

## QUALITY IMPROVEMENT Challenges in conducting quality improvement projects: reflections of a junior doctor

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**KEYWORDS:** healthcare quality improvement, quality improvement projects, quality improvement, patient safety

**DOI:** 10.7861/fhj.2022-0076

### Introduction

Quality improvement (QI) in healthcare dates back to the mid-19th century.<sup>1–3</sup> It has now evolved into a very systematic and structured approach for improving the safety and effectiveness of patients' care and has become a mandatory requirement for many healthcare professions.<sup>4</sup>

While the importance and relevance of QI are well established, not much experience has been shared about real-life challenges encountered while conducting them. This article is a personal reflection of the learning experiences of a junior doctor while conducting QI in the NHS and contains useful personal hints to ease the task of doing QI. It should be helpful for novices to QI in health settings (such as foundation year doctors) and may also inform decision making at managerial level (such as training committees and hospital managers).

### Challenges in conducting quality improvement projects

#### Organisational rigidity

My first and most important lesson while doing QI projects (QIPs) was the realisation of an inherent resistance to change ingrained in complex organisations, such as health systems.<sup>5</sup> While organisational rigidity may pose a challenge at any stage of a QIP, its impact is most felt at the implementation stage.

One example comes to mind in a project I conducted with my colleagues to improve the quality of documentation in fluid balance charts on a medical ward. We encountered several bottlenecks in trying to implement this project across the trust. Our change strategy was to introduce regular training sessions on documentation for nursing staff. All efforts to secure the cooperation of critical stakeholders proved futile, even after the intervention of managerial staff. Two learning points were apparent here. First was that the hospital management

structure was not as hierarchically linear as we expected (ie 'orders from above' did not necessarily translate to 'actions below') and, second, ownership of change mechanisms should be clearly defined early in a project. We were unable to secure the cooperation of the stakeholders because they did not 'own' the project from the start. A final lesson was that implementation of change is difficult if change implementation structures are lacking.

In a similar project to introduce weighing all patients attending the emergency department (ED), we encountered similar challenges as critical stakeholders refused to buy into the project.

#### Interprofessional frictions

I noticed a subtle friction between different professional groups in the health sector and found that people were less likely to be responsive to change if it is introduced by someone outside their profession rather than from within their ranks. Again, this boils down to ownership of the change management. I found that doctors, for instance, are more likely to adapt to change if it is introduced by their consultant rather than by nursing staff, and vice versa. I learnt that the way around this is to secure the support of critical stakeholders early in the project.

#### Inadequate support

As a junior doctor, I often lack the optimal support I require to conduct QIPs. High-impact projects often involve implementing changes that may affect the workflow of other professions (such as asking nursing staff to weigh all patients attending the ED in one of our projects mentioned earlier). Without adequate support from more senior colleagues, my team members and I were unable to succeed in the project.

In the few hospitals I have conducted QI as a junior doctor, I have also experienced shortfalls in the support offered by the hospital; for instance, the audit departments did not provide more support other than registering and signing-off completed projects.

#### Poor resources

High-impact QIPs are resource intensive, requiring time, human capital and financial investments, scarce resources for a junior doctor. In our project to introduce weighing of all patients attending the ED, we required new weighing scales and weighing bridges to be provided in the department (there was only one standing scale in the whole department). The cost of these new scales was more than the monthly salary of a junior doctor.

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Without the support of senior colleagues and the departmental administrative team, the project failed.

### Lack of teamwork

A passionate and enthusiastic team is critical for the success of any QI project. I have often found it daunting to assemble such a team. I noticed that people join QI projects for different reasons, often to get it signed off in their portfolios. I found managing a disinterested team tedious and often led to futile projects.

### Knowledge gap

I noticed a significant knowledge gap in QI and QI methodologies among junior doctors. On some occasions I have had to explain basic methodologies such as plan, do, study, act (PDSA) to my colleagues. In all the teaching sessions I have attended in the NHS, QI methodologies have been taught only once. I suspect there might be an assumption by trainers that junior doctors are proficient on the subject.

### Poor motivation

At some point, my motivation to participate in further QI declined as my previous projects did not translate into a change in practice. At this time, QI felt like an academic exercise. But my passion for QI drove me to continue (I am currently working on two projects).

My hospital(s) also lacked QI incentivising avenues such as QI clubs, QI journals or QI competitions.

### Conclusion

A summary of my learning points from doing QI so far are:

- > hospitals are complex systems that are resistant to change
- > QIPs require careful planning
- > departmental hierarchical structures may not be as linear as expected
- > motivation and passion drive QI.

Some useful personal hints to help ease the task of doing QI include:

- > appreciate the complexity of one's local environment and choose projects that align with the department's or hospital's long-term change agenda
- > select a team that is equally enthusiastic as you are
- > conduct a stakeholder analysis early and identify critical stakeholders for the project
- > getting involved with QI clubs and journals, where available, could be helpful.
- > QI methodologies should feature more prominently in medical students' and doctors' teaching.

Despite these challenges, QI is worthwhile and rewarding. Appreciating them ahead of time and devising means to overcome them makes the task of doing QI seamless. ■

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