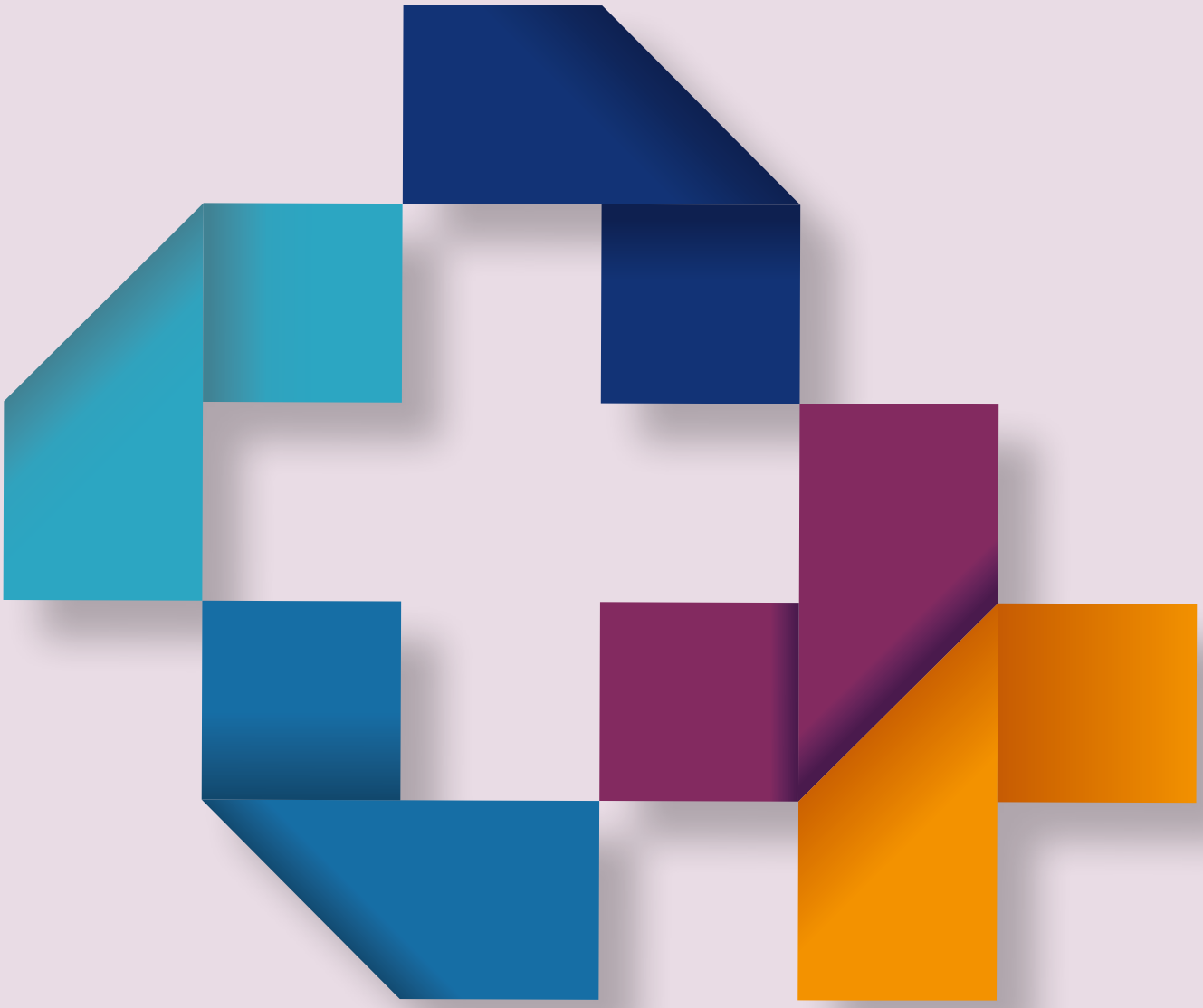
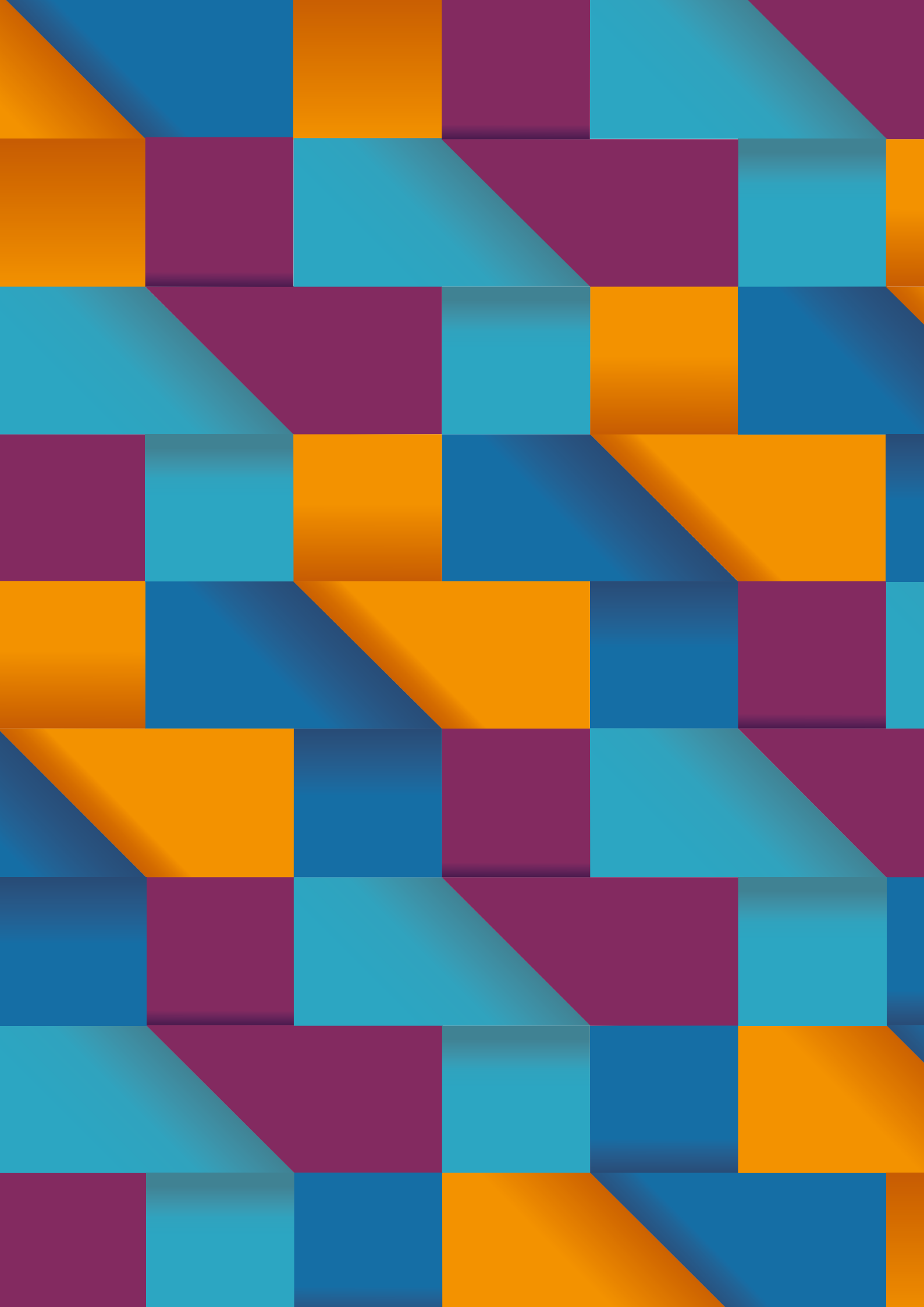
The state of medical education and practice in the UK 2020



Working with doctors Working for patients

General Medical Council



The state of medical education and practice in the UK

2020

Working with doctors Working for patients

General Medical Council

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General Medical Council
Regent's Place
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Foreword

2020 has tested the resilience of the health system and those who work in it. The fortitude of the workforce has been rightly lauded, with remarkable levels of public support.

Experiences of this time have not been uniform, for patients or for the profession. But clinicians, system leaders and policymakers can all agree that coronavirus (COVID-19) has left its mark, and will continue to do so.

The picture is complex, and we're only part-way through this pandemic. But clear lessons have already emerged, and we owe it to doctors and the patients they care for to apply them.

Central amongst them must be the inequalities that persist in medicine and across society, lent a new urgency by the disproportionate toll of COVID-19 on BME health and social care workers.

This is no longer a question of gathering evidence, but of committing to action. We know that the experiences of doctors from a BME background can be sharply different from those of their white colleagues. It is now a question of what we do about it.

This work is critical – not only in the interests of justice and fairness, but because BME doctors make up a growing part of the workforce. 61% of joiners this year identify as BME, compared with 44% in 2017. Meanwhile, more international medical graduates joined the workforce this year than UK and EEA graduates combined.

This growing diversity must be accompanied by genuine inclusivity. To meet today's needs, it is not enough to recruit doctors, we also have to retain them. That means making the UK a place where doctors can develop their career and stay for the long term.

For all doctors, more must be done to make compassionate cultures a lived reality. We've seen encouraging signs, with 54% reporting that the response to the pandemic had a positive impact on sharing knowledge. But these benefits haven't been felt equally. While 68% of white doctors said there had been a positive impact on teamwork between doctors, this figure dropped to 55% for BME doctors.

This period has also reaffirmed the power of the presence of leadership. 38% of doctors said there had been a positive impact on the visibility of leaders, rising to 58% for trainees. One clear positive cited across all levels was a sense of being 'all in it together'.

We know there's a direct correlation between the environment in which a doctor works and the care their patient receives. Collaboration, communication and accessible leadership make a material difference.

In this time of uncertainty, these qualities are more important than ever. With a third of doctors reporting that the pandemic has adversely impacted their mental health, compassionate leadership must come to the fore. The emphasis on wellbeing we've seen during the pandemic must be maintained and built upon.

When we look back at 2020, there is much to be proud of. In the face of acute need, healthcare workers and system leaders have responded with innovation and resolve.

Let's seize the opportunity now to sustain and embed the good work that's been done, so we're ready for the challenges to come.

Dame Clare Marx
Chair

Charlie Massey
Chief Executive and Registrar

An information resource

Alongside this report, we publish a range of data and information resources, which underpin many of the analyses and findings that follow. This includes a set of reference tables, GMC Data Explorer and GMC education data reporting tool.

Reference tables

The reference tables are published on our website.*

These data cover five areas.

1 Who is on the register of medical practitioners? Who is on the temporary register (emergency) (TRE)? Who is a 2020 UK graduate?

2 How does the makeup of the register differ by country and region?

3 Who are doctors in training and what are their training programmes?

4 Who are medical students?

5 Fitness to practise data.

GMC Data Explorer

Accessing our data through GMC Data Explorer

GMC Data Explorer is an interactive data sharing tool, which allows external users to access our registration, revalidation, fitness to practise and education data directly.

It provides access to data on:

- the number of UK graduate doctors, which can be broken down by the body that awarded their primary medical qualification (PMQ), or by the doctor's register type, eg specialist register or GP register
- the current location of registered doctors, where they graduated from and their deanery or local education providers
- education
- the number of doctors with open cases and active sanctions at each designated body
- what allegations are made about doctors over time.

* See gmc-uk.org/stateofmed

How can users access GMC Data Explorer?

GMC Data Explorer can be accessed through: https://data.gmc-uk.org/gmcdata/home/#/

The GMC education data reporting tool

Our education data reporting tool allows the public to access a wide range of information regarding medical education in the UK. The tool is commonly used by deaneries, royal colleges, trusts, and local education providers to quality-assure medical education.

The tool contains:

- national training survey results, viewable at different organisation, programme and specialty levels, including:
  - individual question-level results from the 2020 trainee and trainer surveys, as tables or graphs
  - comparisons between full-time and less than full-time trainees
  - results of burnout questions
- an enhanced monitoring dashboard, displaying the number of current cases in each UK country or region.
- progression reports on key stages in doctors' training, such as:
  - specialty examinations
  - annual review of competency progression (ARCP)
  - application and entry into specialty training
  - foundation doctors' preparedness for postgraduate training
- a summary dashboard showing a snapshot of data for any geographic location.

How can users access the GMC education data reporting tool?

The tool can be accessed through: www.gmc-uk.org/about/what-we-do-and-why/data-and-research/national-training-surveys-reports

Executive summary

As we publish our 2020 edition of 'The state of medical education and practice in the UK', the course of the coronavirus (COVID-19) pandemic remains uncertain. It continues to be a human tragedy – one of devastating loss of life, as well as physical and psychological trauma for many patients and their families.

Doctors and healthcare professionals caring for patients with COVID-19 live with the constant fear of contracting the virus and transmitting it to their families. This risk has been starkly illustrated by the many healthcare professionals who have sadly lost their lives. The pandemic has also caused significant disruption to medical education and training, with the closure of universities and cancellation of planned clinical rotations.

Against this background, doctors have had diverse working experiences – some positive, some negative. This report presents a range of original data, research and case studies that explore these experiences throughout the first peak of the pandemic. The cumulative impact of the ongoing pandemic will take time to quantify and understand. But this immediate insight helps us highlight long-term risks and emerging opportunities that need to be considered now.

Chapter 1 – The state of medical practice

Doctors have experienced significant and rapid changes to their personal and professional lives as a result of the pandemic. 'The Barometer survey 2020' uncovered the widespread impact that the early stages of the pandemic had on doctors' day-to-day working lives. Four out of five (81%) doctors experienced significant changes to their work and over two fifths (42%) were redeployed.

As well, healthcare professionals implemented many changes to practice to enable them to continue to provide high-quality care to patients. Doctors reported some positive changes – namely to teamwork and knowledge sharing – that they felt could be sustained beyond the pandemic.

Compared with 2019, the first six months of 2020 saw a greater proportion of doctors being able to cope with their workload and a smaller proportion at high risk of burnout. This is likely to be linked to some doctors having reduced workloads because elective procedures were postponed or cancelled.

Amid these positive signs, the pandemic brought to the fore some existing challenges. Workloads were still an issue for many. A third (32%) of doctors also indicated that the initial phase of the pandemic had a negative impact on their mental health and wellbeing. And a relatively high proportion of doctors said they experienced situations where doctor (43%) or patient safety (26%) was compromised.

Chapter 2 – The state of medical education

The pandemic has had a significant impact on formal medical education. In response, April rotations were cancelled for all doctors in training and a new post (FiY1) was created for some 2020 medical school graduates to join the workforce early. We approved around 550 additional training locations, so doctors redeployed to them could count this experience towards their training progression.

It's likely that the lessons learned during the pandemic will have a profound impact on the delivery of training in the future.

During the spring peak of the pandemic, almost all trainees and trainers experienced changes in their day-to-day roles. In the national training survey (NTS) 2020, over half (57%) of trainees and over three quarters (78%) of trainers reported that their day-to-day work was significantly affected. As part of this change, around two fifths of trainees (41%) said their workload increased, while roughly the same proportion (39%) said it became lighter. Just 17% of trainees and 11% of trainers experienced no change in their workload.

Even in difficult circumstances, trainees still rated key aspects of their education positively. Nearly nine out of ten (86%) trainees described their clinical supervision as 'good' or 'very good'. However, as expected, formal training and learning opportunities were significantly affected by the pandemic. Around three quarters of trainees (74%) and trainers (78%) said their training, or their role as a trainer, was disrupted. This had negative consequences for most trainees, especially in terms of limiting their opportunities to gain required curriculum competencies.

Over half (52%) of all trainees were concerned about their personal safety, or that of their colleagues, during the spring peak of the pandemic. A quarter (24%) felt their concerns were only partially addressed and 3% reported that they weren't addressed at all. We continue to work with partners to ensure that all trainee doctors have safe working environments.

Chapter 3 – The changing medical workforce

The medical workforce continues to grow, with a record rise in the number of licensed doctors between 2019 and 2020 (5%). From 2012 to 2020, the number of licensed doctors grew by more than 14%.

The UK medical workforce is increasingly ethnically diverse. More than half (54%) of the doctors joining the register in 2020 identified as black and minority ethnic (BME). The number of international medical graduates (IMGs) joining the UK medical workforce continues to increase. Between July 2019 and June 2020, over 10,000 IMGs joined – more than UK and European Economic Area graduates combined.

Medical school numbers are also up. Overall, the number of students starting medical school in the UK each year has risen steadily between the 2013/14 and 2018/19 academic years.

A sustainable workforce relies on retention as well as recruitment. We have analysed groups of doctors who left the profession after two key career milestones – the second foundation year (F2) and after gaining a Certificate of Completion of Training (CCT) to become a specialist or GP. We found that doctors of a non-UK nationality were disproportionately high among those leaving after F2 and that doctors who first qualified outside the UK were more likely to leave soon after attaining a CCT.

In 'the Barometer survey 2020', a third (36%) of doctors said they were considering reducing their clinical hours, a decrease from nearly half (46%) in 2019. But we still observe that one out of ten (10%) doctors said they were considering leaving permanently, which is consistent with 2019. This insight, coupled with the findings about those who leave after F2 and completion of CCT, indicates where additional support may be needed most.

Chapter 4 – Learning from 2020

Despite the overwhelming cost – to personal health and society – of the pandemic and its impact on healthcare professionals' safety and mental health, the response of the medical profession and the system more generally has been very impressive. The changes made – often very rapidly and flexibly – show how it is possible to make beneficial innovations to the way medical work is organised.

The positive changes doctors felt – discussed in chapter 1 – can contribute to their overall autonomy, sense of belonging and competence. These factors were identified in the 'Caring for doctors Caring for patients' report as essential for doctors' wellbeing and motivation at work, as well as their ability to provide high-quality safe patient care.

Embedding the positive learning and changes from 2020 is important for doctors and patients alike. This will only be possible with compassionate and inclusive leadership. Doctors from a BME background were less likely to have experienced positive changes than white doctors. It's crucial that the improved ways of working are extended to everyone equally.

Against a backdrop of increasing demand for care and surging workloads, increasing the supply of doctors as well as supporting doctors' wellbeing remains a priority for the system. This will involve not only taking measures to retain doctors, but also increasing the flow of doctors from overseas into the UK and making medical education and training as flexible as possible.

Introduction

As we publish our 2020 edition of 'The state of medical education and practice', the course of the coronavirus (COVID-19) pandemic remains uncertain.

The cumulative impact of the ongoing pandemic will take time to quantify and understand. We continue to collect data and insight, so we can build a strong evidence base from which to act.*

In this report, we present a range of original data, research and case studies that explore doctors' diverse experiences throughout the first peak in spring 2020. This immediate insight is vital in helping us highlight long-term risks and emerging opportunities.

The human tragedy of the pandemic

The pandemic continues to be a human tragedy – one of devastating loss of life, as well as physical and psychological trauma for many patients and their families.

Doctors and healthcare workers caring for patients who have COVID-19 live with the constant fear of contracting the virus and transmitting it to their families. This risk has been starkly illustrated by the many healthcare professionals who have sadly lost their lives.

The impact of the pandemic for patients goes wider than those who suffered with COVID-19. Large numbers of other patients have had their care halted during 2020 and doctors report their concern of the consequences of this.

Beyond the immediate impact of COVID-19, another area of concern is the effect the pandemic is having on mental health. A third of doctors said their mental health and wellbeing have been adversely affected.

Behind every number is a very real human experience. We felt this year it was more important than ever to amplify doctors' voices through case studies. We wish to thank doctors who participated in these case studies for their time and for sharing their powerful experiences with us.

As demand for healthcare continues to mount, it's imperative that lessons are learned from doctors' experiences during the spring peak.

A catalyst for change

In the face of acute and escalating clinic demands, multi-professional healthcare teams responded with impressive flexibility, agility and resilience.

In chapter 1 of this report, we explore the impact of the pandemic on various areas of doctors' working lives. Despite great upheaval some areas were felt to have seen positive changes, which many doctors felt were sustainable beyond the pandemic, including:†

* We'll share our findings in 'The state of medical education and practice in the UK' 2021.

† The following data were collected from the Barometer survey 2020 after the spring pandemic peak.

- teamwork: three fifths (62%) of doctors felt there had been **a positive impact on teamwork between doctors** and a half (48%) felt there had been a positive impact on multidisciplinary team working
- visibility of senior leaders: over a third (38%) of **doctors felt that the visibility of senior leaders** was positively affected in the early stages of the pandemic.
- pace of change: half (49%) of doctors felt that the speed of implementing change was positively affected.

While this is a welcome sign, some doctors reported more mixed or negative experiences. There are important lessons to be learned from both the positive and the negative.

Sharing and sustaining positive changes can improve doctors' wellbeing and patient care

In chapter 4, we discuss how the positive changes some doctors have experienced can contribute to their sense of autonomy, belonging and competence. These are essential elements for a doctor's wellbeing,[1] which itself has a positive impact on patient care.

These improvements, coupled with reduced workloads for some doctors not directly involved in treating COVID-19 patients, may have contributed to:

- **a smaller proportion of doctors being at high risk of burnout** – one out of ten (10%) doctors in 2020, a reduction of six percentage points since 2019
- **a larger proportion of doctors being satisfied in their day-to-day work** – three quarters (75%) of doctors in 2020, compared with under two thirds (63%) in 2019.

Acting on the recommendations from the 'Caring for doctors, Caring for patients' review is **crucial to sustaining and building on the improvements we've seen in 2020**.

Workloads remain a critical issue

Doctors face a surge in workloads this winter – not just from a resurgence of the pandemic, but also from seasonal flu and the backlog of elective work. Even before the pandemic dominated workloads in our health services, there were clear warning signs of risks to doctors' wellbeing and patient safety.

In 2020, over half (57%) of doctors who regularly struggle to cope with their workloads said they found it difficult to provide a sufficient level of care at least weekly. Almost half (47%) of those doctors identified workloads as a contributory factor.

The workload issue again highlights the importance of increasing the overall supply of doctors – particularly as vacancy numbers were persistently very high before the pandemic.[2, 3, 4, 5]

Supporting an increasingly diverse workforce is essential

We continue to do all we can to enable doctors to enter the UK workforce in the difficult circumstances of the pandemic.

Encouragingly, the number of licensed doctors has been rising over the past few years. This increase is accompanied by greater diversity in the workforce (chapter 3).

Up to June 2020, the sharp increase in the numbers of doctors joining from outside the UK since 2018 continued and the proportion of doctors from a BME background graduating from UK medical schools also continues to rise, increasing ethnic diversity.

Despite a deceleration over recent years, women continue to make up an increasing proportion of the workforce.

In spite of this, worrying numbers of doctors plan to leave the profession before retirement or intend to reduce their hours (37%). In chapter 3, we explore our data and how we can work together to ensure we retain doctors.

In 2020, there has been heightened awareness of inequality – both in relation to health and more generally. One way to improve doctors' working lives is to ensure the UK healthcare system is truly inclusive. Our commissioned, independent 'Fair to refer?'[6] research highlighted that some people remain in 'outsider' groups within organisations. They do not have adequate support and they are more likely to be referred to us by their employer. Implementing the recommendations from this report is still a key priority, not only to retain doctors, but also to ensure they can perform to the best of their abilities.

As we point out in chapter 4, compassionate and inclusive leadership is critical for the future health of the workforce, as well as the successful implementation of the ambitions enshrined in: the 'NHS People Plan' for England,[7] the 'Health and social care workforce strategy 2026' for Northern Ireland,[8] 'An integrated health and social care workforce plan' for Scotland[9] and 'A Healthier Wales' set of plans in Wales.[10]

Disruption to medical education and training

To develop a sustainable medical workforce, there's consensus that we need to expand the number of UK medical graduates and make training as flexible as possible. This would see an increase in generalists, as well as better career paths for non-consultants and non-training roles, such as specialty and associate specialist (SAS) doctors.

The disruption to medical education and training acts as a reminder of the importance of flexibility in training pathways and in approaches to learning. While three quarters (74%) of trainees faced disruption to their formal training, most reported that other aspects of on-the-job learning, such as clinical supervision (87%), remained of a high quality.

An urgent need to sustain positive new ways of working

The pandemic has exposed in particularly sharp ways some of the underlying issues affecting doctors' wellbeing and patient care that we have reported on previously.

The response to the pandemic so far has also exposed how flexibility in ways of working can deliver change that many see as positive and sustainable. The urgency with which we need to build on this wherever possible is acute with the difficult months ahead. Our new corporate strategy emphasises working with the system to ensure that the environments in which the medical workforce practises are as enabling as possible for professionals to deliver good-quality care.

Our response to the pandemic

Temporary and provisional registration

As the pandemic started to unfold in the UK, we quickly put our emergency plans into action at the request of the UK government.

Between 26 March and 24 June 2020, we gave 28,076 doctors temporary emergency registration or restored their licence, under our emergency powers. This included:

- 12,076 doctors with a UK address who were GMC-registered, but did not currently hold a licence to practise
- 16,000 doctors with a UK address who gave up their registration between three and six years ago (2014–17).

Only doctors with no outstanding fitness to practise investigations or sanctions were granted temporary registration. Doctors were able to opt out of temporary registration at any point, for any reason.

To enable final year medical students to offer support to health services, we processed applications for provisional registration at an earlier point in the year than usual.

This meant that final year students who were graduated by their medical school were given a provisional licence to practise and were able to work as foundation interim year 1 doctors* (FiY1) from 27 April – rather than August when they would normally join the workforce.

We refer to this group as 2020 UK graduates in this report. Chapter 3 describes the changes we have seen in the UK workforce since the beginning of the pandemic.

Resuming the Professional and Linguistic Assessments Board (PLAB) tests

We've been working with partners in the UK and abroad to resume PLAB 1 and PLAB 2 assessments, in line with government guidance on social distancing within a workplace setting. We are also exploring options to expand non-PLAB registration pathways. This is discussed in chapter 4.

Postponing revalidation

From 17 March, we moved revalidation dates by one year for doctors who were due to revalidate before 16 March 2021. We also made the process more flexible so responsible officers can submit recommendations to us at any time up to the new deadline.

Changes to medical education and training

To help the UK's health services prioritise frontline patient care during the spring peak of the pandemic, all postgraduate training rotations due to take place from April to July 2020 were postponed.

* Not all final year students who met the requirements of their degree were able to become FiY1 doctors, as some were not able to find a post.

We approved around 550 additional training locations, which allowed trainees who were redeployed to different sites and/or specialties to count the experience gained towards their training progression.

In anticipation of disruption to training and exams caused by the pandemic, temporary changes to the annual review of competency progression (ARCP) process were introduced earlier in the year. The changes allowed trainees to progress to the next level of their programme with a requirement to catch up on any missed competencies or parts of the curriculum during the next training year.

We also made changes to our approvals process. This allows royal colleges and faculties to change curricula more quickly so that assessments can be adapted to new working conditions, while making sure the same competencies are required to attain a certificate of completion of training (CCT).

National training survey

We postponed the 2020 national training survey from its original launch date in March. We worked with key education partners to plan a shorter and more targeted survey, which ran from 22 July to 12 August 2020.

Supporting doctors

The pandemic underlined the importance of wellbeing and effective inclusive leadership. We are continuing to support doctors in these areas by:

- updating our online ethical hub with wellbeing advice and information on how to apply our guidance during the pandemic
- delivering our 'Welcome to UK practice' programme online so that it's more easily accessible to doctors
- supporting partners with their initiatives where possible
- identifying and sharing good practice.

We have also commissioned research on the impact of the pandemic on 2020 UK graduates. The research will explore how the pandemic has affected preparedness for practise and consider the lessons we can all learn from this challenging period.

The state of medical practice

Data relates to the early stages of the coronavirus (COVID-19) pandemic, including the first peak in April 2020.

Doctors' experiences of the pandemic are diverse.

Asked about ten areas of their day-to-day work during the pandemic, 89% of doctors experienced at least one area with a positive impact. 69% of doctors experienced at least one area with a negative impact.

Three quarters (75%) of doctors felt overall satisfied in their day-to-day work.

A third (32%) of doctors felt the pandemic had a negative impact on their mental health and wellbeing.

26%

A quarter (26%) of doctors felt a situation had arisen where patient safety or care was compromised.

43%

Two fifths (43%) of doctors felt a situation had arisen where their own or a colleague's safety was at risk.

We need to understand how we can work together to sustain positive changes, such as:

62% of doctors reported positive changes in teamwork between doctors – 70% of these doctors thought it could be sustained.

Chapter summary

Doctors have experienced significant and rapid changes to their personal and professional lives as a result of the coronavirus (COVID-19) pandemic.

'The Barometer survey 2020' found that the early stages of the pandemic had a widespread impact on the day-to-day working lives of doctors. Four out of five (81%) doctors experienced significant changes to their work and over two fifths (42%) were redeployed.

Doctors reported some positive changes – namely teamwork and knowledge sharing – that they felt could be sustained beyond the pandemic.

Compared with 2019, the first six months of 2020 saw a greater proportion of doctors being able to cope with their workload and a smaller proportion at high risk of burnout.

- Over a third (37%) of doctors never felt unable to cope with their workloads, compared with a fifth (20%) in 2019.
- A fifth (21%) of doctors reported a moderate or high risk of burnout, compared with a third (33%) in 2019.

However, it's important to note that these changes are likely to be linked to reduced workloads because elective procedures were postponed or cancelled.

Amid these positive signs, the pandemic brought to the fore some existing challenges.

- Workload is still an issue for many doctors. A third (34%) of doctors made an adjustment to their working life during 2020 as a response to pressures on workload and capacity.
- A third (32%) of doctors reported that the spring peak of the pandemic had a negative impact on their mental health and wellbeing. Access to learning and development opportunities was also negatively affected.
- A relatively high proportion of doctors have witnessed situations where doctor safety (43%) or patient safety (26%) or care has been compromised.

This chapter explores doctors' experiences during the spring peak of the pandemic. We look at how it's shaped doctors' workloads, health and wellbeing, safety, support, and job satisfaction, as well as its impact on patient care.

Introduction

The pandemic has been a defining experience for the medical profession in 2020, and it continues to shape doctors' professional and personal lives.

The pace of change has been significant. There have been challenges to reorganise health care services to create safe working and treatment environments. And inevitably it's had a negative impact on some doctors and areas of medical practice.

There are strong signals that the impact of the ongoing pandemic will be felt by the UK's health systems for years to come. However, some of the changes that doctors have experienced are felt to be positive, with hopes of sustainable change in the future.

Since the end of January 2020, when the first case of COVID-19 was confirmed in the UK, there have been huge changes to how healthcare is delivered.

- The majority of GP consultations are being delivered remotely.[11, 12]
- Healthcare sites have been organised into 'hot' and 'cold' coronavirus zones.[13]
- Patients' appointments have been cancelled[14] or they've been delivered remotely via video clinics.[15]
- Highly specialised doctors have turned their attentions to other specialty areas as elective procedures were put on hold.[16]
- Emergency COVID-19 field hospitals were opened at sites across the UK.[17, 18]
- Donning and doffing personal protective equipment (PPE) has become a universal experience.[19]

These represent just some of the changes that have come with the single biggest and most rapid reorganisation of healthcare the modern medical profession has experienced.

Box 1:
Evidence sources used in chapter 1

3,693 doctors completed 'the Barometer survey 2020' – a representative sample of the UK medical register. The survey was carried out in June and July 2020. Doctors responded to questions about their experiences of working during the spring peak of the pandemic, as well as in 2020 more generally.

When analysing the data from 'the Barometer survey 2020', we consider the experiences of different groups of doctors and the various factors that influence those experiences.

Most often, the patterns we see relate to a doctor's registration type, and specialty. We present some differences by doctors' demographic characteristics, though, in general, significant differences weren't apparent in the analysis. Box 3 (page 48) presents an overview of the themes explored in this chapter by ethnicity.

Alongside survey results we have also analysed 13 case studies which explore the depth of individual doctors' experiences across the UK.

Further information on the evidence sources for 2020's report can be found in 'A note on research and data' on page 152.

The impact of the pandemic on doctors' working lives

Day-to-day work now looks different for almost all doctors

Almost all doctors (99%) reported a change to their work during the pandemic. Four out of five doctors (81%) described the level of changes in their day-to-day work as 'significant' (Figure 1).

Doctors shared a range of experiences when asked to describe the main changes to their work during the spring peak of the pandemic. The changes included:

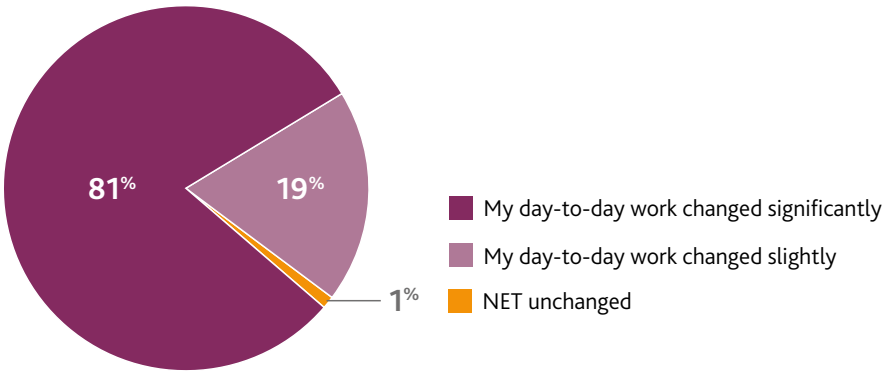
- their working patterns in terms of workloads and hours
- the type of work they undertook
- ways of working
- their personal circumstances.

These responses were given unprompted and the analysis is based on coding doctors' free text answers. It's important to note that the question only asked doctors to discuss the main changes, so their responses won't necessarily capture the full scale of changes that doctors experienced.

Figure 2 shows the breadth of the changes that doctors experienced. Some doctors may have experienced one or two of these changes, whereas others may have experienced them all at times.

Figure 1: Changes to a doctor's day-to-day work as a result of the pandemic

To what extent has your day-to-day work as a doctor been changed by the COVID-19 pandemic?

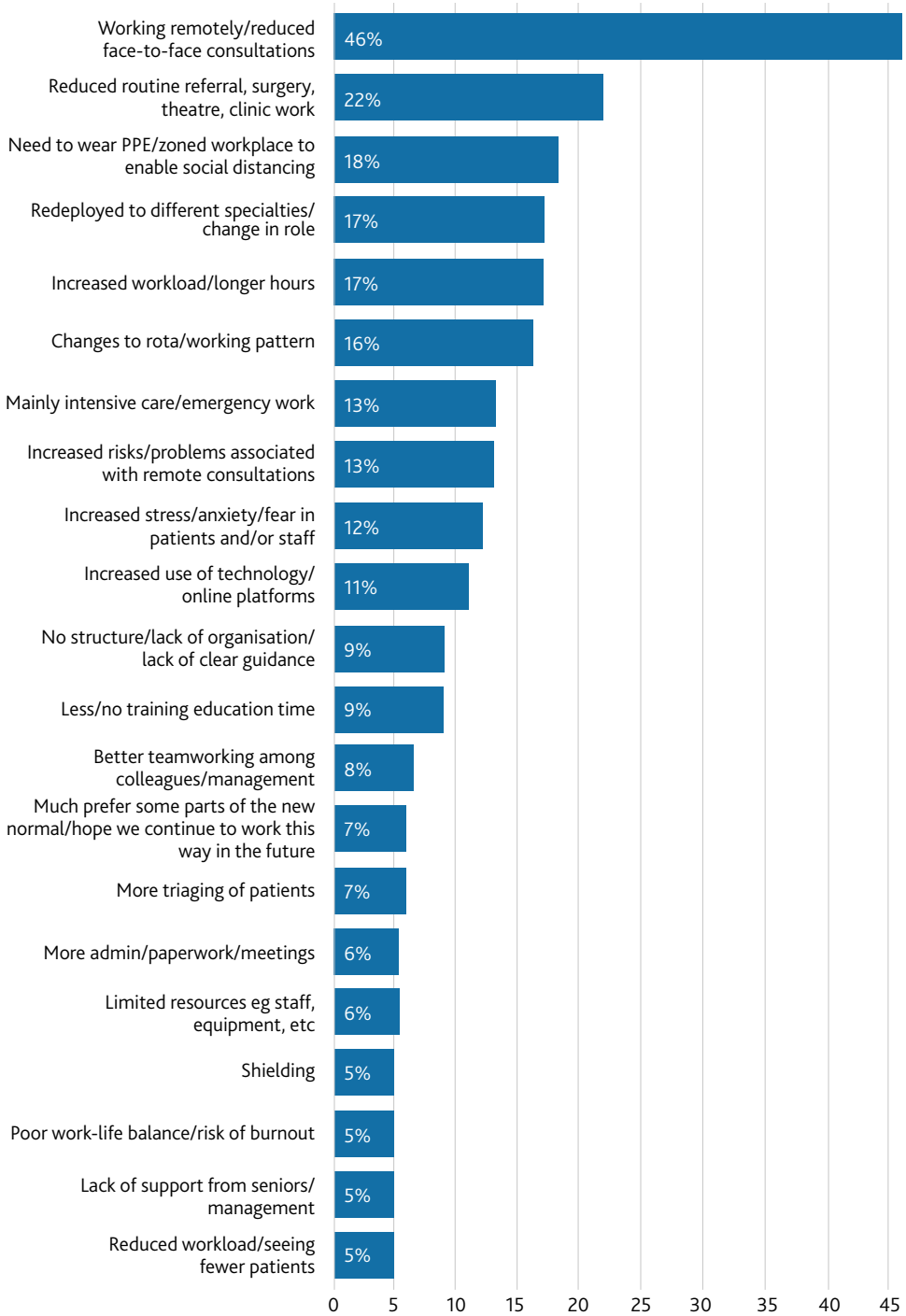


n = 3,693 (all doctors), 'the Barometer survey 2020', QI1

Figure 2: The main ways doctors' work changed during the pandemic

Please tell us about the main ways your day-to-day work has changed over the course of the COVID-19 pandemic and describe your experiences of these changes.

Proportion of doctors who described the following one of their main changes



n = 3,693 (all doctors), 'the Barometer survey 2020', QI5. Answers given unprompted by doctors. Quantification is based on coding of free text responses.

The medical profession has seen an unprecedented shift towards more remote working

The most common change, reported by almost half (46%) of doctors overall, was more remote working and reduced face-to-face consultations. This transition has come hand in hand with an increased use of technology and online software – one out of ten (11%) doctors described this as one of the main changes affecting them. This shift was most common among GPs, with four out of five (80%) reporting more remote working as a main change for them.

The pandemic has forced a widespread rollout of remote consultations where face-to-face contact is not critical. This shift has long been advocated despite some concern about its impact on the quality of the doctor-patient interaction. It seems that the pandemic has provided the push for this widespread rollout.[20] Chapter 4 considers some of the lessons learned from the pandemic, and stresses the importance of embedding these for the future.

Working patterns and workloads have changed for many doctors

Around one out of six (16%) doctors reported a change to their rota or working pattern as one of the main changes they had experienced.

Interestingly, doctors mentioned both increases and decreases in workload. Around one out of six (17%) doctors mentioned a change that had seen them working longer hours or having higher workloads. Increases in admin, paperwork and meetings were specifically mentioned by a small proportion (6%) of doctors.

In case study interviews, it was doctors with more senior roles who described the biggest increase in their working hours. Several discussed taking on more direct patient care, extending their core working hours later into the night, and being resident on-call more frequently.

Only a very small proportion (5%) of doctors mentioned a reduction in their workload or seeing fewer patients, despite elective procedures being cancelled or delayed. This probably reflects the widespread redeployment of doctors.

In case study interviews, doctors working in specialties that weren't directly involved in the treatment of COVID-19 patients, for example psychiatry, discussed a reduction in workload, which gave them time to do other work. A doctor described having more time for research, an activity that we reported in 2019 is often deprioritised in the face of service demand.

> "'[During the pandemic,] it's freed up a bit of time to do some research and those sort of non-clinical things that maybe might get pushed down the list'… 'we've been minimally affected by everything.'
>
> *Doctor in training, case study interview*

When speaking of the 'clap for carers', a specialty and associate specialist (SAS) doctor expressed feeling guilty as, at the time, their working life was quite quiet. Whereas, one GP described a different situation in primary care where:

> "'General practice was probably running at 125% [pre-pandemic], so even that 25% reduction just still felt like a normal day.'
>
> *GP, case study interview*

Redeployment has been a major change for two fifths of doctors

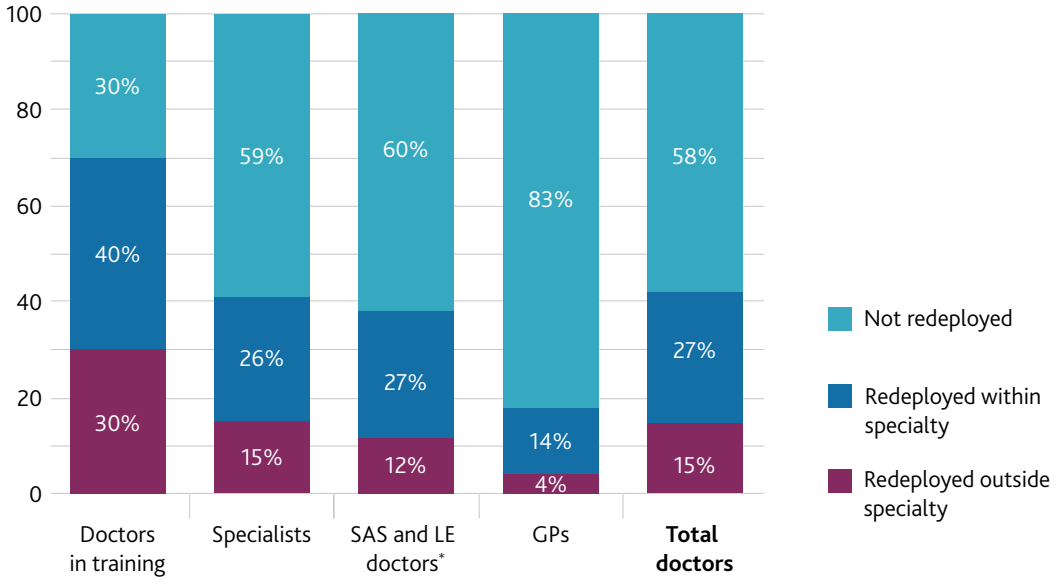
As the scale of the pandemic became clear, it was evident that care delivery would need to be significantly reconfigured. This included pausing some areas of medical service, as well as bolstering the resources and workforce available in other services. As a result, just over one out of seven (15%) respondents said they were redeployed into a different specialty or area of practice. A further quarter (27%) were redeployed within their own specialty or area of practice (Figure 3). Trainees were the most likely to be redeployed overall (69%), perhaps as a result of their greater flexibility within the workforce.

Only a minority of GPs were redeployed overall (17%), most of whom were redeployed within their usual area of practice (14%). This meant that the GP workforce was largely available to patients throughout the pandemic, albeit with new ways of working. However, there were system-wide concerns that some patients were avoiding accessing GP appointments, either for fear of coming into contact with COVID-19 or because they didn't want to burden a stretched health service.[21]

Box 2 on page 29 shows data on redeployment by nation and English region, and various demographic characteristics.

Figure 3: Proportion of doctors redeployed by registration type

During the COVID-19 pandemic, have you been redeployed into a different role (eg grade, specialty, place of work) to your usual one?



n = 3,693 (all doctors), 'the Barometer survey 2020', QI2

* 'SAS and LE doctors' refers to specialty and associate specialist (SAS) and locally employed (LE) doctors

Some specialty areas were much more likely to be redeployed than others, especially when it came to transferring to new areas of practice

The doctors most likely to be redeployed outside their own specialty were those practising:

- surgery (33%)
- medicine (26%)
- acute medicine (26%)
- emergency medicine (26%).

Most of these specialties saw their services slowed down or paused. For example, in the case of surgery, all elective procedures were put on hold. Emergency departments across the UK expressed concern about the lack of patients presenting at A&E, likely for the same reasons many avoided primary care.

Half (48%) of doctors who specialise in anaesthetics and intensive care were redeployed within their usual area of work. This is perhaps unsurprising given the nature of COVID-19.*

Two fifths (40%) of those in acute medicine and in medicine were redeployed within their specialty. This indicates that the workforce was reorganised to cover the quarter of doctors who had temporarily moved to practise elsewhere.

The speed with which doctors were redeployed into priority areas illustrates how flexibility can work in medical practice. Looking forward, it's important to reflect on how specialised medical skills could be used more flexibly by the system on a permanent basis.

Redeployment appears to be associated with doctors being asked to complete tasks usually undertaken by other roles

Doctors who had been redeployed outside their specialty had been asked to complete tasks outside their role† more so than those who hadn't been redeployed, or who were redeployed within their specialty (Figure 4).

The difference is particularly stark when looking at those who were asked to complete a task usually carried out by a more senior doctor. Over half (57%) of doctors who were redeployed outside their own specialty had completed a task usually carried out by a more senior doctor, compared with two fifths (42%) of those redeployed within their own specialty and a quarter (25%) of those who had not been redeployed.

Performing more advanced tasks can be an important learning and development opportunity. The balance of risk in a crisis may make it appropriate for a doctor to work at the limit of their competency. However, there may be cause for concern if, subsequently, doctors are expected to do this more routinely with insufficient supervision.

All groups of doctors had similar amounts of experience of carrying out tasks usually performed by a more junior doctor or another healthcare professional. Seven out of ten (70%) doctors reported that they had done this in 2020.

* COVID-19 is a respiratory illness that can require breathing support and, in the most severe cases, patients may need to be ventilated. Such care is usually provided by doctors in anaesthetics and intensive care.

† These include tasks usually completed by a doctor with a more senior role, a doctor with a more junior role, or a nurse or other non-medical staff.

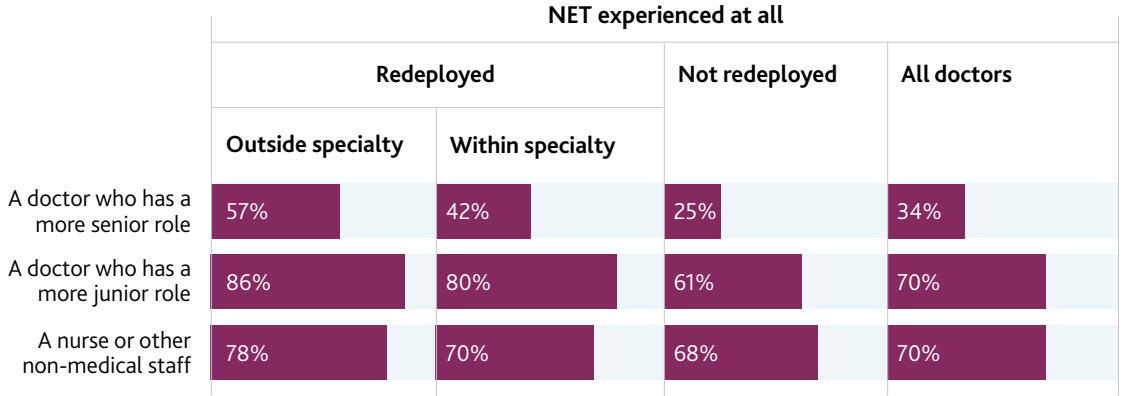
However, carrying out work outside of their usual role was less common for all groups of doctors than it was in 2019.* This perhaps fits with the finding that a third of doctors (30%) felt that the pandemic had a positive impact on the clarity of roles and responsibilities of those delivering care.

In a free text response in 'the Barometer survey 2020' one doctor described their experience of redeployment.

> 'I was redeployed to set up a Nightingale hospital. The change occurred overnight and although I could have said no, I think it was appropriate to take up the new challenge. I was on the point of retirement – so in many ways it made sense for me to move, however the sense of abandonment to colleagues was something I felt unhappy about at the time.' …
>
> 'As a senior doctor, it was important to provide calm leadership at an unprecedented time. In the end, the hospital was not required [during the spring peak] (which was as I had predicted) but the sense of achievement and teamwork was immense. People from different trusts coming together to build a hospital in a conference centre was not something I had believed we could have achieved in the NHS. There was a complete flattening of hierarchy, a can-do attitude, people working night and day, seven days a week in partnership with the private sector – contractors equally working as hard as NHS staff – and caring just as much – which was recognised by clinical staff.' …
>
> 'Medical staff [rose] to the challenges of restricted supplies of equipment and unknown brands – but being pragmatic. So overall my experience was hugely positive.'
>
> *Specialist, 'the Barometer survey 2020'*

Figure 4: Working outside role by redeployment

How frequently, if at all, during 2020 have you been asked/required to undertake tasks usually completed by …



n = 3,693 (all doctors), 'the Barometer survey 2020', QI3_12

* This comparison is indicative only as there were slight changes to the survey question.

Box 2: Summary of data on redeployment

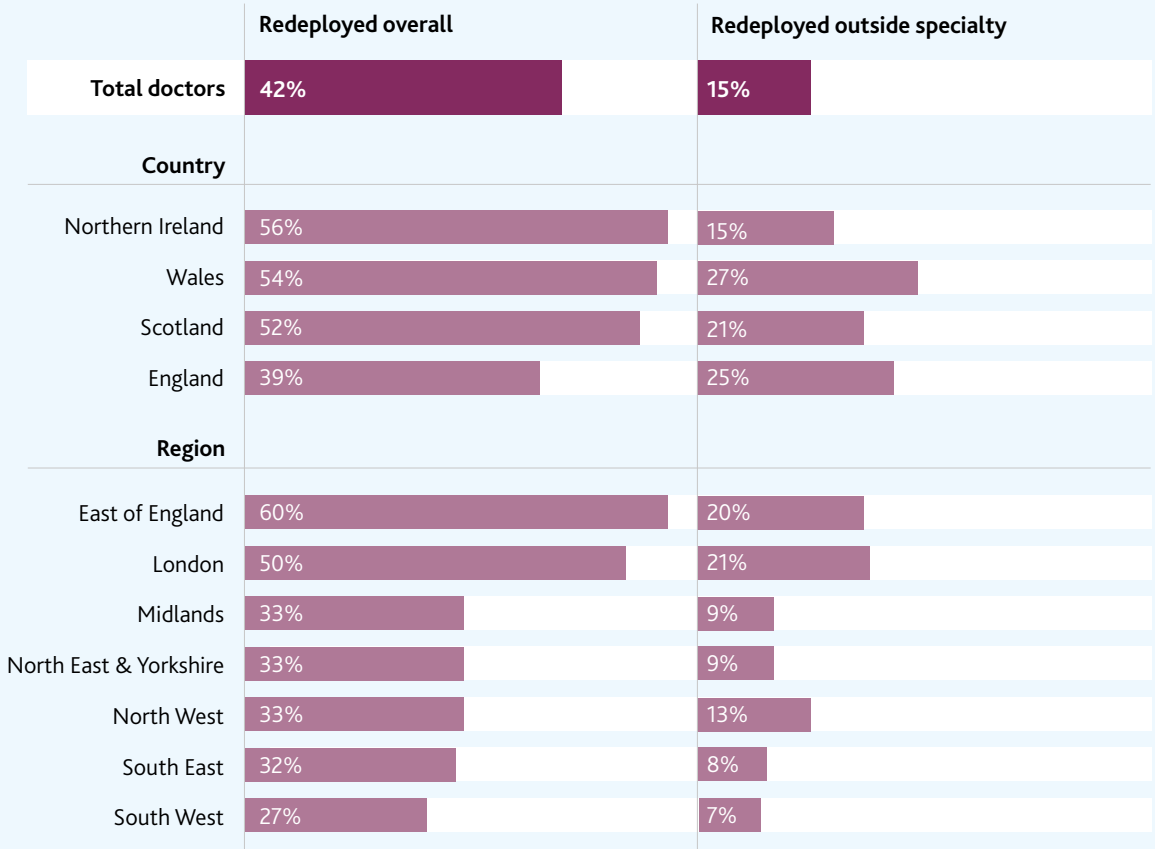
Two fifths of doctors (42%) were redeployed during the spring peak of the pandemic – a quarter (27%) were redeployed within the same specialty or area of practice and 15% were redeployed to a different specialty or area of practice.

Variation in redeployment across the UK nations and regions

Greater proportions of doctors were redeployed in Northern Ireland (56%), Wales (54%), and Scotland (52%) than in England (39%). Of the English regions, the East of England had the highest rate of redeployment, at 60%.

Figure 5: Proportion of doctors redeployed by country and English region

During the COVID-19 pandemic, have you been redeployed into a different role (eg grade, specialty, place of work) to your usual one



n = 3,693 (all doctors), 'the Barometer survey 2020', QI2_12

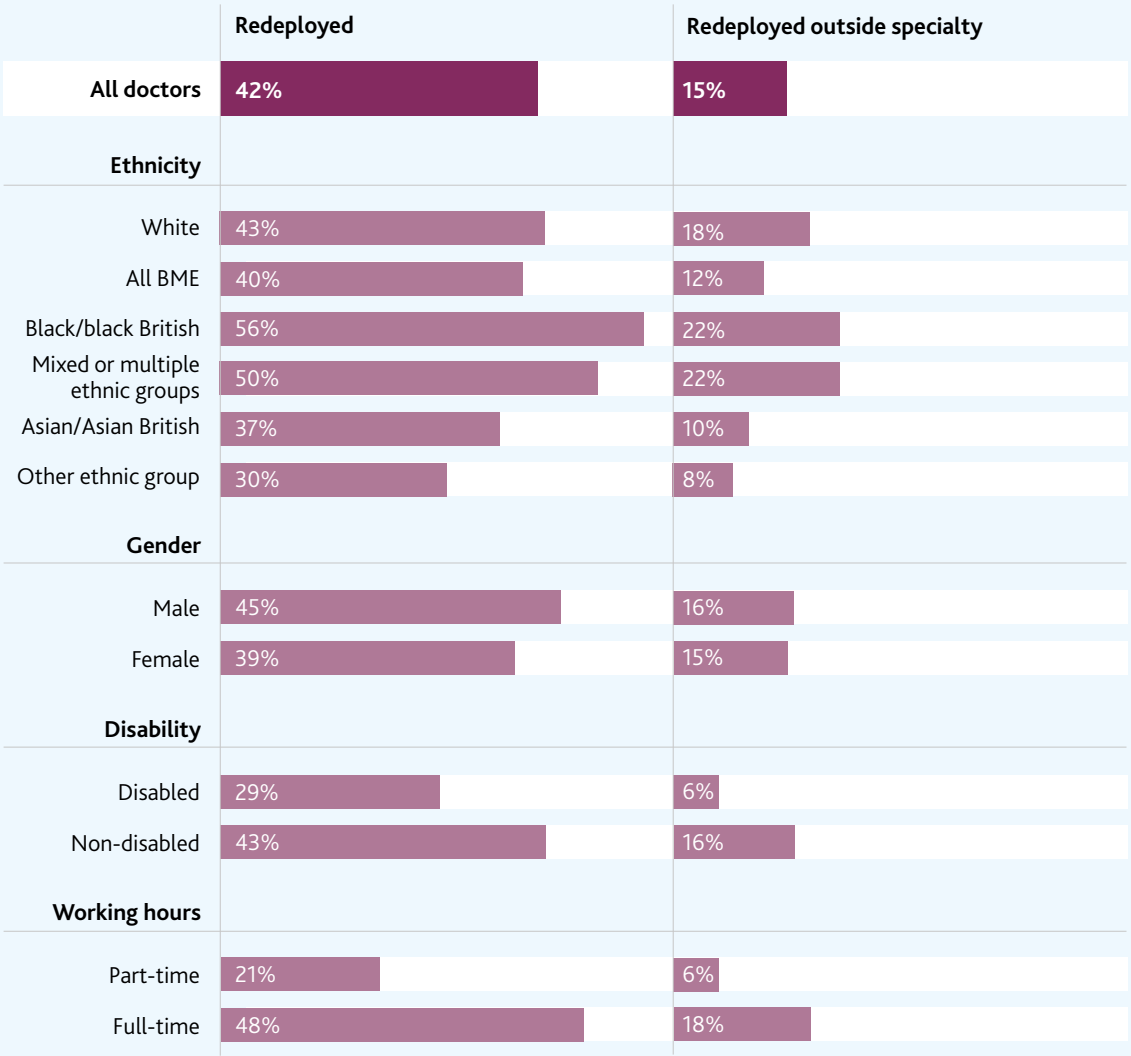
Variation in redeployment by ethnic background and disability

Two fifths (40%) of doctors from a black and minority ethnic (BME) background were redeployed, which is about the same as doctors overall (42%). However, greater proportions of doctors from a black or black British ethnic group (56%), or mixed or multiple ethnic groups (50%), were redeployed.

Over a quarter (29%) of doctors with a disability were redeployed, compared with two fifths (43%) of doctors without a disability. But the difference was greater for redeployment to a different specialty or area of practice – 6% of doctors with a disability, compared with 16% of non-disabled doctors.

A much smaller proportion of doctors who work part-time were redeployed than those who work full-time, both overall (21% vs 48%) or to a different specialty/area (6% vs 18%).

Figure 6: Proportion of doctors redeployed by demographic characteristics



n = 3,693 (all doctors), 'the Barometer survey 2020', QI2_12

New ways of working during the pandemic

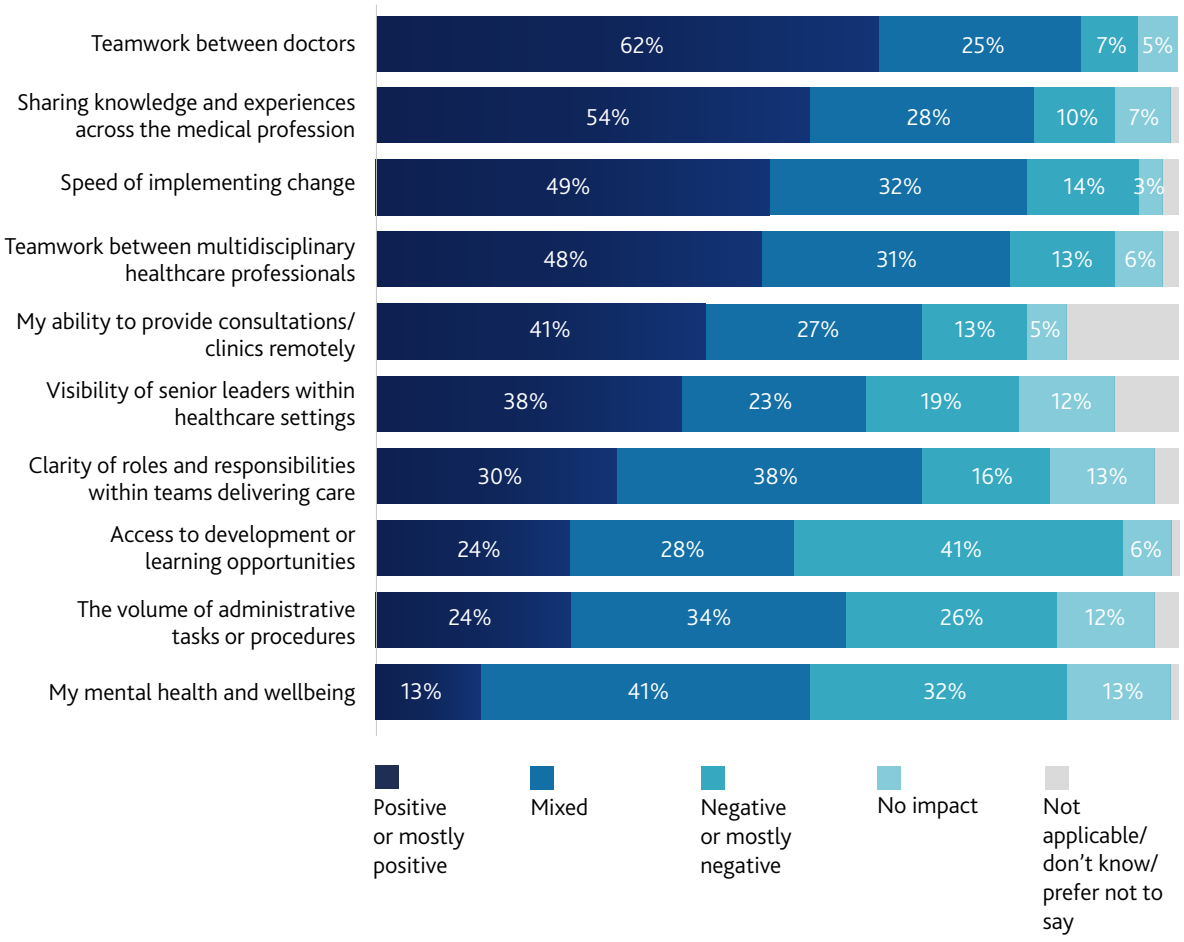
The profession's response to the ongoing pandemic has brought new ways of working that benefit both patients and doctors

The effects of the pandemic on the medical workforce have been far reaching. Doctors have adapted to new ways of working, and at times to new types or places of work, as well as altering their workloads and working patterns. They've done this while also balancing their personal lives during a time of crisis for society as a whole.

In 'the Barometer survey 2020', doctors were asked about a range of aspects of their working lives. They indicated whether they felt the pandemic had a positive, negative or mixed impact (Figure 7). Overall, nine out of ten (89%) doctors felt that at least one area had been positively affected by the pandemic. Conversely, seven out of ten (69%) doctors felt that at least one area had been negatively affected.

Figure 7: Impact of the pandemic on aspects of medical practice

Thinking about your day-to-day work during the COVID-19 pandemic, do you feel that there has been a positive, mixed or negative impact on the following areas?



n = 3,693 (all doctors), 'the Barometer survey 2020', QI3_1–10

Doctors reported a positive impact most commonly in:

- changes to ways of working
- teamwork
- knowledge sharing.

Whereas, negative impacts were most commonly felt in:

- training and development
- mental health and wellbeing.

Significant and rapid change across the UK's health systems saw all healthcare workers having to adapt at pace

As well as creating some new ways of working, the pandemic has accelerated changes that were already under way. For example, a switch to more remote working in primary care has been coming for some time. And there's long been a desire to boost technological efficiencies across the health services.

Half of doctors (49%) felt the pandemic had a positive impact on the speed of implementing change, with this being most common among GPs (59%). One GP described the situation at their practice, in a free text response to 'the Barometer survey'.

> 'We were, as a practice, already moving towards greater telephone triage/consultation before the COVID-19 outbreak but the increased availability of the technology to allow video consulting has helped enormously in speeding this transition.'
>
> *GP, 'the Barometer survey 2020'*

However, only a third (36%) of doctors who felt this impact was positive thought it could be sustained. A further fifth (22%) didn't think the changes could be sustained as pace is lost once the pandemic is over, and another third (36%) felt that it was too soon to say. It would be a shame if this momentum was lost – maintaining it will require a concerted effort by system leaders to embed positive changes for the longer term.

One doctor noted the challenge of balancing swift changes with bureaucratic processes.

> 'Although there have been positive aspects to that including certain modernisations happening at a far swifter pace than normal we have been continually hampered by absurd levels of bureaucracy.'
>
> *Specialist, 'the Barometer survey 2020'*

Team working and sharing of knowledge and expertise were positively affected

We know from 'Caring for doctors Caring for patients'[1] that a sense of belonging is crucial for doctors to provide high-quality care to patients. It's encouraging to see that teamwork, a key part of this, has been positively affected.

Three fifths (62%) felt teamwork between doctors had been affected for the better. Half (48%) of doctors felt the same across healthcare professionals. Only around one out of ten doctors felt there had been a negative impact on teamwork in each of these areas (7% and 13% respectively).

As well, over half of doctors (54%) saw a positive impact to sharing knowledge and experience across the medical profession. A psychiatrist reported improvements to working with community teams.

> 'I've actually got to know the community team, bizarrely, more during COVID than I did in the first six months, which is really odd. You wouldn't think that that would be the case, but because we've been on more calls together, whereas previously, people might not have come to certain meetings. And you wouldn't have crossed over because everyone's getting dragged in different directions.'
>
> *Doctor in training, case study interview*

The doctor in training also spoke about the positive impact this had on patient care.

> 'When you know people, it's very easy just to go, "Oh, can I just discuss this person with you? Can we have a chat about what the options might be?" Rather than specifically sending a referral and saying, "Please can you do this?" You can have a bit more of an open discussion about whether it's appropriate or not. I think that certainly helps the patient in being able to access, what's going to best meet their needs.'
>
> *Doctor in training, case study interview*

A good proportion of doctors who felt that there had been a positive impact on these areas also felt the changes could be sustained in the future.

- Seven out of ten (70%) doctors who felt that there had been a positive impact on team working among doctors also felt that the change could be sustained beyond the pandemic.
- A similar proportion (69%) felt that sharing knowledge and expertise could be sustained in the future.
- Nearly two thirds (64%) of those who felt that team working between multidisciplinary healthcare professionals had been positively affected also felt this could be sustained.

A smaller proportion of doctors from a BME background felt a positive impact on their day-to-day work than white doctors

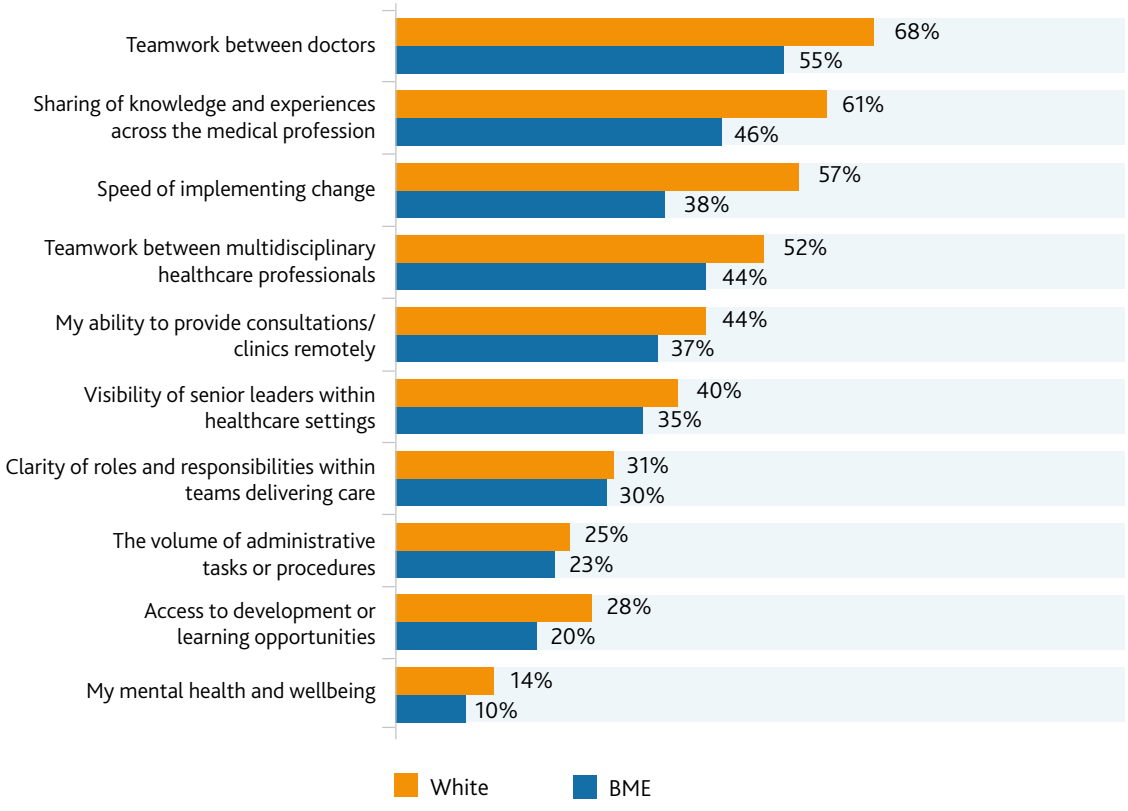
In 'the Barometer survey 2020', doctors indicated how the first peak of the pandemic had affected ten aspects of their working life. The data revealed that doctors from a BME background were consistently less likely to have experienced a positive impact than their white colleagues (Figure 8).

The aspects in which doctors from a BME background were most likely to have seen a positive impact were team working and knowledge sharing – this was similar to white doctors. But, as Figure 8 shows, the proportions of BME doctors who felt this were noticeably smaller.

There was a particularly stark difference in the impact on sharing knowledge and experiences across the medical profession. Three fifths (61%) of white doctors felt this was positively affected,

Figure 8: Proportion of doctors who saw a positive impact on aspects of medical practice by ethnicity

Thinking about your day-to-day work during the COVID-19 pandemic, do you feel there has been a positive, mixed or negative impact on the following areas?



n = 3,693 (all doctors), 'the Barometer survey 2020', QI3_1-10

compared with under half (46%) of doctors from a BME background. Furthermore, only a small proportion (5%) of white doctors felt this had been negatively affected, compared with just over one out of seven (15%) of BME doctors. These differences did not seem to relate to overall satisfaction, where similar proportions of BME and white doctors reported being overall satisfied (77% and 74% respectively).

The 'Fair to refer?'[6] research, published in 2019, found that some doctors, particularly those from a BME background or who received their medical qualification outside the UK, are treated as 'outsiders' within the healthcare settings. 'Outsiders' are often treated less favourably than 'insiders', who receive greater workplace privileges and support. Further research is needed to understand why doctors from a BME background were less likely to feel a positive impact on their day-to-day work during the pandemic. But it's possible it is linked to 'insider' and 'outsider' experiences. In chapter 4, we discuss the critical need for workplaces to be fair and inclusive.

Interestingly, BME doctors who experienced a positive impact were more likely to indicate that the change could be sustained than white doctors.

- Speed of implementing change: Over two fifths (44%) of BME doctors felt the positive impact in this area could be sustained, compared with a third (32%) of white doctors.
- Teamwork between multidisciplinary healthcare professionals: Seven out of ten (70%) BME doctors felt the positive impact in this area could be sustained, compared with three fifths (61%) of white doctors.
- Teamwork between doctors: Three quarters (75%) of BME doctors felt that the positive impact in this area could be sustained, compared with two thirds (67%) of white doctors.

It's encouraging that of those doctors from a BME background who experienced positive changes, relatively high proportions have confidence in their sustainability. However, embedding these changes must be inclusive of all doctors to help break down the barriers between 'insider' and 'outsider' groups.

Some doctors are concerned about losing training and development opportunities, but some informal opportunities are emerging

In 2019, we discussed how some elements of professional development are deprioritised when there is a high demand on services. Understandably, this appears to have been the case with access to development or learning opportunities during the pandemic. As shown in Figure 9, two fifths (41%) of doctors reported a negative impact in this area. SAS and LE doctors were particularly likely to feel this way.

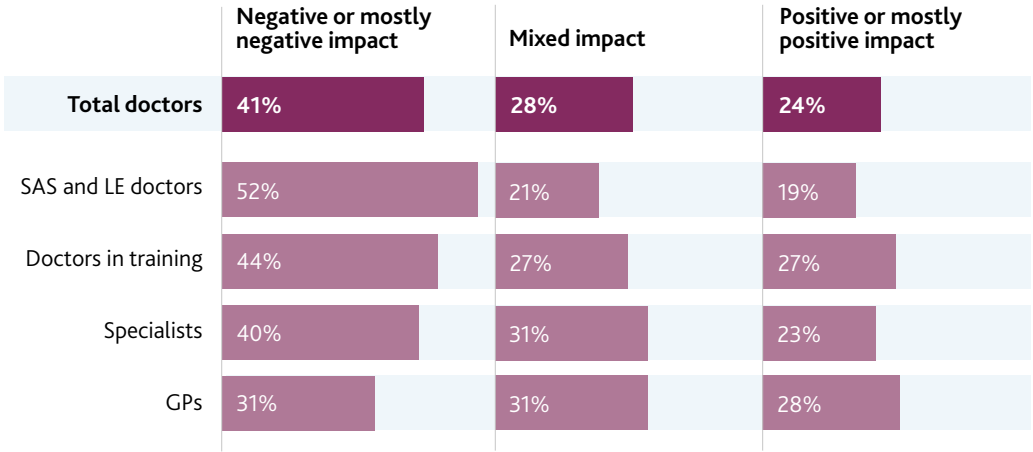
While opportunities for formal training have been lost, some informal opportunities emerged, including for this trainee doctor.

> 'I took it upon myself to say, "Right, I need to learn how to do some of these nursing tasks". In the height of this, I found myself doing the range of stuff that in one day, went from helping move patients, cleaning them, flipping, we did proning,* helping people clean, doing mouth care, things like that. All this stuff that's super important, and changing syringes, to then being like, "Oh, okay, well now I need to do a central line".'
>
> *Foundation year 1 trainee Intensive care, case study interview*

As the pandemic continues to disrupt health services across the UK, it's vital that training, development and educational opportunities are supported for all doctors. Chapters 2 and 4 look at these issues in more depth.

Figure 9: Impact on access to development and learning opportunities by registration type

Thinking about your day-to-day work during the COVID-19 pandemic, do you feel there has been a positive, mixed or negative impact on the following areas?



n = 3,693 (all doctors), 'the Barometer survey 2020', QI3_9
Values do not add up to 100% as not all response options are included.

* Proning is the precise process of turning patients so they're lying on their stomachs. It is used as part of COVID-19 treatment.

Doctors' workloads during the pandemic

The pandemic has had a mixed effect on workloads, but future demand looks set to increase as more health services resume

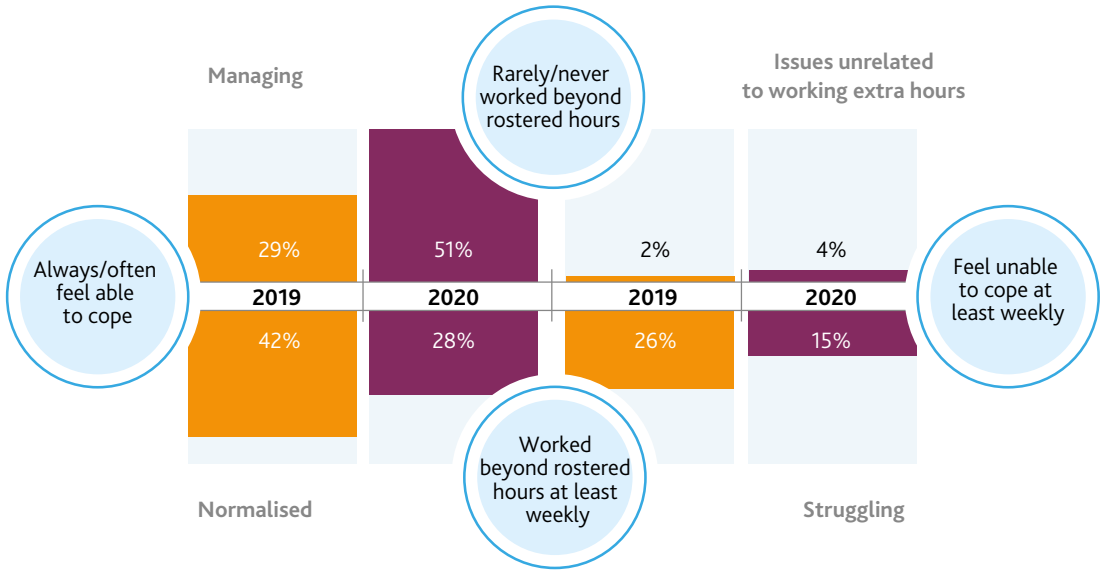
Though data show a mixed impact on workloads during the early stages of the pandemic, we know that there was already mounting pressure in this area. In 2019, we found that seven out of ten (69%) doctors were regularly working beyond their rostered hours and over a quarter (28%) felt unable to cope with their workload at least once a week.

In 2019, an analysis of the relationship between working hours and feeling able to cope with workload identified four distinct groups of doctors.

- Managing – not regularly working beyond rostered hours and coping with workload.
- Normalised – regularly working beyond rostered hours, but not regularly feeling unable to cope with workload. Long hours are a normal part of their working life that they have learnt to cope with.
- Issues unrelated to working extra hours – not regularly working beyond rostered hours but not coping with workload. There are potentially other factors outside of working hours causing these doctors to feel unable to cope.
- Struggling – regularly working beyond rostered hours and not coping with workload.

Figure 10: Quadrant analysis of doctors working beyond rostered hours at least weekly and feeling unable to cope with workloads at least weekly.

How frequently, if at all, over the past year have you experienced the following?
Worked beyond rostered hours/felt unable to cope with workload



2020 data: n = 3,693 (all doctors), 'the Barometer survey 2020', QC1_1/2. 2019 data: n = 3,876 (all doctors), 'the Barometer survey 2019', QC1.

Further information on changes to questions between 2019 and 2020 can be found in 'A note on research and data' on page 152..

The 2020 data show a significant shift in the proportions of doctors in each of these groups.

Half (51%) of doctors could be categorised as 'managing' in 2020. Of particular interest, is the higher proportion of GPs in this group. In 2019, fewer than one out of ten (9%) GPs were 'managing', whereas, in 2020, this is now a third (35%). As well, almost three quarters (72%) of doctors in training are now classed as 'managing'.

There's also been a decrease in the proportion of doctors 'struggling'. In 2020, this is now 15% of all doctors and the proportion of GPs who were 'struggling' is now a quarter (26%), rather than half (50%) in 2019.

While these changes are encouraging, they are likely to be only temporary as the system restarts paused services and addresses the backlog of patients from earlier in the pandemic. As well as this, those patients who avoided accessing health services during the spring peak of the pandemic are returning. This not only adds to demand, but it could also mean patients presenting with more advanced conditions that are more complex to treat. These, combined with the usual winter pressures and rising numbers of COVID-19 patients, could see a sharp spike in workloads.

In a case study interview, a GP was concerned about the winter months when demand for healthcare would be higher and, as such, working life would be busier.

> 'I think for being a GP, the role will get more stressful. You can already see that now with the flu vaccination campaign and all the patients in the care homes, the expectations for the Primary Care Networks. All that work that went a little bit off the board and went quieter will now be saved up in a bank account with interest. We know that because there is now that unmet demand that probably got worse, all those sore ankles that never got treated, well, they're now deeply seated sore ankles, or all the mental health that's been created because of COVID. There's going to be massive, massive demand.'
>
> *GP, case study interview*

A third of doctors have made an adjustment to their work due to pressures on workloads and capacity

Though we can see overall improvements in the proportion of doctors who are 'managing', there's still cause for concern with just over one out of seven (15%) doctors who are struggling with their working hours and workloads (Figure 11). As well, a third (34%) of doctors have made an adjustment to their work due to the pressure.

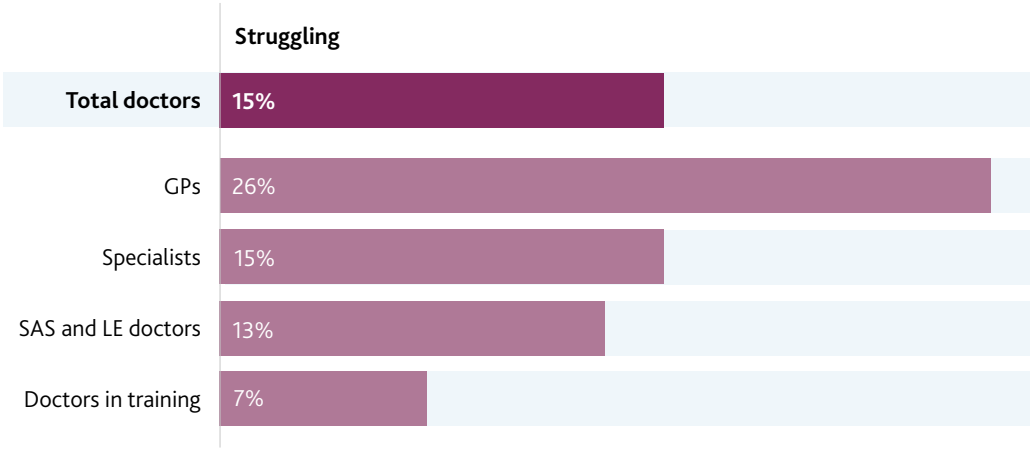
As in 2019, refusing to take on extra workload remains the first reaction to mitigate workload pressures. However, the proportion of doctors doing so has fallen considerably – a third (33%) of all doctors in 2019 compared with around one out of six (16%) in 2020.

As well as a higher proportion of doctors coping, there's also been a fall in doctors reducing their hours in clinical practice. A fifth (21%) of all doctors had done so in 2019, compared with one out of ten (11%) in 2020.

It's important to note that this question altered slightly between 2019 and 2020. In 2019, participants were considering the preceding 12 months, whereas, in 2020, they were reflecting only on the calendar year – around six months at the point the survey was conducted. This shorter time period could partly account for the smaller proportions described here. However, it's more likely to be associated with the 'all hands on deck' approach to the pandemic, which perhaps made doctors feel less able to take a step back.

Figure 11: Proportion of doctors in the 'struggling' group by registration type

How frequently, if at all, over the last year have you experienced the following?
Worked beyond my rostered hours/felt unable to cope with my workload



n = 3,693 (all doctors), 'the Barometer survey 2020', QC1_1/2.

The impact of the pandemic on doctors' health and wellbeing

Healthcare workers across the UK – and the world – are facing unparalleled challenges, which pose a real risk to their health and wellbeing.

Severely ill patients, intensified conditions and unfamiliar settings are just some of the things that could take a toll on a doctor's health and wellbeing. As well as this, doctors have, understandably, been concerned about their own health, the health of their colleagues, and of those they live with, all at a time of great professional upheaval.

Doctors' health and wellbeing issues could be related to uncertainty in the early stages of the pandemic and high workloads for some

A third of doctors (32%) felt that the pandemic had a negative impact on their mental health and wellbeing (Figure 7). And one out of ten (12%) reported, unprompted, that increased stress and anxiety among doctors and patients was one of the main changes they experienced during the pandemic (Figure 2).

The ongoing strain on the mental health and wellbeing of all healthcare workers is recognised by the UK's governments.

- NHS England has announced additional funding to support rapid access to mental health support for NHS staff in England.[22]
- In Northern Ireland, the Public Health Agency (PHA) has developed a framework to support the wellbeing needs of Health and Social Care (HSC) staff.[23]
- As part of the 2020–21 'Programme for government', the Scottish government announced an expansion of mental health and wellbeing support for health and social care staff.[24]
- In April 2020, the Welsh government announced that additional funding would support expanding an existing free support and advice scheme for doctors so as to make the scheme accessible to all NHS Wales staff tackling the pandemic.[25]

Doctors felt that their wellbeing was particularly affected at the beginning of the pandemic, when there was fear of the unknown, and no physical and psychological security. The cumulative impact over time could also be overwhelming – not only because of the tragedy of patients dying, but also because they feared for their own lives.*

* Described by doctors in case study interviews.

Figure 12: Quotes from doctors in case study interviews

> '[The start of the pandemic was] not at all like I'd expected. I was mentally prepared … [but] I've never felt quite so vulnerable at work for a long, long time.'
>
> *SAS doctor, case study interview*

> 'And the third weekend, I think it was [when] Bill Withers had just died, and he played a song, and I started to cry. And I just felt I had to cry, because I was just so exhausted and overwhelmed, and it just seemed such a nice thing to do. It just provided a period of release. But until that point, I hadn't really stopped and thought about how I felt about it all. The pressure to make sure that I kept the staff safe, the [patients] safe, whether the calls you made were the right ones. I know the buck doesn't stop with you, but at times, I felt it did, for the service.'
>
> *Specialist, case study interview*

> 'I met with a group of consultants … and what came out was that they said they'd been rewriting their wills, and even though they'd had COVID, they were fearful they were going to get it again, it was going to finish them off the second dose. And they're still fearful today.'
>
> *Specialist, case study interview*

> 'This was over a period of nights, so I probably was feeling slightly more emotional, because nights make me feel a bit weird sometimes, but certainly, that string of nights, quite a few people died. That was difficult. They're young people. In intensive care, they were younger people, or people who didn't really have very much wrong with them.'
>
> *Doctor in training (Foundation Year 1), case study interview*

> 'The first five or six [patients] we looked after died, and we were starting to wonder if this was completely futile' … 'People were handing us their beloved relative who had a cough, and they were getting a sealed casket back, three weeks later, and not allowed to see anything in between.'
>
> *Specialist, case study interview*

However, there were two key things which kept doctors going at this challenging time:

- a sense of value and purpose
- informal wellbeing support within teams.

An F1 trainee doctor described how the spring peak of the pandemic had highlighted the importance of the work they did. They felt this went some way towards offsetting the challenges they faced.

> ‘I’m doing a job that is key to society. It is productive. It is of value, and that’s nice. I mean, I don’t think you can deny the fact that that is a nice thing, to feel like the thing you are doing is worthwhile.’
>
> *Doctor in training (Foundation Year 1), case study interview*

Another doctor described some of the informal wellbeing activities that were put in place to address the intensity of working during the pandemic.

> ‘One of the things we did was we implemented the RED every day, which is Run Every Day June, RED June, but it was that you could do any form of exercise. And so they set up a Facebook group, and you could post pics of what you were doing. We also had [online] baking sessions once a fortnight.’
>
> *Specialist, case study interview*

Working during the early stages of the pandemic appears to have supported an elevated sense of satisfaction among doctors

Despite experiencing unparalleled challenges, in 2020, a greater proportion of doctors reported feeling an overall satisfaction in their day-to-day work than in 2019.

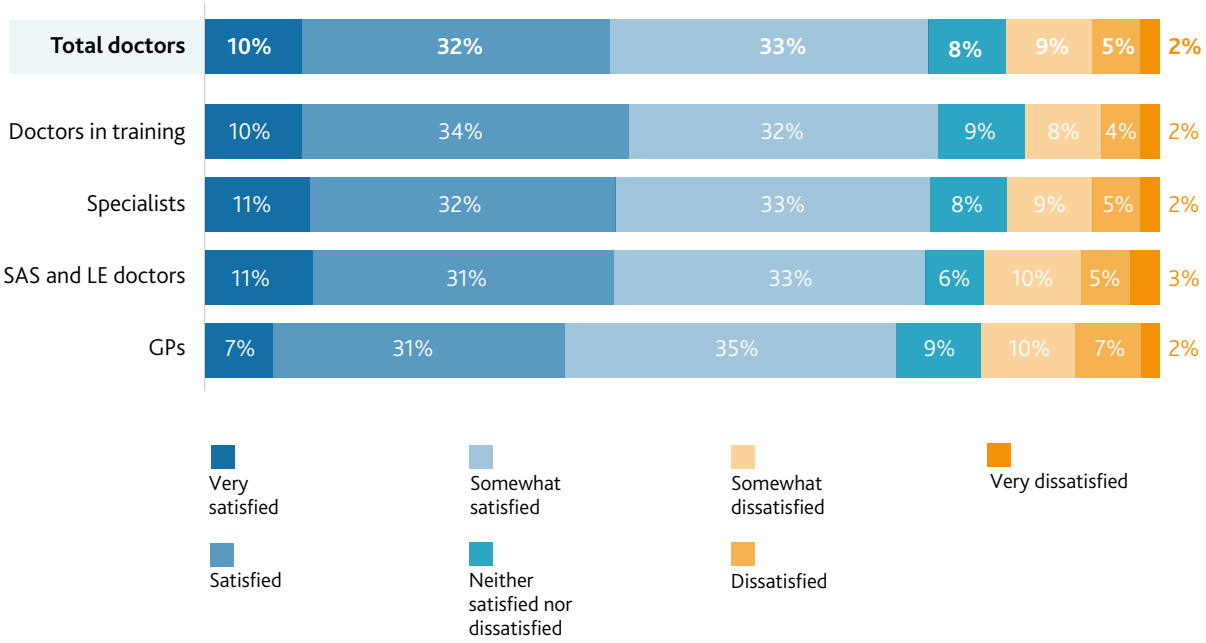
Figure 13 shows doctors' satisfaction by registration type. Three quarters (75%) of doctors were overall satisfied in their day-to-day work and less than a fifth of doctors were overall dissatisfied (16%). This compares with three fifths (63%) who were overall satisfied in 2019 and a third (30%) who were overall dissatisfied in 2019.

Two fifths (42%) of doctors said they were satisfied or very satisfied in their day-to-day work. This has also grown since 2019, when a third (32%) felt this way.

The most notable change since 2019 has been among GPs. In 2020, around two fifths (38%) were satisfied or very satisfied, which puts them in line with doctors overall. This is an improvement on 2019, when GPs were an outlier compared with other registration types, with just a fifth reporting feeling satisfied or very satisfied (20%).

Figure 13: Doctors' satisfaction by registration type

To what extent are you satisfied or dissatisfied day-to-day with your work as a doctor?



n = 3,693 (all doctors), 'the Barometer survey 2020', QA1. Values do not add up to 100% as a result of rounding.

Satisfaction appears to be driven by a sense of fulfilment and reward, which has been heightened during the pandemic

Doctors were given a free text box to explain what factors drove their sense of satisfaction or dissatisfaction. The following responses are the result of coding these answers.*

As in 2019, the most common reason doctors gave for feeling overall satisfied in 2020 was finding their work fulfilling or rewarding. This was given by two fifths (40%) of doctors, which is a significant ten percentage point increase on 2019, when three out of ten doctors, (30%) gave that response.

An SAS doctor described their sense of fulfilment.

> '[Starting a leadership role] was exhausting, but it was so good to feel I could make a positive difference. I absolutely loved it.'
>
> *SAS doctor, case study interview*

Around one out of seven (15%) doctors attributed their satisfaction to liking and respecting their colleagues or the team they work with. And just over one out of ten (13%) said they enjoyed patient contact. These data show that the hands-on elements of medical practice are fundamental for doctors' satisfaction.

GPs were most likely to say that they enjoyed patient contact, with over one out of six saying this (16%), despite such a considerable shift to remote working. This supports findings in 'Caring for doctors Caring for patients',[1] which highlighted the importance of belonging and the dangers of isolation for doctors' wellbeing.

A smaller proportion of doctors are reporting workloads and working hours as a reason for dissatisfaction in 2020

It's also clear that workloads play a part in a doctor's sense of satisfaction in their work. A fifth (19%) of doctors who reported feeling overall dissatisfied in work put this down to increasingly high workloads and long hours. In line with the higher proportion of doctors who feel able to cope with their workloads, a smaller proportion of doctors attributed their dissatisfaction to workloads and working hours than in 2019, when two fifths (42%) gave that reason.

The fact that a smaller proportion of doctors attributed their dissatisfaction to workloads mustn't be taken for granted. The effect could well be temporary as the pandemic's impact on health services continues to evolve and accumulate.

A smaller proportion of doctors are at risk of burnout in 2020 than in 2019

Despite the unique pressures facing the health sector, in 2020, the proportion of doctors at a high risk of burnout was generally lower than in 2019. In 2020, one out of ten (10%) of doctors are at high risk of burnout† (Figure 14). However, when scaled up, this still represents approximately 30,000 doctors on the medical register, which remains a concern.

The biggest change in 2020 has been a shift in the number of doctors with a very low risk of burnout. This is now three fifths (60%) of doctors, compared with two fifths in 2019 (42%) (Figure 14).

* Further information on coding free text responses is available in 'A note on research and data' on page 152.

† Information on categorisation of burnout can be found in 'A note on research and data' on page 152.

Workloads, working hours, and administrative burden are all associated with burnout

Doctors who report working longer hours and feeling unable to cope with their workloads, are at a higher risk of burnout.

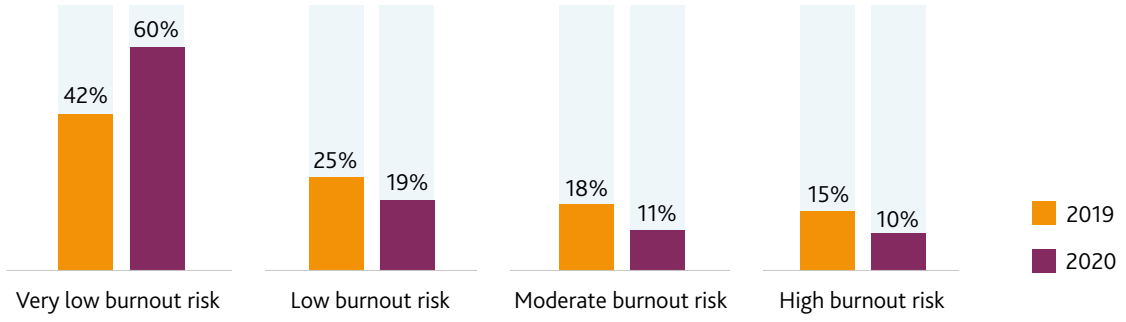
- Nearly seven out of ten (69%) doctors with a high risk of burnout have worked beyond their rostered hours at least weekly, compared with just over half (57%) of those in the low-risk group and less than a third of those with a very low burnout risk (31%).
- Two fifths (42%) of doctors with a high risk of burnout reported that the pandemic had a negative or mostly negative impact on the volume of administrative tasks or procedures.

The evidence to suggest that a smaller proportion of doctors were struggling with working hours and workloads could go some way to explaining the changes to risk of burnout in 2020.

While this is a welcome sign, it's unclear how sustainable this pattern will be as the pandemic continues and pressure on the UK's health services mounts. We may, in fact, only see a temporary drop in risk of burnout at a time of reduced demand and pressure. As more services resume and the second peak of the pandemic intensifies, we may see a corresponding rise in doctors at risk of burnout.

Figure 14: Comparison of burnout risk in 2019 and 2020

Summary of all negative responses given



n = 3,693 (all doctors), 'the Barometer survey 2020', QD1/D2. 2019 data: n = 3,876 (all doctors), 'the Barometer survey 2019', QD1/D2

Some groups of doctors have seen a greater impact on risk of burnout and wellbeing than others

Doctors in training are the most likely to have experienced a very low risk of burnout, with seven out of ten (72%) trainees being in this group. On the other hand, SAS and LE doctors were most likely to have experienced a high risk of burnout, with GPs just behind (Figure 15).

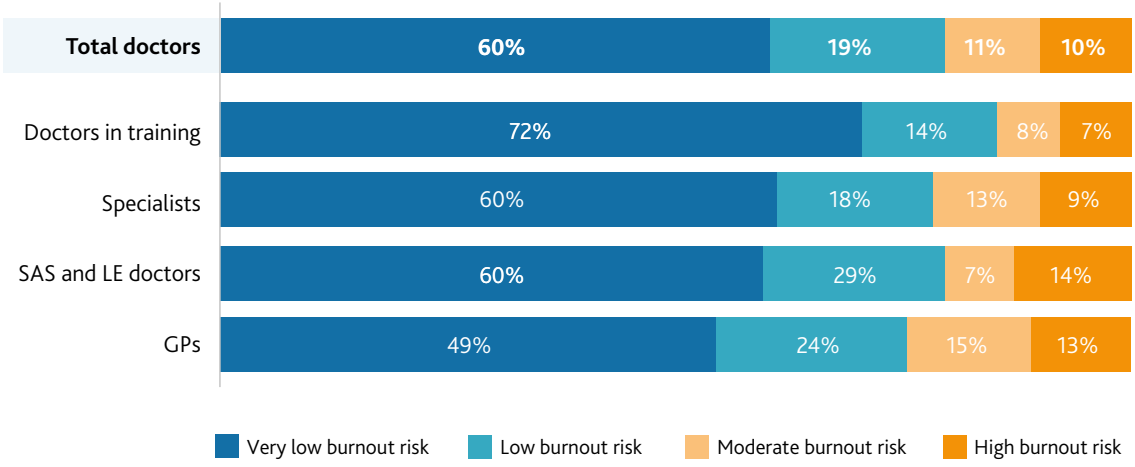
In 2020, GPs remain the most likely to have a moderate to high risk of burnout* (28%) (Figure 15). However, this is much lower than in 2019, when we reported that GPs were the group of doctors the most at risk of burnout and bearing the brunt of pressures.

A GP described how they appreciated the shift to remote working as it had improved their work-life balance.

> 'I could realistically run a full day where I would do video consultations in the morning, do some paperwork, do some telephone calls in the afternoon, do some more paperwork and results, etc. We can genuinely work from home which improves work/life balance, and could improve recruitment too.'
>
> *GP partner, case study interview*

GPs were slightly more likely to say the spring peak of the pandemic had a positive impact on their mental health and wellbeing than specialists or SAS and LE doctors (11% compared with 8% for both).

Figure 15: Risk of burnout by registration type



n = 3,693 (all doctors), 'the Barometer survey 2020', QD1/D2.
Values do not add up to 100% as a result of rounding.

* 'Moderate to high risk of burnout' combines those who are at 'moderate' or 'high' risk, representing those who are more at risk of burnout.

Despite lower risk of burnout overall, stress is still causing some doctors to take time off work

Just over one out of ten (14%) doctors have taken time off due to stress in 2020. Worryingly, this rose to almost a third (31%) of doctors in training, which is significantly higher than any other group of doctors.

Doctors with a very low risk of burnout and those with a high risk of burnout were equally likely to have taken time off (16% and 15% respectively), suggesting that day-to-day stresses affecting a doctor's ability to work are experienced differently from the long-term effects of burnout.

It could be that acting early to take time off helps to protect doctors' wellbeing and prevent burnout. However, doctors who reported taking time off due to stress were also more likely to say that they might leave the UK profession, retire early, or reduce their hours in clinical practice. This indicates that, rather than being a temporary action to help protect their wellbeing and allow them to continue practising, taking time off for stress could be part of a broader set of long-term steps that see doctors stepping away from clinical practice.

Maintaining the lower risk of burnout and a greater sense of satisfaction as winter pressures build will be challenging

While the results of 'the Barometer survey 2020' show a greater proportion of doctors who are overall satisfied in their work and a lower proportion at high risk of burnout, the challenge will be maintaining this. Winter pressures, the backlog of procedures and the second peak of the pandemic all pose a threat to this progress. It will be important for all in the health system to work together to find ways of embedding the positive impacts of the pandemic, while mitigating those that have been negative.

Box 3: Doctors' experiences by ethnicity

Despite doctors from a BME background reporting fewer positive impacts of the pandemic than white doctors, 'the Barometer survey 2020' data show that this doesn't seem to have had a substantial impact on key indicators around burnout, satisfaction, support and safety.

Figure 16 shows some of the data around experiences by ethnicity. Though there are no substantial differences, there is some variation across BME ethnic groups. The variation seen here is indicative of the slight variations in experience we see across all groups of doctors.

It isn't possible to present all the data from 'the Barometer survey 2020', but the indicators presented below have been chosen as they cut across the key themes presented in chapter 1.

Figure 16: Key satisfaction, wellbeing and safety indicators by ethnicity

		White	Overall BME	Asian/ Asian British	Black/Black British	Mixed or multiple ethnic groups	Other ethnic group
Satisfaction	Overall satisfied	74%	77%	74%	90%	83%	80%
	Overall dissatisfied	18%	14%	16%	6%	10%	15%
Support	Part of a supportive team	82%	79%	76%	89%	87%	80%
	Supported by non-clinical management	49%	57%	53%	71%	71%	55%
Burnout	Very low/low risk of burnout	77%	80%	78%	91%	80%	86%
	Moderate/high risk of burnout	22%	19%	23%	9%	20%	14%
Doctor safety	Witnessed doctor safety compromised	41%	46%	48%	40%	44%	40%
Patient safety	Felt unable to provide a sufficient level of care at least once a week	30%	19%	20%	9%	19%	21%
	Witnessed patient safety at risk	28%	23%	25%	15%	21%	21%

n = multiple (multiple questions included), 'the Barometer survey 2020', QA1/D3/D1/D2/C7/C6/C1_4

The impact of the pandemic on safe and supportive healthcare environments

Safe and supportive environments are crucial for doctors to deliver the best care for patients. It's encouraging that, despite the pressures of the pandemic, doctors' responses about support and team working are mostly positive. However, there are some worrying signs of doctors' safety being put at risk.

Overall, doctors feel well supported by colleagues and are positive about team working

Over half of doctors reported that they were supported by a range of clinical and non-clinical colleagues. Indicators around teamwork paint a similar picture with four out of five (80%) feeling that they were part of a supportive team (Figure 17).

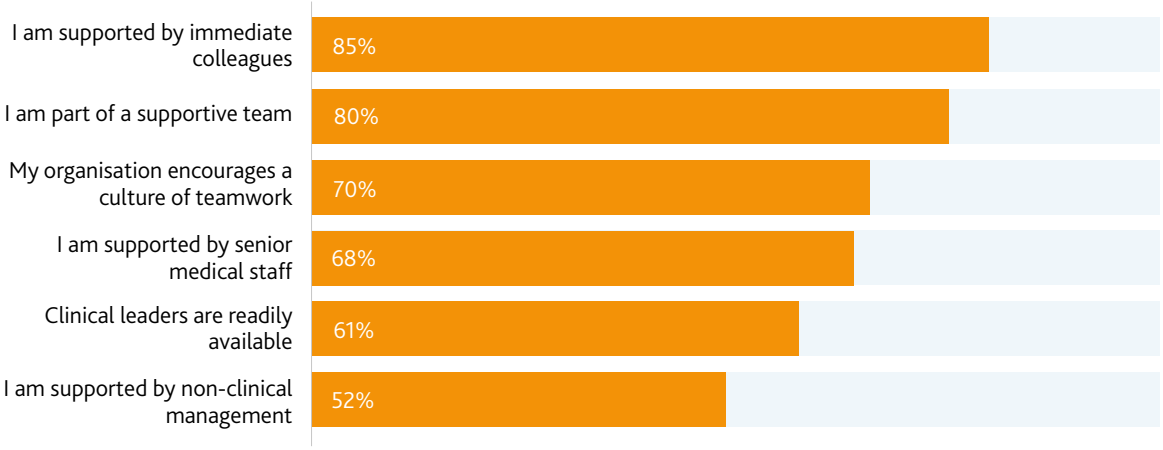
Overall, doctors felt the most support from those they worked with closely, including their immediate colleagues (85%) and those they considered part of their wider team (80%). Seven out of ten (70%) believed that a culture of teamwork was actively promoted by their organisation.

However, lower proportions of doctors felt supported by colleagues with more senior roles, both clinical (68%) and non-clinical (52%). Except for GPs, all groups felt the least support from non-clinical management. This may be because GPs work more closely with non-clinical colleagues, such as practice managers, than their community or hospital-based colleagues do.

Across all groups, SAS and LE doctors and specialists were the least likely to feel supported. This was particularly true in relation to support from non-clinical management. Only around two fifths of specialists (45%) and SAS and LE doctors (39%) agreed that they felt supported by non-clinical management.

Figure 17: Proportion of doctors who agree with statements around support and team working

To what extent do you agree with the following statements?



n = 3,693 (all doctors), 'the Barometer survey 2020', QD3_1-6

Overall, doctors in training were positive about the support they received. It was particularly encouraging to see that a clear majority (83%) felt supported by the senior medical staff they worked with.

A senior doctor described feeling that they could have been more engaged with other doctors prior to the pandemic.

> 'Hopefully I've become a more compassionate leader, and I've taken a lot more trouble to engage with the medical workforce, more than I might've done previously, in terms of just listening to them and trying to understand what their world is. And I think realising that I might have a view from my ivory tower that actually is completely wrong, I've engaged a lot more. I didn't think I was achieving very much because I wasn't on the front-line and a lot of my time was spent trying to sort out PPE and other stuff like that, but I had a very pleasant response from the medical workforce, a really good reception. And I don't intend going back to the old ways either.'
>
> *Specialist, case study interview*

Support is especially important for minimising the risk of burnout

Doctors with a lower risk of burnout were consistently more likely to give a positive response to questions about support and teamwork than those with a higher risk of burnout. This was particularly true in relation to support from senior medical staff. Over three quarters (77%) of doctors with a very low risk of burnout felt supported by senior medical staff, compared with around two fifths (42%) of those with a high risk of burnout.

It's important that disabled doctors have support from those in leadership and management roles

Across all types of support and team working, fewer disabled doctors had positive experiences than non-disabled doctors (Figure 18).

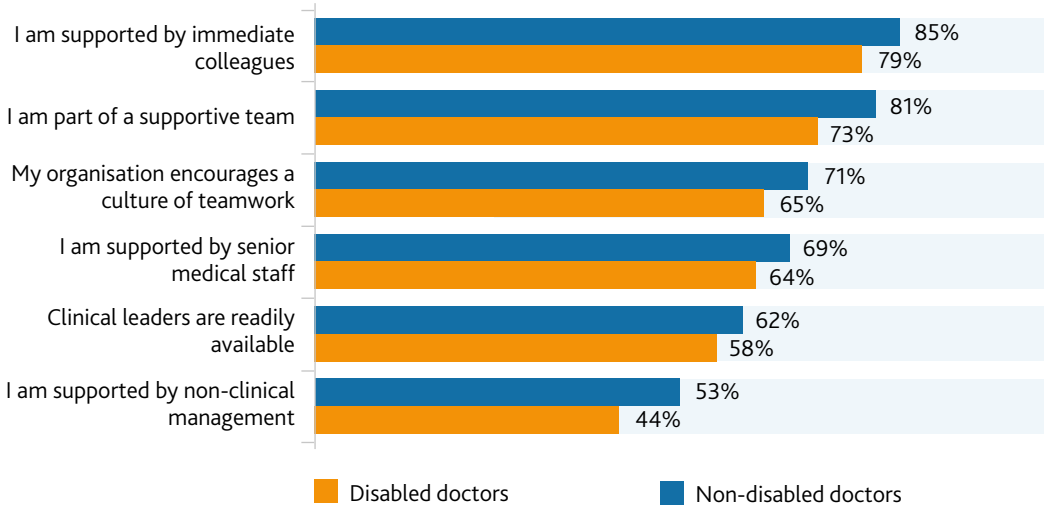
As with doctors overall, those doctors who were disabled were more likely to agree that they were supported by those they worked most closely with. However, they were less positive about those in management or leadership roles.

There were still good proportions who felt positive about support from those leaders with clinical roles – around three fifths felt they were supported by senior medical staff (64%) and that clinical leaders were readily available (58%). However, the most striking difference was how doctors felt about support from non-clinical management. Only two fifths (44%) of disabled doctors felt supported by this group, compared with just over half (53%) of non-disabled doctors.

Disabled doctors will have a range of personal experiences, circumstances, and working arrangements. The ongoing pandemic may have highlighted what some doctors need to ensure their safety and wellbeing. It's encouraging that three quarters (73%) of disabled doctors felt that they're part of a supportive team. But it's more important than ever that all doctors feel they have the support of those in leadership and management roles and that their interests are understood and considered in decision making.

Figure 18: Proportion of disabled and non-disabled doctors who agree with statements around support and team working

To what extent do you agree with the following statements?



n = 3,693 (all doctors), 'the Barometer survey 2020', QD3_1-6

Doctors have reported situations where their own or a colleague's safety was at risk during the spring peak of the pandemic

During 2020, two fifths (43%) of doctors experienced a situation where their own or a colleague's safety was put at risk. When asked what factors had contributed to the most recent incident, these doctors reported causes relating to:

- equipment (83%)
- workloads or resourcing (67%)
- communication (32%).

Specifically, the most common options selected were:

- a lack of suitable PPE (80%)
- pressure on workloads (40%)
- inadequate preparation or training for the situation (40%).

Participants could select multiple options for this question so it's likely that incidents had several contributory factors, rather than being caused by one issue.

Working in a safe environment is also crucial for doctors' wellbeing. Doctors with a high risk of burnout were much more likely to say that they had witnessed a doctor's safety at risk – three fifths (62%) of those with a high risk of burnout, compared with a third (35%) of those with a very low risk.

The impact of the pandemic on patient care and safety

Many patients are understandably concerned about delayed or missed treatments, coupled with worries about catching or spreading COVID-19. Doctors have continued to provide excellent care for patients despite the challenging circumstances. Alongside disruptions to services and pressures on doctor's working lives, the pandemic has presented clinical challenges. Treating a new, novel virus about which little is known is very different from the usual work of most doctors. In an interview, an intensive care consultant described what it was like being faced with a new illness:

> "'We always knew a pandemic was coming, and we've had pandemic plans ... But COVID-19 as an illness is like nothing else really … a lot of our plans were [not applicable], because of how severe the ITU patients were. They were so delicate it was unbelievable.' …
>
> 'An expert opinion is the lowest tier of medical evidence. When it's all you've got, you've got to use it. But the initial stuff we got was completely different to how we manage these patients now, and you can see the mortality drop through the pandemic. Part of that is patients, because the very, very vulnerable people got it first, died quickly. But part of it is we got a lot better at looking after it.'
>
> *Specialist, case study interview*

We know from 'Caring for doctors Caring for patients' that patient safety depends on doctors' wellbeing. Burnt out doctors are much more likely to make a major medical error.[1] Data from 'the Barometer survey 2020' around improvements to doctors' wellbeing, and particularly the smaller proportion experiencing a high risk of burnout, are encouraging. But it's vital that doctors' wellbeing is protected to enable them to provide the best care possible as the pandemic continues, and the UK's health services face a very challenging winter.

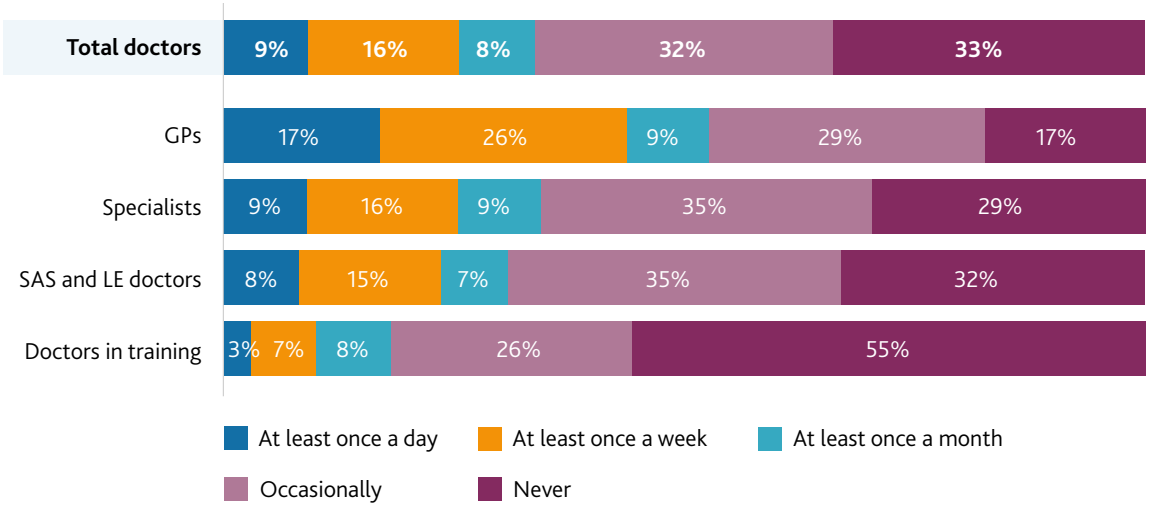
Most doctors have experienced a time when it's been difficult to provide a patient with a sufficient level of care

During 2020, two thirds (65%) of doctors have found it difficult to provide a patient with a sufficient level of care. And a quarter (25%) have experienced this at least weekly. Although this is an improvement on 2019 – 34% at least weekly – it's still a worrying sign to see the quality of patient care is affected to this extent.

Some doctors found it difficult to provide a sufficient level of care more frequently than others (Figure 19). GPs stand out as the group most likely to be struggling in this area. Four out of five (81%) reported being unable to offer a sufficient level care at some point in 2020 and two fifths (43%) experienced this every week. This tallies with free text responses in 'the Barometer survey 2020', in which GPs discussed challenges with making referrals for patients, ordering tests and linking up with secondary care while some services were paused during the pandemic.

Figure 19: Frequency with which doctors found it difficult to provide patients with a sufficient level of care

How frequently, if at all, have you experienced the following during 2020?
Found it difficult to provide a patient with the sufficient level of care they need



n = 3,693 (all doctors), 'the Barometer survey 2020', QC1_4

A number of GPs described the challenges they faced.

> ‘[There has been] very restricted access to investigation or secondary care for many patients.’
>
> *GP, ‘the Barometer survey 2020’*

> ‘It’s hard having to manage patient conditions and patient expectations when the hospital isn’t seeing patients. We are having to manage conditions which really should be managed by secondary care.’
>
> *GP, ‘the Barometer survey 2020’*

A doctor’s risk of burnout is particularly associated with patient care. Half (49%) of doctors with a high risk of burnout found it difficult to provide a sufficient level of care at least once a week.

Similarly, a doctor’s workload appears to be connected to feeling able to provide care. Over half (57%) of doctors who regularly struggle to cope with their workloads said they found it difficult to provide a sufficient level of care at least once a week in 2020.

Doctors have witnessed situations where patient care or safety has been compromised

As with their own safety and that of their colleagues, doctors have also witnessed situations where patient safety or care has been compromised when being treated by a doctor. However, the proportion is much lower (26%). As with the provision of sufficient care, the proportion of doctors seeing patient safety or care compromised is lower than in 2019, but is still an area of concern.

Again, this was more common among GPs, a third (34%) of whom reported seeing patient safety or care being compromised in 2020 (Figure 20). This is a shift from 2019, when it was specialists and SAS and LE doctors – largely those based in secondary or tertiary care – who were most likely to report this. This is perhaps tied to the significant shift in ways of working in primary care.

As with the provision of sufficient care, there’s a link between a doctor feeling that patient safety or care has been compromised and their risk of burnout. Half (50%) of doctors with a high risk of burnout had seen patient safety or care compromised in 2020.

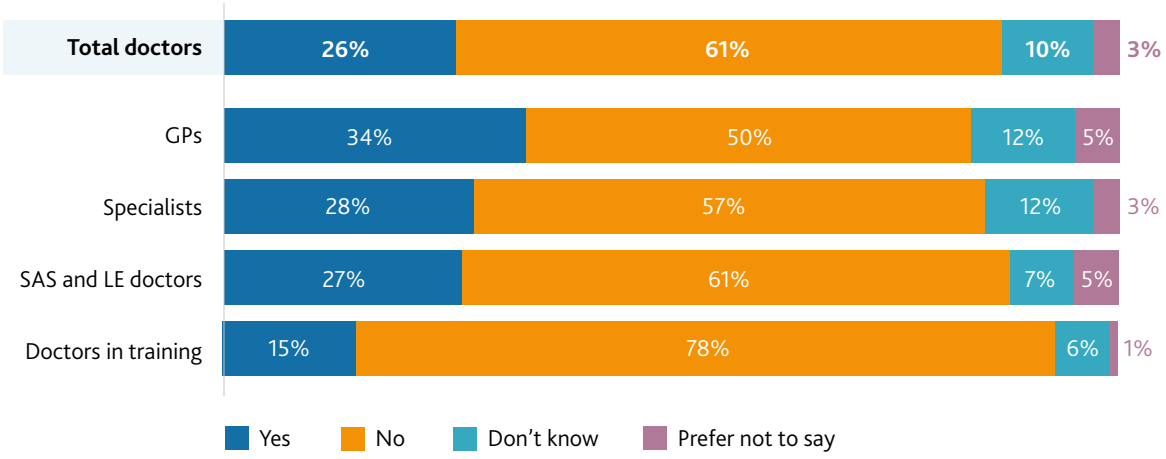
Similarly, overall dissatisfied doctors were more likely to have seen patient safety or care compromised than overall satisfied doctors – nearly half (45%) of overall dissatisfied doctors compared with a fifth (22%) of overall satisfied doctors.

When asked about the factors contributing to the most recent situation where patient safety or care was compromised, half (50%) of doctors attributed it to a lack of access to necessary equipment or services. Again, this tallies with GPs being the most likely to have seen safety or care compromised. Many GPs reported challenges around a lack of services for onward referral of patients, or limited capacity for diagnostic testing.

Almost half (47%) of doctors identified workloads as one of the contributory factors. Doctors who regularly feel unable to cope with their workloads are much more likely to have seen patient safety or care compromised than those who feel unable to cope less often – half (49%) compared with around a fifth (21%). This will need close attention as workloads mount in the coming months.

Figure 20: Proportion of doctors who said a situation or situations had arisen in which patient safety or care was compromised in 2020

During 2020, has a situation or situations arisen in which you believed that a patient's safety or care was being compromised when being treated by a doctor?



n = 3,693 (all doctors), 'the Barometer survey 2020', QC6

Box 4: Concerns raised to us regarding fitness to practise during the pandemic

We received fewer concerns relating to a doctor's fitness to practise between January and June in 2020 than in all preceding years to 2017 (Figure 21). January to June 2020 also had the largest number of concerns raised that did not relate to any doctor's fitness to practise.

Moderate increase in proportion of concerns coming from the public during the pandemic

There's been a very limited amount of change in the composition of the concerns we've received during the pandemic. Of all the concerns we received between 1 January 2019 and 30 June 2019 that related to a doctor's fitness to practise, two thirds (66%) came from the public. This increased moderately in the same period of 2020 to 72%, while all other sources contributed roughly similar proportions of concerns during the same period.

Concerns received during the first six months of 2020 were about broadly similar types of issues to those received in the first six months of previous years. However, concerns that had not yet been categorised – the 'No allegation recorded' group – were markedly higher in June 2020 owing to the insufficient time to categorise all the cases received.

It's too early to comprehensively analyse if and how the pandemic has affected the volume and type of concerns we receive about doctors. However, early indication appears to show there's no notable difference.

Figure 21: Concerns about a doctor's fitness to practise received between January and June each year

The state of medical education

Data relates to the early stages of the coronavirus (COVID-19) pandemic, from March to May 2020.

85% of trainees and 73% of trainers said their organisation provided a supportive environment for everyone.

Most trainees (87%) continue to rate their clinical supervision as 'good' or 'very good'.

Around

7,000

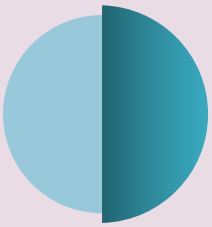
final year students were provisionally registered to fill 4,662 newly-created FiY1* posts between April and July 2020. These posts gave frontline services extra support and may have helped better prepare doctors for their first substantive foundation post.

* Foundation interim year one

74% Three quarters of trainees (74%) and trainers (78%) said training was disrupted.

81% Most trainees (81%) and trainers (88%) felt opportunities to gain required curriculum competencies were reduced.

43% Nearly half (43%) of trainees were partly or fully unable to complete their planned rotations for 2019/20.



Over half (52%) of trainees were concerned about personal safety during the pandemic.

Over a quarter (28%) of trainees felt their concerns about personal safety were not fully addressed.

Chapter summary

During the spring peak of the coronavirus (COVID-19) pandemic, almost all trainees and trainers experienced changes in their day-to-day roles.

In the national training survey (NTS) 2020:

- Most trainees (95%) said their day-to-day work was affected either 'slightly' (38%) or 'significantly' (57%) between March and May 2020.
- The majority of trainers (98%) said their work changed either 'slightly' (20%) or 'significantly' (78%).
- Around two fifths of trainees (41%) said their workload increased, while roughly the same proportion (39%) said it became lighter. Even in these circumstances, trainees still rated key aspects of their education highly.
- Nearly nine out of ten (86%) trainees described their clinical supervision as 'good' or 'very good'.
- Four out of five trainees (84%) agreed that their department, unit or practice encouraged a culture of teamwork between all healthcare professionals.
- Four out of five trainees (78%) felt that they were a valued member of their team.
- Trainees indicated that clinical leaders and senior doctors were often more visible and accessible.*

However, as expected, formal training and learning opportunities were significantly affected by the pandemic.

- Around three quarters of trainees (74%) and trainers (78%) said their training, or their role as a trainer, was disrupted.
- This had negative consequences for most trainees, especially in terms of limiting their opportunities to gain required curriculum competencies.†

Over half (52%) of all trainees were concerned about their personal safety, or that of their colleagues, during the spring peak of the pandemic. A quarter (24%) felt their concerns were only partially addressed and 3% reported that they weren't addressed at all.

In April 2020, foundation interim year one (FiY1) posts were created to lessen anticipated workforce pressures.

- We brought forward provisional registration for almost 7,000 UK medical school graduates, so they were eligible for these posts.
- 4,662 FiY1 posts were filled between April and July 2020.
- Nearly three quarters (72%) of FiY1 doctors worked in areas where there were confirmed or suspected cases of COVID-19.

* Read more about the results of 'the Barometer survey 2020' in chapter 4, from page 131.

† Read more about the potential long-term effects of this disruption to training in chapter 4, from page 148.

This chapter will draw on high-level NTS findings and additional education data to first highlight the major changes to medical education during the spring peak of the pandemic.

We also consider the impact on the provision of training, the training environment, and trainees' and trainers' wellbeing.

Introduction

The state of medical education in 2020 is trickier to summarise than in previous years. Perhaps unsurprisingly, it seems that the predominant experience for postgraduate trainees and trainers, medical schools and students was change and disruption.

Such change and disruption, however, led to some positive developments – especially around multi-professional team working and innovation in delivering patient care. It is likely that many of the lessons learnt during the pandemic will shape the future delivery of training and be embedded in best practice.

The spring peak of the pandemic significantly disrupted formal training and led also to the cancellation or postponement of many postgraduate exams and summative assessments.

As in the medical profession more widely, the range of experiences of trainees and trainers was diverse. Several factors underpinned this, such as doctors' specialties, their stage of training or seniority level, and where in the UK they were practising. However, it's too simplistic to suggest that all doctors working in a particular specialty or in a certain region or country had similar experiences of the pandemic.

The pandemic also affected undergraduate education. It disrupted teaching and exams and medical schools had to adapt assessments for online delivery.

Final year students who met the requirements of their degree were able to graduate and gain provisional registration earlier than normal. This was so these students could provide much-needed support to the workforce as new foundation interim year one (FiY1) posts.

Box 5: An introduction to the national training survey 2020

Every year we survey trainees and trainers to get their views on postgraduate training and the environments they work in. We use the results to work with Health Education England local teams, the Northern Ireland Medical & Dental Training Agency, NHS Education for Scotland, Health Education and Improvement Wales, royal colleges and employers to explore challenges, share good practice and help develop supportive and inclusive training environments.

Throughout the pandemic, we've done all we can to help the UK's health services and doctors prioritise frontline patient care. As part of this, we decided to postpone the 2020 survey from its original launch date in March. In the months that followed, we worked closely with key partners across medical education to plan a new approach. Together, we agreed that it would be beneficial to run a shorter, targeted survey from 22 July to 12 August.

The 2020 survey focused on how the initial peak of the pandemic affected doctors in training and their trainers. We asked about how working practices and training changed, and we added new questions to help us understand the impact on wellbeing and support. We also included our usual questions on workload and burnout.

Over 38,000 doctors completed this year's survey, around half of all trainees (47%) and a fifth of all trainers (22%).

You can explore the results in more detail using our online reporting tool.

The major changes to education and training

Medical schools adjusted final assessments and graduation arrangements to allow final year students to graduate amid the disruption caused by the pandemic

In May 2020, we surveyed 36 medical schools about changes they made to final assessments and graduation arrangements for the 2019/20 student cohort. We wanted to understand:

- the extent to which medical schools were affected by the disruption
- how approaches differed and were similar across medical schools
- how other elements of final year programmes, such as placements, were changed.

Of the 36 schools surveyed, 16 had delivered all knowledge and clinical skills assessments before the pandemic, so they were able to graduate their students without changes to the assessment programme. Out of the remaining 20 schools, three were unaffected due to having no final year students, 12 had not yet delivered their final knowledge assessment and 15 had outstanding clinical skills assessments. Ten medical schools had both types of assessments outstanding.

Where final assessments had not been delivered before the pandemic, medical schools reported that they used a range of approaches to determine whether students had met the standards set out in 'Outcomes for graduates 2018'.[45]

Some medical schools cancelled the formative and summative clinical skills assessments in their programmes and either cancelled or reorganised placements. Generally, teaching moved online for all undergraduate cohorts from mid-March 2020. From September, many medical schools then resumed their in-person teaching.

The creation of FiY1 posts gave frontline services extra support and may have helped better prepare doctors for their first substantive foundation post

In April 2020, FiY1 posts were created to lessen anticipated workforce pressures. This meant that final year students could join the medical register earlier than usual, as long as they had met the requirements of their degree. This required rapid coordination between us and medical schools and postgraduate bodies across the UK.

We emailed all final year UK medical students in early April 2020 and invited them to apply for provisional registration. Non-UK graduates who had a place on the UK Foundation Programme in 2020 were also eligible for provisional registration. As soon as final year medical students graduated and we confirmed they were fit to practise, we granted them provisional registration.

By 30 June 2020, we granted 6,868 UK graduates with provisional registration.* However, not all of those who were registered went on to work as FiY1 doctors.

* Read more about the number of doctors who joined the medical register in chapter 3, from page 95.

The UK Foundation Programme (UKFPO) worked with foundation schools to allocate new doctors to available posts. These FiY1 doctors started work earlier than expected, in newly created posts, often without completing all summative assessments or having a graduation ceremony, all during a time of global crisis.

In May 2020, we began working with a group of researchers led by Newcastle University to understand these doctors' motivations and experiences, as well as how the role affected their wellbeing and prepared them for the start of postgraduate training.

1,448 UK 2020 graduates have participated in this research. Of these, 73% said they had worked as an FiY1 and 25% had not.* With 4,662 FiY1 posts filled at some point between April and July 2020, we therefore have data from approximately 23% of those who took up a post.

The primary motivations for working as an FiY1 doctor involved altruism and personal benefit

When participants signed up to the research, they were asked why they had or hadn't taken up an FiY1 post (Figures 22 and 23).

The most common reason eligible graduates gave for choosing to apply for an FiY1 post was to learn, and gain experience and confidence. This motivation was often accompanied by the expectation of being supported and having an easier transition to the Foundation Programme.

Another important motivation was altruism, including the desire to be useful, to help the healthcare systems, and to be part of the efforts to tackle the pandemic. The financial incentive was also mentioned, either as a welcome add-on or as a necessity to cover living costs.

Avoiding inactivity and boredom was also a common motivation, coupled with the idea that working would offer an opportunity to socialise – or simply leave the house – during lockdown, and/or the realisation that there was a lack of alternatives due to the cancellation of electives or holidays.

Finally, some responses conveyed a sense of obligation, linked to feelings of direct or indirect pressure from peers, including the fear of falling behind or wanting to emulate peers, and from medical schools, families and the media.

* A further 24 participants had not yet graduated when they signed up and, while they probably did not do an FiY1 post, this cannot necessarily be assumed. Two respondents to the August 2020 questionnaire did not respond to this question.

Figure 22: Motivations for undertaking an FiY1 post

Did undertake an FiY1 post	References
Learning gain • Experience • Easier transition to foundation year 1 • Keep updated and not de-skill • Prospect of (more) supervision • Gain confidence	603
Altruistic reasons • Intrinsically motivated • Responsibility • Feel useful • Give back to NHS/medical school • Duty to help • Being part of pandemic effort • Staff shortages	380
Financial gain • Need to have a job/money/pay off student loan	280
No alternative to avoid boredom • Elective cancelled	275
Obligation • Extrinsically motivated • Peer pressure • Emulating other peers • Not wanting to 'fall behind' (other peers) • University expectation • Family expectation • Media expectation	167

n = 1,448 (all respondents), Newcastle University-led research on 2020 UK graduates

Figure 23: Reasons for not undertaking an FiY1 post

Did not undertake an FiY1 post	References
Wanted to but no posts available • Poor communication • Lack of information • Low numbers of COVID-19 • Occupational health restrictions	66
Logistical issues • Commute • Caring responsibilities • International travel, visas • Quarantine	36
Fear of illness for self or others • Fear of contracting COVID-19 • Protecting oneself and others • Avoiding burnout • Being at risk due to personal health condition/wanting to shield family members or others • Pregnancy • Black and minority ethnic (BME) graduate feeling at risk • Concerns due to lack of personal protective equipment (PPE)	36
Taking a break • Rest, holiday • Recharge after exams, have some time off, and be ready to start clinical work • Spend time with family	31
Exams (medical school, Prescribing Safety Assessment, US medical board exams)	15
Contributing to NHS in another way (as other paid healthcare professional role, volunteer)	7

n = 1,448 (all respondents), Newcastle University-led research on 2020 UK graduates

Many respondents who did not undertake an FiY1 post stated they wanted to do so, but could not. Reasons included a lack of posts available to them, due to limitations on where they could apply to, as well as a variation in the need for FiY1 roles at national level in line with the regional differences in the intensity of COVID-19 outbreaks.

Some also cited a lack of effective communication, for example from Foundation Schools or local education providers, as a factor. Logistical issues that went beyond organisational or structural levels were also mentioned. These included international trainees being unable to relocate to the UK in time due to lockdown restrictions, the need to quarantine, or having caring responsibilities.

Fear of illness was also commonly cited by those who didn't take up an FiY1 post. This was linked to an existing personal health condition, vulnerable family members, concerns of developing burnout, a perception of increased risk due to being from a BME background, and concerns around a lack of PPE.

Some respondents said that they wanted to take a break and recharge after exams before starting clinical work and/or spend some time with family. Finally, some mentioned exams and others were already contributing to the health system in another way (eg in another paid healthcare professional role or as a volunteer).

FiY1 doctors worked in a variety of clinical areas, but mostly in medical wards and most had contact with patients who tested positive for COVID-19

Based on the first questionnaire,* half of FiY1 doctors (50%) reported that their work intensity was 'about right', 28% felt it was 'light' or 'very light' and 22% said it was 'heavy' or 'very heavy'.

Figure 24 shows the settings in which FiY1 doctors worked. Most (62%) worked in medical wards and over a quarter (28%) said they worked in multiple settings.

Nearly three quarters (72%) of FiY1 doctors worked in areas where there were confirmed or suspected cases of COVID-19. Of these, 42% had worked in COVID-19 specific areas and 83% in areas that were not reserved for COVID-19 patients (FiY1s could work across multiple settings).

Seven out of ten (70%) of those who worked in COVID-19 areas felt that they had appropriate PPE 'all the time', 28% said this was the case 'sometimes', and 2% said 'none of the time'.

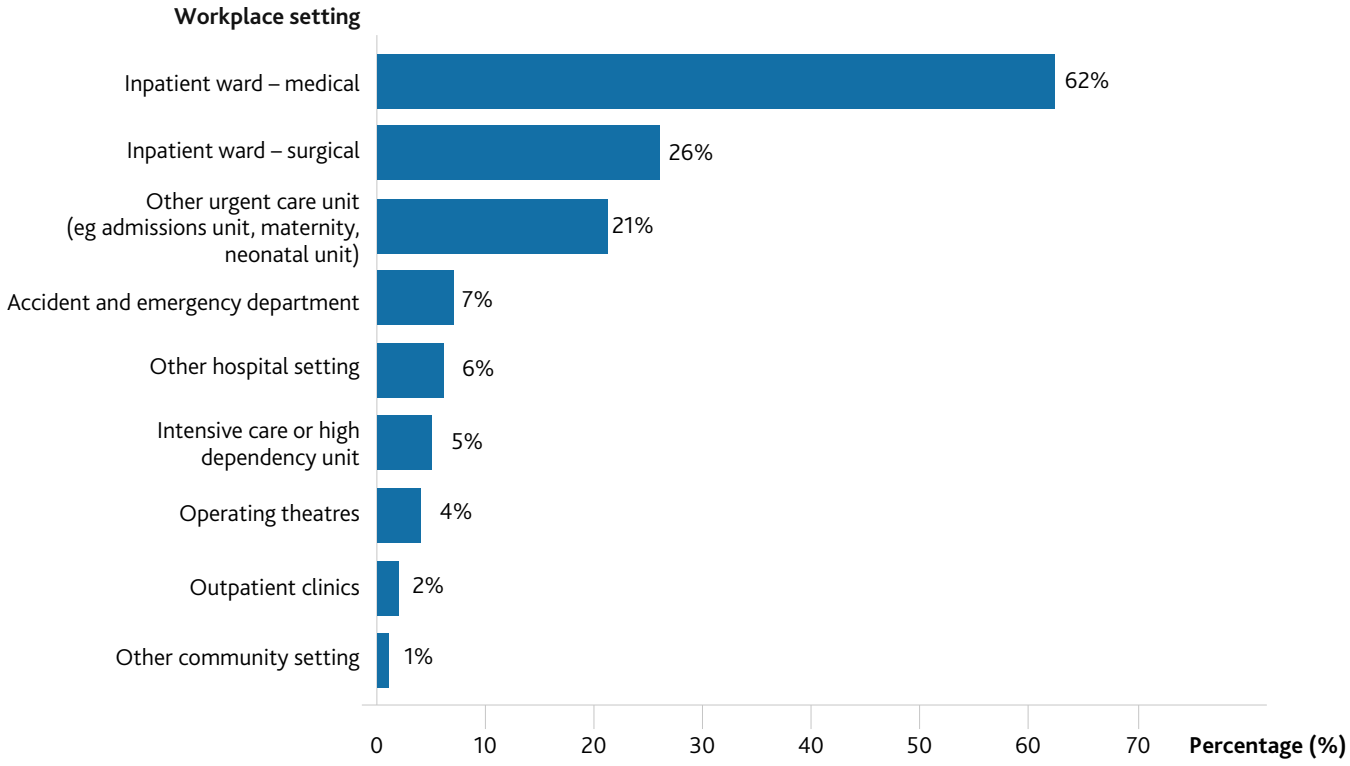
* Subsequent questionnaires capturing the experiences of this cohort of graduates later in 2020 will form part of the final analysis.

We are keen to establish whether, as they progress through their postgraduate career, these FiY1 doctors feel:

- more prepared
- more tolerant of ambiguity
- they have better wellbeing measures than those who did not take on this role.

Early analysis suggests that, upon starting foundation year one in August 2020, those who had worked in non-FiY1 roles or hadn't done any clinical work since April 2020 reported lower levels of preparedness than those who did work as FiY1 doctors. *This research is ongoing and more detailed findings will be published at a later date.

Figure 24: The workplace settings of FiY1 doctors



n = 461, Newcastle University-led research on 2020 UK graduates

* Responses to the following question are referred to as an overall measure of preparedness: 'how much do you agree with the statement "I felt adequately prepared for my first F1 post"?'. There was a significant effect of role, with lower preparedness reported by those who had worked in non-FiY1 roles (beta=-0.65, $p < 0.0001$) and who had no clinical work since April (beta=-1.00, $p < 0.0001$).

Postponing postgraduate rotations affected the provision of training, particularly for trainees in the Foundation Programme

In March 2020, all postgraduate training rotations due to take place from April to July were postponed. This would have involved over 20,000 trainees moving to new workplace settings at an already pressured time for healthcare services.

This decision had potential benefits for trainees in that it removed the need for departmental inductions or to adjust to a new post, team or working environment. However, some doctors may have been disappointed about missing a planned rotation, especially those at the start of postgraduate training who wanted to experience different specialties before choosing their ultimate career pathway.

We recognise that there may also have been advantages for some doctors in a longer placement, in terms of becoming more embedded in their teams or an organisation, and becoming more competent in a particular area of work.

The NTS 2020 found that a fifth (20%) of trainees were unable to complete their planned rotations for the 2019/20 training year. A further quarter (24%) were only partly able to do so. Of those trainees who could not complete or only partially completed their planned rotations, 84% said their training was disrupted. Notably, among those trainees who were able to complete planned rotations, 66% still reported disruption.

The postponement of the April to July rotation particularly affected foundation trainees. Half of this cohort (49%) weren't able to complete their planned rotations for the year and a third were only partly able to do so (33%). Trainees in these earlier stages of postgraduate programmes often have shorter and more frequent rotations, across a wider range of specialties, than those further along the pathway, so the potential for disruption was always greater.

Many trainees were redeployed to different specialties or sites as a result of the pandemic.* To facilitate this, we approved around 550 additional training locations, so doctors working at them could count this experience towards their training progression.

There were substantial changes to trainees' and trainers' day-to-day work and workload

During the spring peak of the pandemic, almost all trainees and trainers experienced changes in their role. Among trainees, 95% said their day-to-day work changed either 'slightly' (38%) or 'significantly' (57%). And 98% of trainers said their day-to-day work changed either 'slightly' (20%) or 'significantly' (78%).

This experience of change was common to trainees working in all specialties (Figure 25). Between 89% and 98% of trainees, so at least nine out of ten, in each specialty reported a slight or significant change.

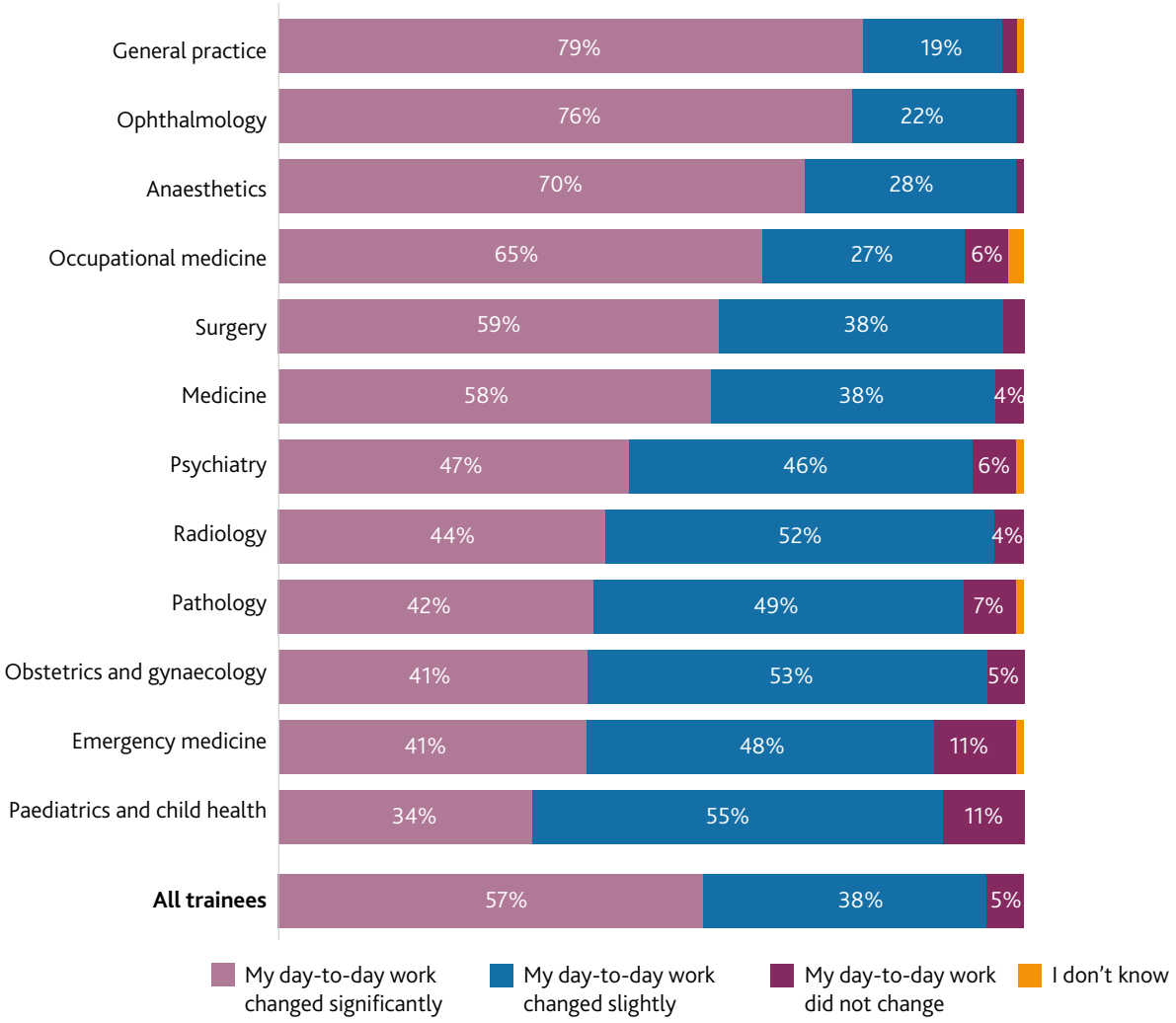
* Read more about redeployment of doctors during the coronavirus pandemic in Box 2 on page 29.

A much higher proportion of trainees in general practice (79%), ophthalmology (76%) and anaesthetics posts (70%) reported a significant change. And a higher proportion of trainees in their third year of specialist training year reported a significant change, compared with all other training levels.

Conversely, a lower proportion of trainees in paediatrics (34%), emergency medicine (41%), and obstetrics and gynaecology (41%) reported significant changes to the nature of their work.

Figure 25: Changes in the day-to-day work of trainees, split by post specialty

To what extent (if at all) did your day-to-day work as a doctor change as a result of the COVID-19 pandemic?

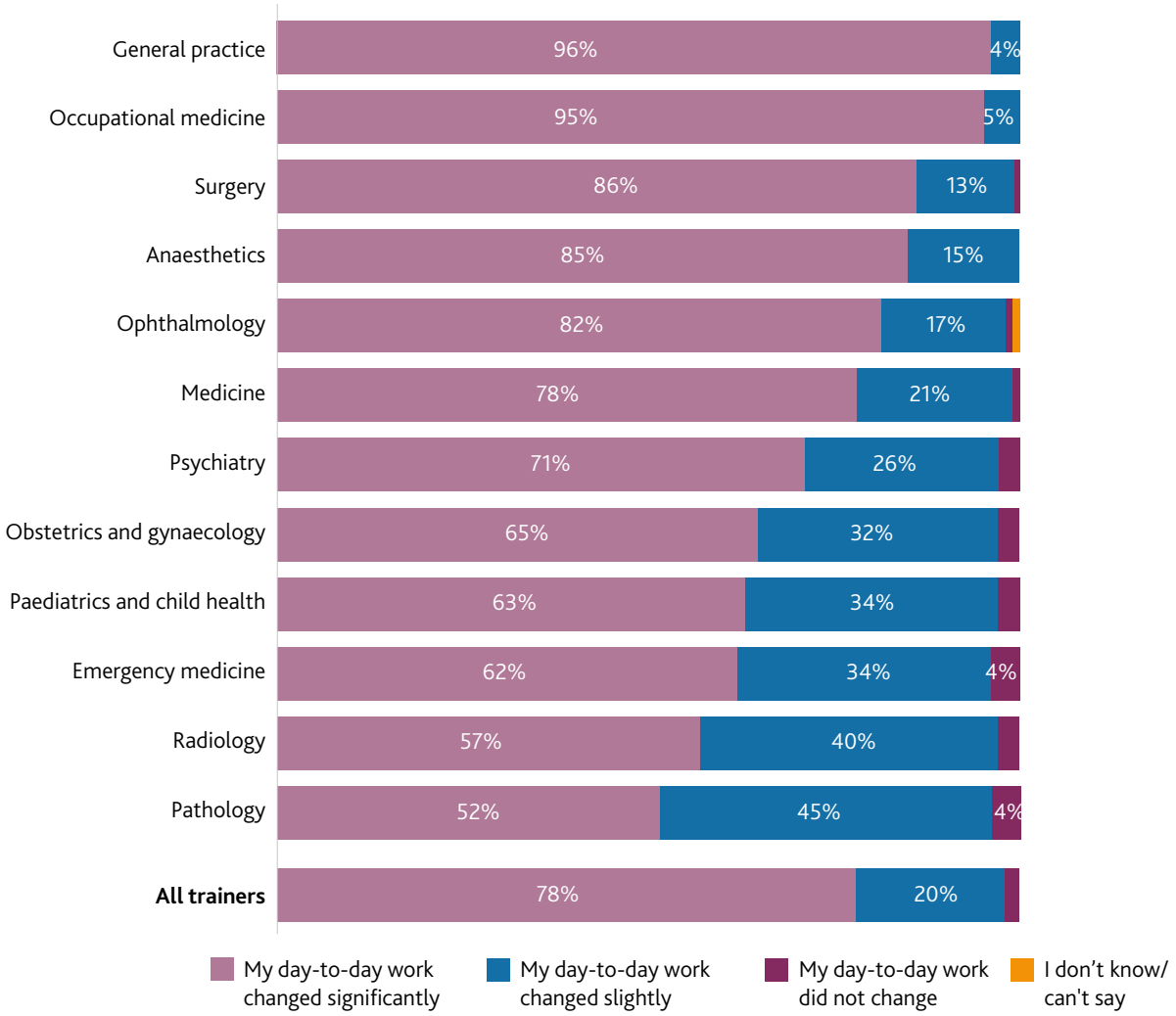


n = 28,042 (all specialties), NTS 2020

Trainers perceived their day-to-day work to have changed to an even greater extent than trainees. At least 95% of trainers in each specialty experienced some form of change. A higher proportion of trainers in general practice (95%) and occupational medicine (94%) said their day-to-day work changed significantly (Figure 26).

Figure 26: Changes in the day-to-day work of trainers, split by specialty

To what extent (if at all) did your day-to-day work as a doctor change as a result of the COVID-19 pandemic?



n = 10,785 (all specialties), NTS 2020

A significant change in day-to-day work is associated with heavier workloads, disruption to training, and reduced opportunities to gain curricula competencies (Figure 27).

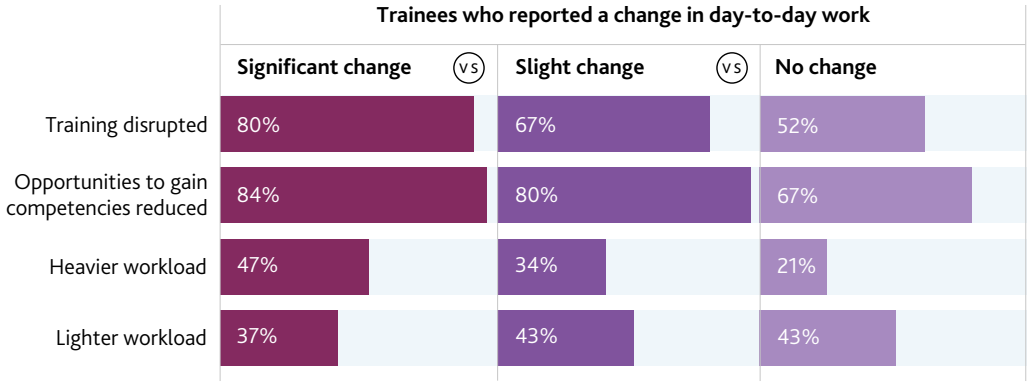
Almost half (47%) of all trainees who reported a significant change in their role said their workload became heavier during the spring peak of the pandemic, compared with a third of those (34%) who experienced a slight change and a fifth of those (21%) whose role did not change.

Four fifths (80%) of those whose role changed significantly said their training was disrupted, compared with half (52%) of those who experienced no change in role.

Four fifths (80%) of trainees said their workload changed in some way during the spring peak of the pandemic (Figure 28). There was an almost even split between those who said their workload was lighter (39%) and those who felt it became heavier (41%). Only 17% of trainees reported no change.

Figure 27: Relationship between change in day-to-day work and other NTS measures

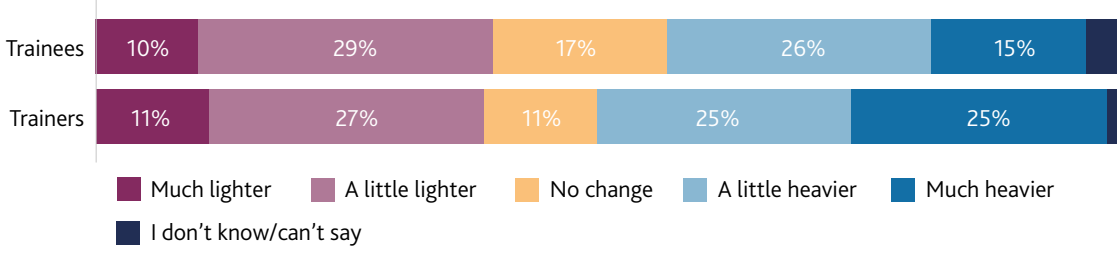
Overall, how (if at all) was your workload affected by the COVID-19 pandemic?



n = 28,042 (all trainees)

Figure 28: Change in workload of trainees and trainers

Overall, how (if at all) was your workload affected by the COVID-19 pandemic?



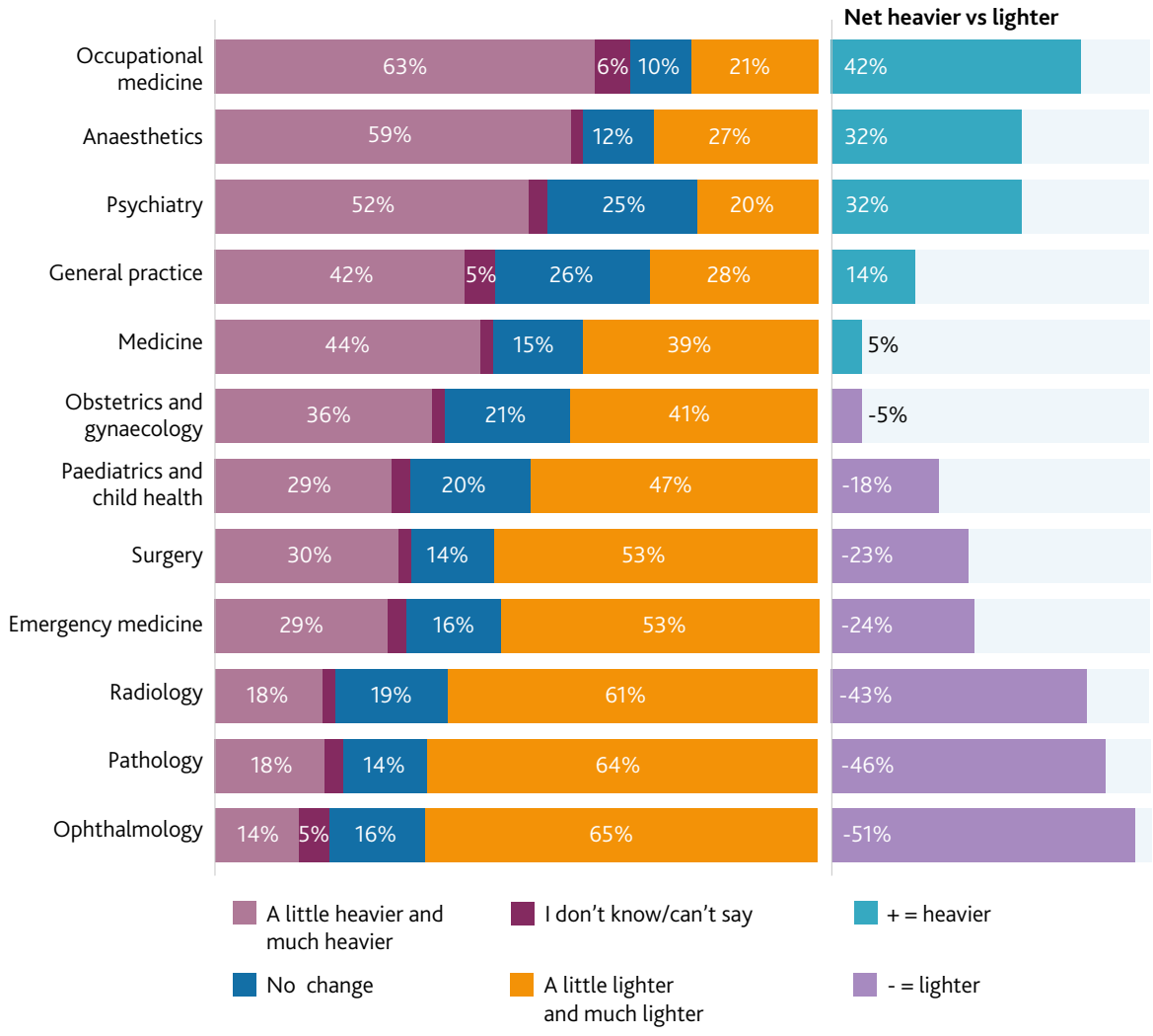
n = 28,042 (all trainees); 10,785 (trainers), NTS 2020

A higher proportion of trainees in occupational medicine (63%) and anaesthetics (59%) felt their workload was heavier. Whereas in ophthalmology (65%), pathology (64%) and radiology (61%), a higher proportion reported a lighter workload. Figure 29 also shows the difference between net heavier workloads and net lighter workloads by post specialty.

There was also some variation between doctors at different stages or routes of their training. Around half of all core trainees (49%) said their workload was heavier, compared with 43% of foundation trainees and 39% of trainees in specialist training.

Figure 29: Change in trainee workload, split by post specialty, with difference between net heavier and net lighter responses

Overall, how (if at all) was your workload affected by the COVID-19 pandemic?

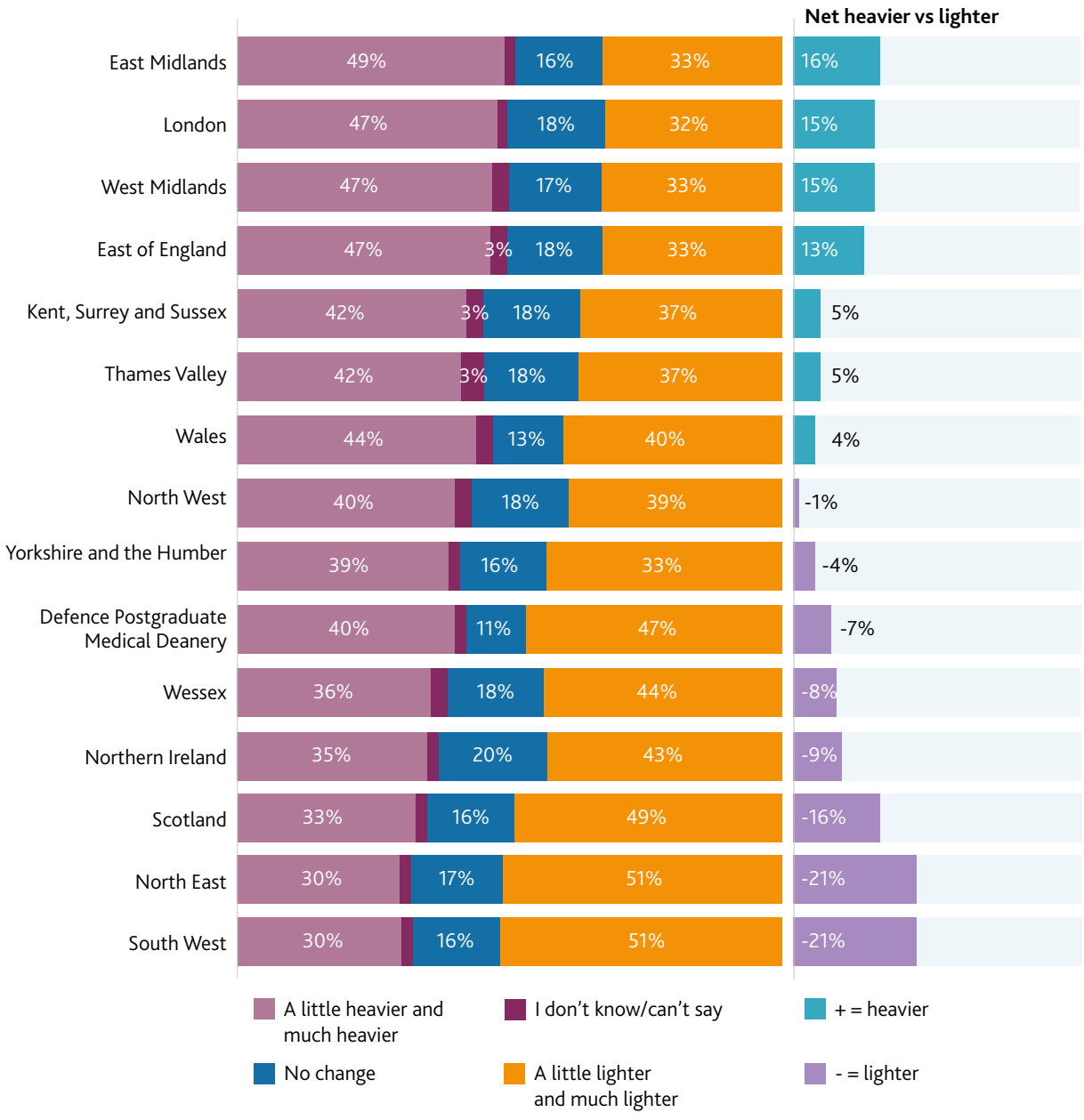


n = 28,042 (all trainees), NTS 2020

A higher proportion of trainees reported a shift to lighter workloads in regions or countries where the coronavirus was less prevalent, such as the North East and South West of England, and Scotland (Figure 30). Conversely, heavier workloads were reported by a higher proportion of trainees in the East Midlands (49%), London (47%), the West Midlands (47%) and the east of England (47%).

Figure 30: Change in trainee workload, split by UK region/country, with difference between net heavier and net lighter responses

Overall, how (if at all) was your workload affected by the COVID-19 pandemic?



n = 28,042 (all trainees), NTS 2020

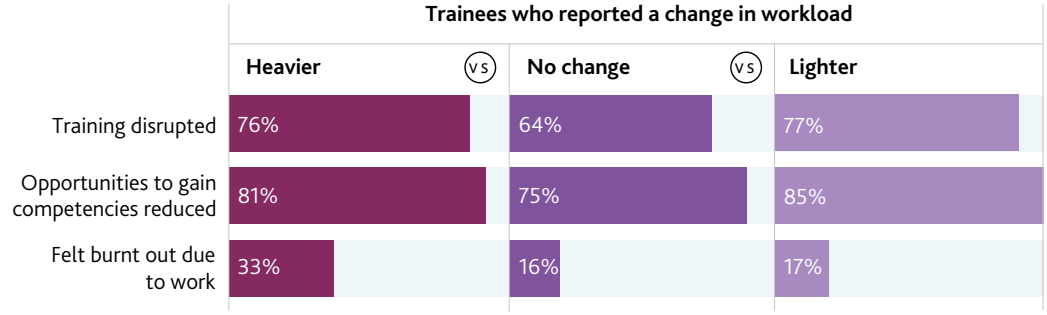
It's important to note that even in the parts of the UK where a higher proportion of trainees reported an increase in workload, there was still a significant proportion who felt that they had a lighter workload – and vice versa.

Overall, most trainees reported that their training was disrupted and there were limited opportunities to gain competencies, whether their workload became heavier, lighter or did not change (Figure 31).

Trainers also showed differences in their perceptions of how their workload changed as a result of the pandemic (Figure 32). Half (50%) reported that it became heavier and over a third (38%) said it was lighter. Around one out of ten (11%) thought there had been no change. Compared with other specialties, a higher proportion of trainers in emergency medicine (65%) and surgery (62%) reported a lighter workload, while 68% of trainers in anaesthetics reported a heavier workload.

Figure 31: Relationship between change in trainee workload and other NTS measures

Overall, how (if at all) was your workload affected by the COVID-19 pandemic?



n = 28,042 (all trainees), NTS 2020

There was a net reduction in trainees' and trainers' overall intensity of work in 2020 compared with 2019 (Figure 32). However, direct comparisons with previous years' surveys should be treated with caution given the exceptional circumstances in which doctors were working, as well as the changes to the timing and broader focus of the NTS.

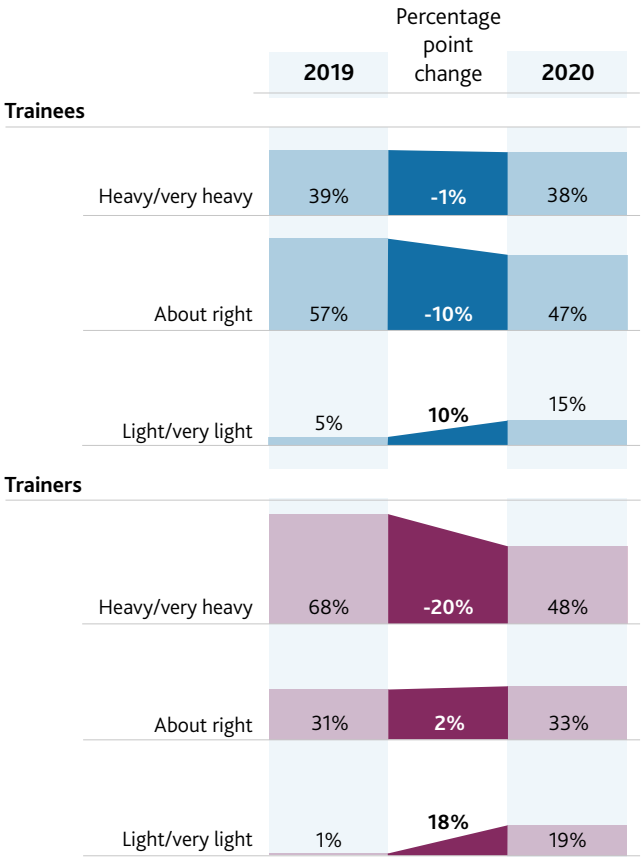
As highlighted in 'The state of medical education and practice in the UK 2019',[26] there has been a small but sustained year-on-year reduction – of around one to two percentage points – in trainees reporting a 'heavy' intensity of work since 2016.

However, the change from 2019 to 2020 – from 'about right' to 'light' for trainees, and from 'heavy' to 'light' for trainers – is stark.

Reductions in the intensity of work may reflect that some specialties or regions saw fewer patients as a result of the pandemic. Some doctors were also redeployed to frontline specialties and additional support was given by FiY1 doctors and doctors with temporary registration. As such, these NTS 2020 reductions are unlikely to be indicative of the longer-term trend we identified in the NTS 2019.

Figure 32: Year-on-year comparison of trainees' and trainers' intensity of work

Overall, how would you rate the intensity of your work?



n = 28,042 (2020 trainees); 10,785 (2020 trainers), 53,477 (2019 trainees), 21,812 (2019 trainers), NTS 2019–2020

The data are perhaps better viewed as another illustration of the changes to working conditions that trainees and trainers experienced in 2020. Indeed, of those trainees who described the intensity of their work as heavy, 74% told us the pandemic increased their workload; of those who described the intensity of their work as light, 92% said the pandemic decreased their workload.

When viewed by post specialty, a higher proportion of trainees in emergency medicine (48%) and anaesthetics (47%) described the intensity of their work as heavy. Comparatively, fewer than a fifth of trainees in radiology (18%), ophthalmology (16%) and pathology (13%) said the same. From the trainer perspective, almost three fifths of those in anaesthetics (57%), general practice (56%) and psychiatry (56%) said their work was heavy. Conversely, just under two fifths of trainers in surgery (37%) and pathology (38%) described the intensity of their work as light.

In summary, trainees and trainers experienced significant changes in their role because of the pandemic – and this clearly affected workload. However, changes in workload were experienced differently across the profession. Across the UK, there was an even split between doctors who reported heavier workloads and those who experienced lighter workloads. Breaking this data down by specialty, stage of training, and region gives an indication of some of the areas that were more affected. But, as the figures in this chapter show, even within those defined subgroups there were contrasting experiences.

The impact on the quality of training and patient safety

The pandemic disrupted training and reduced opportunities for trainees to gain required competencies

The NTS 2020 confirms that the provision of formal training was significantly affected by the pandemic. Three quarters of trainees (74%) and trainers (78%) said their training, or their role as a trainer, was disrupted.

There was considerable variation by post specialty. At least 60% of trainees in every specialty, except occupational medicine (44%), said that their training was disrupted. A greater proportion of trainees in ophthalmology (87%), surgery (85%), and obstetrics and gynaecology posts (82%) shared this view. Among trainers, those in surgery (90%) and ophthalmology (89%) were the worst affected.

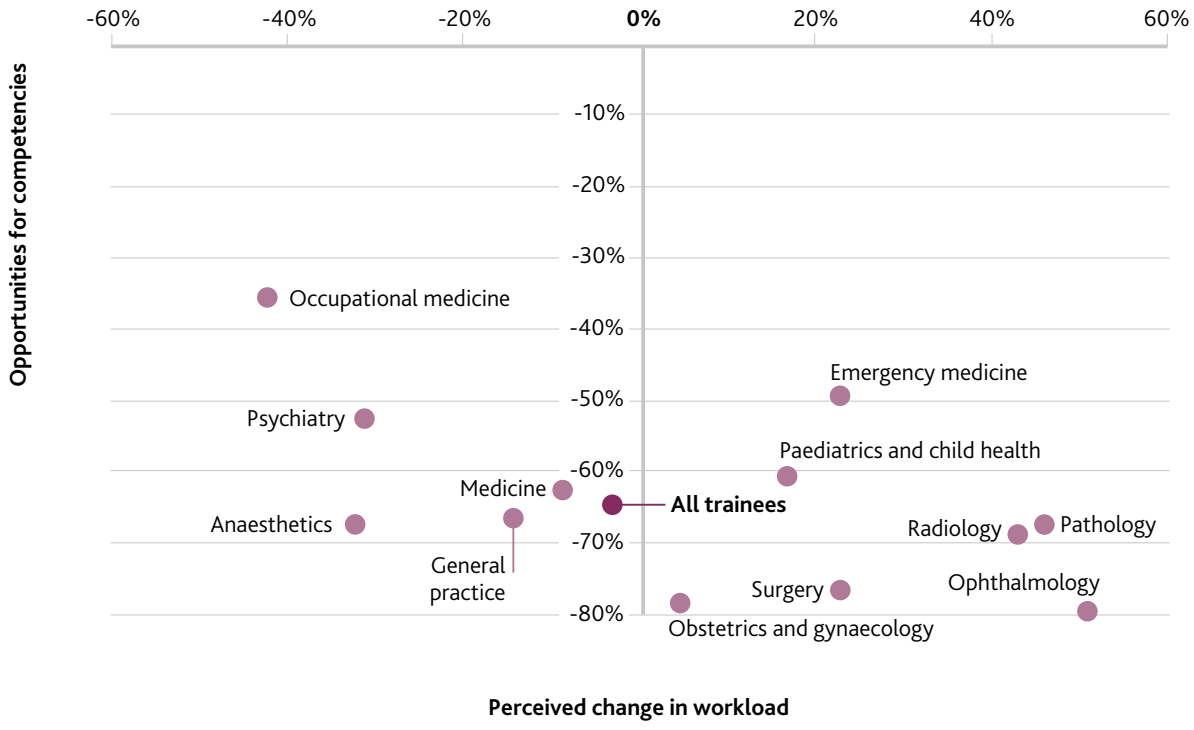
This disruption has also affected certain training levels more than others. A greater proportion of trainees in the first and second years of core training (84% and 80% respectively) reported disruption. Nonetheless, at least two thirds of doctors at each level of training shared this experience.

Over a third (38%) of trainees felt that the pandemic significantly reduced their chances to gain the required curriculum competencies for their stage of training. A further 43% said that it slightly reduced their opportunities. Overall, 81% said their opportunities were negatively affected. Again, a greater proportion of trainees in ophthalmology (89%), surgery (88%), and obstetrics and gynaecology (88%) posts reported this, as did 87% of trainees in core programmes. The cancellation or postponement of exams in many programmes, especially at core training levels, may be a factor underpinning this response – as well as the effects of changing workloads and roles.

Trainers shared this concern. Nearly nine out of 10 (88%) said the pandemic 'slightly' (41%) or 'significantly' (46%) reduced their trainees' opportunities to gain the required curriculum competencies.

Figure 33 illustrates the relationship between perceived changes in trainees' workload ('lighter' vs 'heavier') and opportunities to gain curriculum competencies ('improved opportunities'/'no change' vs 'limited opportunities'), split by post specialty. The scatter plot broadly shows that opportunities to gain curriculum competencies were reduced for a greater proportion of trainees in specialties where workload was, overall, said to have become lighter.

Figure 33: The relationship between trainees' perceptions of changes to workload (net lighter vs net heavier) and opportunities to gain curricular competencies (net positive vs net negative responses), split by post specialty



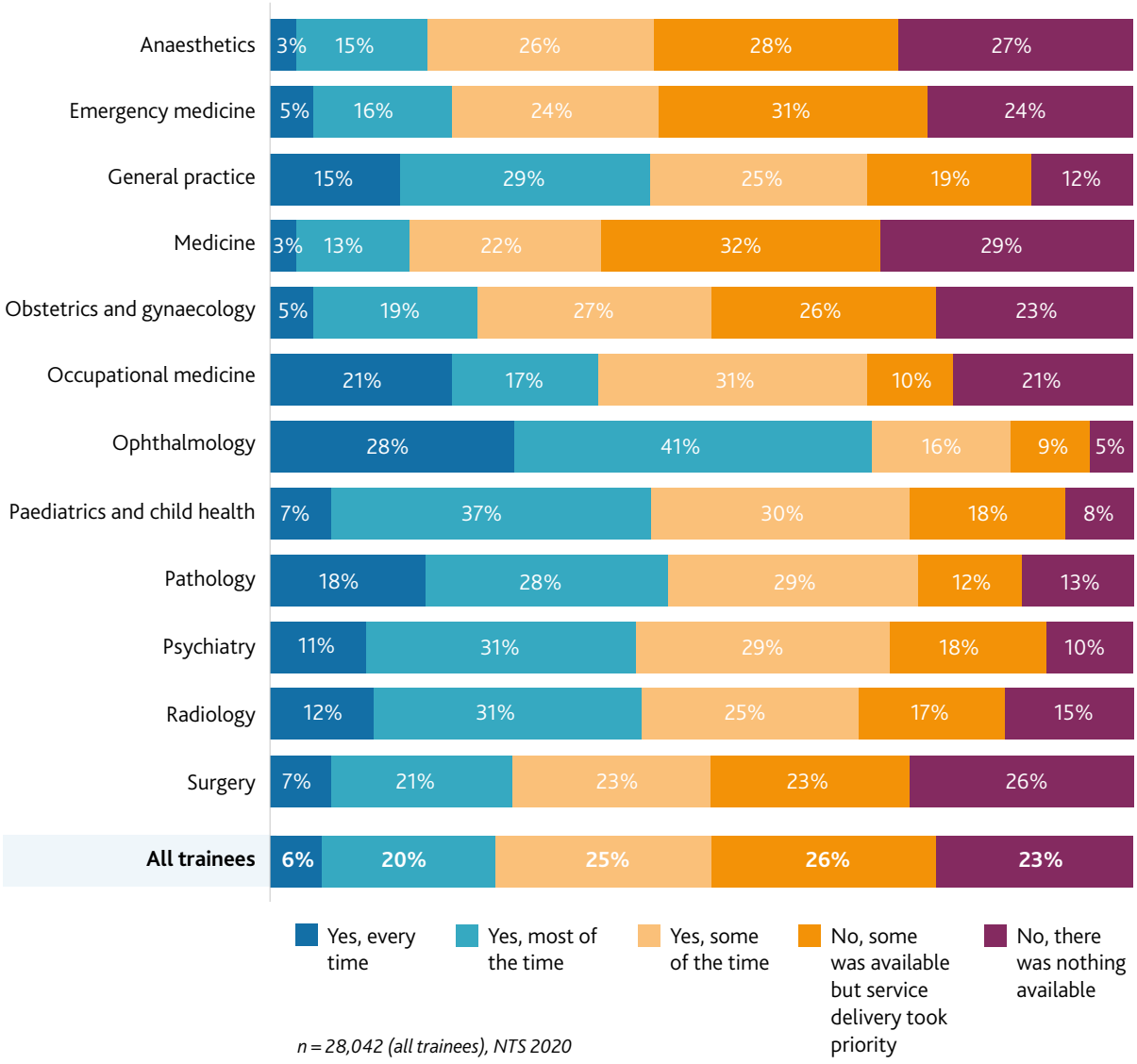
n = 28,042 (all trainees), NTS 2020

Almost a quarter (23%) of trainees had no access to local teaching opportunities. A further quarter (26%) reported that service provision took precedence over local teaching. Trainees working in frontline specialties, such as anaesthetics, surgery, medicine, and emergency medicine, were particularly affected by this (Figure 34).

Trainees in some specialties that encountered disruption to training responded more positively when asked about local teaching. For instance, 87% of trainees in ophthalmology posts said that their training was disrupted by the pandemic, but 69% said they could 'always' (28%) or 'mostly' (41%) access local teaching – far more than any other specialty group.

Figure 34: Trainees' access to local teaching, split by post specialty

Were you able to access local teaching opportunities during the stated time period?



n = 28,042 (all trainees), NTS 2020

This emphasises the diversity of experiences in 2020. While we can confidently assert that training was disrupted for almost all trainees, there are various stories and underlying contexts concealed in this picture.

The experiences of trainees and trainers were diverse, and formal training is not the only form of learning

It's important to acknowledge the range of experiences caused by the pandemic. Trainees in some specialties or parts of the UK may have missed out on training opportunities because their workload increased and/or their role was primarily focused on treating COVID-19 patients. Yet, in other specialties or regions, a lack of opportunities may have been due to a decline in patients to observe or treat.

Trainees with reduced workloads may have seen practical opportunities diminish, but, in some cases, this may have given them some more time to access local or online teaching. While redeployment and cancelled rotations disrupted planned training and limited the opportunities for gaining required competencies, trainees are likely to have developed different skills in their substitute environments.

There is a broad trend emerging from the NTS 2020 that doctors at the start of the training pathway – especially those in core training – experienced more profound disruption. It's possible that this simply reflects the broader diversity of specialty rotations and curricula coverage at these stages of training.

It's also important to recognise that formal training is not the only form of learning. The survey suggests that aspects of postgraduate education are still in place and functioning effectively. Most trainees (87%) continue to rate the quality of clinical supervision as 'good' or 'very good'. This is consistent with the results of the previous three surveys.

When asked directly about a change in the quality of clinical supervision, half (48%) of trainees said it remained the same, and a quarter (26%) said it improved, although a fifth (22%) thought it deteriorated. Trainees in anaesthetics posts were a notable outlier. Two fifths (43%) reported that supervision improved, with 17% describing it as 'much better' (compared with 10% across all specialties).

Over three quarters (78%) of trainees said that they were never supervised by someone who wasn't competent to do so. However, 9% said this happened at least once a month – a two percentage point increase compared with 2019.

Over half of all trainees (53%) reported that they never felt forced to cope with clinical problems beyond their competence or experience – although a fifth (22%) said this happened at least once a month (a six percentage point increase compared with 2019).

Box 6: Tracking the specialty stories

This chapter has provided more granular breakdowns of several of the NTS 2020 questions, showing differences by post specialty, training level and UK region or country. The following table (Figure 35) gives an overview of how the spring peak of the pandemic affected trainees working in different types of posts.

Looking at five key measures – perceived change in workload, burnout, disruption to training, opportunities to gain curriculum competencies, and access to local training – it shows the difference between the proportion of positive and negative responses for each measure. These are colour-coded: purple to show where positive responses outweighed negative responses; and orange to show the opposite. The percentages and shade of purple or orange show the extent of this difference.

As the table shows, most specialties had overall positives for three out of the five measures – although there was a lot of variation in the scale of these percentages. Every specialty had a negative score for disruption to training and opportunities to gain competencies, underlining the impact that the pandemic has had on training across the board.

Figure 35: Difference in net positive/negative responses of trainees for five key measures, split by post specialty

	Workload (lighter vs heavier)	**Burnout** (low risk vs moderate/high)	**Disruption to training** (agree vs disagree)	**Reduced opp. for competencies** (increased and no change vs limited)	**Access to local training** (all yes vs all no)
Anaesthetics	-32%	11%	-64%	-67%	-10%
Emergency medicine	23%	-10%	-48%	-49%	-9%
General practice	-14%	17%	-55%	-66%	38%
Medicine	-6%	6%	-65%	-63%	-23%
Obstetrics and gynaecology	5%	5%	-74%	-78%	1%
Occupational medicine	-42%	51%	-13%	-35%	38%
Ophthalmology	51%	41%	-83%	-79%	72%
Paediatrics and child health	17%	25%	-45%	-60%	47%
Pathology	46%	68%	-62%	-67%	50%
Psychiatry	-31%	29%	-37%	-52%	43%
Radiology	43%	50%	-59%	-68%	37%
Surgery	23%	13%	-79%	-76%	1%
All trainees	**-2%**	**14%**	**-61%**	**-64%**	**3%**

n = 28,042 (all trainees), NTS 2020

Most trainees and trainers had positive experiences with teamwork and communication

The NTS 2020 highlighted several positive aspects of doctors' experiences during this challenging period (Figure 36).

Most trainees (69%) and trainers (74%) felt that information relating to the pandemic was communicated effectively by senior colleagues or leaders. And over two thirds of trainees (62%) said there was a culture of listening to doctors about working practices. Trainers were slightly less positive on this latter point: over half (52%) agreed that this was the case, while a fifth (20%) disagreed.

Doctors were extremely positive about team working. Four out of five trainees (84%) agreed that their department, unit or practice encouraged a culture of teamwork between all healthcare professionals. Three quarters (74%) of trainers believed this culture was present in their employing organisation.

Four out of five trainees (78%) felt that they were a valued member of their team, and three out of five trainers (61%) felt valued by their organisation. Two thirds of both groups said staff were 'always' treated fairly. There was no significant variation in the responses to these questions by gender or ethnicity.

In the NTS 2020, we asked trainees and trainers to provide a free text comment highlighting any new or flexible working practices they'd experienced during the spring peak of the pandemic. An initial scan of the 30,000 free text comments shows that many doctors had good experiences around team working, communication and leadership. There was also widespread positivity about the switch to remote consultations/clinics, especially from those working in general practice.

85% of trainees and 73% of trainers agreed that their organisation provided a supportive environment for everyone, regardless of background, beliefs or identity. A small proportion of each cohort (5% and 8% respectively) said that this was not the case.

There was some variation in the trainee responses to this question by ethnicity. 87% of white trainees perceived their working environment as supportive for everyone, compared with 84% of trainees from a mixed ethnic group, 82% of trainees from an Asian or British Asian background, and 79% of trainees from a black or black British background. Over twice the proportion of black or black British trainees (9%) disagreed that their environment was supportive for all, compared with white trainees (4%).*

* Read more about fairness and inclusivity in clinical workplaces, and how we are addressing the ethnic attainment gap in medical education, in chapter 4, from page 138.

Figure 36: Trainees' and trainers' perceptions of workplace cultures and support

Trainees	Agree	Disagree
There was a culture of listening to doctors in training with regard to working practices (including discussions related to the COVID-19 pandemic).	62%	17%
Information relating to the pandemic was communicated effectively by senior colleagues.	69%	16%
The department/unit/practice I worked in encouraged a culture of teamwork between all healthcare professionals.	84%	7%
I felt I was a valued member of the team I worked in.	78%	9%
Staff, including doctors in training, were always treated fairly.	69%	16%
My department/unit/practice provided a supportive environment for everyone regardless of background, beliefs or identity.	85%	5%

Trainers	Agree	Disagree
Information relating to the pandemic (written and/or verbal) was communicated effectively to me by senior leaders in my trust/board (or equivalent).	74%	13%
There was a culture of senior leaders in my trust/board listening to trainers with regard to working practices (including discussions related to the COVID-19 pandemic).	52%	20%
My trust/board (or equivalent) encouraged a culture of teamwork between all healthcare professionals.	74%	10%
Staff were always treated fairly in my trust/board.	66%	13%
I felt valued by my trust/board (or equivalent).	61%	16%
My trust/board (or equivalent) provided a supportive environment for everyone regardless of background, beliefs or identity.	73%	8%

n = 28,042 (all trainees); 10,785 (all trainers), NTS 2020

While trainers were positive about teamwork and communication among the profession, a substantial proportion reported issues with the support they received related specifically to their role (Figure 37). Only a third (33%) rated the support they received as a trainer as 'good', with around a fifth (18%) describing it as 'poor'.

When asked how the pandemic affected this support, two fifths (39%) of trainers thought it got worse. Half (48%) said there was no change and 7% felt it improved. Nearly half of all surgery (45%) and anaesthetics (46%) trainers said that support for their role deteriorated.

Figure 37: Trainers' perception of the support for their role

Trainers	Positive response	Negative response
Please rate the support you received from your trust/board (or equivalent) in your role as a trainer.	33%	18%
I received clear guidance from my deanery/Health Education England local office on the support available to me if the COVID-19 pandemic affected my role as a trainer.	34%	38%
Overall, how (if at all) was the support you received in your role as a trainer affected by the COVID-19 pandemic?*	7%	39%

** No change = 48%*

n = 10,785 (all trainers), NTS 2020

A quarter of trainees and a fifth of trainers felt the culture of reporting concerns improved during the spring peak of the pandemic

Three quarters of trainees said that the culture of reporting concerns either remained the same (48%) or improved (26%) during the spring peak of the pandemic. Among trainers, just over half (54%) reported no change and a fifth (21%) thought the culture improved. Nearly one tenth (9%) of trainees and 14% of trainers thought it got worse. Finally, three quarters of trainees (76%) and trainers (74%) agreed that there were always enough members of staff to make sure that patients were treated by someone with an appropriate level of clinical experience.

The effect on trainee and trainer wellbeing

Burnout remains an issue for the profession, although there has been an increase in those considered to be at low risk compared with previous years

The NTS 2020 shows a small but significant improvement in trainees' and trainers' risk of burnout* compared with 2019 and 2018. But it is likely that this improvement is temporary due, in part, to the reduced workload experienced by many doctors during the spring peak of the pandemic. It is telling that a smaller proportion of trainees whose workload became lighter said they felt burnt out to a higher extent because of their work than those whose workload became heavier (17% to 33%, Figure 31). And 62% of trainees who described their workload as 'heavy' had a high or moderate risk of burnout, compared with 32% of those who described their workload as 'about right' or 'light'.

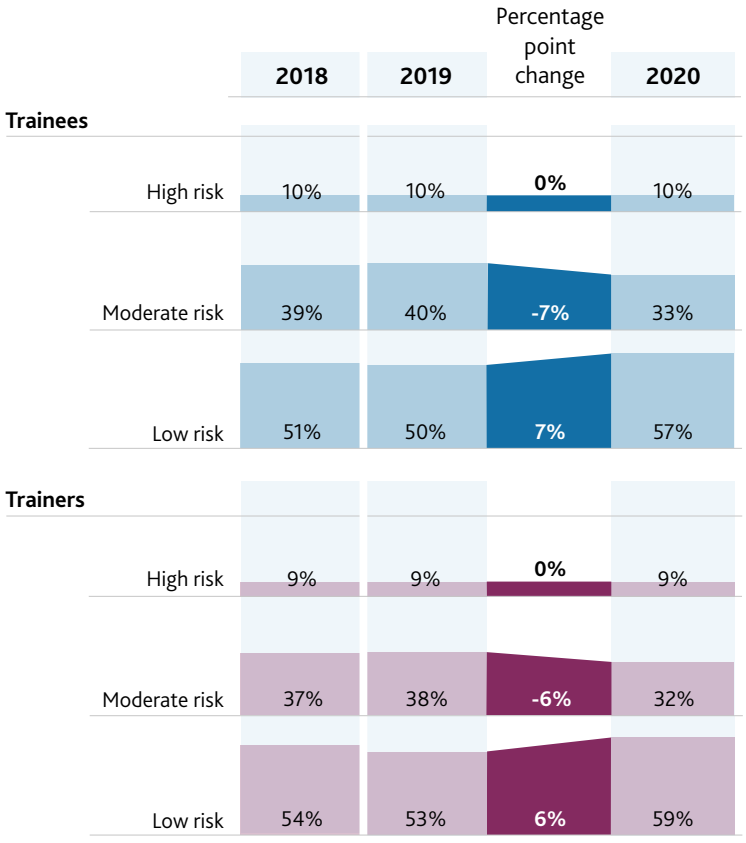
* In the NTS, we measure burnout using the seven work-related questions from the established and widely used Copenhagen Burnout Inventory (CBI). The questions are scored using the established NTS scoring system on a scale from 0–100. The respondents' mean scores across all seven questions are categorised into one of three levels of burnout: www.gmc-uk.org/help/education-data-reporting-tool-help/burnout-report

As Figure 38 shows, while the proportion of trainees and trainers at high risk of burnout was the same in 2020 as in 2019, there was a shift of six to seven percentage points from moderate risk to low risk among both groups. This trend was broadly consistent across post and programme specialties, training levels, and all four countries of the UK.

Overall, the picture remains concerning. Even with this reduction, a tenth of trainees and trainers were at high risk of burnout, with a further third of each group registering a moderate risk.

As seen in NTS burnout results in previous years, there was considerable variation in the breakdown of the 2020 results by post specialty, programme group, and training level.

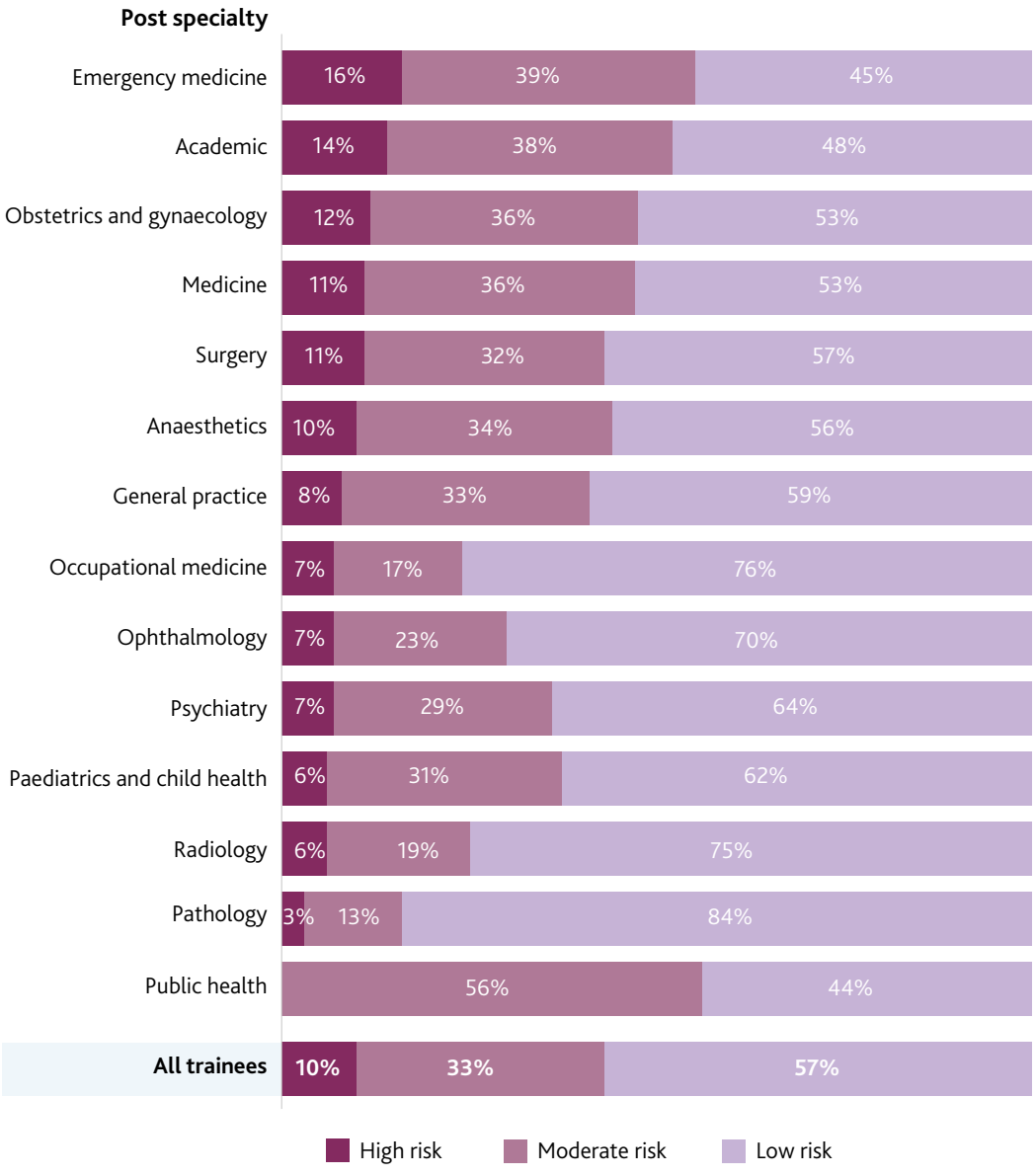
Figure 38: Year-on-year comparison of trainees' and trainers' risk of burnout



n = 28,042 (2020 trainees); 10,785 (2020 trainers); 53,477 (2019 trainees) 21,812 (2019 trainers), NTS 2019–20

A larger proportion of trainees in emergency medicine (16%), academic* (14%), and obstetrics and gynaecology (12%) posts were at high risk of burnout (Figure 39). Conversely, a larger proportion of trainees in pathology (84%), occupational medicine (76%), and radiology (75%) had a low risk – albeit there was a much smaller number of respondents in these specialties.

Figure 39: Trainees' risk of burnout, split by post specialty



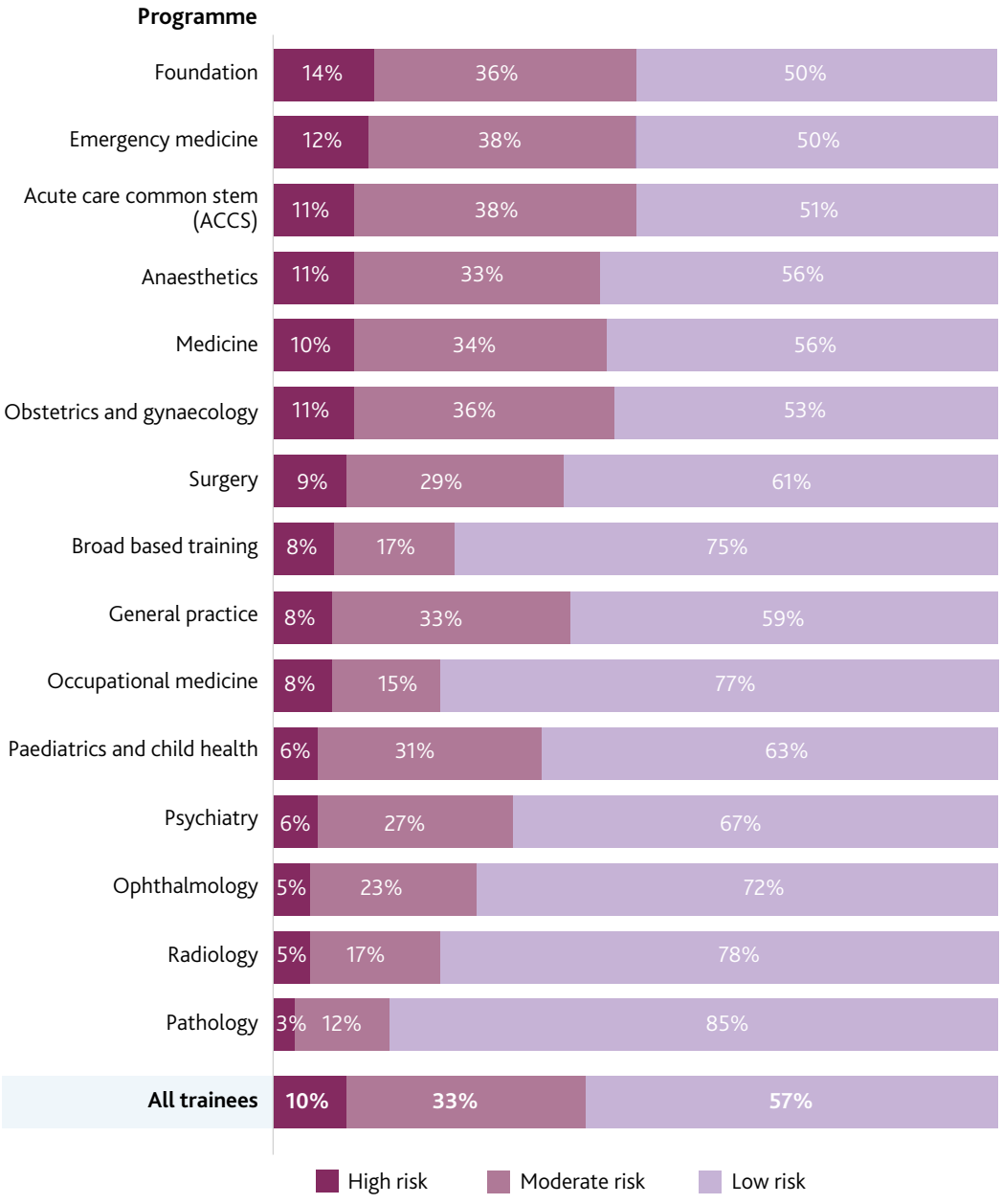
n = 27,488, NTS 2020

* During the pandemic many academic trainees have been drawn back to full-time clinical work, have had to maintain their academic research when universities were closed, and may have seen, or expect to see, a reduction in funding opportunities.

When the burnout results are broken down by programme specialty (Figure 40), 12% of trainees in emergency medicine and 14% in Foundation programmes had a high risk, slightly above the average for all trainees.

Again, a greater proportion of those in pathology (84%), occupational medicine (78%) and radiology (77%) programmes reported a low risk of burnout.

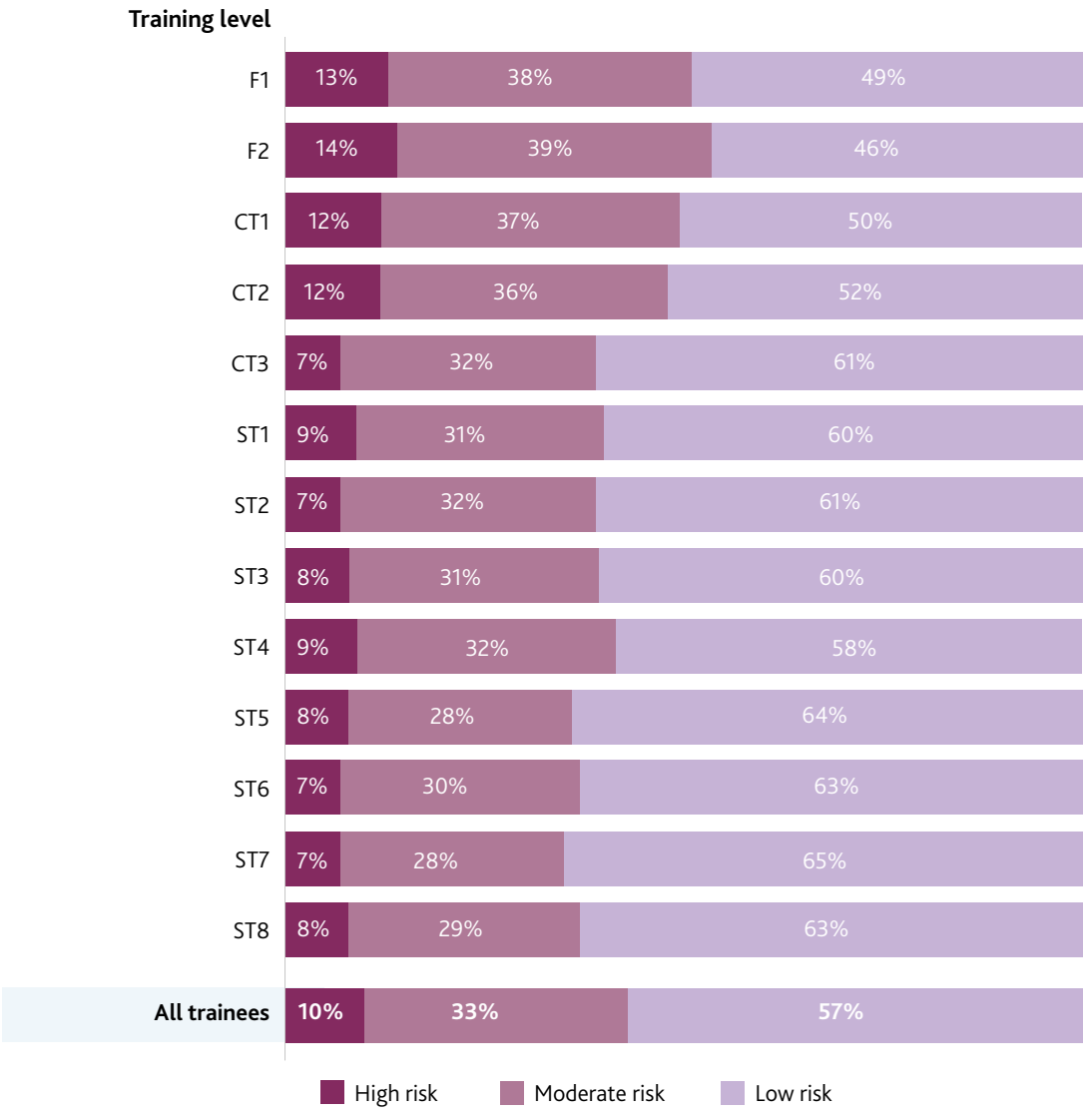
Figure 40: Trainees' risk of burnout, split by programme specialty



n = 27,488, NTS 2020

As in previous years, a greater proportion of doctors in the early stages of their postgraduate training – and especially those in foundation or core training – reported higher risk of burnout, compared with those in the later stages of the pathway (Figure 41). There was almost no variation in responses across the four countries of the UK: 11% of trainees in Northern Ireland and Wales were at high risk of burnout, 10% in England, and 9% in Scotland.

Figure 41: Trainees' risk of burnout, split by training level

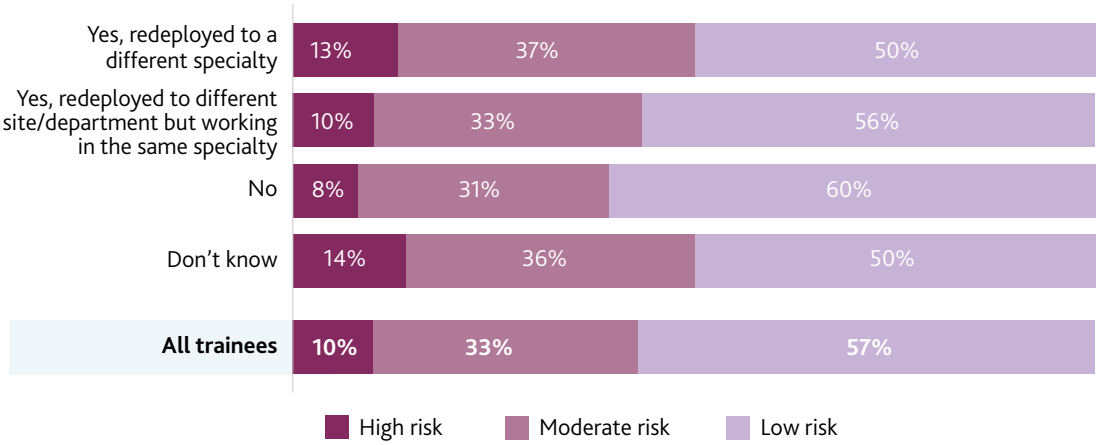


n = 27,488, NTS 2020

A greater proportion of trainees who were redeployed to a different specialty during the spring peak of the pandemic had a high or moderate risk of burnout (50%), compared with those who were not redeployed (39%) (Figure 42). This difference may reflect the switch to working in frontline specialties, or a feeling of uncertainty or upheaval brought about by a change in training plans.

One tenth (10%) of trainees who were redeployed to a different site or department registered a high risk of burnout, although this was in line with the UK average for all trainees.

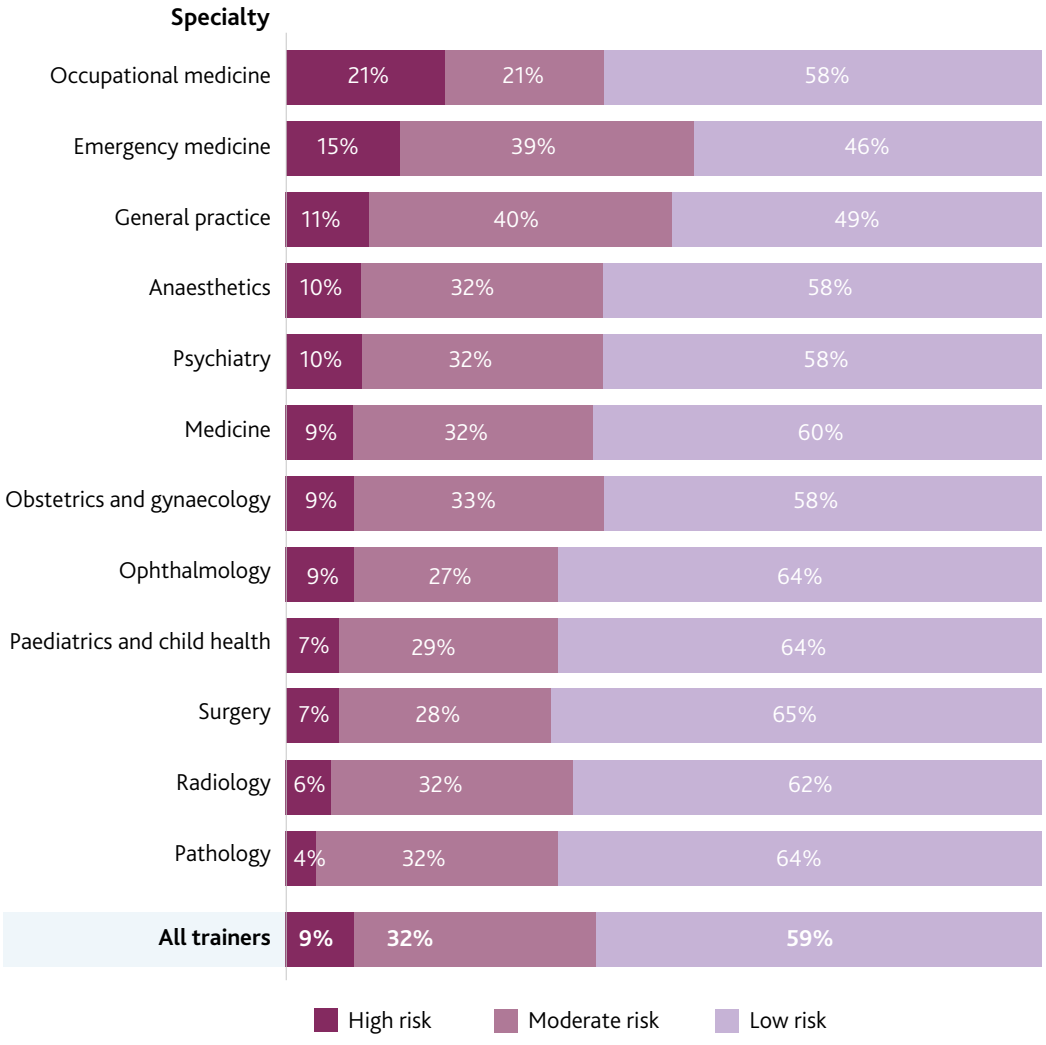
Figure 42: Trainees' risk of burnout, split by redeployed status



n = 27,488, NTS 2020

There were also marked differences between specialties in the trainer survey (Figure 43). Five specialties had a larger proportion of doctors at higher risk than the UK average of 9%: anaesthetics, psychiatry (both 10%), General practice (11%), emergency medicine (15%) and occupational medicine (21% – albeit based on a much smaller number of responses). Surgery (65%), ophthalmology, paediatrics and pathology (all 64%) had the largest proportion of doctors who were at low risk of burnout.

Figure 43: Trainers' risk of burnout, split by specialty



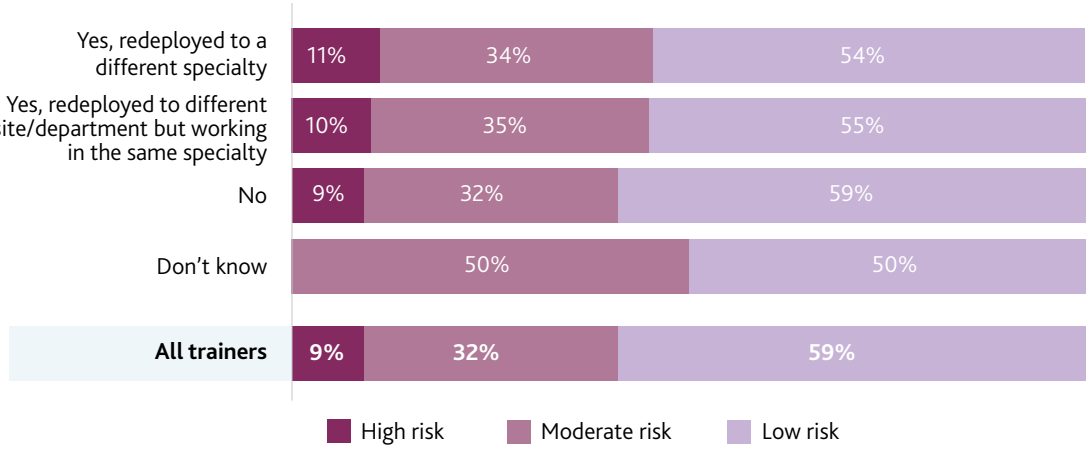
n = 10,378, NTS 2020

As with the trainee survey, there was almost no variation in trainers' responses across the four countries of the UK. In Northern Ireland, 10% were at high risk of burnout, 9% in England and Wales, and 8% in Scotland. There was very little variation between trainers who were redeployed and those who were not. A slightly larger proportion of those who were redeployed were at high risk of burnout, although the sample size was much smaller in the trainer survey (Figure 44).

Over half of trainees were concerned about personal safety during the spring peak of the pandemic and a quarter felt these concerns were not fully addressed

Over half (52%) of all trainees were concerned about their personal safety, or that of their colleagues, during the spring peak of the pandemic. A quarter (24%) felt their concerns were only partially addressed and 3% reported that they weren't addressed at all.

Figure 44: Trainers' risk of burnout, split by redeployed status



n = 10,378, NTS 2020

There was significant variation in responses to this question by region or country and post specialty. In parts of the UK that were particularly affected by the pandemic, more doctors had concerns and they were more likely to feel that those concerns were not fully addressed, if at all.

A higher proportion of trainees – around three fifths – in the east of England (64%), London (57%), Kent, Surrey and Sussex (56%), and the West Midlands (56%) had concerns. Two fifths (39%) of those trainees in the east of England said their concerns were partially addressed (33%) or not addressed at all (6%) – more than in any other region or country. A smaller proportion of trainees in Northern Ireland (38%), the South West of England (39%), and the North East of England (43%) had concerns.

As a broad rule, doctors at the start of their postgraduate training were more likely to have concerns about personal safety – especially those in foundation (59%), core (54%), or the first year of specialty training (54%). A significantly higher proportion of foundation trainees (40%) felt these concerns were partially or not at all addressed, compared with those at other training levels. Around a third of trainees in medicine (37%), emergency medicine (30%), and surgery posts (30%) felt their concerns were partially or not at all addressed.

Most trainees were satisfied with the support they received in relation to their personal safety and wellbeing

Despite these concerns, trainers and trainees were broadly positive about the support they received from their employing organisation about their personal health and safety and their wellbeing. Two thirds of trainees rated the support they received from their organisation as 'good' or 'very good' in relation to personal health and safety (65%) and wellbeing (66%). However, one in ten (11%) rated this support as 'poor', 'very poor' or 'none offered'.

Around three fifths of trainers rated the support they received from their organisation as 'good' or 'very good' in relation to personal health and safety (63%) and wellbeing (59%). 14% rated this support as 'poor', 'very poor' or 'none offered'.

61% of both trainees and trainers agreed that concerns relating to their personal safety, or that of colleagues, were taken seriously by their employer. One in ten (11%) trainees, and 16% of trainers, said this was not the case.

In the NTS 2020, we gave trainees and trainers the opportunity to leave a free text comment stating their biggest concern(s) while working during the spring peak of the pandemic. We received over 35,000 responses, which we will analyse in more detail in the coming months. Following a rapid scan of the comments, the majority were, perhaps unsurprisingly, related to a lack of training opportunities and uncertainty about exams and assessments. Many doctors also shared their concerns about the pandemic's impact on wellbeing, especially in relation to stress and mental health. Many trainers said they were anxious about being redeployed to frontline services, and both trainees and trainers raised issues relating to PPE.

The changing medical workforce

From 2012 to 2020, the number of licensed doctors grew by more than 14%.

The number of medical students increased to 8,930 in the 2018/19 academic year, a substantial 10% increase compared to the previous year.

The number of these students from the EU increased by 23%.

The number of IMGs joining the UK medical workforce continues to increase. In 2020, over 10,000 IMGs joined – more than UK and EEA graduates combined.

Doctors joining the UK workforce are ethnically diverse – more than half (54%) of those joining in 2020 identified as black and minority ethnic (BME).

The number of licensed EEA graduate doctors increased by 4% to 23,102, from 2019 to 2020.

15% **The number of specialty and associate specialist and locally employed doctors rose by 15%, from 2019 to 2020 – four times the rate of increase for the next fastest growing group, trainees.**

36% of doctors said they were considering reducing their clinical hours, a decrease from 46% in 2019.

7% of doctors said they were considering leaving permanently, which is the same as 2019.

Data relates to the early stages of the coronavirus (COVID-19) pandemic, including the first peak in April 2020.

Chapter summary

The health services' ability to deliver safe patient care depends on the recruitment, retention and ongoing development of all doctors. This becomes especially clear when faced with an emergency of the scale of the coronavirus (COVID-19) pandemic.

The medical workforce continues to grow, with a record 5% growth in the number of licensed doctors between 2019 and 2020.

As well, the UK medical profession is becoming increasingly diverse. The register as a whole is again more female, though this is decelerating. There has been a very large increase in doctors who first qualified outside the UK and the European Economic Area (EEA) who we refer to as international medical graduates (IMGs) and ethnic diversity among those joining the UK medical register.

Following rapid growth from 2015, more IMGs joined the UK workforce than UK and EEA graduates combined in 2020.

More than half (54%) of those joining the register in 2020 identified as black and minority ethnic (BME).

In recent years, we've a seen a particularly rapid growth in the number of medical students joining UK medical schools from the Middle East and the European Union (EU).

In 2020, the Government enacted our emergency powers to increase the number of doctors available to work in the UK's health systems, as part of the pandemic response.

The number of students starting medical school in the UK has risen steadily every academic year between 2013 and 2019.* 2017/18 to 2018/19 saw a particularly steep increase, rising by 9% from 8,170 students to 8,935.

We have looked into groups of doctors who leave after two key career milestones – after completing their second foundation year (F2) and in the years immediately after gaining their Certificate of Completion of Training (CCT) and becoming a specialist or GP. We have found that doctors of a non-UK nationality were disproportionately high among those leaving after F2 and that doctors who first qualified as a doctor outside the UK were more likely to leave soon after attaining a CCT.

Compared with 2019 there is now a smaller proportion of doctors considering reducing their hours in clinical practice – a third (36%) of doctors said they were considering reducing their clinical hours, a decrease from nearly half (46%) in 2019. But one out of ten (10%) doctors said they were considering leaving permanently.

This chapter shows how diverse the UK's workforce is and the considerable changes in where doctors come from. It also explores doctors' career progression while in the UK. Finally, we present findings from two surveys about UK doctors' future intentions.

* This report includes information derived from that collected by the Higher Education Statistics Agency Limited ("HESA") and provided to the GMC ("HESA Data"); for more information on this see 'A note on research and data' on page 152.

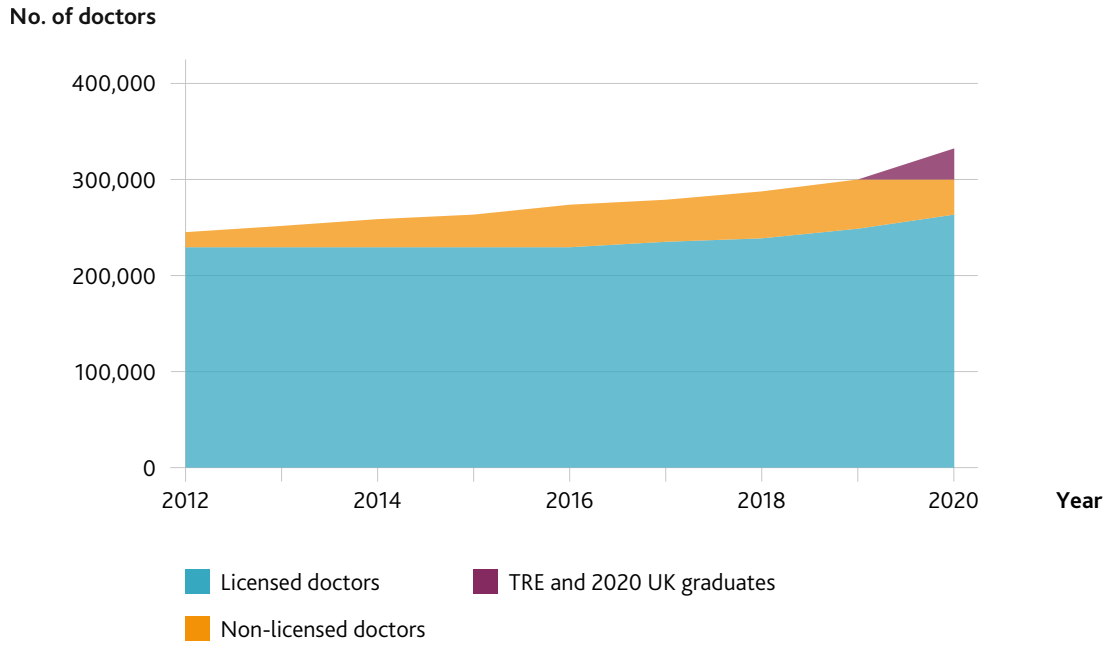
The UK workforce

The number of licensed doctors in the UK continues to grow rapidly

From 2012 to 2020, the number of licensed doctors grew by more than 32,000, as shown in Figure 45. The largest year-on-year increase (5%) was from 2019 to 2020.

Figure 45 also shows an extra group of licensed doctors in 2020. We registered these doctors as part of our response to the coronavirus (COVID-19) pandemic, which is described earlier in the report (page 17). The group includes doctors on the temporary register (emergency) (TRE) and 2020 UK graduates, who we registered earlier than normal.

Figure 45: Registered doctors in the UK, by licence status and including TRE and 2020 UK graduates



While the UK population was projected to grow by 2.4% between mid-2016 and mid-2020,[27] the number of licensed doctors rose by 14% between 2016 and 2020. At face value this is a positive sign, but it's important to take into account the wider context. For example:

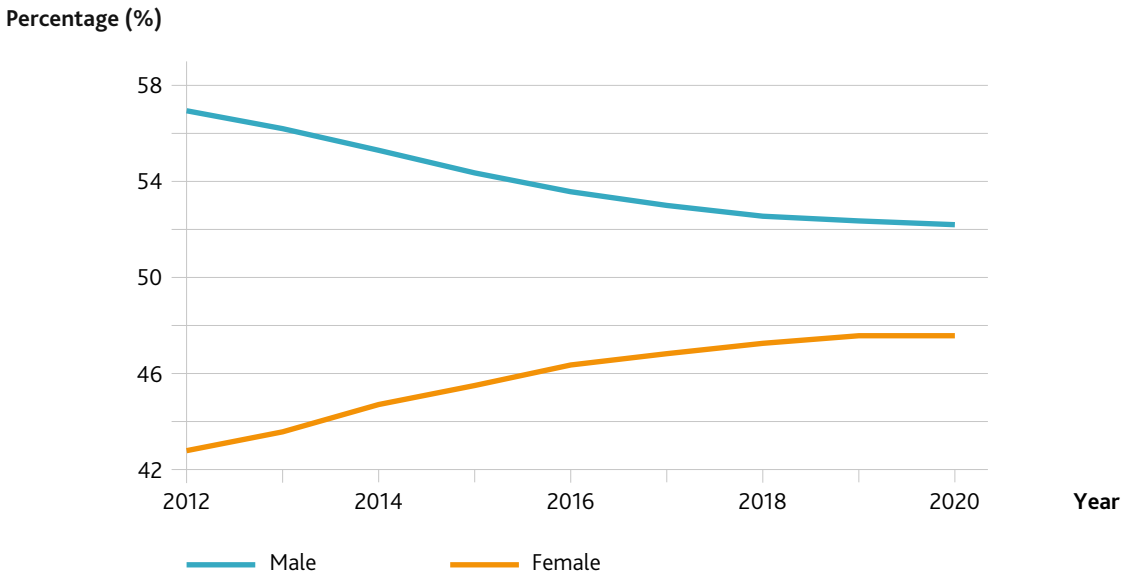
- growing proportions of doctors have reduced their working hours in recent years[28]
- there are concerns about staff shortages[29]
- demands on health services grew due to the aging population, increases in patients' expectations, and healthcare needs becoming more complex.

Female doctors make up a greater proportion of licensed doctors than ever before

In 2020, female doctors made up just under 48% of all licensed doctors (Figure 46). This follows a rise by more than a quarter (27%) since 2012. Year-on-year, the number of licensed female doctors has been increasing at a higher rate than the number of licensed male doctors. However, the difference between those rates has been narrowing since 2014.

From 2018 to 2020, we didn't see any dramatic shift in the medical register's gender balance. Instead, the proportion of female licensed doctors in 2020 was only 0.2 percentage points higher than in 2019.

Figure 46: Proportions of licensed doctors by gender, from 2012 to 2020



More male doctors are relinquishing their licences, but more are taking up licences too

The number of male doctors taking up a licence exceeded female doctors in 2019 and 2020. While the number of female doctors taking up a licence has increased by just over a third (34%) since 2018, the number of male doctors taking up a licence has increased by almost half (48%) in the same period.

However, female doctors continue to make up an increasing proportion of the register due to male doctors leaving the profession in higher numbers. In 2019, three out of five doctors (60%) relinquishing their licence were male.

There's been a large influx of IMGs, a disproportionate number of whom have been male doctors.

Doctors added to the workforce as part of the pandemic response

As part of our response to the pandemic, we granted 28,076 doctors temporary emergency registration or restored their licence under our emergency powers (page 17). This section provides more information on those doctors including their distribution across the UK.

The distribution of TRE and 2020 UK graduates across the four countries* is similar to those on the medical register (Figure 47). A higher proportion of 2020 UK graduates are in the 'Other' group – 14% compared with 4% on the medical register. This relates to the short period between the 2020 UK graduates joining the workforce and the time of writing this report.

Figure 47: TRE and 2020 UK graduates by UK country

	Licensed doctors (exc. TRE and 2020 UK graduates)		TRE		2020 UK graduates	
England	214,686	81%	22,702	81%	4,971	72%
Scotland	21,391	8%	2,712	10%	530	8%
Wales	10,716	4%	1,212	4%	199	3%
Northern Ireland	6,715	3%	837	3%	200	3%
Other†	11,408	4%	613	2%	965	14%

* Doctors located by a variety of data described in the accompanying data notes from page 152.

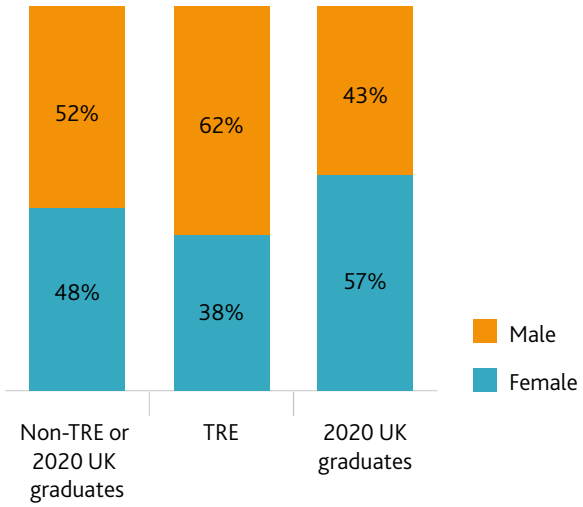
† Includes Channel Islands and Isle of Man as well as doctors who could not be located.

The makeup of TRE doctors and 2020 UK graduates is different from the rest of the medical register

A higher proportion of TRE doctors are male – 62% compared with 52% of licensed doctors excluding TRE and UK 2020 graduates (Figure 48). The group is also older, with 67% aged 50 years and over compared with 27% of non-TRE, non UK 2020 graduates. As well, a larger proportion of TRE doctors are white (62% compared with 52%) and UK-trained doctors (68% compared with 64%) than licensed doctors excluding TRE and UK 2020 graduates.

In recent years, there's been a higher proportion of female graduates joining the medical register. This is evident from the 2020 UK graduates group (Figure 48). At the same time, the doctors retiring from UK practice have been disproportionately male and many of these recent retirees were added to the medical register via the TRE group (also shown in Figure 48).

Figure 48: Gender balances of three register groups



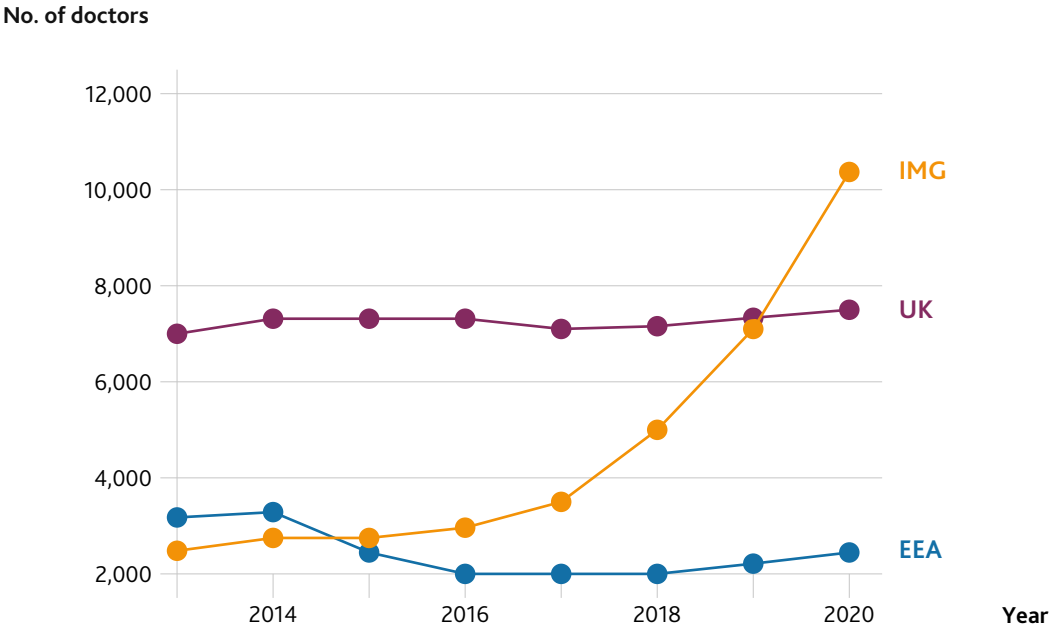
Non-UK doctors joining the UK workforce in 2020

IMGs joining the UK workforce outnumbered UK and EEA graduates combined as of June 2020

Following a rapid growth from 2015, more IMGs joined the UK workforce than UK and EEA graduates combined in 2020 (Figure 49). Graduates with a primary medical qualification (PMQ) from Middle Eastern and South Asian countries made up a large proportion of this, growing by 83% and 47% respectively. In fact, the Middle Eastern region has now overtaken Africa to become the second largest contributor of IMGs to the UK medical workforce, behind South Asia.

In recent years, we've increased our capacity to assess IMGs' knowledge and skills* as part of long-term efforts to boost the UK medical workforce. However, this doesn't explain the significant increase in IMGs joining in 2020. The data in Figure 49 relate to 30 June each year, so it's important to look at the monthly numbers to better understand this upsurge.

Figure 49: Doctors taking up (or returning to) a licence to practise, by PMQ (excluding TRE and UK 2020 graduates), from 2012 to 2020



* Most doctors who qualified outside the EEA* must pass two GMC Professional and Linguistic Assessments Board (PLAB) exams before they can practise in the UK. They also need to demonstrate that they meet the necessary English language requirements.

Figure 50 shows the number of IMGs we granted first-time registration to between 2018 and 2020,* by month. The spike in Figure 50 around March 2020 is explored further in Figure 51 alongside data for EEA and UK graduates. There is a marked increase in both IMG and EEA for the week commencing 16 March 2020.

The increase in March corresponds with us granting some doctors' registrations automatically during the pandemic, so they could support with the response. They will have to complete an identity check in the future, but we're currently exploring the most efficient way to manage this. All doctors in this cohort have had the electronic versions of their documents checked and approved by our registration team prior to their registration being granted. Employers will also have conducted their own identity check before they started working.

The subsequent drop after March coincides with the coronavirus lockdown, when our PLAB testing and ID checking facilities closed.†

From 2019 to 2020, there was a marked decline of applications from IMGs in July and August, with August 2020 being 43% lower than August 2019 (Figure 50). This may be early evidence that IMG applications in 2020 were concentrated in March, rather than following the more even spread across the year seen in 2018 and 2019. As such, it wouldn't be wise to extrapolate the data in Figure 49 into the future until there is further data.

* Not all doctors who have an application granted go on to become licensed doctors, but these data provide us with the most suitable proxy for a month-by-month analysis.

† Since lockdown restrictions started to ease, we resumed our PLAB testing at a reduced capacity, which is discussed further in chapter 4 [DN: link to section 4].

Figure 50: Applications granted to IMGs for first-time registration on the medical register,* by month for 2018 to 2020

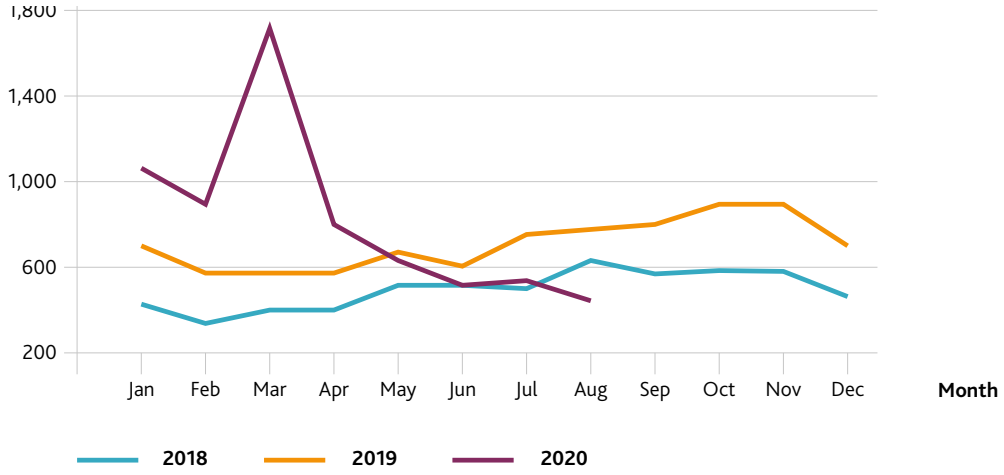
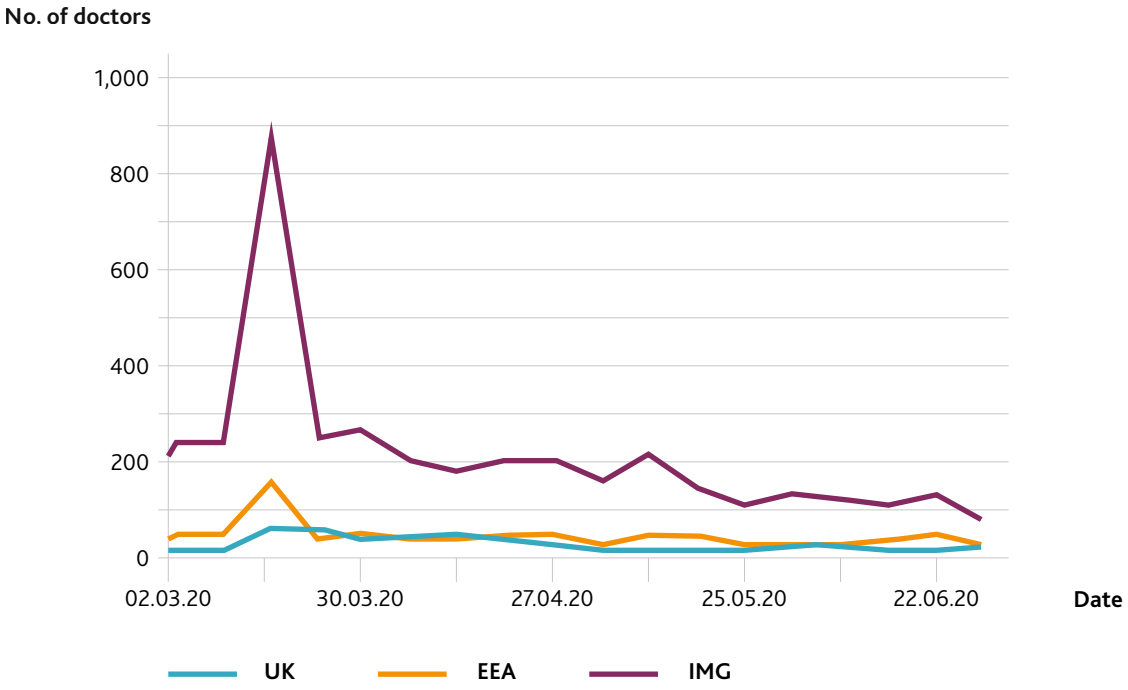


Figure 51: Weekly additions to the potentially available UK workforce, by PMQ, between 2 March and 22 June in 2020



* This doesn't include review applications or applications to restore licences.

The number of licensed EEA doctors in the UK has increased slightly since the EU referendum

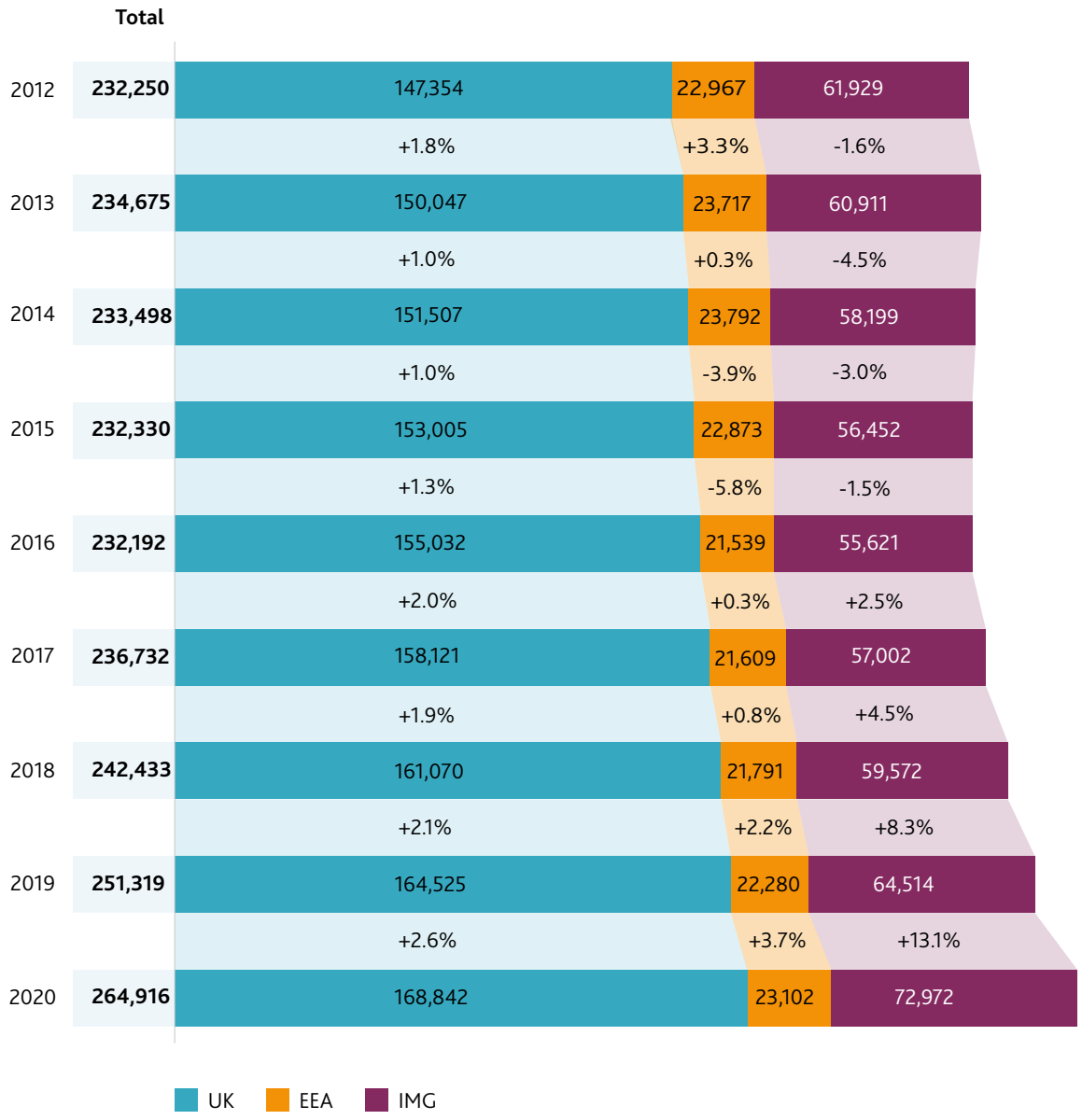
Despite fluctuations between the two years, the number of EEA doctors working in the UK in 2020 is very similar to 2012 (Figure 52). Between 2014 and 2016, we saw a 9% fall, which corresponded with a new requirement for EEA doctors to show proof of their English language capability before being able to gain a licence to practise.

Interestingly, since then – and following the EU referendum result – we've seen increases in the number of licensed EEA doctors across all four UK countries. There was a 0.8% rise from 2017 to 2018, followed by a more notable 2.2% rise from 2018 to 2019. And from 2019 to 2020, there was an even higher increase of 3.7%. This was initially driven by a fall in the numbers of EEA graduates leaving the workforce but then from 2017 the numbers joining started to rise, creating a combined effect.

After 31 December 2020, the Mutual Recognition of Professional Qualifications Directive will no longer apply to the UK. Recognition of UK medical qualifications will be governed by the national policies and rules of each of the EEA member states. There's a risk this could deter some of the 2,724 EEA graduate doctors who are currently training in the UK from completing their qualification. And, in future, it could prevent EEA graduate doctors from choosing to train in the UK if the qualification isn't recognised in their home country.

We continue to monitor the number and makeup of EEA graduate doctors in the UK as part of our annual report series, 'Our data about doctors with a European primary medical qualification'.[30]

Figure 52: Number of licensed doctors by PMQ, from 2012 to 2020



The number of specialty and associate specialist (SAS) and locally employed (LE) licensed doctors has risen substantially

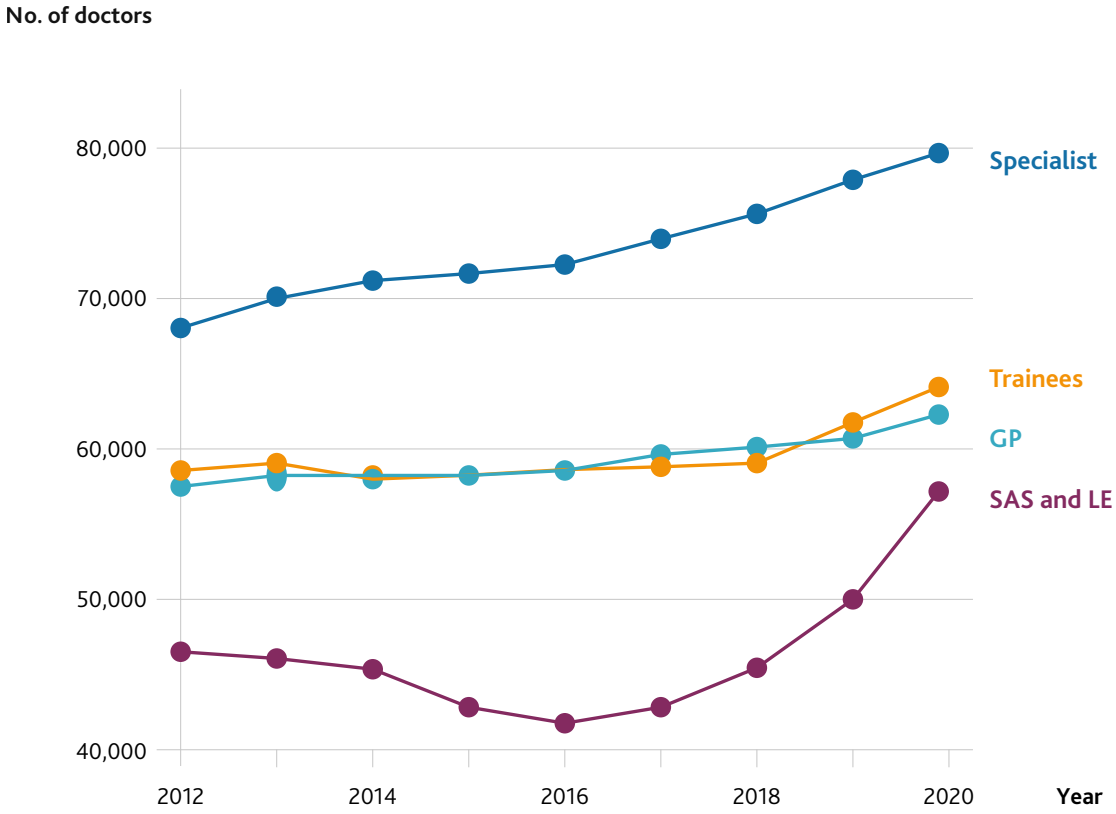
There are more specialists than any other register type, and SAS and LE doctors are the smallest group (Figure 53).

However, the number of SAS and LE doctors has risen rapidly since 2016. From 2019 to 2020, this group grew at more than four times the rate of the next fastest growing group – trainees. There are a number of possible explanations for this, including:

- more trainees are opting to work as SAS and LE doctors, while pausing their training after F2
- there is an increasing number of IMG doctors, who we know tend to work as SAS or LE doctors initially.

The largest register group, specialists, has continued to grow steadily. Our data show that most specialties have the same trend of steady growth in licensed specialists. The exceptions are pathology, public health, and occupational medicine, which have all continued to steadily decline since 2012.

Figure 53: Register types of licensed doctors, from 2012 to 2020

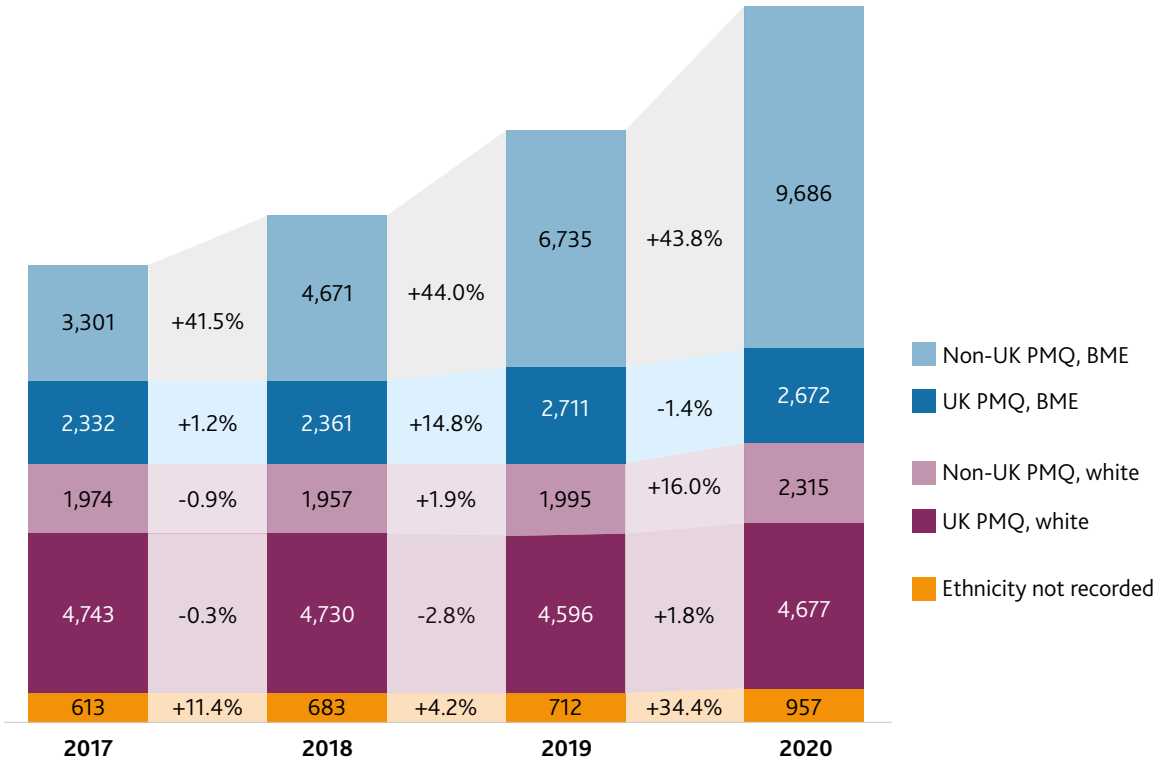


Ethnic diversity continues to grow among doctors joining the UK workforce

Since 2017, we've collected data on the ethnicity of just over 95% of doctors taking up a licence. Figure 54 shows the dramatic year-on-year growth in the number of doctors who identify as black and minority ethnic (BME) joining or returning to the UK medical workforce – from 44% in 2017 to 61% in 2020.

The proportions of doctors taking up a licence, who identify as black or black British and Asian or Asian British have each increased by around five percentage points since 2017. It's important to note that this, and the increase in BME doctors overall, is predominantly driven by the increasing number of doctors who have trained outside of the UK. This group grew from a quarter of all new joiners in 2017 to 45% in 2020, which is almost double the number of UK-trained white doctors who joined in 2020.

Figure 54: Doctors taking up a licence to practise by ethnicity, from 2017 to 2020



The supply of UK-trained doctors

Medical students in the UK

There's been a large rise in the number of medical students in recent years

Overall, the number of students starting at medical school in the UK has risen steadily every academic year between 2013 and 2019.* The academic years 2017/18 and 2018/19 saw a particularly steep increase, rising by 10% from 8,085 students to 8,930.

Scotland has the largest number of medical students relative to population in the UK

In the 2018/19 academic year, over four fifths (81%) of UK medical students were studying at a medical school in England while the remaining were in Northern Ireland (3%),† Scotland (12%) and Wales (5%). However, when normalised by each country's population, there were:

- 93 students per 100,000 in Scotland
- 73 students per 100,000 in Northern Ireland
- 60 students per 100,000 in England and Wales.

There continue to be increasingly more female than male medical students

There have been higher numbers of female students than male students attending medical school each year. This gap has grown since the 2015/16 academic year, when 55% of students were female, compared with 57% in the 2018/19 academic year.

Increasing numbers of students join UK medical schools from the European Union and the Middle East

84% of UK students taking up their first degree at medical school in the 2018/19 academic year lived in the UK prior to starting their course. This is a slight decrease from 85% in the 2017/18 academic year.

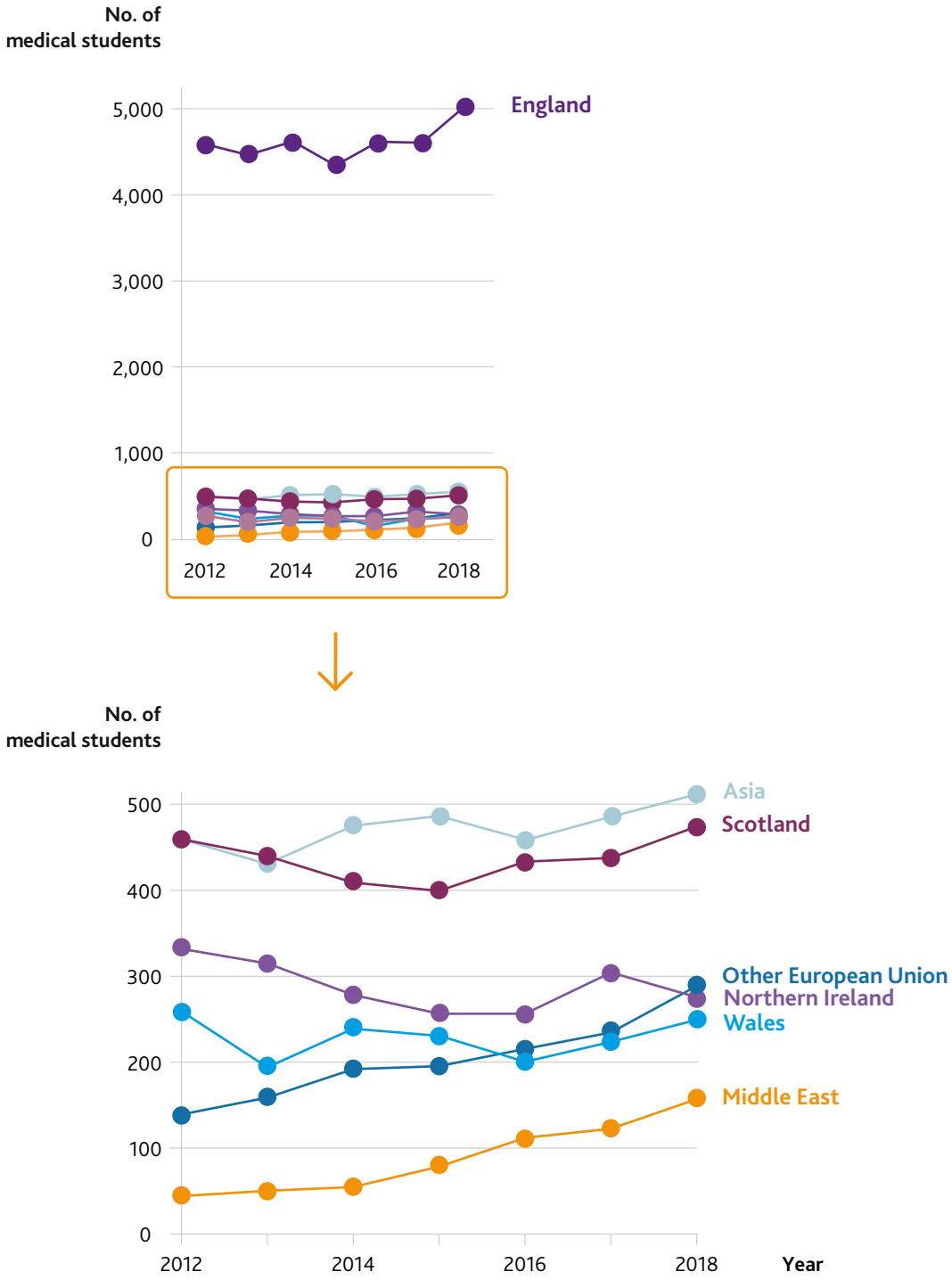
In recent years, we've seen a particularly rapid growth in the number of medical students joining UK medical schools from the Middle East and the European Union (Figure 55). Between the 2017/2018 and 2018/2019 academic years, there was a 27% increase in students from the Middle East and a 23% increase in students from the European Union. This, and the increase in previous years, appears to show that the result of the EU referendum hasn't discouraged European students from coming to the UK to study medicine.

Interestingly, the increase in students from the Middle East joining UK medical schools mirrors the rise in qualified doctors joining the UK workforce from that region.

* This report includes information derived from that collected by the Higher Education Statistics Agency Limited ("HESA") and provided to the GMC ("HESA Data"), for more information on this see 'A note on research and data' on page 152.

† A small percentage (less than 0.2%) of students moved medical school and have been counted twice.

Figure 55: Students starting medical school by domicile when applying for UK medical school, from 2012 to 2018*†



World regions supplying fewer than 100 students in the 2018–19 academic year have been omitted.

* Figure 55 shows the domicile world region of medical students when they applied for their place at a UK medical school. It's limited to students who were applying for medicine as their first degree as the students entering university for a second time to study medicine are a minority whose domicile is more likely to have changed from where they grew up and were educated.

† Each year refers to the year in which the student started studying.

Doctors in postgraduate training

The number of GP trainees continues to rise

The number of GP trainees has continued to rise and, in 2020, there were 8% more GP trainees than there were in 2019 (Figure 56).

Increasing the numbers of GPs is a priority that's been outlined in a number of national healthcare workforce strategies, such as the 'NHS Long Term Plan for England'[7], 'A Healthier Wales'[10], and 'An Integrated Health and Social Care Workforce Plan for Scotland'[9]. Other specialties that have also been the focus of national strategies include emergency medicine and radiology, which both continued to grow steadily from 2019 to 2020, by 9% and 4% respectively.

Figure 56: Numbers of doctors by specialty programme per year, from 2012 to 2020

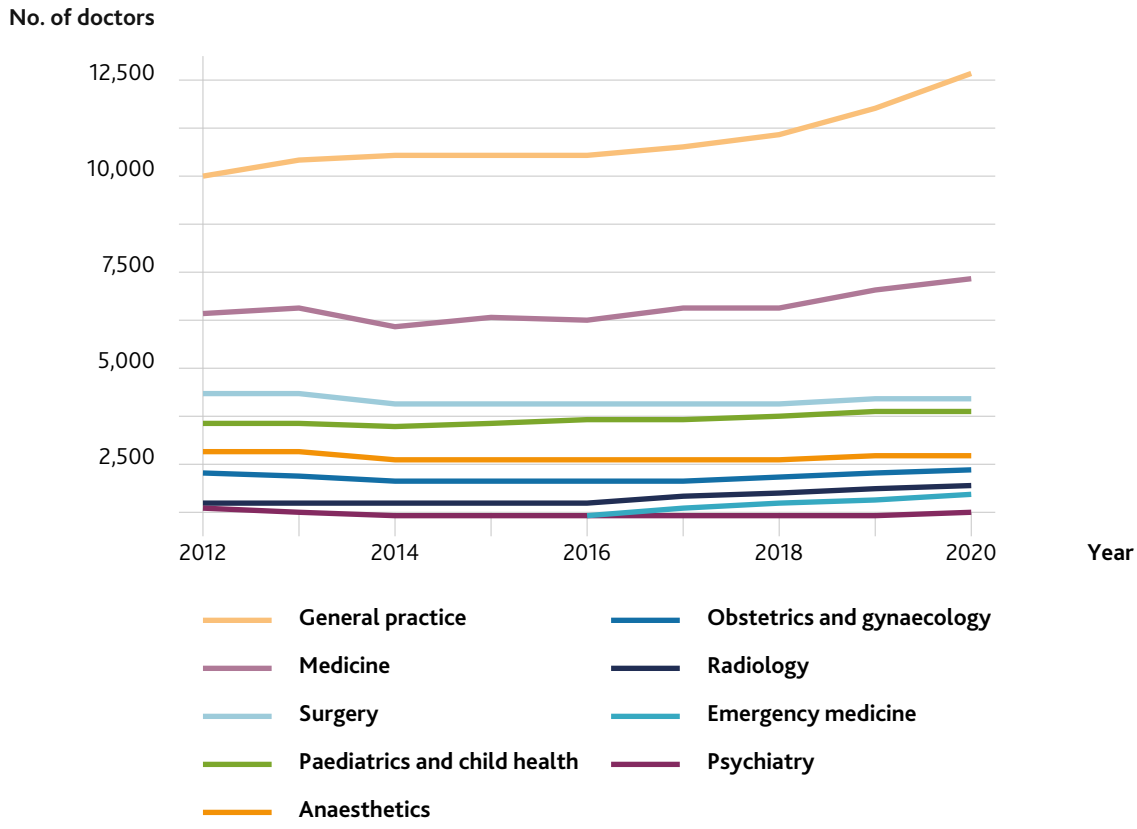
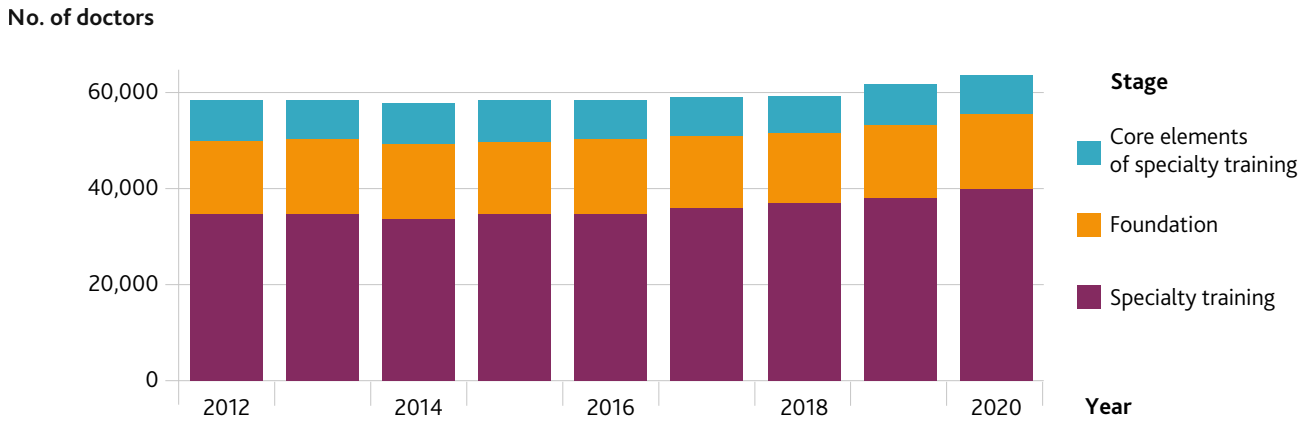


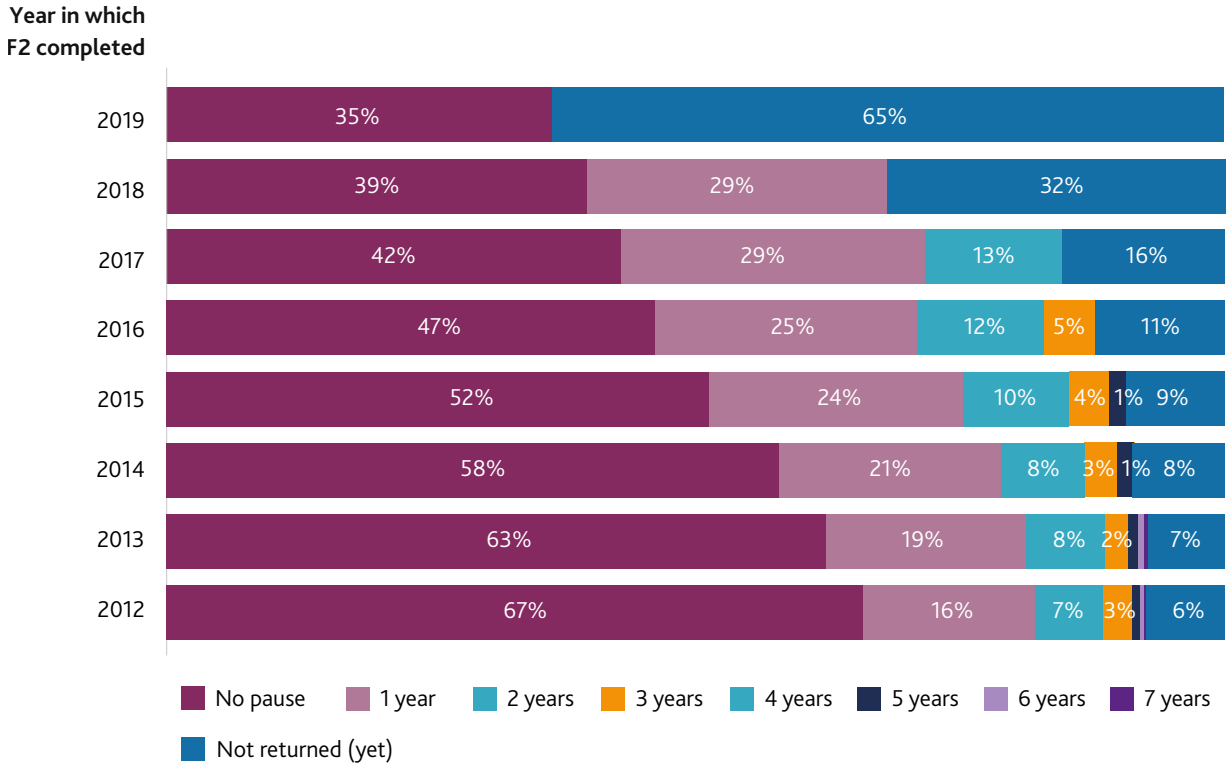
Figure 57: Numbers of doctors in training by stage per year, from 2012 to 2020



More doctors are pausing their specialty training after completing F2

It's increasingly common for specialty trainees to pause their training after completing F2 (Figure 58). In 2012, 67% of F2 specialty trainees continued their training with no pause, but this figure fell to just 35% in 2019. Most of these doctors don't leave the profession. Instead, they choose to work in other roles, which may be one driver of the increasing numbers of LE doctors.

Figure 58: Lengths of pauses between F2 and first specialty training stage, per year, from 2012 to 2019



The length of pauses between completing F2 and entering the next phase of training varies by specialty training programme

There is a clear pattern of longer pauses after completing F2 with each passing year, and this is observed across all programmes (Figure 59).

Trainees on certain programmes appear to have taken longer pauses than others, with emergency medicine, public health and sexual and reproductive health seeing the longest pauses on average in 2020.

Figure 59: Average lengths of pauses (in years) between F2 and next training stage, by programme specialty* and year†

	2014	2015	2016	2017	2018	2019	2020
Core elements	1.2	1.4	1.5	1.6	1.7	1.8	2.0
Emergency medicine	1.1	1.5	1.8	2.0	2.0	2.6	2.4
General practice	1.2	1.4	1.6	1.7	1.8	2.0	2.1
Obstetrics and gynaecology	1.3	1.5	1.6	1.7	1.7	1.7	1.8
Ophthalmology	1.3	1.5	1.6	1.7	2.0	1.9	1.8
Paediatrics and child health	1.2	1.4	1.5	1.6	1.7	1.7	1.8
Pathology	1.2	1.3	1.4	1.7	1.7	1.7	2.0
Public health	1.4	2.0	1.5	2.1	2.3	2.9	2.5
Radiology	1.3	1.4	1.6	1.2	1.6	1.8	1.8
Sexual and reproductive health	1.5	1.3	2.3	1.3	2.2	2.3	2.8

* We've grouped specialties that progress from F2 to a core training (CT) phase under 'Core elements'.

† A value of one represents progressing immediately from F2 to the next stage.

Specialty training course lengths and switching

Becoming a GP or a specialist often takes longer than the minimum time to complete the curriculum, especially in obstetrics and gynaecology

It takes longer than the minimum time defined by training programme curricula for trainees to complete the stages following F2 (CT1 or ST1), attain a CCT and become a GP or specialist (Figure 60). This could be highly valuable for workforce planning models to account for when projecting the future numbers of doctors in a certain specialty.

Some programmes do roughly take the minimum time to complete, such as ophthalmology. But others have notably longer average course lengths.*

Comparing two seven-year programmes, fewer than one out of ten 2012 obstetrics and gynaecology ST1 trainees gained a CCT in the minimum time, compared with four out of ten of the 2012 ST1 ophthalmologists. In the coming years, we will be able to analyse data for other cohorts of longer specialty training programmes and start to better understand these issues.

Figure 60: Trainees' access to local teaching, split by post specialty

Training programme	Minimum time to attain CCT (years)	Number of doctors in training in 2012 at CT1/ ST1 level	Average length of training (years)	Percentage of doctors gaining CCT in minimum time (%)†
General practice	3	3,425	3.8	53
Pathology	5	118	6.1	20
Public health	5	39	6.5	15
Radiology	5	215	5.9	36
Psychiatry	6	310	7.3	13
Obstetrics and gynaecology	7	261	7.8	9
Ophthalmology	7	104	7.3	38

* Specialties where the curricula require more than seven years have been excluded from this analysis due to the insufficient length of time that would allow a fair comparison.

† including doctors currently not licensed and those currently not on the medical register.

Over 40% of the 2012 cohort of GP trainees took longer than the minimum time to complete their training

Over 40% of trainees who started GP training in 2012 had not finished in the minimum time – three years. A quarter of these trainees were yet to become GPs after four years. These are sizeable minorities, and projections of future qualified GP numbers should incorporate the fact that many GP trainees take longer than the minimum course length of three years to qualify.

By 2018 – six years after starting GP training – most of those who would be qualified GPs in 2020 already were. This showed that we could track GP specialty training cohorts from more recent years to test if the proportion working as GPs after three years of training is increasing or decreasing. When we did this, we found similar patterns were observed for the 2013, 2014 and 2015 cohorts but that slightly smaller proportions were fully qualified after three years from the 2016 and 2017 cohorts.

In 2020, 1% of the 2012 cohort were completing ST3 while a larger group (4%) were working as SAS and LE doctors. Another 4% were not working as doctors in the UK, which is consistent with the typical rate at which doctors leave UK practice each year.

Figure 61: The progression of GP trainees through training stages, by year

	2012	2013	2014	2015	2016	2017	2018	2019	2020
ST1	3,425	10%	1%	0%	0%	0%	0%	0%	0%
ST2		86%	18%	5%	2%	0%	0%	0%	0%
ST3		1%	76%	28%	15%	7%	3%	1%	1%
GP		0%	0%	58%	75%	83%	87%	88%	89%
SAS and LE		2%	3%	5%	5%	5%	4%	4%	4%
Other training programme		1%	1%	2%	1%	2%	2%	2%	2%
Not licensed		0%	1%	1%	2%	2%	3%	4%	2%
Not on the register		0%	0%	0%	1%	1%	2%	2%	2%

Certain stages of some programmes take longer to complete than the minimum time defined by curricula

Some training pathways for specialties, such as medicine, surgery and psychiatry, include a core training element prior to further specialisation. The data show that completion of the second year of core training (CT2) and progression to specialty training year 3 (ST3) took six months longer on average, compared with those who move from a specialised second year of training (ST2) to ST3.

The largest average time between core training and first specialty training stage was among trainees in occupational medicine – 2.1 years compared with the minimum one year. One specific training stage that appeared to take considerably longer than minimum was psychiatry CT3, where the average time to progress to ST4 was 1.8 years.

General practice is a common destination for those who switch specialty

Of all the 88,158 doctors who were in training from 2012 to 2020, 7,441 (8%) switched their training programme. The most prominent training programmes that doctors moved away from were obstetrics and gynaecology, paediatrics, pathology, and public health.

General practice was the most popular destination, attracting almost half (47%) who initially started with core training but did not go on to their original specialty training programme. Radiology was also a popular choice for 17% of doctors who started core training but then chose to follow a different training pathway.

Summarising change in the supply line of UK doctors

Overall, the data show that there's a considerable change in the makeup of medical students preparing to join the UK medical workforce.

There have been large increases in the number of students taking up medicine, with a gradually increasing majority of those being female. There were also increases in the numbers of medical students from the Middle East, which mirrors the increases in qualified doctors joining from those areas. And, interestingly, we've seen a growth in students from the EU too.

At the same time, the pathway through postgraduate training has also changed substantially since 2012. Pauses in training after F2 are becoming the norm and the training stages that follow F2 are taking longer – to the extent that projected minimum times to qualify as a GP or specialist should not be expected for all trainees. These themes are explored further in chapter 4.

Doctors who leave the profession

Some doctors relinquish their licence to practise and appear to leave the profession for very short periods of time. Therefore, to get a sense of the trends in the number of doctors leaving, we define leavers as those who had a licence in June of the previous year, do not have one in June this year and have not returned by June of the following year. This means that we cannot produce 2020 figures for leavers yet, because we do not yet know if they are going to return by June 2021.

From 2017 to 2019, 9,153 doctors relinquished their licence in 2017, followed by 9,232 doctors in 2018; this number then fell to 8,537 in 2019.

In 2019, 'The state of medical education and practice in the UK: The workforce report'[28] identified that a large volume of doctors under 40 years old were leaving the profession. Doctors who leave after having recently completed F2 and doctors who leave soon after gaining their CCT to join the specialist or GP register are key components of this group and are the focus of this section.

Doctors leaving after their second foundation training year

When doctors leave after their F2 year, the UK's healthcare systems lose many years of service, potentially as a specialised doctor. To make sure we're analysing doctors within this group who permanently left UK medical practice, we have looked into the 7,740 doctors that were completing their F2 training in 2016.* By January 2017, 237 (3%) of these doctors no longer held a licence to practise in the UK and haven't held one since (as of February 2020).

All things held equal, doctors leaving the profession after F2 were disproportionately:

- of non-UK nationalities
- working less than full-time during their F2 year
- or from a group that had previously declared their intention to leave UK practice.

We may wish to consider how we could better support trainees who fall into these categories.

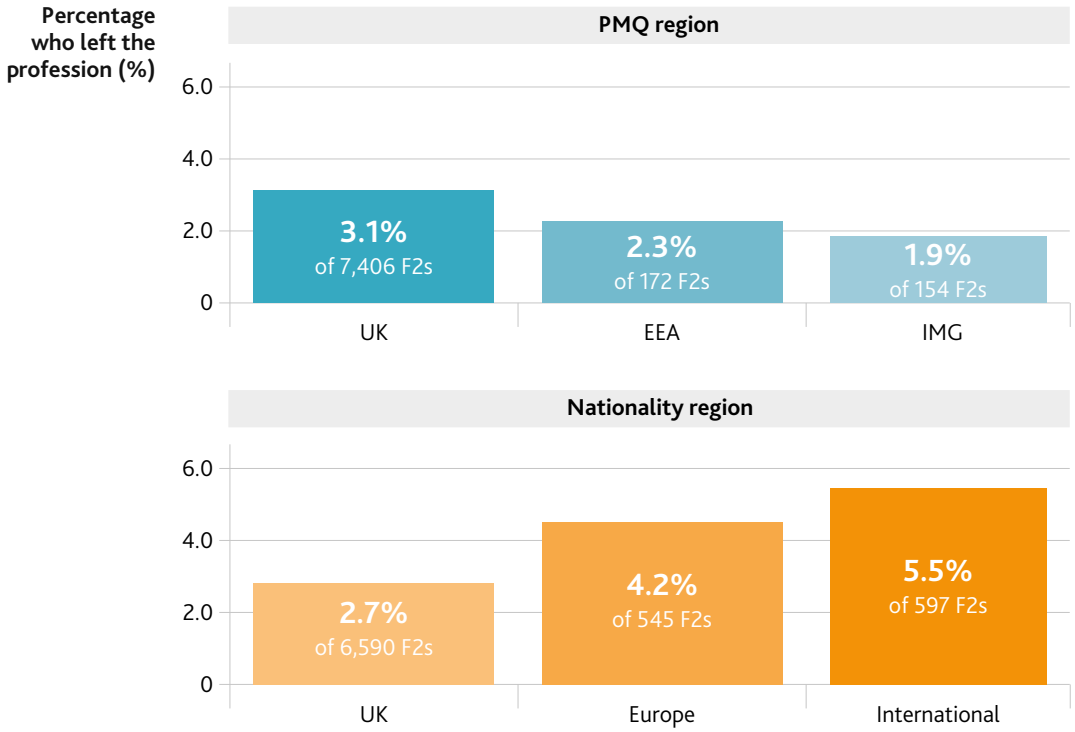
* According to the national training survey (NTS) 2020

Nationality – and not PMQ – is associated with doctors who leave after F2

There's an interesting contradiction in the proportions of 2016 F2 doctors who left the UK workforce when analysing PMQ and nationality (Figure 62). When data relating to nationality and PMQ were isolated, it was nationality – and not PMQ – that was associated with a greater likelihood of a doctor leaving after F2. For example, while doctors with a UK PMQ had a greater propensity to leave, doctors with a UK nationality were the smallest proportion to leave of the three nationality regions.

It is, however, important to acknowledge that the 597 doctors with an international nationality made up just 8% of the cohort of 2016 F2 trainees. If doctors with an international nationality were to leave at the same rate as 2016 UK nationality F2 doctors, 16 fewer would have left than actually did. So, we should recognise that, although this group are more likely to leave, any action targeted to better support the group may result in only a small improvement in the overall retention of F2 doctors.

Figure 62: Proportions of 2016 F2 doctors who left the UK profession, by PMQ region and nationality



Doctors working full-time are less likely to leave after F2

A slightly larger proportion of 2016 F2 doctors who worked less than full-time left the profession (4.6%) than those who had worked full-time (2.9%).

A smaller proportion of doctors from more deprived backgrounds leave after F2

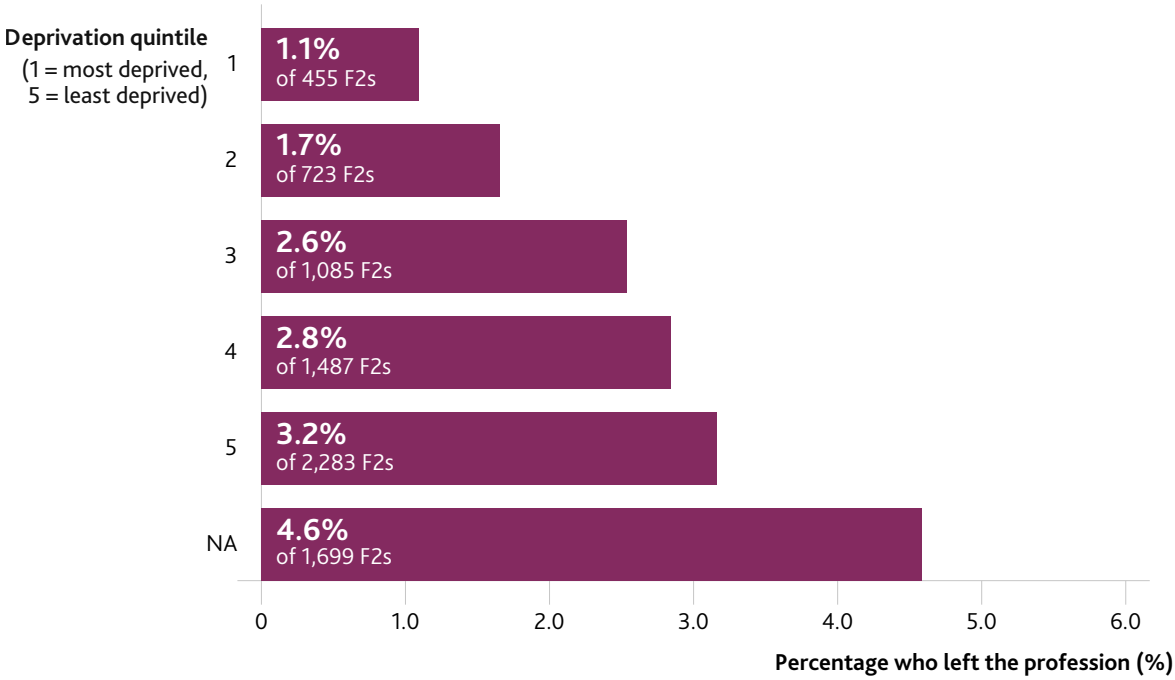
The proportion of 2016 F2 doctors who left the UK profession after their F2 year steadily fell in correlation with the deprivation index quintile of the area they lived in when they first applied to medical school* (Figure 63). A smaller proportion of doctors from more deprived areas (1.1%) left after F2 compared with the least deprived areas (3.2%).

There were far fewer doctors completing F2 specialty training in 2016 from the most deprived areas than the least deprived areas (Figure 63). This is evidence of a need to widen participation in specialty training for those from more deprived backgrounds.

Doctors who intended to permanently work abroad were more likely to leave UK practice after F2

Doctors of the 2016 F2 cohort reported that they wanted to leave UK practice in the next year. Of these, a fifth then left the profession. However, when all the possible factors were held equal, doctors who had announced this intention were disproportionately high among 2016 F2 doctors who had gone on to leave. While it may be too

Figure 63: The number and proportion of 2016 F2 doctors who left the profession, by deprivation quintile of address when applying for university†



* The deprivation index quintile of a doctor's address when first applying to medical school was sourced from the Higher Education Statistics Agency Limited ("HESA") and provided to the GMC ("HESA Data"); for more information on this see 'A note on research and data' on page 152.

† Limited to medical students who did not already have a degree when they commenced their medical studies ie non-graduate entrants.

late to take action once a doctor tells us they intend to leave, the intentions reported in the National Trainee Survey (NTS) do give an early warning if the loss of F2 doctors is likely to be particularly high in a given year.

Doctors who leave after gaining their CCT

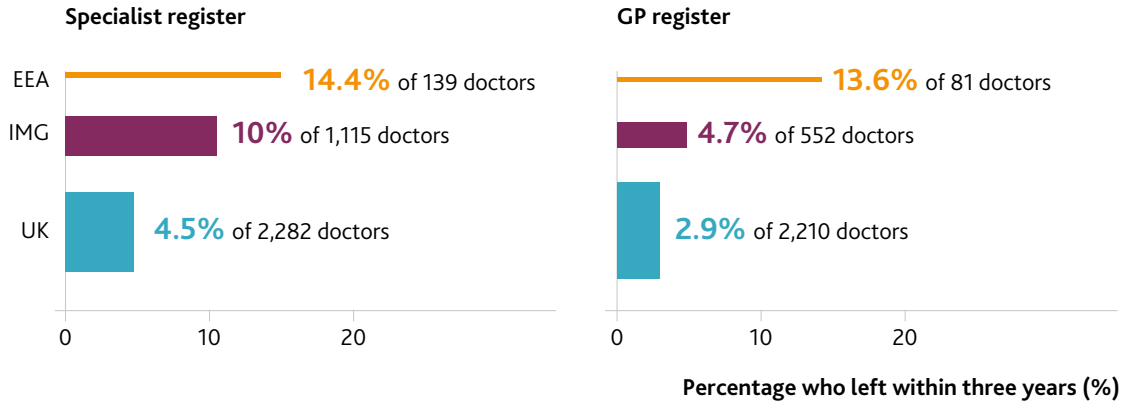
Fewer UK-qualified doctors leave within three years of joining the GP or specialist register via CCT than non-UK colleagues

To investigate leaving rates among those who had recently become a specialist, we have looked into the 3,536* doctors who joined the specialist register for the first time in 2014 after completing UK training.

In the pages that follow, we describe the 234 (7%) of these doctors who had left within three years of attaining a CCT and have not yet returned three years later (February 2020). We have done this to highlight the greater rate of leaving among this group of recently qualified specialists than among the wider population of doctors, which was reported as 4% in 'The state of medical education and practice in the UK: The workforce report'.[28]

A smaller proportion of the 2,843 doctors who joined the GP register via CCT in 2014 left, but still this came to 101 doctors (3.6%). Figure 64 shows that smaller proportions of the largest PMQ groups (UK and IMG) left UK practice within three years of joining the specialist or GP register via CCT. While similar overall patterns by PMQ exist, the proportions of GPs leaving within three years are noticeably lower than specialists, particularly among IMGs.

Figure 64: Proportions of doctors who joined the specialist (left) and GP (right) registers via CCT in 2014 and left within three years, by PMQ



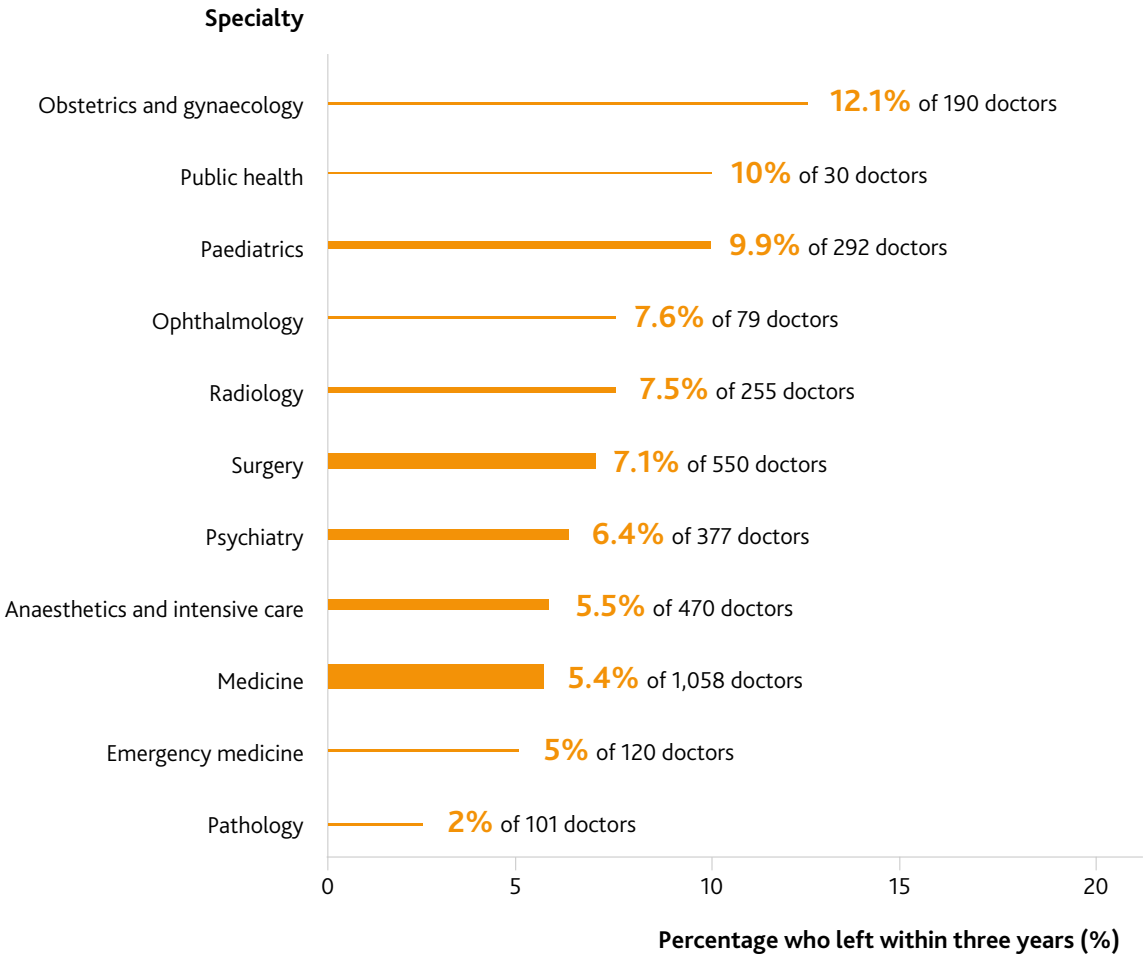
* Excludes those who also joined the GP register at the same time.

Obstetrics and gynaecology has the highest proportion of newly qualified specialists that leave but having a non-UK PMQ is the biggest driving factor

The data show that leaving rates vary by the specialty for which the doctor gained their CCT (Figure 65). Obstetrics and gynaecology appears to lose the largest proportion of specialists – 12% within three years of CCT.

However, 57% of the doctors joining the specialist register by CCT in that specialty were EEA graduates or IMGs compared with the average of 35% across all specialties. We've shown that doctors with a non-UK PMQ were far more likely to leave within three years of gaining their CCT than UK-qualified doctors. Therefore, we believe this is what leads to the proportion of specialists leaving obstetrics and gynaecology being higher. However, it may still be of interest to workforce planners to see how the patterns of leaving soon after CCT vary by specialty when projecting future numbers of specialists.

Figure 65: Proportions of doctors who gained a CCT in 2014 and left within three years, by specialty



Reasons for leaving the profession

In order to support the profession, we need to understand the reasons why doctors decide to leave UK medical practice.

Between 21 January and 10 March 2020, we co-produced the 'Completing the picture' survey.* 13,158 doctors who had previously practised in the UK, but who weren't doing so at the time, completed the survey. They answered a series of questions, including why they had decided to stop practising, or if they had left the UK to practise elsewhere.

Notably, over a third (35.7%) of doctors stated 'Dissatisfaction with previous role/place of work/NHS culture' contributed to their decision to leave UK practice. And a quarter (27%) of doctors gave 'Burnout/work related stress' as a reason. The full report will be published in the coming months.

* The survey was conducted in partnership with Health Education England (HEE), the Department of Health (Northern Ireland), NHS Education for Scotland (NES) and Health Education and Improvement Wales (HEIW).

Figure 66: Reasons for having left the UK medical workforce, 'Completing the picture survey'*

* Proportions of the 91,313 responses provided to this question – for which participants could select more than one option.

Doctors' future intentions

In 2020, 'the Barometer survey' and NTS findings contained promising signs for the immediate future of the medical workforce.*

There was a marked decrease in the proportion of doctors intending to make a career change – from 71% of respondents in 2019 to 57% in 2020.

While the responses to the NTS across all levels of training were broadly similar to the 2019 survey, there was a strong growth in the proportion of F2 respondents looking to continue training. There were also noticeable falls in F2 respondents looking to take a career break, or temporarily work outside the UK.

It's difficult to be certain if these findings will have long-term implications because they could be related to the practicalities and limitations at the time of the pandemic.

The questions in 'the Barometer survey 2020' relating to respondents' future intentions can be divided into three groups:

- planned career changes in the next year
- steps taken towards leaving the profession
- reasons for wanting to make a career change.

Fewer doctors are planning to leave clinical practice, compared with 2019

A smaller proportion of respondents to 'the Barometer survey 2020' (57%) were considering making a career change in the next year, compared with respondents in the 2019 survey (71%).

Of the 2020 respondents who were looking to make a career change, fewer were considering making a change that would result in reducing or leaving clinical practice, compared with 2019. Specifically, there's been a fall in the proportions of doctors looking to reduce their hours, take a break or leave the profession. Nearly two fifths of doctors (39%) were considering such a change in 2020, compared with 46% in 2019 (Figure 67).

There's some variation by area of practice. Of those intending to make a career change, just over a quarter of GPs (26%) and specialists (also 26%) were considering reducing their hours. Whereas, only 18% of trainees and 17% of SAS and LE doctors were considering reducing their hours.

There were also notable differences across the four countries of the UK. Of those doctors intending to make a career change, almost a third in Northern Ireland (31%) and Scotland (30%) were considering reducing their hours, compared with a fifth in England (20%) and Wales (20%).

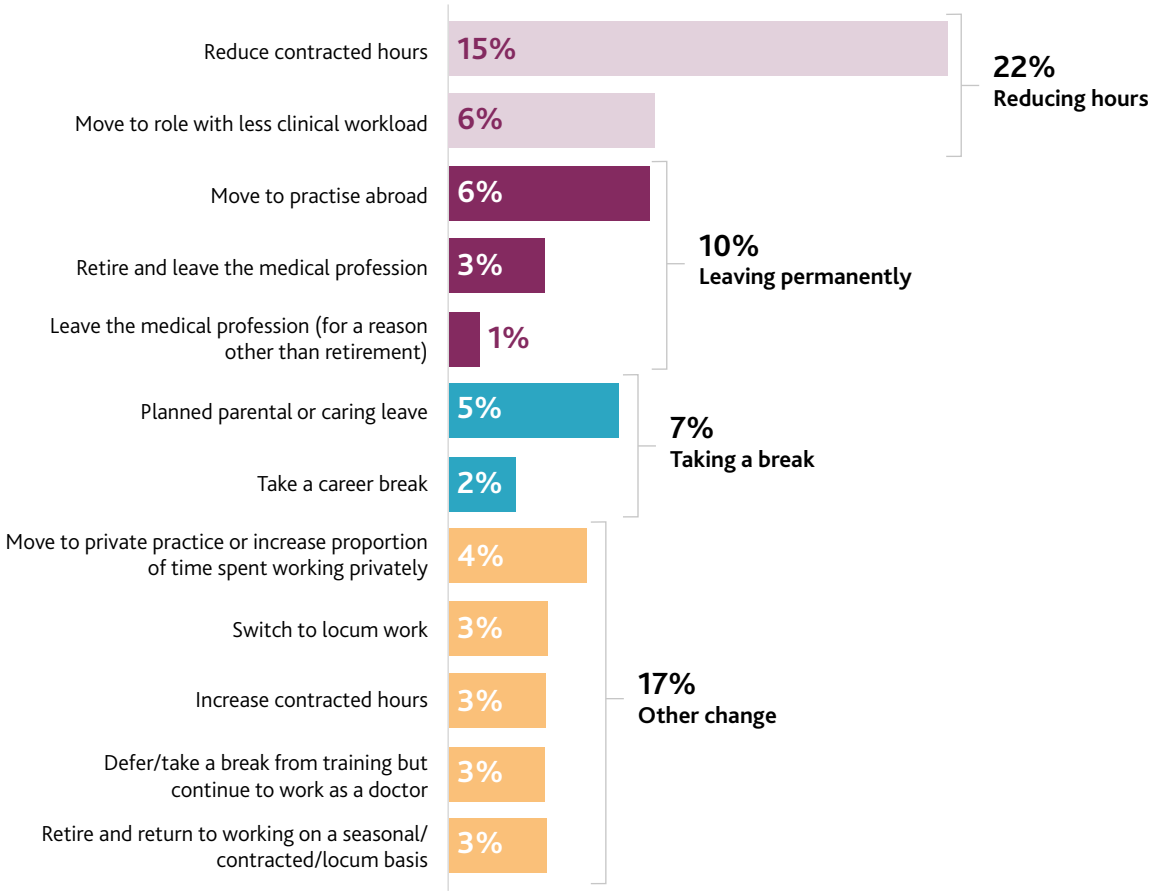
* During the pandemic many academic trainees have been drawn back to full-time clinical work, have had to maintain their academic research when universities were closed, and may have seen, or expect to see, a reduction in funding opportunities.

Doctors experiencing more severe workload pressures were more likely to consider reducing their hours or leaving the profession. This was also true for doctors who said that the pandemic had a mostly negative impact on their health and wellbeing. However, it appears that satisfaction with their role and workload pressures are more prominent factors than their explicit experiences of the pandemic.

Crucially, doctors responded to the survey amid the context of the first pandemic peak, so this will enable us, in the coming years, to analyse its impact on doctors' career choices more comprehensively.

Figure 67: Most likely career changes of doctors considering making a change in the next year

What is the career change you are most likely to make in the next year?



n = 3,693 (all doctors), 'the Barometer survey 2020', QB1a

A similar proportion of doctors are thinking of leaving the UK profession, compared with 2019 – and the proportion of doctors who have taken hard steps towards leaving is almost the same

While the wider group of career changes that amount to reduced clinical hours has gone down – reducing hours, leaving permanently and taking a break – there's been a slight increase in the component considering leaving permanently.

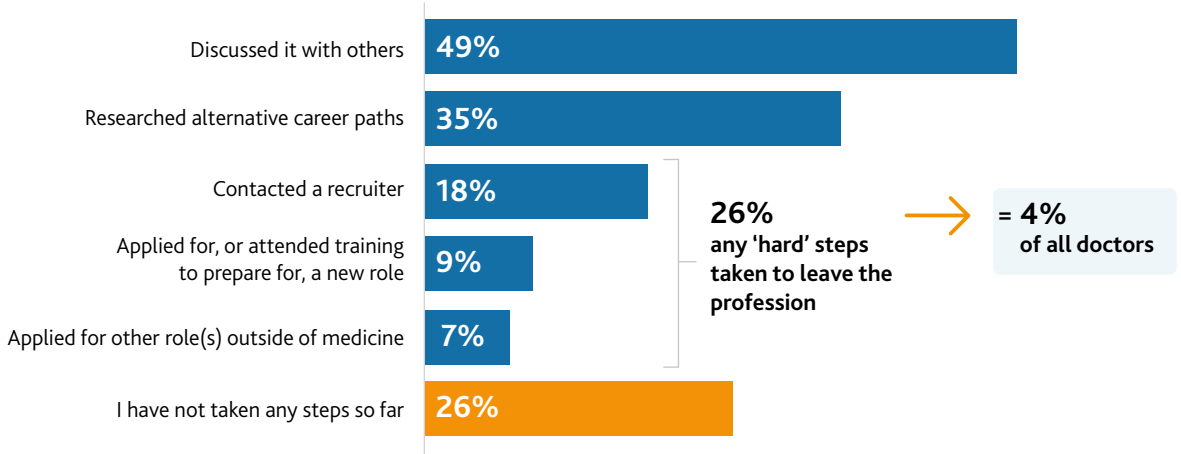
In 2020, 10% of respondents were considering leaving the profession – moving to practise abroad, retiring, or leaving for another reason – which is the same as in 2019. Only 4% of respondents had taken hard steps towards leaving in 2020, similar to the 3% in 2019. Hard steps include:

- contacting a recruiter
- applying for or attending training to prepare for a new role
- applying for another role outside of medicine.

It's likely to have been more difficult for doctors to take hard steps towards leaving the profession during the spring peak of the pandemic. It's too soon to tell whether more will take these hard steps in the future. For the 2020 respondents, however, the pandemic was a secondary reason for wanting to leave and more traditional reasons, described in the following paragraphs, were more prominent. We'll continue to track doctors' career intentions in 2021 to offer further insights into the effect the pandemic has on doctors' career intentions.

Figure 68: Steps taken by doctors who reported they were likely to leave the profession, in 2020

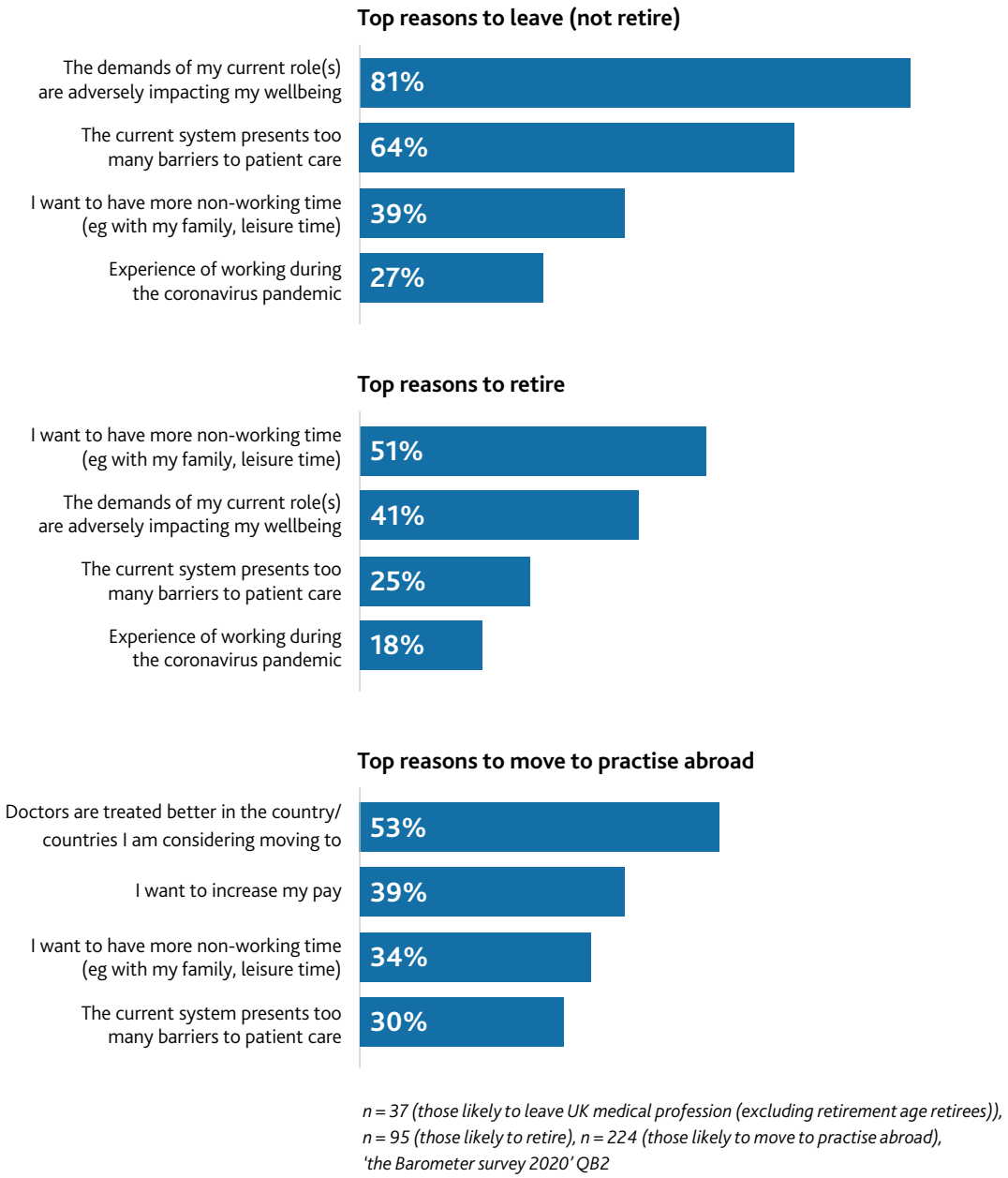
For doctors who said they were likely to leave the UK medical profession in the next year. What steps, if any, have you taken towards leaving the UK medical profession?



n = 618 (those likely to leave UK medical profession (excluding retirement age retirees)), 'the Barometer survey 2020' QB3

Figure 69: Reasons for wanting to leave the profession, in 2020

Reasons why making career change



n = 37 (those likely to leave UK medical profession (excluding retirement age retirees)), n = 95 (those likely to retire), n = 224 (those likely to move to practise abroad), 'the Barometer survey 2020' QB2

Wellbeing and work-life balance are the most common reasons for doctors considering a career change

Wellbeing and work-life balance were among the top reasons for all respondents wanting to leave the profession (Figure 69). This includes doctors who want to retire, move to practise abroad, or leave the profession.

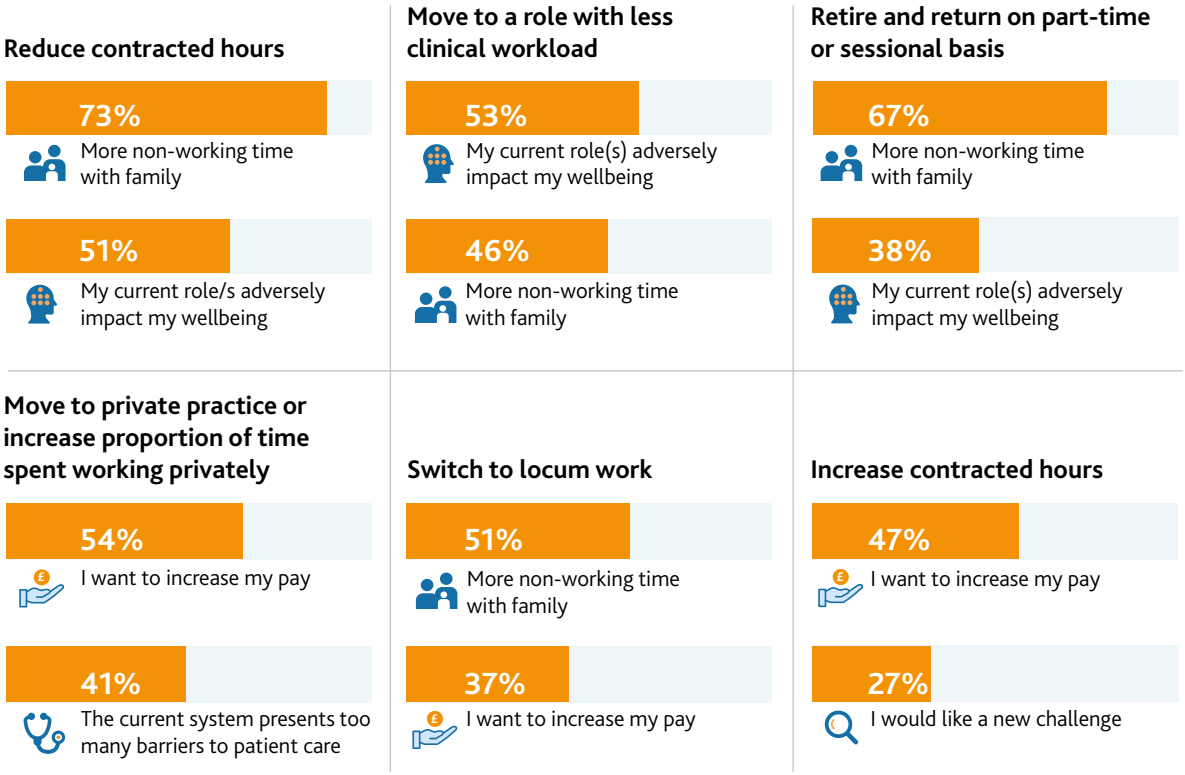
Similarly, as Figure 70 shows, the most common reasons for doctors who were likely to make a range of career changes were:

- concerns about wellbeing
- desire to spend more time with family
- pursuit of increased pay.

Over two fifths (45%) of respondents mentioned that the excessive demands of their current role were affecting their wellbeing, or that the current system was presenting too many barriers to patient care. This proportion is far greater than the 15% who cited the pandemic as a reason for them wanting a career change.

Figure 70: Top two reasons for making a career change among those intending to do so, in 2020

Reasons why making career change



n = 557 (reduced contracted hours), n = 240 (move to a role with less clinical workload), n = 119 (retire and return on part-time or sessional basis), n = 159 (move to private practice or increase proportion of time spent working privately), n = 103 (switch to locum work), n = 126 (increase contracted hours), 'the Barometer survey 2020' QB2)

Future intentions of postgraduate trainees

Most postgraduate trainees intend to continue training or work as a qualified doctor in a year's time

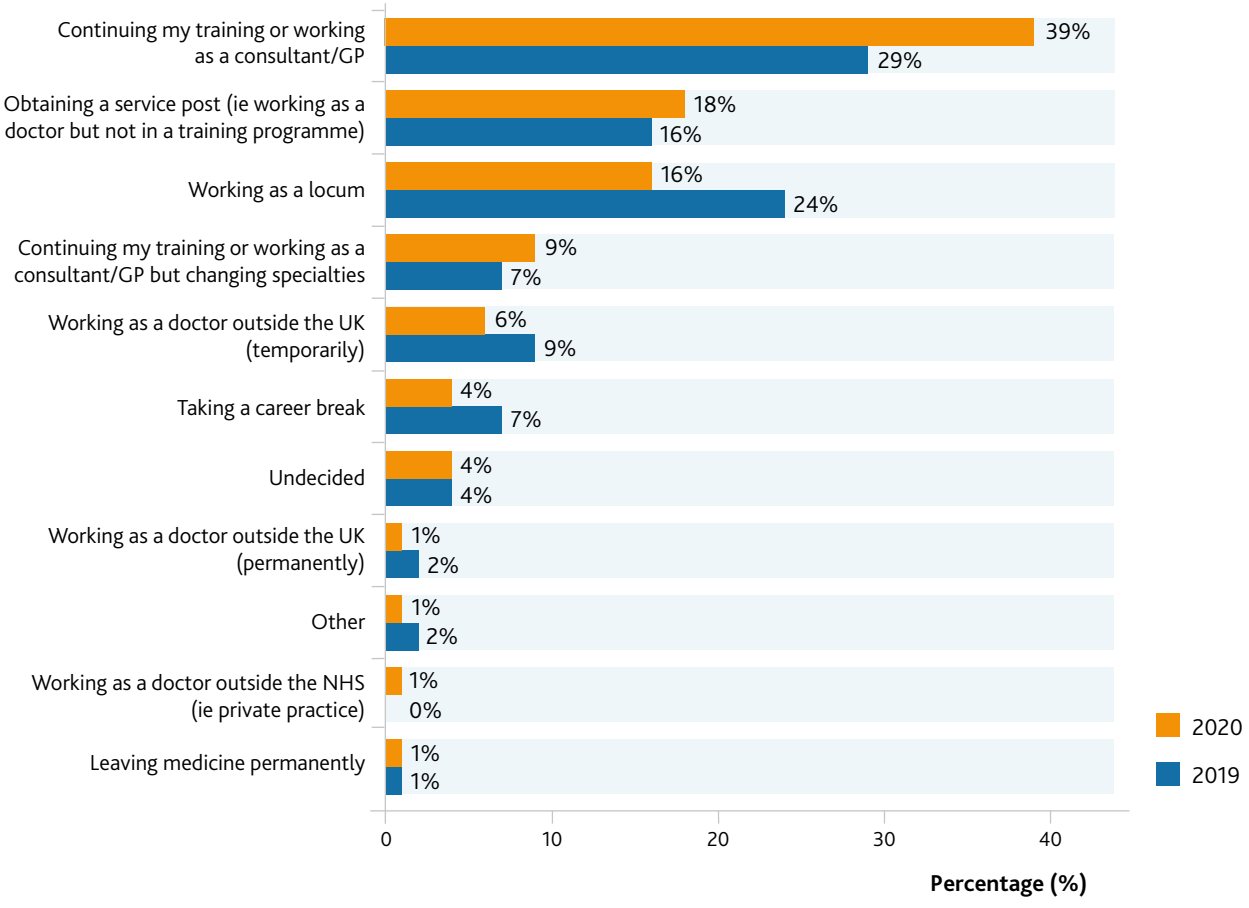
Every year in the NTS, we ask trainees what they see themselves doing one year from now. The responses for the 2020 survey were consistent with the responses given in 2019. Just under three quarters (73%) intend to continue training, or work as a consultant or GP, but some trainees (10%) were intending to work as an LE doctor instead of train. This 10% represents 2,771 trainee doctors and may be another signal of the increasing lengths of time needed to train specialists (page 111). Of those intending to work as an LE doctor instead of train, half intend to work as a locum.

F2 trainees are more likely to continue their training than in 2019

In contrast to the NTS results for all doctors, F2 trainees' future intentions were noticeably different from 2019. There's been a shift from wanting to work as a locum or work abroad, to wanting to continue in training, or work as a consultant or GP (Figure 71).

In 2020, 48% of F2 trainees were intending to continue training (either in their current specialty or switching to another) or working as a consultant or GP, compared with 36% in 2019. This increase might suggest that trainees are more likely to want to choose something familiar and secure as a result of the pandemic.

Figure 71: F2 trainees' intentions for a year's time (NTS survey), in 2020



Learning from 2020

Data relates to the early stages of the coronavirus (COVID-19) pandemic, including the first peak in April 2020.

Embedding positive learning and changes from 2020 is important. Changes must be inclusive to support the greatest possible improvements.

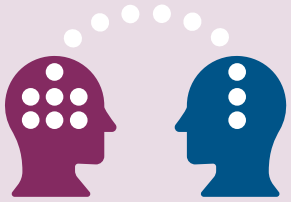
BME doctors were less likely than white doctors to report positive changes.

44% of BME doctors identified a positive impact in relation to teamworking, including between doctors (compared with 52% of white doctors).

46% of BME doctors identified a positive impact in relation to sharing knowledge and skills (compared with 61% of white doctors).

38% of BME doctors identified a positive impact in relation to the speed of implementing change (compared with 57% of white doctors).

Doctors reported positive and potentially sustainable impacts related to autonomy, belonging and competence, areas known to be important for doctor wellbeing.



Some doctors are concerned about losing training and development opportunities – 41% reported a negative impact in this area. Although informal opportunities did emerge.

Increasing the supply and retention of doctors and supporting their wellbeing remain priorities.

Chapter summary

Despite the terrible human cost of the coronavirus (COVID-19) pandemic and the impact of it on the safety and mental health of health professionals, the response of the medical profession and the health and care system more generally has been very impressive. The changes made – often very rapidly and flexibly – exposed how it is possible to make beneficial changes to the way medical work is organised.

Many doctors reported experiencing positive changes to their work during the first peak of the pandemic, including:

- improved team working – three fifths of respondents (62%) experienced this between doctors and nearly half (48%) experienced this within multidisciplinary teams
- sharing knowledge and experiences – over half of doctors (54%) reported this
- the speed of implementing change – half of doctors (49%) identified with this
- more visibility of senior leaders in patient care settings – nearly two fifths of doctors (38%) saw this.

Many of these positive changes contribute to autonomy, belonging and competence – essentials for doctors' wellbeing, motivation and ability to deliver high-quality patient care.*

However, experiences of the pandemic have been diverse and not all doctors experienced positive effects equally.

In this chapter, we explore some of the changes doctors experienced and the importance of embedding the learning from the first peak of the pandemic.

Against the backdrop of increasing demand for care and surging workloads, we also consider the ever-growing importance of attracting and retaining high-quality medical professionals. We also look at how greater flexibility in medical education and training is key to adapting for the future.

* This was identified in the report, 'Caring for doctors Caring for patients',[1] which we commissioned Professor Michael West and Dame Denise Coia to produce.

Introduction

Doctors and other healthcare workers have been at the forefront of the pandemic dealing with acute patient and system needs. They have continued to show unwavering dedication to patient safety and professionalism despite working in highly uncertain and unsettled circumstances.

There's now an opportunity to build on and embed the learning from 2020 to bring about positive change so that the health and care system can support the greatest possible improvements in health and wellbeing for everyone, well beyond this crisis.

Nearly all doctors and medical students have experienced some degree of change in their day-to-day work or training this year, including:

- being redeployed to different roles
- changes to their working patterns
- medical school adjustments*
- postponed rotations
- changes to how they carried out clinical duties.

Doctors have created opportunities in the way they have adapted to these changes. Some, for example, have experienced improved team working, more efficient decision making and increased visible leadership. We, together with the health and care system, need to embed these positive changes.

However, as reported in earlier chapters, experiences have been diverse. While some doctors have reported greater satisfaction day to day, the ongoing pandemic has had an adverse effect on the mental health and wellbeing of a third of doctors. And we are concerned that, with the backlog of non-COVID-19 patients, the risk of the resurgence of the coronavirus alongside other winter pressures, there will be an increasing toll on the profession.

On top of this, the pandemic has brought in new challenges around the supply of doctors on the medical register (discussed in chapter 3). It's also highlighted the importance of preparing doctors to meet the needs of diverse communities, alongside system-wide action to prevent or reduce health inequalities.

In this chapter, we reflect on the challenges – present and future – and the opportunities to strengthen areas such as leadership, team working, the sharing of knowledge and experiences, induction, and the speed of implementing change.

* Medical schools adjusted final assessments and graduation arrangements to allow final year students to graduate amid the disruption caused by the pandemic.

We mustn't lose the innovations, and the resulting gains, that this unprecedented situation has prompted.

We're still in the pandemic and the cumulative impacts and lessons will take some time to unearth. Throughout this chapter we explore some of the most immediate lessons from the initial phase of the pandemic and what this means for us and the wider health and care system.

Supporting doctors' wellbeing and ability to deliver high-quality care

Before the pandemic, doctors reported widespread burnout and an array of workforce and workplace pressures. This was leading many doctors to consider career breaks and early retirement.[26]

Doctors need positive workplace cultures and environments where team working and inclusive leadership are encouraged to thrive. These attributes support both a doctor's wellbeing and their ability to provide safe, high-quality care. And this, in turn, can help to attract and retain doctors.[1]

Much of this is mirrored in the findings from 'the Barometer survey 2020'. We can see links between satisfaction and wellbeing with experiences of team working, leadership, intentions to leave the profession, and patient safety.

- Almost 9 out of 10 doctors (87%) who said they were overall satisfied in their day-to-day work also agreed they were part of a supportive team.
- Doctors with a lower risk of burnout were consistently more likely to give a positive response to questions about support and teamwork than those with a higher risk of burnout. This was particularly true in relation to support from senior medical staff. Over three quarters of doctors (77%) with a very low risk of burnout felt supported by senior medical staff, compared with around two fifths (42%) of those with a high risk of burnout.
- It's much more common for doctors who are dissatisfied to be considering leaving medical practice. A third of doctors (32%) who were overall dissatisfied in their day-to-day work said that they were likely to leave the UK medical profession in the next 12 months.* This is compared with around one out of ten doctors (12%) who were overall satisfied.
- There is a similar pattern around burnout. One out of ten doctors (11%) with a very low risk of burnout said they were considering leaving the medical profession; this rose to almost two fifths (38%) of those with a high risk of burnout.
- Half of doctors (50%) with a high risk of burnout had seen patient safety or care compromised.
- Dissatisfied doctors were more likely to have seen patient safety or care compromised than overall satisfied doctors – nearly half of overall dissatisfied doctors (45%), compared with a fifth of overall satisfied doctors (22%).

The 'Caring for doctors Caring for patients' report† identified that doctors have three core needs to maintain their wellbeing and motivation at work.†

* For reasons other than retirement.

† We commissioned Professor Michael West and Dame Denise Coia to produce 'Caring for doctors Caring for patients' in 2019.

A **Autonomy/control** – the need for doctors to have control over their work lives, and to act consistently with their work and life values.

B **Belonging** – the need for doctors to be connected to, cared for in, and caring of others in, the workplace, and to feel valued, respected and supported.

C **Competence** – the need for doctors to experience effectiveness and deliver valued outcomes, such as high-quality care.

Similar conclusions were reported in 'The courage of compassion' report† which was led by Professor Michael West and Suzie Bailey to explore how workplaces affect nurses' and midwives' practice and wellbeing.[31]

Learning from 2020, we continue to see the importance of autonomy, belonging and competence and some of the ways they might be further embedded in the health and care system.

Developing visible leadership, autonomy, and a listening culture

Visible and inclusive leadership

Effective clinical leadership plays a central role in driving positive and inclusive workplace cultures. These, in turn, improve workforce morale, motivation and mental health and wellbeing, as well as having a positive impact on the quality of patient care.[1, 26, 32]

Clinical leadership is multifaceted – it includes both formal leadership roles, such as clinical or medical management, and the everyday leadership doctors deliver in their day-to-day practice.

Visible formal leadership is essential for creating positive and supportive workplace cultures. It can enable quick communication of issues, support wellbeing initiatives and encourage a safer working environment. At a time of crisis and uncertainty, having a trusted senior leader on hand provides immense support and reassurance for all healthcare workers.

There were positive signs of visible senior leadership in 'the Barometer survey 2020'.

- Three out of five doctors (61%) agreed that clinical leaders were readily available.
- Nearly two fifths of doctors (38%) said they felt there had been a positive impact on the visibility of senior leaders within patient care settings during the pandemic. Of those doctors, half (52%) thought the change could be sustained and 13% thought it couldn't.
- Trainee doctors reported the biggest improvement, with over half (54%) saying they felt there had been a positive impact on the visibility of senior leaders.

The health system needs to consider how to sustain this positive change.

† Commissioned by the RCN Foundation whose aim is to support and strengthen nursing and midwifery to improve the health and wellbeing of the public. The foundation was set up in 2010 by the Royal College of Nursing.

There's some evidence that, overall, more experienced doctors felt more worn out at the end of the day, compared with less experienced doctors. 51% of doctors with more than ten years' experience said they 'always or often felt worn out at the end of the day', compared with 34% of doctors with less than ten years' experience. It's therefore important that employers and the system make sure doctors in leadership roles are sufficiently supported if the positive impact of increased visibility is to be sustained.

A doctor in a more senior role described how the first peak of the pandemic had made them a better leader by being more present and available for their team.

> 'Hopefully I've become a more compassionate leader, and I've taken a lot more trouble to engage with the medical workforce, more than I might've done previously, in terms of just listening to them and trying to understand what their world is. And I think realising that I might have a view from my ivory tower that actually is completely wrong and so I've engaged a lot more … I don't intend going back to the old ways either.'
>
> *Specialist, case study interview*

Box 7:
Supporting and improving leadership

The improvements in clinical practice and compassionate leadership seen during the first peak of the pandemic highlight the importance of our ongoing work with others to support leaders.

In February 2020, we hosted roundtables in each of the four UK countries to discuss with senior healthcare leaders how a collective effort could improve workplace environments. Four priority areas were identified for action – and compassionate, collective and inclusive leadership was one of them. This remains a key focus of our work, as outlined in our 'Corporate strategy 2021–25'.[33]

We are supporting leaders with our guidance on leadership,[34] which signposts to stakeholder websites and emphasises the need for clear communication. As well, our Outreach teams have piloted a new training programme designed to help improve doctors' skills and confidence to address unprofessional behaviour.[35]

We want to continue to work with the system to support leaders, who, in turn, can support doctors and help to minimise risk of burnout within the workforce.

Autonomy and feeling listened to

The pandemic has required healthcare workers to step into unfamiliar roles and trust in their autonomy to implement new initiatives.

Being listened to and being involved in decision making are key to making autonomy effective for doctors. In the national training survey (NTS) 2020, three fifths of trainees (62%) and over half of trainers (52%) felt there was a culture of listening to doctors about working practices in their workplaces – this included discussions related to the pandemic. Although around a fifth of trainees and trainers disagreed with this statement (17% and 20% respectively), it's encouraging to see a step in the right direction for many.

One doctor noted they had seen greater autonomy for doctors during the pandemic.

> 'I think [the pandemic] showed how the NHS could work at its best. I think we cut through a lot of red tape. Clinicians were making decisions.'
>
> *Specialty and Associate Specialist doctor, case study interview*

We've seen some great examples where healthcare workers have excelled in leading locally, for example:

- rapid reorganisation of primary care with remote consultations
- splitting acute care wards into 'hot' and 'cold' areas
- redeployment of doctors into new roles and reorganisation of rotas to cope with the demand.[36]

Half of doctors (49%) felt there had been a positive impact on the speed of implementing change so far in the pandemic. This was felt most strongly by GPs, with 59% reporting a positive impact. This is probably due to the extensive changes experienced in primary care, with a huge shift towards delivering most patient care remotely. Reassuringly, a third of doctors (36%) experienced this positive impact and thought the improved speed of change could be sustained after the pandemic.

Remote working

One clear example where doctors have been able to show autonomy is in remote working and the use of technology to deliver patient care. The first peak of the pandemic has been described as 'the catalyst bringing about the long-discussed digital revolution'.[37] Digital solutions were adopted in very little time and we've seen doctors be flexible and adapt to these changes – 41% of doctors said the pandemic had a positive impact on their ability to provide consultations or clinics remotely.

There are opportunities and challenges in delivering healthcare remotely for patients and for doctors. Several doctors described the benefits of remote working.

> '[Remote working has] given people more flexibility to attend [meetings], rather than having to be in a certain location at a certain time.'
>
> *Doctor in training, case study interview*

> ‘Homeworking is a massive bonus in terms of wellbeing. I’m saving two hours plus per day of not commuting… The docs who work for me are all young-ish doctors with young-ish families. Of course, their reality is they can’t bring the kids into the surgery, which is undesirable anyway, but sometimes needs must. Actually, having that availability to genuinely work from home and have a rota where there’s somebody on-site with somebody actually off-site is amazing.’
>
> *GP, case study interview*

> ‘I was wasting about six hours a week, polluting the environment. I’m not going back to that again, and I’ve been able to pack a lot more in … a major benefit.’
>
> *Specialist, case study interview*

However, delivering care remotely has challenges and risks for both patients and doctors. Communicating bad news or discussing sensitive issues can be much harder over the phone.

> ‘For me, and a couple of others, that was the hardest bit about it. Just talking to sobbing relatives over the phone.’
>
> *Doctor in training, case study interview*

> ‘Telephone consultations [are] not the best way for an oncologist to break bad news.’
>
> *Specialist, ‘the Barometer survey 2020’*

Doctors also mentioned risks of patients’ needs being unmet because of reduced or lack of face-to-face contact. As well, there’s a risk some patients are excluded if they’re not able to access the required technology.

> ‘There is much less face to face patient contact because of all the remote consulting. Most patients like this as being more convenient but it’s time consuming and I’m less certain of any impact that I’m making in terms of moving forward with a patient’s health (and in not missing something significant).’
>
> *GP, ‘the Barometer survey 2020’*

> ‘I think telephone appointments and maybe Zoom or video conferencing will become more common. I think there are lots of people who will be left behind by that and we need to make sure there are appointments for those people.’
>
> *Specialist, case study interview*

Other doctors noted how they missed face-to-face interaction with colleagues and patients, and that working remotely could be exhausting and left them feeling more dissatisfied day-to-day.

While some doctors discussed the challenges and risks of remote working, overall, the negatives were balanced with positive outcomes and opportunities. Therefore, it’s important that, when incorporating technology to deliver care, considerations are taken into what works best for both patients and doctors.

We hope that it will be possible to expand the use of remote working, given the benefits apparent in our evidence, in a way that mitigates the risks that have been cited.

Box 8:
Incorporating technology to deliver care

An urgent recommendation from the 'Caring for doctors Caring for patients'[1] report was for a review of new technologies being used in UK healthcare systems, to increase efficiency, work better with the voluntary sector, and focus on preventative care.

Increased use of technology in providing care has been included in national strategies.

- In England, 'We are the NHS: People Plan for 2020/2021' states that the NHS should commit to offering more flexible, varied roles and opportunities for remote working and online training.[38]
- In Northern Ireland, the 'Rebuilding health and social care services' strategic framework states that both trusts and the primary care sector must consider the continued use and expansion of technology, where appropriate.[39]
- In Scotland, the 2020–21 Programme for Government sets out plans to expand on digital access to care achieved in response to the pandemic. The Scottish government stipulates that, while it recognises that video consultations, via the Near Me video consultation service, will not be appropriate for every patient or situation, the intention is to move to the position where it will be the default option for consultations.
- In Wales, 'A Healthier Wales' sets out plans to expand on the use of technology in consultations.[10] This was initially designed to support rural communities. Since the pandemic, the Welsh government has laid out plans to roll out virtual consultations across the NHS in Wales in the future. It recognises that video consultations will not be appropriate for every patient or situation, but the intention is to create a more blended, holistic approach to healthcare in Wales.

The increase in remote consultations and other changes to the way care is delivered means that good practice in shared decision making is more important than ever. We've recently published updated guidance on 'Consent: patients and doctors making decisions together' to make it easier to apply in everyday practice.[40]

Strengthening teamwork and a sense of belonging

Effective teamwork is fundamental for doctors to deliver good and safe patient care. We also know that belonging to a supportive and inclusive team is beneficial for a doctor's wellbeing.[1, 26] It's therefore encouraging to see that during 2020:

- three fifths (62%) of doctors experienced a positive impact on team working between doctors
- nearly half (48%) of doctors felt there had been a positive impact on team working between multidisciplinary teams.

Conversely, around one out of ten doctors felt there had been a negative impact on teamwork in each of these areas (7% and 13% respectively).

In the NTS 2020, doctors were extremely positive about team working – four out of five trainees (84%) agreed their department, unit or practice encouraged a culture of teamwork between all healthcare professionals.

We need to understand more about the circumstances that led to these positive team working experiences, so they can be extended to all doctors.

Sustaining the positive changes doctors have experienced is important. Seven out of ten doctors (70%) who experienced a positive impact on team working between doctors felt it could be sustained after the pandemic. And 64% of doctors who experienced a positive impact on team working between multidisciplinary healthcare professionals felt the same.

Doctors in training talked about working as part of multidisciplinary teams.

> 'Everyone from consultant down through... To everyone on the ward. Nurses, allied healthcare professionals, everyone has been very much looking out for each other and certainly, within general medicine, I felt a real sense of being part of a wider team.'
>
> *Doctor in training (Foundation interim Year 1), case study interview*

One doctor described the sense of camaraderie between different healthcare professionals that they would like to see continue.

> 'the camaraderie that I think that there was between those doctors and nurses, of, "We're kind of in this together," and stuff. I think that's really nice, and I think maybe taking that understanding forward.'
>
> *Doctor in training (Foundation Year 1), case study interview*

The 'Caring for doctors Caring for patients' report identified effective team working as critical in giving doctors a sense of belonging in modern, complex workplaces. The review found that belonging to a supportive and inclusive team can 'offer a significant buffer for doctors from the stresses of their work'.[1] It is therefore crucial that we and others do what we can to encourage inclusive and supportive working environments, as well as good team working.

Box 9:
Supporting and improving teamwork

Team working is an important element of the workforce plans across England, Northern Ireland, Scotland and Wales.

- In England, multidisciplinary teams are a key theme throughout the 'Interim NHS people plan'.[41]
- In Northern Ireland, multidisciplinary teams are being rolled out across GP Federations.
- In Scotland, multidisciplinary teams feature in the 'National health and social care workforce plan'[10] and GP contract. [42, 43, 44]
- In Wales, the integrated health and social care plan[10] promotes multidisciplinary team working and includes a theme on seamless workforce models, including 'Work with partners to harmonise governance, regulation and registration arrangements to facilitate multi-professional working.'

A core theme in our new corporate strategy is 'Enabling the profession to provide safe care'. As part of this, we commit to working with healthcare systems to improve working environments and team culture for the medical workforce.

Through current projects and our work with others, we continue to play our part in helping to improve team working. This includes:

- sharing good practice across the health service through our Outreach teams
- including requirements about multidisciplinary team working in 'Outcomes for graduates'[45] and 'Generic professional capabilities'[46]
- participating in discussions about common education standards and inter-professional learning on the inter-regulatory group
- commissioning research into the preparedness of recent medical graduates to meet anticipated healthcare needs – one aspect of this is exploring multidisciplinary teams.

Inclusive team environments

The 'Fair to refer?' research* that we commissioned found that some groups of doctors are treated as 'outsiders', which creates barriers to opportunities and makes them less favoured than 'insiders' who experience greater workplace privileges and support.[6] Often the 'outsiders' are non-UK graduates or from a black and minority ethnic (BME) background.

Overall, in 'the Barometer survey 2020' there were few notable differences between the experiences of doctors from a BME background and those from a white background. Some of our findings reinforce the evidence about insider/outsider dynamics.

Doctors from a BME background were less likely to say they had experienced some of the positive changes seen during the pandemic.

- 38% of doctors from a BME background said there had been a positive impact on the speed of implementing change, compared with 57% of white doctors.
- 46% of doctors from a BME background said there had been a positive impact on sharing of knowledge and experiences across the medical profession, compared with 61% of white doctors.
- 55% of doctors from a BME background said there had been a positive impact on teamwork between doctors, compared with 68% of white doctors.
- 44% of doctors from a BME background said there had been a positive impact on teamwork between multidisciplinary healthcare professionals, compared with 52% of white doctors.

Data from the NTS 2020 also found that doctors from BME backgrounds were less likely to agree that their training environment provided a supportive environment for everyone regardless of background, beliefs or identity. 87% of white trainees perceived their working environment as supportive for everyone, compared with 84% of trainees of mixed ethnicity, 82% of Asian or British Asian trainees, and 79% of black or black British trainees.

The events of 2020 have brought to the fore a renewed focus on tackling inequality within society and healthcare.

COVID-19 is affecting patients and doctors in different ways. For everyone, the enduring impacts of deprivation, social inequalities and racial discrimination have been exposed. This has been particularly apparent in the NHS. Medicine is a globalised profession – nearly 40% of UK registrants are from a BME background and there are acknowledged longstanding issues of discrimination and disadvantage.

Our Chair, Dame Clare Marx, has written to the profession[47] setting out our commitment to work to reduce inequalities. We are determined to work with others to take forward the recommendations from the 'Fair to refer?' research and to tackle the long-term issues that shape inequalities. This includes our work on the educational attainment gap, preparedness to practise, and making sure that doctors from all backgrounds have a supportive start to UK practice. See box 10 for more information.

* We commissioned Dr Doyin Atewologun and Roger Kline to conduct UK-wide research to explore why some groups of doctors are referred to us more than others.

Box 10:
Fairness and inclusivity in clinical workplaces

Addressing the ethnic attainment gap in medical education

There is a well-reported ethnic attainment gap in medical education – most strikingly seen in the 12 percentage-point difference in specialty exam pass rates from a UK medical school for white and trainees from a BME background. This variation cannot be explained by factors such as gender or socio-economic status.

Research suggests this is the result of persistent inequities throughout medical education and training.[48] BME doctors report receiving less support and feedback during training and experience more barriers, including being separated from support networks. Our NTS data show that this difference occurs very early in a doctor's career, with F1 doctors from a BME background being less likely to report feeling adequately prepared for their first post than their white colleagues.*

We continue to shine a light on the multi-layered inequities within medical education and use our regulatory influence to drive local and system-wide change. Since 2019, postgraduate bodies have submitted an annual action plan for tackling inequalities in their regions. We have recently published advice to medical royal colleges and faculties on actions they can take to improve fairness, including ensuring good quality feedback is provided to all medical students following an unsuccessful exam attempt.[49]

We recognise that there's a need to build up a strong evidence base to show interventions can have a real impact.

We are partnering with organisations to evaluate interventions around early personalised learning needs analysis, mentoring and support for educators in response to our 2019 research, which asked doctors in training from a BME background 'What supported your success?'.[50]

This builds on the work of others who have already shown that change is possible, such as Health Education England (HEE) whose educational programme, which was developed in the North West, achieved a significant improvement in Clinical Skills Assessment (CSA) results for GP trainees who had failed the CSA.[51]

Helping to prepare international doctors for UK medical practice

We've expanded the reach of our 'Welcome to UK practice' programme by offering virtual workshops to non-UK doctors joining the UK medical workforce. It's important for doctors to have a supportive start to UK medical practice as it can affect their continued practice and experience.[6]

Preparedness for practice

One of the key points in exploring the impact of changes to exams as a result of the pandemic is considering any equality implications. We've commissioned research on the experiences of the 2020 UK graduates. This will include how starting clinical practice earlier has affected their preparedness for practice and considering what lessons can be learned from this.

* Since 2012, there is a persistent 10% difference in responses to the question 'I was adequately prepared for my first F1 post'
See our NTS progression reports and data for more information.

Helping doctors to build and maintain competence

Making the most of all learning opportunities

We know that, when there is a high demand on services, time dedicated to professional development is often the first thing to be deprioritised. It's therefore unsurprising that, as described in chapter 1, some doctors reported a loss of training opportunities as an outcome of the first peak of the pandemic. Two out of five doctors (41%) felt there had been a negative impact on access to development or learning opportunities. Moreover, disruption to formal training meant many trainees missed out on formal opportunities to meet their competencies or to carry out planned rotations.

However, over half of doctors (54%) said there had been a positive impact on sharing knowledge and experiences. And, in the NTS 2020, most trainees (87%) continued to rate the quality of clinical supervision as 'good' or 'very good' – suggesting that aspects of postgraduate education are still functioning effectively. The more informal ways of learning, developing and sharing experiences are important and should be encouraged as part of doctors' lifelong learning.

One 2020 UK graduate described how, while their core training had gone online, they felt there was more time for hands-on teaching on the ward.

> 'Everyone I saw by myself was then reviewed by a senior, and that is the best learning experience you can have, because you've just seen a patient, you've gone through a series of thought processes in your head, and then you're with a consultant or a registrar, who's perhaps got a little bit more time, who can go through the same thought process as you've had and pick out perhaps where they might have thought something different or changed something.'
>
> *Doctor in training (Foundation interim year 1), case study interview*

We're currently working with researchers at Newcastle University to understand 2020 UK graduates' motivations and experiences*. However, interim findings indicate that the key motivating factors for doctors taking a 2020 graduate post were learning, gaining experience, and confidence.

Another trainee described how the pandemic had presented them with the opportunity of becoming the trainer, delivering sessions on donning and doffing personal protective equipment (PPE).

> 'I jumped in with trying to help … I ended up teaching 50-odd people one day about how to put on and off the PPE, things like that.'
>
> *Doctor in training (Foundation interim year 1), case study interview*

* See chapter 2 for more information.

Finding informal ways to share knowledge and experiences with colleagues can help doctors' overall feelings of competence – a core need for doctor's wellbeing identified in 'Caring for doctors Caring for patients'. Moreover, opportunities to develop outside of formal training was identified as a protective factor to retain more experienced doctors who may be looking to continue working in medicine but who want to change their ways of working.[1]

It's important that workplace cultures embrace and recognise all forms of learning and development to support doctors to grow, so their skills and competence are constantly improving.

Induction and feeling prepared for practice

A significant reconfiguring of care delivery was needed to help with the pandemic.

For many doctors, this meant being redeployed to a different role. In 'the Barometer survey 2020', two fifths of doctors (42%) said they were redeployed – a quarter (27%) in the same specialty or area of practice, and 15% to a different specialty or area of practice.

As well, we granted temporary registration to 28,076 doctors to boost the available pool of doctors who could help respond to the pandemic.

The high numbers of doctors who were redeployed or returning to practice highlights the importance of good inductions. We've previously noted how crucial this is in a workforce that is likely to be increasingly flexible and mobile in the future.

A lack of a good induction is thought to be a contributing factor to poor patient experience and, potentially, patient safety. Without it, doctors can feel stressed, undervalued and 'out of their depth', leading to treatment delays and possible clinical errors.

On top of this, a lack of suitable induction can affect some doctors more than others. The 'Fair to refer?' research found that doctors who are new to UK medical practice and fail to have a supportive start can then continue to experience further disadvantages as an 'outsider'.[6]

The system has been responding to the need for effective inductions, including signposting doctors to wellbeing materials and to other useful resources related to new ways of working during the ongoing pandemic.

- HEE launched their new 'Wellness Induction' materials, which provide wellbeing and mental health support materials and videos for 2020 graduates and their supervisors.[52]
- The Northern Ireland Medical & Dental Training Agency had a specific induction process for 2020 graduates providing essential information and wellbeing support.[53]
- NHS Education for Scotland (NES) launched guidance for 2020 graduates and other trainees around working during the pandemic and links to wellbeing support.[54]
- Health Education and Improvement Wales (HEIW) launched a suite of resources on wellbeing and FAQs around new working practices.[55]

Box 11:
Supporting effective inductions

In June 2020, we published research into the nature and scale of the issues associated with doctors' induction, including those returning to practice.* This research involved interviews with doctors and stakeholders across primary and secondary care settings, who described the features of safe and effective inductions for doctors.

The findings showed that, too often, positive interventions are down to individuals putting in extra effort outside of their usual working hours, rather than a more systemic approach. A lack of a good induction is perceived to be a contributing factor to poor patient experience and, potentially, patient safety. In its absence, doctors can feel stressed, undervalued and 'out of their depth', resulting in delays in treatment and possible clinical errors.

The research identified some key principles doctors want to see from an induction:

- **tailored** – to their individual circumstances, their specific needs and level of expertise
- **timely** – physical induction is provided at the right time for them, with some information ideally provided in advance of starting
- **focused** – on what they need to do the job and is expertly designed by people who understand their role, ie by both senior colleagues and by those who are currently doing the role or have done so recently
- **engaging** – provides new information in an engaging, interactive way rather than duplicating
- **welcoming and inspiring** – sets the tone for their future career and helps them understand the culture and ethos of the organisation and where they fit within it
- **evolving** – isn't static, ie content is kept up-to-date and is reflective of feedback.

* The full findings of the research were published in June 2020 and are available here.

Feeling safe to deliver care competently

We know that a doctor's priority is the welfare of their patients, alongside their own wellbeing and that of the healthcare team in which they work. We don't expect doctors to leave patients without treatment, but we also don't expect them to provide care without regard to the risks to themselves or others.

- Two fifths of doctors (43%) felt that a situation had arisen where they believed their safety or a colleague's safety was compromised while practising.
- Over half of all trainees had concerns about their personal safety, or that of their colleagues, during the pandemic. A quarter (24%) felt their concerns were only partially addressed and 3% reported they weren't addressed at all. However, a quarter of trainees (26%) said that the culture of reporting concerns had improved during the pandemic.

Many frontline workers expressed concerns around the availability of PPE. While access to and supply of PPE have improved, we know this has been a great concern of doctors.

- Four fifths (80%) of doctors said they had experienced a safety compromise, where a perceived lack of suitable PPE was a contributing factor.

Doctors need to feel safe and supported in order to provide the safest care to patients, and to feel able to work competently.

Attracting and retaining a high-quality medical workforce

Workload pressures continue to be an issue

We've reported extensively that high workloads continue to be a challenge for doctors. They are a significant cause of pressure, which has implications for wellbeing and burnout.[26, 56] 2020 is no different. Heavy workloads continue to be an issue for many doctors.

As reported in chapter 1, nearly one sixth of doctors (15%) said they were struggling with their working hours and workloads, and a third of doctors (34%) said they had made an adjustment to their work due to the pressure.

Some doctors reported improvements in workloads and burnout in 2020. 51% of doctors in 2020 said they were managing with their workload, compared with 29% in 2019.

Even for those doctors who have seen improvements, we're concerned that, in the latter part of 2020 and in 2021, workloads will increase, and we could see new cycles of unsustainable demand and pressure.

In the short term, the disruption of the pandemic has caused a growing backlog of patient demand for both primary and secondary care. The health systems need to restart and catch up on elective and delayed treatments. On top of this, potential additional peaks of COVID-19 infections and winter pressures are likely to create additional pressures on an already stretched system. This is concerning for both patients and the profession.

Doctors expressed concerns about patient backlog and the impact this will have on both patients and the system.

> ‘[There is a] huge backlog of patients waiting for non-life-threatening surgery - this is causing massive detriments to patient quality of life and risks emergency presentation later with more significant complications.’
>
> *Specialist, ‘the Barometer survey 2020’*

> ‘Access to secondary care has been extremely restricted so people are not getting consultations or imaging and I think there will be a big price to pay in terms of backlog and delayed diagnoses.’
>
> *GP, ‘the Barometer survey 2020’*

Excessive workloads are a key factor affecting poor patient satisfaction, low levels of staff engagement, and failure to innovate.[1] The excessive work demands in medicine can exceed the capacity of doctors to deliver the high-quality patient care they wish to, which affects their feelings of competence.

There are many steps that will be needed to help reduce the workload pressures felt by doctors and other healthcare workers in the system. The greater use of physician associates and anaesthesia associates, who we will be regulating, can be part of the solution.

Box 12:
Physician associates and anaesthesia associates

Physician associates and anaesthesia associates* have played an important role in the response to the pandemic and helped to alleviate pressure on other healthcare workers.

The generalist approach of physician associates has enabled them to be flexible in adapting to supporting the health system's response to the pandemic where needed.

Anaesthesia associates have been making vital contributions in anaesthesia and sedation services, alongside consultants in theatre, and supporting other services where required.

In July 2019, the Department of Health and Social Care (DHSC), with the support of the four UK governments, asked us to regulate both physician associates and anaesthesia associates.

We have been making good progress on developing the regulatory framework for both of these roles with the support of our partners. In September, we published an update on the progress we have made so far and we'll continue to update this as the programme develops.[57]

* Physician associates and anaesthesia associates are relatively new professional roles, which bring additional support to multidisciplinary teams. They are two of the four groups collectively known as medical associate professions (MAPs).

Increasing the supply of doctors remains a priority

The long-term pressures on doctors' workloads and the volume of vacancies within the UK health services existed long before the pandemic. As such, increasing the number of internationally qualified doctors and UK-trained doctors must remain a priority for us and others.

In the UK, the number of international medical graduates (IMGs) and doctors who graduated in the European Economic Area (EEA graduates) make up a significant proportion of the UK workforce.

As reported in chapter 3, IMGs joining the UK medical workforce now outnumber both UK and EEA graduates combined. Over 10,000 IMGs joined the UK workforce between 2019 and 2020. And there has also been a notable increase in medical students joining from domiciles in the European Union (EU) in the 2019-20 academic year. These are encouraging signs that the UK continues to be a favourable location for international and EU nationals.

It is important that all new doctors starting work in the UK feel they belong to inclusive teams and supportive working cultures – highlighted earlier in this chapter.

We're beginning a programme of research on the world migration of doctors to better plan for the future. The first project in this programme is due to complete in the first quarter of 2021, following a delay due to the pandemic.

There remain real uncertainties around the UK's withdrawal from the EU and the transitional period. European doctors make a significant contribution to the UK health service, making up 8.7% of all licensed doctors.

From 1 January 2021, amendments[58] to the Medical Act will ensure that most EEA-qualified doctors will continue to be able to access the medical register in a timely and streamlined way, but there are other questions that are not yet answered.

Although the number of EEA doctors in training has increased by almost a third (29%) since 2016, they represent only 4.3% of all doctors in training. For this group, there are still questions about whether the end of automatic recognition of UK qualifications will alter the intentions of EEA doctors in training as well as EEA medical students that would otherwise have come to the UK.

After 31 December 2020, the Directive on the mutual recognition of professional qualifications will no longer apply to the UK. Recognition of UK medical qualifications will be governed by the national policies and rules of each of the EEA member states. This has been confirmed by the European Commission in its official preparedness notice.[59]

We continue to monitor the number and makeup of EEA-qualified doctors licensed to practise in the UK and we have published a series of reports about this group of doctors.[30]

Box 13:
Professional and Linguistic Assessments Board (PLAB)

We've been working with partners in the UK and abroad to resume the PLAB 1 and PLAB 2 assessments, in line with government guidance on social distancing within a workplace setting. This means that, for now, our bookings for the PLAB 2 assessment will be running at about a third of the capacity we would usually expect.

The demand to complete PLAB 2 remains high with all available slots fully booked to the end of 2020. While we anticipate seeing a higher number of IMG graduates applying, travel restrictions, the uncertainty around the pandemic, and cancellation of PLAB 1 dates* may lead to fewer IMG graduates joining the UK workforce in the near future.

We're now processing a number of registration applications for groups of IMG doctors as there were challenges to obtaining documentation during the initial phase of the pandemic. We're also working with the UK governments to support doctors undertaking PLAB, through initiatives to cut down operational processing and reforming the CESR/CEGPR routes† to registration to make them more accessible.

UK graduates

There is currently debate about the appropriate proportion of the UK workforce that should be UK graduates and/or have completed their specialty training in the UK. But there is general agreement that the number of doctors graduating from UK medical schools and training in the UK needs to be increased.

Our NTS data show that the pandemic has posed some short-term issues, which have disrupted the provision of formal postgraduate training. This has left most trainees feeling that their opportunities to gain required curriculum competencies for their stage of training were reduced.

Three quarters of trainees (74%) and trainers (78%) said their training, or their role as a trainer, had been affected by the pandemic. Four fifths of trainees (81%) felt the pandemic had limited their chances to gain required competencies. 88% of trainers felt the same.

We have worked with postgraduate training organisations to make sure the pandemic doesn't compromise long-term training needs.

* Due to rising infection rates in other countries.

† Certificate of Equivalence for Specialist/GP Registration (CESR/CEGPR) provides a route to specialist or GP registration for those doctors who did not undertake formal postgraduate training in the UK leading to a certificate of completion of training (CCT).

Box 14:
Helping to support medical education and training through the pandemic

Many trainees were redeployed to different specialties or sites as a result of the pandemic. To facilitate this, we approved around 550 additional training locations, so doctors working at them could count this experience towards their training progression.

We also made changes to our approvals process, allowing curricula to change quickly. This meant that assessments could be adapted to new working conditions, while ensuring the same competencies required to attain a CCT.

We supported the introduction of Foundation Interim Year One postings (2020 UK graduates), which have given newly graduated doctors an opportunity to work in approved care settings and support the health service during the pandemic.

We reduced the pressure on the profession by postponing the NTS 2020 and extending the approval of trainers. In addition, we reviewed our quality assurance processes and moved them online where they were required to address particular risks.

We will continue to work with education bodies and postgraduate deans to make sure trainees can catch up on any missed competencies without it being over-burdensome on trainees and trainers.

It's encouraging to see an increase in the number of medical students – a 9% increase from the 2017/18 academic year to the 2018/19 academic year. We'll play our part in making sure that UK education remains of the highest quality. We're introducing the Medical Licensing Assessment to provide a common standard across UK medical graduates. And, as part of our commitment to equality, diversity and inclusion, we'll help to make sure these increasing numbers of doctors are more representative of the communities they care for.

Alongside this, we've presented evidence that longer and more flexible training pathways are becoming more usual. There's also a recognised need for more generalist training and more flexibility in re-training and continuing professional development (CPD) throughout a doctors' career.

Box 15:
Our commitment to flexibility in training

Encouraging and improving flexibility in postgraduate medical training was a key recommendation in our 'Adapting for the future' report (2017).[60] Since then, we have worked with the Academy of Medical Royal Colleges, which has recently published guidance for trainees who switch between specialties.[61]

The new guidance will enhance doctors' experiences of training. It will make it easier for them to broaden their experience of different specialties, as well as develop their careers in ways that are tailored to their own strengths, preferences and circumstances. This is all while making sure patients continue to receive high-quality and safe care.

This is one part of our wider educational reforms, which have seen the introduction of outcomes-based training and the review of flexibility in postgraduate training. For example, we have:

- restated our commitment to less than full-time training
- updated our policy for doctors wishing to train in the UK and receive a CCT through the CESR combined programme
- issued comprehensive guidance on support for trainees with health conditions or impairments.

But there is more to be done, by us and by others, to continue to improve the flexibility doctors have during their training.

The pandemic has brought rapid changes to health provision and training, including earlier entry into year one of the Foundation Programme, changes to training and exams, and greater flexibility in the ways in which different specialties and professions are working together. There's a huge opportunity to build on these changes – this relies on building a common agreement among the various bodies across the four nations.

We have recently held an education policy summit with partners from all four countries to consider the future for medical education and training. The discussions focused on:

- assessment and curricula change
- the balance between generalism and specialism
- preparing graduating medical students
- doctors as health leaders.

Conclusion

As the pandemic continues through 2020 and into 2021, we encourage the learning from this year to be used to promote discussion and change for patients, doctors and all those working in the UK healthcare system.

During the first peak, we have seen areas where doctors have reported positive changes – especially around team working, sharing knowledge, the speed of implementing change and the visibility of senior leaders in patient care settings. These themes are important as they link to doctors' core needs – autonomy, belonging and competence – that are crucial to maintain wellbeing and motivation at work, and patient safety.

As noted throughout this chapter, we and others in the system are already working on improving many of these areas. In particular, our work has focused on leadership, fairness and inclusivity, as well as innovation and teamwork. However, it's important we continue to listen and work with doctors, patients and others in the healthcare system to further reflect and embed learning where we can.

Going forward, we will continue to monitor and track doctors' experiences of training, education and day-to-day work through the NTS and Barometer surveys. In 2021, we'll look at the cumulative impact the pandemic has had on doctors' experiences and wellbeing.

Glossary

ACCS	Acute Care Common Stem
ARCP	Annual review of competency progression
BME	Black and minority ethnic
CBI	Copenhagen burnout inventory
CCT	Certificate of completion of training
CEGPR	Certificate of Eligibility for GP Registration
CESR	Certificate of Eligibility for Specialist Registration
COVID-19	Coronavirus disease 2019
CPD	Continuing professional development
CSA	Clinical Skills Assessment
CT1-3	Core training years one to three
DHSC	Department of Health and Social Care (England)
EEA	European Economic Area
ESR	Electronic staff records
F1	Foundation year one
F2	Foundation year two
FiY1	Foundation interim year one
GMC	General Medical Council
HEE	Health Education England
HEIW	Health Education and Improvement Wales
HESA	Higher Education Statistics Authority
HSC	Health and Social Care (Northern Ireland)
IMG	International medical graduate
LE	Locally employed doctors
MAPs	Medical associate professions
NES	NHS Education for Scotland
NTS	National training survey
PCIS	Primary care information standard system
PHA	Public Health Agency (Northern Ireland)
PLAB	Professional and Linguistic Assessments Board
PMQ	Primary medical qualification
PPE	Personal protective equipment
SAS	Staff grade, specialty and associate specialist doctors
ST1-7	Specialty trainees years one to seven
SWISS	Scottish workforce information standard system
TRE	Temporary register (emergency)
UKFPO	UK Foundation Programme

A note on research and data

Much of the analyses and data in this report have been drawn from primary research and from the information we collect when registering doctors, assuring the quality of medical education and training, and assessing doctors' fitness to practise.

Commissioned primary research

In 2020, we commissioned 'the Barometer survey 2020', an independent research project exploring doctors' day-to-day working experiences in the UK. The research method of this survey is outlined in the following paragraphs.

The state of medical education and practice barometer survey 2020

This research was carried out by IFF Research. 'The Barometer survey' was first conducted in 2019. It was designed to build on previous work and provide a baseline for the annual tracking of doctors' experiences in the workplace, adaptations they make to cope with pressure, and their career intentions.

This year's survey retained this aim, but changes were made to refine some questions and to ask doctors about their experiences in relation to the coronavirus (COVID-19) pandemic. Direct tracking of responses for some questions isn't possible due to these changes.

Some questions that were included in the 2019 survey have been omitted or changed in 2020 to facilitate the inclusion of pandemic-related questions. This includes changes to the wording of some questions and the period of time doctors were asked about. Doctors were asked about their experiences 'in 2020', rather than 'in the past 12 months', which was used previously.

Barometer sample and respondents

The doctors who took part in 'the Barometer 2020 survey' were selected to reflect, as far as possible, the characteristics of the UK's overall population of doctors. The research also includes representative coverage of the four nations of the UK.

Over June and July 2020, a total of 3,693 doctors currently working in the UK were surveyed via an online survey. The results were weighted against GMC population data on the basis of age, registration status, ethnicity and place in which they gained their primary medical qualification.

The following tables give a breakdown of the 3,693 respondents (ie actual unweighted numbers) by various characteristics. The totals for most tables are less than the overall number of respondents because not all respondents provided information for the relevant question (including answering 'don't know' or 'prefer not to say'). The total for registration type is greater than the overall number of respondents (3,721 compared with 3,693) because some doctors are on more than one register.

Registration type

GP	Specialist	Training	SAS/Non-training	Other
1,001	1,917	493	278	32

Primary medical qualification

UK	EEA	Outside UK/EEA
2,617	305	726

Nation

England	Northern Ireland	Scotland	Wales
3,017	111	312	160

Ethnicity

White	BME (all)	Asian/Asian British	Black/Black British	Mixed or multiple ethnic groups	Other ethnic group
2,465	999	718	125	67	89

Gender

Male	Female
1,886	1,682

Age

Under 30 years old	30–34	35–39	40–44	45–49	50–59	60 years and over
159	234	205	367	531	1389	509

Disability

Disabled	Non-disabled
325	3,240

Indicators of burnout in 'the Barometer survey 2020'

Burnout is a state of emotional, mental and often physical exhaustion caused by prolonged or repeated work-related stress. Feeling depressed and lacking motivation are characteristics of burnout. 'The Barometer survey 2020' included seven questions from the Copenhagen Burnout Inventory,[1] an internationally recognised and validated tool for assessing the physical and psychological fatigue associated with burnout.

To what degree do you feel the following about your work?

1 Is your work emotionally exhausting?

2 Do you feel burnt out because of your work?

3 Does your work frustrate you?

How often, if at all, do you feel the following about your work?

4 Do you feel worn out at the end of the day?

5 Are you exhausted in the morning at the thought of another day at work?

6 Do you feel that every working hour is tiring for you?

7 Do you have enough energy for family and friends during leisure time?

Differing risk levels for burnout were suggested by the number of indicators to which participants gave a 'negative' score, where a negative score was:

- for questions one to six, answering a question with experienced to a 'high' or 'very high' degree, or experienced 'often' or 'always'
- for question seven (energy for family and friends), answering experienced 'seldom' or 'never'.

Participants were grouped into four categories based on their responses, though the categories are indicative only given the subjective nature of burnout and the burnout questions.

- **Very low burnout risk** – gave a negative response on 0–1 of the seven indicators.
- **Low burnout risk** – gave a negative response on 2–3 of the seven indicators.
- **Moderate burnout risk** – gave a negative response on 4–5 of the seven indicators.
- **High burnout risk** – gave a negative response on 6–7 of the seven indicators.

Working arrangements

Previously, participants were asked how many hours they were contracted to work each week, and this was used to estimate the proportions working full-time and less than full-time, based on assumptions about the full-time hours of GPs (37.5 hours per week) and specialists, SAS and LE doctors, and doctors in training (all 40 hours per week).

However, the complexity of doctors' contracts and working hours means it is difficult to define how many doctors are working less than full-time. The assumed full-time hours were approximate and not reflective of the contracts of all doctors.

1 Tage S Kristensen, Marianne Borritz, Ebbe Villadsen, Karl B. Christensen (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout, Work & Stress, 19:3, 192–207. DOI: 10.1080/02678370500297720 (accessed [date]).

'The Barometer survey 2020' asked doctors to select the best description of their current working arrangement from a list that included the following options:

- permanent – full-time
- permanent – part-time
- fixed or temporary – full-time
- fixed or temporary – part-time
- locum work
- retired and returned – full time
- retired and returned – part time
- some other working arrangement.

Open responses

The Barometer included questions which offered participants the opportunity to make an unprompted, free text response.

For example:

A2. Why do you say that you are satisfied/ dissatisfied in your day to day work as a doctor?		
WRITE IN		
Don't know	1	
Prefer not to say	2	

The free text responses by all participants have been analysed and coded for key themes. Counting the occurrence of these themes forms the basis for the quantification presented in this report. The number of subjects covered in participants' free text responses may be fewer than would result from a similar question giving a selection of subjects to choose from. However, overall, a wide range of subjects is gathered, which may include themes that would not have been included in a closed selection of responses.

Net values

'NET' values are used when responses have been grouped together to give an overall figure. For example, the values of responses 'somewhat satisfied' (33%), 'satisfied' (32%), and 'very satisfied' (10%) together produce 'NET satisfied' (75%).

Asking about support

Support has emerged as a key theme in recent years, and accordingly 'the Barometer survey 2020' includes questions to enable exploration of the relationships between support from different colleagues and other workplace experiences. Based on doctors' discussions of feeling unsupported in previous research, 'the Barometer survey 2019' asked about support using the following phrasing:

How frequently, if at all, over the last year have you experienced the following? Felt unsupported by my immediate colleagues/senior medical staff/ non-clinical management

However, responses to questions using this phrasing did not enable determination of doctors feeling supported. This made discussion of the results difficult, with use of double negatives such as 'never feeling unsupported' being necessary. To address this, 'the Barometer survey 2020' asked about support using the following phrasing:

To what extent do you agree with the following statements? - I am supported by my immediate colleagues/senior medical staff/ non-clinical management

This change means that direct comparison between responses to the support questions in previous years is not possible, but responses to 'the Barometer survey 2020' can be discussed more clearly, and it is intended that the new wording will be used consistently going forward, facilitating tracking in future.

Experiences and motivations of UK graduates awarded provisional registration to work as FiY1 doctors

By 30 June 2020, 6,868 UK graduates were awarded provisional registration, but not all went on to work as FiY1 doctors. 4,662 FiY1 posts were filled between April and July 2020.

In May 2020, we began working with a group of researchers, led by Newcastle University, to understand these doctors' motivations and experiences, as well as how the role affected their wellbeing and prepared them for the start of postgraduate training.

1,448 graduates participated in this research. Of these, 73% said they had worked as an FiY1 and 25% said they had not.* This means this research includes approximately 23% of the 4,662 doctors who took up an FiY1 post at some point.

This research is ongoing and more detailed findings will be published at a later date. It is seeking to establish whether FiY1 doctors, as they progress through their postgraduate career, feel more prepared, are more tolerant of ambiguity, and have better wellbeing measures.

State of medical education and practice case studies

We commissioned an independent author to conduct one-to-one interviews with 13 doctors to learn about their experiences of practising in 2020. The case studies based on these interviews reflected the diversity of experiences among the medical workforce in 2020. However, as the number of doctors interviewed was small, the case studies have not been given undue weight and have not been used to make inferences about the overall UK doctor population. Rather, 'the Barometer survey 2020' enabled analysis of the overall workforce, and the case studies were used to illustrate and add insight to the Barometer findings.

The 13 doctors were interviewed in July and August 2020. These doctors were found using GMC network contacts with participants opting in to participate in the case studies. It is acknowledged that this process did not have the rigour of a research project, such as 'the

* 24 participants had not yet graduated when they signed up; they probably did not do an FiY1 post, but this cannot necessarily be assumed. Two respondents to the August 2020 questionnaire did not respond to this question.

Barometer survey 2020' but an effort was made to find doctors who represented variety across a range of different factors, such as register type, specialty, the nation of the UK in which they practice, and personal attributes, such as age and ethnicity.

GMC surveys

We have undertaken research to help direct priorities and to keep up to date with the experiences of doctors and doctors in training. As in previous years, this research is used in 'The state of medical education and practice in the UK'.

The national training survey

Every year, we survey doctors in training to get their views on their training and the environments where they work. The survey also asks trainers to report their experience from their perspective as a clinical and/or educational supervisor. These findings have been included in previous editions of 'The state of medical education and practice in the UK'.

Because of the pandemic, we postponed the 2020 survey from its original launch date in March. We instead ran a shorter, targeted survey from 22 July to 12 August 2020.

The 2020 national training survey (NTS) had an increased emphasis on how doctors were affected by the pandemic. We added new questions to help us understand its impact on training, wellbeing and support, alongside our usual questions on workload, burnout, and patient safety. We asked trainees and trainers to respond based on their experiences between March and May, during the spring peak of the pandemic.

The survey results are published in an online reporting tool with filters to explore the data by region or country, specialty, programme, or trust/board – all benchmarked against the UK average.

Completing the picture survey

The Completing the picture survey ran between 21 January and 10 March 2020, before the peak of the coronavirus pandemic. It was conducted in partnership with Health Education England (HEE), the Department of Health (Northern Ireland), NHS Education for Scotland (NES) and Health Education and Improvement Wales (HEIW). We surveyed 13,158 doctors who had previously practised clinically in the UK but who weren't doing so at the point of completing the survey. We asked them a series of questions about why they had decided to stop practising or leave the UK to practise elsewhere.

The survey's results have been weighted and are consequently generalisable to a population of 91,313 doctors. This means that each of the percentages can be considered as a proportion of 91,313 doctors. Analysis of the survey is ongoing, and it is due to be published in early 2021.

Our data

Our in-house data in this report were primarily drawn from the information we collect when registering doctors, assuring the quality of medical education and training, and assessing doctors' fitness to practise.

Percentages in all tables are rounded and may not add up to 100%

Data for the analysis of the profession in 2020 refer to the medical register (known as the List of Registered Medical Practitioners), the GP Register and the Specialist Register on 30 June 2020. Data for the analysis of the change between 2012 and 2020 refer to the state of the registers on 30 June of each year between 2012 and 2020. Where data are aggregated over 2012–20, the number of doctors is taken as being the count of doctors over those years. In figures or tables showing GPs and specialists separately, the very small number of doctors who are on both the GP and the Specialist Registers are excluded unless stated otherwise.

Temporary registration and early registration of 2020 UK graduates

Data for doctors on the temporary register and UK medical students who registered earlier to help with the coronavirus pandemic refer to the medical register on 30 June 2020 and don't include any doctors who decided to opt-out before that date and any students who joined after that date. Numbers of doctors on temporary registration (emergency) (TRE) and 2020 UK graduates are reported in separate tables and added to the national and regional tables reporting on number of doctors on the medical register.

Fitness to practise data

Fitness to practise data for 2012–19 were for enquiries either received or closed between 1 January 2012 and 31 December 2019. The data were drawn from the GMC's database on 2 July 2020. For data referring to specific years, we used enquiries received between 1 January and 31 December of that year, except where we label an enquiry as being closed in that year.

Data for cases closed in each year were for enquiries closed between 1 January and 31 December of that year at the point of a decision being made – either the case examiner giving a decision or the Medical Practitioners Tribunal Service hearing ending. 59% of complaints that originated in 2019 and were investigated did not yet have an outcome (866 complaints) when the data were drawn from the GMC database.

Data on medical students and doctors in training

Tables on medical students are based upon the information collected by the Higher Education Statistics Agency Limited (HESA) and provided to the GMC (HESA Data). The source of this information is the HESA Student Record 2002/2003 to 2018/2019 (copyright Higher Education Statistics Agency Limited). HESA makes no warranty as to the accuracy of the HESA Data and cannot accept responsibility for any inferences or conclusions derived by third parties from data or other information supplied by it.

Where we have used HESA Data, we have agreed different confidentiality rules. Here we do not report on any group smaller than 23 people. And all reported group sizes are rounded up to the nearest multiple of 5. For example, a report including information about 28 people will be reported as including 30 people. The year a student commenced medical school is taken from data provided by HESA and the HESA confidentiality rules will apply when the 'Year(s) commenced medical school' filter is used.

The number of doctors in postgraduate training programmes is from data that HEE local teams in England and deaneries in Northern Ireland, Scotland and Wales provided ahead of the 2020 national training survey – it was accurate on 24 March 2020.

The deprivation index quintile of a doctor's address when first applying to medical school was calculated by the GMC using HESA Data on the student's postcode and qualifications on entry, excluding graduate entrants.

Areas of practice

Some doctors have multiple specialties recorded on the Specialist Register. For the analysis, we have used their primary specialty. We separate out GPs and do not include them in tables of specialties.

For the analysis of doctors' specialties, primary specialties were grouped into 13 specialty groups according to the current list of specialties and sub-specialties by approved curriculum. All older terms were matched to the specialty group that was the best fit; where that was not possible, they were assigned to the 'other specialty or multiple specialty' group – 165 doctors were in this group in 2020.

Data relating to the age of a doctor

A small group of doctors on the register have no date of birth recorded (1.6% in 2012 and 0.7% in 2020). In these cases, we subtract 24 years from the full date that they passed their primary medical qualification (PMQ).

Data relating to the ethnicity of a doctor

For the purpose of analysis, white ethnicity is defined as white British, white Irish and other white. Black and minority ethnic (BME) includes Asian or Asian British, black or black British, other ethnic groups and mixed ethnic groups.

We did not know the ethnicity of 8.8% of licensed doctors on the register in 2020.

Data relating to the nationality of a doctor

At the time a doctor applies for registration, up to two nationalities may be recorded. For the purpose of analysis, doctors are considered:

EEA nationality if they are not British and at least one of their nationalities is from a country within the EEA. For the purposes of registration, the EEA is the 27 countries of the EU, together with Norway, Switzerland, Iceland and Liechtenstein non-EEA nationals if all of their nationalities are from countries outside the EEA.

- **British nationality** if at least one of their nationalities is British or derives from a country that qualifies them for British citizenship
- **European Economic Area (EEA) nationals** if they are not British and at least one of their nationalities is from a country within the European Economic Area (EEA). For the purposes of registration, the EEA is the 28 countries of the EU, together with Iceland, Liechtenstein, Norway and Switzerland
- **Non-EEA nationality** if all of their nationalities are from countries outside the EEA.

In 2020, we had no nationality information for about 54,000 doctors (20% of all licensed doctors).

Regional and country data

Doctors were located using the Agora location algorithm. We first look into NHS contracts data (Electronic Staff Record (ESR), Primary Care Information Service (PCIS), Scottish Workforce Information Standard System (SWISS) and GPREF databases and first prioritise full-time contracts, followed by permanent part-time contracts, and then other part-time contracts.

If a doctor doesn't appear in any of the sources above but is in training, we use the location of their training as defined in the NTS for that year.

For those without an NHS contract record who are not in training, we then use the location of their designated body. However, certain types of designated body are not reliable for determining location (such as a locum agency) and so some doctors can only be located by the address a doctor has provided us for registration.

It is important to note that all doctors in Northern Ireland are located using only training data and registered address. Also, there are no NHS contracts data available for GPs in Wales.

The regions of England are grouped according to regions defined by the Office for National Statistics.

Sustainability and transformation partnerships in England are grouped according to the NHS England structure; Health and Social Care Boards in Northern Ireland are grouped according to HSC Northern Ireland structure; regional Healthcare Boards in Scotland follow the structure of NHS Scotland; and Local Health Boards in Wales follow the structure of NHS Wales.

The countries where doctors who are practising in the UK first qualified in have been grouped into regions on the following basis:

Africa: Algeria, Angola, Botswana, Burundi, Cameroon, Côte d'Ivoire, Democratic Republic of the Congo, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Liberia, Libya, Malawi, Mali, Mauritius, Morocco, Mozambique, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia and Zimbabwe.

Central Europe, eastern Europe and Baltic countries (EEA): Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania and Slovakia.

Northwestern Europe (EEA): Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Netherlands, Norway, Sweden and Switzerland.

Southern Europe (EEA): Bulgaria, Croatia, Cyprus, Greece, Italy, Malta, Portugal, Slovenia and Spain.

Non-EEA Europe: Albania, Belarus, Bosnia and Herzegovina, Kosovo, Macedonia, Moldova, Montenegro, Russia, Serbia and Ukraine.
Middle East: Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian Territories, Qatar, Saudi Arabia, Syria, Turkey, United Arab Emirates and Yemen.

South Asia: Bangladesh, India, Nepal, Pakistan and Sri Lanka.

Rest of Asia: Afghanistan, Armenia, Azerbaijan, China, Georgia, Hong Kong, Indonesia, Japan, Kazakhstan, Kyrgyzstan, Malaysia, Mongolia, Myanmar, Philippines, Singapore, South Korea, Taiwan, Tajikistan, Thailand, Turkmenistan, Uzbekistan and Vietnam.

Northern America: Canada and USA.

South, Central and Latin Americas and the Caribbean: Antigua and Barbuda, Argentina, Aruba, Barbados, Belize, Bolivia, Brazil, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Curacao, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Montserrat, Nicaragua, Panama, Paraguay, Peru, Saba, Saint Kitts and Nevis, Saint Lucia, Saint Martin, South Netherlands Antilles, St. Vincent and The Grenadines, Suriname, Trinidad and Tobago, Uruguay and Venezuela.

Oceania: Australia, Cook Islands, Fiji, New Zealand and Papua New Guinea

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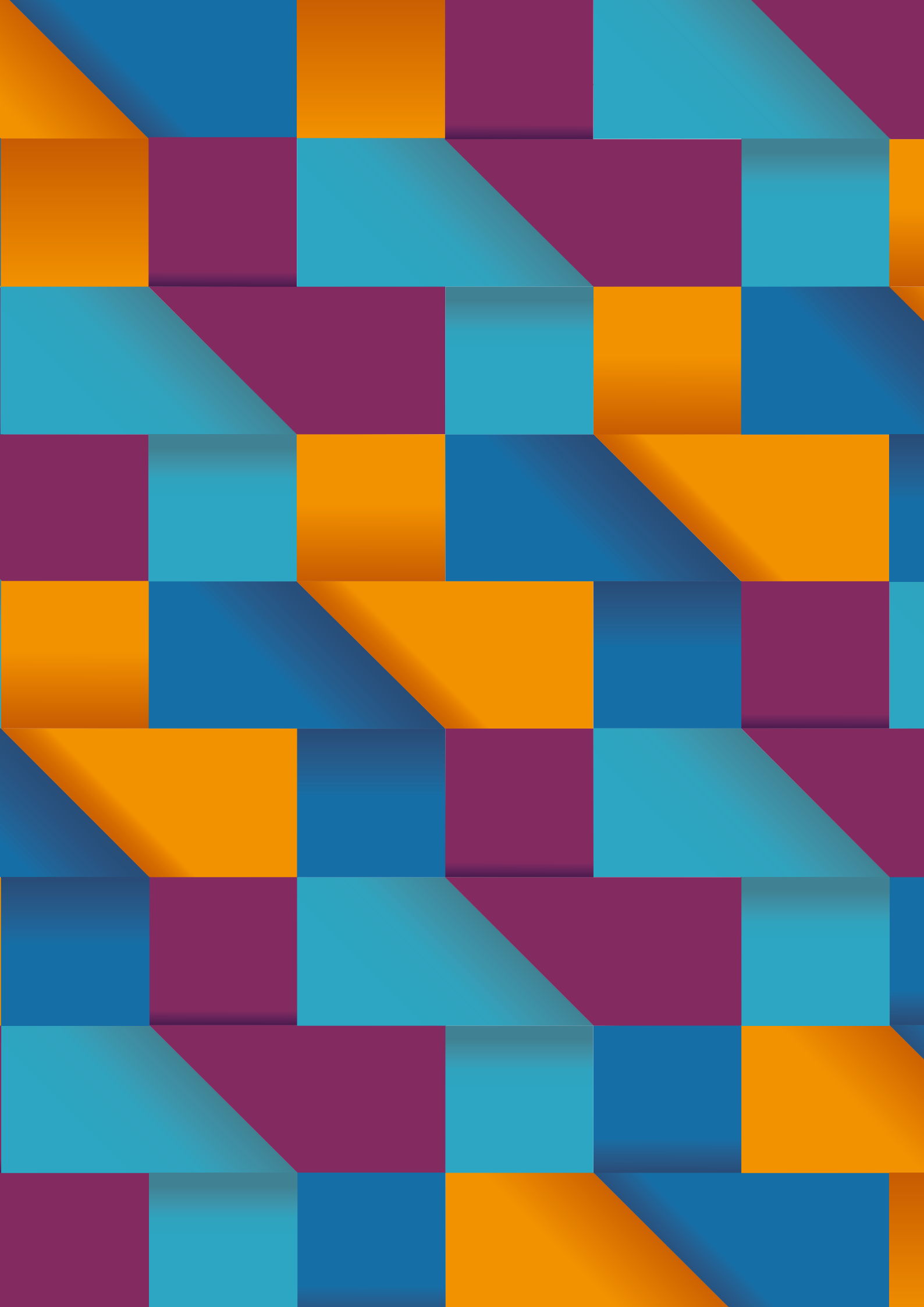

Email: gmc@gmc-uk.org
Website: gmc-uk.org
Telephone: 0161 923 6602

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