

Training and learning in quality improvement: what should be done?

Call for ideas from the Healthcare Quality Improvement Partnership (HQIP)

1. The situation now

Quality Improvement (QI) approaches are used in healthcare in the UK every day, both by specialist QI staff working in audit, patient safety, patient surveys, clinical dashboards, performance monitoring and many other settings; and also by clinicians and clinical managers working to improve the care they provide. Yet there is no recognised system of qualification to use QI methods, manage QI functions or work full time in quality improvement, whether the person using QI methods is a full time QI specialist, in audit or other broader methods of QI; nor as a clinician who uses QI as part of clinical or management activity.

So what training is currently available?

Undergraduate education in healthcare: Taking clinical qualifications first, we do not know the degree to which courses for undergraduates cover QI at present – whether for nursing, medicine or any other healthcare discipline. These vary because it is not a curricula requirement. There have been attempts to promote QI learning at undergraduate level for professional disciplines.

At postgraduate level, there are examples of draft curricula that could be followed to promote aspects of quality within medicine, for example: http://www.institute.nhs.uk/safer_care/safer_care/patient_safety_and_improvement_guidance_for_postgraduate_medical_education.html. No such curriculum is actually taught yet. Some QI activity is a requirement for FY1/2 junior doctors – there is a requirement to practice clinical audit and some receive education in this regard, although often this time is very short and sometimes not present.

Turning to those who work on QI or health management, the range of their undergraduate learning is considerable. Those who have completed a health studies degree may have studied QI science as part of this degree, but there is no agreed curriculum. Some of those who work full time in QI and related roles will have a previous relevant healthcare qualification and clinical experience, but both because QI is not always covered in clinical training, as above, and because most don't have a clinical qualification, and because health studies or other generic non-clinical health degree level courses don't always cover QI, people in these roles will have received no agreed entry level training against specified competences prior to starting their practice in QI. Their only learning is likely to be received after they start work in a QI role.

QI learning as part of CPD or as part of generic health management training: As there is no entry level qualification to work in specific QI roles, and it is not covered in undergraduate training, the most common pattern is that people take a course as part of CPD, and this also applies to clinical professionals; or future QI specialists take a generic post graduate health management course at some point, perhaps before they start working in QI roles, but often after.

There is one specialist course on quality:

<http://www1.imperial.ac.uk/surgeryandcancer/teaching/postgraded/qualityandsafetyinhealthcare/> Most courses of this type at masters level are general management courses. There are also a number of modules covering QI which form part of these wider health management qualifications, but which can also be taken as free standing courses, such as at www.hsmc.bham.ac.uk/programmes. There are some on-line short courses of this type at masters or diploma level which can be taken as free standing courses e.g. <http://courses.brighton.ac.uk/course.php?cnum=1003>. Such courses are limited in their scope related to quality improvement.

There are specialist courses in aspects of the broader topic of QI, for example patient safety: <http://www.lboro.ac.uk/study/postgraduate/courses/departments/business/patientsafetymanagement/>; <http://www.beds.ac.uk/howtoapply/courses/postgraduate/enhancing-quality-through-patient-safety>

There are specific courses on quality in America: such as

<http://www.nahq.org/certify/content/index.html>; and <http://asq.org/healthcare-use/why-quality/overview.html>; but these have very low take up in the UK. This main American qualification does not appear to have had a UK person take this course in many years and there are a handful of others practising in the UK who possess this course. There are also American on-line short courses: e.g. <http://www.ihl.org/offerings/IHIOpenSchool/Courses/Pages/default.aspx>.

Local training: Given the lack of a national system the main instigation of action and opportunity to learn basic skills in QI is through smaller scale local training events and local QI activity where people learn as they practice. These may be perhaps driven by local clinical audit staff; through NHSIII activity, a Health Foundation project and so on. There is no certainty what this covers, but it is almost certainly likely to be based on single approaches – LEAN, Six-sigma, Audit, PDSA cycles, Productive ward, dashboards etc rather than include teaching in various methods of QI in an integrated course.

Action in hand from HQIP: Because there is no system to regulate the entry to work in QI as a whole, in relation to clinical audit specifically HQIP has been trying to formalise training by settings standards and course content practitioners will need in order to practice as setting the standard for the field. This will cover both undergraduate training for clinicians and also specialists. See our pages at: <http://www.hqip.org.uk/education-and-training-2/>

Summary about taught courses: There are therefore no formalised systems of qualification to work in quality improvement as an integrated discipline involving various methods and approaches through higher education or taught entry courses. There are courses which

teach QI, mostly as part of wider subjects, but their content or scope is not codified or agreed, so in the main these are partial or incomplete in offering a system for regulation or professionalisation of QI work. There is no entry level course. Clinicians learn a small amount as undergraduates, or as part of CPD.

Fellowships: In the absence of taught courses, there are learning opportunities by attachment, and the dominant attachment based opportunity is as a fellow or associate of the IHI in Boston. This can be accessed directly but also through the Health Foundation: <http://www.health.org.uk/areas-of-work/programmes/quality-improvement-fellowships/> Such schemes clearly have value and quite a number of those prominent in QI in the UK have passed through this route, although it is a small number in total. However it is not in any sense a complete route to the organisation of learning and expertise in QI for the majority: it will only meet the needs of a small minority of people, who may act as local catalysts, and it is expensive and challenging in its time commitment.

For a historical perspective on what was needed:

http://qualitysafety.bmj.com/content/10/suppl_2/ii70.full.pdf. An interesting sideways perspective is offered by a recent article:

http://qualitysafety.bmj.com/content/20/Suppl_1/i73.full

2. So what could or should be done?

The lack of a formalised system of learning may reflect the fact that QI roles are themselves not formalised. Typically people either manage various types of QI as part of broader healthcare roles, practice one element of it (patient safety/audit etc) or try to instigate QI as part of clinical leadership roles. The concept of a career in QI that requires a specific qualification may not properly exist, except for subsidiary areas like audit or patient safety. At the same time, many thousands of people take part in QI, often on the basis of short course learning, typically in specific techniques – without any systematic grasp of the science they practice and with potential impacts on the quality of their work and a failure to impact on health practice or patient outcomes (see our evaluations of the effectiveness of audit for the evidence: <http://www.hqip.org.uk/literature-on-the-effectiveness-of-clinical-audit/>). They will also lack knowledge of alternative QI practises they might use. Many more might be motivated to take part in QI if it were taught more widely, or exposed to other ideas and approaches that systematic learning would offer.

HQIP believes there should be national agreement on a qualification or the specific learning content needed to work in substantive QI roles or to have managerial responsibility for QI. Is there not a risk that without such codification of the substantive training to practice a range of QI approaches (as opposed to these short courses in specific methods), the impact of QI activity will be blunted, its practice ineffective? Given the financial pressure on the NHS, is the need to equip people in using or managing a range of QI methods not essential, given both the waste that ineffective practice involves and also the potential gains effective practice will offer? Good QI saves money through minimising waste, avoiding unnecessary procedures and tests, and improves poor practice that leads to failure to treat patients effectively and not deliver good outcomes.

Such a qualification also allows for a career structure for those in disparate QI roles – patient safety, implantation for NICE guidelines, clinical audit etc – to ensure their skills are linked and their commitment maintained for a sustained NHS career where they can with confidence move between jobs and offer grounded skills and knowledge across methods. Such a qualification could also form the basis of membership of a possible professional body for those who work in QI, with the potential this would bring to drive the quality of work up. (HQIP is also consulting on the need for such a body. See <http://www.hqip.org.uk/professional-body-for-quality-improvement-have-your-say-now/>)

This opens the question for debate: **does the UK need to have a defined generic healthcare QI course structure, the content of which needs to be defined, and the quality of which needs to be assured?**

Is there enough common interest for this to be needed? Or can the market only support the current range of courses given above and should we just let the market shape the learning opportunities needed? Should employers specify a level of learning before they employ people in QI roles – do we need this agreed course content and curriculum to enable them to do so? Should there be definition and recommendation on the content of shorter, local courses?

Who might lead this attempt to codify this content?

HQIP is working to address these issues for clinical audit. However increasingly our stakeholders – those who work in audit, whether as clinicians or specialists, say that the need is for a generic QI learning architecture. HQIP would like to be central to helping create such an architecture. However we can only do this working with partners – the task is too big otherwise.

Next steps:

- We believe the first step is to secure agreement that the problem identified needs the solution we discuss here
- Given this agreement we think the first step is to agree the broad content of such a curriculum
- The next stage is the recommendation of a more detailed learning architecture and to find ways to develop its implementation

Are you interested in these ideas? Do you support the need for such systematic learning? Are you keen to partner HQIP in this activity?

HQIP will be opening a discussion thread on its [NCAF Forum](#) to give people there an opportunity to discuss these issues. We will also be discussing these ideas with other organisations who work on quality improvement nationally, recognising that we need to work together. We will also be discussing these with the Department of Health.

You can also email us at gid@hqip.org.uk