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Executive summary

Medicine is a high-paid and high-status career. It is also a big profession – and expected to grow considerably over coming decades. Understanding differences in access to medical careers by ethnicity, and different career paths within medicine by ethnicity, is therefore an important and interesting part of understanding the labour market experiences of people from different ethnic backgrounds more generally. There is also a growing evidence base (albeit largely from the United States) showing that non-White patients treated by a doctor of the same ethnicity as them experience better health outcomes. For both these reasons, the ethnic diversity of doctors working in the NHS matters. In this report, we use the Electronic Staff Record (ESR), the monthly payroll of all staff directly employed by NHS organisations, to examine the ethnicity mix of doctors working for the NHS in England and highlight differences across types of roles, gender and country of medical training.

Key findings

- 1. The share of doctors in the NHS who are non-White is far above the share of non-White people in the working-age population.** In 2021, 51% of junior doctors and 41% of consultants were non-White (excluding those with unknown ethnicity). This compares with 20% of the English working-age population. **Much of this is driven by international recruitment, with the vast majority of internationally trained doctors being non-White.** But even among UK-trained doctors, 37% of junior doctors and 24% of consultants were non-White.
- 2. Among junior doctors, every ethnic minority group makes up a larger share of the workforce than in the wider English working-age population.** By far the largest non-White group is Asian, making up 33% of junior doctors in 2021 (excluding those with unknown ethnicity). **8% of junior doctors in 2021 were Black, compared with 5% of the working-age population. However, among UK-trained junior doctors, only 3% were Black.**
- 3. Among consultants (the most senior doctors in the NHS), not all ethnic minority groups make up a larger share than in the wider working-age population.** As with junior doctors, by far the largest non-White group is Asian, making up 32% of consultants in 2021 (excluding those with unknown ethnicity). **Just 3% of consultants were Black, compared with 5% of**

the working-age population. Among UK-trained consultants, the share who were Black was even lower at just 1%.

4. Non-consultant specialists were much less likely to be White than consultants: 59% of consultants were White (excluding those with unknown ethnicity), but only 37% of non-consultant specialists were White, and every non-White ethnicity accounted for a smaller share of consultants than of non-consultant specialists. This is because non-consultant specialists are much more likely to be trained abroad (38% of consultants were trained abroad compared with 68% of non-consultant specialists). Among UK-trained doctors, a higher share of non-consultant specialists were White than among consultants.
5. There have been substantial changes in the ethnicity mix of doctors over the last decade, in part reflecting the growing share of incoming non-White junior doctors. **In 2012, 46% of junior doctors were non-White, compared with 51% in 2021** (excluding those with unknown ethnicity). The share of Black junior doctors has particularly increased, from 4% in 2012 to 8% in 2021. **The share of non-White senior doctors (consultants and other specialists) also increased, from 39% in 2012 to 45% in 2021.**
6. **More male doctors are non-White than female doctors.** For example, 55% of male junior doctors were non-White in 2021, compared with 48% of female junior doctors (excluding those with unknown ethnicity). Although a larger share of junior doctors than of senior doctors overall are non-White, male senior doctors and female junior doctors have very similar shares who are non-White.
7. There are differences in the ethnicity mix of doctors working in different clinical specialties, but **all specialties have a larger share of non-White doctors than in the wider English working-age population.** At the extremes, 60% of senior doctors working in ophthalmology and 57% working in endocrinology and diabetes medicine were non-White in 2021, compared with 31% working in intensive care and 39% working in anaesthetics (excluding those with unknown ethnicity).
8. **Even though the NHS's doctor workforce is ethnically diverse, this does not mean the experience of staff is equal.** The NHS's own analysis finds that Black and minority ethnic staff (not just doctors) are a quarter more likely to experience harassment, bullying or abuse from colleagues than their White counterparts, two-and-a-half times more likely to experience discrimination, and a third less likely to be appointed from shortlists. The large representation of non-White ethnicities among NHS doctors should therefore not be taken as a sign that all is well – it may well be that non-White doctors who are succeeding are doing so in spite of unequal opportunities.

1. Introduction

Medicine is a high-paid, high-status career and, as a university subject, generates relatively high rates of social mobility (Britton, Drayton and van der Erve, 2021). Differential access to medicine, as well as different career trajectories within it, is therefore an important and interesting part of understanding the labour market experiences of people from different ethnic backgrounds. As the largest employer in the UK, the NHS also has the potential to influence standards and expectations in the wider labour market, beyond its own (many) employees.

Who becomes a doctor also matters for patients. There is a growing evidence base (albeit largely from the United States) showing that non-White patients treated by a doctor of the same ethnicity as them experience better health outcomes, including more precise diagnoses, improved medication adherence, and ultimately a lower risk of dying from manageable illnesses (Alsan, Garrick and Graziani, 2019; Frakes and Gruber, 2022; Hill, Jones and Woodworth, 2023).

Given the importance of who becomes a doctor, in this report we examine the ethnic diversity of doctors employed in the English NHS using payroll data. The NHS conducts its own analysis as part of its Workforce Race Equality Standard, comparing the outcomes of White and Black & minority ethnic (BME) staff. This finds differences in representation at the very highest level of the NHS and in job experiences. In 2022, 24% of NHS staff were BME, compared with 10% of very senior managers (NHS England, 2023a). People from a BME background are also less likely to be appointed from shortlisting, and more likely to enter formal disciplinary proceedings, than White people.

Previous research on the wider UK labour market (Mirza and Warwick, 2022) has highlighted complex differences between the outcomes of different ethnic groups. For example, Indian and Chinese employees are more likely to work in higher managerial and professional occupations than White British employees of the same gender, while Black African, Black Caribbean and Bangladeshi male and female employees are less likely to do so. Mirza and Warwick (2022) also highlight the crucial role of intersections with other characteristics, with important differences in the experiences of men and women and of UK-born and foreign-born people.

In this report, we document the ethnic diversity of doctors working in different roles in the English NHS and how this compares with the wider English population. Taking these prior research findings into account, we go beyond the overall share of non-White doctors to highlight differences in outcomes between multiple ethnic groups and consider intersections with gender,

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type of role, and domestic versus international training status. The last grouping is an especially important demographic in this context, given the NHS's high reliance on international recruitment.

Although there are important nuances, we find throughout that, in general, the NHS doctor workforce has a much larger share of non-White doctors than the wider population. Much of this is explained by international recruitment, although even the share of UK-trained doctors who are non-White is larger than the non-White share in the wider population. This greater representation, however, does not mean that the experiences of doctors from different ethnicity groups are equal. Work as part of the NHS Workforce Race Equality Standard finds that BME NHS staff (not just doctors) are a quarter more likely to experience harassment, bullying or abuse from colleagues than their White counterparts, two-and-a-half times more likely to experience discrimination, and a quarter less likely to believe that trusts provide equal opportunities for career progression or promotion (NHS England, 2023a). The large representation of non-White ethnicities among NHS doctors should therefore not be taken as a sign that all is well – it may well be that non-White doctors are joining, remaining and succeeding despite their unequal experiences and opportunities.¹

One important dimension of equality for the NHS medical workforce is pay equality. Differences in pay – which, in the NHS's regulated system, should largely reflect differences in progression opportunities, access to leadership roles, and performance-related bonuses – are a complex and nuanced topic, which we leave for future research.

The rest of the report is organised as follows. Section 2 describes our data and the classification of ethnicity groups we use. Section 3 explores the ethnicity mix of junior doctors, consultants and other specialists in 2021. Section 4 shows how the ethnicity mix of doctors has changed over time, while Section 5 sets out how it varies by gender and medical specialty. Section 6 documents differences between UK-trained and internationally trained doctors. Section 7 concludes.

¹ Ross et al. (2020) explore how several NHS providers have sought to address these inequalities.

2. Data

The Electronic Staff Record

The data source for our analysis is the Electronic Staff Record (ESR), the monthly payroll of all staff directly employed by the NHS in England. As the ESR only includes staff directly employed by NHS organisations, it excludes staff in primary care, such as GPs, and in contracted-out services, such as porters and cleaners in some hospitals.

Each month, the ESR records the hours and pay of each individual staff member working in the NHS. It provides information on hours, grade and pay band, and a detailed breakdown of basic pay and additional payments. The data also include age, gender and (self-reported) ethnicity, as well as the job role and the hospital (or other) trust in which the staff member works. We discuss the ethnicity classification in the ESR in more detail in Box 1.

Our analysis includes junior doctors, consultants and other specialists.² They work in a variety of settings, including hospitals (acute trusts), mental health trusts, and community providers. Due to data limitations, we do not study GPs working in practices. Focusing on a single profession allows us to draw out nuances that would be lost in an analysis that aimed to cover the breadth of occupations across the NHS.

Box 1. Ethnicity groups

Ethnicity is recorded in the ESR using 2011 Census top-level ethnicity groups.^a These include ethnicities such as White British, Indian and Black Caribbean. For some analysis, we aggregate these ethnicities into five larger groups, following the groupings used by the Office for National Statistics (ONS). Table 1 lists the ethnicities and ethnicity groups used in our analysis. Some staff have no ethnicity recorded in the ESR and (unless otherwise stated) we treat these in a separate category of unknown ethnicity. Throughout, we capitalise all ethnicity groups in line with ONS guidance (Office for National Statistics, 2023c).

² We identify doctors using pay codes in the ESR. Junior doctors include Foundation doctors, registrars undergoing core training and registrars undergoing specialist training. We restrict our sample to doctors working in NHS trusts. We only include doctors recorded in the ESR as receiving positive basic pay and having positive contracted hours in a given month.

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Table 1. Ethnicity categorisation

Ethnicity group	Ethnicity
White	White British White Irish White Other
Asian	Indian Pakistani Bangladeshi Chinese Other Asian
Black	Black Caribbean Black African Black Other
Mixed	White & Black Caribbean White & Black African White & Asian Other Mixed
Other	-

Ethnic identities are complex, multifaceted and often context-dependent, and a discussion of the conceptual and political nuances of measuring ethnicity is beyond the scope of this report. By using these categories, our analysis makes use of a valuable data source and allows for comparison with widely available statistics, even if it is unable to account fully for the nuances of individuals' ethnic identity.

^a A small number of staff are recorded using an earlier classification, which we convert to the 2011 Census groups. Staff in 'other' categories (e.g. Other Asian, or Other) are sometimes recorded with a second-level ethnicity, such as Japanese. It is not clear how many staff who would identify as being in these second-level groups are in the top-level 'other' categories. We therefore do not use this information.

3. Doctors are more diverse than the wider population

In this section, we document the ethnicity mix of doctors, and how it compares with that of the wider working-age population. Figure 1 shows the share of junior doctors, consultants and other specialist doctors in each large ethnicity group between February and April 2021. Junior doctors are a broad group, covering all doctors who are still in training. This ranges from Foundation doctors, who have recently completed medical school, to specialist registrars close to a decade into their career. Consultants are the most senior doctors, with ultimate responsibility for patient care and the supervision of more junior staff. Other specialist doctors, known within the NHS as SAS doctors, are junior to consultants but senior to junior doctors as they are no longer in training. In general, this role is an alternative to being a consultant, and most non-consultant specialist doctors do not subsequently become consultants, although it is possible and a small number do so each year. Collectively, we refer to consultants and other specialist doctors as senior doctors.³

Figure 1 shows that all three groups of doctors were ethnically diverse. For other specialist doctors, a majority (59%) were non-White, while 47% of junior doctors and 39% of consultants were non-White.⁴ But there were some large ethnic differences between the staff groups, reflecting changes in the ethnicity mix of doctors across cohorts as well as differences in their career trajectories in consultant versus other specialist roles after they complete their training.

Overall, junior doctors and other specialists have a lower share of White doctors than consultants. These two groups also have larger shares of doctors belonging to smaller ethnicity groups (outside of White and Asian), making them more ethnically diverse than consultants.

The differences in the ethnicity mix of different doctor types are driven by two main factors. The first is that junior doctors are younger than consultants and other specialist doctors. Changes in the ethnicity mix of different birth cohorts in the wider population, as well as changes in access to medicine, are one driver of differences between junior and senior doctors (consultants and other specialists). For example, in 2021, 78% of the English population at the average age of a junior doctor (32) was White, compared with 83% of the English population at the average age

³ For a more detailed description of non-consultant specialty doctor roles, see <https://www.healthcareers.nhs.uk/explore-roles/doctors/career-opportunities-doctors/sas-doctors/sas-doctors>.

⁴ Excluding those with unknown ethnicity, a majority (51%) of junior doctors were non-White.

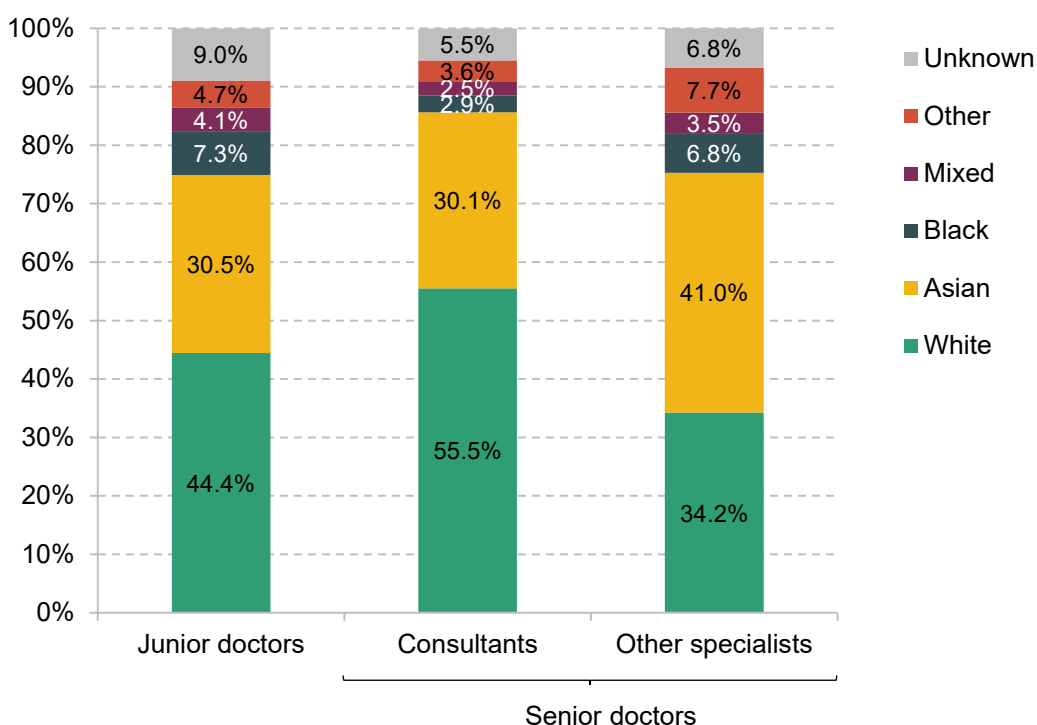
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of a senior doctor (49). The gap between junior doctors and consultants – with 44% of junior doctors but 55% of consultants being White – likely reflects this pattern, at least in part.

In turn, junior doctors were much more likely to be Black or from the Mixed ethnic group. The share of Black junior doctors was 2.6 times the share of Black consultants and the share of junior doctors of Mixed ethnicity was 1.7 times the share of consultants of Mixed ethnicity.

Meanwhile, the shares of Asian doctors were very similar, at 30% among both junior doctors and consultants.

Figure 1. Share of doctors from each ethnicity group, February to April 2021



Note: 'Other specialists' refers to specialty doctors and specialist grade doctors (SAS doctors).

Differences between consultants and other specialists are not likely to be driven by the same factor as these are broadly the same cohort of doctors (the average age of a consultant was 49 in 2021, compared with 48 for other specialists). It is therefore especially notable that the share of White consultants is so much higher than the share of White specialist doctors in non-consultant roles. For other specialist doctors, Asian (rather than White) was the largest ethnicity category, making up 41% of doctors. Other specialist doctors were also much more likely to be Black or of Mixed ethnicity than consultants, with the shares of these ethnicities among other specialists only slightly below those among junior doctors.

Other specialist doctor jobs differ from consultant jobs. They tend to include more time spent on direct patient care, less time on administration and leadership, shorter specialty training and

more flexibility. It may be that different groups of doctors have different preferences over job characteristics and this drives some of the difference in ethnicity mix. There may also be ethnicity-specific barriers to reaching a consultant post. One important difference between the two roles is the qualification requirements for internationally trained doctors. In Section 6, we directly examine the difference between UK-trained and internationally trained doctors, and find that most of the difference in ethnicity mix between consultants and other specialists can be explained by the share of doctors who are internationally trained.

Whatever the source of differences between consultants and other specialists, the large ethnicity differences will contribute to ethnicity pay gaps because other specialists tend to be paid substantially less than consultants. For example, in 2021–22, the average consultant full-time-equivalent salary was around £130,000, while the average other specialty doctor salary was around £90,000 (NHS Digital, 2022b).⁵

In the appendix, we repeat the analysis of the ethnicity mix of each group of doctors using more detailed ethnicities. Figures A1 to A3 show a more detailed breakdown of ethnicity for each group between February and April 2021. The largest non-White-British ethnicity groups were Indian, making up 12% of junior doctors, 19% of consultants and 23% of other specialist doctors; White Other, making up 7% of junior doctors, 11% of consultants and 12% of other specialists; and Pakistani, making up 8% of junior doctors, 4% of consultants and 10% of other specialists.

There are also some substantial differences between different staff groups within the same larger ethnicity groups. For example, other specialist doctors have the highest share of Asian doctors but the smallest share of Chinese doctors: 30% of consultants and 41% of other specialist doctors are Asian, but 2% of consultants are Chinese compared with 1% of other specialist doctors.

We now consider how the ethnicity mix of doctors in the NHS compares with the ethnicity mix of the wider population. In particular, we compare doctors with the English population, the English working-age population and the UK population of workers in professional occupations (which includes doctors). Table 2 shows the mix in each of these populations.

⁵ The gap in average salary per person is even larger, because other specialty doctors are more likely than consultants to work less than full-time.

Table 2. Comparison of ethnicity shares in 2021

	White	Asian	Black	Mixed	Other
English population	81.0%	9.6%	4.2%	3.0%	2.2%
English working-age population	80.0%	10.5%	4.6%	2.5%	2.4%
Professional occupations (UK)	84.4%	9.1%	3.0%	1.5%	2.0%
NHS doctors					
Consultants	58.7%	31.9%	3.0%	2.6%	3.8%
Other specialists	36.7%	44.0%	7.3%	3.8%	8.2%
Junior doctors	48.8%	33.5%	8.1%	4.5%	5.1%

Note: Working age is defined as 16–64. Consultants and junior doctors in the NHS exclude those of unknown ethnicity to be comparable with the other rows.

Source: Office for National Statistics, <https://www.ons.gov.uk/datasets/TS021/editions/2021/versions/3>, <https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/ethnicity/datasets/ethnicgroupbyageandsexinenglandandwales>. UK government, <https://www.ethnicity-facts-figures.service.gov.uk/work-pay-and-benefits/employment/employment-by-occupation/latest>.

White individuals made up a smaller share of the NHS doctor workforce than in wider populations. This is true whichever group of doctors we compare with whichever delineation of the ‘wider population’, but the differences are interesting. The share of White people in the overall English population is 81% (80% in the working-age population), rising to 84% as we restrict to workers in professional occupations. However, the share of White individuals among NHS doctors is much lower – 59% among consultants, 37% among other specialists and 49% among junior doctors. This suggests medicine is a notable exception compared with other professional occupations, in that it manages to attract and retain many more ethnic-minority workers. One important driver of this pattern is immigration: 42.7% of doctors in England and Wales were born abroad, compared with, for example, 10.9% of teachers, 17.5% of lawyers and solicitors, and 22.9% of everyone working in a professional occupation (Office for National Statistics, 2023a). We compare the ethnic composition of domestically and internationally trained doctors in Section 6.⁶

Correspondingly, non-White individuals collectively make up a larger share of the NHS doctor workforce than of the wider populations – but this is not true for all individual ethnicity groups. Among consultants, Asian and Other ethnicity both made up larger shares than they did in the

⁶ Section 6 uses a slightly different definition from the ONS analysis, because some NHS doctors who were trained in the UK were born abroad (the opposite case is of course also possible, though likely to be less common).

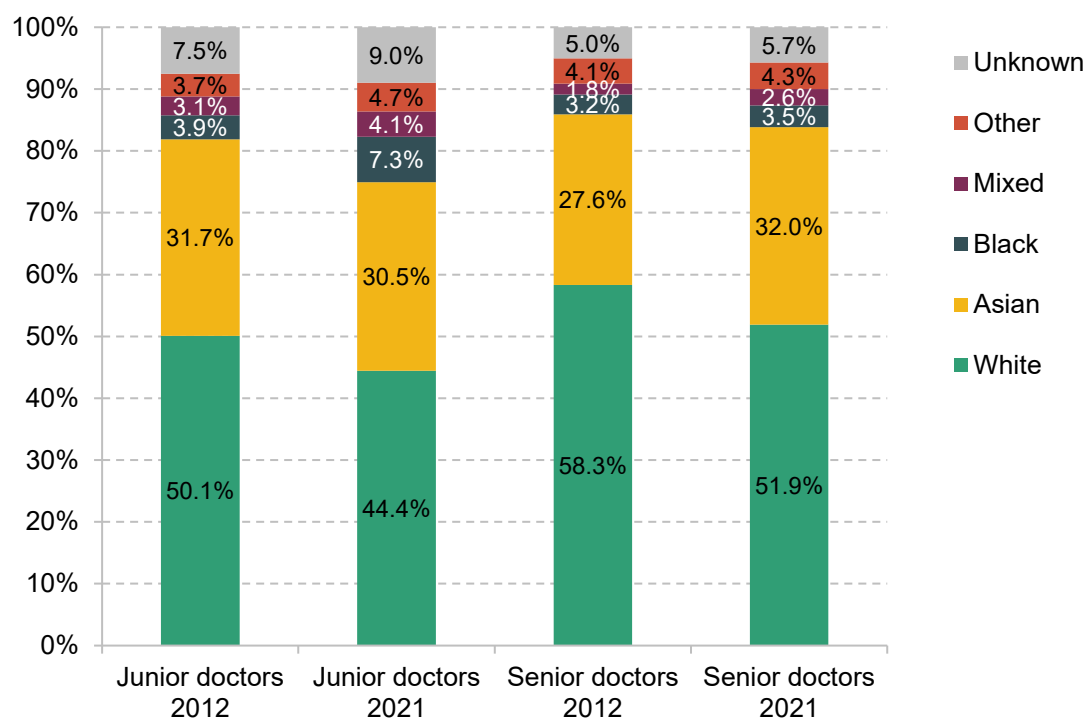
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wider English population, while Black individuals made up a smaller share. For junior doctors and other specialists, all ethnic groups except White made up much larger shares than in the wider English population. For example, 8% of junior doctors and 7% of other specialists were Black, compared with 5% of the working-age population. This means that among all NHS doctors, the share of Black people is higher than in the wider population. This is notable in international comparison: for example, in the United States, the share of Black (as well as Hispanic) doctors is far below the population share (Association of American Medical Colleges, 2023). However, as we will see in Section 6, the relatively high share of Black junior doctors and non-consultant specialists is largely driven by international recruitment.

4. The share of ethnic minority doctors has increased over time

In the previous section, we showed differences in the ethnicity mix of different groups of doctors, which may reflect changes over time. While Asian doctors were well represented among all groups of doctors, Black doctors were under-represented among consultants, but made up a larger share of junior doctors and other specialists than in the wider population. In this section, we examine how the ethnicity mix of doctors has changed over time. For simplicity in this analysis, we combine consultants and other specialists into a single group, called senior doctors.

Figure 2. Share of doctors from each ethnicity group in February to April, 2012 and 2021



Note: 'Senior doctors' refers to consultants and other specialists.

Figure 2 shows how the ethnicity mix of junior and senior doctors compares between Spring 2012 and Spring 2021. Consistent with the cohort difference between junior and senior doctors we focused on in the previous section, the share of White doctors has fallen over time for both staff groups. The share of White junior doctors has decreased from 50% in 2012 to 44% in 2021

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(with the decrease starting in 2015), while the share of White senior doctors has decreased consistently from 58% in 2012 to 52% in 2021. Including or excluding doctors of unknown ethnicity makes little difference to the size of the fall over time.⁷

However, not all non-White ethnicity groups grew over the same period. The share of Asian junior doctors has decreased slightly from 32% to 30% while it increased from 28% to 32% for senior doctors. On the other hand, the share of Black junior doctors has risen sharply, from 4% in 2012 to 7% in 2021, and from 3% to 4% for senior doctors, a somewhat smaller increase in absolute as well as relative terms. The share of Mixed ethnicity junior doctors rose from 3% to 4% and the share of Mixed ethnicity senior doctors rose from 2% to 3%.

There have also been changes in ethnicity groups within each broad category. Figure A4 in the appendix shows how the share of junior doctors from six large ethnicity groups has changed between 2012 and 2021. Figure A5 repeats this for senior doctors. Figure 2 showed that the share of Asian junior doctors had fallen slightly, but there were large changes within the Asian group. In particular, the share of junior doctors of Indian ethnicity fell by around 5 percentage points, largely between 2012 and 2015. Meanwhile, the share of Pakistani junior doctors rose by 2 percentage points, with most of the increase happening since 2016. In contrast to junior doctors, the share of senior doctors of Indian ethnicity rose by 2 percentage points between 2012 and 2021.

For junior doctors, the share of White Other individuals was rising until the end of 2016, after which it started to fall. The share of White Other junior doctors was 2 percentage points lower in August 2021 than at its peak in 2016. These changes may reflect changes in immigration patterns after the Brexit referendum in 2016.

⁷ Excluding those with unknown ethnicity, the share of White junior doctors fell from 54% in 2012 to 49% in 2021, while the share of White senior doctors fell from 61% to 55% over the same period.

5. Gender, medical specialty and ethnicity

We now consider differences in the ethnicity mix of doctors by gender. In the wider labour market, men and women from the same ethnic background often have very different outcomes (Mirza and Warwick, 2022). Just focusing on one dimension can therefore obscure differential trends and patterns by specific gender–ethnicity groups. Moreover, we highlight differences in the clinical specialties that doctors from different ethnic backgrounds go into. Ethnicity-specific occupational choices in the wider economy matter for the matching of talented individuals to jobs. Specialty choices – where specialties can differ substantially in terms of their earnings potential, schedules and other working conditions, opportunities for clinical research, and many other attributes – matter for the same reason.

Differences by gender

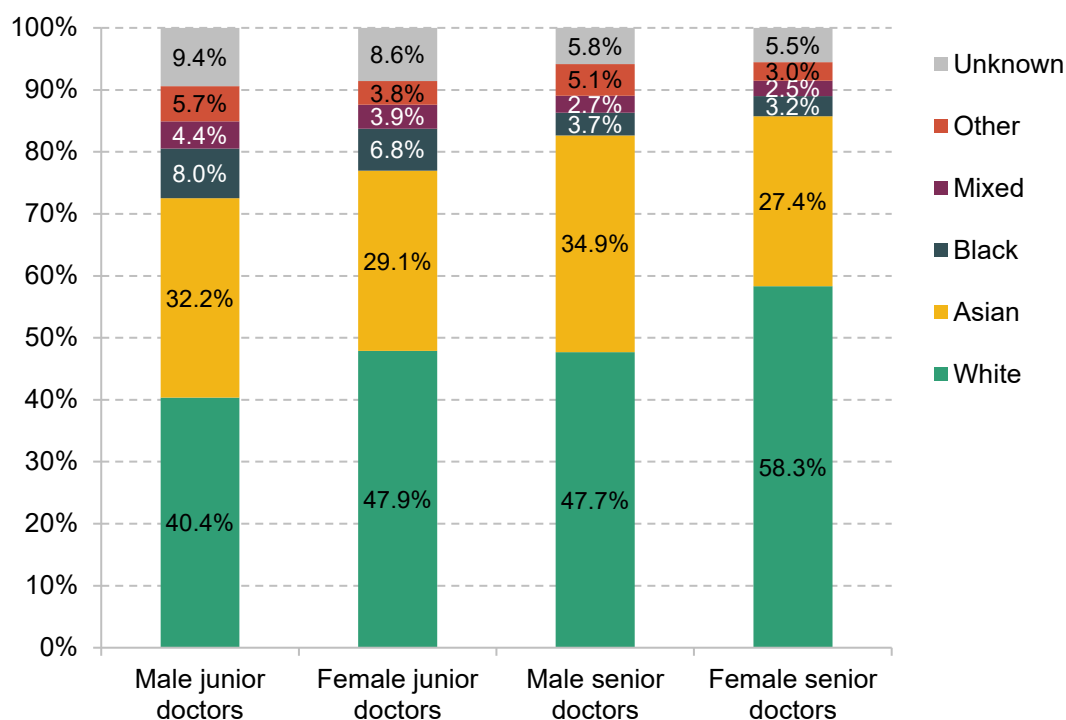
Figure 3 shows the share of senior doctors and junior doctors in each ethnicity group separately for male and female doctors in February to April 2021. It shows that male doctors are much more likely to be from an ethnic minority than female doctors: 40% of male junior doctors were White, compared with 48% of female junior doctors; similarly, 48% of male senior doctors were White, compared with 58% of female senior doctors.⁸ Strikingly, this means that despite the overall large ethnicity differences between the two groups of doctors, the share of White doctors is very similar among female junior doctors and male senior doctors.

There are more Asian and more Black male doctors compared with their female counterparts at each level of seniority: 32% of male junior doctors were Asian and 8% were Black, compared with 29% and 7% of female junior doctors, respectively; similarly, 35% of male senior doctors were Asian and 4% were Black, compared with 27% and 3% of female senior doctors, respectively. Ethnic groups in the UK population differ only very slightly in their gender composition, so the large differences we find must reflect differences in the likelihood of becoming and remaining a doctor.⁹

⁸ Excluding those with unknown ethnicities, 45% of male junior doctors were White, compared with 52% of female junior doctors, and 51% of male senior doctors were White, compared with 62% of female senior doctors.

⁹ An alternative explanation for the ethnicity differences by gender are that the ethnicity of those with unknown ethnicity could vary by gender. Even if there was such a difference, it could not fully explain the large differences we find by gender.

Figure 3. Share of doctors in each ethnicity group by gender, February to April 2021



Note: 'Senior doctors' refers to consultants and other specialists.

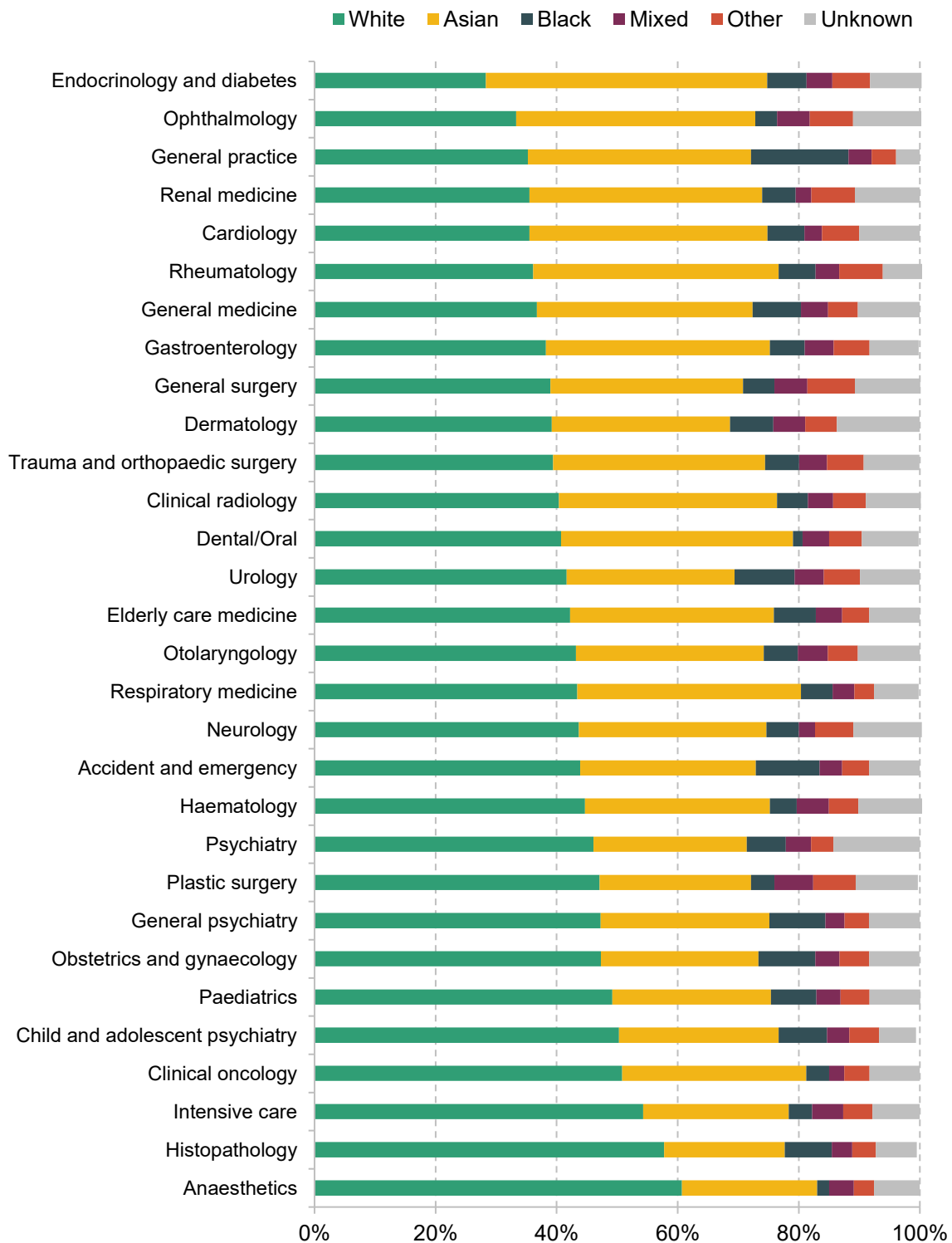
Differences by clinical specialties

Next, we examine differences in the ethnicity mix of doctors working in different clinical specialties. Even though, overall, the doctor workforce is very ethnically diverse, there are differences across areas of medicine. Medical specialties differ in many respects, including the relative importance of different tasks and skills, the working schedules required, typical earnings (reflecting differences in opportunities for clinical leadership, performance-related pay, and private work), and prestige. Doctors with different characteristics may place more or less importance on different characteristics, which could lead them to make different choices about which specialty to go into. But they may also face specific barriers to access, whether that is a lack of information, unequal access to training places, or the anticipation of future workplace discrimination. If this were the case, it would be concerning not just because doctors are restricted in their choices, but also because the process of matching doctors to the posts to which they are best suited based on their talents and skills would be distorted.

Figure 4 shows the share of registrars from each ethnicity group working in a selection of large clinical specialties. Unlike Foundation junior doctors, who rotate across a number of different specialties, registrars have already chosen a specialty pathway, which makes the comparison of specialty choice across ethnicities more meaningful. Endocrinology and diabetes medicine had the lowest share of White registrars (28%), substantially lower than the share of Asian registrars

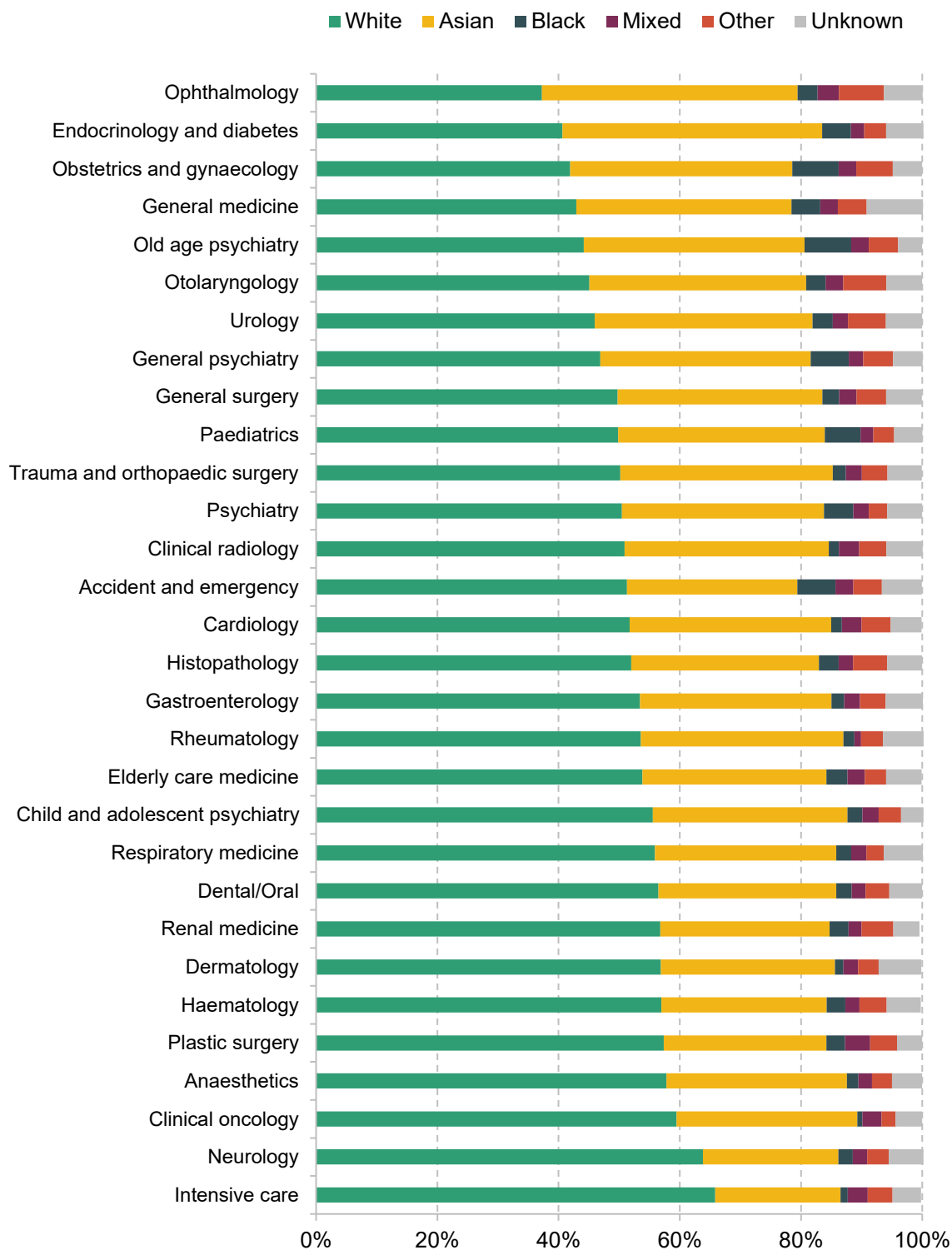
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Figure 4. Share of registrars from each ethnicity group by clinical specialty, February to April 2021



Note: Clinical specialties with at least 1,000 doctors.

Figure 5. Share of senior doctors from each ethnicity group by clinical specialty, February to April 2021



Note: Clinical specialties with at least 1,000 doctors.

(46%). Put differently, 1.8% of Asian registrars were working in endocrinology and diabetes medicine, compared with 0.8% of White registrars. Analysis by NHS Digital suggests that, once age is accounted for, Asian people are between two (Indian) and three (Pakistani) times more likely to be diabetes patients than White people (NHS Digital, 2022a). Amongst a range of other possible explanations, the pattern among doctors could therefore reflect differential awareness of the disease burden by ethnicity. At the other end, anaesthetics had the highest share of White registrars (61%) and a below-average share of Asian registrars (22%) and Black registrars (2%). One striking fact is that although there were large differences between specialties, all of these specialties, including anaesthetics, had substantially larger shares of non-White individuals than wider populations.

Figure 5 repeats this analysis for senior doctors. The story is similar to that for registrars: there are large differences in the ethnicity mix of clinical specialties, but all clinical specialties have a share of White senior doctors smaller than the share in wider populations.

The clinical specialties with the greatest shares of White registrars are similar to those for senior doctors. For example, endocrinology and diabetes medicine and ophthalmology have the highest shares of both non-White registrars and non-White senior doctors, while anaesthetics and intensive care have some of the lowest shares of both non-White registrars and non-White senior doctors.¹⁰ This is consistent with a degree of persistence in specialty choices by ethnicity over time.

¹⁰ Endocrinology and diabetes medicine had 63% (69% excluding unknown ethnicity) non-White registrars and 53% (57%) non-White senior doctors. Ophthalmology had 56% (63%) non-White registrars and 56% (60%) non-White senior doctors. Anaesthetics had 32% (34%) non-White registrars and 37% (39%) non-White senior doctors. Intensive care had 38% (41%) non-White registrars and 29% (31%) non-White senior doctors.

6. Internationally trained doctors

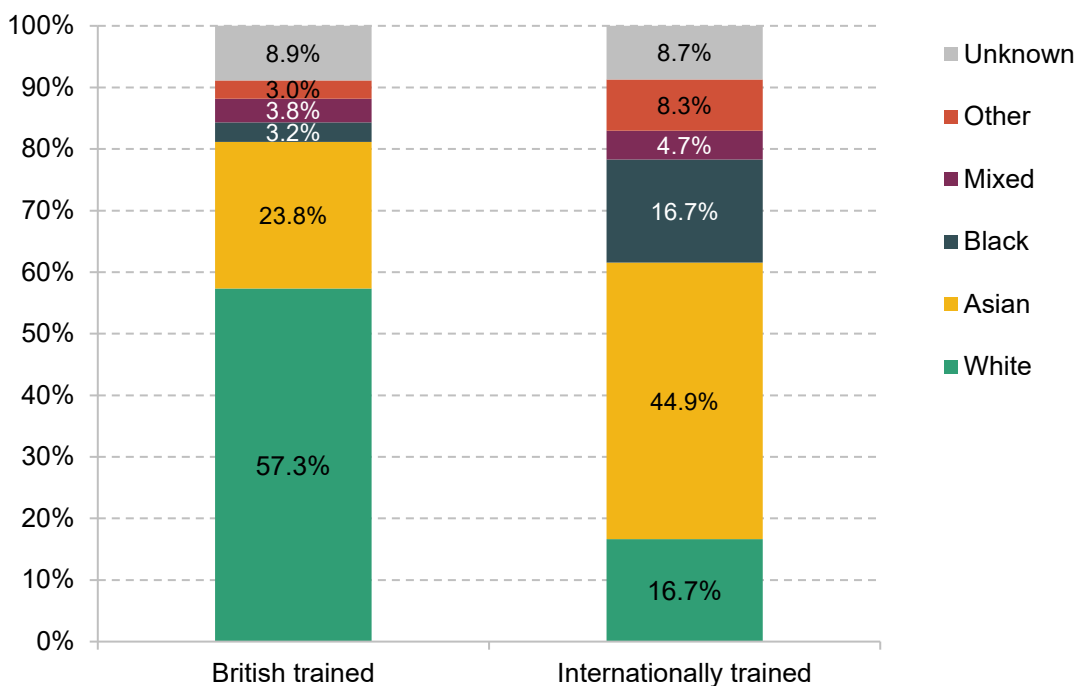
Many doctors in the NHS were trained in countries other than the UK. For example, 31% of junior doctors in our February to April 2021 sample were recorded as having trained abroad, while 38% of consultants and 68% of non-consultant specialist doctors were recorded as having trained abroad. Given the large difference between consultants and non-consultant specialist doctors, we present them separately for this analysis rather than combining them into senior doctors as in the previous section. The share of all doctors recorded as having trained abroad has increased slightly from 35% in February to April 2012 to 37% in February to April 2021.

As we might expect, the ethnicity mix of internationally trained doctors is quite different from that of domestically trained doctors. For some of the reasons we care about the ethnicity of doctors – such as those relating to interactions between patient and doctor ethnicity – it may or may not matter whether doctors are trained in the UK or internationally. But for other reasons – such as whether access to a medical career is equal among all groups in the UK population – focusing on UK-trained doctors will give us a better indicator.

Figure 6 shows the share of junior doctors from each ethnicity group by whether they were trained in the UK or internationally. There are large differences: 57% of UK-trained junior doctors were White, compared with 17% of internationally trained junior doctors. The share of White internationally trained junior doctors was somewhat higher in 2012, at 22%, perhaps reflecting changes in immigration patterns after the Brexit referendum in 2016. The plurality of internationally trained junior doctors in 2021 was Asian, at 45%, compared with 24% of UK-trained junior doctors. Similarly, the share of Black junior doctors among internationally trained doctors, at 17%, was much higher than their share among UK-trained doctors, which was just 3%.

Internationally trained doctors are also much less likely to be White than immigrants to the UK overall. In the 2021 Census, 46% of the foreign-born population in the UK identified as White (Office for National Statistics, 2023b), nearly three times as high as among internationally trained doctors in the NHS. Conversely, the share of Asian immigrants was a third lower, and that of Black immigrants a quarter lower, than the shares of Asian and Black internationally trained doctors, respectively.

Figure 6. Share of junior doctors from each ethnicity group in February to April 2021 by country of qualification



Note: Excludes 1.9% of junior doctors with unknown country of qualification.

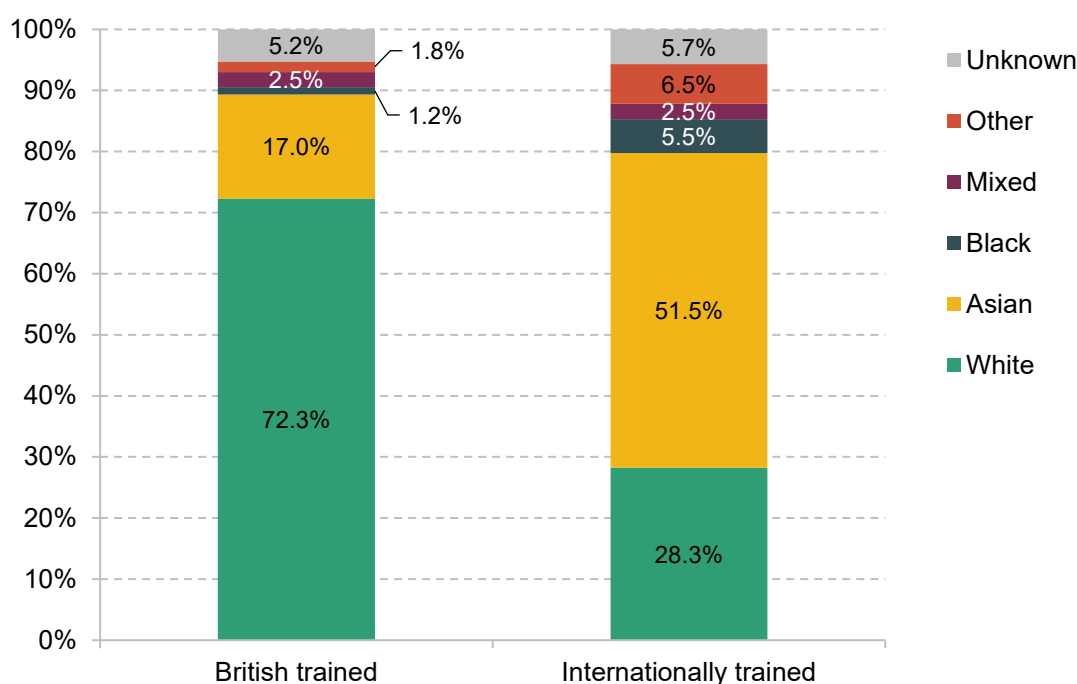
A large part of the ethnic diversity of junior doctors therefore comes from internationally trained doctors. Even so, the share of non-White UK-trained junior doctors is much larger than in wider populations. But this is not true for all individual non-White ethnicity groups. In particular, there is a much larger share of Black junior doctors overall than in wider populations, but among UK-trained junior doctors the share of Black staff is lower than in wider populations. Table A1 in the appendix shows how the ethnicity mix of UK-trained doctors compares with the wider population. Excluding those with unknown ethnicity, 3.5% of UK-trained junior doctors were Black, compared with 4.6% of the English working-age population and 8.1% of all junior doctors. Encouragingly, the share of UK-trained junior doctors who are Black was substantially higher in 2021 than in 2012, when it stood at 2.5%.

If we are worried about unequal access to medicine from different ethnic minority groups, this suggests that the high share of Black junior doctors should not be taken as a sign that there are no issues. The recent NHS long-term workforce plan (NHS England, 2023b) aims to reduce the NHS's reliance on international recruitment. Unless other action is taken, this may meaningfully offset recent trends of increased representation particularly of Black doctors.

Figure 7 repeats this analysis for consultants. The story is qualitatively similar to that for junior doctors: a much larger share of internationally trained consultants than of UK-trained consultants are non-White. The share of UK-trained consultants who are non-White is still higher than the

non-White share in larger populations, but this is driven by Asian consultants. Black, Mixed and Other ethnicities are a much smaller share of UK-trained consultants than in wider populations. For example, excluding those with unknown ethnicity, 1% of UK-trained consultants are Black, compared with 5% of the English working-age population (Table A1). The share of Black doctors among internationally trained consultants, at 5.5% in Figure 7, was much lower than among internationally trained junior doctors, while the shares of White and Asian doctors were much higher.

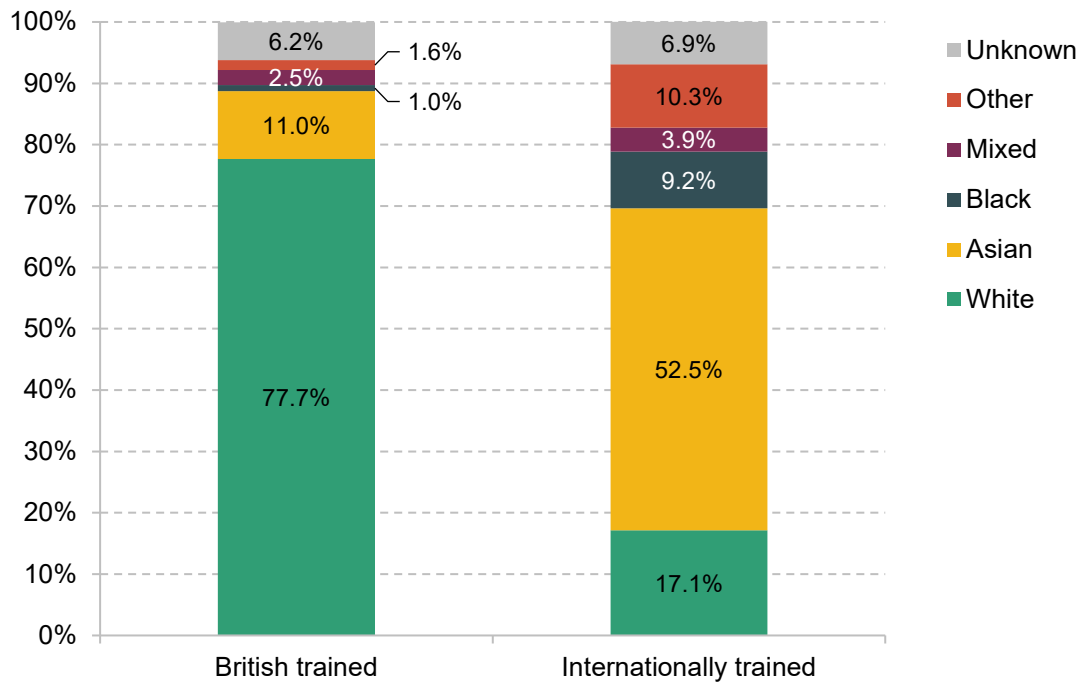
Figure 7. Share of consultants from each ethnicity group in February to April 2021 by country of qualification



Note: Excludes 1.5% of consultants with unknown country of qualification.

Finally, Figure 8 repeats this analysis for other specialists. The story is similar to those for junior doctors and consultants. 78% of UK-trained non-consultant specialists were White, compared with 17% of internationally trained doctors, while 11% of UK-trained non-consultant specialists were Asian, compared with 52% of internationally trained doctors. Among internationally trained non-consultant specialists, the shares of Black, Mixed and Other ethnicity doctors were much higher than among internationally trained consultants, while the share of White doctors was much lower. This may reflect differences in access to becoming a consultant, perhaps related to different requirements for qualifications from other countries.

Figure 8. Share of non-consultant specialists from each ethnicity group in February to April 2021 by country of qualification



Note: Excludes 7.6% of non-consultant specialists with unknown country of qualification.

One of the reasons to separate consultants and other specialists is to examine whether there is unequal access to becoming a consultant – a higher-paid role – by ethnicity for those trained in the UK. However, UK-trained consultants were actually more ethnically diverse than UK-trained non-consultant specialists. Therefore, the fact that other specialists are much more ethnically diverse than consultants (see Figure 1) is driven by other specialists being much more likely to be internationally trained, rather than by UK-trained ethnic minority junior doctors being less likely to become consultants.

7. Conclusion

Our analysis finds that the NHS doctor workforce has a much larger share of ethnic minority groups than the wider English population. Although there are some differences, this holds true within all major specialties, and for male and female doctors. It is not the case, however, that all ethnic minority groups are as well represented across all types of roles. One important factor in understanding these differences is international recruitment. We show that doctors who were trained abroad are much more ethnically diverse than those trained in the UK. Given the large share of doctors who were trained abroad, this can explain much of the ethnic mix of the overall NHS doctor workforce. It also means that reducing the NHS's reliance on international recruitment, as proposed in the NHS workforce plan (NHS England, 2023b), could meaningfully change the ethnicity mix of the workforce.

Across all types of roles, Asian doctors are by far the second-largest ethnicity group, after White doctors, and make up much larger shares than in the wider population. But if we focus on UK-trained doctors, there are smaller shares of Black doctors in both junior and senior roles than in the wider population. This could reflect differences in career preferences or differences in access to opportunities in other, similar sectors, but also differences in access to medical schools and training. It is encouraging, then, that the share of UK-trained junior doctors who are Black has increased substantially between 2012 and 2021. With a large expansion in medical school places outlined in the NHS workforce plan, ensuring equal access to medicine will be even more important over the next decade.

Our findings in this report therefore present a nuanced story. The much larger share of non-White doctors as a whole compared with the shares in wider populations is striking – particularly when compared with skilled professions as a whole in the UK. But the lower shares of some ethnic minority groups and the consistent findings that ethnic minority NHS staff experience higher rates of harassment, bullying, abuse and discrimination mean that we should not interpret our headline results as suggesting that all is well when it comes to the experiences and opportunities of doctors of different ethnicities.

Appendix

Figure A1. Share of junior doctors in each ethnicity, February to April 2021

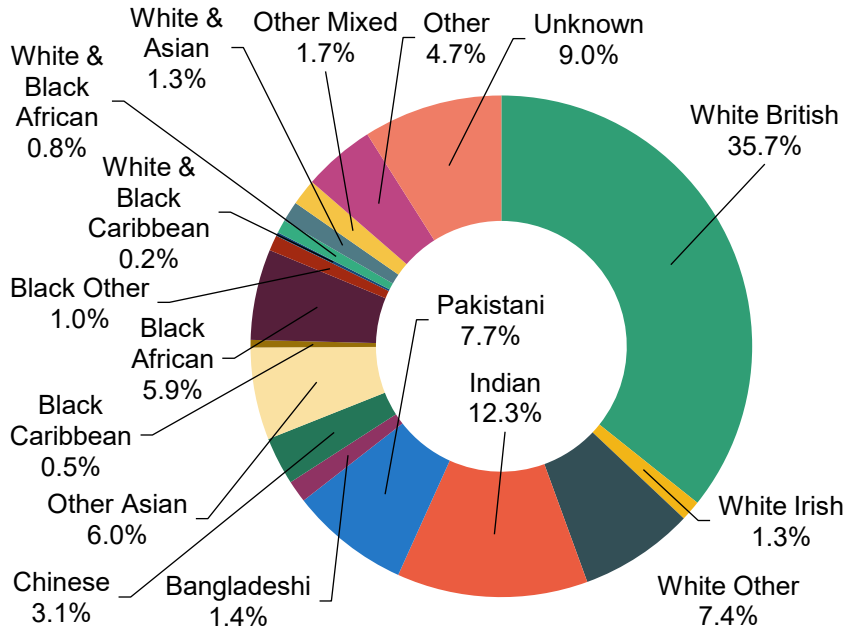


Figure A2. Share of consultants in each ethnicity, February to April 2021

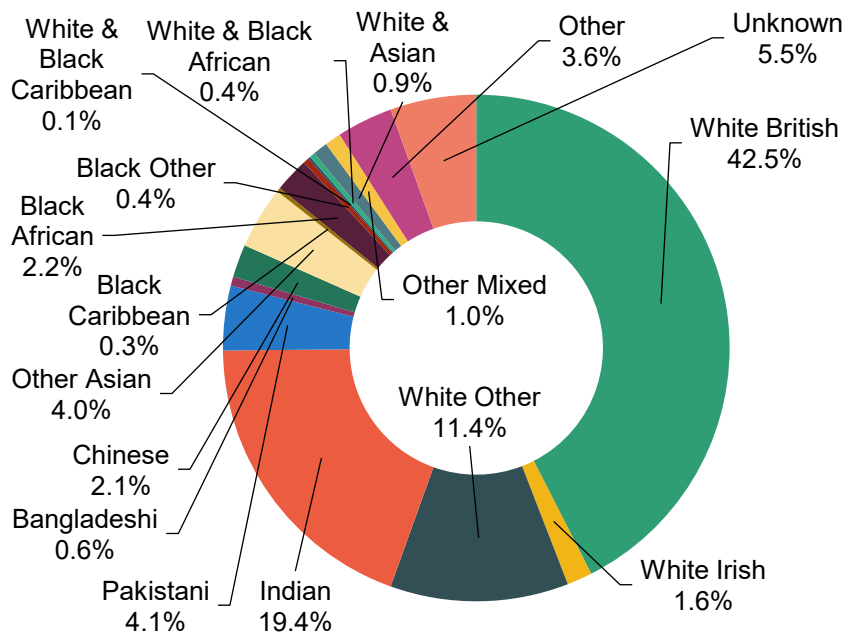


Figure A3. Share of non-consultant specialists in each ethnicity, February to April 2021

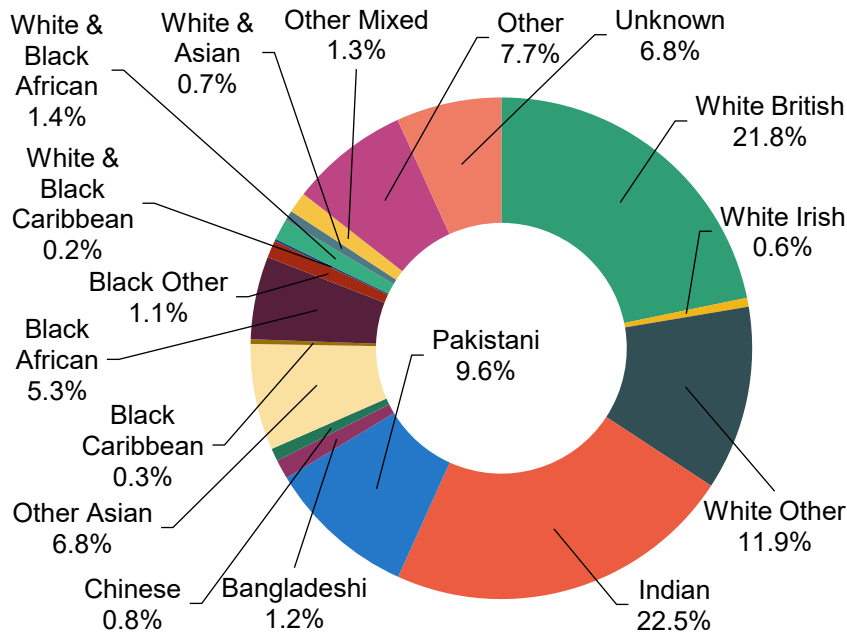
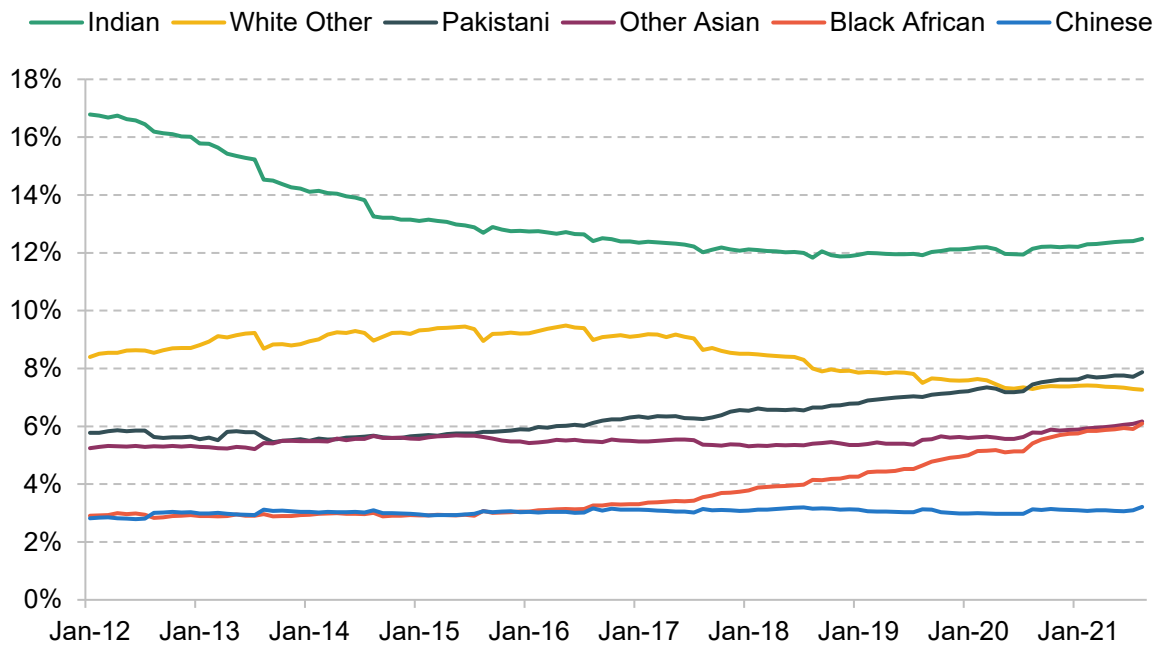


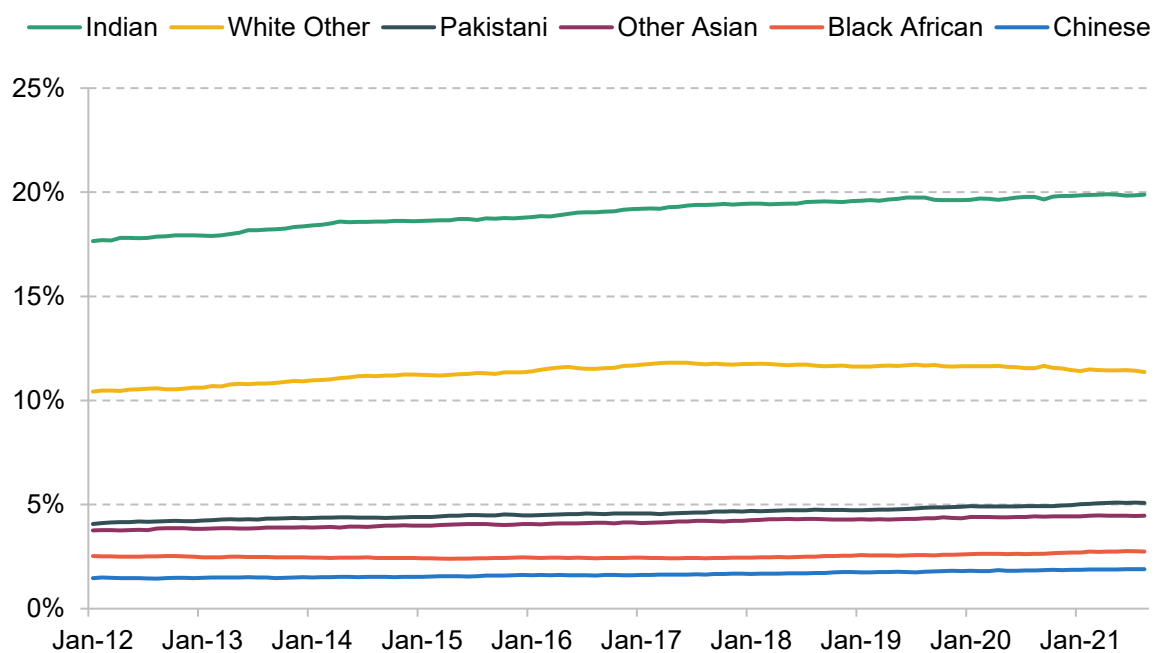
Figure A4. Share of junior doctors from selected ethnicities between January 2012 and August 2021



Note: Six largest ethnicities excluding White British, Other and Unknown.

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Figure A5. Share of senior doctors from selected ethnicities between January 2012 and August 2021



Note: Six largest ethnicities excluding White British, Other and Unknown.

Table A1. Comparison of ethnicity shares in 2021 for UK-trained doctors

	White	Asian	Black	Mixed	Other
English population	81.0%	9.6%	4.2%	3.0%	2.2%
English working-age population	80.0%	10.5%	4.6%	2.5%	2.4%
Professional occupations (UK)	84.4%	9.1%	3.0%	1.5%	2.0%
NHS doctors					
Consultants	76.3%	17.9%	1.3%	2.6%	1.8%
Other specialists	82.8%	11.8%	1.1%	2.6%	1.7%
Junior doctors	62.9%	26.1%	3.5%	4.2%	3.3%

Note and source: See Table 2.

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