# Systematic audit of peri-operative care in the UK?

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The HSRC column in this edition of the *Bulletin* will be a piece of shameless advocacy for the collection of national systematic peri-operative data by anaesthetists.

The argument for such an audit rests upon the premise that 'what anaesthetists do matters'. We have relied traditionally upon the canard that 'anaesthesia is incredibly safe'. Whilst this may be true literally when applied to the isolated administration of anaesthetic drugs to healthy individuals, it obscures the critical role anaesthetists have in peri-operative care, ranging from risk evaluation through intra-operative physiological management to post-operative critical care. If you believe anaesthetic care has no material effect on patient outcome, then read no further. If, on the other hand, you believe that what we do, and how we do it, is an important determinant of outcome following surgery, then ask yourself why systematic peri-operative audit does not already exist.

Widespread systematic data collection is feasible. UK anaesthesia has already demonstrated its ability to work together on point prevalence audits such as the National Audit Projects and NCEPOD studies. More than 90% of adult general critical care units in England, Wales and Northern Ireland contribute to the Intensive Care National Audit and Research Centre (ICNARC) Case-Mix Programme. In the US, the National Surgical Quality Improvement Program (NSQIP) has a similar role in the peri-operative setting. Originally established within the Veterans Administration hospitals, the NSQIP has now spread to more than 200 institutions including private sector providers. Whilst this type of data collection can be costly, many organisations have achieved their goals on a minimal budget, often using data derived from an initial shoestring operation to drive the subsequent justification for the funding of a definitive audit.

Although the randomised controlled trial is the gold standard experimental design for testing a novel intervention, many areas of clinically important knowledge are best, or most efficiently, informed by high quality observational data. Systematic audits, such as the NSQIP, have demonstrated outcome benefits driven by quality improvement in institutions that contribute to the system, when compared with those that do not.

Ideally, a comprehensive audit would encompass all patients undergoing surgery in hospital and collect patient characteristics (demographics), surgical description, and pre-intra- and post-operative data reflecting risk, process of care and outcomes. The data obtained could drive a quality improvement agenda; without this information we are operating in the dark.

For elective surgery in the UK, there are many specialist databases receiving data on defined groups of elective patients. For example, the National Adult Cardiac Surgical Database now publishes independently analysed individual surgeon results on the internet. However, in contrast to most surgeons whose practice is confined to a single specialist area, most anaesthetists interact with patients being treated by several surgical specialties. For elective surgery, where an established specialist surgical database exists, partnership may be the best approach. The Vascular