

Instigating change: trainee doctors' perspective

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ABSTRACT

In the 21st century, the core skills of trainee doctors are evolving as clinicians, leaders and innovators. Leadership skills are an essential tool for all doctors and need to be an integral part of their training and learning as set out in the General Medical Council's Good Medical Practice. It is essential to develop these skills at an early stage and continually improve them. A group of junior doctors participated in a pilot programme for leadership with the aim of executing a quality improvement (QI) project. This article describes our experiences of both the course itself and the project undertaken by our group. As part of the process of implementing change, we faced a number of challenges which contributed to our learning. These have been explored as well as potential ways to overcome them to enable the swift and smooth development of future QI projects. Using an example of a QI project looking at handover, this article demonstrates how a trainee doctor can implement their project for both professional and institutional improvement.

INTRODUCTION

All doctors work as part of the healthcare system and cannot carry out their professional practice in isolation. It is now becoming increasingly evident that doctors need to go beyond their clinical responsibilities and act as leaders and innovators, thus contributing to the effective running of the National Health Service (NHS). Leadership skills are an essential tool for all doctors and need to be an integral part of their training and learning as set out in the General Medical Council's (GMC) Good Medical Practice. Developing these skills at an early stage of training is fundamental in equipping doctors with the leadership and management skills necessary to manage patients, resources and colleagues concurrently.^{1 2} The current government proposals to reform the NHS will put doctors increasingly at the forefront of service commissioning, design and provi-

sion. In addition, with the need to find £15–20 billion of efficiency savings across the NHS by 2014, these core skills will become increasingly important in allowing doctors to rise to the challenge of meeting their ever changing role in the 21st century.^{3 4}

There are many opportunities available at different stages of training to improve and build on essential leadership skills. Though many are not formally incorporated into training programmes, they can help with the development of strong personal and professional values and instil attitudes and practice which ultimately help to improve clinical care.² Furthermore, junior doctors are frequently at the forefront of delivering patient care, and hence are well positioned to identify, develop and deliver change to improve quality of care and utilise increasingly strained resources more effectively. Despite this, junior doctors are often under-represented in quality improvement (QI) initiatives, and are not often given the tools to initiate or deliver change.

To address some of the problems outlined, a novel programme has been developed by the North West Thames London Deanery, 'Today's Doctors, Tomorrow's Leaders (TDTL)'. A group of junior doctors in London participated in this programme which aimed to equip the participants with the leadership and management skills needed to initiate and develop QI programmes in their base hospitals. Following our experiences of attempting to drive through such a project, we will outline some of the challenges we faced and some of the strategies used to overcome them.⁵

OVERVIEW OF TDTL

TDTL was developed and delivered within Imperial College Healthcare NHS Trust and the North West Thames Foundation School between December 2010 and July 2011 at

a cost of £17 000 for foundation year doctors. The aim of TDTL was to develop leadership and team-working skills at an early stage of a medical professional's career so that these capabilities are ingrained into their work ethic by the end of their training. The programme recognised the fact that junior doctors have a unique insight into QI opportunities and that this should be utilised to improve patient care. The programme offered a series of modules consisting of a core lecture programme, team working and better self-awareness exercises (including completion of the Myers-Briggs Type Indicator assessment), small group workshops, and the opportunity to participate in small QI projects in base hospitals. Throughout the programme participants had access to 'design surgeries' where problems with the QI project could be discussed and suggestions to overcome these problems recommended. The year-long programme culminated in a regional conference in mid July 2011 where participants presented the work that had been achieved throughout the year.

CLINICAL HANDOVER

The importance of good clinical handover is obvious when we consider the disastrous consequences of poor communication, either through inaction or incorrect action. From our research into clinical handover at our base hospital we noted that patients were usually being handed over verbally, often with important information presented in an erratic and disorganised way. Unfortunately, this method relies inextricably on the communicative strengths of both the presenter and the listener. Furthermore, handover practices are frequently inconsistent and potentially prone to clinical error; experience backed up by industrial evidence showing poor handover of information can have potentially devastating outcomes.⁶

With the implementation of the European Working Time Directive, limiting our working hours, clinical handover has become an increasingly important and common part of junior doctor's work. Good quality communication among all healthcare professionals in handover is essential in maintaining a high standard in the continuity of care. As such, clinical handover is potentially a high-risk activity that if done poorly can directly affect patient care and safety.⁷

Widespread anecdotal evidence among junior doctors would suggest that most are unhappy with the quality of handover, patients are occasionally lost between teams and that information transfer during handover is commonly poor.⁸ As potential gaps in the continuity of care can usually be identified before they occur it is our duty as doctors to ensure they are bridged as best as possible.

Furthermore, the lack of standardisation across different specialties and departments means that doctors are forced to familiarise themselves with new processes and systems on a frequent basis with the associated increased risk of error. This is despite recognition of the issues by relevant bodies, namely the British Medical Association and the Royal College of Surgeons.^{9 10}

We decided to address the problems associated with poor clinical handover for our QI project. The wide applicability of a potential solution would provide not only interest and motivation for all participants, but also help to gain support from multiple sources. The project was developed with the assistance of the TDTL leaders who were involved at all steps, providing advice and suggestions.

The aim of our project was to design and implement a new, innovative, computer-based system for clinical handover to improve the structure, reliability and process of handover. The goal was for a system that would be updated by junior doctors but accessible and modifiable by doctors of all levels at all times, in medical and surgical specialties. The handover is typically led by senior specialists; our method of computer-based handover is not designed to change that but to provide a more robust and complementary format that is accessible to all staff concerned, allowing a rapid, accurate, accountable handover of patients vertically within individual clinical teams, and horizontally between different specialties and other healthcare professionals. The system would need to be fully integrated with existing IT systems in the hospital and accessible on the Trust intranet. However, to avoid complexity and to maintain speed and ease of use, it would be separate from other results-based programmes (eg, pathology or radiology results). The target date for completion of the project was 6 months with a team of five junior doctors sharing the task.

We started by carrying out a survey of the wide range of handover documents that were in use by all specialties in our hospital. From this, we identified the core dataset required for a single, Trust-wide, fully integrated handover document which would meet the needs of all specialties. This was used to produce the specifications we required.

We then identified key stakeholders including junior doctors, senior trainees, consultants and the IT department. The idea was explored with junior doctors through a questionnaire, which found that the majority agreed clinical handover was an important area to address and improve. We also arranged meetings with key consultants to share our vision and get buy-in. In addition, we developed a close relationship with the IT department who were keen to work with us on this project.

Over the period of the project, we were supported by a number of TDTL training sessions which helped develop our leadership skills. In addition, leadership consultants ran monthly workshops where we could discuss the challenges faced and how we could overcome these with experts.

By the end of the project, we managed to develop a prototype of the handover system demonstrating the end user interface with the required specifications, as well as making significant progress on the design and feasibility of the underlying IT infrastructure required. In addition, we generated enough enthusiasm for the project throughout the hospital that, following our presentation at a Hospital Grand Round, there was enough support among all key stakeholders and a commitment was made by senior consultants to take this project forward. Unfortunately, we did not get to the stage of implementing the prototype Trust-wide during the lifespan of the project. However, we hope that following the commitment made by senior stakeholders, this project will come to fruition. In the meantime, the key points identified by the project have resulted in changes being made to some departmental handover processes and lists, which has improved both the efficiency of the handover process and patient safety. Moreover, during the process we have learnt a huge amount about making change happen, and how it is possible to overcome some of the challenges faced.

CHALLENGES

During our journey, we encountered many hurdles. Below, we will reflect on some of these difficulties accompanied by strategies and methods used to try to overcome them.

Complexity of organisation

We identified at an early stage that hospitals have a complex and often confusing organisational structure. This was partly explored in our teaching during the TDTL programme and through speaking with senior clinicians. For example, in this project we soon realised that due to the complex nature of IT provision and procurement within the NHS, we had to factor in the difficulty of working within a landscape of multiple, often independent IT systems, together with the competing interests of multiple new IT infrastructure projects, which often seemed to lack an overall coherent strategy or lead. We spoke with our nominated lead for QI and leadership who provided us with further advice on resources to further our learning about the structure of healthcare. Important sources of information included the Department of Health, Strategic Health Authority, and Primary Care Trust websites, and publi-

cations. Identifying the nominated lead for QI and leadership at a local level, together with the Caldicott Guardian, can be of great help in identifying and facilitating potential projects. It is vital to be proactive and actively seek out opportunities; 'sitting and waiting' is never prolific. We found approaching relevant individuals directly particularly helpful (eg, talking directly with the Chief Executive of the IT department), and generally, we found the majority of people were only too delighted to help. In order to realise change a great deal of energy, drive and perseverance is essential.

Culture and inertia

The initial problem was easy to identify. However, the subsequent hurdle of introducing and integrating the solution was more of a challenge. We found our organisation generally resistant to change. For example, people who initially agreed with the problem in hand were later slow to introduce the pilot programme. People seemed to revert to the old way of doing things within days of introduction. For this change to be sustainable we needed to invest a great deal of time and effort in convincing the non-clinical team members (eg, management) of the need to further develop this electronic tool. Key to this was identifying not only the clinical need for change, but also a business case for change to support the cost of the development, implementation and maintenance of a new system, which we proposed. Identifying the financial costs associated with poor handover, such as potential for unnecessary patient complications, increased length of stay, and risk of re-admission, enabled us to demonstrate the project was cost effective and sustainable, with the potential to yield financial savings to the Trust in the short to medium term. We did this by providing statistical information (eg, the number of sheets of paper for the average handover) and accounts of personal experience of bad handover. We learnt that we need to ensure there is buy-in and enthusiasm for the new change to be maintained and used once implemented. Examples we used included presenting at Hospital Grand Rounds and open forums with the aim of reiterating the usefulness of our proposal and ensuring buy-in. In addition, we held regular meetings with all the involved parties from across the Trust to help us overcome new challenges and adapt the project as its design and goals evolved.

Evidence

Despite being aware of the weaknesses in clinical handover being a fairly common issue, we needed to prove the problem by gathering evidence. We needed to collect quantitative and qualitative evidence and present it to relevant parties. We identified that through discussing our ideas in a forum with a group of junior doctors

at a teaching session, experiences of handover, proved the problem subjectively as a cohort. We also gathered objective evidence through audit and a literature review to provide the evidence needed to put the case forward for change. We learnt on the TDTL programme that it is often best to identify the data you require and then collect what you need in a focused and concise fashion.

Information technology

Our solution was a simple software package. We were fortunate enough to have a very supportive IT department and after establishing a good rapport, were able to identify the development capabilities to create a new system. Some IT departments house their own designers and developers, which can prove economically and temporally beneficial. It is important to work with the IT department early in the process to ensure that key logistical issues are not overlooked. In our case, despite an early optimistic outlook, the subsequent journey proved a significant challenge as the further we progressed, more barriers would appear. These barriers were particularly around clinical governance, data security, IT licensing, the difficulties of facilitating communication between existing and new programmes, and also the difficulties posed by the uncertainties facing the NHS Connecting for Health Project and local NHS organisations and systems since the new proposals for NHS reform. This taught us about all the issues surrounding the use of IT in healthcare and how understanding all aspects concerning a QI project is of vital importance.

Resources

As part of our business proposal we needed to consider resources such as personnel, money and time as important factors in what we hoped to achieve. As junior doctors with busy clinical commitments, implementing projects that require a significant time commitment is a challenge. We had to overcome this by often arranging meetings out of hours. Furthermore, relying on considerable expenditure and investment from your organisation is only going to prove ever more difficult in these times of austerity. It is important to consider all factors from the outset when deciding if your project is achievable and going to be realistic—two important lessons taught on the TDTL programme.

DISCUSSION

In the 21st century, there is an increased drive to see doctors take on more significant leadership roles to aid in the delivery of high-quality healthcare and improve efficiency of healthcare organisations and systems.¹¹ Leadership skills are an essential tool for all doctors

throughout their training careers. As a group of junior doctors, we were encouraged to undertake a QI project by identifying a problem in the clinical setting. As such, we identified clinical handover as a major issue relating to patient safety.

Clinical handover requires great diligence and if done in a disorganised way can lead to the loss of important patient information. Most junior doctors are unhappy with the quality of handover affecting patient safety.¹² As potential gaps in the continuity of care can usually be identified before they occur, it is our duty as doctors to ensure they are bridged as best as possible. Furthermore, with changes in working hours, the need for a robust handover system is indispensable to ensure good continuity of care and patient safety.⁷ Initially, there was little or no support, but with time, senior supportive figures, such as our QI lead clinician, provided us with guidance to ensure our project was approved and had strength to go on. Senior colleagues can also play an important role in ensuring it is sustainable, and continually developed and modified with time to address new needs. Through the involvement of our lead clinician, we managed to allow our vision to evolve and our plans to adapt to meet the needs of all. We got the much needed buy-in from across the Trust that was needed to drive the project forward. This helped to maintain enthusiasm and positivity even though, at first, many of our ideas were not met with positive encouragement.

There are a limited number of medical leadership programmes being developed to help change the culture and attitudes of the medical profession, and enable doctors to gain a greater understanding of the strategic goals and direction of healthcare systems, and how doctors can play their part in this change for the benefit of their patients.^{13 14} By introducing a standardised and validated training programme in management and leadership at an early stage, junior doctors will be inspired to lead across professional boundaries, while grasping an understanding of the complex settings through which healthcare is delivered. The ultimate goal is to facilitate real change for the benefit of patients. We were privileged to be part of a novel programme introducing the basic concepts of leadership and management that provided us with the essential foundations to undertake a QI project. We identified handover as an issue at our hospital, explored potential solutions, faced numerous challenges and ultimately learnt about the process of instigating change. This process can be challenging, tedious and time-consuming at points, however it is ultimately both extremely satisfying for the doctor, and more importantly beneficial to patients. Learning in this way should play an important part in any junior doctor's training. Through the workshop and lecture content of the programme, and via the scoping,

designing and implementing of a QI project, we have developed our clinical and analytical skills, honed our abilities in searching and appraising the medical literature, and understood the links between the processes and outcomes of care.¹⁵

Junior doctors have an important role to play outside of their day-to-day clinical practice. They are skilled at identifying problems but frequently have difficulties in executing and sustaining complex QI projects due to many obstacles such as long hours, demands of patient care, and lack of support by managers and senior colleagues for their involvement in change projects. We would advise all juniors to grasp any opportunity to get involved in QI projects, and join a formalised management and leadership programme if possible. New developments such as the Faculty of Medical Leadership and Management by the Academy of Medical Royal Colleges, United Kingdom will enable junior trainees to seek out appropriate support and resources to help

them dedicate the time to undertake QI projects and achieve change within their organisation. Meanwhile the expanding number of institutions that are answering to the demand for increased physician expertise in leadership and management through the development of their own in-house programmes will only increase the opportunities available to junior doctors in the future.¹⁶

While a formal programme of training is not a prerequisite for junior doctors to instigate and lead change, it is certainly of benefit. However, it is the individual's own initiative and subsequent determination to accomplish change that is the most important factor in success. We have identified some common challenges seen when leading change within a complex organisation and how these can be overcome, summarised in [table 1](#). Hopefully this will enable trainee doctors to move institutions forward, and implement their visions and objectives for development and change throughout their future careers.¹⁷

Table 1 Challenges faced for quality improvement (QI) projects and how to overcome these challenges

Challenges	Ways to overcome these challenges
Complexity of organisation	Knock on doors: identify nominated clinical lead for QI Identify your local Caldicott Guardian Learn about how the NHS is structured
Culture/inertia	Be realistic Use evidence to prove a real problem Use 'people skills' Gauge interest from relevant parties to gain buy-in
Encouragement	Be positive Do not take things personally Provide incentives for people A small change can have a great impact Form a group of like-minded people
Evidence	Talk to the right people—data may already exist If none, collect evidence Minimal, focused data collection Map current processes and use LEAN thinking Audit or use evidence-based medicine
Information technology	Identify and communicate with key persons in charge Learn about what systems are available and how much can be established with the available staff/resources Work on developing and trialling a prototype
Originality	Clear explanation of clinical needs is vital to non-clinical staff If you identify a problem, it is likely someone else has as well Do not duplicate work Look for potential collaboration If need still exists, do not be afraid of continuing to develop it further
Resources	Time and people: spread the workload and work as part of a team. Specific, measurable and realistic targets Minimise costs Use any existing infrastructure Identify potential sources of funding. Be flexible with your time
Support and sustenance	Important to have good man-power and recruit as many people as possible Gain support from seniors, administrative staff and other allied healthcare professionals Identify suitable individuals to continue work done

Viewpoint

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REFERENCES

- Merry MD. Physician leadership for the 21st century. *Manag Health Care* 1993;1:31–41.
- Schwartz RW, Pogge C. Physician leadership: essential skills in a changing. *Am J Surg* 2000;180:187–92.
- Department of Health. *DH/NHS Finance, Performance and Operations. The Operating Framework for the NHS in England 2010/11*. London, UK: Department of Health, 2010.
- Field S. *NHS Future Forum. Summary Report on the Proposed Changes to the NHS*. London, UK: TSSO, 2011.
- Levenson R, Atkinson S, Shepherd S. *The 21st Century Doctor: Understanding the Doctors of Tomorrow*. London, UK: King's Fund Publication, 2009.
- Cullen WD. *The Public Enquiry into the Piper Alpha Disaster*. London: Department of Energy, HMSO, 1990.
- Petersen LA, Brennan TA, O'Neil AC, *et al*. Does housestaff discontinuity of care increase the risk for preventable adverse events? *Ann Intern Med* 1994;121:866–72.
- British Medical Association. *Safe Handover: Safe Patients. Guidance on Clinical Handover for Clinicians and Managers*. London: BMA, 2004.
- The Royal College of Surgeons of England. *Safe Handover: Guidance from the Working Time Directive Working Party*. London: RCSE, 2007.
- Doran GT. There's a S.M.A.R.T. way to write management's goals and objectives. *Manage Rev* 1981;70:35–6.
- Warren OJ, Carnall R. Medical leadership: why it's important, what is required, and how we develop it. *Postgrad Med J* 2011;87:27–32.
- Roughton VJ, Severs MP. The junior doctor handover: current practices and future expectations. *J R Coll Physicians Lond* 1996;30:213–14.
- Stoller JK. Developing physician-leaders: a call to action. *J Gen Intern Med* 2009;24:876–8.
- McAlearney AS, Fisher D, Heiser K, *et al*. Developing effective physician leaders: changing cultures and transforming organizations. *Hosp Top* 2005;83:11–18.
- Ashton CM. 'Invisible' doctors: making a case for involving medical residents in hospital quality improvement programs. *Acad Med* 1993;68:823–4.
- Tangalos EG, Blomberg RA, Hicks SS, *et al*. Mayo leadership programs for physicians. *Mayo Clin Proc* 1998;73:279–84.
- Guthrie MB. Challenges in developing physician leadership and management. *Front Health Serv Manage* 1999;15:3–26.

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