



Royal College
of Physicians



Advancing medical professionalism



Royal College
of Physicians



Advancing medical professionalism

Royal College of Physicians

The Royal College of Physicians (RCP) plays a leading role in the delivery of high-quality patient care by setting standards of medical practice and promoting clinical excellence. The RCP provides physicians in over 30 medical specialties with education, training and support throughout their careers. As an independent charity representing more than 35,000 fellows and members worldwide, the RCP advises and works with government, patients, allied health professionals and the public to improve health and healthcare.

Citation for this document:

Tweedie J, Hordern J, Dacre J. *Advancing medical professionalism*. London: Royal College of Physicians, 2018.

Copyright

All rights reserved. No part of this publication may be reproduced in any form (including photocopying or storing it in any medium by electronic means and whether or not transiently or incidentally to some other use of this publication) without permission of the copyright owner. Applications for the copyright owner's written permission to reproduce any part of this publication should be addressed to the publisher.

Copyright © Royal College of Physicians and University of Oxford, 2018

ISBN 978-1-86016-739-3
eISBN 978-1-86016-740-9

Royal College of Physicians
11 St Andrews Place
Regent's Park
London NW1 4LE

<http://www.rcplondon.ac.uk>

Registered Charity No 210508

Foreword

Professor Dame Jane Dacre,
Professor Andrew Goddard September 2018

Physicians were first recognised as professionals 500 years ago, in 1518, with the bestowing of the royal charter that created the Royal College of Physicians (RCP). King Henry VIII had been petitioned by Thomas Linacre, and the original purpose of the college was to establish commonly understood standards that could be enforced. This is the promise made by new fellows, which still exists today:

You faithfully promise, to the best of your ability, to maintain the welfare of the College; to observe and obey its statutes, Bye-Laws and Regulations, and to submit to such penalties as may be lawfully imposed for any neglect or infringement of them; to regard as secret its proceedings, when the College so desires it; to admit to the Fellowship those only who are distinguished by character and learning; and finally to do everything, in the practice of your profession for the welfare of your patients and the community and to the honour of the College.

These bye-laws and regulations were the foundations of modern-day professionalism. Over the past 500 years, medicine has changed very significantly, but the foundations of the original promise made by the fellows still holds true.

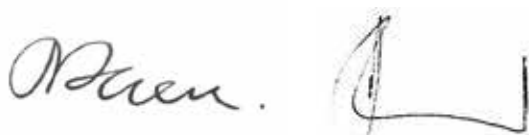
Medical professionalism has also changed, and must keep up to date with the demands of modern-day clinical practice. The RCP last redefined professionalism in 2005, during the presidency of Professor Dame Carol Black, and now, in the RCP's quincentenary, we have done so again.

Changes in the healthcare environment in recent times have led to the need to continually reinterpret our core values, and to ensure that we, as physicians, are able to continue to demonstrate the highest standards of practice.

The RCP is committed to supporting its members and fellows to develop the skills and attributes of the modern doctor described in this work. Professor Andrew Goddard, president-elect RCP, will continue to advance this agenda in his time as president and ensure professionalism remains a core tenet of the RCP's work.

We are grateful to our clinical fellow, Dr Jude Tweedie, for steering this project to its completion. We also extend our thanks to the members of the external advisory group, who have shared their wisdom and supported the project, and to Dr Richard Smith, for his exemplary editorial skills.

Please read this report, use it in your daily practice, and use it to help you and your organisation redefine what it means to be a medical professional, 500 years after the RCP was founded.



Expert Advisory Group

The authors and the RCP thank the Expert Advisory Group for its advice and guidance. The views and opinions expressed in this publication are those of the authors and the RCP, and do not necessarily reflect the views of individual members of the Expert Advisory Group.

Professor Dame Jane Dacre

President,
Royal College of Physicians

The Rt Hon Sir Ernest Ryder

Senior president of tribunals

Sir Robert Francis QC

Serjeants' Inn Chamber

The Baroness Cumberlege CBE DL

British Conservative Party
politician and businesswoman

Professor Dame Carol Black

Principal of Newnham College,
Cambridge

Ms Elisabeth Davies

Chair, RCP Patient and
Carer Network

Professor Joshua Hordern

Member, RCP Committee for
Ethical Issues in Medicine;
Associate Professor of
Christian Ethics, Oxford Healthcare
Values Partnership;
Faculty of Theology and Religion,
Harris Manchester College,
University of Oxford

Mr Peter Lees

Chief executive and medical
director, Faculty of Medical
Leadership and Management

Dame Clare Marx

Chair, FMLM;
Immediate past president, Royal
College of Surgeons

Ms Kate Rohde

Partner, Kingsley Napley LLP

Professor David Black

Medical director, JRCPTB

Professor Sir Cyril Chantler

Honorary fellow and emeritus
chairman, UCL Partners Academic
Health Science Partnership

Ms Kirsty Allen

Senior associate,
Kingsley Napley LLP

Dr Mark Spence

Consultant interventional
cardiologist; co-founder, Structural
Heart Disease Programme

Ms Sharon Burton

Head of policy, standards and
ethics, Education and Standards
Directorate, General Medical
Council

Professor Sir David Haslam

Chair, National Institute of Health
and Care Excellence

Professor Sir Denis Pereira Gray

Consultant, St Leonard's Medical
Practice, Exeter; Emeritus
professor, University of Exeter;
Former chair, Academy of Medical
Royal Colleges

Dr Clive Weston

Associate Professor, Swansea
University Medical School;
Consultant in cardiology and
general internal medicine

Professor Sir Terence Stephenson

Chair, General Medical Council

Dr Yee Yen Goh

ST4 neurology;
National medical director's
clinical fellow 2015/16

Dr Sarah-Jane Bailey

ST6 geriatrics/general
internal medicine;
National medical director's
clinical fellow 2017/18

Dr Lewis Peake

Public health registrar,
South West Deanery;
National medical director's
clinical fellow 2017/2018

Mr Luke Austen

5th Year medical student,
University of Oxford

Dr Nick Manning-Cork

FY2 doctor, South Thames
Foundation School;
Education Associate,
General Medical Council

Dr Johnny Boylan

ST5 genitourinary medicine;
National medical director's clinical
fellow 2016/2017

Executive summary

Introduction

Professionalism is fundamental to good medical practice. It benefits patients, increases the job satisfaction of doctors, makes for superior organisations, and improves the productivity of health systems. In its last report, the Royal College of Physicians (RCP) defined professionalism as ‘a set of values, behaviours and relationships that underpin the trust the public has in doctors’. Since the publication of this work, society and healthcare have undergone major transformations with profound implications for professionalism. The main aim of this report is to help doctors improve their professionalism in practical ways, describing seven professional roles. Many doctors working in the UK are currently not content in their roles, and promoting professionalism may be the best response to their discontent. Each chapter is dedicated to one of the seven roles outlined below.

Doctor as healer

The doctor as healer is at the core of medical professionalism. Modern healing requires doctors to master all the roles described in this report: patient partner, team worker, manager and leader, advocate, learner and teacher, and innovator. Underlying all these roles is the doctor as healer. To heal is to alleviate suffering, much of which cannot be alleviated through standard medical treatments alone. Doctors can alleviate suffering by providing the best care for individuals, improving the health of the population, or advancing how care is delivered, but this chapter concentrates on treating the individual. Healing starts with the relationship between the doctor and the patient, and compassionate, listening doctors can heal simply through their presence.

Healing is relatively poorly studied, but the attributes needed include ‘the little things’ (for example, how patients are greeted), active listening, being open, finding something likeable about each patient, removing barriers, letting the patient explain, sharing authority, and being committed and trustworthy.

Having the ‘difficult conversation’ – perhaps with dying patients – rather than simply prescribing more treatments, is an important part of healing.

Putting patients first is central to medical professionalism, but doctors must also care for themselves in order to be effective healers.

Doctor as patient partner

The patient–doctor relationship is at the core of the doctor’s work. The traditional relationship of patient deference to doctors has been replaced by an equal partnership. Values, including integrity, respect, and compassion must underpin the partnership with patients. Integrity involves staying up to date, but also being willing to admit one’s limitations. Doctors can show respect for patients by listening to them actively, involving them in decisions, and respecting their choices. Compassion means not just recognising the suffering of the patient, but acting to reduce the suffering.

Doctor as team worker

Teamwork is an important component of professional satisfaction and engagement, and effective teamwork improves patient outcomes and satisfaction, as well as organisational performance and productivity. Teamwork has become more important because of the growing complexity of patients' problems and health systems, and the increasing range of possible interventions. Yet although long recognised as important, team working in healthcare is still underdeveloped. Barriers to teamwork include failure to recognise that it depends on learning, failure to build it into the training of health workers, and the structure of healthcare. The three areas that teams should focus on improving are culture, communication, and reflexivity (the ability to reflect on events and learn from them).

Doctor as manager and leader

Even though they may not recognise it, all doctors are managers and leaders. Clinical engagement and leadership is pivotal to the success of health systems, and doctors make many decisions that determine where resources flow. Yet there is a tension between doctors as employees of huge complex systems and the autonomy of individual doctors. Autonomy is crucial for the delivery of care, but modern autonomy is more complex and nuanced and needs greater judgement. Effective healthcare requires clinical leadership, and embracing such leadership will enable the profession to flourish – but doctors need to be well-supported in order to be effective clinical leaders. Good leaders are defined by three attributes: courage; the ability and desire to innovate and improve; and the ability to manage risk and uncertainty. Good doctors have the same attributes.

Doctor as advocate

Professionalism requires that doctors advocate on behalf of their patients, all patients, and future patients. One issue that should be given the highest priority is advocacy on patient safety. Raising concerns about poor care, or the potential for poor care, is a professional duty for all doctors but is not easy; such advocacy needs training, practice, and mentorship. Medical errors are common and harm both patients and doctors and carry high financial costs. Errors may arise from both system and personal failures, but most are preventable. There has recently been a tendency to concentrate on system failures, but a 'just culture' expects accountability for both systems and individuals. Doctors also have a professional duty to advocate on broader issues affecting health, including tobacco, alcohol, poverty, and many others – for example, climate change, the major threat to global health today.

Doctor as learner and teacher

A commitment to lifelong learning underpins the work of all professionals, and the ability to reflect on an event or experience and improve one's practice defines an effective professional. Teaching and training is recognised as a necessary component of the role of the doctor. Supervision, formal and informal teaching and role modelling are all important for passing wisdom to the next generation. Doctors used to learn professionalism through apprenticeship, but now it is a specific part of education and training. There has been a focus on assessment when training in professionalism, but now there is more emphasis on developing a professional identity through mentoring and role modelling. Changes in medical careers and the NHS have complicated the development of professionalism, but younger doctors are showing increased interest in leadership and management. Lifelong learning includes a commitment to evidence-based practice (while recognising its limitations) and continuous improvement using tools of measurement, reflection and feedback.

Doctor as innovator

Innovation, including research, is crucial for the development of healthcare, and innovations may be in technology, how healthcare is organised and delivered, and much else. Innovations may be small, perhaps in a doctor's practice, or large, affecting the whole of healthcare. Sometimes the innovation is driven by doctors themselves and sometimes from outside medicine. Machine learning is likely to have extensive effects on medicine and how doctors work, and is used as an example to discuss innovation and professionalism. Doctors should welcome innovations like machine learning, seeking to identify how it can improve patient care. At the same time they should be thinking critically about machine learning's impact by continually asking: 'What skills and valuable activities are in danger of being lost?' The challenge for doctors is how to innovate amid the innovation happening all around them. The use of machine learning could lead to the progressive replacement of face-to-face patient-doctor consultations with a collaboration in which the machine becomes effectively an independent actor. But it is doctors, rather than machines, who can provide solidarity, understanding, and compassion to patients. Research is important for the development of healthcare, and all doctors should be supporters and critical consumers of research; some will be primarily researchers.

What next?

Medical professionalism not only has benefits for individual doctors but also the whole profession, those who work with doctors and patients. This report should therefore prove useful to all these groups. Individual doctors might read this report and act to improve their own professionalism, and discuss it in their lifelong learning, and with their teams. For the profession as a whole to advance medical professionalism, a working group should be created to develop and implement a plan to take forward the key findings from this work. The group should include patients and stakeholders and be led by an overarching body such as the Academy of Medical Royal Colleges.

Introduction

Professionalism is fundamental to good medical practice. It benefits patients, increases the job satisfaction of doctors, makes for superior organisations, and improves the productivity of health systems.

In 2005, the Royal College of Physicians' report *Doctors in society: medical professionalism in a changing world* defined medical professionalism as 'a set of values, behaviours and relationships that underpin the trust the public has in doctors' (RCP, 2005). Since the publication of this work, society and healthcare have both experienced profound change. This work sets out to describe the values, behaviours and relationships that characterise the doctor in 2018. The findings have implications for education and training and continuous professional development, but also patients, employers, regulators and professional bodies and, most importantly, the individual doctor.

The shifting context

The ageing of the population and the increasing proportion of patients with long-term conditions and multiple comorbidities, together with healthcare costs consistently rising faster than inflation, have placed great strains on all health services, including the NHS. In the UK, these changes have been occurring during the government's austerity programme, which has aimed to reduce public spending. The growing pressure on the NHS is affecting not only the welfare of its patients but also the work and lives of medical professionals. Evidence suggests that morale among all grades of doctors is declining and the incidence of burnout is increasing. (RCP, 2016) (Lemaire & Wallace, 2017) (RCSeng, 2017).

Alongside this, advances in science and technology present opportunities to revolutionise healthcare. These developments include gene sequencing, the use of big data and artificial intelligence, wearable technology, medical applications on smartphones, and patients

(rather than doctors) controlling their electronic health records. (Feiler et al, 2017). The patient–doctor relationship is changing, driven by democratisation of knowledge, the growing acknowledgement of the patient as an equal partner and, at a societal level, by the increasing call for accountability.

The remit of the doctor is also changing as the delivery of healthcare becomes more complex. Non-medical managers are frequently responsible for the overall delivery of healthcare. New roles have been introduced, such as physician associates and surgical care practitioners; while other roles have evolved – for example advanced nurse practitioners and advanced clinical pharmacists. What does this mean for doctors and how do they understand the evolution of the unique role they play in healthcare? How do we prepare and educate medical students and junior doctors for the realities of modern practice? And how do we support doctors through a career to maintain professional satisfaction and even joy in challenging environments?

Professionalism

This report argues for understanding and advancing professionalism as one way to support doctors to find joy and satisfaction throughout a career. Professionalism is more than a lofty ideal; it encompasses who doctors are, how they work and what they value. It is writ large every day in the decisions doctors make, the way they treat their colleagues and patients and the way they view themselves. Articulating a modern professional identity helps doctors to understand and undertake the unique role they play in healthcare. Thinking about professionalism has the potential to clarify the current context in which healthcare is provided, and inspire confidence and pride in an occupation. It can also provide a sense of identity beneficial to patients, all healthcare professionals, and the organisations in which they work.

Professionalism is probably a more constructive concept to develop in our doctors than the current focus on wellbeing. Wellbeing focuses on the doctor, whereas professionalism incorporates the doctor, the patient, the team, the organisation, the environment and the connections between them. Promoting professionalism and achievement can create fertile ground for innovation and efficiencies, which in turn promote satisfaction and engagement.

There is no universally agreed definition of professionalism. 'We think about it, we speak about it, and we write about it. We use it as an adverb, an adjective and a noun, illustrating the elusiveness of the concept' (NCAS, 2009). Whatever exactly 'it' is, professionalism plays a central role in education, training, appraisal, and revalidation and defines what is expected of a doctor today.

This work uses the definition of professionalism given in the *Doctors in society* working party report published in 2005: 'a set of values, behaviours and relationships that underpin the trust the public has in doctors.'

Rather than focusing on a new definition, this work seeks to explain, expand and interpret this definition for healthcare in 2018. This is critically important to maintaining public trust and confidence both in the profession and the individual doctor.

Why now?

While the world changes, the medical profession is experiencing turmoil. After years of discussion failed contractual negotiations ended in 2015 with the first all-out strikes by junior doctors in the history of the NHS. The strikes raised questions about professionalism, and many junior doctors felt that their professional identity was being attacked, while some doctors thought it unprofessional to strike. Discontent is felt not just by junior doctors, but increasingly throughout the profession. Nearly half of doctors surveyed report their morale to be low or very low (BMA, 2018). 45% of new medical consultant jobs remain unfilled, while consultants regularly report working down to cover gaps on medical rotas (RCP, 2018). Record numbers of GP posts are unfilled: nearly one-third of GP practices in England have a vacancy for at least one GP partner (NHS Providers, 2017). An onslaught of top-down and occasionally contradictory policy initiatives has led many clinicians to become 'change-fatigued', suppressing the innovation, creativity, and drive of a committed workforce.

There is increasingly a gap between what doctors are trained to do and the realities of modern practice. The healthcare workplace is fraught with complexity, competing ideals of what is good practice, rising demand, and increasing regulatory and legal obligations. Every day doctors face ethical dilemmas and clashes in professional (and sometimes) personal values. For example, advocating for the best care of a single patient and using resources efficiently in a finite system, putting the care of the patient first while maintaining your own health and welfare, and speaking up about concerns while knowing this may result in reprisals.

In particular, the case of Dr Hadiza Bawa-Garba, a paediatrician who was found guilty of manslaughter and then struck off the medical register after an appeal from the General Medical Council (GMC), sent shock waves through the medical profession and prompted many questions about professionalism.

The Bawa-Garba case

On 18 February 2011, Dr Bawa-Garba had recently returned from maternity leave and was the on-call paediatric registrar in Leicester Royal Infirmary. Working in an unfamiliar hospital with a faulty IT system, with her consultant off-site, she was doing the work of three registrars: covering the wards, casualty, and the children's assessment unit.

Six-year-old Jack Adcock was admitted with diarrhoea and vomiting. Dr Bawa-Garba had a working diagnosis of dehydration from gastroenteritis and treated him with intravenous fluids. Blood tests showed him to be acidotic, and a chest X-ray showed he had pneumonia.

Dr Bawa-Garba started antibiotic treatment, and in the afternoon she discussed the blood results with the consultant, although he did not see the child. Jack was also given enalapril, although this was not prescribed by Dr Bawa-Garba.

Jack suffered a cardiac arrest, which prompted efforts at resuscitation. Dr Bawa-Garba mistook the child for another who had been declared 'not for resuscitation' and briefly interrupted the resuscitation. Jack died of streptococcal sepsis.

Distraught, Dr Bawa-Garba was urged to reflect on the event. In her notes, she reflected on her own failure, rather than the obvious system failures, which were later identified by internal inquiry. Dr Bawa-Garba was charged with, and found guilty of, gross negligence manslaughter. A Medical Practitioners' Tribunal, recognising the system failures and prompted by her seniors praising her as an excellent doctor, decided not to strike her off the medical register but to suspend her until the end of her sentence.

The GMC appealed to the High Court to have the decision overturned. Dr Bawa-Garba was subsequently erased from the register, and her training number removed. In August 2018, the Court of Appeal ruled that the High Court was wrong to overturn the tribunal decision. The tribunal will determine whether, following her period of suspension, Dr Bawa-Garba will be fit to return to practise.

This case has caused great anxiety in the medical community.

Questions raised

The Dr Bawa-Garba case raises many questions related to professionalism. While this report itself cannot hope to answer all of them, it attempts to navigate some of the common challenges faced by doctors in practice.

- What is the balance between individual and system failure?
- Should a doctor admit to an error? Who is responsible and where does accountability lie?
- How does the doctor advocate for the one as well as the many?
- What are the skills now required by doctors to work effectively as professionals in complex and challenging clinical environments?
- Are we preparing doctors adequately for all that will be asked of them in their career?

Professionalism is an important framework for navigating these difficulties, helping doctors to do the challenging things and providing a set of guiding principles. In the UK, the GMC sets professional standards for doctors, which are described in Good Medical Practice (GMP) (GMC, 2013): a high-level summation of the core principles and standards that should apply to all doctors as professionals. This report seeks to act as a bridge between professional standards and the realities of practice, something that should be supported by the medical royal colleges. The characteristics of the doctors described in this work fit with the *Generic professional capabilities framework* (GMC, 2016) but this work goes further in seeking to understand the challenges in enacting these characteristics in practice and outlines the skill development required across a professional career.

How was this report produced?

The main aim of this report is to promote professionalism by supporting doctors to improve their own practice and by identifying the wider barriers to professionalism. To produce it, the RCP set up an advisory group. For further information on the methods and advisory group please see the Methodology section at the end of the report.

The RCP Patient Carer Network has been integral to this work, and has shaped and guided this project from the outset.

The expert advisory group asked for a report that would be aspirational, practical, grounded in the realities of practice, and evidence-based. They also wanted each chapter to include an ‘experiment’ for the reader to try.

The team produced a first draft of report, which was then edited by Richard Smith, former editor of the *BMJ*. The final version was approved by Professor Dame Jane Dacre, president of the RCP.

‘The main aim of the report is to help doctors reflect on and improve their professionalism in practical ways.’

Who is the report for?

The report is intended primarily for members and fellows of the Royal College of Physicians (RCP), particularly for those directly involved in caring for patients, but it should prove helpful to many types of doctor, other healthcare professionals, healthcare leaders and medical students. The report does not, however, address the extra care around professionalism and communication to be borne in mind for children and young people, vulnerable adults and some patients with mental health problems.

What does it cover?

This report describes the seven characteristics of the modern doctor developed from the research conducted for this work. Each chapter explores the impact of societal and healthcare changes on the respective characteristic, the importance and impact of the characteristic, where the challenges lie and where to focus improvements. The chapters contain descriptions of models of behaviour, practical checklists for improving practice, and exercises for doctors to undertake in their everyday work.

The report progresses from considering roles in which doctors work as individuals through to

partnerships in which doctors work as part of society and a large healthcare system. It begins with the doctor as healer and then moves through doctor as patient partner to doctor as team worker. The next chapter deals with the doctor as manager and leader. The fifth role for doctors is as advocates, particularly for quality and safety, but also more broadly. The sixth role, doctors as learners and teachers, recognises that all doctors must continue to learn and that they must teach, not only medical students and junior doctors but also other health workers, patients, and citizens. The final role is doctors as innovators; people who constantly innovate to find better ways of working.

‘As a patient and carer, what I want from a doctor is, at all times, to be able to trust them. I want to not only trust in their technical abilities but also to trust in them as fellow human beings who have my interests at the heart of what they are doing for me. This involves them demonstrating integrity; that their “walk matches their talk” and me being treated with respect and dignity by them.’

– Patient representative



Royal College
of Physicians

Chapter 1: Doctor as healer



Contents

15 Summary

17 What is healing?

18 Attributes that make healers

20 The importance of the difficult conversation

21 Healing and vocation

22 Recommended reading

Summary

- > The concept of the doctor as healer is at the core of medical professionalism.
- > There have always been healers, and today doctors are seen as the dominant (but not exclusive) healers in society.

Modern healing requires doctors to master all the characteristics described in this report: patient partner, team worker, manager and leader, advocate, learner and teacher, and innovator. Underlying all these roles is the doctor as healer.
- > To heal is to alleviate suffering, much of which cannot be alleviated through standard medical treatments.

Doctors can alleviate suffering by providing the best care for individuals, improving the health of the population, or advancing how care is delivered, but this chapter concentrates on treating the individual.
- > Healing starts with the relationship between the doctor and the patient, and compassionate, listening doctors can heal simply through their presence.

Aristotle said that the healer needed three attributes: integrity (training the intellect to discern truth); altruism (training the will to make sound clinical judgements and put the needs of the patient first); and practical wisdom (training the imagination to apply knowledge in the right manner, understanding the particular circumstances).
- > Healing is relatively poorly studied, but the attributes needed include ‘the little things’ (for example, how patients are greeted), active listening, being open, finding something likeable about each patient, removing barriers, letting the patient explain, sharing authority, and being committed and trustworthy.

Often doctors may be tempted to avoid ‘the difficult conversation’, particularly with dying patients, by prescribing more tests or treatments when that is not in the best interests of the patient; healers will choose to have the difficult conversation.
- > Putting patients first is central to medical professionalism, but doctors must also care for themselves to be effective healers.

Autonomy, mastery, and purpose are necessary components of professional satisfaction and good performance, but many doctors feel these components have been eroded by excessive management, scrutiny, and regulation.
- > Moving beyond the era of scrutiny, perverse incentives, excessive measurements and markets to a return to putting trust in the intrinsic motivation of the workforce and reconnecting with the role of healer would benefit patients and doctors.

Society and the delivery of healthcare changes, and the treatment of disease evolves, but the need for healers remains unchanged.

The doctor as healer is at the core of medical professionalism. Healers have existed throughout human history and have taken many forms. Healing answers a fundamental human need to be cared for in times of difficulty. It has persisted despite technical, scientific and industrial advances and can be found in virtually all cultures and religions (Kearney, 2000). Society and the delivery of healthcare changes, and the treatment of disease evolves, but the need for healers remains unchanged.

People who are suffering may seek to be healed by various people, including doctors, other members of the healthcare team, priests, counsellors, complementary medicine practitioners, family, and friends. However, doctors have long been given a leading role in exchange for expectations of special skills, competence, and caring. The doctor as healer must combine expertise and compassion (Frank et al, 2015). Competence for doctors includes not only maintaining their knowledge and skills but also taking risks, managing uncertainty and using professional judgement in challenging circumstances.

The daily grind of the job can make it difficult to appreciate the unique influence doctors hold. Patients are often bewildered by modern healthcare systems and must put their trust in doctors. Doctors can change lives by the diagnoses they make, the treatments they give, and the way that they care for patients.

The influence of the doctor is not restricted to the individual patient but is found at every level of the healthcare system.

Modern healing requires doctors to master all the characteristics described in this report: patient partner, team worker, manager and leader, advocate, learner and teacher, and innovator. Underlying and permeating all these roles is the doctor as healer.

Healing is needed because, as Rachel Naomi Remen, an American professor of integrative medicine, said: 'We thought we could cure everything, but it turns out we can cure only a small amount of human suffering. The rest of it needs to be healed.' (Churchill & Schenck, 2008)

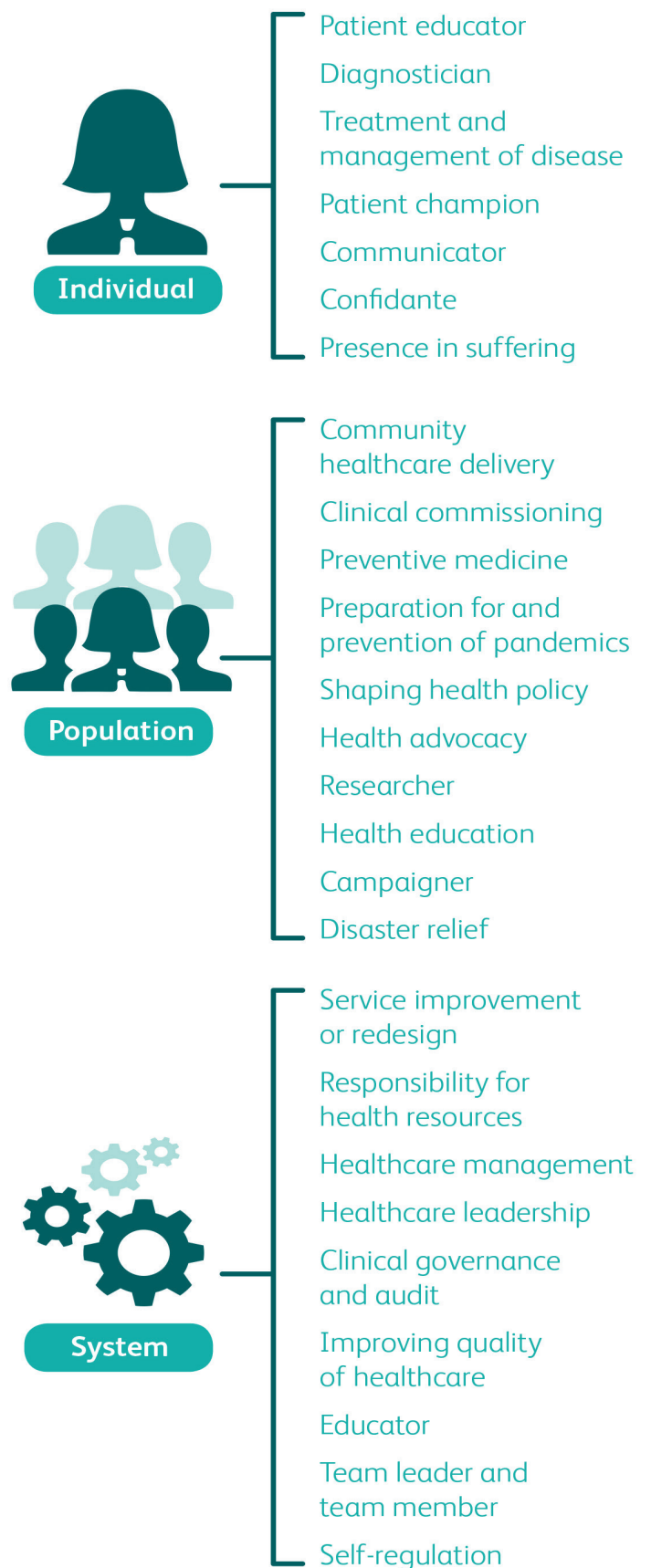
“ You are so vulnerable when it comes to your healthcare and that of your family. You need to believe in the professionalism of those who treat you that they are well trained, have up-to-date skills, will prioritise your clinical needs over financial priorities etc – because what’s the alternative? ”
– Patient representative

What is healing?

The origins of the word ‘healing’ mean to make whole again. The *Oxford Dictionary* defines a healer as ‘a person who claims to be able to cure a disease or injury using special powers.’ The word ‘claims’ is important, implying that the person may not actually have ‘special powers’ nor be able to heal. Medicine’s ‘special powers’ come from science, empirical evidence, and experience together with integrity, compassion, respect and other attributes discussed below.

The Oxford definition includes ‘to cure a disease or injury,’ and this is an aim of medicine. But often, particularly today when many patients have multiple long-term conditions, cure is impossible. For this reason, healing is better thought of as ‘relieving suffering’ and there are many ways in which doctors can do this apart from treating individual patients. The graphic on the right describes how doctors can alleviate suffering through improving the health of the population, or advancing how care is delivered as well as by providing the best care for individuals.

The skills needed for improving the health of the population or advancing how care is delivered are dealt with mostly in other chapters – on team working, leading, managing, and innovating – and the rest of this chapter concentrates on the doctor as healer with individual patients. Nevertheless, some of the qualities discussed will also be useful when working with systems and populations.



Attributes that make healers

The little things

Studies by the Nobel Prize-winning psychologist Daniel Kahneman demonstrate that people make instant judgements of others that subsequent rational thinking finds it hard to alter (Kahneman, 2011). How patients, and any relatives or friends accompanying the patient, are greeted is crucial. Healers stand up, make eye contact, smile, introduce themselves (perhaps explaining their role eg a consultant, registrar), ask patients how they would like to be addressed, and acknowledge others in the room. Patients feel acknowledged and welcomed into what can be an unfamiliar, and even frightening, environment.

Doctors who continue writing notes or looking at computers and are offhand in their greeting immediately lose ground that is then difficult to reclaim. It may be hard for doctors at the end of an exhausting clinic to start an interaction in the right way, and doctors who are performing a technical procedure may think that greeting the patient well may not matter. But patients, like all of us, make judgements on how they are greeted, and attention to these 'little things' is a hallmark of a professional.

Doctors who continue writing notes or looking at computers and are offhand in their greeting immediately lose ground that is then difficult to reclaim.

Active listening

Active listening is at the heart of healing. It is possible to hear and not listen. Listening well takes time and effort. All medical students learn that letting patients talk in their own way and at their own pace is a major part of making a diagnosis, but there is evidence that doctors often frequently interrupt patients (Beckman & Frankel, 1984). Studies have demonstrated the average time taken for a doctor to interrupt a patient in their opening monologue is between 12 and 18 seconds (Beckman & Frankel, 1984) (Rhoades et al, 2002). Doctors are working under increasing pressure, which is always at risk of being transmitted to the individual doctor–patient consultation. Doctors may think it necessary to interrupt patients, particularly those who are slow and unclear in their history, in order to use their time effectively. But as healers, they do so at their peril. Time allocated to patients at the beginning of encounters may well save time later (Marvel et al, 1999).

“ You are the expert on my medical condition but not on me. Behave as if your time is important and my time is important also!
– Patient representative

Active listening means working hard to understand patients. Once a patient has made their initial statement, a doctor needs to question the patient to be sure that they have understood them. This is a concept doctors learn in medical school, but sometimes forget to put into practice. For patients to be healed they need to feel that they have been understood. They also need to be recognised as people, not just a cluster of symptoms – or worse – a single organ. Even in a brief consultation, questions about family and occupation can help build the relationship that is central to healing.

Be open

Patients bring wounds and vulnerability to meetings with doctors, something that is discussed in more detail in the second chapter of this report. This may be particularly common for patients at the end of life. The Churchill & Schneck study, published in *Annals of Internal Medicine*, suggests that doctors responding emotionally to their patients' pain will greatly enhance their power as healers. This is clearly a difficult balance to get right: the doctor who breaks down in tears in such a way as to lose focus will not be helpful to the patient; but nor will the doctor who seems entirely unmoved by a patient's distress. Neither rejoicing nor crying with patients can be wrong in themselves. Showing the appropriate, intelligent sort of emotional response demonstrates the humanity and vulnerability of the doctor. Perhaps counterintuitively, this seems to enhance healing.

“Life is short, the Art long, opportunity fleeting, experience perilous and judgement difficult.”
– Hippocrates

Find something to like in the patient

The outstanding healers in the study thought it important to like their patients in some way. They tried to find something to like in each patient; perhaps an accomplishment, a personality trait, or a certain quality. By doing this, doctors found it easier to generate the compassion that is undoubtedly needed for healing.

Removing barriers

A doctor behind a desk or a computer will find it difficult to heal. Physical barriers should be avoided, but other barriers include adopting a superior attitude or using technical language that patients cannot understand. It is all too easy for doctors to overestimate patients' capacity to understand, and it seems better to start with simple language and then adjust if necessary. Doctors who start with complex language may lose their patients' trust at the very beginning, and many patients may be reluctant to confess that they do not understand.

Let the patient explain

It is important to know how patients understand their own condition. Many may have a long history. One of the practitioners in the study put it this way:

A good way to get the patient started is [to ask] them what they understand about what's going on so far. It allows them to be either very scientific and talk about the tests that they've had, or [it provides] an opening if the emotional piece is important to them at that time. It gives them an opportunity to frame it for what they need the most...

Open-ended questions like 'What brought you here?' or 'How do you think I can best help you?' 'What's important to you in this?' can be effective for healing. Doctors who are healers will develop their own styles, but at the same time will benefit from feedback. Video recording a series of consultations and discussing them with colleagues can provide powerful learning. The *Annals* study also mentioned the importance of sharing authority and being committed and trustworthy (Churchill & Schneck, 2008). These components of healing are discussed further in the chapter on doctors as patient partners.

The importance of the difficult conversation

Seamus O'Mahony, an Irish gastroenterologist, writes in his book *The Way We Die Now* about the importance of 'the difficult conversation' (O'Mahony, 2016). He argues, particularly with dying patients, that doctors find it easier to recommend more drugs or a further operation than have 'the difficult conversation', even when they think that further treatment is not in the best interests of the patient. It takes time and courage to have such conversations, and both may be in short supply. However, O'Mahony argues that doctors who want to be healers, rather than simply technicians, will choose to have those conversations.

O'Mahony writes mainly in the context of end-of-life decisions, but difficult conversations are needed across medicine because of the pressures to perform tests or surgery, or prescribe drug treatments when such interventions may not be the best option. Famously, good surgeons know how to operate, while better surgeons know when to operate, and the best surgeons know when not to operate. GPs who are confident that their patients' symptoms are psychosomatic can avoid a series of fruitless investigations by having a difficult conversation. Indeed, simply talking to a patient with a sore throat about how antibiotics are not the best treatment can be a difficult conversation. O'Mahony came to think a lot about 'the difficult conversation' because he was so often asked to perform a percutaneous endoscopic gastrostomy (PEG) when he didn't think that the best option for the patient. Doctors who act as healers rather than simply technicians will have the courage to have difficult conversations and will accept the vulnerability inherent in such conversations.

Caring for the patient and caring for yourself

Professionals are expected by society to put the needs of their patients or clients before their own. This concept remains fundamental to understanding the basis of professionalism today. The patient or client does not have the capability to scrutinise the work of the professional and therefore has to trust in the professional to do the right thing (Dixon-Woods et al, 2011). This principle stretches beyond the individual-professional relationship and forms the basis of the professions' right to self-regulation.

Doctors meet people at their most vulnerable, and this is physically, mentally and emotionally challenging for all participants. Patients (and the public) must believe that doctors place their interests first. To achieve this, doctors must care for themselves. Putting patients' interests first cannot mean that doctors seriously harm their own health. In fact, doctors have a duty, as stated by the GMC (GMC, 2013), to seek help if their judgement or performance could be impaired. The basic building block of professionalism is to understand and manage oneself.

“ Professionalism means knowing how to communicate with each individual patient, because every patient will be different.”

– Patient representative

‘ We need to care for ourselves [in order] to care for others – it’s ok to say we can’t cope and then find help.’
– Doctor in training

Altruism is mentioned constantly in writings on professionalism, yet its meaning remains somewhat ambiguous (Kerr et al, 2004). Altruism in medicine has been described as the patient’s belief the physician is ‘consistently placing the interest of individual patients and society above their own’ (Cruess et al, 2004). For previous generations of doctors, this altruism was often demonstrated through long working hours and prolonged on-call duties, and was intrinsically bound to their identity and occupational self-worth. ‘We stayed ‘til the job was done, whenever that was,’ said an older consultant.

Changes in legislation on working hours, an increasingly demanding workload and increasing complexity of the work alongside a body of evidence showing the negative impacts of fatigue on performance (Dall’Ora et al, 2016) (Gohar et al, 2009) (Lockley et al, 2004) mean old patterns of working are no longer feasible, desired, or humane. This has resulted in a schism between how different generations view themselves as professionals and what is valued by the profession.

Healing and vocation

The professional identity of doctor is rooted in healing. When their capability is questioned it can feel profoundly personal to the doctor. Clare Gerada, a leading GP, has observed that for doctors their professional identity is often deeply entangled with their personal selves (Gerada, 2016). Vocation is entwined with this professional identity and is often cited as an essential component of professionalism (Parsai & Sheehan, 2006).

Vocation today describes a strong sense of suitability for a particular career or profession. In medicine this is characterised by capability in science, a desire to help others, and commitment to a greater good. These characteristics align well with what brings people into a career in medicine. Research suggests that the most common reasons for students to apply to medical school are:

- 1) to help other people
- 2) an aptitude for sciences
- 3) undertaking work which is valuable to society (BMA, 2017) (McHarg et al, 2007).

Students start with idealism and commitment to a career of service, but for some their careers lead them to disillusionment, cynicism, and eventually burnout (RCP, 2017).

The basic building block of professionalism is to understand and manage oneself.

Evidence shows that a strong sense of vocation is associated with better career and life satisfaction and stronger clinical commitments (Yoon et al, 2017) (Jager et al, 2017) (Tak et al, 2017) (Schrijver, 2016). There is, however, a limit to how far a sense of vocation will compensate for other ills. If the perceived costs of remaining in medicine (be they intellectual, personal, social, or financial) outweigh this sense of vocation, then recruitment and retention of doctors becomes a severe problem.

How one views oneself in an occupational role, and the sense of achievement and intrinsic value that arise from the role, are critical for motivation (Pinder, 2008). Autonomy, mastery, and purpose are necessary components of professional satisfaction (Pink, 2009). At one time these components were thought to be synonymous with the professional identity of a doctor, but in recent years many doctors have felt that these components are being eroded.

Many doctors currently experience excessive management, scrutiny, and regulation. Autonomy, purpose, and meaning have been replaced with control and bureaucracy, leading doctors to feel that their contract with society has been betrayed. The moral endeavour of medicine is increasingly politicised, commercialised, and inappropriately driven by targets. The current pressures, and identity crisis, afflicting medical professionals are competing with the vocational ideals that led many into the profession.

Evidence shows that a strong sense of vocation is associated with better career and life satisfaction and stronger clinical commitments.

A brighter future for the profession of medicine

Don Berwick, of the Institute of Healthcare Improvement, has called for a new era in medicine that he describes as Era 3, defined by its 'new moral ethos' (Berwick, 2016). Berwick recommends doctors keep the professional pride, beneficence and scientific foundations of the past (which is called Era 1) but not the opacity, self-protection or dominance. He argues that the ratcheting up of scrutiny, perverse incentives, excessive measurements and markets (described as Era 2) are not the answer. Instead what is needed is a new era in healthcare with a return to putting trust in the intrinsic motivation of the workforce and reconnecting with the role of healer based in scientific knowledge and committed to moral practice.

One thing you can do

Take time to reflect on your sense of vocation as a doctor. How did it start, and how has it developed? What do you enjoy in your job and how can you do more of it? Reflect on your daily work as a professional in relation to the attributes of healers. How do you greet patients, do you ask them how they would like to be addressed?

Recommended reading

Churchill L, Schenck D. Healing Skills for Medical Practice. *Ann Intern Med* 2008;149:720–724.

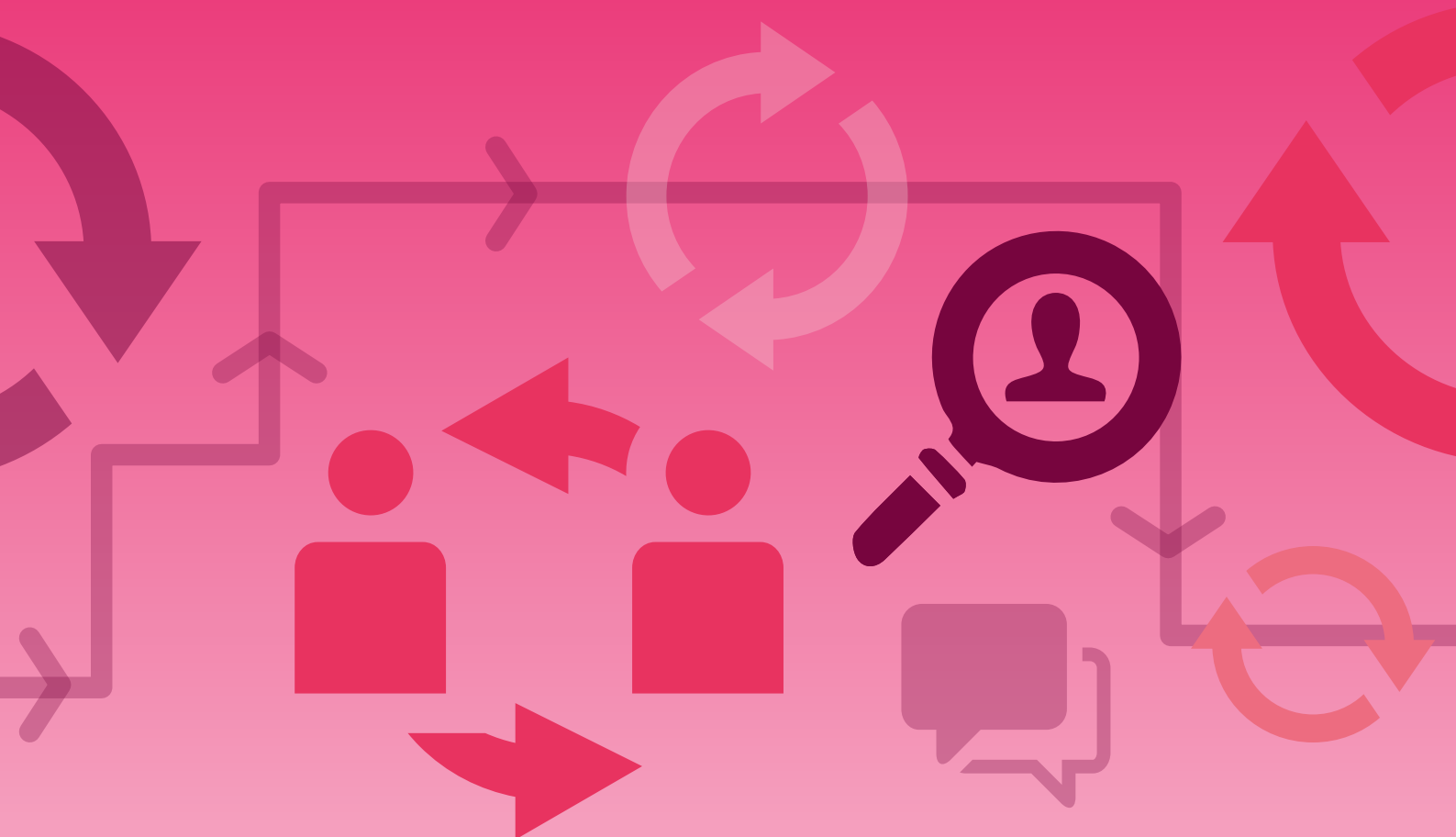
Berwick D. Era 3 for Medicine and Health Care. *JAMA* 2016 5;315(13):1329–30. doi: 10.1001/jama.2016.1509.

Parsi K, Sheehan M. *Healing as Vocation: A Medical Professionalism Primer*. Rowan and Littlefield Publishers, 2006.



Royal College
of Physicians

Chapter 2: Doctor as patient partner



Contents

25 Summary

26 Doctor as patient partner

27 Patient autonomy

29 The importance of professional values

35 Recommended reading

Summary

- > The patient–doctor relationship is at the core of a doctor’s work.
- > The traditional relationship of patient deference to doctors has been replaced by an equal partnership.
- > The law now says that, with informed consent, doctors must engage in shared decision-making with patients – not just tell them what they think they should know.
- > Patient autonomy is an important bioethical principle that has come to the fore over the last three decades.
- > Patient autonomy is enabled by an effective patient–doctor relationship, but the complexities created by patient autonomy need to be understood by both patients and doctors.
- > Patients remain vulnerable, and doctors need to recognise that vulnerability can drive improvement in healthcare.
- > Values, including integrity, respect, and compassion, must underpin the partnership with patients.
- > Integrity involves staying up to date, but also being willing to admit to limitations.
- > Doctors can show respect for patients by listening to them, involving them in shared decisions, and respecting their choices.
- > Compassion means not just recognising the suffering of the patient, but acting to reduce that suffering.
- > Good communication underpins partnership and shared decision-making and is essential for showing integrity, respect, and compassion.

Doctor as patient partner

The patient–doctor relationship is at the core of the doctor’s work. There is a mutual dependency between the two parties, with expected behaviours and responsibilities for both the patient and the doctor. Traditionally the role of the doctor, or professional, was defined by their monopoly over expert knowledge. The doctor was the only source of specialist knowledge available to the citizen, but that has now changed radically, providing another reason why professionalism needs to be reconsidered.

A changing relationship between doctors and patients

During the 19th and 20th centuries professionals, including doctors, became more powerful than those they served. Patients were deferential to doctors: ‘the doctor knows best’. Doctors gave orders, and their advice was rarely questioned. But society has been transformed over the last half century (Rowe & Calnan, 2006). Advances in technology, medicine, science, and education alongside changes in social attitudes mean that deference has largely gone, particularly among the young. People now have as much access to information as doctors (Rowe & Calnan, 2006).

In parallel, several high-profile scandals have shaken the public’s belief in the safety and quality of healthcare. In the past, patients assumed (correctly or incorrectly) that everything was done in their best interest; now there is more scepticism.

Most patients wish to be included in decision making about their health. Patient-centred care and patient choice have been major policy objectives for several years. These changes have the potential to be positive by enabling patients to participate in decisions, by delivering individualised care and reducing both healthcare costs and waste. However, these initiatives have created some confusion for doctors about their role and how they should relate to patients. The paternalism of the past gave confidence and ease to patients and reflected societal expectations. There remains a need to maintain a professional relationship and provide advice grounded in expertise, knowledge and judgement, but increasingly the professional-client relationship is now viewed as a partnership of equals.

‘Mid-Staffs [a high-profile scandal involving poor quality care] was very bad news and it was also very scary for a lot of people, because you suddenly realise actually we can’t assume that everyone knows what they are doing, or that it’s for the best.’
– Consultant

Patient autonomy

The creation of an effective patient–doctor relationship enables patient autonomy, an important bioethical principle that has come to the fore over the last three decades. Meaningful autonomy is considered free from external control or influence (Deci & Ryan 1987). It is difficult to argue against the right of patients to make informed choices about their own health and wellbeing (see boxes on page 28). For patient autonomy to prosper it is important for both doctors and patients to grasp the complexities of this changing relationship.

The first challenge is that, in some quarters, there has been a change in how patient autonomy is understood: whereas it was once thought to be a patient’s right to be exercised at their discretion, there is now a near moral obligation for the patient to act autonomously (Schneider, 1998). Patients can end up feeling like abandoned individuals, rather than part of a supported partnership, if their clinician refuses to do more than inform (Entwistle et al, 2010). Part of the exercise of autonomy is to be able to relinquish it when so desired (Gawande, 2008).

A second challenge is the tendency to over-focus on the idea of decision making, rather than taking a broader understanding of respect for patient autonomy. This, in turn, means less focus is given to implementation (Entwistle et al, 2010). Undue emphasis is thus placed on autonomy in decision-making over the practicalities of how the decision is enacted.

Thirdly, the dynamic, complex nature of medicine makes it nearly impossible to create a ‘one size fits all’ model (Schneider, 1998). Serious, potentially life-changing diagnoses have an impact on an individual’s capability to make decisions (Epstein & Street, 2011). The acuity of illness is another important factor. How patient autonomy is enacted will be different for long-term conditions like diabetes as opposed to acute illness, such as meningitis or a ruptured aortic aneurysm.

Fourthly, where autonomy has been delegated to other individuals, such as carers or parents, advocates may not wish to have responsibility for decisions that can go wrong (Gawande, 2008).

Finally, competency is a necessary component of autonomy, but can carry a great deal of complexity. Among the general population, there is a broad range of healthcare literacy, and the capacity for informed consent may look very different across individuals (Entwistle et al, 2010).

The answer is not to return to ‘doctor knows best’, but for both members of the patient–doctor partnership to understand their role. This is most clearly articulated in the shared decision-making that underpins contemporary standards of consent to treatment (GMC, 2008). Shared decision-making brings together the patient’s individual values (what is important to them as an individual) with the doctor’s professional knowledge and experience. Only the patient can truly articulate their personal values and preferences and have the right to choose their own fate. The doctor brings experience, a scientific discipline to decision-making, refined practice and the advantage of professional detachment when making difficult decisions (Gawande, 2008). It is in this partnership that autonomy is enabled. The evidence suggests that patients still value clinicians who emphasise expert clinical care and take the lead with decision making (Salmon & Young, 2017). If compassion, respect and integrity form the basis of the partnership, then patients can be appropriately enabled to utilise their autonomy, which is a human right, in the most effective way.

The changing nature of informed consent

This shifting relationship means that the way consent is obtained from a patient has changed. Notwithstanding long-standing GMC guidance (GMC, 2008), the test of duty of care in decision-making between doctors and patients remained until 2015 the Bolam test: this meant that in obtaining consent from a patient, a doctor needed only to reach the standard of ‘a responsible body of medical opinion’ (in line with what other doctors may have done), even if that fell below what was considered best practice.

But in 2015 a UK Supreme Court case called Montgomery replaced the Bolam standard with shared decision-making between doctor and patient as the basis of consent (Herring et al, 2017).

The Montgomery judgement requires doctors to ask themselves three questions:

- Have I discussed the reasonable alternative treatments with my patient (including the option of no treatment)?
- Has my patient understood from me the material risks and benefits of these alternatives?
- Have I understood from my patient what is important to him or her about these alternatives?

These questions can only be answered through dialogue with the patient. This may appear challenging with the pressures of contemporary clinical care but it can be incorporated into everyday practice in a time-efficient way (see Herring et al, 2017 for some examples from surgery).

The doctor–patient relationship is one of the most important components of a patient’s encounter with healthcare.

The doctor–patient relationship is one of the most important components of a patient’s encounter with healthcare (Wen & Tucker, 2015) (Goold, 1999) (Jagosh, 2011) (Morgan, 2008). When patients and the public are questioned about their experiences of healthcare, they talk mostly about their last or most important interaction with a doctor. This is true of all ages and socioeconomic classes. The quality of this interaction is critically important to how the whole experience of healthcare is viewed. This is a privilege for doctors, but also a challenge, considering that many aspects of the delivery of healthcare are outside their control.

The vulnerability of patients is a challenge and an opportunity

The doctor–patient relationship is special among professional relationships because patients are innately vulnerable, relying on others to safeguard their health and wellbeing. Advances in technology and increased access to information do not attenuate this vulnerability – indeed, they may increase it.

Suspicion of professionals has replaced the ‘blind faith’ of previous generations. If not outright suspicion, there is now certainly a need to probe, question, and analyse. While this may feel uncomfortable for some doctors, it creates an opportunity to evolve as a profession. Even if feeling challenged, doctors must, a patient representative said, ‘keep hold of that sense of vulnerability among patients.’ The vulnerability that lies at the heart of the patient–doctor relationship is a driving force for creating a safe, high-quality, and equitable healthcare system. Feeling secure and confident in a trustworthy doctor and safe within the overall system is a basic need in times of extreme vulnerability.

When patients are experiencing the uncertainty and risk of illness they need to be able to trust the doctors and others who are caring for them. How does the modern doctor maintain trust, not through the paternalism of the past, but through a relationship of equals that is productive and mutually beneficial for both parties? What are the behaviours and attitudes that reflect contemporary values?

The importance of professional values

Values act as a guiding force or a moral compass in doctors’ practice – they mark out what doctors count as ‘good’ and thereby give doctors their sense of purpose. Values affect how doctors prioritise their time and energy, how they conduct relationships, and their attitudes and behaviours. They are important to an individual’s meaning, purpose, and passion, all of which are directly linked to wellbeing and job satisfaction.

Medicine flourishes when doctors with different characteristics and skill-sets come together. Different perspectives drive improvement and innovation. But there is a core set of values that the public and patients require of all doctors; a unified sense of what ‘good’ means in practice. These values are necessary for a patient to trust a doctor during times of vulnerability, uncertainty and risk. The demonstration of these values enables patients to feel safe and confident that their best interests are being cared for.

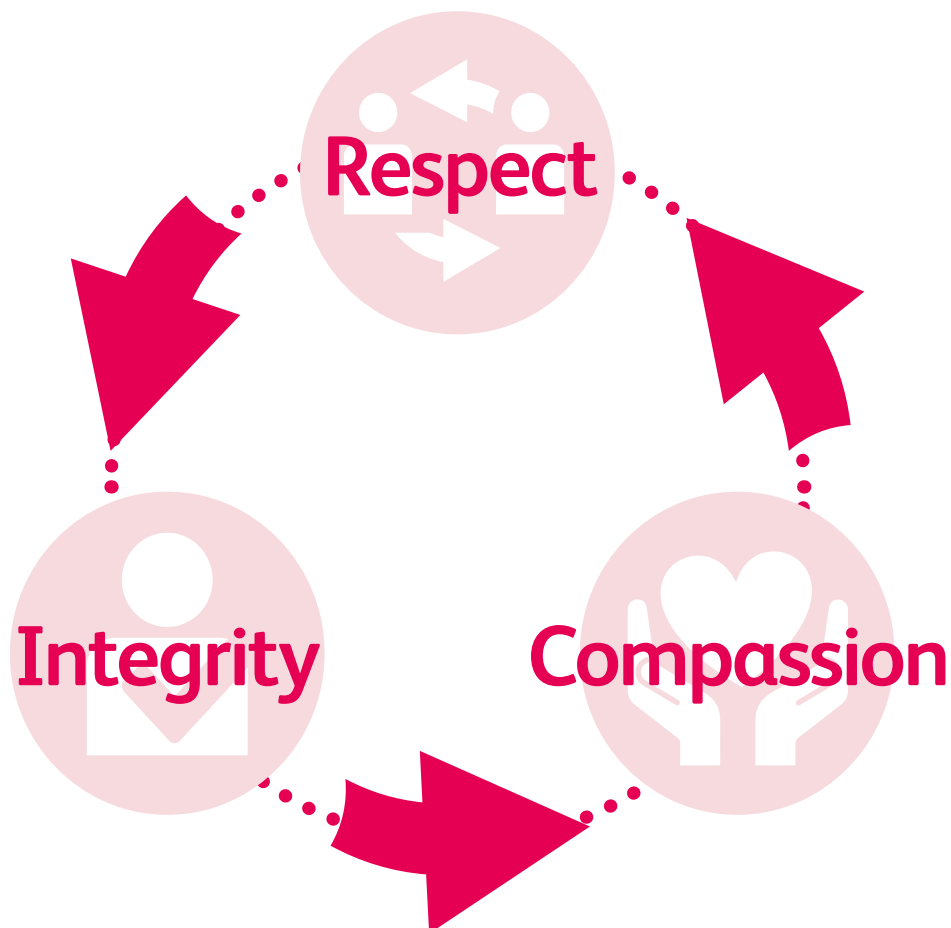
“ Human values are central to medical professionalism; medical professionalism transcends behaviours and concerns morals and ethics.”
– Patient representative

Doctors' professional values (what doctors count as 'good') must reflect what is important from the perspective of their patients. Patient representatives were asked to identify the values – or good qualities – that they believe a doctor should have. The ten most important values were identified and subsequently ranked in order of importance.

To better understand how these relate to the realities of everyday practice, they are considered in three broad groups: integrity, respect, and compassion. Examples are included of what these mean from the perspectives of our patient representatives and of doctors.

Values in doctors rated most important by patient representatives

- | | |
|--------------------------------------|--------------------------|
| 1 Responsibility | 6 Collaborative |
| 2 Empathy | 7 Compassion |
| 3 Respect | 8 Non-judgemental |
| 4 Integrity | 9 Humility |
| 5 Willingness to seek answers | 10 Resilience |



Integrity

In this context, integrity centres on putting the patient's interests first. Being competent and skilled to do the job is an important component of acting with integrity, as is remaining up to date with advances in practice. However, integrity also encompasses humility and a willingness to seek answers when needed. Professionals who act with integrity recognise and are truthful about the limits of their competence. They have the strength to seek assistance. Communicating competence while acknowledging limitations can, at first, seem incompatible. It is an important shift from the previous characterisation of the professional as the authoritative and absolute source of knowledge. Yet offering advice, which the patient may later discover to be inaccurate, undermines the likelihood of one being viewed as trustworthy (O'Neill, 2002). It takes skill and practice to show expertise and confidence alongside humility and openness. Acknowledging that you don't have the answer to everything can feel uncomfortable, but it is how it is done that matters. Constructive feedback from peers and patients is critical to learning how to do it well.

‘Medical professionalism means always putting the patient first. It is a code of conduct and a way of thinking.’

– GP

Respect

Respect is fundamental to the patient–doctor relationship and is similarly a two-way relationship. Patients, as well as doctors, have responsibilities and the NHS constitution describes these (Box 2.1). Box 2.2 describes some of the ways that doctors can manifest respect as described by patient representatives.

Box 2.1 A patient's responsibilities

- To make a significant contribution to their own and their family's good health and wellbeing, and take personal responsibility for it
- To treat NHS staff and other patients with respect
- To provide accurate information and keep appointments or cancel within reasonable time
- To follow the agreed course of treatment and discuss with their clinician if they find this difficult
- To participate in public health programmes and ensure those closest are aware of wishes for organ donation
- To give feedback – both positive and negative – about care received

(Adapted from NHS Constitution)

‘Medical professionals need to respect patients and patients need to respect medical professionals to allow healthcare to take place.’

– Patient representative

In a respectful interchange the views of both participants are recognised as important. Respect is lost when patients feel dismissed or that their concerns are left unheard or unacknowledged. This may happen, for example, when patients lack confidence in vocalising fears or want to appear compliant, despite having concerns. The desire to be treated as a person, rather than an illness, is intrinsic to feeling respected. Simple ways to show respect include asking patients how they want to be addressed, remembering a patient's name and personal details about them, being familiar with their case history, and involving their family and carers in discussions (with their consent). Enabling patients to voice their concerns and responding in a non-judgemental manner is pivotal to building respect. Feeling listened to is perhaps the most fundamental element of building respect.

Respect extends beyond the patient–doctor relationship. Patients describe feeling less confident in their relationship with a doctor when they witness rudeness by the doctor to other members of the team. Researchers have confirmed this phenomenon, showing that consumers become angry and lose confidence when they witness an employee behaving uncivilly towards another employee (Porath et al, 2010). Furthermore, consumers make faster and more negative judgements about the organisation after witnessing uncivil behaviour (Porath et al, 2010).

Box 2.2 Respect from the patient's perspective

- > Listen to their concerns
- > Involve them in decisions
- > Treat them as adults
- > Respect their choices
- > Involve family and carers with the patient's consent

‘It's not rocket science. It comes down to listening and active listening. Demonstrating you are listening – feedback, reflect what you are hearing.’
– Patient representative

Compassion

Compassion is that value or quality of doctors and patient–doctor relationships that facilitates companionship amid uncertainty, a sensitive approach to risk and intelligent reasoning and decision-making (Hordern, 2017). Compassion in healthcare has been defined as the ‘humane quality of understanding suffering in others and wanting to do something about it’ (as cited in Haslam, 2015) or the feeling that arises in witnessing another's suffering that motivates a subsequent desire to help (Goetz, 2010). Both definitions highlight the recognition of suffering and the desire to relieve suffering. Compassion is intrinsic to the individual but can be diminished by relationships, the environment, and surrounding behaviours.

Compassion moves the patient–doctor interaction beyond the purely transactional and is strengthened when bounded with respect and integrity. Compassion is an action word. Compassion is listening, empathising, and acting to alleviate suffering. At its best, it is a noble act between two human beings through which both derive benefit.

It is a two-way process of mutual understanding that involves openness to learning, change of mind and responsibility-taking by both doctors and patients (Hordern, 2018a). Navigating disagreements, challenges and tensions with care and consideration is central to compassionate care and enables two-way respect and integrity to develop. Avoiding judgementalism by not letting failings define relationships (Hordern, 2013 & 2018b), respecting the patient's person and agency, and understanding another's distress are further important elements. Compassion for many is at the heart of healthcare; 'many identified the values of compassion and care... as their most deeply felt personal professional commitment' (Dixon-Woods et al, 2013).

There is no standardised measurable way to show compassion, but it is ultimately any act that alleviates the suffering of another while acknowledging and respecting their humanity. Compassion comes more easily to some clinicians in some circumstances, but that does not mean others lack compassion: the surgeon who stitches a wound with great care is being compassionate, just as the palliative care doctor engaging in hopes and fears at the end of life.

of compassion have led to the profession being perceived as cold or indifferent (RCP, 2010). The role of a professional is different from a family member or loved one: it is to use training, experience, reasoning, and evidence to reach a morally and scientifically sound conclusion.

What is the impact of compassion on the professional? Collaborative, caring, and compassionate patient–doctor relationships improve both the patient and doctor's experience and are associated with enhanced morale and wellbeing (Lown & McIntosh, 2014) (Graber & Mitcham, 2004) (Sinclair et al 2016). The risk factors for compassion fatigue include job-related factors and having less experience (Sinclair et al, 2017). There is no evidence to support the hypothesis that exemplary compassionate professionals are more susceptible to 'compassion fatigue' (Sinclair et al, 2017). An organisation that is compassionate to its staff will lead to the staff being more compassionate to patients and having better morale (Sinclair et al, 2016). The reverse is also true. In order for an organisation to demonstrate compassionate behaviour, it should 'always treat employees exactly as you would want them to treat your best customer.' (Covey, 1989)

‘Although we patients still respect members of the medical profession and expect high professional standards from our doctors the relationship is altering. The level of deference given by patients to their doctors is changing and the need for a more balanced relationship growing.’
– Patient representative

At times, misunderstandings about the nature

Communication

Good communication is essential for showing integrity, respect, and compassion. It is central to how patients judge doctors and consider them to be trustworthy. Communication is both verbal and non-verbal and may happen face to face or through phone, email, or letter. Honest two-way communication, characterised by the two-way qualities of integrity, compassion and respect, is essential for a collaborative relationship.

Research from the Mayo Clinic in the USA describes seven ideal doctor behaviours: confident, empathetic, humane, personal, forthright, respectful, and thorough (Bendapud et al, 2006). Patients want professionals to be good communicators and have sound, up-to-date clinical knowledge and skills (Coulter, 2005). A systematic review showed that ‘humaneness’ was the most valued attribute of doctors, followed by competence/accuracy and patient involvement in decisions (Wensing et al, 1998).

The most commonly cited barrier to collaboration, care, and compassion is the lack of time. Both clinicians and patients identify adequate space, both in terms of time and environment, as critical to the compassionate relationship.

What patients want

- > ‘Accept me as I am (age, gender, sexuality, religion, ethnic origin) and do not make assumptions.’
- > ‘If I am emotional, check I have heard what you have told me. Do not complain about me to others (particularly when I can hear).’
- > ‘You are the expert on my medical condition, but not on me. Behave as if your time is important and as if my time is also important!’

Patients talk about a good experience

‘I recently asked for a GP recommendation by a friend who is being treated for breast cancer. She rang me afterwards to tell me about the experience. She was taken aback by the way the GP stood up, shook her hand and greeted her by name. The GP proceeded to ask questions and listen to the answers.

My friend felt the GP was really trying to understand what this illness meant for her as a whole person.

In her next visit the GP overruled my friend’s decision to return to work and insisted my friend took more time off than she felt able to ask for/allow herself. It was only in being surprised at how relieved she felt that my friend realised how unready she was to return to work. My friend felt that this decision very much illustrated the degree to which the GP had fully taken on board not only her illness, but her work demands and her personality and natural inclination to do too much.’

‘Waiting room clean, tidy, not overcrowded, bright with clear signs. Receptionists pleasant and welcoming. I was seen on time. I did not feel rushed, so I felt able to ask questions. The consultant talked to me and not his computer.’

A patient talks about a poor experience

‘Following hysterectomy after a diagnosis of endometrial cancer, I attended the outpatient clinic postoperatively. The diagnosis had been a shock and my psychological recovery would prove to be slower than my physical one. [The doctor’s] response was to scribble down the stage and grade on a piece of paper and to tell me to go away and look it up on the internet. In the situation I had every trust in the doctor’s technical abilities, however I did not feel listened to or understood or that I mattered as a person.’

One thing you can do

Set aside 10 minutes a day for the next two weeks to reflect on a significant patient consultation. This might be one that went particularly well, or perhaps was particularly challenging. Think about this in relation to the key attributes of integrity, compassion and respect and what patients want (described in box above), consider what you might do differently in future.

Recommended reading

Schneider C. *The Practice of Autonomy: Patients, doctors, and medical decisions*. Oxford University Press, 1998.

McDonald M. *A long and winding road. Improving communication with patients in the NHS*. London: MacMillan Publishing, 2016.

Herring J, Fulford KWM, Dunn D, and Handa A. *Elbow room for best practice? Montgomery, patients' values, and balanced decision-making in person-centred care*. Medical Law Review 2017;25:582–603. Available online: <https://academic.oup.com/medlaw/advance-articles>

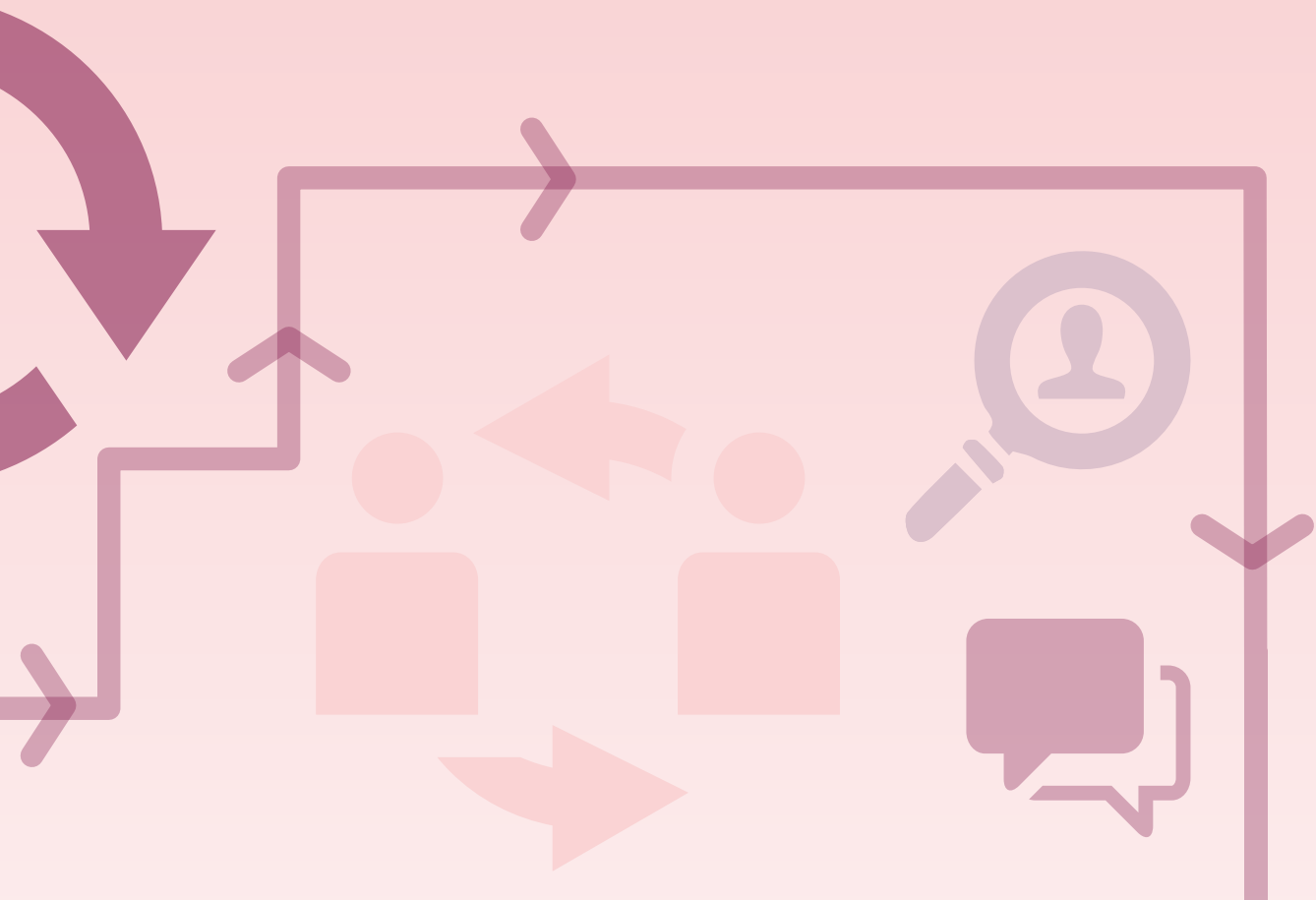
General Medical Council. *Consent: patients and doctors making decisions together*. London: General Medical Council, 2008.

Granger K. *The Other Side*. 2012. Ebook.



If shared decision making really is going to take off, we need longer appointment times.'

– Patient representative





Royal College
of Physicians

Chapter 3: Doctor as team worker



Contents

39 Summary

40 The growing imperative of team working

41 The importance of team working

42 Benefits of team working

43 Different types of teams

44 Challenges to effective team working

46 Leading and following

48 Recommended reading

Summary

- > Teamwork is an important component of professional satisfaction and engagement.
- > Effective teamwork improves patient outcomes and satisfaction and organisational performance and productivity.
- > In the 21st century the success of professionals will be defined by their ability to work collaboratively in complex teams.
- > Teamwork has become more important because of the growing complexity of patients' problems and healthcare systems and the increasing range of interventions.
- > Although long-recognised as important, team working in healthcare is still underdeveloped.
- > Effective teams protect team members, reducing burnout, stress-related illness, and anxiety related to litigation.
- > Barriers to teamwork include failure to recognise that it depends on learning, failure to build it into the training of health workers, and the structure of healthcare.
- > The three areas that teams should focus on improving are culture, communication, and reflexivity (the ability to reflect on events and learn from them).

Doctor as team worker

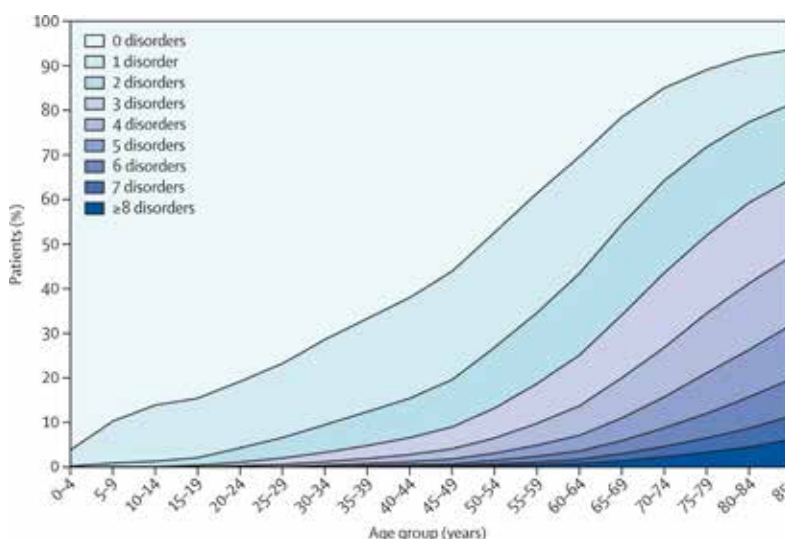
The professional ‘heroes’ of the past tended to be mavericks who were independent and self-sufficient (Gawande, 2012). Being a good team player did not rank highly in professional aspirations. Medicine and the law, for example, have tended to attract competitive, driven individuals and prioritised individual success. But that is changing: teamwork has been recognised as an important component of professional satisfaction and engagement. It is also necessary for better organisational performance, productivity and improved patient satisfaction and outcomes (Manser, 2009) (Firth-Cozens, 2001) (West et al, 2002) (RCP, 2017).

In the 21st century the success of professionals will be defined by their ability to work collaboratively in complex teams. Healthcare is no longer the domain of the individual doctor working in the local parish with limited therapeutic options. As the complexity of work increases, the ability to collaborate across professional and structural boundaries becomes ever more important.

The growing imperative for team working

Until recently, healthcare was dominated by the treatment of patients with acute conditions. Only in the early 1990s did long-term care become more of a priority (Greengross et al, 1999). The management of chronic disease and multimorbidity is now the main work of health systems (see Graph 3.1 below). The treatment of patients with long-term conditions accounts for 70% of the health and social care spend in the UK (Department of Health, 2012). Patients are also older: since 2005, admission of patients aged over 45 have increased by 60% (NHS Digital, 2018).

As well as patients tending to present with increasingly complex conditions, and at an older age, scientific understanding has drastically increased, leading to more diagnostic and treatment options, and so in turn increasing specialisation. Around 2.5 million new scientific papers are published annually, and the European Union approved 92 new drugs in 2017 (Hirschler, 2018). Procedural techniques are evolving faster than ever, and patients expect the best care, delivered by experienced (and usually specialist) practitioners. As a result, true generalists have become endangered.



Graph 3.1 This graph shows the increase of multimorbidities with age

In the 21st century the success of professionals will be defined by their ability to work collaboratively in complex teams

The shift from acute to long-term conditions means that a re-orientation in healthcare is required. As The King's Fund highlights, we need a model of 'prevention, self-care, more consistent standards of primary care, and care that is well co-ordinated and integrated' (The King's Fund, 2015), while still providing for those with acute illnesses.

As medicine has become more specialised patient care has become increasingly fragmented. Patients commonly experience duplicated or conflicting advice from clinicians, causing anxiety, frustration, and fear. The confusion contributes to poor medication adherence, unnecessary use of emergency care services, and an eroded doctor–patient relationship.

Effective team working has never been as important in healthcare as it is now. Individual efforts will not meet current and future challenges. 'Through combining the efforts of individuals within a team, the aggregates of individual contributions will be surpassed' (West et al, 1998).

“ The big problem for trusts is that everyone continues to work in little pockets – so how do we solve problems together? ”
– Doctor in training

The importance of team working is long-recognised, but team working is still insufficient

This report is not the first to recognise the importance of teamwork. The *Future Hospital: Caring for patients* in 2013 recognised team and professional collaboration as necessary to realising its ideals (RCP, 2013). and its *Good medical practice* includes teamwork as an explicit component of professionalism (GMC, 2013). *Doctors in Society* highlighted the importance of team working in professionalism over a decade ago (RCP, 2005) .

However, the evidence suggests that dysfunction in teams continues to damage the delivery of healthcare (RCP, 2017) (Borrill et al, 2011). Reviews of surgical and paediatric units have shown that dysfunction in clinical teams is either the first or second cause of problems within units (NHS staff survey, 2016) (NHS staff survey, 2017). Nearly half of NHS staff do not believe teams meet to discuss effectiveness, and two-thirds think that senior managers do not act on staff feedback (NHS Staff Survey, 2017). Analysis of adverse event and malpractice claims shows that poor teamwork and communication are the root cause in between half to three-quarters of adverse events (Rabøl et al, 2011) (Singh et al, 2007).

In enabling teams, members also look out for each other's long-term development, training and career rather than solely short-term 'getting-through-the-day' type concerns.

Benefits of team working

Team working has three important benefits. Firstly, providing coordinated care improves patient outcomes. Systematic reviews show that effective team working has a medium-to-large effect on clinical performance (Salas et al, 2008) (Schmutz & Manser, 2013). Patient safety also improves when teams work well together; one study found that team training reduces medical errors by 19% (Hughes et al, 2016).

The second benefit of teamwork is for organisations. Medical errors have been recognised to be common since the 1990s, and these errors are mostly avoidable and usually attributable to human or systems failures (Vincent, 2016). Teamwork reduces medical errors and increases patient safety (Baker et al, 2003). The World Health Organization recognises teamwork as a critical component of patient safety (WHO, 2011). Effective team working also reduces absenteeism and increases employees' engagement and satisfaction (West & Dawson, 2012) (West & Borrill, 2005) (Buttigieg et al, 2011).

Thirdly, effective teams protect team members, reducing burnout, stress-related illness, and anxiety related to litigation. The negative impact of the day-to-day challenges of providing patient care is reduced by feeling well-supported by a team (Maben et al, 2016). Chapter 2 describes how teams marked by relationships of compassion are more likely to stay together and perform well under pressure (see chapter 2). Teams can also be sustained during times of difficulty if there is a shared vision aligning common purposes. In enabling teams, members also look out for each other's long-term development, training and career rather than solely short-term 'getting-through-the-day' type concerns.

“As doctors, we have to accept the responsibilities of the hundreds of decisions that we take every day. By reflecting on adverse events the team could share their thoughts, learn and work together to minimise the risks we all inevitably deal with on a day-to-day basis.”
– Doctor in training

Beware of ‘pseudo-teams’

Being part of a good team creates a sense of belonging and enables individuals to feel valued and purposeful. However, working in pseudo-teams has been found to be more harmful than not working in any team at all (West & Lyubovnikova, 2012).

A real team is a group of people with complementary skills who are committed to a common purpose and approach, and who hold each other accountable. Real teams work closely and interdependently and have clear, shared objectives (Lyubovnikova, 2015). They meet regularly to reflect on performance and how it could be improved (Carter et al, 2008). Pseudo-teams, in contrast, do not have shared objectives, do not work interdependently, and do not meet regularly to review performance. Unfortunately, pseudo-teams are common in healthcare. Members of pseudo-teams report reduced job satisfaction and engagement and increased stress (West, 2013).

The box below describes the necessary components of an effective team and can be used to benchmark a team’s development. The fewer criteria met, the more likely the group is functioning as a pseudo-team.

How do you know your team is working well?

- Is the leadership of the team clear and unambiguous?
- Does your team have a shared purpose and set of goals?
- Do team members feel confident adapting roles when needed?
- Are the skills of team members complementary?
- Do team members honour their commitments to one another?

Different types of teams

Ad hoc teams are common in healthcare because of shift working, and they are often formed in stressful conditions, and for short periods. Intact teams, in contrast, have a history and future of working together. Ad hoc teams are defined by ‘rapid formation, an abbreviated lifespan and limited experience working together’ (Weaver et al, 2014). Examples of the sorts of team that a clinician might encounter are an emergency medicine consultant participating in a cardiac arrest, leading the emergency room team on a day shift, and joining a departmental governance meeting.

Another example is a doctor who works in both public health and general practice. They are likely to be a member of multiple teams within local authorities, but also a member of general practice teams and perhaps clinical commissioning groups. All of these teams have different aims and are likely to have different cultures, meaning that advanced skills are needed to work effectively in each team.

‘Rotating around makes you feel like a commodity. I am worried that our guys don’t feel like doctors.’
– Consultant

Challenges to effective team working

1 Insufficient awareness of the difficulty of teamwork and the skills required

Team working is challenging and depends on skills that need continuous improvement. Bringing together people with different perspectives and agreeing on a joint vision of a good outcome for a patient takes skill (Firth-Cozens, 2001). Yet aligning people with different perspectives produces the best outcomes for patients.

Many studies have shown that team training improves team processes and behaviours, and patient outcomes including morbidity and mortality (Weaver et al, 2014); and ad hoc teams benefit as much as intact teams from team training (Salas et al, 2008) (Delise et al, 2010).

2 The lack of prioritisation of teamwork in education and training

Despite strong evidence of its benefits, team working is still not given priority in healthcare (Weller, 2012). Physical environments, unhelpful performance targets and professional prerogative all contribute to the team dysfunction that is common in healthcare.

Few staff have attended dedicated training and even fewer have received training in the teams in which they work. Time and physical space are required for teams to meet and reflect on performance. The frequent rotations of junior staff and the move to shift working are probably both contributors to the breakdown of teams in prerogative (RCP, 2016).

In their review of team working in healthcare, West and Field describe a ‘failure of healthcare teams to set aside time for regular meeting to define objectives, clarify roles, apportion tasks, encourage participation and handle change’ (Field & West, 1995).

3 The structure of healthcare

Systems of accountability in healthcare can act as a barrier to effective teamwork. Traditionally doctors have led the healthcare team, but if, for example, a physiotherapist abuses a patient, who has ultimate authority to deal with this: the physiotherapist’s line manager or the patient’s consultant? (Firth-Cozens, 2001). Ambiguity in line management promotes isolated professional working and leads to education and training remaining largely within disciplines. Professional allegiances can cause tensions when there are diverse views on how objectives can be achieved (Carter et al, 2008).

‘In my hospital, the wards that work badly are those where nurses and doctors don’t work together.’
– Consultant

Teamwork is like any other skill and benefits from practice, training, and feedback on performance.

Teamwork is like any other skill and benefits from practice, training, and feedback on performance. Box 3.1 describes the behaviours demonstrated by skilled teamworkers. Box 3.2 describes the behaviours of successful teams.

Box 3.1 Behaviours of team members in successful teams

Demonstrate understanding

Understands themselves and recognises their impact on others.

Commit

Recognises the importance of the team's goals and works with purpose to achieve these.

Support

Helps others to achieve individual and team goals, supporting through difficulties and maximising success.

Negotiate

Works to solve conflicts in the group and create consensus where possible.

Communicate

Is respectful in the way they converse and communicate with other team members and keeps the team up to date .

Box 3.2 Behaviours of successful teams

Speak up

Team members are expected to speak up, ask questions, acknowledge errors and raise issues.

Reflect

Team members meet on a consistent basis to discuss, observe and question the work of the team.

Disagree

Team members will have different viewpoints; this is a core reason for teams to exist. Resolving conflict effectively creates opportunity.

Experiment

The team adapts work to solve the problem. Errors are acknowledged and lessons learned.

Listen

Team members work hard to understand each other's opinion and respect the expertise of all members.

(Box 3.2 Adapted from Edmondson, HBR 2012)

‘Being a good leader, a good clinician and a good follower are completely different things.’
– Senior medical educationalist

Leading and following

Doctors are required to be both leaders and members of effective teams. Leadership is addressed in another chapter, but as ‘followers’ the most useful contributions doctors can make are understanding themselves and their impact on others, commitment to the goal, and flexibility in achieving that goal. A team worker can contribute most by supporting others, solving conflicts and facilitating communication.

How to improve teams



The three areas that teams should focus on improving are culture, communication, and reflexivity (the ability to reflect on events and learn from them).

The three areas that teams should focus on improving are culture, communication, and reflexivity (the ability to reflect on events and learn from them). All areas are important, but the nature of the team should determine priorities. For example, focusing on communication is particularly important for 'ad hoc teams' to prevent errors and improve patient safety. Team culture is the central issue for 'intact teams' to ensure long-term effectiveness, innovation and engagement. Reflexivity remains critically important for all teams.

Team culture

Team culture is summarised best in the phrase 'how things are done around here'. It is the interaction of beliefs, values, systems, and processes that result in a set of behavioural norms (Pollack & Frolkis, 2015). The culture of a team defines how it operates. For example, a team that has a culture of learning from mistakes will encourage members to identify errors, adopt processes that enable group learning, and act because of that learning. There are four areas to focus on to improve team culture: recognition of contributions; creating a supportive working environment; containing disruptive behaviour; and enabling open communication (Weller et al, 2014) (Leonard et al, 2004).

Team communication shapes the culture of a team.

Team communication

Team communication shapes the culture of a team. Analysis of sentinel events, prescribing errors, and near misses repeatedly identify miscommunication as a key factor (Flin et al, 2009) (RCP, 2015). Effective communication is a challenge in healthcare because professionals work in stressful environments (Leonard et al, 2004), have a high level of responsibility, and are often distracted and interrupted. In these circumstances effective communication needs to be actively developed. Most important is improving communication among professional groups and creating regular times for teams to meet and use evidence-based techniques to improve communication.

Team reflexivity

Team reflexivity is the ability of a team to reflect on events, learn and then act (Schippers et al, 2015). In the best teams this is a continuous process embedded in daily working routines. Healthcare presents unique challenges for promoting reflexivity: doctors often work in multiple teams; increasing pressure on healthcare can lead to reflective time being sacrificed to complete immediate tasks; and the bureaucratic nature of health systems reduces the ability of teams to adapt after reflection. But there are evidence-based interventions which can overcome many of these barriers (Point of Care Foundation, 2018) (Bar-Sela, 2012) and team debriefs offer an effective, low resource tool for teams to reflect and adapt.

One thing you can do

For a minimum of one week, introduce a team huddle in your department at least once a day.

To be effective the evidence suggests that huddles should last for 10–15 minutes, optimise staff engagement, and focus only on essential information (Goldenhar et al, 2013) (Yu, 2015) (Provost et al, 2015). The checklist below will help you to structure this.

Structuring your team huddle

- ☐ Who is on your core team?
- ☐ Do all members understand the agreed goals?
- ☐ Does everyone understand their roles and responsibilities?
- ☐ What is the plan of care?
- ☐ What is the current staff availability?
- ☐ What considerations do you need to take into account around workload?
- ☐ What are your available and unavailable resources?

Recommended reading

RCP London. *Improving teams in healthcare*. London: RCP, 2017.

Lencioni P. *The Five Dysfunctions of a Team: A Leadership Fable*. New Jersey: John Wiley and sons, 2002.

McChrystal S et al. *Team of Teams: New Rules of Engagement for a Complex World*. London: Portfolio Penguin, 2015.

Salas E. *Transforming Healthcare One Team at a Time: Ten Observations and the Trail Ahead*. *Group and Organisation Management* 2018;43:357-81.

Yu E. *Implementing a Daily Team Huddle*. Available at www.stepsforward.org/modules/team-huddles



Royal College
of Physicians

Chapter 4: Doctor as manager and leader



Contents

- 51 Summary
- 52 Doctor as manager and leader
- 53 Unwarranted variation, autonomy and performance management
- 55 Aligning professional, clinical, managerial and patient preferences
- 56 The importance of clinical leadership
- 59 Recommended reading

Summary

- > Even though they may not recognise it, all doctors are also managers and leaders.

Health systems have become bigger and more complex and expensive, creating a
- > tension between the traditional view of the professional as an autonomous individual and the modern reality, which requires a doctor to work as an employee in a huge, complex system.
- > All health systems show considerable unwarranted variation in practice, and reducing these variations is an ethical, clinical, and professional responsibility for doctors.
- > Autonomy for doctors is necessary for the delivery of care, but the modern concept of autonomy is more complex and nuanced, and requires a greater degree of judgement than in the past.
- > Professionalism will be essential to sustain and improve health systems, but doctors need to have a broader view of the delivery of healthcare, relinquish traditional roles (that can now be performed by others), and integrate clinical with managerial leadership skills.
- > It is now no longer acceptable for doctors to be accountable only for their interactions with individual patients.
- > Clinical engagement and leadership is pivotal to the success of health systems.
- > Effective healthcare requires clinical leadership and embracing such leadership will enable the profession to flourish.
- > Doctors need to be well-supported to be effective clinical leaders.
- > Good leaders are defined by three attributes: courage; the ability and desire to innovate and improve; and the ability to manage risk and uncertainty. Good doctors have the same attributes.

Doctor as manager and leader

Some doctors might be surprised that being a medical professional includes also being a manager and leader. But working in increasingly complex and expensive health systems – and deciding how resources are allocated – doctors are inevitably expected to act as managers and leaders. The professional challenge is to recognise these roles and do them well.

Professional tensions

Until the second half of the 20th century doctors were usually autonomous and often ran the institutions in which they worked. External regulation was limited, and society trusted professionals to regulate themselves. When the NHS began, doctors in primary care had the status of private businesses, albeit providing services for a monopoly funder, and senior consultants were highly influential in the organisation of hospitals. But as the costs and complexity of healthcare rose, non-medical managers became more common and more powerful, and politicians became more active in trying to ensure health systems are high-quality and efficient.

The medical sociologist Elliot Friedson has identified three models organising work (Friedson, 2001):

- the free market, which is consumer and competition driven
- bureaucracy, which uses hierarchy to formulate, distribute, and specialise tasks
- professionals and professionalism.

The NHS has used all of these models, in parallel and in combination, with differing degrees of success.

Individual doctor excellence is necessary for good patient outcomes in modern medicine but cannot achieve them in isolation (Bohmer, 2012).

In the 21st century the delivery of healthcare is as much dependent on the success of institutions as it is on individuals. This has created considerable tension between the traditional view of the professional as an autonomous individual, and the view of an employee in a huge complex system. The NHS, for example, is the fourth largest employer in the world with 1.3 million employees, and the NHS in England alone had a budget of £122.5 billion in 2016/2017. (The King's Fund et al, 2017)

Medicine was once constrained by limited therapeutic options, but now there is a huge range of treatment options, many of them expensive. In the developed world the potential cost of healthcare is far exceeding what can be afforded (World Economic Forum, 2016). This is presenting an existential crisis for medicine, as doctors have been taught to do the absolute best for every patient – but what if the 'best' is too expensive?

Every clinical decision has financial implications, but doctors are not, at present, likely to be trained in health economics. Where does individual autonomy fit in the complexity of modern healthcare, both as a core tenet of professionalism and a requirement of job satisfaction? Unwarranted variation in practice is an important driver of the costs of healthcare, and there are many initiatives to try to reduce it. How do doctors marry standardisation based on the best evidence with expertise, judgement, and autonomy?

Unwarranted variation, autonomy and performance management

Unwarranted variation in practice describes the differences in the delivery of healthcare across a specified geography that cannot be explained by disease prevalence or patient preference (Wennberg, 2011). This work was pioneered in the USA by Professor Jack Wennberg, past director of the Dartmouth Institute for Health Policy and Clinical Practice. He showed significant differences in spending, resource allocation, and service use in the USA and subsequently in the UK without measurable differences in outcomes (Wennberg, 2011). He highlighted his findings in the Dartmouth Atlas of Healthcare, and there is now the NHS Atlas of Variation in Healthcare. The atlases show important variation in almost every part of healthcare, including uptake of vaccinations, methods of delivering babies, and referrals from general practice to specialists.

Unwarranted variation has been estimated to add 1 trillion dollars to the cost of the US health system (Berwick & Hackbath, 2012). But unwarranted variation has a moral as well as a financial implication: the variations represent under- or over-treatment of patients (Winnberg, 2011). Beyond clinician-specific factors, many other variables contribute to disparities in practice, including systems, processes, and access.

“ If reduction in variation is associated with movement towards the best possible outcome, then it should be supported.”
– Consultant

This ability to act independently on behalf of patients is critical to the integrity of the profession and has been described as the “soul of professionalism”.

But doctors continue to hold a central role in the allocation of resources, and reducing unwarranted variation is an ethical, clinical, and professional responsibility of doctors. In this way all doctors, not just those with specific managerial roles, are managers, even if they neither recognise nor like the term.

At the same time, autonomy for doctors is crucial both for the delivery of care and the integrity of the surrounding systems and processes. The ability of doctors to advocate for patients at an organisational, systemic, and governmental level is part of their professional responsibility. This ability to act independently on behalf of patients is critical to the integrity of the profession and has been described as the ‘soul of professionalism’ (Friedson, 2001). Autonomy is also important in the interaction with individual patients: standardisation will not account for patient preference, the challenge of managing patients with multimorbidity, and the uncertainty that is intrinsic to medicine.

It is important to acknowledge that there will always be some variation in access and available resources depending on geographic location. For example, the range of specialist services readily available to a cancer patient in London will be different to that in the northern isles of Scotland. Part of the skill of medicine is to minimise the impact of circumstance on outcomes.

This leads to the question of how to promote standardisation of healthcare provision while enabling clinician autonomy in the NHS. The answer seems to rest in how autonomy is considered in the 21st century. The autonomy now needed by doctors is more complex and nuanced and needs greater judgement than in the past with respect to the individual patient and the population as a whole. The best outcome for a patient requires the doctor to know the current evidence, understand the causes of variation in practice, and be aware of individual patient preferences. Synthesising this information to create the right treatment plan for each patient requires skill.

Autonomy is trusting doctors to use their skill, knowledge and judgement to make the right decision, at the right time, in the best interests of the patient. This requires trust in those providing services, and to interweave clinical skills with managerial frameworks. At the same time doctors must recognise the constraints on the system and consider this within their own practice.

Performance management dominated public and private organisations for many years, but while the private sector has largely moved away from this model, this shift has not yet been mirrored in the public sector. Performance management, which uses processes to maintain performance, has been considered to be at odds with professionalism, which incorporates a more vocational and moral motivation: a drive to work for the greater good. Performance management has been thought to generate ‘red tape’, stifle creativity and innovation, and demotivate staff (Hirst et al, 2011).

Imposed targets that are nothing to do with professional decisions are very demoralising.

Performance management uses targets, which are often process rather than outcome driven, as process is usually easier to identify and measure than outcomes. Targets may be misleading, as although throughput (a process measure) may be good, outcomes may be poor. The use of targets has created disharmony between doctors and managers, both of whom are trying to deliver healthcare, but by using disparate methods. This breakdown between doctors and managers is one of the most important challenges facing the NHS, and requires improvement on both sides. In the 2017 NHS staff survey across all trusts in England, less than half of staff felt listened to by managerial staff (NHS staff survey, 2017).

Efficiency is talked about constantly and can seem to be a predominant force in the NHS. While it is important to use resources effectively, the focus on efficiency is often taken to mean that staff are not working hard enough, and that working more ‘efficiently’ would improve services. Efficiency, while undoubtedly important, is not inspiring to most health workers, who entered their profession to provide care for others, not to drive efficiency.

“Trust, for me, is [knowing] that the doctor will make the right decision for the individual patient.”
– Patient representative

Aligning professional, clinical, managerial and patient preferences: doctors need new skills

What is the solution to these challenges?
How can professional, clinical, managerial and patient preferences be aligned?

A transformation in healthcare is required, but bureaucratic restructuring alone is unlikely to yield sustainable results. Instead, as Friedson argued, the practice of medicine is conducted properly only when professionals are enabled by their organisations to lead and have authority in the delivery of healthcare. (Friedson, 2001) The success of any organisation or system in the future will depend on its ability to delegate authority and decision-making to frontline teams. The interdependence among teams will be critical for joined up, safe, high-quality care, as will the ability of systems to promote information sharing. Primary and specialist care must be better integrated if patients are to be treated holistically. (Goodwin et al, 2012) Box 4.1 shows what patients want from healthcare systems.

Box 4.1

What patients want from their healthcare:

- > Accessibility in times of need
- > Confidence in the system, ie people and processes
- > Integration across services
- > Being treated as an individual
- > Effective treatment options

[Adapted from work with the RCP Patient Carer Network and Coulter, 2005]

‘Health economies are struggling: professional groups need to be strong enough to rise to the challenge.’

– Doctor

This requires a new set of skills for doctors. They need to have a broader view of the delivery of medicine, relinquish traditional roles that can now be performed by others, and integrate workstreams in a new and innovative fashion. Collaborative leadership, rather than competition between healthcare workers, will bring success.

Collecting, analysing and using data is increasingly important for benchmarking, identifying population needs, and analysing unwarranted variation and gaps in quality. The consideration of financial cost is a necessary component of a just and equitable healthcare system. Recognising this requires a paradigm shift in how professionals think (Gawande, 2012).

‘You feel you can trust a joined-up integrated service where people talk to one another and work in a collaborative way.’

– Patient representative

Clinical leadership, evaluating population health, and continuous improvement are all necessary for 21st-century medicine. But why should the success of a service matter to the individual doctor? It is now no longer acceptable for doctors to be accountable only for their interactions with individual patients. The delivery of a service impacts on patient outcomes as much as the choice of treatment, making it part of the professional responsibility of all doctors. This responsibility is the essence of professionalism: a trusted relationship where a person places confidence and faith in another to act in that person's best interests.

If the profession chooses not to engage with these endeavours to create 21st-century healthcare, then it undermines its professionalism. The evidence is unequivocal that clinical engagement and leadership is pivotal to the success of health systems and is necessary for transforming systems (West et al, 2015) (Clay-Williams et al, 2014) (Spurgeon et al, 2011) (Barker, 2011) (Mountford and Webb, 2009). Importantly, the engagement of doctors in organising and improving health systems is necessary for doctors themselves. The autonomy of professionals has never been a right, but a privilege to be earned and – once earned – respected. Working collaboratively, moving beyond traditional territories, and using available resources with care are the basis on which autonomy flourishes. In return, organisations and systems should empower doctors to work with pride, joy and meaning.

The delivery of a service impacts on patient outcomes as much as the choice of treatment, making it part of the professional responsibility of all doctors.

The importance of clinical leadership

Clinical leadership exists at all levels, from the individual role-modelling professional behaviours through to chief medical officers and national medical directors. What follows considers doctors in formal leadership positions and those leading on standards in healthcare, but this does not take away from the importance of those who lead by acting consistently with integrity, compassion, and respect to their patients and colleagues. In fact, role-modelling is one of the main ways in which professionalism is learned.

The impact of clinical leadership on individuals, departments, and services cannot be underestimated (Goodall, 2011) (Veronesi et al, 2013). Doctors are uniquely placed to understand the trade-off between medical science and organisational imperatives (Bohmer, 2012) (Kings Fund, 2012). Furthermore, their core professional identity as healers prioritises what is best for patients and brings this to the fore (Tweedie & Dacre, 2017).

At present, politics, policy, money, and measurement are the main drivers of health systems, yet the leadership of the clinical director, GP partner, or nursing sister may well have more impact on patient care. Medical directors and other clinical leaders help define the culture of an organisation, the degree of transparency, learning, and compassionate care throughout the organisation. Yet being a medical director is often seen as a burden or a 'thankless task'. Often doctors step into leadership roles unwillingly and with little formal preparation, only to then suffer from unwarranted criticism and obstruction from colleagues.

“It’s a case of: “Well, who is going to be the clinical director for the next three years?” and “oh ... that’s over. I hope I haven’t got to do that for another ten years”.’
– Consultant

There are several elements that can make the job of clinical leadership particularly difficult. Managing peers can be challenging, as can creating consensus among departments with differing priorities. Change fatigue is rife in the NHS, and clinical leaders who ask for more change can be resented. Change fatigue is experienced when a system or organisation is constantly changing but without clear benefits to patients or staff. Doctors aren’t opposed to change but do need to see obvious benefits for patients or working practices (Garside 2004). A seemingly perpetual stream of new and often conflicting initiatives heightens the sense of fatigue (Garside 2004). Clinical engagement can be a challenge, made worse by low morale and a consistent focus on reducing costs. It is important to acknowledge the inherent value clash in marrying the unique individual doctor–patient relationship, where the professional has made an oath to put the patient’s interests first, with providing care for a population. Developing the skills to balance these competing priorities has traditionally been underdeveloped in the training of doctors.

Effective healthcare requires clinical leadership, and embracing such leadership will enable the profession to flourish.

Yet clinical leadership can transform outcomes for patients. Primary percutaneous intervention for heart attacks, the London Trauma Network, and the nationwide integration of stroke care have all improved patient outcomes and been driven by strong clinical leadership. Effective healthcare requires clinical leadership, and embracing such leadership will enable the profession to flourish.

Beyond formal leadership roles, doctors can have a strong influence on shaping healthcare. Effective leadership of teams, wards, clinics and practices can improve patient outcomes, staff morale and the ability of teams to work together. The NHS and its patients need doctors to engage in developing the service, governance, audit, and quality and safety improvement. Richard Boehmer, a professor of management, argues that the basic tools of leadership are available to doctors and are outlined in box 4.2 (Bohmer, 2012). In many ways, leadership mirrors the patient–doctor interaction: the leader listens, advises, creates consensus and acts to create an outcome which leads to an improvement in patient care. Box 4.3 describes some of the skills required by those who take on higher level leadership roles.

How can doctors be better supported to become clinical leaders? Firstly, all doctors moving into a leadership or management role should have formal management and leadership training and be supported with mentoring. Secondly, creating strong triumvirates among doctor, nurse, and manager leaders at each level in the organisation enables clinical leaders to work more effectively. Delegation of authority and autonomy to these triumvirates to drive change may help avoid change fatigue. The best leaders will combine this with continuing collaboration with and credibility among clinical colleagues. Finally, the broader workforce needs to acknowledge that the profession thriving depends on its leadership. Supporting doctors taking on leadership roles is an ethical and professional responsibility.

Box 4.2

Foundational skills of medical leadership

- > Speaking clearly
- > Inquiring respectfully
- > Acting decisively
- > Demonstrating humility and fallibility

(Adapted from Bohmer, 2012)

Box 4.3

Skills of higher level healthcare leadership

- > Relinquishing self-importance and ownership
- > Understanding healthcare systems
- > Possessing a knowledge base bridging clinical and managerial practice
- > Ability to adapt communication and behaviours with context
- > Creating the environment in which teams can continuously improve
- > Listening to employees and helping them to reach their short and long-term goals
- > Seeking to understand first, and then be understood
- > Recognising mistakes and learning from them
- > Creating a shared vision based on the higher goals of healthcare backed by the evidence

(Adapted from Timmins, 2015)

‘If you want to engage people, it has to mean something. There are a few trusts where you feel it: good leaders surrounded with good people, given the freedom to get on with it.’

– Senior health leader

Good leaders are defined by three attributes (Tweedie, 2018): courage; the ability and desire to innovate and improve; and the ability to manage risk and uncertainty. These attributes also describe the characteristics of a good doctor, and show how leadership and good doctoring are closely related.



Questions clinical leaders should regularly ask themselves

- ✓ Is the content of employees' work primarily related to their higher goals: delivering the highest standards of patient care?
- ✓ Are employees adequately supported to develop their professional attributes? Could more be done, or could it be done in a better way?
- ✓ Do the culture, structures and processes enable or hinder team working?
- ✓ Are employees trusted and given the flexibility to use their professional judgement?

The task of clinical leadership can feel particularly daunting when, as is currently the case in the NHS, services are struggling. But these circumstances offer an opportunity for doctors to re-engage. A crisis can create opportunities, and new ways of working emerge. Doctors as leaders use evidence, continuous improvement, and data to build equitable, just, and accessible healthcare. If doctors do not engage they may be permanently sidelined, working in unsatisfactory systems that others have created. But if doctors do engage – as individuals and as a profession – they can sustain and improve the NHS.



This is how you start to make [your profession] brilliant: creating a generation of people who expect good leadership and then become good leaders.'

– Lawyer

One thing you can do

Consider any leadership position you hold, which could be a formal leadership position such as clinical director or leading a ward round or arrest team. Ask three of your peers (including at least one junior), to give you feedback on your performance in your role. Take time to reflect on the responses. Commit to doing this at least twice a year. The boxes in the full report can be used to structure the feedback.

Recommended reading

Gawande A. *Better*. London: Profile Books, 2008.

Bohmer, R. *The instrumental value of medical leadership*. London: The King's Fund, 2012.

Collins J. *From Good to Great*. London: Random House, 2001.

Kotter JP. *Leading change*. USA: Harvard Business Review Press, 2012.

Royal College of Physicians. *Acute care toolkit 11: Using data to improve care*. London: RCP, 2015.

West W et al. *Leadership and leadership development in health care: the evidence base*. London: FMLM, 2015.



Chapter 5:

Doctor as advocate



Contents

- 63 Summary
- 64 A short history on patient safety
- 65 Second victims
- 67 Transparency and the duty of candour
- 68 Speaking up about concerns
- 70 Advocacy on broader issues affecting health
- 71 Recommended reading

Summary

- > Professionalism requires that doctors advocate on behalf of their patients, all patients, and future patients.
- > Raising concerns about poor care or the potential for poor care is a professional duty for all doctors and needs training, practice, and mentorship.
- > The issue of advocacy on patient safety should be given the highest priority.
- > Medical errors are common; such errors harm patients and doctors, and carry high financial costs.
- > Errors arise from both system and personal failures, and most are preventable.
- > A 'just culture' expects accountability for both systems and individuals.
- > Trustworthiness has three components: honesty, competence and reliability.
- > Communicating mistakes to patients shows honesty and suggests trustworthiness.
- > Doctors have both a professional and statutory duty of candour.
- > For candour to become routine the individual needs to be supported with sufficient time and resources.
- > Doctors also have a professional duty to advocate on broader issues affecting health, including tobacco, alcohol, poverty, and many other issues.
- > The major threat to global health today is climate change, and the NHS is a major emitter of greenhouse gases; doctors should reflect on what personal and professional contribution they can make to reducing the threat.

Doctor as advocate

Professionalism requires that doctors advocate to improve the health of their patients, all patients, and future patients. This advocacy can be personal and collective. One issue that deserves the highest priority is patient safety. Doctors can improve patient safety through their daily work, but improvement also requires speaking up, sometimes in the most difficult circumstances, when patient safety is threatened. Doctors can also advocate on broader issues affecting health, including tobacco, alcohol, air pollution, climate change, and much else.

A short history of patient safety

The patient safety movement began in earnest in 1999 with the release in the USA of the Institute of Medicine report *To Err is Human* (IOM, 1999). The report followed the seminal Harvard Medical Practice studies, which suggested that around 100,000 patients died each year in the USA because of medical errors. Medical errors are defined as ‘the failure of a planned action to be completed as intended or the use of the wrong plan to achieve an aim’ (IOM 1999). These errors are mostly avoidable, and analysis of contributory factors allows individuals and organisations to learn. Errors may or may not result in harm. The ability of individuals, teams and systems to adapt and ensure harm does not occur as a result of an error also presents important learning opportunities (Hollnagel, 2015).

The financial costs of errors include lost income, legal or malpractice suits, and disability and healthcare costs (Thomas et al, 1999). Errors can also harm healthcare workers. When serious errors occur doctors can suffer professional, emotional, and personal difficulties (Scott et al, 2010). As safety expert Charles Vincent writes: ‘there is something horrible about being harmed, or indeed causing harm, in an environment of trust and care’ (Vincent, 2011).

The professional acts to minimise risk (the potential for harm) for the individual patient and the patient population through:

- > learning from adverse events with responsible incident reporting and investigation
- > identifying common systems failures in everyday care through observation and measurement
- > using learning from individual events and everyday care to improve systems
- > role modelling supportive behaviour and enabling colleagues to discuss errors and near misses
- > optimising conditions to mitigate against harm through good communication, teamwork and leadership.

Examples of harm

- > Hospital-acquired infections
- > Pressure ulcers
- > Venous thromboembolism
- > Catheter-associated urinary tract infection
- > Malnutrition

- > Dehydration
- > Delirium
- > Adverse drug reactions requiring admission to hospital
- > General harm from over-treatment

(Adapted from Vincent, 2016)

Second victims

In the wake of an adverse event, it is best practice to learn from such events to reduce the chance of patients suffering harm in future. However, to be an effective professional, as discussed in this report's first chapter, a doctor must care for themselves as well as their patient. In the case of adverse events, it is also important to consider the harm caused to healthcare providers.

The phrase 'second victims' was coined to describe the suffering of healthcare providers involved in an unanticipated medical error or adverse event (Wu, 2000). After a serious error, clinicians may experience feelings of guilt, shame and loss of confidence (Sirriyeh et al, 2010). Three outcomes have been described for the second victim which are contingent on how the event was handled: dropping out, surviving or thriving (Scott et al, 2009). Important positive modifiers are: support from colleagues, a supportive organisational structure and clear policies which support open disclosure (Wu & Steckelberg, 2012). Organisations need to build structures into incident responses that:

- 1) recognise and mitigate the potential risks to patients after an incident and
- 2) recognise and support second victims by promoting and modelling a (genuinely) open, transparent, non-judgemental reporting culture. Without these structures doctors develop dysfunction mechanisms to protect themselves such as anger, blame and defensiveness (Wu, 2000).

‘Doctors are prickly and defensive, and worried about the world around them.’

– Doctor

Balancing system failures and personal accountability: the just system

The release of the Institute of Medicine's report began to shift the focus from individual blame to considering the system and processes that enable errors to occur. Systems need to be designed to prevent errors (IOM, 1999). James Reason, an expert on human factors in safety, described two types of errors that may occur: the correct action does not proceed as planned (an error of execution), or the original intended action is not correct (an error of planning) (Reason, 1997). He developed the Swiss cheese model of error, which shows that failure at multiple levels is needed for serious adverse harm to occur. Reason described the human tendency to blame individuals for poor outcomes as 'the most tenacious and perhaps the most pervasive in its harmful effects upon organisational safety' (Reason et al, 2001). Subsequently there has been increased effort to design systems that prevent caregivers from committing errors, catching errors before they caused harm, and mitigating harms that do occur, eg computerised systems that catch errors before they reach the patient. (Wachter & Provonost, 2009)

Learning from adverse events and near misses is central to this approach. But there are now growing concerns that the pendulum has swung too far toward a 'no-blame' culture, resulting in a loss of personal accountability. Lessons for individual doctors have the potential to be lost if the focus is only on systems.

Personal accountability is fundamental to being a professional. Being drunk or violent in the workplace is clearly a matter of personal accountability, but so – in a lesser way – is disengagement from governance agreements, or failing to follow a policy. This realisation has prompted a shift from the 'no-blame' culture to a 'just culture,' which expects accountability for both systems and individual.

The case of Dr Hadiza Bawa-Garba, which has shocked the medical profession, illustrates this tension. Her case is described on page 10, but in brief she was found guilty of manslaughter after a 6-year-old boy died. She undoubtedly on her own admission made serious errors, but there were also multiple system failures. A tribunal said that she could practise again after a year, but the GMC appealed to the High Court and was allowed to erase her from the register permanently. Bawa-Garba appealed that decision, and the Court of Appeal overturned it. The alternating judgements show the difficulty of separating personal from system failure.

‘We do work in an odd environment in the NHS; we work in a culture of going straight to blame.’
– Doctor

A just culture is defined as ‘an atmosphere of trust in which people are encouraged, even rewarded, for essential safety-related information – but in which they are also clear about where the line must be drawn between acceptable and non-acceptable behaviour.’ (Reason, 1997) The Agency for Healthcare Research and Quality (AHRQ), in the USA, sets the gold standard in patient safety culture as ‘one in which healthcare professionals are held accountable for unprofessional conduct, yet not punished for human mistakes’ (AHRQ, PS net 2016). David Marx, a US attorney and engineer, has been developing the concept of just culture for more than 15 years. He has categorised errors, and the table below shows his categorisation together with the response recommended by the AHRQ (Table 5.1) (Marx, 2001) (American College of Healthcare Executives, 2017).

The gold standard in patient safety culture is when healthcare professionals are held accountable for unprofessional conduct, yet not punished for human mistakes.

Box 5.1

Error type	Marx classification (Marx, 2001)	Response (Leape/ AHRQ PS net 2016)
Human error	An inadvertent slip or lapse	Support the person who made the error
At-risk behaviour	Choosing an action without realising the level of risk of an unintended outcome	Investigate the reasons for choice and enact systems improvement if necessary. Counsel the person as to why behaviour is risky
Reckless behaviour	Choosing an action with knowledge and conscious disregard or risk	Disciplinary action

Taken from American College of Healthcare Executives & The National Patient Safety Foundation at the Institute for Healthcare Improvement, 2017

Human factors

'Human factors' is a commonly used term in patient safety, encompassing many aspects of psychology and ergonomics. Human limitations are acknowledged, and ways to minimise human frailties are offered so as to minimise errors and their ramifications (NHS England, 2013). These may be related to the task being performed, the individual or the team/organisation, and can affect people's safety-related behaviour (HSE, 1999). Examples include situational awareness, team working and communication. The approach aims to improve system performance and reduce accidental harm by supporting the physical and cognitive abilities of humans and increasing resilience to unanticipated events (Russ et al, 2013). It must be considered in local investigation processes undertaken in a systematic manner.

“The professional is able to escalate concerns about their own and other practice in a way that improves rather than disempowers. These things rarely become evident if people fear retribution’.

– Senior healthcare manager

Transparency and the duty of candour

In her landmark work on trust, the philosopher Professor Onora O'Neill described three components of trustworthiness: honesty, competence and reliability (O'Neill, 2013).

Communicating mistakes to patients shows honesty and suggests trustworthiness. It is mistakenly believed that admitting errors is incompatible with competency, another component of trustworthiness. On the contrary, apologies for medical errors can reduce the blame attributed to professionals, improve the doctor–patient relationship, and enhance trust (Robbennolt JK. 2009.). Communicating errors to patients with respect, integrity, and compassion is a skill all professionals need and improves trustworthiness of the individual and the profession.

In response to Sir Robert Francis's report into failings at the Mid Staffordshire Foundation Trust, the government introduced a statutory duty of candour for all healthcare providers. The professional duty of candour for doctors and nurses has four components:

1. Inform the patient when something has gone wrong.
2. Apologies to the patient or, when appropriate, the patient's advocate, carer or family.
3. Remediate the situation where possible.
4. Explain fully the potential short and long-term effects.

(NMC, 2014)

A full apology should include plans to prevent a reoccurrence (GMC guidance) (Robbennolt 2009). The desire to prevent the same thing happening to others is one of the most common reasons people pursue litigation (Bark et al, 1994) (Hickson et al, 1992).

‘Time and time again the driving factor [behind patients and families taking legal action] is that you don’t want this to happen to someone else.’
– Patient representative

Disappointingly, a fifth of patients in one study pursued litigation, as it was the only way they had to fully understand what had happened (Hickson, 1992). The ethical duty of the practitioner to be open and honest precedes the legal duty of candour. *Good Medical Practice* states that all registered doctors should be ‘open and honest with patients if things go wrong’ (GMC, 2013).

Common barriers to the duty of candour include workforce pressures, lack of confidence in communicating candidly, and unclear reporting structures. Recent high-profile cases may have caused some doctors to be reluctant to be candid, for fear of possible consequences. In addition, it can be hard to distinguish between an error requiring disclosure and a routine complication that does not require disclosure.

For candour to become routine the individual needs to be supported with sufficient time and resources, including a private room; support from peers and leaders across the organisation; a system that prioritises learning; and an acceptance of fallibility. The pursuit of perfectionism in the medical profession is largely a positive attribute for improving patient care, but can make the acceptance of error troublesome. Regulators, organisations, and the professions themselves need to accept that even the best practitioners are fallible.

Speaking up about concerns

Raising concerns about poor care or the potential for poor care is a professional duty for all doctors. Doctors have been called ‘heroes’ when they speak out (DeAngelis, 2014), and unfortunately fulfilling a professional duty in healthcare can feel as if it requires heroism. In cultures that prioritise safety, staff are encouraged to speak up about threats to safety. Speaking up should be the norm, not a special event.

Two-thirds of respondents to a survey (mostly senior clinicians) said that they did not feel supported in raising concerns (GMC, 2016). More than half (57%) of respondents reporting in the annual NHS survey said that they did not feel confident that concerns would be addressed (NHS Staff Survey, 2015). In research undertaken for this report, trainees described feeling ‘unsupported’ and ‘vulnerable’ when raising concerns; and ‘fear’ and ‘anxiety’ were the main emotions expressed by workshop attendees.

The most common reasons for not speaking up are summarised in Box 5.2. A culture of fear seems to prevail in the NHS, which is irreconcilable with a culture of safety, that requires candour, transparency and learning.

Raising concerns about poor care or the potential for poor care is a professional duty for all doctors.

Box 5.2 Reasons doctors don't speak up

- > Lack of clarity: how to report, and to who?
- > Fear of retaliation
- > Futility: nothing will change
- > Not wishing to appear 'unable to cope'
- > Hierarchical nature of medicine

Whistleblowing

Doctors who see patients being harmed have a professional duty to blow the whistle. They should also act on other types of misconduct, for example research or financial misconduct. Yet extensive evidence shows that whistleblowers often suffer badly, even when they are highlighting serious misconduct.

All organisations should have a whistleblowing policy that allows whistleblowers to speak up internally and not suffer when they do so in good faith – even if it turns out that their concerns were mistaken. Such policies do now exist in NHS trusts, and there is an NHS and Social Care Whistleblowing Helpline.

The hope is that these internal NHS channels will allow problems to be resolved without resorting to the mass media or other external mechanisms.

Doctors working in organisations that do not have a whistleblowing policy should advocate for one, but they face a dilemma when they need to speak up when there is no such policy. Ultimately professionalism requires them to blow the whistle, but they should try to find ways of protecting themselves.



There is a reluctance to deal with unprofessional behaviour as there will be a disruption to service. Removal of one clinician can impact significantly on waiting lists.'

– Doctor

Accountability is complex in healthcare and contributes to the difficulties in raising concerns. Doctors in training, for example, are 'employed' by their trust and education authority, 'managed' by hospital managers, and 'supervised' by education and clinical supervisors. They are regulated by the GMC, follow curricula set by the royal colleges, and are required to be members of a medical defence union. This complexity means that it is not clear to whom they should report a concern. Despite the difficulties, raising concerns is a professional duty that needs training, practice, and mentorship.

Leaders themselves benefit from training in speaking up and can then serve as role models for other health staff. Concerns raised by team members to the responsible doctor should be treated with respect, compassion, and integrity. Leaders should acknowledge the courage required to highlight such issues. Individual doctors should advocate on behalf of their patients, and organisations need their doctors to highlight risks and harms to ensure a culture of safety.

Advocacy on broader issues affecting health

Social and environmental factors are the main determinants of health, illness and life expectancy (Wilkinson & Marmot, 2003). For example, Glasgow has a difference in life expectancy of 7.1 years between richer and poorer areas (Audit Scotland, 2016). Doctors have a responsibility not just to the patients they are managing today, but also to the public and future populations. This means paying attention to social determinants of health and advocating on behalf of all patients.

An advocate is ‘someone who speaks on behalf of others and helps others speak’ (Gaines et al, 2014). This responsibility is often discharged collectively, with doctors’ organisations campaigning on issues like poverty, tobacco, alcohol, diet, physical activity, seat belts, and many other areas that have a profound effect on health. But professionalism requires that doctors also think about what they can do personally.

A good example for doctors to reflect on is advocacy on climate change, not least because it is the main threat to global health, and the major impact will be on the young and those as yet unborn. The NHS is one of the largest contributors to greenhouse gas emissions in the UK. In England alone the NHS produces more CO₂ per year than all passenger planes taking off from Heathrow annually (RCP, 2017). Within the public sector the NHS is the single biggest contributor of greenhouse gas emissions – some 25% of the total.

Unless action is taken, the NHS’s carbon footprint will expand as demand from a growing and more medically complex population increases. Every clinical contact utilises energy and medical resources and produces multiple types of waste, including staff and patient travel, infrastructure, prescriptions and medical equipment. Global consumption of natural resources is growing to beyond what the Earth’s capacity can support, and the production of waste entering back into the environment is accelerating climate change.

Research clearly shows that climate change is a real and imminent threat to health. The most devastating effects will be felt by developing countries who have contributed least to the problem, but modernisation and technology will not protect the UK population from changing disease patterns and rising mortality as a result of temperature fluctuations, and threats to food supplies and homes from flooding. It broadens the discussion around the detrimental impacts of modern lifestyles beyond obesity and smoking to include the environment.

Progress has been made in recent years to reduce carbon emissions created by NHS services, but the reduction is predicted to stall by 2020. Action is therefore needed to create a sustainable model of healthcare in the NHS and reduce its carbon footprint. Healthcare professionals from all disciplines, managers and senior NHS leaders should see action on climate change as a central issue in organisational objectives and risk management, advocating for its consideration and inclusion in decisions. As an organisation, the NHS makes one million clinical patient contacts every 36 hours (Department of Health, 2005) and has an annual purchasing budget of approximately £20 billion. The ability of doctors to make an impact is significant, through service and care provided and procurement of medicines and medical devices.

Doctors have tended to think that acting on climate change is a job for others, but progress will be made only with action at every level, from the individual to the global. Professionalism requires that doctors reflect on how they can contribute to reducing carbon emissions in their personal and working lives and advocate for broader policies. Their scientific knowledge and status makes them powerful voices in important debates. This professional duty to advocate for health extends beyond climate change to all the broader determinants of health. Clearly, it’s a duty that must be discharged judiciously.

One thing you can do

During your next clinical shift, note all the systems, practices and events which have real or potential safety risks. Are any of your behaviours contributing to these risks? Is there something you could work with colleagues to improve? How would you start this process and who would you need to involve?

In Dr X's role as ...

What should Dr X start doing?

What should Dr X stop doing?

How to give feedback well in difficult situations

- > Address the most difficult issues, even when voicing them is hard
- > Comment on the behaviour not the person
- > Be clear about the impact and effect
- > Understand each other's position
- > Paraphrase to check each other's understanding
- > Search for realistic solutions

Recommended reading

Vincent C, Amalberti, R. *Safer Healthcare: Strategies for the Real World*. Springer, 2016

Reason J. *Human Error*. Cambridge University Press, 1990

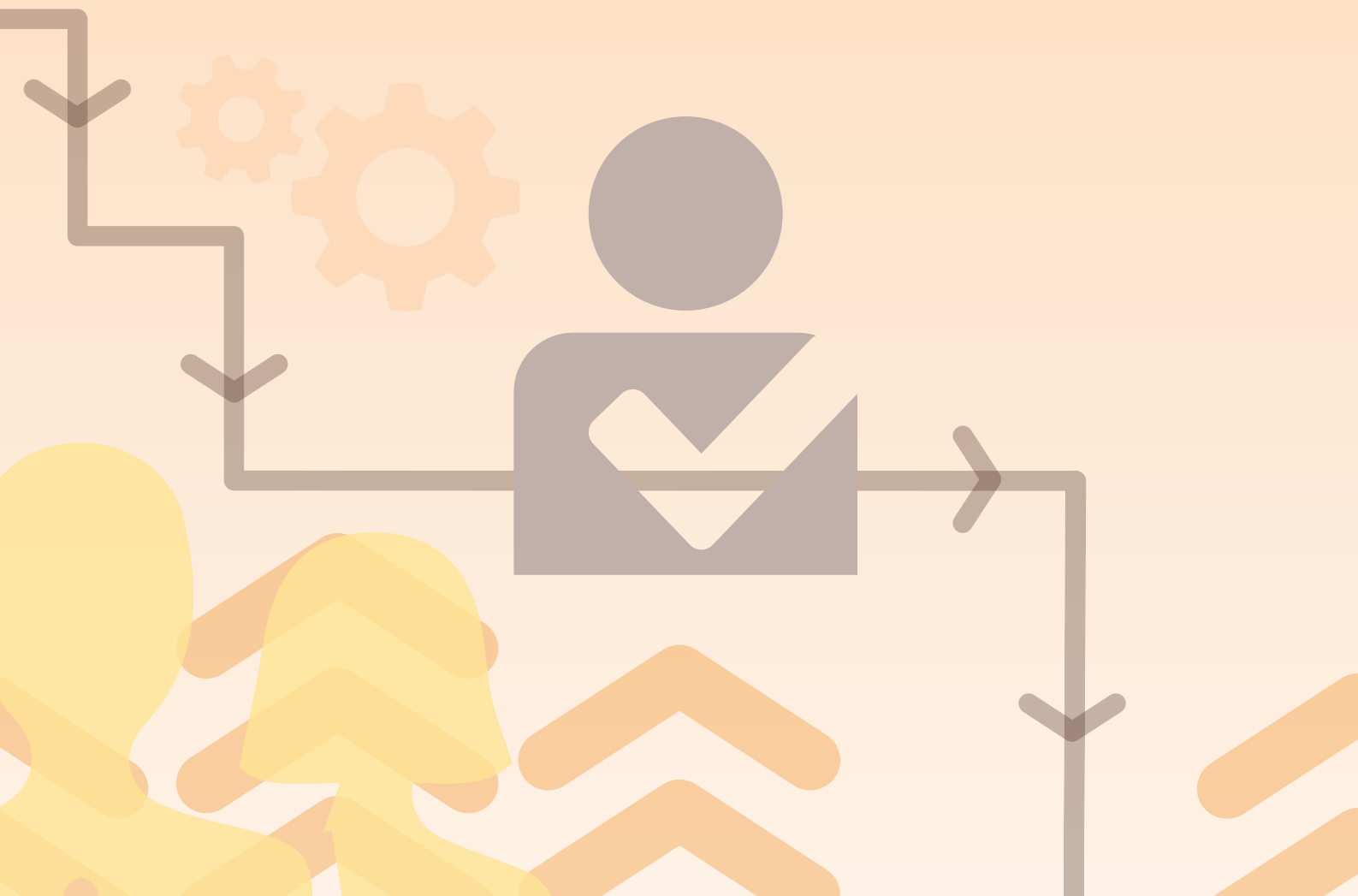
Wachter R, Provonst P. Balancing “No Blame” with Accountability in Patient Safety. *New England Journal of Medicine* 2009 Oct 1;361(14):1401–6.

NHS Improvement (2018) *A just culture guide*, Available at: <https://improvement.nhs.uk/resources/just-culture-guide> (Accessed: 15/7/2018).

Institute for Healthcare Improvement. *Respectful Management of Serious Clinical Adverse Events*. 2010.

Royal College of Physicians. *Breaking the fever*. London: RCP, 2017.

Marmot M. *The Health Gap: The Challenges of an Unequal World*. London: Bloomsbury, 2015.





Royal College
of Physicians

Chapter 6: Doctor as learner and teacher



Contents

- 75 Summary
- 76 What is lifelong learning, and why is it important?
- 78 Teaching as a habit of professionalism
- 79 Developing professionalism in postgraduate medical education
- 81 The importance of developing a professional identity
- 82 Difficulties of learning professionalism in the working environment
- 83 Junior doctor strikes and professionalism
- 84 Professionalism among millennials
- 85 Professionalism as character development
- 87 Recommended reading

Summary

- > A commitment to lifelong learning underpins the work of all professionals.
- > The ability to reflect on an event or experience and improve defines an effective professional.
- > All doctors teach knowledge, skills, and perhaps most importantly attitudes and behaviours.
- > Professionalism demands that doctors take teaching seriously and endeavour to improve their teaching skills.
- > Just as with the doctor–patient relationship, trust, which is based on compassion, respect and integrity is fundamental to the trainee-teacher relationship.
- > Doctors used to learn professionalism through apprenticeship, but now it is a specific part of postgraduate training.
- > There has been a focus on assessment when training in professionalism, but now there is more emphasis on developing a professional identity through mentoring and role modelling.
- > Changes in medical careers and the NHS have complicated the development of professionalism.
- > The strike by junior doctors stimulated discussions on professionalism: some arguing that striking was unprofessional; others thinking that striking to protect patients was a professional duty.
- > Younger doctors are showing increased interest in leadership and management, but at the same time the imposition of a new contract has created some disillusionment.
- > Some have doubted the professionalism of millennials (those born between 1982 and 2000), but evidence suggests they are more similar than dissimilar to previous generations.
- > There is evidence that millennials place less emphasis on status and money, and more on meaning and purpose.
- > Lifelong learning includes a commitment to evidence-based practice (while recognising its limitations) and continuous improvement.

The ability to reflect on an event or experience and improve defines an effective professional.

A commitment to lifelong learning underpins the work of all professionals. They must seize every opportunity to learn and develop their knowledge, skills, and attitudes. Much of the learning is not individual but occurs in teams and organisations. Doctors have the potential to learn from patients and particularly from errors and complaints. (A process discussed in more depth in Chapter 5 of this report). The ability to reflect on an event or experience and improve defines an effective professional. The ineffective professional is one who is restricted to repetitive, routine tasks and does not have time or the motivation to learn and improve (Schon, 1983).

‘Professionalism can be thought of as character development occurring in the context of the work of patient care’ (Leach et al, 2006).

Learning to be a doctor continues far beyond medical school. New therapies and techniques are being developed at an unparalleled rate. The advent of artificial intelligence (discussed further in Chapter 7), big data and precision medicine have the potential to revolutionise healthcare.

At present, innovations in healthcare are exceeding the ability of regulators and similar bodies to keep up to date. Doctors need to take the lead in evaluating innovations that might be used in practice.

Some doctors will have formal teaching roles, but all doctors teach knowledge, skills, and perhaps most importantly, attitudes and behaviours. Professionalism demands that doctors take teaching seriously and endeavour to improve their teaching skills.

What is lifelong learning, and why is it important?

Lifelong learning is a fundamental principle of professionalism. Medicine is evolving, and a commitment to keeping up to date is necessary to honour the trust patients place in doctors. Practising evidence-based medicine is an important component of the professional commitment to lifelong learning: evidence-based practice empowers doctors to deliver the highest quality and best value care, and enables them to identify questions for future research.

Evidence-based care involves combining the best evidence with patient preferences and clinical expertise (See diagram 6.1) (Sackett et al, 1996), but it can be difficult to deliver effectively in the clinical setting. The best evidence is drawn from randomised control trials. However, these trials may be made up of patients who are not representative of those with more complex health needs.

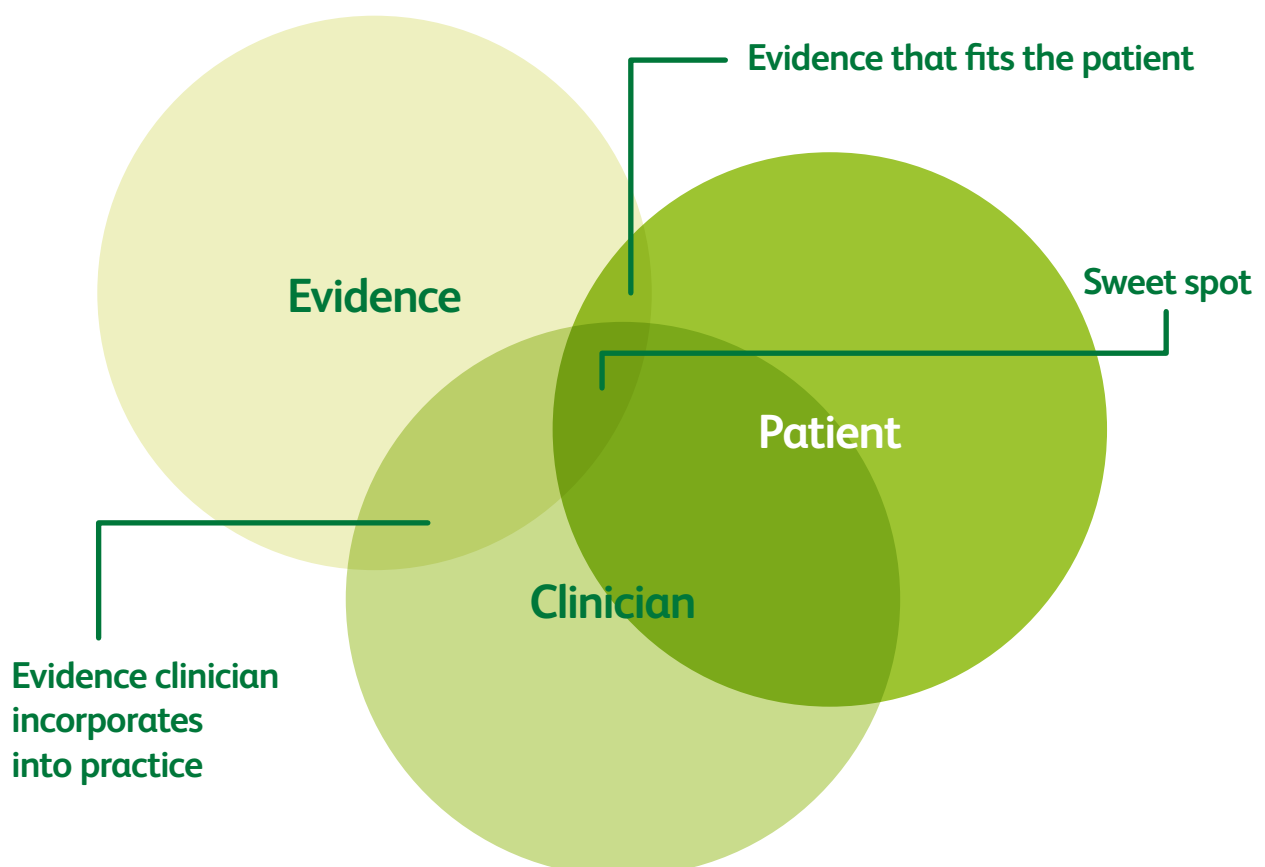
Research is dynamic, and the evidence is continuously being updated. On many topics there may be only limited or poor-quality evidence. Ultimately, decisions can’t be based on evidence alone. The best care combines evidence-based medicine and shared-decision making – while noting that sharing decision-making is not the same as devolving it. Different patients, or different illnesses, may well require different approaches.

The practical wisdom described in Chapter 1 has been defined as the art of ‘doing the right thing at the right time’. But to be able to deliver quality care means having the up-to-date knowledge and skills that patients have an absolute right to expect. While artificial intelligence and other information technology may become a major support, they should remain just that – allowing the human doctor to practise truly human medicine, ideally with more time.

Finally, lifelong learning is a commitment to continually improving individual practice and the health system. Developing professionalism must continue throughout a medical career. Professionalism is aspirational, and progress is made through constantly trying to improve. Medicine is complex because it is simultaneously systematic and idiosyncratic, technical and compassionate, precise and full of uncertainties, placing a premium on professionalism.

‘ Professional behaviour is about going above and beyond. It is about being more than good, and [it’s about] pushing frontiers.’
– Doctor in training

Diagram 6.1 – Triad of evidence-based medicine
(Adapted from Duke University)



Teaching as a habit of professionalism

Teaching and training are important components of being a doctor (RCP, 2005) (GMC, 2013). Doctors who teach are highly influential in the careers of students and trainee doctors: this means doctors affect not only the care of their patients but also a wider group of patients. Doctors pass wisdom, skills, and techniques to the next generation of practitioners and those less experienced than them. Ultimately, the individual doctor's enthusiasm for teaching will determine how well they do it. Teaching, like the other habits in this report, incorporates values and behaviours which can be learned and improved.

Many doctors hold formal teaching positions, and most doctors will teach in consultations, at the bedside, or during operations. All doctors act as teachers when they role model behaviours and attitudes, and, just as with the doctor–patient relationship, trust based on compassion, respect and integrity is fundamental to the trainee–teacher relationship.

Trainees trust that teachers will:

- 1) contribute to their development
- 2) act with integrity in difficult circumstances when trainees are vulnerable
- 3) treat each trainee fairly without professional or personal bias
- 4) respect the capabilities and stage of training of each trainee.

There are multiple demands on doctors, and insufficient time is allocated to teaching – and funding and support are suboptimal (Board of Medical Education, 2006). Almost half (45%) of trainers in the 2018 GMC National Training Survey thought that their job plan did not contain enough designated time for their role as trainer (GMC, 2018). Two-thirds described the work as a trainer as heavy or very heavy (GMC, 2018). Yet these roles have an important impact on trainee morale and development (RCP, 2016).

Trainees felt the following actions would improve supervision:

- 1) time with supervisors when they focus on the trainees avoiding interruptions
- 2) more frequent meetings, of at least 20 minutes, providing opportunities to debrief about important events either individually or in teams in a safe learning environment
- 3) personal development plans that are tailored to the individual
- 4) constructive feedback
– not 'sitting on the fence'

“Educators are not used to giving positive feedback, and doctors aren't used to receiving it.”
– Doctor in training

Role-modelling is one of most influential methods through which professionalism is taught (Wilson et al, 2013) (Ibarra, 1999). All doctors act as role models to trainees, students, colleagues, and other healthcare professionals. Box 6.2 shows the attributes trainees rated most highly in role models, with personality traits consistently ranked the most important.

Box 6.2



Personality

- Positive
- Respectful towards patients, families, staff, and colleagues
- Honest
- Shows integrity
- Sense of humour



Teaching

- Communication skills, especially listening
- Ability to make difficult topics understood
- Patience
- Non-threatening teaching style
- Adjust to different abilities



Clinical skills

- Competent
- Knowledgeable
- Proficiency as a diagnostician
- Enthusiastic in work
- Stresses importance of the patient–doctor relationship
- Awareness of strengths and weaknesses

Developing professionalism in postgraduate medical education

Postgraduate medical education is unique among the professions in that the graduate becomes a doctor and has responsibilities but remains ‘a trainee’ for between 5 and 15 years. Doctors in training are active participants in the delivery of medical care, but at the same time are still learning. Both are essential for their professional identity. This dichotomy presents both challenges and opportunities.

Until the 1980s apprenticeship was the way that trainees learned, but there is now greater attention given to professionalism. Before this change, professionalism had been ‘taken for granted’: simply by completing the training, the doctor was assumed to become a professional (Hafferty & Levinson, 2008). The attributes of professionalism were believed implicit in a doctor’s character and did not require any further attention during training (Hafferty & Levinson, 2008).

With the new movement, proponents sought to define (Swick, 2000) (Birden, 2014), measure (Wilkinson et al, 2009) (Hodges et al, 2011), and assess professionalism (Wilkinson et al, 2009) in undergraduate and postgraduate medical education. Educators believed then that professionalism had to be assessed to capture the attention of learners focused on exams. Assessing professionalism, however, created its own problems – for example, right and wrong became absolute for the purposes of assessment. In many medical schools professionalism was taught as a self-contained module divorced from the biomedical component (Stockley & Forbes, 2014). Assessments of professionalism in postgraduate education tended to comprise ticking off isolated behavioural competencies.

(Box 6.2 Adapted from Wright, 1996; Jochemsen-van der Leeuw et al, 2015; Wright et al, 1998; Elzubeir & Rizk, 2001).

‘ Training around professionalism involves a lot of box ticking. You think that as soon as you’ve ticked all the boxes, you can get on with the ‘good stuff’. But the box-tick exercise saps your enthusiasm for doing anything else.’

– Doctor in training

The medical educationalists who pioneered much of the teaching of professionalism identified six major issues with how professionalism had developed in medical education. (Box 6.3)

Box 6.3 The problems with professionalism in medical education

- Oversimplification of complex content
 - Loss of focus on the individual
 - A focus on negative professionalism
 - Teaching professionalism in isolation from the clinical context
 - Insufficient positive role modelling
 - Lack of focus on areas of transitions
- (Adapted from Cruess & Cruess, 2016)

In the UK significant changes were taking place in postgraduate medical education while the attempts to teach professionalism were underway. Concerns about the senior house officer grade and the acquisition of generic skills led to the Modernising Medical Careers programme, which overhauled the structure of training (Donaldson, 2002) (Tooke, 2008). The changes, introduced in 2005, brought in foundation training (the first 2 years after graduation) and run through training.

The goal was to equip all doctors with generic competencies and to modernise career structures. Training was focused on completing predefined competencies, which resulted in the award of a certificate of completion of training (CCT).

Unfortunately, this restructuring of medical training undermined education in professionalism. Frequent and short rotations, loss of team structure, and inconsistent trainee-consultant relationships damaged the building blocks of professionalism: supported reflective practice, role modelling, relationships, formative feedback, and collaborative learning (Vivakendt-Schmidt et al, 2015) (Doran et al, 2007) (Lave & Wenger, 1998).

Educational and appraisal meetings have been described as ‘tick-box’ exercises, devoid of purposeful interaction and meaningful development (RCP London, 2016). The changes seem to assume that there is just one way of being a doctor (Frost, 2013); doctors in training describe it as ‘the conveyor belt of medical training’ (RCP London, 2016).

The importance of developing a professional identity

Many have called for a new way of thinking about professionalism in medical education (Cruess et al, 2014) (Hafferty & Castellani, 2010). Rather than focusing on isolated behaviours, the goal should be to enable learners to develop a healthy professional identity. Professional identity is how professionals view themselves in their occupational role and is much more than an observed set of behaviours. Edgar Schein, a professor of management, describes it as ‘the relatively stable and enduring constellation of attributes, beliefs, values and motives, and experiences in terms of which people define themselves in a professional role’ (Schein, 1978).

Rather than learning a list of dos and don’ts, learners are encouraged to understand themselves, who they are, and what they wish to become; they should then be supported in this ‘becoming’ phase. This process consists of individuals assessing their professional possibilities, evaluating their capabilities (Am I capable of becoming what I want, need or am expected to be?) and committing to an identity. This process has led to changes – for example, to medical registrars. This role was once highly competitive, but trainees now see the role as too challenging, or not in keeping with their values (RCP, 2013).

Although the evidence is limited, the postgraduate years seem to be when professional identity is embedded (Snell, 2016) (Ludmerer, 2012). The attributes, values, and roles internalised at this time will define how doctors act throughout their careers. Two philosophies drive this concentration on developing professional identity. Firstly, medicine is complex and it is impossible to learn dos and don’ts for every situation. In contrast, embodying professional values such as compassion, respect and integrity, in addition to knowing yourself, will empower clinicians to navigate complex challenges. Secondly, forming professional identity is heavily influenced by role modelling and relationships. In some ways this way of thinking brings back the concept of apprenticeship. Further research is required into how trainee doctors construct their professional identities.

‘It feels as if people have had lots of clever ideas, and in isolation they worked, but no one goes back and looks at a system as a whole.’
– Doctor in training

Difficulties of learning professionalism in the working environment

In addition to those already outlined, many other changes have affected postgraduate training in professionalism:

- The NHS is under unprecedented financial and operational pressures. Rising demands on the individual and the system reduce opportunities for feedback and collaborative learning.
- The European Working Time Directive, introduced in 2009, limits the number of hours a junior doctor can work in a week. The profession had believed that long hours developed both competency and professional identity. Senior doctors expressed concerns about the 'adequacy of junior doctors' training' (Lambert et al, 2014). This debate over working hours mutated into a debate about the 'work ethic', commitment, and responsibility of younger doctors, (Ginsburg, 2014) creating a schism in a profession reliant on relationships and mentoring. Yet there is no research that supports the idea that working long hours is necessary for developing professionalism. Responsibility is an important component of professionalism, but the number of hours worked does not equate to professional responsibility.

‘Systems pressures mean you cannot deliver the care you are trained for.’
– Senior medical leader

- Expanding the professional capabilities of non-medical health professionals and breaking down professional boundaries have been a priority in the 21st-century NHS. Tasks traditionally undertaken by doctors are increasingly undertaken by nurses, physiotherapists and other allied healthcare professionals. The expansion of roles has caused concerns about the professional role of doctors (Segar et al, 2014) exemplified in headlines such as 'Will physician associates be replacing doctors?' (Rimmer, 2014) Yet research suggests that acknowledging the unique contribution of a profession improves team working (Lindsay & Dutton, 2012) (Gilbert, 2016).

‘Values make you who and what you are. Attributes are how you demonstrate them.’
– Medical student

Junior doctor strikes and professionalism

It is impossible to discuss postgraduate medical education and professionalism without considering the junior doctor strikes of 2016. Failed contract negotiations between the doctors' trade union (the British Medical Association) and their employers (NHS Employers) led to the first full doctors strike in British history. Opponents to the contract believed it was unsafe, penalised female doctors, and would lead to increased dysfunction in teamwork and continuity of patient care. Plans to implement the contract changes without recognising the concerns of the profession caused an unprecedented reaction. Many felt that industrial action was the only option left open to them. (Roberts, 2016)

Opinion polls found that the majority of the public believed junior doctors more right than wrong to strike, although the majority shrunk towards the end of the disputes (September 2016). (Dahlgreed, 2016) Scholars concluded that the strikes were 'probably ethically permissible'. (Toynbee et al, 2016) (Roberts, 2016) Opponents of the strike believed that they undermined a core tenet of professionalism, the fiduciary responsibility of doctors to patients. But making a decision to strike is an individual's decision and right, and professionalism is using one's judgement to do what is right for those to whom you have a duty. There is a duty of care to the patient in front of the doctor, but also to all patients, and to maintaining a safe, equitable, and high-quality healthcare system.

The strike galvanised junior doctors into action, leaving them no longer willing to be passive recipients of circumstance. Whether because of the strike, changes in healthcare, or unknown factors, perceptions towards leadership and management are changing: 97% of respondents to a trainee survey felt that leadership and management skills were important, and 92% had ideas for improving patient care, the working environment, or both (Hynes et al, 2018).

But the unsatisfactory outcome of the contract negotiations has left a profession dealing with unresolved conflict. A satisfactory resolution was never found, and the new junior doctors' contract was eventually imposed in England.

The profession is thus at a crossroads: there is a willingness to engage with leadership, management and continuous improvement but also undercurrents of disillusionment, hurt, and disengagement. Supporting this generation of doctors in developing strong and healthy professional identities must be a priority for all medical leaders.

“Professionalism is about showing respect for patients, for yourself, for colleagues and for the organisation in which you work.”
– Doctor in training

Professionalism among millennials

The professional values of the millennial generation (those born between 1982 and 2000, accounting for most junior doctors) (Roberts et al, 2012) have been a topic of much discussion. Many claims have been made, but there is empirical data to help understanding.

Studies using focus groups have shown seven distinguishing traits of the millennial student;

- 1) special
- 2) sheltered
- 3) confident
- 4) team-orientated
- 5) achieving
- 6) pressured
- 7) conventional

(Howe & Strauss, 2000)

But other research has shown that the millennial generation has the same diversity in backgrounds, personalities, and values as previous generations. (DiLullo et al, 2011). Research comparing professionals of the baby-boomer generation (born between 1946 and 1965), Generation X (born between 1966 and 1981) and millennials found little evidence that millennials were significantly different in personality. The only difference found was in 'growth need strength' (the need for personal accomplishment, learning and development), which was greater in millennials than the other groups studied (Fogarty et al, 2017) (Borges et al, 2006).

Time-lag studies (isolating generational changes from age changes) have shown similar findings: millennials put increased value on leisure compared with previous generations, but this trend to value leisure time has been increasing for over 50 years. Millennials may place less value on status and money than Generation X and more value on intrinsic motivations – for example, variety, responsibility, and challenge (Twenge et al, 2010).

To inform this report on professionalism, focus group data was gathered from junior doctors and lawyers. They were asked to define what values were important to them as professionals. (Box 6.4) Medical students were also asked to define the values they believed a professional should hold (Box 6.5)

Box 6.4

The professional values of junior doctor and early career lawyers (ranked)

- > Honesty
- > Knowing limitations
- > Transparency
- > Responsibility
- > Integrity
- > Humility
- > Advocacy
- > Accountability
- > Empathy

Box 6.5

The professional values of medical students (unranked)

- > Resilience
- > Adaptability
- > Integrity
- > Honesty
- > Sense of compassion for people
- > Humility
- > Awareness of colleagues
- > Realistic

The medical students believed that compassion was particularly important and one of the main drivers of professional behaviour.

They also described a sense of humour as being important and had noticed this in many of the doctors they respected. A sense of humour was associated with good rapport with patients, resilience and optimism.

Professionalism as character development

Professionalism has been described as ‘character development occurring in the context of the work of patient care’ (Leach et al, 2006).

Each of the seven habits discussed in this report describe a collection of attributes that can be improved upon. Continuing improvement rather than the attainment of perfection is the realistic goal.

‘ We aim to be perfect before we should’
– Doctor in training

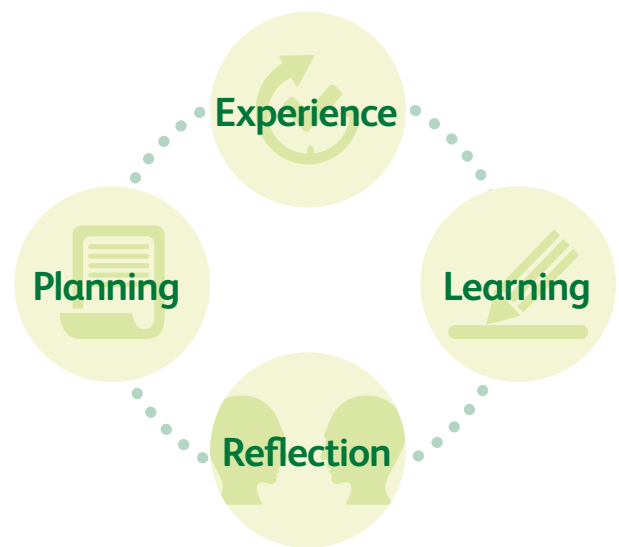
Being able to improve is not the same as failing, and too often the two have been conflated in medicine. There must always be the possibility of improvement otherwise medicine and the profession will have stopped evolving.

‘ We can all improve’
– Doctor in training

Three tools can support the professional in this task: measurement, feedback and reflection. Measurement is discussed in more depth in Chapter 7.

Reflection

Reflection is crucial to learning, professionalism and improvement. However, concerns regarding the use of Dr Bawa-Garba’s reflections in her criminal trial have led to widespread apprehension about the role of reflection.



Reflective practice is the ability to reflect on one’s action in order to participate in continuous learning (Schon, 1983). Reflection has been described as ‘thinking on thinking’ and is necessary for self-regulation in addition to lifelong learning (Sanders, 2009). The four basic stages of the reflective process are to experience, reflect, learn and plan.

Reflection can identify knowledge gaps, promote deep learning, increase learning from an experience, and lead to the acquisition of new knowledge and skills. Reflective practice is, in particular, critical to understanding your own values, beliefs and assumptions and is the most important way to acquire the practical wisdom of the healer described in chapter one (Epstein, 2008).

Reflection is usually triggered by an event or situation with the aim of increasing awareness or understanding (Sanders, 2009). Increasingly, there has been a drive to collect reflections in e-portfolios and appraisal documentation. While the promotion of reflection is welcome, there is a danger it may degenerate to simply a means of demonstrating engagement with a compulsory component of the training record.

It becomes a bureaucratic exercise rather than a route to improvement (Mann, 2009).

Writing is one form of reflective practice that can be particularly useful to identify underlying beliefs and assumptions. In medical practice it is important that all written reflections are anonymised, both from identifiers such as name or age, but also any unique characteristics of the event or patient and/or careers involved. If the triggering event has been particularly difficult, the first reactions can be emotional and deeply personal, resulting in perceptions that may be overly critical of others or self. It is important to recognise the difference between a professional reflection ('thinking on thinking') and the initial outpouring of emotion. It is the professional reflections not emotional outpourings that should be stored in ePortfolios or appraisal documentation.

This is not to say that a professional should avoid reflecting on their own emotional response to an experience, and their perceptions of the emotional responses of others. In fact, the wise practitioner should actively explore why it is that particular cases make them feel certain emotions and how those emotions influence their behaviour. Thinking about the emotional responses of others – team members, patients, and their relatives – promotes the development and expression of compassion in practice.

Guided reflection is often necessary to identify and challenge underlying assumptions and to help with making sense of experiences. Here, the trainers or supervisor may document the reflection as having taken place and the outcome of the process without recording the details of the conversation or correspondence. Peers are important resources for reflection, and effective reflection is also possible in other settings such as:

- When healthcare professionals meet in groups to discuss significant events or cases such as a Balint group or Schwartz round
- Dedicated team time
- Morbidity or mortality meetings
- Governance and audit engagement

The best professionals make the most of every opportunity to learn and develop using reflection and feedback as tools to improve.

Feedback, when done well, can improve learning, performance and job satisfaction (Bosse et al, 2015) (Cook et al, 2011) (Krogstad, 2006). Feedback is defined as 'information about reactions to a person's performance which is used for the basis of improvement' (Oxford English Dictionary). Feedback works best when it occurs frequently, includes specific goals and action plans, and is delivered by a supervisor or respected colleague (Ivers et al, 2014).

Feedback in medicine often takes place through computerised forms, but these present limited opportunities for discussion or guided reflection. Trainees described constructive feedback as critical to developing as professionals. In organisations that embrace a learning (as opposed to blame) culture patient complaints, adverse events, and near misses all present opportunities for powerful feedback and learning.

Giving and receiving feedback can be challenging, and both are skills which improve with repetition. Barriers include concerns about professional development, preserving authority, loss or reputation and defensiveness (Kaldjian et al, 2006) (Hesketh et al, 2002) (Finkelstein et al, 1997). Box 6.6 and Box 6.7 describe models which can be used for feedback. Feedback can be improved by focusing on behaviours rather than personality, including specific examples and describing the consequences of actions and behaviours.

Box 6.6 Feedback model:
Effect, not blame, model

- 1 State the behaviour as neutrally as possible (avoid excessive use of 'you')
- 2 Let them know how you are affected (or team/project/organisation)
- 3 What can we do now to move forward

Box 6.7 Feedback Model:
Restorative practice

- 1 What has happened?
- 2 What were you thinking at the time?
- 3 Who has been affected by your outcomes?
- 4 How have they been affected?
- 5 What needs to be done to rectify this?
- 6 What is the future action?

One thing you can do

Consider two people who have been role models in your career. Write down the attributes that you most admired in them. Consider all the people you are a role model to, what attributes would you like them to write down about you, and how you could model these attributes more effectively. See the main report for assistance.

Recommended reading

Cantillon P. ABC of teaching and learning in medicine. Teaching large groups. *BMJ* 2003;326:437–40.

Jacques D. ABC of teaching and learning in medicine. Teaching small groups. *BMJ* 2003;326:492–4.

Gooding HC, Mann K, Armstrong E. Twelve tips for applying the science of learning to health professions education. *Med Teach* 2009;39:1;26–31.

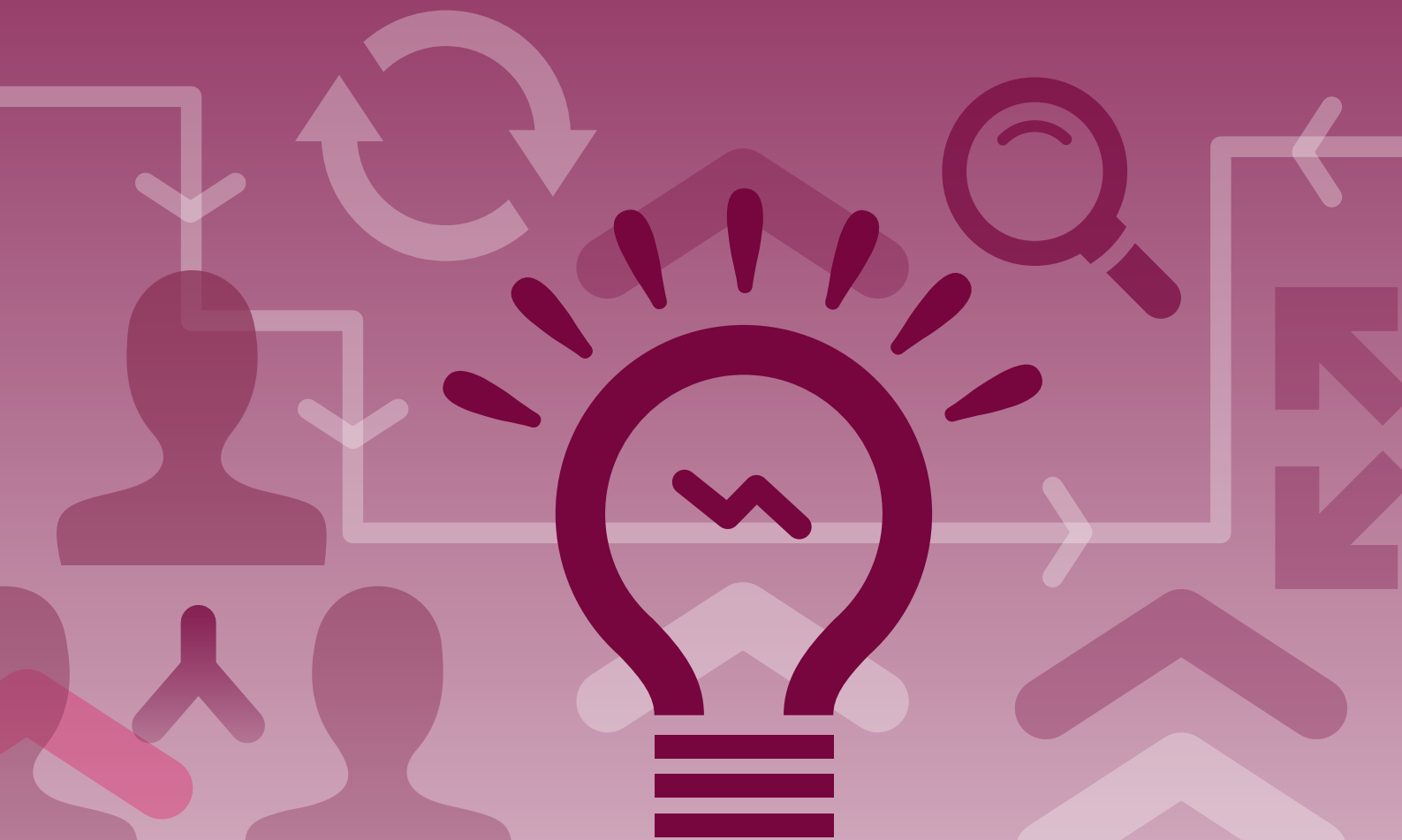
Norma G. The adult learner: a mythical species. *Acad Med* 1999;74(8):886-9.

Dweck C. *Mindset*. USA: Penguin Random House, 2006.



Royal College
of Physicians

Chapter 7: Doctor as innovator



Contents

- 91 Summary
- 92 How should doctors respond to machine learning?
- 94 Machine learning and medical practice and professionalism
- 98 Continuous improvement: an essential tool for innovation
- 99 Professionalism and research
- 100 Recommended reading

Summary

- > Innovation is crucial for the development of healthcare.
 - Innovations may be in technology, how healthcare is organised and delivered,
 - > and more. They may be small, perhaps in a doctor's practice, or large, affecting the whole of healthcare.
 - Sometimes the innovation is driven by doctors themselves and sometimes from
 - > patients to outside medicine. Technology, such as machine learning is likely to have extensive effects on medicine and how doctors work.
 - > Doctors should welcome innovations like machine learning, seeking to identify how it can improve patient care.
 - At the same time, doctors should be thinking critically about machine learning's
 - > impact by continually asking: 'What skills and valuable activities are in danger of being lost and what must we continue to learn?'
 - > The challenge for doctors is how to innovate amid the innovation happening in the medical field.
 - > Machine learning has the potential to transform the whole clinical pathway, from referral through to management.
 - The use of machine learning may lead to the progressive replacement of face-
 - > to-face patient–doctor consultations with a collaboration in which the machine becomes effectively an independent actor.
 - It is doctors, rather than machines, who can provide solidarity, understanding,
 - > and compassion to patients. Ideally, technology should support doctors and not aim to replace them.
 - Research is important for the development of healthcare, and all doctors
 - > should be supporters and critical consumers of research; some will be primarily researchers.
 - > Doctors may become better doctors by studying humanities and social sciences.

Innovation in healthcare has been extensive and rapid, particularly since the Second World War, which was shortly followed by the creation of the NHS. The NHS was itself an innovation, and innovations may be in technology, health systems, health policies, health financing, how healthcare is delivered, how doctors' work is organised, and much else. Sometimes the innovation is driven by doctors themselves and sometimes from outside medicine.

Innovations may be big or small, ranging from a practitioner innovating in individual practice – perhaps shifting emphasis from a pharmaceutical to a lifestyle response to a condition – to something as large as the introduction of artificial intelligence and machine learning – something that has the potential to dramatically change the whole of healthcare and the role and work of doctors. Innovations such as these require robust evaluation before widespread integration into working practices. Doctors will also need the skills to evaluate applicability, reliability and validity of innovations at the individual patient level.

Many innovations result from research, and most of what doctors do is the result of research. All doctors are consumers of research, and some doctors are primarily researchers. This chapter discusses the relationship between professionalism and research. It also briefly touches on the idea of doctors as scholars, learning from whatever may make them better doctors, including from literature, history, and other humanities and social sciences.

Innovations may be in technology, health systems, health policies, health financing, how healthcare is delivered, how doctors' work is organised, and much else.

Much of this chapter concentrates on the example of artificial intelligence (AI), machine learning and related digital technologies, all characterised by various kinds of automation. These fields represent some of the innovations most likely to change how doctors work, and raise many questions about innovation and medical professionalism. Furthermore, while AI and machine learning have been researched since the 1950s, advances over the past decade (such as advances in processing and an increase in available data) have enabled it to be used much more widely (House of Lords, 2018).

Definitions of machine learning and artificial intelligence

Artificial intelligence

AI is technology that has the ability to perform tasks characteristic of human intelligence. This includes understanding language and speech, object recognition and problem solving. Modern artificial intelligence usually has the capacity to learn or adapt.

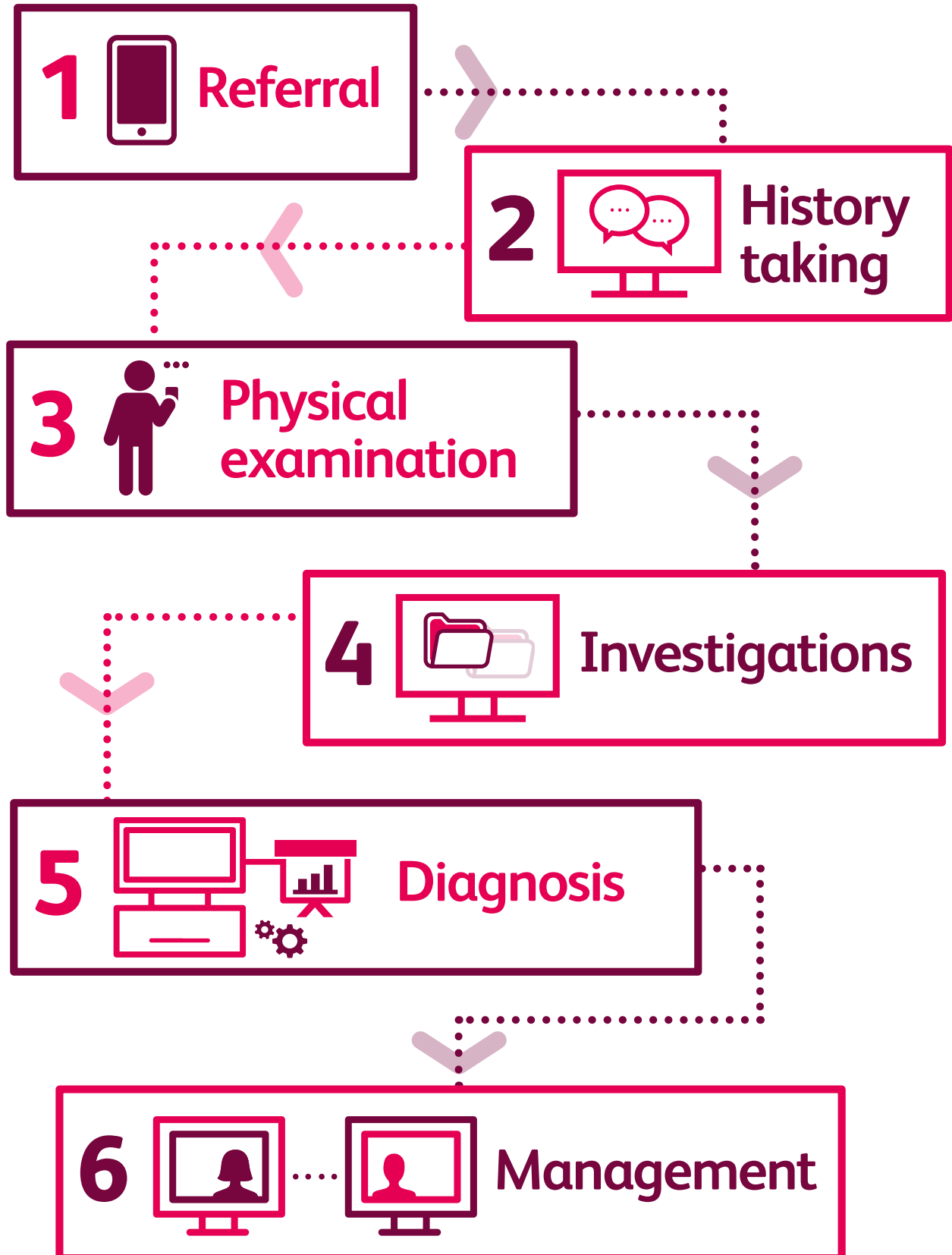
Machine learning

Machine learning is a type of artificial intelligence that enables computer systems to learn directly from examples, data, and experience. The 'training' involves feeding extensive amounts of data into algorithms and enabling the algorithms to improve and adjust. Complex processes are learned from data rather than from following pre-subscribed rules. Pioneering researcher Arthur Samuel defined it as 'the field of study that gives computers the ability to learn without being explicitly programmed.'

Adapted from House of Lords. Select Committee on Artificial Intelligence. Report of Session 2017–19. House of Lords 2018

Royal Society. *Machine Learning: the power and promise of computers that learn by example.*

The referral pathway



Machine learning and medical practice and professionalism

At its simplest, machine learning refers to computer programmes that can recognise patterns within large datasets without being programmed by humans. It is a subset of artificial intelligence, which encompasses many different technologies – for example, image recognition, robotics, continuous speech transcription, and decision support systems.

Machine learning has many applications in healthcare, including medical imaging, analysis of individual patient histories, optimisation of the sequence of diagnostic investigations, individualisation of treatment plans, optimisation of hospital logistics, and analysis of population data to identify target groups for screening. It can also include virtual agents that interact with patients.

Machine learning has enormous potential to improve diagnostic accuracy. Systems can analyse millions of pages of research and data in seconds and employ automated techniques to provide diagnostic probabilities and predicted responses to treatments. Because of the potential for huge profits and global health benefits, entrepreneurs are working to increase the efficiency, accuracy, and speed of medical interventions.

All this might currently seem distant, and we can never be sure of how new technologies will develop, but it is probable that machine learning will become ubiquitous within healthcare. The rapid growth in machine learning in healthcare is likely to have disruptive effects on medical practice and professionalism. The following section of this report hypothesises some of the ways machine learning may impact on the patient's clinical pathway. Ultimately, while doctors cannot predict the future, by considering technology's likely advances, they can equip themselves with the tools to meet the challenges they will likely face.

How could machine learning and automation change the clinical pathway?

Referral

The wide availability of smartphones is already changing the nature of the patient–doctor relationship, allowing, for example, consultation at a distance, and current trends are likely to continue.

Access to specialists in the UK has been restricted by traditional referral pathways, which have typically depended on face-to-face encounters with doctors. Smartphones and other new technologies may allow patients to initiate contact with a doctor, including specialists. Contact with patients is increasingly likely to be through technology at a distance.

There is also likely to be increasing automation of contact with patients. This may result in points in the referral pathway, especially those which depend on privileged expertise, being removed as unnecessary. Automated surveillance of patients' health, linked with wearable technology, may support doctors' communication with patients.

With healthcare systems under increasing pressure and the trend towards patients self-managing their conditions, these technologies are likely to be used more frequently. Doctors and their organisations need to think carefully about what will be lost and gained by such developments.

History taking

Technology is transforming the collection of clinical information. Wearable technology allows continuous collection of physiological data and analysis using machine learning. Patient histories can be obtained using an autonomous virtual assistant. The intention is to increase the speed and efficiency of the interaction between doctor and patient. The doctor's role may increasingly be interpreting machine obtained data instead of direct interaction with patients. Some doctors might see this as a serious reduction in their professional identity, whereas others might welcome the opportunity to start with a well-structured complete record for each patient.

In pressurised healthcare systems, the capacity for histories to be taken without the need for costly doctors may bring benefits, allowing resources to be deployed where they are most needed. Some patients may prefer a history to be taken in this way, and a machine may be more reliable in gathering the most relevant information (Lucas et al, 1977).

But taking a clinical history has traditionally been a key opportunity to build relationships and understand the priorities of patients. There may be considerable but unpredictable losses to the traditional doctor–patient relationship. It has been proposed that virtual agents might screen patients and refer them to specialists, but this process of referral may raise questions and anxieties for patients that machines can't address.

Machines may eventually improve on the best human history taking, but it may also be that certain kinds of emotionally-loaded conversation that disclose important information will work better with doctors than machines. There is also the important role of the doctor in understanding the history in the context of the patient's condition, and creating a care plan based on the patient's preferences.

There will also be so-far unsolved issues of trust, informed consent, and privacy in the use of confidential personal health data acquired through machines.

Physical examination

The traditional view is that physical examination is important, not just to gain diagnostic information but also to strengthen the relationship between patient and doctor. Gentle and skilled physical contact with the patient mediates compassionate care and reduces anxiety. This is a unique role for doctors in an age increasingly anxious about physical contact between strangers.

The collection of physiological and pathological data through technology could result in a loss of this human contact. It may be difficult to balance the value of human contact against demands for increasing efficiency, speed, safety, convenience and accuracy of healthcare delivery.

The doctor's role may increasingly be interpreting machine obtained data instead of direct interaction with patients.

Investigations

Machine learning is expected to allow more efficient use of laboratory and other investigations. Automated image analysis will assist human diagnosis and may increasingly replace some human workers. There will be increasing use of point-of-care technology for laboratory investigations, and autonomous devices may conduct pathological investigations without human assistance.

There may, however, be increased inefficiencies in the use of such technologies, since experienced clinicians are often able to avoid uninformative investigations. Increasing automation of laboratories may lead to the loss of experienced pathologists to assist doctors in interpreting results.

Errors and biases may be introduced into machine learning by the use of large but unrepresentative databases. Moreover, the decline in experienced doctors available for training and development in resource-poor contexts – for example, low- and middle-income countries – needs careful consideration. Although it is likely that machine learning and digital technologies will bring benefits to patients and healthcare providers in low- and middle-income countries, this should not displace the training of expert doctors.

Diagnosis

Traditionally the unique role of the doctor in a multidisciplinary healthcare team has focused on diagnosis. But this unique medical skill is likely to be increasingly irrelevant as diagnosis will increasingly depend on machine learning. Automated systems are being found to be better at diagnosis than doctors, particularly in dermatology and radiology, and in the case of rare diseases (Haenssle et al, 2018) (Esteva et al, 2017) (Arbabshirani et al, 2018).

If diagnostic options are increasingly expressed as probabilities, how will they be communicated to patients? Will doctors focus on communicating to patients the diagnostic and therapeutic information? The doctor would become ‘the friendly front-end’ of healthcare while the machines do the ‘clever stuff’ behind the scenes. This depletion in the traditional base of professional identity may be regretted by doctors, but this is not strong argument for resisting change.

Yet doctors have obligations here as innovators in the midst of innovation. In particular, there is a well-known problem of hidden biases and distortions introduced by databases in artificial intelligence, meaning that some results are routinely skewed. This might happen, for example, if the nature of a disease is altered by cultural or racial variables that have not been considered in the database. Furthermore, automated systems struggle to cope with novel and unpredictable combinations of factors unforeseen by the system designers. Experienced doctors often use the gestalt of the expert combination of multiple sources of information based on previous experience, sometimes referred to as ‘tacit knowledge’ (Polanyi, 2009), to form a diagnosis. A collaboration between the doctor and the machine is likely to give the best outcome (Blois, 1980) – but how will this partnership be achieved?

Who will then take professional and legal responsibility for the diagnostic information provided by machines? Traditionally consultants carry overall responsibility for patients’ clinical care. To what extent is consultants’ clinical responsibility diffused or nullified by machine diagnosis? If harm results, it may not be possible to determine how the error arose and how to prevent future errors. These are not unanswerable questions, but they are difficult ones that challenge current ideas of professional identity.

If doctors confine their identity to the diagnostic task, then their identity will be quickly pared away. Information about health and disease is, however, not simply data to be transferred, but is laden with meaning. Doctors will continue to be experts who communicate information in an intelligible way to enable patients to take decisions.

Management of patients

Machine learning is likely to be increasingly used to provide ranked treatment options together with the evidence for each option. Doctors may use their judgement to choose a preferred option, but is there an ethical duty to inform the patient if the system ranks a different option more highly? It is commonly said that an expert is ‘someone who knows what the rules are, and knows when they may be broken’, but the right of the physician to break the rules may be increasingly challenged. Some patients may choose to trust the machine’s ‘judgement’ rather than the doctor’s, but who then carries responsibility for the outcome? Then there is ‘automation bias’, where incorrect machine-derived guidance is followed by humans, leading to potential harm (Goddard et al, 2013). Another issue is how machine learning systems can be tested and certified for clinical use if the underlying algorithms are constantly changing as a result of new data.

The treatment options provided by automated systems reflect the limitations and distortions in the data on which they are based. A well-publicised example is provided by the COMPAS algorithm, which was used by some US courts to assess the risk of an individual reoffending. It was found to be strongly influenced by the race of the individual, leading to falsely elevated risk assessments in black people (Wellcome Trust & Future Advocacy, 2018) (Angwin et al, 2016). It will be increasingly important to understand the implications for the most vulnerable patients of using automated systems.

The use of machine learning could lead to the progressive replacement of face-to-face patient–doctor consultations with a collaboration in which the machine becomes effectively an independent actor. The role of the doctor may need renegotiation, but there will always be the need for a ‘wise friend’ who accompanies patients on their journeys. It is doctors, alongside other healthcare colleagues, rather than machines who can provide solidarity, understanding, and compassion to patients.

Continuous improvement: an essential tool for innovation

Not all innovation involves technology and artificial intelligence, though the principles illustrated in this example can be applied to other interventions. To be effective, innovation must also encompass new models of behaviour and working. Continuous improvement is a commitment to learning and action, and is a key part of professionalism. Individuals, teams, services and organisations should understand the quality and value of the care that is being delivered, identify areas for improvement and plan approaches to achieving measurable, improvement. Where this happens most consistently, organisations have a unifying purpose around quality and value, communicate priorities clearly, and support frontline teams with the skills and functions to innovate. Performance measurements are owned by clinicians and are used to reduce variation and improve quality and safety. The measurements balance safety, efficiency and personalised care, and it is understood that improvements in variation, quality and safety will reduce costs. Improvement requires doctors to take ownership of the broader quality agenda, starting with ensuring that performance measures reflect quality of service and can be used to effect meaningful change through continuous improvement (Berwick, 2016).

‘The system is not very good at encouraging every level of doctor and nurse to be continuously improving and to value this.’
– Lawyer

There are several challenges in employing continuous improvement in modern practice. Protected time, organisational support functions including information analysis, doing this as a team, and consistent approaches are often highlighted. Sustainability is also a major issue; in a recent survey nearly 70% of trainees reported that their work in service improvement had not been sustained after their rotation finished (Hynes, 2018). Supervisors need to ensure mechanisms are in place for work to be continued. If the work is not aligned with the organisational aims, it is unlikely to be embedded and spread to other departments.

If the methodology is weak then it is less likely to be successful. Measurement of the effect and sustaining the work is key. Doctors should ensure that they are developing the skills in continuous improvement, and are working with others to deliver this. Developing these skills through practice is now part of the training curriculum in the UK.

If not done well then there are ethical and resource implications, but when continuous improvement works it can have large impacts on patient outcomes, safety, and cost.

‘Quality improvement seems still to be missing from the curriculum. The tools are needed to help people.’
– Medical student

Professionalism and research

As the arguments above show, medicine and healthcare constantly produce questions that need answering. Research is fundamental to medicine and its development, and professionalism requires that doctors have a positive attitude to research across the full range of research from basic science to policy research. Through engagement with research, doctors improve critical improvement skills, advance medical knowledge and develop their abilities in reconciling research findings with the individual patient. Research also brings diversity and new challenge to the doctors work which can improve engagement and job satisfaction (RCP, 2016).

Research opportunities

- > Recruiting patients into trials
- > Publishing papers, including literary reviews and quality improvement outcomes (as leading or contributing author)
- > Leading or assisting audit or quality improvement research
- > Leading or assisting observational research
- > Leading or assisting laboratory work
- > Developing new guidance
- > Leading and assisting clinical research

(Adapted from the RCP report *Research for all*)

Research, just like clinical practice, has become increasingly complex and specialised. It is not feasible for all doctors to be active researchers – and combining clinical practice with research has become increasingly difficult. 64% of doctors surveyed would like to do more research if they could (RCP, 2016). All doctors, however, will be consumers of research, and keeping abreast of current research that is relevant to their practice is important for doctors.

To support a patient's decision making, doctors need to be able to understand and interpret research findings, and to explain them to the patient. Recognising that all research is imperfect, doctors should also be critical consumers of research. Patients will often consult doctors after reading of some 'breakthrough' in the media, and doctors should be able to help patients make sense of the research. Critical appraisal of research is a difficult skill that needs to continue to develop during a professional lifetime.

Even though most doctors will not be active researchers they should be supporters of research, participating in research – perhaps clinical trials or surveys – when asked.

Doctors as scholars

Doctors are taught science and clinical skills at medical school, but exposure to literature, philosophy, theology and religion, history, other humanities, and the social sciences will be limited and usually optional. Yet many doctors think that some exposure to these other ways of thinking can only improve them as doctors. Medical humanities is growing as a discipline, and, particularly as machines play an increasing part in medical practice, perhaps will one day be included in all medical curricula.

It would seem extreme at the moment to insist that study of the humanities be part of medical professionalism, but many doctors will feel that such study can only improve them as doctors.

Further research

The future will likely see physicians advancing and embedding, as safely and swiftly as possible, benefits of machine learning for patient care and patient safety documented in well-designed and executed studies. At the same time, physicians continue to advocate for patients and safeguard against any threats that this likely ubiquitous technology may bring.

Further research is therefore needed on how machine learning and related technologies come to be applied which will in turn inform strategies in adoption and education. Physicians will need to negotiate and collaborate in order to exercise leverage with the commercial, university and other entities which are largely shaping innovation, and with the authorities which create regulatory frameworks and certification processes.

What is true of innovation in relation to machine learning is true more generally of doctors as innovators amidst innovation. This underlines the importance of doctors keeping abreast of medical research as well as engaging in fields such as medical humanities so that they can address new challenges as they arise.

Free online courses:

- Machine Learning offered by Stanford University
Available at www.coursera.org/learn/machine-learning
- Artificial Intelligence: A Free Online Course from MIT
Available at www.openculture.com/2017/05/artificial-intelligence-a-free-online-course-from-mit.html

One thing you can do

Data drives innovation. Choose something meaningful to measure that is of interest to you in your practice, such as the number of patients who develop a complication from a certain type of treatment. Look to see if you can identify any patterns and explore whether changes to medical practice could improve outcomes. This can also help you identify questions for further research.

Recommended reading

Royal Society. *Machine learning: the power and promise of computers that learn by example*. 2017.

Wachter R. *The Digital Doctor: Hope, Hype and Harm at the Dawn of Medicine's Computer Age*. New York: McGraw-Hill, 2015.

Susskind D, Susskind R. *The Future of the Professions: How Technology Will Transform the Work of Human Experts*. Oxford: OUP Oxford, 2015.

Topol E. *The Patient Will See You Now: The future of Medicine is in Your Hands*. Canada: Basic Books, 2015.

Wellcome Trust & Future Advocacy. *Ethical, Social, and Political Challenges of Artificial Intelligence in Health*. 2018.

What next?

Medical professionalism matters to individual doctors, the professional medical institutions, and all those who work with doctors, including patients.

This report has tried to be practical. One hope is that individual doctors will read the report, do the exercises, reflect on their current state of professionalism, and improve their practice. No doctor has mastered all the seven characteristics; every doctor can improve.

All doctors, as the report emphasises, continue to learn and work within teams. The ideas in this report can usefully be discussed as part of lifelong learning – from medical school onwards – and in the teams in which doctors work.

The RCP commits to continue to develop professionalism among its fellows and members and, recognising the dynamic nature of professionalism, to return to the subject in future reports. The RCP will also urge the Academy of Medical Royal Colleges to lead a working group to develop and implement a plan for advancing professionalism.

That working party should include not only doctors from the profession's institutions, but also patients, other health professionals, including managers, and those responsible for running and developing health systems. Leaders developing plans for health systems and institutions need to incorporate medical professionalism in their plans, as it can benefit patients, teams, institutions, and whole systems, as well as doctors themselves.

Methodology

Background

In 2005, the RCP published *Doctors in society: medical professionalism in a changing world*, which defined professionalism as ‘a set of values, behaviours and relationships that underpin the trust the public has in doctors’ (RCP, 2005).

In the 13 years since its publication, healthcare and society have evolved. Increasing financial and operational pressure have created unprecedented demands. Scientific and technological advances bring both opportunities and risks. Individually and collectively these changes have the potential to significantly impact on the role doctors play in healthcare and broader society. Professor Dame Jane Dacre, president of the Royal College of Physicians, set up this project to develop an updated understanding of the unique role of professionalism in healthcare.

Governance

Professor Dame Jane Dacre was the RCP officer responsible for the project and had final sign-off for the report.

The Expert Advisory Group (EAG) consisted of patient representatives, students, politicians, academics and representatives of varying seniority from law and medicine (see front of the report for list).

The advisory group was asked to:

- provide guidance on the scope and aim of the project
- advise on the structure and suggest content for the professionalism report
- provide external stakeholder context advice on how the final output can be used to influence policy/practice.

Evidence

The evidence for the report was collected from:

- literature review (academic and grey literature)
- focus groups
- qualitative interviews with stakeholders
- workshops
- roundtable discussion.

The RCP Patient and Carer Network was critical to the evidence gathering, participating in focus groups and interviews and an interactive workshop. A range of stakeholders were interviewed for this work, including senior leaders, educators and professionals with policy and political backgrounds. Three expert workshops were held in 2017 to inform the work (further details below). Evidence was also collected from professionalism workshops with medical students, junior doctors, consultants, GPs and allied health professionals. Chapter 3 (Doctor as team worker), in addition to the above sources, was informed by a roundtable event held at the Royal College of Physicians London on 22 June 2017 entitled ‘Improving Teams in Healthcare’.

Expert workshops

(For attendees, please see Appendix A)

Calling, compassion and citizenship

2 March, Royal College of Physicians London

Marketisation, work and management

27 April, Liverpool Medical Institution

Intelligent technology and authority

3 October, St Luke’s Chapel University of Oxford

The overall professionalism workstream received funding from the Nuffield Foundation, RCP charities fund, the General Medical Council and the Arts and Humanities Research Council (grant AH/N009770/1).

Drafting the report

The report was authored by Dr Judith Tweedie, Professor Joshua Hordern and Professor Dame Jane Dacre. Dr Richard Smith added to, and extensively edited, the report. The EAG gave feedback on the report as it progressed. Professor Dame Jane Dacre approved on the final document.

Acknowledgements

This document has benefited from a wide range of wisdom, guidance and input. The project team would particularly like to thank Dr Clive Weston, Dr John Dean, Dr Therese Feiler and Dr Michael Trimble for their support and expertise in shaping the work and Dr Ian Bullock for providing professional support. The RCP's Committee for Ethical Issues in Medicine provided expert contributors, especially Professor Albert Weale (chair), Dr Tania Syed and Dr Rosemarie Anthony-Pillai. Professor John Wyatt conceived and wrote extensive material for Chapter 7, which also received significant contributions from Professor Jeremy Wyatt. The project is indebted to Ms Rosie Stewart for her coordination, administration and patience. The University of Oxford Research Services, especially Ms Lucy Rodwell and Louie Fooks, supported the project on behalf of the Oxford Healthcare Values Partnership, with funding from the University of Oxford Wellcome Trust Institutional Strategic Support Fund (105605/Z/14/Z). The project team is also grateful to Kingsley and Napley LLP for its financial contribution to the work.

Methodology

Appendix A

London workshop attendees – 2 March 2017

Dr Michael Trimble

Consultant physician;
Northern Ireland Regional Adviser Service, RCP
London

Professor Albert Weale CBE

Chair, RCP Committee for Ethical Issues in Medicine;
Emeritus professor of political theory and public
policy / programme director of executive MPA in
global public policy and management, School of
Public Policy, University College London

Professor Alan Cribb

Professor of bioethics and education,
Kings College London

Professor William Fulford

Fellow of St Catherine's College and member of the
Philosophy Faculty, University of Oxford; emeritus
professor of philosophy and mental health,
University of Warwick Medical School

Professor Jonathan Montgomery

Professor of healthcare law, Faculty of Laws,
University College London SLASH

Ms Kate Rohde

Partner, Kingsley Napley

Dr Clive Weston

Consultant in cardiology and general internal
medicine, Department of Cardiology, Singleton
Hospital Sketty, Swansea

Dr Rosemarie Anthony-Pillai

Palliative care consultant;
Medicolegal advisor at Medical Protection Society
Member, RCP Committee for Ethical Issues in
Medicine

Richard Smith CBE

Past editor of the *BMJ*

Dr Therese Feiler

Oxford Healthcare Values Partnership AHRC post-
doctoral researcher, Harris Manchester College,
Faculty of Theology and Religion, University of
Oxford

Dr Tania Syed

Consultant acute physician, Central Manchester
Foundation Trust; Member, RCP Committee for
Ethical Issues in Medicine

Ms Rita Bygrave

Representative, RCP Patient and Carer Network

Mr Luke Austen

Medical student, University of Oxford

Professor Sir Cyril Chantler

Honorary fellow and emeritus chairman, UCL
Partners Academic Health Science Partnership

Dr Johnny Boylan

ST5 genitourinary medicine;
National medical director's clinical fellow 2016/17

Dr Rammya Matthew

ST3 general practice;
National medical director's clinical fellow 2016/17

Dr Sue Shephard

Previous senior policy officer, RCP
secretary, *Doctors in society: medical
professionalism in a changing world*

Dr Helen Millott

Programme lead, PGDip Physician Associated
Studies, University of Leeds

Dr Lola Loewenthal

Specialist registrar respiratory medicine;
National medical director's clinical fellow
2012/2013

Dr Andrew N Papanikitas

NIHR academic clinical lecturer in general practice,
University of Oxford

Professor Jane Maher

Chief medical officer, MacMillan

Ms Deidre McLellan

Representative, RCP Patient and Carer Network

**Liverpool workshop attendees
– 27 April 2017**

Dr Andrew N Papanikitas

NIHR academic clinical lecturer in general practice,
University of Oxford

Dr Mike Dent

Emeritus professor, Staffordshire University

Dr Simon Moralee

Senior lecturer, healthcare management,
University of Manchester Cohort director and
tutor, Elizabeth Garrett Anderson (MSc Healthcare
Leadership) programme

Dr Lucy Frith

Reader in bioethics and social science, University
of Liverpool, NIHR Research Design Service, NW
public involvement strategic lead

Dr Rosemarie Anthony-Pillai

Palliative care consultant;
Medicolegal advisor, Medical Protection Society
Member, RCP Committee for Ethical Issues in
Medicine

Dr Amit Nigam

Senior lecturer in management, Cass Business
School

Dr Martin McShane

Chief medical officer (clinical delivery), Optum
International

Professor Elena Antonacopoulou

Professor of organisational behaviour work,
Organisation and Management, University of
Liverpool

Dr Therese Feiler

Oxford Healthcare Values Partnership AHRC post-
doctoral researcher, Harris Manchester College,
Faculty of Theology and Religion, University of
Oxford

Dr Tania Syed

Consultant acute physician, Central Manchester
Foundation Trust; Member, RCP Committee for
Ethical Issues in Medicine

Professor Adrian Edwards

Professor of general practice and co-director of
the Division of Population Medicine at Cardiff
University, Wales

Lynne Quinney

Representative, RCP Patient and Carer Network

Mr Will Ries

Medical student, University of Birmingham

Ms Sophie Jackman

Medical student, University of Cambridge

Dr Jenny Isherwood

ST6 general surgery;
RCP sustainability fellow
National medical director's clinical fellow 2016/17

Professor Joshua Hordern

Member, RCP Committee for Ethical Issues in Medicine; Associate professor of Christian Ethics, Faculty of Theology and Religion, Harris Manchester College, University of Oxford

**Oxford Workshop attendees
– 3 October 2017**

Professor John Wyatt

Emeritus professor of ethics and perinatology at University College London; Principal investigator, Faraday Institute for Science and Religion, University of Cambridge

Professor Andrew Briggs

Professor of nanomaterials in the Department of Materials, University of Oxford

Professor Joshua Hordern

Member, RCP Committee for Ethical Issues in Medicine; Associate professor of Christian Ethics, Faculty of Theology and Religion, Harris Manchester College, University of Oxford

Dr Therese Feiler

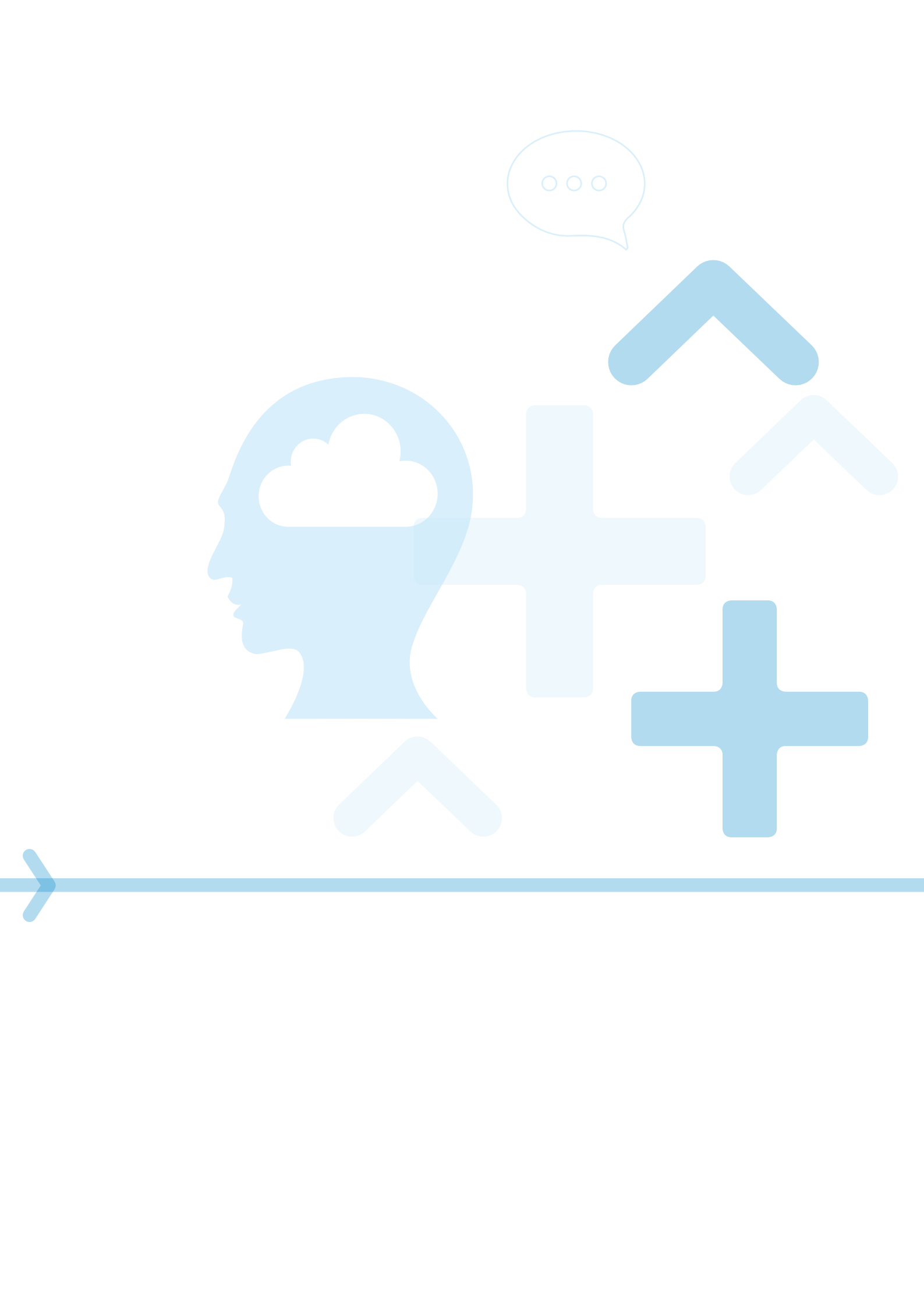
Oxford Healthcare Values Partnership AHRC post-doctoral researcher, Harris Manchester College, Faculty of Theology and Religion, University of Oxford

Mr Robert Burdon

Medical student, University of Oxford

Dr Tania Syed

Consultant acute physician, Central Manchester Foundation Trust Member; Member, RCP Committee for Ethical Issues in Medicine



References

- AHRQ PSNet (2016) *Patient Safety Primer, Safety Culture*. <https://psnet.ahrq.gov/primers/primer/5/safety-culture>
- American College of Healthcare Executives & National Patient Safety Foundation's Lucian Leape Institute (2017) *Leading a Culture of Safety: a Blueprint for Success*. Chicago: American College of Healthcare Executives & National Patient Safety Foundation's Lucian Leape Institute.
- Angwin J, Larson J, Mattu S *et al* (2016) *Machine Bias*. ProPublica. www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing
- Arbabshirani MR, Fornwalt BK, Mongelluzzo GJ *et al* (2018) Advanced machine learning in action: identification of intracranial hemorrhage on computed tomography scans of the head with clinical workflow integration. *Nature Digital Medicine* 1:9.
- Audit Scotland (2016) *Health inequalities in Scotland*. Edinburgh: Audit Scotland.
- Baker DP, Gustafson S, Beaubien J *et al* (2005) Medical teamwork and patient safety: the evidence-based relation. AHRQ publication 5(53):1-64.
- Balint M (2000) *The doctor, his patient and the illness*. London: Churchill Livingstone.
- Bar-Sela G, Lulav-Grinwald D & Mitnik I (2012) Balint group meetings for oncology residents as a tool to improve therapeutic communication skills and reduce burnout level. *J Cancer Educ* 27:786–89.
- Bark P, Vincent C, Jones A *et al* (1994) Clinical complaints: a means of improving quality of care. *Qual Health Care* 3:123–32.
- Beckman HB & Frankel RM (1984) The effect of physician behaviour on the collection of data. *Ann Intern Med* 101:692–6.
- Bendapudi NM *et al* (2006) Patients' perspectives on ideal physician behaviors. *Mayo Clin Proc* 81:338–44.
- Berwick DM (2016) Era 3 for Medicine and Health Care. *JAMA* 315:1329.
- Blois MS (1980) Clinical judgment and computers. *New Engl J Med* 303:192-7.
- Berwick DM & Hackbarth AD (2012) Eliminating waste in US health care *JAMA* 307: 1513–16.
- Board of Medical Education (2006) *Doctors as teachers*. London: BMA.
- Bohmer R (2012) *The instrumental value of medical leadership: Engaging doctors in improving services*. London: The King's Fund.
- Borges NJ, Manuel RS, Elam CL *et al* (2006) Comparing Millennial and Generation X Medical Students at One Medical School. *Acad Med* 81:571–6.
- Bosse HM, Mohr J, Buss B *et al* (2015). The benefit of repetitive skills training and frequency of expert feedback in the early acquisition of procedural skills. *BMC Med Educ* 15:22.

- BMA (2017) *Influences on choice of medical career*. www.bma.org.uk/collective-voice/policy-and-research/education-training-and-workforce/influences-on-choice-of-medical-career
- BMA (2018) *Quarterly survey Q2 2018*, Available at: www.bma.org.uk/collective-voice/policy-and-research/education-training-and-workforce/quarterly-survey/quarterly-survey-results/quarterly-survey-q2-2018 (Accessed: 11th September 2018)
- Buttigieg SC, West MA & Dawson JF (2011) Well-structured teams and the buffering of hospital employees from stress. *Health Serv Manage Res* 24:203–12.
- Carter M *et al* (2008) Developing team-based working in NHS trusts Report prepared for the Department of Health. Birmingham. Available at: http://publications.aston.ac.uk/19330/1/Developing_team_based_working_in_NHS_trusts.pdf
- Churchill LR & Schenck D (2008) Healing skills for medical practice. *Ann Intern Med* 2008;149:720–4.
- Clay-Williams R *et al* (2014) Do large-scale hospital- and system-wide interventions improve patient outcomes: a systematic review', *BMC Health Serv Res* 14:369.
- Cook DA, Hatala R, Brydges R *et al* (2011). Technology-Enhanced Simulation for Health Professions Education. *JAMA* 306:978–88.
- Coulter A (2005) What do patients and the public want from primary care? *BMJ* 331:1199–1201.
- Covey S (1989) *The seven habits of highly successful people*. Fireside/Simon & Schuster.
- Cruess SR (2006) Professionalism and Medicine's Social Contract with Society. *Clin Orthop Relat R* 449:170–6.
- Cruess SR, Johnston S and Cruess RL (2004) Professionalism for medicine: opportunities and obligations. *Iowa Orthopaedic Journal* 24:9–14.
- Cruess RL *et al* (2014) Reframing medical education to support professional identity formation. *Acad Med* 89:1446–51.
- Cruess RL, Cruess SR & Steinert Y (2016) (eds) *Teaching medical professionalism: supporting the development of a professional identity*. Cambridge: Cambridge University Press.
- Dall'Ora C *et al* (2016) Characteristics of shift work and their impact on employee performance and wellbeing: a literature review. *Int J Nurs Stud* 57:12–27.
- Dahlgreen W (2016) Public support for doctors strike weakened by all-out action, Available at: <https://yougov.co.uk/news/2016/04/04/all-out-doctors-strike/> (Accessed: 24th August 2018).
- DeAngelis, C (2014) Medical Professionalism in the 21st Century in DeAngelis C (ed) *Patient Care and Professionalism*. New York: Oxford University Press.
- Deci EL and Ryan RM (1987) The support of autonomy and the control of behavior. *J Pers Soc Psychol* 53:1024.
- Delise LA *et al* (2010) The effects of team training on team outcomes: A meta-analysis. *Performance Improvement Quarterly* 22:53–80.
- Department of Health (2005) *Chief Executive's report to the NHS: December 2005*, London: Department of Health.
- Department of Health (2012). Report. *Long-term conditions compendium of Information*. 3rd edn. London.
- Department of Health (2015) *The NHS Constitution*. London: Crown.

- DiLullo C, McGee P, & Kriebel RM (2011). Demystifying the Millennial student: A reassessment in measures of character and engagement in professional education. *Anat Sci Educ* 4:214–26.
- Donaldson L (2002) *Unfinished business. Proposal for the reform of the Senior House Officer Grade*. London: NHS.
- Dornan T, Boshuizen H, King N *et al* (2007). Experience-based learning: a model linking the processes and outcomes of medical students' workplace learning. *Med Educ* 41:84–91.
- Dixon-Woods M, Baker R, Charles K *et al* (2013) Culture and behaviour in the English National Health Service: overview of lessons from a large multimethod study. *BMJ Qual Saf* 23:106–15.
- Dixon-Woods M, Yeung K, Bosk CL (2011) Why is medicine no longer a self-regulating profession? The role of scandals involving 'bad apple' doctors. *Soc Sci Med* 73:1452–9.
- Duke University Medical Centre (2018) *What is Evidence-Based Practice (EBP)?* Available at: <https://guides.mclibrary.duke.edu/c.php?g=158201&p=1036021>
- Entwistle VA *et al* (2010) Supporting patient autonomy: the importance of clinician-patient relationships. *J Gen Intern Med* 25:741–5.
- Elzubeir MA & Rizk DE (2001) Identifying characteristics that students, interns and residents look for in their role models. *Med Educ* 35:272–7.
- Epstein RM (2008). Reflection, perception and the acquisition of wisdom. *Med Educ* 42:1048–50.
- Esteva A, Kuprel B, Novoa RA, *et al* (2017) Dermatologist-level classification of skin cancer with deep neural networks. *Nature* 542:115.
- Edmonson A (2012) *Teamwork on the Fly* Available at: <https://hbr.org/2012/04/teamwork-on-the-fly-2>
- Feiler T, Gaitskell K, Hordern J *et al* (2017) Personalised Medicine: The Promise, the Hype and the Pitfalls. *The New Bioethics* 1:1-12.
- Field R & West M (2009) Teamwork in primary health care. Two perspectives from practices. *J Interprof Care* 9:123–30.
- Finkelstein D, Wu AW, Holtzman NA *et al*. When a physician harms a patient by a medical error: ethical, legal, and risk-management considerations. *J Clin Ethics* 8:330–5.
- Firth-Cozens J (2001) Cultures for improving patient safety through learning: the role of teamwork *BMJ Qual Saf* 10:26–31.
- Fletcher E, Abel GA, Anderson R *et al* (2017) Quitting patient care and career break intentions among general practitioners in South West England: findings of a census survey of general practitioners. *BMJ open* 7(4):p.e015853.
- Flin R, Winter J, Sarac C *et al* (2009) World Health Organization. *Human factors in patient safety: review of topics and tools*.
- Fogarty TJ, Reinstein A, & Heath RS (2017). Are Today's Young Accountants Different? An Intergenerational Comparison of Three Psychological Attributes. *Account Horiz* 31:83–104.
- Frank JR, Snell L & Sherbino JE (2015) *CanMEDs 2015 Physician Competency Framework*. Ottawa: Royal College of Physicians and Surgeons of Canada.
- Freidson E (2001). *Professionalism, the third logic: On the practice of knowledge*. Chicago: University of Chicago.

- Frost HD, & Regehr G. (2013). I am a doctor: Negotiating the discourses of standardization and diversity in professional identity construction. *Acad Med* 88 1570–7.
- Garside P (2004) Are we suffering from change fatigue? *Quality & safety in health care*. BMJ 13:89–90.
- Gawande A (2010) *Complications: A surgeon's notes on an imperfect science*. London: Profile Books.
- Gawande A (2012) *How do we heal medicine?* TED lecture.
- Gerada C (2016) Physician, heal thyself? The Hippocratic Post. www.hippocraticpost.com/mental-health/physician-heal-thyself
- Gilbert H (2016). *Supporting integration through new roles and working across boundaries*. London: The King's Fund.
- Ginsburg S (2014). Duty hours as viewed through a professionalism lens. *BMC Med Educ* 14(Suppl 1): S15.
- GMC (2008) *Consent: patients and doctors making decisions together*. London: GMC.
- GMC (2013) *Good medical practice*. London: GMC.
- GMC (2013) *The duties of a doctor registered with the General Medical Council*. London: GMC.
- GMC (2016) *Medical Professionalism Matters*. London: GMC.
- GMC (2016) *Generic professional capabilities framework*. Available at: www.gmc-uk.org/education/standards-guidance-and-curricula/standards-and-outcomes/generic-professional-capabilities-framework
- GMC (2018). *National training surveys 2018: Initial findings report*. London: GMC.
- Goddard K, Roudsari A & Wyatt JC. (2012) Automation bias: a systematic review of frequency, effect mediators, and mitigators. *J Am Med Inform Assoc*. 19:121–7.
- Goetz JL, Keltner D & Simon-Thomas E (2010) Compassion: an evolutionary analysis and empirical review. *Psychol Bull* 136:351.
- Gohar A et al (2009) Working memory capacity is decreased in sleep-deprived internal medicine residents. *J Clin Sleep Med* 5:191–7.
- Goldenhar LM, Brady PW, Sutcliffe KM et al (2013) Huddling for high reliability and situation awareness *BMJ Qual Saf* 22:899–906.
- Goodall AH (2011) Physician-leaders and hospital performance: Is there an association? *Soc Sci Med* 73:535–9.
- Goodwin N et al (2012) *A report to the Department of Health and the NHS Future Forum: Integrated care for patients and populations: Improving outcomes by working together*. London: The King's Fund.
- Goold SD & Lipkin M (1999) The doctor–patient relationship: challenges, opportunities, and strategies. *J Gen Intern Med* 14:26–33.
- Graber DR & Mitcham MD (2004) Compassionate clinicians: Take patient care beyond the ordinary. *Holist Nurs Pract* 18:87–94.
- Greengross P, Grant K & Collini E (1999) *The History and Development of The UK National Health Service 1948–1999*. London: Health Systems Resource Centre.

- Haenssle HA, Fink C, Schneiderbauer R *et al* (2018) Man against machine: diagnostic performance of a deep learning convolutional neural network for dermoscopic melanoma recognition in comparison to 58 dermatologists. *Ann Oncol* 29:1836–42.
- Hafferty FW & Castellani B (2010). The increasing complexities of professionalism. *Acad Med* 85:288–301.
- Hafferty FW & Levinson D (2008). Moving beyond nostalgia and motives: towards a complexity science view of medical professionalism. *Perspect Biol Med* 51:599–615.
- Haslam D (2015) More than kindness. *Journal of Compassionate Health Care*. BioMed Central 2:6.
- Herring J *et al* (2017) Elbow Room for Best Practice? Montgomery, Patients' values, and Balanced Decision-Making in Person-Centred Clinical Care. *Med Law Rev* 25: 582–603.
- Hesketh EA & Laidlaw JM (2002). Developing the teaching instinct, 1: feedback. *Med Teach* 24:245–8.
- Hickson GB, Clayton EW, Githens PB *et al* (1992) Factors that prompted families to file medical malpractice claims following perinatal injuries. *JAMA* 267:1359–63.
- Hirschler B (2018) *New drug approvals hit 21-year high in 2017*. Reuters.
- Hirst G *et al* (2011) How does bureaucracy impact individual creativity? A cross-level investigation of team contextual influences on goal orientation – creativity relationships. *Acad Manage J* 54:624–41.
- Hodges BD, Ginsburg S, Cruess, R *et al* (2011). Assessment of professionalism: Recommendations from the Ottawa 2010 Conference. *Med Teach* 33:354–63.
- Hollnagel E, Wears RL & Braithwaite J (2015) From Safety-I to Safety-II: A White Paper. The Resilient Health Care Net: Published simultaneously by the University of Southern Denmark, University of Florida, USA, and Macquarie University, Australia.
- Hordern J (2013) What's wrong with 'compassion'? Towards a political, philosophical and theological context. *Clin Ethics* 8.4:109–115.
- Hordern J (2017) Self-knowledge and risk in stratified medicine. *The New Bioethics* 23.1:55–63 [Open Access]
- Hordern J (2018a) Compassion in Primary and Community Care. In Papanikitas A and Spicer J (eds.) *Handbook of Primary Care Ethics*. CRC Press, 25–33 [Open Access]
- Hordern J (2018b) *Compassion and Responsibility for Disease: Trump, Tragedy and Mercy*. *Theology* 121:2:102–11 [Open Access]
- Howe N & Strauss W (2009). *Millennials rising: The next great generation*. New York: Vintage.
- HSE (1999) *Reducing error and influencing behaviour*. Norwich: TSO.
- Hursthouse R, Pettigrove G (2016) *Virtue Ethics*. Stanford Encyclopaedia of Philosophy. <https://plato.stanford.edu/entries/ethics-virtue>
- Hughes AM *et al* (2016) Saving lives: A meta-analysis of team training in healthcare. *J Appl Psychol* 101:1266–1304.
- Hynes G, Peake L & Tweedie J (2016) *The state of medical leadership and management training for junior doctors*. London: FMLM.
- Ibarra H (1999) Provisional Selves: Experimenting with Image and Identity in Professional Adaptation. *Admin Sci Quart* 44:764.

- Institute of Medicine (2000) Committee on Quality of Health Care in America in Kohn LT, Corrigan JM, Donaldson MS (eds) *To Err Is Human: Building a Safer Health System*. Washington: National Academies Press.
- Ivers NM, Grimshaw JM, Jamtvedt G *et al* (2014). Growing Literature, Stagnant Science? Systematic Review, Meta-Regression and Cumulative Analysis of Audit and Feedback Interventions in Health Care. *J Gen Intern Med* 29:1534–41.
- Jager AT, Tutty MA & Kao AC (2017) Association Between Physician Burnout and Identification With Medicine as a Calling. *Mayo Clinic Proceedings* 92:415–22.
- Jagosh J, Boudreau JD, Steinert Y *et al* (2011) The importance of physician listening from the patients' perspective: Enhancing diagnosis, healing, and the doctor–patient relationship. *Patient Educ Couns* 85:369–374.
- Jochimsen-van der Leeuw, HGAR, van Dijk, N, van Etten-Jamaludin FS *et al* (2013) The attributes of the clinical trainer as a role model: a systematic review. *Acad Med* 88:26–34.
- Kahneman D & Egan P (2011) *Thinking, fast and slow (Vol 1)*. New York: Farrar, Straus and Giroux.
- Kaldjian LC, Jones EW, Rosenthal GE *et al* (2006) An empirically derived taxonomy of factors affecting physicians' willingness to disclose medical errors. *J Gen Intern Med* 21:942–8.
- Kearney M (2000) *A place of healing: Working with suffering in living and dying*. Oxford: Oxford University Press.
- Kerr B, Godfrey-Smith P & Feldman MW (2004) What is altruism? *Trends Ecol Evol* 19:135–40.
- King's Fund, Nuffield Trust and The Health Foundation (2017) *The Autumn Budget: Joint statement on health and social care*. London. Available at: www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-september-2017
- King's Fund (2012) *Leadership and engagement for improvement in the NHS: Together we can*. London. Available at: www.kingsfund.org.uk/publications
- Kings Fund (2015) *Transforming our health care system. Ten priorities for commissioners*. London: Kings Fund.
- Krogstad U, Hofoss, D, Veenstra M *et al* (2006) Predictors of job satisfaction among doctors, nurses and auxiliaries in Norwegian hospitals: relevance for micro unit culture. *Hum Resour Health* 4:3.
- Lambert TW, Smith F, & Goldacre MJ (2014). Views of senior UK doctors about working in medicine: questionnaire survey. *JRSM Open* 5:205427041455404.
- Lave J & Wenger E (1998) Communities of practice: Learning, meaning and identity. *Journal of Mathematics Teacher Education* 6:185–94.
- Leach D, Surdy P & Lynch D (2006) Practicing professionalism in Sheehan, M & Parsai K (eds) *Healing as Vocation*. Oxford: Rowman & Littlefield.
- Lemaire, J.B. and Wallace, J.E., 2017. Burnout among doctors. *BMJ* 358:j3360
- Leonard M, Graham S & Bonacum D (2004) The human factor: the critical importance of effective teamwork and communication in providing safe care. *BMJ Qual Saf* 1:85-90.

- Lindsay C & and Dutton M (2012) promoting healthy routes back to work? Boundary spanning health professionals and employability programmes in Great Britain. *Soc Policy Admin* 46:509–25.
- Lockley SW *et al* (2004) Effect of Reducing Interns' Weekly Work Hours on Sleep and Attentional Failures. *New Engl J Med* 351:1829–37.
- Lown, B & McIntosh S (2014) Recommendations from a Conference on Advancing Compassionate, Person-and Family-Centered Care Through Interprofessional Education for Collaborative Practice in *Recommendations from a Conference on Advancing Compassionate, Person- and Family-Centered Care Through Interprofessional Education for Collaborative Practice*. Atlanta: The Schwartz Centre.
- Lucas RW, Card WI, Knill-Jones RP *et al* (1976) Computer interrogation of patients. *BMJ*. 2:623–5.
- Ludmerer KM (2012) The history of calls for reform in graduate medical education and why we are still waiting for the right kind of change. *Acad Med* 87:34–40.
- Lyubovnikova J, West MA, Dawson JF *et al* (2015) 24-Karat or fool's gold? Consequences of real team and co-acting group membership in healthcare organizations' *Eur J Work Organ Psy* 24:929–50.
- Maben J *et al* (2016) *National institute for health research service delivery and Organisation Programme exploring the relationship between patients' experiences of care and the influence of staff motivation, affect and wellbeing*. Available at: www.netscc.ac.uk/hsdr/files/project/SDO_FR_08-1819-213_V01.pdf
- Mann K, Gordon J & MacLeod A (2009). Reflection and reflective practice in health professions education: A systematic review. *Adv Health Sci Educ* 14:595–621.
- Manser T (2009) Teamwork and patient safety in dynamic domains of healthcare: a review of the literature. *Acta Anaesthesiol Scand* 53:143–51.
- Marvel MK, Epstein RM, Flowers K, Beckman HB. Soliciting the Patient's Agenda: Have We Improved? *JAMA* 1999;281(3):283–287.
- Marx D (2001) *Patient safety and the 'just culture': a primer for health care executives*. New York: Columbia University.
- McHarg J, Mattick K & Knight LV (2007) Why people apply to medical school: implications for widening participation activities. *Med Educ* 41:815–21.
- Morgan M (2008) *The doctor-patient relationship. Sociology as applied to medicine*. Edinburgh: Saunders Elsevier.
- Mountford J & Webb C (2009) *When clinicians lead*. London: HEE.
- NCAS (2009) *Professionalism – dilemmas and lapses NCAS: Helping resolve performance concerns*. London
- NHS Digital (2018) *Hospital Admitted Patient Care Activity, 2017-18*. London: NHS Digital.
- NHSE (2013) *Human Factors in Healthcare A Concordat from the National Quality Board*. London: NHSE.
- NHS National Patient Safety Agency (2009) *Professionalism - dilemmas and lapses*, London: National Patient Safety Agency 2009.

- NHS Providers (2017) *Summary of vacancy, shortfall and fill rate data for the clinical workforce*. London: NHS Providers
- NHS Survey Coordination Centre (2015) *NHS Staff Survey 2015*.
- NHS Survey Coordination Centre (2016) *Staff Survey 2016*. Detailed Spreadsheets.
- NHS Survey Coordination Centre (2018) *Staff Survey 2017*. National Briefing.
- NHSE (2013) *Human Factors in Healthcare A Concordat from the National Quality Board*. London: NHSE.
- NIHR (2017) *A realist informed mixed methods evaluation of Schwartz Center Rounds in England*. London: NIHR.
- NMC (2014) *Read the professional duty of candour*, Available at: www.nmc.org.uk/standards/guidance/the-professional-duty-of-candour/read-the-professional-duty-of-candour
- O'Mahony S (2016). *The way we die now*. 1st edn. London: Head of Zeus.
- O'Neill O (2002) *A question of trust: The BBC Reith Lectures 2002*. Cambridge University Press.
- O'Neill O (2013). *What we don't understand about trust*. Ted talk.
- Parsi K & Sheehan MN (2006) *Healing as vocation: a medical professionalism*. 1st edn. Oxford: Rowman & Littlefield.
- Pereira Gray DJ *et al* (2018) Continuity of care with doctors – a matter of life and death? A systematic review of continuity of care and mortality. *BMJ Open* 8:e0201161.
- Polanyi M (2009) *The tacit dimension*. Chicago: University of Chicago Press.
- Pollack S & Frolkis J. *Creating strong team culture*. www.stepsforward.org/modules/create-healthy-team-culture
- Porath C, Macinnis D & Folkes V 2010 Witnessing Incivility among Employees: Effects on Consumer Anger and Negative Inferences about Companies. *J Consum Res* 37:292–303.
- Provost SM, Lanham HJ, Leykum LK *et al* (2015) Health care huddles: managing complexity to achieve high reliability. *Health Care Manage Rev* 40:2–12.
- Pinder CC (2008) *Work Motivation in Organizational Behaviour*. 2nd edn. New York: Routledge.
- Pink D (2009) *Drive: The surprising truth about what motivates us*. 1st edn. New York: Riverhead.
- Pollack S & Frolkis J (2018) *Creating strong team culture*. www.stepsforward.org/modules/create-healthy-team-culture
- Rabøl LI *et al* (2011) Descriptions of verbal communication errors between staff. An analysis of 84 root cause analysis-reports from Danish hospitals. *BMJ Qual Saf* 20:268–74.
- Ross Baker G (2011) *Commission on Leadership and Management in the NHS The roles of leaders in high-performing health care systems*. London: The King's Fund.
- RCP (2005) *Doctors in Society: Medical Professionalism in a Changing World*. London: RCP
- RCP (2010). *Future physician. Changing doctors in changing times*. London: RCP.
- RCP (2013) *The Medical Registrar*. London: RCP.
- RCP (2016) *Being a Junior Doctor*. London: RCP.
- RCP (2016) *Research for all*. London: RCP.

RCP (2016) *Underfunded, Underdoctored, Overstretched: The NHS in 2016*. London: RCP.

RCP (2017). *Breaking the fever*. London: RCP.

RCP (2017) *Improving teams in healthcare*. London: RCP.

RCP (2017) *Supporting junior doctors in safe prescribing*. London: RCP.

RCP (2017) *Physicians and wellbeing: the latest survey of consultants*. *Commentary magazine*, June 2017. London: RCP.

RCP (2018) Focus on physicians. *Census of consultant physicians and higher speciality trainees 2017–8*. London: RCP

RCSeng (2017) *Half of surgeons concerned by low workplace morale*, Available at: www.rcseng.ac.uk/news-and-events/media-centre/press-releases/member-survey-low-morale (Accessed: 11th September 2018).

Reader TW, Gillespie A & Roberts J (2014). Patient complaints in healthcare systems: a systematic review and coding taxonomy. *BMJ Qual Saf* 23:678–89.

Reason J (1997) *Managing the risks of organisational accidents*. Aldershot: Ashgate Publishing.

Reason JT, Carthey J & De Leval MR (2001) Diagnosing ‘vulnerable system syndrome’: an essential prerequisite to effective risk management. *BMJ Qual Saf* 10:ii21–ii25.

Rhoades DR *et al* (2001) Speaking and interruptions during primary care office visits. *Fam Med* 33:528–32.

Rimmer A (2014) Will physician associates be replacing doctors? *BMJ* 349:5439.

Robbennolt JK (2009) Apologies and medical error. *Clin Orthop Relat R* 467:376–82.

Roberts A (2016) *Should Junior Doctors Still Strike?* <https://blogs.bmj.com/medical-ethics/2016/09/20/should-junior-doctors-still-strike>

Roberts DH, Newman LR & Schwartzstein RM (2012) Twelve tips for facilitating Millennials’ learning. *Med Teach* 34:274–8.

Rowe R & Calnan M (2006) Trust relations in health care—the new agenda. *Eur J Public Health* 16:4–6.

Russ AL, Fairbanks RJ, Karsh BT *et al* (2013) The science of human factors: separating fact from fiction. *BMJ Qual Saf* 22:802–8.

Sackett DL, Rosenberg WM, Gray JM *et al* (1996). Evidence based medicine: what it is and what it isn’t. *BMJ* 312:71–2.

Salas E, Cooke NJ & Rosen MA (2008) On Teams, Teamwork, and Team Performance: Discoveries and Developments. *Hum Factors* 50:540–7.

Salmon P & Young B (2017) A new paradigm for clinical communication: critical review of literature in cancer care. *Medical education*. *Med Educ* 51:258–68.

Sandars J (2009) The use of reflection in medical education: AMEE Guide No. 44. *MEd Teach* 31:685–95.

Schein EH (1978) *Career Dynamics: Matching Individual and Organizational Needs*. Reading, MA: Addison-Wesley.

Schippers MC, West MA & Dawson JF (2015) Team reflexivity and innovation: The moderating role of team context. *J Manage* 41:769–88.

- Schmutz J & Manser T (2013) 'Do team processes really have an effect on clinical performance? A systematic literature review. *Brit J Anaes* 110:529–44.
- Schneider C (1998) *The Practice of Autonomy: Patients, doctors, and medical decisions*. Oxford: Oxford University Press.
- Schon D (1983) *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.
- Schrijver I (2016) Pathology in the Medical Profession?: Taking the Pulse of Physician Wellness and Burnout. *Ama Arch Pathol* 140:976–82.
- Scott SD *et al* (2009) The natural history of recovery for the healthcare provider 'second victim' after adverse patient events. *Quality and Safety in Health Care* 18:325–30.
- Segar J, Checkland K, Coleman A *et al* (2014). Changing the Ties That Bind? The Emerging Roles and Identities of General Practitioners and Managers in the New Clinical Commissioning Groups in the English NHS. *SAGE Open* 4:215824401455420.
- Sinclair S *et al* (2016) Compassion: a scoping review of the healthcare literature. *BMC Palliat Care* 15:6.
- Sinclair S *et al* (2017) Compassion fatigue: A meta-narrative review of the healthcare literature. *Int J Nurs Stud* 69:9–24.
- Singh H, Thomas EJ, Petersen LA *et al* (2007) Medical errors involving trainees: A study of closed malpractice claims from 5 insurers. *Arch Intern Med* 167:2030–6.
- Sirriyeh R, Lawton R, Gardner P *et al* (2010) Coping with medical error: a systematic review of papers to assess the effects of involvement in medical errors on healthcare professionals' psychological well-being. *Qual Saf Health Care*, 19:e43–e43.
- Smith R (2003) Thoughts for new medical students at a new medical school. *BMJ* 327:1430–3.
- Snell L (2016) Teaching medical professionalism: supporting the development of a professional identity in Cruess RL, Cruess SR & Steinert Y (eds) *Teaching medical professionalism: supporting the development of a professional identity*. Cambridge: Cambridge University Press.
- Sokol JT (2009) Identity Development Throughout the Lifetime: An Examination of Eriksonian Theory. *Graduate Journal of Counseling Psychology* 1:1–11.
- Spurgeon P, Mazelan PM & Barwell F (2011) Medical engagement: a crucial underpinning to organizational performance. *Health Serv Manage* 24:114–20.
- Stockley AJ & Forbes K (2014) Medical professionalism in the formal curriculum: 5th year medical students' experiences. *BMC Med Educ* 14:259.
- Swick HM (2000) Toward a normative definition of medical professionalism. *Acad Med* 75:612–6.
- Tak HJ, Curlin FA and Yoon JD (2017) Association of Intrinsic Motivating Factors and Markers of Physician Well-Being: A National Physician Survey. *J Gen Intern Med* 32:739–46.
- The King's Fund (2012) *Leadership and engagement for improvement in the NHS: Together we can*. London: The King's Fund.
- The King's Fund, Nuffield Trust & The Health Foundation (2017) *The Autumn Budget: Joint statement on health and social care*. London.
- Thomas EJ, Studdert DM, Newhouse JP *et al* (1999). Costs of medical injuries in Utah and Colorado. *Inquiry* 36:255–64.

- Timmins N (2015) *The practice of system leadership Being comfortable with chaos*. London: The King's Fund.
- Tooke J (2008) *Aspiring to excellence: final report of the independent inquiry into modernising medical careers*. London: MMC Inquiry.
- Toynbee M, Al-Diwani AA, Clacey J *et al* (2016) Should junior doctors strike? *J Med Ethics* 42:167–70.
- Tweedie J (2018) *Leadership – so what is it anyway?* London: FMLM
- Tweedie J & Dacre J (2017) Future of clinical leadership; the to-do list. *BMJ Leader* 1:16–20.
- Twenge JM, Campbell SM, Hoffman BJ *et al* (2010). Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. *J Manage* 36:1117–42.
- Veronesi G, Kirkpatrick I & Vallascas F (2013) Clinicians on the board: what difference does it make? *Soc Sci Med* 77:147–55.
- Vincent C (2011) *The Essentials of Patient Safety*. London: BMJ Books.
- Vincent C (2016) *Safer Healthcare: Strategies for the Real World*. Springer International Publishing.
- Vivekananda-Schmidt P, Crossley J & Murdoch-Eaton D (2015). A model of professional self-identity formation in student doctors and dentists: a mixed method study. *BMC Med Educ* 15:83.
- Wachter RM & Pronovost PJ (2009) Balancing 'no blame' with accountability in patient safety. *N Engl J Med* 361:1401–6.
- Weaver S J, Dy SM & Rosen MA (2014) Team-training in healthcare: a narrative synthesis of the literature. *BMJ Qual Saf* 23:359–72.
- Wellcome Trust & Future Advocacy. (2018) *Ethical, Social, and Political Challenges of Artificial Intelligence in Health*. London: Wellcome.
- Weller J, Boyd M & Cumin D (2014) Teams, tribes and patient safety: overcoming barriers to effective teamwork in healthcare. *Postgrad Med J* 90:149–54.
- Wen LS and Tucker S (2015) What do people want from their health care. A qualitative study. *J Participat Med* 7:10.
- Wennberg JE (2011) Time to tackle unwarranted variations in practice', *BMJ* 342: 687–90.
- Wensing M *et al* (1998) A systematic review of the literature on patient priorities for general practice care. Part 1: Description of the research domain. *Soc Sci Med* 47:1573–88.
- West M *et al* (2015) *Leadership and leadership development in health care: the evidence base* London: FMLM
- West M & Borrill C (2005) The influence of team working. In Cox J, King J, Hutchinson A McAvoyn P (eds), *Understanding doctors' performance*. Oxford: Radcliffe Publishing.
- West MA, Borrill C, Dawson J *et al* (2002) The link between the management of employees and patient mortality in acute hospitals. *Int J Hum Resour Man* 13:1299–310.
- West M, Borrill CA & Unsworth KL (1998) Team effectiveness in organizations. In: Cooper CL & Robertson I (eds), *International review of industrial and organizational psychology*, vol. 13. Chichester: John Wiley 1–48.
- West M & Dawson JF (2012) *Employee engagement and NHS performance*. London: The King's Fund.

West MA & Lyubovnikova J (2012) Real Teams or Pseudo Teams? The Changing Landscape Needs a Better Map. *Industrial and Organizational Psychology*. Wiley/Blackwell 5:25–8.

Yu E. *Implementing a Daily Team Huddle*. STEPSforward. Available at www.stepsforward.org/modules/team-huddles

West MA & Lyubovnikova J (2013) Illusions of team working in health care. *J Health Organ Manag* 27:134–42.

Wilkinson R & Marmot M (2003) *Social Determinants of Health. The Solid Facts*. Denmark: WHO.

Wilkinson TJ, Wade WB & Knock LD (2009) A blueprint to assess professionalism: Results of a systematic review. *Acad Med* 84:551–8.

Wilson I, Cowin LS, Johnson M *et al* (2013). Professional identity in medical students: pedagogical challenges to medical education. *Teach Learn Med* 25:369–73.

WHO (2011) *Topic 4: Being an effective team player*. Available at: www.who.int/patientsafety/education/curriculum/who_mc_topic-4.pdf

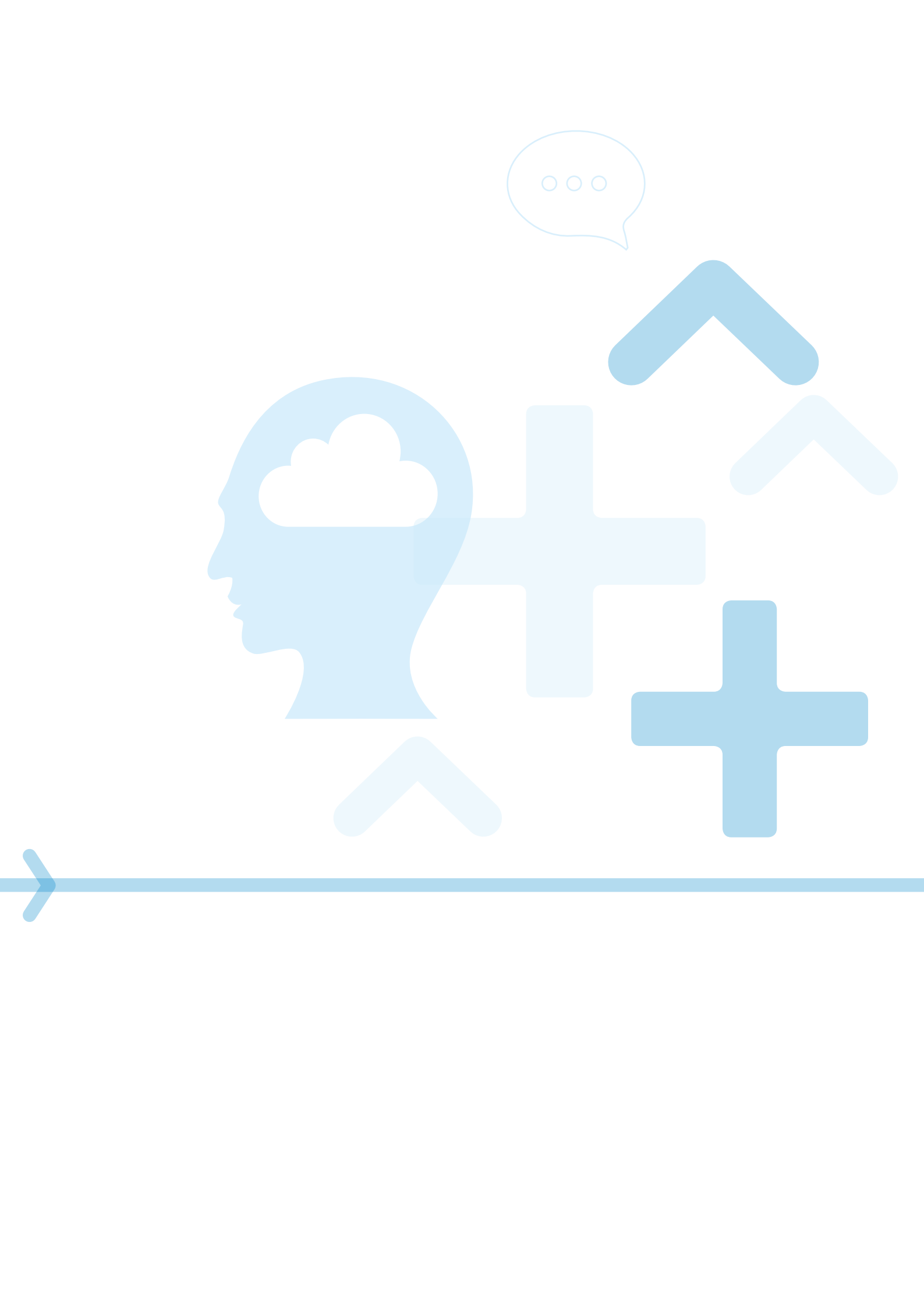
Wright S (1996). Examining what residents look for in their role models. *Acad Med* 71:290–2.

Wright SM, Kern DE, Kolodner K *et al* (1998). Attributes of Excellent Attending-Physician Role Models. *New Engl J Med* 339:1986–93.

Wu AW (2000) Medical error: the second victim: the doctor who makes the mistake needs help too. *BMJ* 320:726

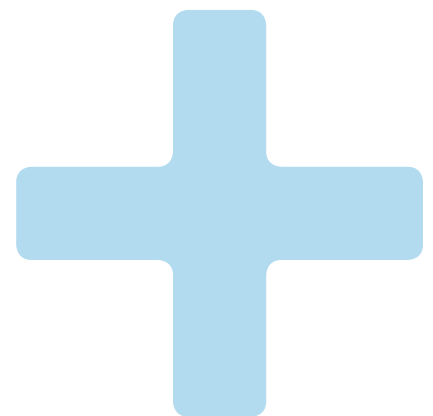
Wu AW & Steckelberg RC (2012) Medical error, incident investigation and the second victim: doing better but feeling worse? *BMJ Qual Saf* 21:26–70.

Yoon JD, Daley BM & Curlin FA (2017) The Association Between a Sense of Calling and Physician Well-Being. *Acad Psychiatr* 41:167–73



Royal College of Physicians
11 St Andrews Place
Regent's Park
London NW1 4LE

www.rcplondon.ac.uk



**Royal College
of Physicians**

