A workforce strategy to make sure the progress of the past 70 years does not stall

Doctors deliver good care in very trying circumstances but stark evidence of pressures is threatening standards

Many doctors positive and managing, but stress is causing some to consider reducing or ending their practice, including two thirds of surveyed GPs

Critical juncture: the UK needs to attract and retain sufficient doctors to maintain professional standards that they, and patients, expect

Workplace pressures must be tackled to avoid risking the supply of doctors

New research: doctors tell us how they cope with pressures, but we and they worry these strategies are risky and unsustainable

Workforce strategies need to address clear and present risks such as Brexit, as well as longer-term risks for patient care

The pressures are widespread but we need to learn from places where they have less severe impact

Doctors are telling us what changes they need. We must all work together to make it happen

Introduction

This is our eighth annual report on *The state of medical education and practice in the UK*. In our first seven editions we held up a mirror to the profession through our data, highlighting the many challenges and changes it faced.

This year, that approach continues, with two pieces of in-depth, independent research with doctors (see box 1, page 36), getting underneath the skin of what it means to be a doctor in 2018, and hearing how the profession is adapting and coping in some very difficult times.

The profession is at a critical juncture

Seventy years on from the founding of the NHS, it is now at a critical juncture.

Demand for care is increasing in both volume and complexity as the overall number of households and the proportion of older people rise. Combined with severe shortages of staff in some areas of the country and in some parts of health and care provision, this creates huge pressures on the medical workforce. Continued uncertainty over Brexit adds to the risk of us and others being unable to plan in a way that enables a sufficient future supply of doctors. Our new research shows further threats to supply with large numbers of existing doctors considering leaving clinical practice or reducing their hours in the face of pressures.[2] Furthermore, doctors have told us of strategies that the pressures force them to adopt, which have both clear and present risks for patient care and threaten the long-term sustainability of health provision.[1]

The healthcare sector faces a decline in what healthcare professionals can offer – to a level of care way below what doctors aspire to, and below what the public expects in the 21st century. The NHS's 70th birthday was celebrated with great plaudits from patients and employees, who highlighted the excellence and breadth of its work. There have been huge improvements in health since the formation of the NHS. But if the pressures presented in this report are not tackled head on, there is a serious risk of stalling and moving backwards after 70 years of healthcare progress.

We are realistic about the pressures and have been highlighting them for some time. In 2016 in a previous edition of this report,[14] we sent a message to governments, employers and regulators about the state of unease within the medical profession and the system could not continue this way. In 2017[15] we said we had reached a crunch point in the development of the

UK's medical workforce and needed to address recruitment concerns to avert greater pressure over the coming years. And our new corporate strategy[16] reflects a determination on our part to provide better support to doctors and help them deliver good medical practice to patients. For example, we have worked both behind the scenes and more publicly to keep patients safe by ensuring good working conditions for trainees where they are being overused to plug gaps in our health services.

In 2018 we are saying loud and clear: the medical profession is at the brink of a breaking point in trying to maintain standards and deliver good patient care. The pressures continue to mount and doctors' stated intentions reported here, to leave or reduce clinical practice, threaten further decline in the supply of doctors. The severe pressures are already affecting services, training environments, and the ability of doctors to do their jobs.

Doctors feel less supported and more vulnerable than ever working in a system under such intense pressure. This is not sustainable, and changes must be made.

Breaking the vicious cycles of workforce supply and pressure-induced short-termism

Tackling the pressures will involve taking advantage of new opportunities such as those presented through the new NHS plan and workforce strategies in England, and Scotland,[17] the already published planning framework and health delivery plans in Wales,[18] and also the *Quality 2020* ten-year strategy in Northern Ireland.[19]

In doing so, we need to break two 'vicious cycles'[1] that we explore in this year's report: declining workforce supply and pressure-induced short-termism. Both are leading to a potential acceleration in the mismatch between supply and demand, making action to break these cycles now imperative.

Workforce supply: Staff shortages are creating such pressures that high numbers of doctors cannot cope and intend either to reduce their hours or to leave clinical practice entirely.[2] Many doctors have indicated that they are working extra hours that are unpaid as a short-term coping strategy,[6] but they tell us that this goodwill in supplementing supply is coming to an end as it is unsustainable in the long term. Of 700 doctors surveyed,* one out of every four doctors (26%) told us they have already reduced their hours over the past two years to cope with the pressure.[6] This reduces the supply further, increases the pressure and hence the cycle continues and intensifies. Action is needed to retain more existing doctors and to encourage a greater supply of new doctors.

* 700 doctors were surveyed in the *Adapting, coping, compromising* research project (reference 6 only). See the data note on page 139 for more information.

Pressure-induced short-termism: This is particularly illuminated in new research commissioned for this year's report. Many doctors, having reached the limits of smarter working, are forced to introduce strategies that are storing up problems for the future. Immediate patient safety issues are prioritised to an extent that severely reduces tackling a patient's less urgent needs, with the knock-on effect of increasing future demand on the service.[1]

Strategies reported as a response to the pressures of the past two years,[2] also involve between a quarter and a third of the workforce engaging less in delivering continuing professional development (CPD), mentoring junior doctors, and around a quarter reducing attendance at team and interorganisational meetings.[6] These strategies potentially reduced skill development, productivity, and the effective working of the health system in the future.

Chapter 2 sets out new evidence on the nature of the workforce supply vicious cycle, noting the high numbers planning to leave the workforce and the threats to the supply of new doctors, exacerbated by Brexit uncertainty.

Chapter 3 examines evidence in relation to the short-termism vicious cycle. It explores the threats to the medical profession's welfare and the potential unsustainability of the health service, as contributions to management, leadership and training/CPD are reduced to prioritise immediate patient care and service needs. The chapter also looks at the threats to patient care that are already clear and present, despite this prioritisation of immediate patient need and the increased use of smarter working.

This picture is not universal. The majority of doctors remain motivated and are still satisfied overall with being a doctor.[2] This must not be lost sight of, particularly when encouraging people to take up a medical career – vital at a time when an adequate supply of doctors is a serious issue.

But exposure to the pressures is widespread and we are concerned with specific pressures on some groups.

Specific pressures on certain groups of doctors in particular roles and situations

Certain groups of doctors are facing particular pressures and risks.

Doctors in training

Our survey of all doctors in training shows high levels of burnout and increased likelihood of them taking breaks in training, as reported in November 2018.[13] We worry about their ability to work safely and to the right standards. As less senior doctors, they are the most vulnerable and want and need support. We are listening to their concerns, which they are voicing to us frequently through a range of channels.

We have experience in intervening when pressures affect training and safety. In chapter 4 we describe some of the actions we have taken, unilaterally and with others, to respond (for example, at North Middlesex). Nevertheless we remain concerned in general with the risks to medical education in the NHS.

The responses to our surveys show a profession where many are having to make compromises between delivering a service on the front-line, getting the training they require and their own personal wellbeing. The strategies being adopted put at risk the continuing development of a high-quality workforce.

Senior consultants

A further related problem is that senior consultants are reporting having to 'act down' and do tasks that would have been done by doctors in training or nurses because they need to support the service in the face of workforce shortages.[6] By doing so, their role, rather than appearing inspiring, becomes less appealing to doctors in training.[1]

Senior doctors are reporting having to give out personal phone numbers and encourage doctors in training who may be inadequately supported on shift to contact them.

This inefficient use of skills and experience and this erosion of work-life balance are unsustainable – particularly as over two thirds of doctors reported that maintaining a clear boundary between work and home life is important to them.[2]

Doctors on neither register and not in training

We are also concerned about the 45,000 doctors who are not in training and not on the GP Register or the Specialist Register (such as service grade doctors, often known as staff grade, specialty, and associate specialist (SAS) doctors) – they account for a sixth of all doctors with a licence to practise.

They are a diverse group of doctors who have a range of medical experience, with many reasons for not being on the Specialist or GP registers. This is an ongoing area of exploration of our work to gain a better understanding of these doctors and we will publishing a segmentation analysis of this group of doctors in 2019

Many have no professional body to support them, many are from black and minority ethnic (BME) backgrounds and, like early career doctors, they particularly rely on the support of senior colleagues and employers to feel satisfied in their work. They are a hidden group of doctors and they need recognition. We want to find out more about them, to gain an appreciation of the roles they carry out and the challenges they encounter. We do this in a small way with some of our data from the surveys commissioned for this year's report, but we will be doing more in 2019, including a major survey of this group of doctors.

The evidence presented throughout this year's report from research we commissioned is reinforced by findings from elsewhere. In a British Medical Association survey of 900 doctors,[20] 47% of GPs said they have one or more vacancies at their practice and three quarters of these had been unfilled for more than six months. 71% of hospital doctors said there are gaps on shift rotas in their department. A Royal College of Physicians' census of 8,579 consultants and doctors in training, found that more than half of all consultants and two thirds of doctors in training reported frequent gaps in the rotas for doctors in training.[21]

Supply of new doctors to the UK register

The immediate supply of new doctors is threatened by Brexit uncertainties (see box 2, page 42) and our ability to encourage qualified and experienced doctors from the rest of the world to join the workforce rapidly. We are taking action on these fronts as well as on ensuring in the long term that new UK medical schools can open as quickly as possible.

Supply of new doctors from the European Economic Area

Doctors who graduated in the European Economic Area (EEA graduates) are of course a very significant part of our workforce. For example, a quarter of ophthalmologists, a fifth of surgeons, and one out of ten psychiatrists are EEA graduates.

The UK needs to continue to make the EEA graduates who are already here, and want to stay and develop their career in the UK feel welcome. There must be routes onto the register for EEA graduates in the future, so the UK can continue to benefit from a flow of doctors into the UK. We have written to Brexit ministers on this and we will continue to engage with them.

International medical graduates

International medical graduates (IMGs) – those doctors who have graduated outside the EEA – are also an important part of the workforce, particularly in certain specialties. In April 2018 NHS Employers[22] said it was aware of at least 400 doctors who hadn't been able to enter the UK to take up posts because of the cap on Tier 2 visas for skilled workers.

We have successfully lobbied the UK government on this issue. In June 2018 doctors and nurses were excluded from this cap, temporarily ending the restriction.[23]

We have seen a significant increase in registration applications from IMGs since the beginning of 2018. In the first four months of 2018, we received 2,284 applications from IMGs – a 49% increase when compared with the same time period last year. While we do not have concrete evidence as to why an increasing number of IMGs are applying for registration in the UK, we expect the number of live vacancies in the UK medical workforce is a significant driver.

There has also been a sustained increase in the volumes of applicants for our Professional and Linguistic Assessments Board tests (PLAB 1 and PLAB 2) over the last five years. We have seen more candidates sit PLAB 1 between January and April 2018 than we did in the whole of 2015. We also provided our first PLAB 1 assessment in our office in Scotland following discussions with the Scottish government. The significant increase in demand for PLAB 1 is having a knock-on impact on demand for places on PLAB 2, which is delivered through the Clinical Assessment Centre (CAC) – our dedicated facility for assessing the clinical and communication skills of doctors. We are now exploring options for delivery of a new or expanded CAC facility so we can continue to assess and register doctors in a timely manner.

But as a proactive regulator it is not enough for us merely to register these new doctors: we must also support them as they make the transition to working in the UK. That is why we are significantly extending the reach of our Welcome

to UK Practice programme,[24] which helps doctors new to the UK to understand the context of medical care here, and provides support on a range of ethical issues and dilemmas they may face through free workshops. In the last 12 months, around 2,300 doctors attended one of these workshops, a 44% increase on the previous 12 month period, and we are looking to increase this attendance in 2019.

UK medical schools

This year saw the announcement of five new medical schools opening in England[3] – at the University of Sunderland, Edge Hill University in Lancashire, Anglia Ruskin in Chelmsford, the Universities of Kent and Canterbury Christ Church (based in Canterbury), and the Universities of Nottingham and Lincoln (based in Lincoln). These will open over the next three years and are part of a broader programme of creating new medical school places across England, which will add around 1,500 more students every year.

This year also saw an increase in the number of medical school places in Wales, with 40 new places being made available.[5]

The Scottish Government's National Health and Social Care Workforce Plan committed to creating additional undergraduate medical places and announced in June 2018 that 60 new places would begin in 2019–20 at the Universities of Aberdeen and Glasgow – 30 in each. Additionally, 25 places at the University of Edinburgh would begin at the University of Edinburgh in 2020–21.[4]

Given the urgency of increasing the supply of doctors, we will be resourcing a rigorous programme of visits and scrutiny for each new medical school, to help support them to open on schedule, and meet the same high standards already being demonstrated by existing medical schools across all the four countries of the UK.

Medical schools can only award degrees with our approval. If necessary, we can delay the opening of a medical school until it has reached the standards necessary. Where this has previously happened, the medical school has revised its provision and reached the expected standards in time for the following academic year. But we will be acting to avoid any such delay unless absolutely necessary.[25, 26]

Retaining existing doctors

With the short-term difficulties around providing a supply of new doctors, retaining existing ones is a top priority. But the pressures on some doctors are such that there is a risk of driving them out of practice and compromising their ability to deliver the safe, high-quality care they want to deliver.

Within the next three years, many are considering reducing their hours (around a third), going part time (a fifth), and/or planning to leave UK practice and work abroad (a fifth). Significantly, over a quarter (28%) of those considering career changes said it is because the current system presents too many barriers to patient care, and a similar proportion (27%) said their role demands too much of them.[2]

A particular issue is that 21% of doctors who are aged between 45–54, and 66% of doctors who are aged between 55–64 are intending to take early retirement in the next three years. In total, 32% of doctors said that the **main** change they are planning in the next three years is to leave clinical practice in the UK and a further 21% said the main change they are considering is to reduce their hours. These figures rise in the case of GPs to 38% planning to leave and 28% planning to go part time or reduce their hours.[2]

A survey with 700 doctors as part of the *Adapting, coping, compromising* research project asked doctors how they had adjusted their work already as a result of pressure on workload and capacity. Almost two fifths of these doctors reported that they had refused to take on additional work, and a third of doctors had investigated whether they could retire earlier than they had planned. Around a quarter of surveyed doctors (26%) said that they are working fewer hours as a result of going part time or reducing their contracted hours.[6]

Workforce strategy

All the four countries in the UK need to make sure they have a workforce with the right skills in the right places. Without the necessary support, doctors will come under even greater pressure and the UK may reach a point of no return.

Action is needed: not just more money but a commitment to new ways of thinking about how workforce supply can be achieved, and how that workforce can be supported to achieve the professional standards and quality of care that should be expected 70 years on from the founding of the NHS. It is vital to mobilise all available resources to tackle these pressures and to arrest the vicious cycle of declining doctor numbers in the next few years. Strategies in the four countries need to set out a clear plan for making the UK a great place to work for doctors and for having a world-leading healthcare environment that attracts, develops and retains the best doctors and provides fantastic patient care. It must not only set out a compelling vision for the ten-year horizon, but also needs to address clear and present dangers – for example, the potential cliff edge of a no-deal Brexit and some of the workplace culture issues.

In chapter 3 we highlight some of the clear and present dangers of the current situation, made apparent in our research with doctors. A particularly worrying example of this is that around 46% of 700 doctors surveyed have witnessed situations where pressure has placed patient safety at risk at least monthly over the past two years.[6] Doctors tell us about things that would support them in their roles, such as improved support for doctors no longer in approved training posts, mentoring, and additional support when introducing new initiatives.

We also highlight in chapter 3 the strategies doctors are forced to follow in the face of immediate pressures, which are storing up difficulties for the future. Workforce strategies with a vision that resolves these as well as immediate risks are essential. We have particular opportunities to achieve this with new investment in the NHS in England, new workforce strategies in Scotland and England, and ongoing workforce planning across the UK. We are committed to contributing what we can to make sure doctors are better supported to deliver the standards they aspire to and to maintain patient safety.

We cannot of course do it on our own. It will take a concerted effort by all those with a stake in our health systems to break the vicious cycles of under-resourced services, a stretched and stressed workforce, declining morale, doctors leaving the profession, and forced prioritisation of the short term at the expense of the long term.

We are therefore working with the Care Quality Commission (CQC) and NHS improvement in England, the Regulation and Quality Improvement Authority (RQIA) in Northern Ireland, Healthcare Inspectorate Wales (HIW), and NHS Education for Scotland (NES) and Healthcare Improvement Scotland (HIS), at a system level to make regulation smarter. The aim is to make the health system better able to understand the environment of practice and work to mitigate risks and to intervene early. We are contributing the full range of our regulatory powers, from 'soft' influencing powers to using our 'hard' powers in collaboration with the system, such as removing approval for training where the pressures have become a real problem.

Concerted action is clearly required urgently to make sure the support doctors are telling us they need is more available and retains as much of the current workforce as possible. Two fifths said they have felt unsupported by management in the last year.[2] Having access to support systems provided by employers was identified as being important or very important by around a third of all doctors in the survey commissioned for this year's report.[2]

Part of the solution is also resolving cultural challenges such as bullying, and any lack of confidence doctors experience in raising concerns. We have a role in helping to meet these challenges in collaboration with employers, which we describe in chapter 4.

We critically need to make sure doctors are supported to develop and train to meet the challenges of the future and that enablers are put into place so they can be the most effective doctors they can be, such as knowing how to take advantage of the technological and digital innovations set to transform healthcare. Regulation can play a role here too.

Chapters 4 and 5 highlight what we are doing to contribute to the workforce strategies across the UK; to support employers and doctors' in maintaining and improving professional standards' and to meet our particular responsibilities for the standards of training environments. We highlight immediate interventions and, particularly in chapter 5, the possibilities to act with others to improve workforce supply over the longer term:

We report on where we've worked with postgraduate bodies to support trusts and health boards to make improvements such as in providing enhanced monitoring to address issues that we believe could adversely affect patient safety and doctors' progress in training.

Our work on enabling all groups to reach their potential shows how important it is that we enable the whole workforce to fulfil its potential.

New guidance on reflection has been jointly developed with the Academy of Royal Colleges, the Conference of Postgraduate Medical Deans and the Medical Schools Council.[11]

Reforms to our fitness to practise processes show how we're developing a range of actions to ensure high standards, while also supporting doctors going through those processes.

Engendering a speak-up culture across the healthcare system is something we are fully committed to. Our involvement in the Emerging Concerns Protocol in England and our work on exception reporting and rota monitoring across the UK are summarised in chapter 4 and show how we are working with others to achieve this speak-up culture.

Looking at the bigger picture, we look at what could be done if there was the political will and if other stakeholders agreed that bold moves, individually and in collaboration, were the way forward. Some will require flexibility in regulation that can only be delivered through reform to a legislative framework[27] that is over 35 years old and becoming an active block to supporting the health systems and patients.

This year's report – the evidence in support of action

In the ways mentioned above we will continue to contribute to the collaborative agendas that are now developing to tackle the causes and impacts of pressures.

The whole of this year's *The state of medical education and practice in the UK* is dedicated to illuminating evidence to support these agendas. This is not only in terms of a greater understanding of how the profession is experiencing the pressures, but also in highlighting the approaches that doctors and others tell us might begin to address the situation in a realistic and sustainable way.

In summary, there are four main elements to this: workforce **Supply**, **Support** to employers and the profession, **Strategic** interventions to maintain standards, and an exploration of possible **Solutions**.

Supply (chapter 2): Shortages of resources and in particular workforce underpin many of the difficulties. We highlight not only what the unique data we hold on trends in registration tell us about the supply of new doctors, but also crucially what the original research commissioned for this year's report tells us about the retention of existing doctors in clinical practice.

Support (chapter 3): We detail new evidence on what it means to be a doctor, how the continuing pressures in the system are affecting their motivation, satisfaction and health, how doctors are adapting in their work to cope with the pressures, and the strategies they are adopting.

All of this has implications for the sort of support needed at this time.

Strategic interventions to maintain standards (chapter 4): We examine how we are working with others to help doctors achieve the high standards they aspire to throughout their career and particularly how they can realise their potential during training. This is not only critical for patient care, but also to maintain motivation and retain the medical workforce. It includes our work on differential attainment, on new guidance on reflective practice, and how we are on progressing with the development of the Medical Licensing Assessment (MLA). This chapter also provides the latest data on fitness to practise and an update on our reforms in this area to better support doctors who are struggling to meet standards, or where concerns have been raised about their fitness to practise.

Solutions (chapter 5): An exploration of how current activity and future possibilities might particularly contribute solutions to breaking the vicious cycles creating a worsening mismatch between demand and supply – both immediately and in the longer term.

The healthcare sector can avert the risk of the progress of the past 70 years stalling

With concerted action on workforce strategies, the medical workforce can be the catalyst and leader for change across the whole system: pioneering technological innovation and implementation, and identifying and leading the development of new models of care and career development. Though not the whole picture, doctors can be integral to putting health provision on a sustainable footing.

Many of the actions highlighted in chapters 4 and 5 can have immediate effect and some of the longer-term ideas in chapter 5 can be implemented quickly with the support and shared commitment of the system. Some will need a willingness to change the long-established paradigms of what it means to educate and train doctors and what it means to have a sustained career in the profession. Some will require the flexibility of regulation that can only be delivered through legislative reform to a legislative framework that is over 35 years old and becoming an active block to supporting the NHS. With legislative reform, we believe we could shift much of the significant regulatory resource that we have to those areas now essential to supporting education and upholding medical standards.

Getting things right

Many doctors are still highly motivated and satisfied with their choice of career. Most are able to provide good, and often superb, levels of care to patients despite the pressures. The costs for some – in terms of their own wellbeing and work-life balance – are not, however, sustainable. As we have noted, some of the current strategies to maintain good care for patients identified in our research are not sustainable for the health system overall. We also have ongoing and specific concerns in relation to training environments.

But concerted efforts now to build on the high standards most doctors are still providing is clearly possible given the high motivation still reported by many. Our sense is that both the will and the opportunity are there for the taking if we grasp the nettle and act now to develop a workforce fit for the future. We hope that the evidence presented in the following chapters is helpful to this endeavour.

It has been a very challenging year, when our regulatory approach has come under great scrutiny following the case of Dr Bawa-Garba. There was a lesson for us about the way we regulate and we have initiated an independent inquiry into gross negligent manslaughter and culpable homicide.* The case also acted as a lightning rod for issues that had been concerning the profession and us for some time. We have

* An independent review commissioned by the GMC into how gross negligence manslaughter and culpable homicide are applied to medical practice has been under way since February 2018, and is chaired by Dr Leslie Hamilton. This review invited written submissions in June 2018 from doctors, patients, and others, and received over 800 responses. This report will be published in early 2019.

brought together some ongoing and new work on these issues under the umbrella programme of 'supporting a profession under pressure'* and it has accelerated our shift begun several years ago towards more frontline engagement and support for the profession. The issues it highlighted are also central to those covered in this report.

We will continue to analyse the data that we have about doctors' education, qualifications and practice to identify risk as it emerges. This will help us try to establish the underlying structural causes of poor-quality practice and education so that we can work at a system level to address these. It is important for us as a regulator to be specific about where and why there is patchiness and variation in standards so that we can address these issues, working with our partners and stakeholders to achieve this. There is inevitably a lag between people's understanding of our role, responsibility and approach, and the reality of what we are doing. But we hope our contribution to resolving some of the issues highlighted in this report will help rebuild the confidence of the profession in its regulation.

* This programme includes the following six areas of work: independent review of gross negligence manslaughter and culpable homicide; helping doctors become reflective practitioners; improving support for doctors to raise and act on concerns; making sure doctors are treated fairly; supporting medical students and doctors; and induction and support for doctors returning to work.

Box 1: Primary research used in this year's *The state of medical education and practice in the UK*

In the main, the evidence on pressures comes from primary sources: from the two major research projects we have commissioned, detailed below, as well as from this year's annual national training survey of 70,000 doctors in training and doctors who act as trainers.

First, we commissioned an independent online survey by ComRes of 2,602 UK doctors[2] on our register, weighted to reflect the register, on the theme of 'What it means to be a doctor.' The project also involved further qualitative in-depth interviews with 25 doctors. They were asked a series of questions on motivation, morale and working pressures over the past three years.

We wanted to try to understand particular differences between the rising generation of younger professionals and their older colleagues: in terms of how their attitudes to being a doctor and their understanding of their role differ' what professional identity means in this new century; and what we as a regulator need to do to vary our approach so that we're providing information and support that's relevant to them.

Second, we commissioned an independent qualitative study by Community Research into the strategies doctors are using to deal with these pressures, and by the trainers of doctors who want to continue providing high-quality training in the face of these pressures. Our *Adapting, coping, compromising,* report explores the day-to-day experiences and examines how sustainable their coping mechanisms are and where the strains may be particularly acute.[1]

An additional quantitative phase of this research saw 700 doctors take part in a rapid survey carried out by medeconnect.

We have also drawn on new analysis that triangulates primary data from ourselves and others to understand more about areas of practice where data have traditionally been less available – primary practice, locums and SAS doctors (and other doctors on neither register and not in training). We have published these analyses in working papers on our website during 2018.

More generally, we have analysed intelligence and insights from our field teams from the Employer Liaison Service, our Regional Liaison Service in England, our education visits team and our devolved offices in Scotland, Wales and Northern Ireland, as well as Joint Working Intelligence Groups.

We also draw evidence from information and data collated and coded on our management information systems. This includes our quantitative data from the register, from revalidation and fitness to practise processes and from our recently launched 'Intelligence Module,' which has been developed to capture and code a range of qualitative data that we gather.

Other sources include material from our confidential helpline, ethical enquiries service and telephone/email contact centre. As in previous editions we have supported this primary evidence with secondary material, such as the wider literature and reports from medical royal colleges, think tanks, NHS England, and others.