

## Towards a national Perioperative Quality Improvement Programme (PQIP)

Dr R Moonesinghe, Deputy Director, NIAA HSRC Health Foundation Improvement Science Fellow, PQIP Lead Professor M Grocott, Director, NIAA HSRC

One of the original aims of the NIAA's Health Services Research Centre was to develop and implement a national casemix programme for measuring quality and outcomes in perioperative care. With the award of a Health Foundation grant to support work towards this goal, we now have recognition of the value of such a programme and are in a position to be able to develop a pilot initiative. The national Perioperative Quality Improvement Programme (PQIP) will be implemented in approximately ten NHS Trusts in 2016, as a prelude to a wider roll-out aiming to engage at least 75% of NHS Trusts within five years.

## 'ICNARC for Perioperative Care?'

Most of us are familiar with the Intensive Care National Audit and Research Centre's Case-Mix Program (ICNARC-CMP), which analyses data collected by local staff on ICU patients in over 90% of UK hospitals. The challenges of setting up a similar system for perioperative care are considerable. With an estimated 10 million surgical procedures taking place in the NHS per year, it is clear that prospective manual data collection on all these cases would be impossible. We would also not want to establish a system that duplicates data collection from existing national clinical audits. These would include the ICNARC-CMP and established audits supported by the Healthcare Quality Improvement Partnership (HQIP), such as the Bowel Cancer Audit, the National Joint Registry or the National Emergency Laparotomy Audit. There

are also well-known initiatives that analyse 'administrative data' (routinely collected hospital coding data) to report on quality and outcomes: Dr Foster reports use Hospital Episode Statistics (HES) data in this way.

That said, there are areas which these initiatives do not focus on, and which offer great opportunities to improve patient outcomes. For example, current audits do not measure quality in a number of high-risk surgical procedure groups, such as major urological surgery or hepatobiliary surgery. Existing initiatives also often focus on mortality as their primary outcome measure; there are few data collected regarding postoperative morbidity (complications) and accurate figures (apart from for a few specific surgical complications) are not currently retrievable from HES data. Patient-reported outcome is not widely audited outside the mandatory Patient-Reported Outcome Measures programmes in primary hip and knee replacement, varicose vein and hernia repair. Crucially, as mortality is low in many procedures, it is only through the measurement of morbidity and patientreported outcome, that we may truly be able to identify variation in outcome, and therefore targets for quality improvement.

#### Looking across the Pond: ACS-NSQIP

Some of these issues have been addressed in different healthcare settings. The American College of Surgeons National Surgical Quality Improvement Program (ACS-NSQIP) has collected risk-adjusted morbidity and mortality data on patients undergoing major surgery for over two decades. Rather than aiming for data collection on all patients, each participating hospital collects data on a random sample of patients, thereby reducing the burden of trying to recruit hundreds of patients each week. Important and sustained improvements in quality and outcomes have been achieved, and a number of important epidemiological findings have been published leading to changes in service provision and driving further improvement.

## Who is going to do all the work?

There is no doubt that collecting data for HQIP National Clinical Audits, NCEPOD studies, NAPs, SNAPs, ASAPs and a plethora of other initiatives place a huge burden on clinical departments. Many hospitals rely on clinical staff, often junior trainees, to collect data in their spare time. There is a clear contrast between this UK philosophy and the US system. Hospitals participating in the ACS-NSQIP use trained, dedicated staff (known as Surgical Clinical Reviewers, SCRs) to collect data; they have no clinical responsibilities, and are also responsible for engaging with clinicians and supporting quality improvement initiatives based on the data captured. Participation in the ACS-NSQIP comes at a cost of between \$10,000 and \$29,000 per year per hospital (paid to



#### hsrc@rcoa.ac.uk www.niaa-hsrc.org.uk

the American College of Surgeons) – in addition to the cost to the hospital of paying an annual salary of at least \$40,000 to the SCRs (who are generally registered nurses with a Bachelor's degree and at least one year's clinical experience). Such a level of resourcing is not available to support this current pilot, nor is it likely to be available within our healthcare system in the foreseeable future.

# What's the point? How will we actually improve patient outcome?

We acknowledge that it is critically important to the success of the project, and the engagement of clinicians, to be mindful of these issues. However, we believe that the goal – to reduce variation and improve quality of care for thousands of surgical patients - is worth striving for. So how do we plan to support trusts to participate in this programme? We are only in the very early stages of development and discussion, but will focus on a number of areas, including minimising the dataset and using a sampling strategy to reduce the data collection burden using technology (for example, apps) to aid data collection, and potentially

developing model business cases to aid departments in seeking support from their trust for data collection. Furthermore, from the outset, a key aim of the pilot study will be developing mechanisms for maintaining momentum, supporting clinicians to actually use the data and therefore hopefully driving sustainable and successful local improvement. We know that while generally, in healthcare we are quite good at 'counting' or 'auditing', actually responding to the results and then trying to improve them, is considerably harder. There is evidence that whether audit leads to improvement depends on a variety of elements, including how the feedback is delivered, having clear goals to strive for and knowing clear strategies that can be implemented to head towards achieving those goals. With the support of the Health Foundation, we have started a programme of research aimed at developing novel evidence-based methods of helping clinicians to use data for improvement. We will then test these methods in our pilot sites and conduct an 'ethnographic' study - an anthropological evaluation of the role that local culture and context plays in how individuals, departments or

hospitals respond to data feedback. This research will be used to develop strategies to help local departments use their audit data to improve their patients' outcomes – and therefore to deliver some tangible benefits for all the hard work which is invested locally.

#### The time is now!

Anaesthetists are uniquely placed to lead multi-disciplinary efforts aimed at improving the quality of healthcare in a broad range of surgical subspecialties. There is real enthusiasm and drive amongst trainees and established consultants to engage with quality improvement, and the PQIP will provide an ideal vehicle to support and train our future consultants in improvement science. It is hard to justify not knowing our patients' outcomes and the resulting inability to get off the starting blocks with efforts to improve them. We hope therefore, that we will be able to engage successfully with our colleagues across the UK in order to deliver our collective aspirations for improving the quality of perioperative healthcare.

If you are interested in participating or finding out more, please get in touch with us at pqip@rcoa.ac.uk.



### **Morgan Cenan**

It is with great sadness that the College announces the death of Morgan Cenan, a former employee at the College from 2008–2013.

As the first coordinator for the National Institute of Academic Anaesthesia and the Health Services Research Centre, Morgan played an intrinsic role in establishing both organisations and making them the success they are today. Morgan will also be remembered for the high level of support she provided to ACTA.

Morgan was highly regarded by her friends and colleagues at the College and will be remembered as a valued member of the team. We will miss the sense of fun that she always brought with her, her laughter, and her caring attitude towards others.

Morgan's family meant the world to her and she leaves behind two young daughters, Jizel and Leyla and her husband, Kem. Our thoughts are very much with them at this difficult time.