topic for NAP5 is not completely finalised so, although this article will not announce the topic for NAP5, in fact it is likely that the topic will have been announced before this article is published.

**Table 2**
Topics proposed for NAP5 by multiple individuals in alphabetical order

| Topic | Proposals |
|---|---|
| Awareness during general anaesthesia | 4 |
| Head-down and laparoscopic surgery complications | 2 |
| Paediatric anaesthesia delivery and complications | 2 |
| Peripheral nerve block complications | 4 |
| Sedation complications | 2 |

## NAP6 and onwards

The future of NAPs is dependent upon the success of NAP5 and subsequent projects. These in turn depend on the enthusiasm and active involvement of individual anaesthetists, local reporters, anaesthetic departments, and the approval of hospital management. These are major challenges that all will need to respond to in order to maintain the success of the NAPs.

The process of tendering for NAP5 has produced a number of high quality proposals which might be suitable for NAP6 and beyond. Formal requests for re-submissions are likely within the next 12 to 18 months to enable adequate forward planning.

## Potential changes to NAPs

Compared with equivalent research projects, NAP3 and NAP4 were delivered on very modest budgets, and can be considered to have been excellent value for money. Whilst most costs were met by the College, significant contributions were made by the main partner organisations, and directly or indirectly by supporting organisations. It is recognised that there was an immense reliance placed on the local reporters in hospitals, often acting within their own professional or personal time.

The College is currently examining how the quality of future projects can be maintained at a time when there is increasing pressure on costs at all levels of the NHS, and when professional leave is an ever dwindling resource. The College is exploring ways of formally supporting the position of national project-lead in a manner similar to other College positions. Ways in which the already considerable administrative support provided by the College (and from other partners) can be developed to reduce administrative tasks for the project-lead may also be examined. It is hoped the position of project-lead will attract high quality applicants for future NAPs.

Finally, it is recognised that the role of the NAP local reporter in hospitals may need to be more formalised. Improved recognition of the post as a suitable use of supporting professional activity (SPA) might be a first step.