RCoA
Royal College of Anaesthetists

Quality Improvement Education Guidance for the 2021 Curriculum

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Purpose of this guidance

Quality Improvement (QI) aims to improve the quality and safety of patient care by applying a systematic approach to understand the complex healthcare environment, to design, test and implement change whilst using real-time measurement for improvement.

The 2021 Curriculum takes into consideration the General Medical Council (GMC) Generic Professional Capabilities (2017) framework and the Academy of Medical Royal Colleges (AoMRC) Training for Better Outcomes strategy for developing QI capabilities as part of training.

This guidance aims to complement existing 2021 curriculum information and should be considered alongside the RCoA 2021 Curriculum Assessment Guidance.

Planning your QI project and learning

The 2021 curriculum supports progression of skills, knowledge and experience through the stages of training.

There is no longer a requirement for an annual audit, instead, anaesthetists in training should demonstrate attainment of the learning outcomes by the end of the stage and should spread their learning across the whole stage.

This also allows time for anaesthetists in training to familiarise themselves with their local training environment and the different opportunities available.

It is advisable for project work and learning plans to be discussed with Educational Supervisors or the designated trainer responsible for the assessment of the Safety and QI Holistic Assessment of Learning Outcomes (HALO) before commencing work on their chosen area of work.

As experience is gained across the domain of training, it is beneficial to review learning up until that point and discuss local, regional and national training and project opportunities to meet the curriculum learning outcomes.

Anaesthetists in training are expected to **engage with QI activities each year** throughout their training, and the level of involvement increases with each stage. Stage 1 focuses on learning different aspects of QI methodology and understanding systems. During Stage 2 and Stage 3 it is anticipated that **at least one** significant project will be undertaken for each stage.

2021 Curriculum
Summary of Learning Outcomes: Safety & QI

Stage 1

Learning outcomes focus on understanding QI methodology (for example, Model for Improvement), and the application of principles of patient safety to your own practice. This includes understanding diagnostic tools to understand systems and the contrast between quantitative and qualitative analysis. This can include work towards part of a wider QI project or building knowledge and understanding.

Stage 2

Anaesthetists in training are expected to demonstrate progression to be able to lead a local QI project by the end of the stage of training. The project can be in an area of anaesthetic practice of their choice.

Stage 3

Anaesthetists in training should demonstrate ability to supervise aspects of a QI project involving other doctors and members of the multi-professional team and be able to use a systems approach to improving patient safety by the end of the stage of training.

Special Interest Areas (SIA) Safety & QI

The new non-clinical SIAs have additional advanced learning outcomes beyond the requirements for the Stage 3. This is an optional component of the 2021 Curriculum and will enable the anaesthetist to lead on this aspect of work as part of a future career. The learning outcomes include the ability to mentor and train others in QI upon completion of the SIA.

When individuals are approaching the end of a stage of training, it is advisable to review the training progress with the designated trainer of the local assessment faculty responsible for the Safety and QI HALO in advance, to ensure that any remaining areas for further learning are identified to enable completion of the domain.

Assessment of learning outcomes

The 2021 Curriculum describes a spiral approach to learning and developing QI knowledge, skills and experience.

Feedback should focus on the learning gained through educational activities rather than the impact of the project itself, it is important to remember that significant learning can be gained from a challenging project or Plan-Do-Study-Act (PDSA) cycle that did not yield a successful change.

Each project and learning experience present the opportunity to gain feedback on QI work and anaesthetists in training can **utilise the Anaesthesia QI Project Assessment Tool (A-QIPAT)** to

gain feedback on all aspects of their QI work. This **formative assessment** can be used to provide feedback on **part of a project or a completed project**. The emphasis is on feedback to inform future learning.

Anaesthetists in training can draw on a broad range of evidence to demonstrate attainment of the Key Capabilities, in addition to the A-QIPAT this can **include Personal Activities** and **Personal Reflections.**

Further guidance on the assessment of Safety and QI HALO, including suggested evidence, is provided within each HALO guide.

Who approves the HALO for safety & QI?

The HALO should be approved by a **designated trainer** of the local Assessment Faculty.

This is likely to be led by a supervisor with an ongoing commitment to Safety and QI. This may be your local QI lead, Safe Anaesthesia Liaison Group (SALG) lead or RCoA Quality Network Regional Lead within your school, depending on local arrangements.

This mirrors the process that supports the programme of assessment across the 2021 Curriculum. The Assessment Faculty should consider a broad scope of evidence to determine if the anaesthetist in training has met the requirements of the Learning Outcomes for the Safety & QI domain described of the curriculum.

Assessment Faculty are:

- **designated trainers** responsible for the assessment of the Learning Outcomes within the domain of learning
- have knowledge of the requirements of the Learning Outcomes for the respective domain of learning
- trainers with **existing professional commitments relevant to the learning outcomes** and can signpost to learning opportunities available locally.

Further details of the examples of evidence expected to be gained can be found in the accompanying HALO Guide.

Examples of evidence

- Models for QI
  - Model for improvement (PDSA)
  - Lean tools
- Process mapping
- Principles of stakeholder engagement
- Use of driver diagrams
- Use of tools to understand your system:
  - Pareto carts or fishbone diagrams to identify areas of improvement
- Principles of continuous measurement
  - Run charts
  - Variation
  - Statistical process control (SPC) charts
- Utility of qualitative data to support QI
- Spread of QI including use of reporting tools.

QI education considerations for trainers

We encourage Schools of Anaesthesia to develop school specific examples of evidence such as attendance at specific training days where available.

This can include a range of different training approaches including learning in the workplace, e-learning and structured courses or self-directed learning.

When developing materials or learning resources, it is beneficial to map the content against the different learning outcomes and key capabilities for each of the stages of training.

The RCoA Quality Network may be able to advise and share examples of different models that have been developed across different Schools of Anaesthesia; and provide further information and support if you are looking to develop your own QI education programme locally.

What resources are available to support learning in safety and QI?

There are a number of national and local resources available to support this area of practice. Some schools of anaesthesia have developed specific courses and programmes of learning in safety and QI. Your RCoA Quality Network Regional Lead may be able to provide further information.

Raising the Standards: RCoA QI Compendium

The Raising the Standards: RCoA QI Compendium, previously known as the Audit Recipe Book, provides a manual of QI recipes for anaesthetists. The compendium includes specific examples of improvement projects mapped to national guidelines and priorities. Each chapter is written by a leader in that aspect of anaesthetic practice alongside an expert QI editor to guide possible project measures and change ideas that can inform local projects.

National Emergency Laparotomy Audit (NELA) and Perioperative Quality Improvement Programme (PQIP)

National projects that use established data collection systems such as NELA or PQIP can be useful models that enable the anaesthetist in training to focus on improvement ideas using a standardised data set.

e-Learning for Healthcare

The Perioperative Improvement Science and Management (PRISM-ed) module introduces QI methodology and is available online. This resource is being updated and mapped against the domains of the 2021 Curriculum.

Considerations for developing SIA safety and QI

If you are considering developing an SIA in Safety and QI locally, it is essential to discuss your ideas with your head of school and training programme director so that the training can be aligned with existing training programmes available in your region and other available SIA modules. Consider how the SIA will be structured and the balance of clinical and QI time across the training module.

A **non-clinical SIA must be for six months duration** to meet the learning outcomes of the SIA. Clinical activities can also be undertaken during this period; however, it is important that the **majority of the time in this period should be focused on Safety and QI**. Only one non-clinical SIA may be completed during the training programme, so the remaining SIA time will be directed towards a clinical SIA.

Supervisors may also wish to consider access to further learning opportunities such as fellowships, attendance at train the trainer style courses and regional training programmes to enable their own development.

Further information on the timing and sequence of the SIA can be discussed with training programme directors who can take account of individual circumstances and local context.

Read more detailed information on the learning outcomes and assessment of SIA Safety and QI and additional guidance for SIA supervisors.

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