

Appraising the current design of a quality equality impact assessment tool and opportunities for future research - Executive summary

Sean Manzi, Associate research fellow, PenCHORD

Introduction to Quality Impact Assessment in Healthcare

Quality impact assessment (QIA) was instigated by the National Quality Board in 2010 as a way of ensuring high patient care standards during the large-scale restructuring of the National Health Service (NHS) and the accompanying cost reduction requirements initiated by national Government. Quality impact assessments form one aspect of the cost improvement programme (CIP) decision making and commissioning process. The business case outlining the potential financial savings of a proposed CIP are now balanced by an assessment of the impact that the proposed changes may have on the quality of patient care.

The guidelines provided by the National Quality Board recommended that QIA for proposed CIP's be carried out along three dimensions. The first dimension is the impact of the CIP on patient safety, the second the impact the CIP would have on clinical effectiveness/the effectiveness of a treatment and thirdly the experience the patient has while receiving care. Other impacts could also be considered for example; adverse publicity, alignment with hospital strategy and feasibility.

The QIA process has been formalised by a number of Clinical Commissioning Groups (CCG's) and individual hospitals in England. There are examples of risk matrices being utilised which measure the likelihood of an outcome occurring alongside the severity of the impact to produce a numerical impact score. The score produced by a risk matrix places emphasis on the potential for a negative impact on quality. The scoring scale on a risk matrix does not fully recognise the potential for positive impacts on quality. Other examples of approaches to QIA use more checkbox description based measures of impact on quality. This approach to QIA accounts for potential positive impacts of the proposed change on quality but without a numerical score for impact on quality.

The Northern, Eastern and Western Devon Clinical Commissioning group Quality Equality Impact Assessment tool

A quality equality impact assessment (QEIA) tool has been developed by Mr Simon Polak and used within Northern, Eastern and Western Devon (NEW Devon) CCG. This QEIA tool replaces a purely narrative QIA process which relied on text descriptions of quality impact without a numerical scoring system. A numerical scoring system has been developed for the QEIA tool along a scale of positive impact on quality to negative impact on quality. This scoring system also accounts for the number of patients that would be affected by the proposed CIP changes and the length of time the change would be in place for. The QEIA tool produces individual scores along the following four dimensions of quality; patient safety, treatment effectiveness, patient experience and other impacts. There are also scores for the total impact on quality and total impact on quality using absolute (all positive) values. These scores are the sum of the patient safety, treatment effectiveness and patient experience dimensions. A final score includes the other impacts dimension.

The current version of the QEIA tool was used by NEW Devon CCG for their autumn 2014 round of CIP development. It has also been used by the NEW Devon CCG to evaluate their planning processes.

PenCHORD was approached to provide an independent appraisal of the tool suggesting immediate changes that could be made to improve the effectiveness and usefulness of the tool. There is also potential for future collaborative research that would further develop the QEIA tool and further our understanding of assessing quality in healthcare service provision.

Suggested changes to the NEW Devon CCG QEIA tool

Changes that could immediately be made to the QEIA tool are grouped under three general headings; changes to the scoring system and measurement scales, naming conventions and other changes.

The changes to the scoring system and measurement scales include removing references to risk in the tool and scoring mechanism. A novel and useful aspect of the QEIA tool is that it does not have to rely on a risk based measurement system. Some of the outcome scoring scales were adapted from a risk measurement scale, while this was useful as a guide during the initial creation of the tool the addition of a positive side to the scale would enhance its usefulness. Replacing risk with impact on quality would make the tool more internally consistent helping the user to understand the scoring system better. The decision matrix which guides the user in the scoring process would likewise benefit from more directly referencing impact on quality. It is suggested that the decision matrix use a graduated scale running from high negative impact on quality (score of -5) to high positive impact on quality (score of 5).

The QEIA tool scoring mechanism uses category scores for the number of patients impacted by a change and length of time for which a proposed change would impact on patients. The current categories weight the scores in favour of CIP's targeted at smaller groups of patients and that take place over shorter time periods. This system cannot currently be substantiated as suitable for the current use of the tool. It is suggested that a linear scoring system be used where all of the categories are treated equally. It will require further research to determine whether or not these variables should use weighted categories and if so what those weightings should be.

The changes suggested under the naming conventions heading are to be applied to the outcome score names and, titles and headings within the body of the QEIA tool. All of these name changes are suggested to improve the consistency of naming throughout the tool and remove as much ambiguity as possible from the tool. This will aid the user in understanding what information is being requested from them and provided to them.

The other changes section refers to two changes in particular. The first of these is to the menu navigation buttons on the front page of the QEIA tool. The current order does not provide a systematic way for the user to understand and navigate through the QEIA tool; several alternatives are suggested which use an ordered and number layout. The final suggested change is the inclusion of an evidence hierarchy to prompt the user into including and appropriately referencing suitable evidence such as randomised control trial studies, case studies, internal reports and not solely relying on expert opinion.

Questions arising from the report and future lines of research

From the appraisal of the QEIA tool undertaken during this report a large number of questions arose. These questions were centred around four key themes; the systems in which the tool was/could be

used, the user entering information into the tool, the decision maker basing their judgements on the content of the tool and direct development of the tool.

In relation to the system in which the QEIA tool is/could be used, various questions arose such as:

- In what other situations can the QEIA tool be used?
- Who are the stakeholders within these systems and what is their role?
- What is the understanding and perspective of the various stakeholders on the quality impact assessment process?

These questions focus on where the QEIA tool can be used, who would be using the tool and how is it used. Understanding the role of the QEIA tool in the QIA process for healthcare service provision is the main aspect of these questions.

The user completing the QEIA tool and entering information into the tool was of particular interest. The QEIA tool scoring system currently relies on the user to make subjective predictive judgements about the impact of their proposed programme of change. This raises a number of questions about the user's ability to score impact on quality consistently and how this might vary between stakeholder groups.

The decision maker is the person who would be using the information from the QEIA tool to inform their decisions involving CIP commissioning. The questions around the decision maker are about how the information in the QEIA tool is interpreted and integrated into the decision making process. The comparison of the quality of the data coming from the QEIA tool to other data types, how the decision maker would deal with conflicting information from different sources and the relevance of risk in relation to impact on quality are all question topics raised by the report.

Questions arising that were directly linked to the further development of the QEIA tool focused on specific aspects tool which with more information could be improved and the movement of the entire tool to a more user friendly platform. The change of platform for the QEIA tool would mean taking it from its current Excel format and optimising it for use as a web based or mobile application. Specific refinements ask how the variables currently included in the tool could be changed to more accurately represent impact on quality. The visualisation of the data entered into the QEIA tool and output from it is also subject to questioning because this is of importance for both the users and the decision makers understanding of the impact on quality scores and what they represent.

Building on the questions raised by this report several possible projects and lines of research are outlined. These projects would begin with a literature search to gather a broad base of knowledge about quality impact assessment methods, measurement and other approaches. This would lead on to a project mapping the systems and process in which the QEIA tool is and could be used. The stakeholders would also be identified and a needs assessment carried out to inform the redesign of the QEIA tool. The platform redesign of the QEIA tool would also begin at an early stage with a concept design. The full application development process would also be planned at this point and the possibility of a knowledge transfer partnership or internship for the creation of the redesigned tool investigated.

Following the process mapping of the systems in which the QEIA tool sits and conceptual redesign of the QEIA tool a number of studies could be undertaken to look at how the QEIA tool is used, the

reliability of the scoring mechanism and alternative scoring mechanisms and many of the specific questions raised in this report. These projects hold a high degree of potential for novel and useful insights into the idea of quality in healthcare, how quality can best be measured and how measures of impact on quality can be used to inform decision making.