Guidance for College Tutors and Educational Supervisors on the assessment of QI activities

Background
The GMC states that core duties of a doctor include, ‘taking part in systems of quality assurance and quality improvement to promote patient safety’, and the ‘Outcomes for Graduates’ guidance says that doctors should, ‘Continually and systematically reflect on practice and, whenever necessary, translate that reflection into action, using improvement techniques’.

With regard to training requirements, the AoMRC’s ‘Better training for Better outcomes’ says that a curriculum in quality improvement activity should underpin all training stages of a doctor and that quality improvement activity should be integral to appraisals. They also add, ‘Assessment drives learning; therefore to properly embed quality improvement within education and training it must be capable of being robustly assessed…at postgraduate level much more emphasis is placed on assessment in the workplace, as this is where the vast majority of education and training takes place. The majority of experts from across the continuum agreed that workplace-based assessments or assessed projects would be the best methods for assessing quality improvement. This makes sense as it is essentially a practical skill. From discussions with assessment experts it is clear that further work needs to be done to develop more formal ways of assessing quality improvement.’

In addition to this policy steer towards formalising QI assessment and training, feedback from the RCoA’s College Tutors meeting and a specialty wide survey of trainees and educators conducted by the college, identified a need for guidance and support in the assessment of QI activity. The requirements for QI may differ from those of audit (particularly around measurement), and many college tutors in particular have asked for guidance in how they can assess trainees in this area. Currently, very few trainees complete WPBAs on QI, but an increasing number of trainees wish to bring QI activity to ARCP, in place of/in addition to, audit activity. This is encouraged by many schools of anaesthesia. It is expected that as QI activity increases, that more trainees will seek to complete WPBAs on QI curriculum areas. This document is intended to help trainees, educators and assessors to ‘sign off’ QI activities at ARCP in a similar manner to how audit is ‘signed off’ currently.

Planning QI for ARCP
Trainees intending to submit QI work for ARCP should review their activity and learning outcomes with their educational supervisor at an early stage, to ensure their planned activity will meet their learning and assessment requirements. The doctor in training and Educational Supervisor may also wish to consult with someone locally, who is familiar with QI, if they are not familiar themselves. They may refer to the RCoA’s Compendium of Audit recipes for specific examples of improvement projects mapped to national guidelines and priorities. Local experts may soon be signposted by their membership of the college ‘Quality Faculty’. Prior to the establishment of this cohort, help may be available from departmental or Trust/Board QI leads, NELA or PQIP leads, or QuARCs, depending on local skill mix. There are many resources available to trainees and trainers to support
QI learning, this is beyond the scope of this paper, but they may consider: PRISM an e-Learning resource, the ‘Quality Improvement in Anaesthesia’ chapter in the Compendium of Audit Recipes, and the RCoA’s ‘Quality Improvement and Patient Safety’ study day as learning resources mapped to the college curriculum.

It is recognised that requiring a trainee to complete a self-started QI project on a single placement does not support their learning needs on short rotations, or indeed produce sustainable improvements of high quality, given the timeframe constraints. Learning needs can be met by participating in a broader departmental or regional QI activity, including Trainee-led Network QI projects. For example, all of the questions below could be answered by participation in NELA, PQIP or ACSA activities that aim to improve care. Established data collection systems like NELA or PQIP enable the trainee to focus their energies on making improvement rather than collecting data.

It may be helpful to consider the following questions to clarify whether the trainee’s activity qualifies as QI:

1. Does the project aim to change a process, with the aspiration to improve safety, clinical outcomes, patient or staff experience, timeliness, efficiency or equity of care?
The project does not necessarily have to show improvement, but should demonstrate an attempt to improve a process or system.

2. Is the project a quality improvement project, and not an audit?
Audit focuses on measurement against a standard; QI focuses on making changes as a result of measurement. A completed audit loop with changes implemented and re-measured can be described as a QI project.

Data sets for QI need not be large, but undertaken on multiple occasions and displayed as a time series or run chart. Data can be quantitative or qualitative. Data sets may be small, in which case care should be taken to ensure they follow defined sampling rules.

3. Does the project demonstrate baseline measurement, making change, and then measurement again?
We suggest using the PDSA/model for improvement but may choose to use different tools. Change cycles may include starting a small pilot study and then scaling up, or modify the intervention in the light of what is learnt. It is important that any changes are evaluated by looking at evidence from data collected.
Examples:

A) A trainee on a perioperative medicine module works with the preoperative nurses to introduce new ERAS information resources to the preoperative clinic. They demonstrate improved adherence to ERAS principles and improved patient experience in the preoperative clinic in the subsequent months, and so share the resources more widely through the Trust/Board and hospital website.

B) Based on their NELA data, a Trust/Board can see that preoperative risk prediction is below the accepted standard. A trainee redesigns the theatre booking form to include risk prediction scores. Subsequent data displayed on the NELA dashboard run charts shows this improves the numbers of patients meeting the NELA standards, and that this change is sustained.

C) Based on the action plan of a safety incident, a trainee helps to implement a revised structured handover for ITU admissions. They monitor the number of handovers completed to the new standard, and undertake a teaching session for new doctors and nurses on handover. This demonstrates increased awareness of handover issues amongst staff, but does not improve compliance with the new handover format.

D) A trainee captures and analyses PQIP data for their department, which demonstrates that there is a problem with surgical site infections. They draw up a protocol together with theatre and ward nurses and surgeons to improve adherence to best practice in prevention of wound infections. There is an improvement in processes and outcomes related to wound infection.

E) A trainee works with the Trust’s/Board’s ED to equip and standardise the anaesthetic trolley based on the RCoA’s GPAS standards, as part of the ACSA accreditation process. This improves the Trust’s/Board’s compliance with GPAS, and reduces the amount of time taken to find emergency equipment, measured in a simulated emergency. They roll out the new design across all the resus bays in ED.