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- 8 Medicines and Healthcare Products Regulatory Agency. Licensing of medicines. Available at: www.mhra.gov.uk/ Howweregulate/Medicines/Licensingofmedicines/ [Accessed 29 November 2012].
- 9 Ernst & Young et Associés. Evaluation of the European Medicines Agency, final report. London: European Commission, 2010.
- 10 Pharmacovigilance legislation EMA/441425/2012.
- Directive 93/42/EEC.
- 12 Department of Health. Poly Implant Prosthese (PIP) silicone breast implants Review of the actions of the Medicines and Healthcare products Regulatory Agency (MHRA) and Department of Health. London: DH, 2012. www.gov.uk/government/uploads/system/ uploads/attachment_data/file/216537/dh_134043.pdf [Accessed 2 January 2014].
- 13 Proposal for a regulation of the European Parliament and of the Council on medical devices, and amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 EEC/2012/0266.
- 14 Al-Khatib SM, Sanders GD, Mark DB, et al. Implantable cardioverter defibrillators and cardiac resynchronization therapy in patients with left ventricular dysfunction: randomized trial evidence through 2004. Am Heart J 2005;149:1020-34

- 15 Harris PL, Vallabhaneni SR, Desgranges P, et al. Incidence and risk factors of late rupture, conversion, and death after endovascular repair of infrarenal aortic aneurysms: the EUROSTAR experience. J Vasc Surg 2000;32:739-49.
- 16 Kastrati A, Mehilli J, Pache J, et al. Analysis of 14 trials comparing sirolimus-eluting stents with bare-metal stents. N Engl J Med 2007;356:1030-9.
- 17 General Medical Council. Good practice in prescribing and managing medicines and devices. London: GMC, 2013.
- 18 Medicines and Healthcare products Regulatory Agency. Committee on the Safety of Devices, 2013, www.mhra.gov.uk/ Committees/Devices/CommitteeontheSafetyofDevices/ [Accessed 29 November 2013].
- 19 Johnson JA. FDA regulation of medical devices. Washington DC: Congressional Research Service, 2012.
- Basu S, Hassenplug JC. Patient access to medical devices a comparison of U.S. and European Review Processes. N Engl J Med 2012;363:485-8.

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Learning leadership skills in practice through quality improvement : ***

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The development of leadership skills in doctors in training is essential to support both their professional development and the future supply of clinical leaders the NHS so desperately needs. There is, however, limited opportunity in current training programmes for trainees to learn and develop these skills, and what opportunity there is has often focused on management rather than leadership skills. Involvement in trainee-led supported quality improvement projects can teach these skills. We summarise the current limitations in leadership training and discuss how the College's 'Learning To Make a Difference' programme, and others like it, are helping to teach leadership.

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The need for improvement of leadership in the NHS

Few people working in the NHS, or indeed in most other healthcare settings, would doubt that both leadership and quality improvement are urgent priorities. The NHS is again in a period of rapid change, and, in order to achieve the aims set out in 'Equity and excellence: liberating the NHS'1 while also remaining within the strict financial limitations necessary under the 'Nicholson Challenge',2 we need to be both more efficient and more effective. We will need strong leadership in order to achieve this. The clash of cultures between medicine and management highlighted in the Francis report³ has brought a renewed focus on the already-identified need for increased clinical involvement in leadership in the NHS, and on the need to teach doctors in training about management and leadership. 3-5 The Francis report particularly highlighted how a feeling of 'learned helplessness' among the medical and nursing staff within the Mid Staffordshire Trust resulted in 'professional disengagement from management' and was a major factor in allowing the poor care to continue.³ Doctors in training need a means to respond to this challenge in a positive



way. One group of trainees has suggested that the response should be by speaking out about poor care, by engaging with the management of their hospital, by learning leadership skills and by leading themselves. 6 How can trainee doctors effectively learn leadership skills?

Current leadership training focuses on management

To date, much of the available training for trainee doctors has focused on teaching management rather than leadership skills. This is reflected by the small part that leadership skills play in training curricula, and hence they are often viewed as an after-thought at the end of the training programme.⁷ The focus is often on NHS structure, processes, and the management aspects of a consultant's job. Management includes 'strategic and operational planning', 'organising and directing the activities of others' and 'manipulating and controlling outcomes'.8 'Leadership is not (just) management' but has a much broader meaning in healthcare. 9 Northouse defines leadership as 'a process whereby an individual influences a group of individuals to achieve a common goal', the purpose of which is to create 'change for the greater good'. 10 Only a small proportion of individuals will be Chief Executive Officers or Medical Directors, that is, 'Leaders with a big 'L''. 11 'Leadership with a small 'l' focuses on day-to-day leadership of our teams, wards, units and departments and is vital throughout healthcare; it involves setting an example and direction, and not only managing teams but also inspiring them. The leader and manager may not be the same person. The leader's challenge is one of integrating task and relationship behaviours in appropriate requisite measure. There is relatively little training for this type of day-to-day leadership in the current education of trainees, although this the kind of leadership that the vast majority of senior doctors are required to provide. Most doctors will be required to help run a department and organise a team, and providing these teams with inspiring leadership and direction is vital. A vast literature on leadership both within and without the medical world has established the importance of leadership in team performance and in the quality of care achieved by the team. 12,13

Quality improvement work teaches leadership

The Medical Leadership Competency Framework (MCLF) defines the skills that are important in medical leadership as 'demonstrating personal qualities, working with others, managing services, improving services, setting direction, creating a shared vision, and delivering organisational strategy'.4,14 How can these skills be effectively taught in training?

Quality Improvement (QI) has been defined as 'better patient experience and outcomes achieved through changing provider behaviour and organisation through using a systematic change method and strategies'. 15 Although achieving QI is not straightforward, 16 if done well, it has potential to both reduce costs and improve care. 15,17 Lord Darzi put quality improvement at the heart of his vision for improving the care delivered by the NHS in his 2008 report, producing a seven-step framework for achieving a focus on quality.¹⁸

Involvement in QI provides practical training in leadership skills.12 Leading quality improvement is complex and

demanding, and requires leaders to manage uncertainty, to foster cultural and behavioural change and to manage implementation. There is clear evidence that involving trainees in QI, and in particular allowing them to design and run their own QI projects, can leave organisations with longlasting benefit. 19,20 As trainees undertake QI projects, they will learn leadership skills by necessity. A large survey of those running QI projects found that this activity required all of the elements of leadership, and most respondents felt that leading improvement needed similar skills to 'generic' leadership. 12 A literature review also found that the leadership skills required to lead OI were broad and multi-factorial.13

Using the terms describing leadership in the MCLF, it is clear that QI provides skills in 'improving services', as well as at least some insight into managing them. 'Demonstrating personal qualities' and 'working with others' are also clearly required by those leading a QI project, which almost invariably require multi-disciplinary team working and can lead to the development of engagement and relationship skills.¹² QI work allows the development of the trainee's capability and confidence to respond appropriately to a wide range of complexities and opportunities that they might encounter, at least on a small scale, during a QI project. 12 Many other skills are also likely to be learnt during a QI project, including change management and embedding sustainability into projects. The challenge arising from this is how to measure objectively the development of leadership skills beyond selfassessment. The Quality Improvement Project Assessment Tool, which has been developed by the Joint Royal Colleges of Physicians Training Board and the Royal College of Physicians, can be used to assess a trainee's competence in completing a QI project. In some part, it also includes the assessment of trainee leadership skills in the context of doing a QI project.²¹ Multisource feedback, a recognised work-place-based assessment tool, is also a an appropriate method of assessing leadership.

Example: a personal experience

James Gamble undertook a NHS South Central Leadership Fellowship in 2011–12.²² During his fellowship, he was able to instigate and implement a successful quality-improvement project in his department.²³ This provided a very practical grounding in essential leadership skills, as well as experience of how higher-level hospital leadership operates. James wrote proposals and a business case, presented to the divisional board, and worked with a multi-disciplinary team over several months to iron out problems in the project. This was an opportunity to take on a leadership role in a specific situation that was very different to what he had previously experienced as a trainee. Although James continued to work as a trainee doctor, with a relatively lowly position in the hierarchy of his department, achieving the goals of the project required leadership skills, particularly in terms of working with a team and providing direction to that team - while not being their manager or team leader. The most important element of the fellowship and associated learning for James was developing increased personal insight into how he interacts with others and how he makes decisions. He believes these skills will stand him in good stead as he takes on more senior roles in the future.

Learning leadership through quality improvement

Continuous improvement of our practice is part of our professionalism. We have a responsibility and obligation to improve, and not just to identify the opportunities for improvement. To date, trainee involvement in QI has largely been through clinical audit. Clinical audit is QI but has not necessarily felt like it in practice. For many trainees, 'audit' focuses on the first half of the audit cycle, with a lot of measurement and very little hope of any visible change in practice. The practice of audit by trainees has become something of a token effort - brief audits of boring topics involving extensive data entry have abounded and most trainees struggle to complete a formal audit cycle during a 4-month attachment.²⁴ A potential opportunity to drive improvement has resulted in de-motivating our doctors in improvement practice. Moving from the traditional approach to implementing repeated realtime measurable changes using QI methodology, such as the Model For Improvement, as a robust framework to implement change transforms audit into meaningful QI.25 The most important differences between conventional audit projects and QI projects are the use of real-time measurements, techniques such as run charts or Statistical Process Control charts, and the opportunity to test changes in real time and to see the results.²⁵

Trainees bring unique perspectives and untapped potential to the area of improvement. A recent survey of almost 1,500 NHS junior doctors found that 91% had ideas for improvement in their workplace, but only 11% had been able to implement these ideas.²⁶ Trainees are heavily exposed to inefficiencies and safety issues and often understand the inner workings of the systems they labour in much better than more senior doctors, who may be relatively removed from the details. They also bring an enthusiasm and energy that has great value of its own.

The key theme is allowing trainees to put these ideas into action, and to take control of their own projects, allowing them a different level of responsibility and hence of experiential learning. Providing these opportunities in a supported environment will extend learning, as well as improving patient care in both the short and long term. It can also expose trainees to many elements of their organisation that they might previously have not been involved with, helping them to understand how the Trust and its management functions. This pushes trainees beyond the normal narrow focus on their ward, unit or speciality, and encourages them to work in a multidisciplinary team in order to achieve QI outcomes.

How can this be done in practice?

Some Royal Colleges are already attempting to integrate QI into their training programmes. The Royal College of Physicians' 'Learning To Make a Difference' (LTMD) programme aims to support trainees in Core Medical Training in undertaking a QI project annually during their training. 21 Doctors involved in a pilot gave very positive feedback with 85% feeling they had made a difference to patient care and 94% feeling they had developed new skills.²⁰ With changes in patient care evident from some of the trainee QI project outcomes, LTMD has demonstrated more evidence of benefit to patients than any of the current workplace-based assessments. Trainees are assisted in developing their ideas and in aligning them to their NHS Trust quality agenda. Making improvements in health care is hard

work, and help and support is needed. Cross-college working, for example with the Royal College of Anaesthetists, is starting to identify an improvement map that will support trainees as they implement QI projects and learn the much-needed new skills of QI and emerging leadership.

Other opportunities to learn leadership and management skills are available in several hospitals and regions. The Tickle project at Salford Royal NHS Foundation Trust provides training and education in patient safety and QI for foundation trainees (personal communication). In the Severn Deanery Foundation, doctors have been successfully supported to carry out OI projects.²⁷ Other initiatives include the National Medical Director's Clinical Fellow Scheme, 28 the National NHS Leadership Academy Clinical Leadership Fellows Programme²⁹ and the NHS South Central Leadership Fellows Scheme.²² These are more time-consuming options that require a six-month to one-year commitment, but they allow dedicated time for the acquisition of leadership and QI skills. Finally, the Faculty of Medical Leadership and Management is a 'new UK-wide organisation that aims to promote the advancement of medical leadership, management and QI at all stages of the medical career for the benefit of patients', 30 and provides a variety of resources to support leadership development.

Conclusion

By creating capability and capacity for our trainees to be able to ask the question 'what can I do to make a difference?' without having to wait to be asked to improve, we can empower them to counteract 'learned helplessness' resulting from the EU Working Time Directive, reduced training hours and increasing management complexity. By providing a robustly structured framework of methodology and an infrastructure of support, trainees have a means to respond to the lessons of the Francis report and to make a positive difference to patient care. As professionals, we have a duty to improve continuously and a responsibility to prepare our trainees for this improvement work. By making QI work both feasible and supported, we can create the right conditions for trainees to learn new skills in the science of improvement, to put them into practice, and at the same time, to learn and develop the leadership skills needed to make it happen.

Competing interests

Emma Vaux is the clinical lead for the 'Learning to Make a Difference' project.

References

- 1 Department of Health. Equity and excellence: liberating the NHS. London: DH, 2010. www.dh.gov.uk/prod_consum_dh/groups/dh_ digitalassets/@dh/@en/@ps/documents/digitalasset/dh_117794.pdf [Accessed 3 January 2014].
- 2 Nicholson D. Equity and excellence: liberating the NHS managing the transition. London: Department of Health, 2010. www.dh.gov.uk/ prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/ dh_117406.pdf [Accessed 3 January 2014].
- Francis R. Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry. London: The Stationery Office, 2013. www.midstaffspublicinquiry.com [Accessed 3 January 2014].
- Gillam S. Teaching doctors in training about management and leadership. BMJ 2011;343:d5672.

- 5 Imison C, Giordano RW. Doctors as leaders. BMJ 2009;338:b1555.
- Faculty of Medical Leadership and Management. Understanding Francis - a trainees' perspective on why the Francis Report is important. 2013. www.fmlm.ac.uk/sites/default/files/Understanding%20Francis. pdf [Accessed 3 January 2014].
- Joint Royal Colleges of Physicians Training Board. CT1/CT2 in Core Medical Training and Acute Care Common Stem, 2013. www.jrcptb. org.uk/trainingandcert/Pages/ST1-ST2.aspx [Accessed 3 January 2014].
- Barker RA. How can we train leaders if we do not know what leadership is? Human Relations 1997:50:343-62.
- Oliver D. Leadership is not management. BMJ 2009;338:b1900.
- Northouse PG. Leadership: theory and practice (5th edn). Sage Publications, Inc, 2009.
- Bohmer R. Leadership with a small "l". BMJ 2010;340:c483.
- Hardacre J, Cragg R, Shapiro J et al. What's leadership got to do with it? London: The Health Foundation, 2011. www.health.org.uk/ publications/what-s-leadership-got-to-do-with-it [Accessed 3 January 2014].
- 13 Øvretveit J. Leading improvement effectively. London: The Health Foundation, 2009. www.health.org.uk/publications/leadingimprovement-effectively [Accessed 3 January 2014].
- Academy of Medical Royal Colleges, NHS Institute for Innovation and Improvement. Medical leadership competency framework. London: NHS Leadership Academy, 2010. www.leadershipacademy. nhs.uk/discover/leadership-framework/ [Accessed 3 January 2014].
- 15 Øvretveit J. Does improving quality save money? London: The Health Foundation, 2009. www.health.org.uk/publications/doesimproving-quality-save-money [Accessed 3 January 2014].
- Pronovost PJ, Berenholtz SM, Morlock LL. Is quality of care improving in the UK? BMJ 2011;342:c6646.
- Reiter KL, Kilpatrick KE, Greene SB et al. How to develop a business case for quality. Int J Qual Health Care 2007;19:50-5.
- Darzi A. High quality care for all: NHS next stage review final report. London: DH, 2008. www.official-documents.gov.uk/document/ cm74/7432/7432.pdf [Accessed 3 January 2014].
- The Health Foundation. Involving junior doctors in quality improvement. London: The Health Foundation, 2011, www.health.org.uk/ public/cms/75/76/313/2719/Involving%20junior%20doctors%20 in%20quality%20improvement.pdf?realName=BM3UUj.pdf [Accessed 3 January 2014].

- Vaux E, Went S, Norris M, Ingham J. Learning to make a difference: introducing quality improvement methods to core medical trainees. Clin Med 2012;12:520-5.
- 21 Royal College of Physicians of London. Learning to Make a Difference (LTMD). 2013. www.rcplondon.ac.uk/projects/ learning-make-difference-ltmd [Accessed 3 January 2014].
- 22 NHS Workforce, Education and Leadership in NHS South Central. www.workforce.southcentral.nhs.uk [Accessed 3 January 2014].
- 23 Gamble JHP, Hutchinson T, Eavrs KE, Orr WP. A rapid chest pain assessment pathway including high-sensitivity troponin T testing reduces length of stay. Heart 2013;99:A18.
- 24 Cai A, Greenall J, Ding DCD. UK junior doctors' experience of clinical audit in the foundation programme. BJMP 2009;2:42-5.
- Institute for Healthcare Improvement. How to improve, 2013. www.ihi.org/knowledge/Pages/HowtoImprove [Accessed 3 January
- 26 Gilbert A, Hockey P, Vaithianathan R et al. Perceptions of junior doctors in the NHS about their training: results of a regional questionnaire. BMJ Qual Saf 2012;21:234-8.
- Bethune R, Soo E, Woodhead P et al. Engaging all doctors in continuous quality improvement: a structured, supported programme for first-year doctors across a training deanery in England. BMJ Qual Saf 2013;22:613-7.
- Faculty of Medical Leadership and Management. National Medical Director's Clinical Fellow Scheme, 2013. www.fmlm.ac.uk/ professional-development/national-medical-directors-clinicalfellow-scheme [Accessed 3 January 2014].
- NHS Leadership Academy. Academy fellows. www.leadershipacademy. nhs.uk/grow/professional-leadership-programmes/academy-fellows/ [Accessed 3 January 2014].
- Faculty of Medical Leadership and Management. www.fmlm.ac.uk/ [Accessed 3 January 2014].

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