

Article

# International migration and the healthcare workforce

Drawing on all currently available data, as no single source gives us a definite picture, we set out how many migrants work in health care in the UK and explore their age structure, location and changes over time. We also present data on specific health workers in England, such as hospital nurses and General Practitioners.

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# 1 . Main points

- Around 1.9 million people were employed in the healthcare workforce in the UK in 2018 – this includes both public and private sector health workers such as doctors, nurses and paramedics.
- Of these, British nationals make up 88% of the workforce and non-British nationals make up 12% – 6% were EU nationals and 6% non-EU nationals.
- The proportion of non-British nationals in the healthcare workforce has remained broadly stable since 2012, but at the same time the numbers have increased from 155,000 to 227,000, with EU nationals accounting for the majority of the increase.
- Around two thirds of these people worked in the public sector (68%) and a third worked in the private sector (32%), with EU nationals being more likely to work in the private sector than non-EU and British nationals.
- The proportion of the healthcare workforce that are non-British nationals varies greatly across the UK; London had the highest proportion (23%).
- There were over 1 million people (913,789 full-time equivalents) working in healthcare roles in NHS hospitals in England in March 2019: 6% were EU nationals and 8% non-EU nationals (this excludes NHS infrastructure support staff).
- Most healthcare workers in England with an EU nationality were from EU15 countries<sup>1</sup> and most non-EU nationals were from South Asia.
- Of those working in healthcare roles in NHS hospitals, higher proportions of doctors and nurses were non-British nationals than people in other staff groups – 29% and 18% respectively.
- One in five fully qualified and permanent General Practitioners (GPs) in England in March 2019 gained their qualification outside of the UK – the majority in non-EU countries (16% – mostly South Asia and Africa) and 4% in the EU.

## Notes for: Main points

1. Nationals of countries that were EU members prior to 2004, for example, France, Germany and Spain, are termed the EU15.

## 2 . Introduction

We are [transforming the way we produce population and migration statistics](#) to put administrative data at the core of our statistics and better meet our user needs. Our users have told us that they need more information on the contribution and impact migrants have while they are in the UK, including the sectors in which they work, the communities they live in and the impacts on public services.

In January 2019, we published an [update on our transformation journey](#), providing an update on our plan to publish research in 2019 investigating migration and the health and [education sector](#), which was followed in May 2019 by our first article on the education sector. Today's (15 August 2019) article – and accompanying [blog](#) and [analysis plans](#) – is the first part of our planned research on international migration and health.

International migration and its contribution to and impact on the provision of health care is a complex topic. Availability of workforce data varies across the UK and between health professions, and there is not a consistent way to define international migrants. For example, not all sources include information on country of birth, nationality or citizenship. This article therefore draws on all currently available sources and provides a summary of the insights we can obtain from these sources. We set out how many migrants work in health care in the UK and explore their age structure, location and changes over time. We also present data on specific health professions in England, such as hospital nurses and General Practitioners (GPs). We do not include the social care workforce in this release.

Each of these [data sources](#) have coverage and definitional differences so care should be taken when making any comparisons between them. We present self-reported data on nationality for the overall healthcare workforce for the UK and for hospital and specialist workforces for England. For GPs in England, we use country of primary medical qualification; for the visa data for the UK, we use citizenship.

## 3 . Overall healthcare workforce

The healthcare workforce is a major employer in the UK, accounting for an estimated 6% of the total UK workforce in 2016 to 2018 according to the Annual Population Survey (APS). In this section, we explore the characteristics of this workforce, including how many migrants work in health care in the UK and their age structure, location and changes over time.

We define the healthcare workforce as those people who are working in health roles providing healthcare services that are of direct benefit to a patient. A detailed breakdown of who we have included in the analysis is in the [Annex](#).

It is not possible to survey all people resident in the UK, so these statistics are estimates based on a sample of people living in households (excluding communal establishments), not precise figures. More information on the survey is provided in the [Understanding these data section](#).

## Non-British nationals make up 12% of the UK healthcare workforce

In 2018, estimates from the APS show that there were approximately 1.9 million people employed in health care in the UK. Of these 88% were British nationals<sup>1</sup>, while 6% were EU nationals and 6% non-EU nationals. This is similar to the [overall resident population](#) where in 2018, 6% were EU nationals and 4% non-EU nationals.

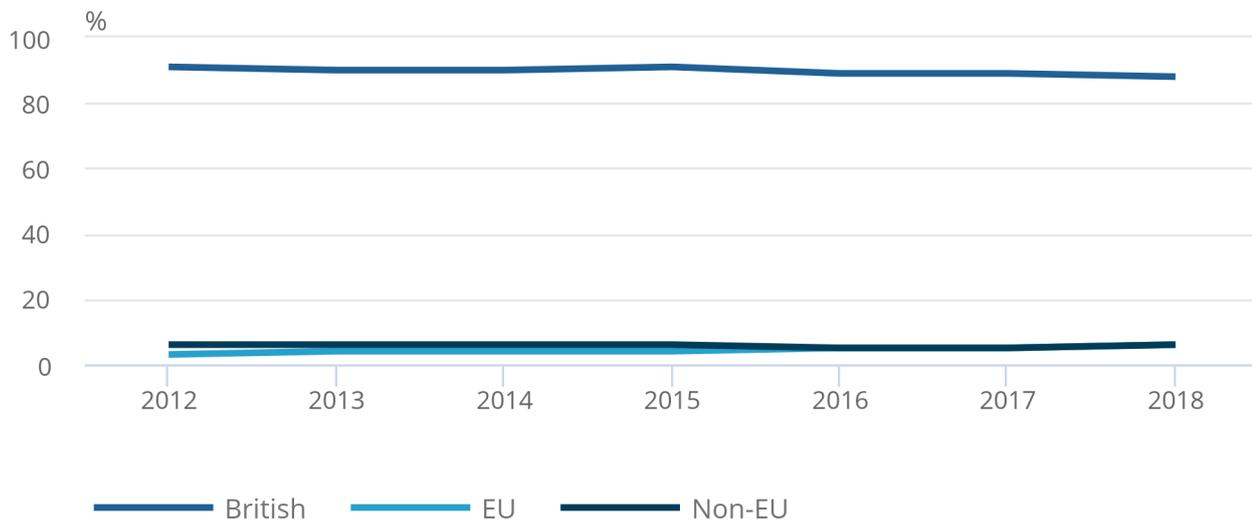
Over the medium term, the proportion of non-British nationals in the healthcare workforce has remained broadly stable (Figure 1). At the same time, the numbers have increased from 155,000 to 227,000, with EU nationals accounting for the majority of the increase (from 56,000 in 2012 to 116,000 in 2018).

**Figure 1: A similar proportion of EU and non-EU nationals work in healthcare**

Proportion of healthcare workforce by nationality, UK, 2012 to 2018

### Figure 1: A similar proportion of EU and non-EU nationals work in healthcare

Proportion of healthcare workforce by nationality, UK, 2012 to 2018



Source: Office for National Statistics – Annual Population Survey

**Notes:**

1. For consistency with other published data sources, nationality has been used within this time series. However, it is possible that an individual's nationality may change over time. As a respondent's country of birth cannot change, this provides a more robust estimate of changes in population over time. (Country of birth data can be found in the accompanying data tables.)
2. Please see [Annex B](#) for who we have included in the healthcare workforce.

Of the 1.9 million people in the UK healthcare workforce, 68% reported they were working in the public sector and 32% in the private sector<sup>2</sup>. This is similar for both British and non-EU nationals, but EU nationals were more likely to work in the private sector (38%).

The proportion of the healthcare workforce with non-British nationality varies greatly across the UK (Figure 2). London had the highest proportion where 23% of the healthcare workforce were non-British nationals. This was similar to the [overall population](#) – 22% were non-British nationals in 2018.

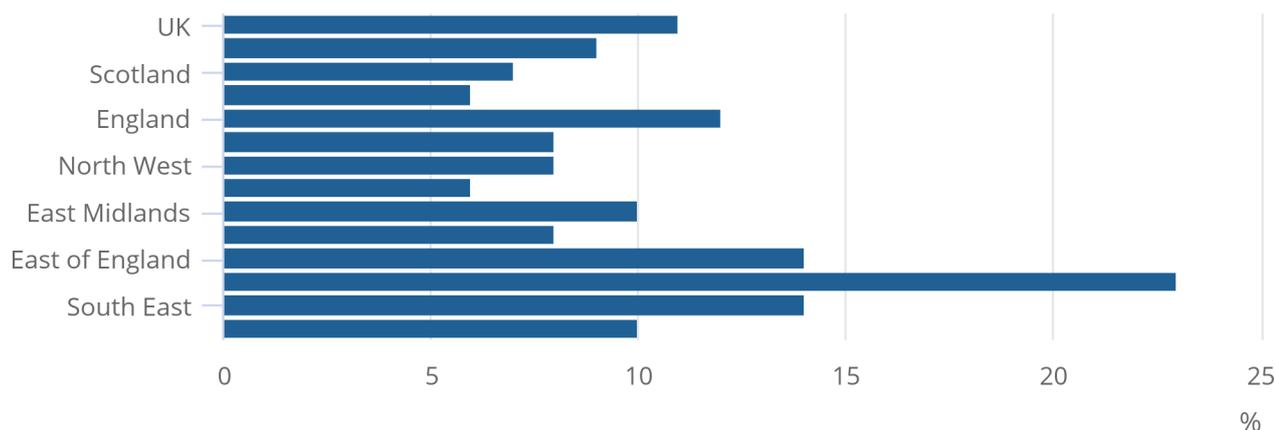
For Scotland and Wales, the proportion of the healthcare workforce with non-British nationality was 7% and 6% respectively. Whereas for Northern Ireland it was slightly higher at 9%. For Scotland this was similar to the overall population – 7% were non-British in 2018. However, for Wales and Northern Ireland, 4% and 7% respectively were non-British nationals in the overall population.

**Figure 2: London has the highest proportion of the healthcare workforce with a non-British nationality**

Proportion of healthcare workforce with a non-British nationality, by region and country, UK, 2016 to 2018

## Figure 2: London has the highest proportion of the healthcare workforce with a non-British nationality

Proportion of healthcare workforce with a non-British nationality, by region and country, UK, 2016 to 2018



Source: Office for National Statistics – Annual Population Survey 3-year pooled dataset 2016 to 2018

**Notes:**

1. For consistency with other published data sources, nationality has been used. However, it is possible that an individual's nationality may change over time. As a respondent's country of birth cannot change, this provides a more robust estimate of changes in population over time. (Country of birth data can be found in the accompanying data tables.)
2. Please see [Annex B](#) for who we have included in the healthcare workforce.

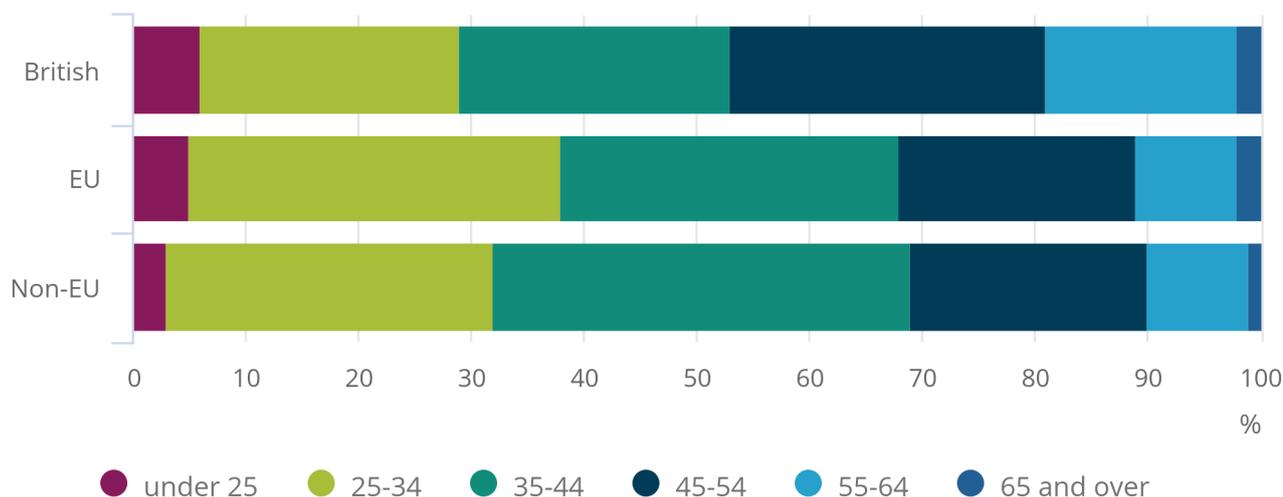
Non-British nationals working in health care were generally younger than British nationals. The highest proportion of British nationals were aged 45 to 54 whereas for non-EU and EU nationals they were aged 35 to 44 and 25 to 34 years respectively (Figure 3).

### Figure 3: Non-British nationals working in healthcare tend to be younger than British nationals

Proportion of healthcare workforce by age group and nationality, UK, 2016 to 2018

## Figure 3: Non-British nationals working in healthcare tend to be younger than British nationals

Proportion of healthcare workforce by age group and nationality, UK, 2016 to 2018



Source: Office for National Statistics – Annual Population Survey 3-year pooled dataset 2016 to 2018

**Notes:**

1. Please see [Annex B](#) for who we have included in the healthcare workforce.

**Notes for: Overall healthcare workforce**

1. Nationality refers to that stated by the respondent during the interview for the Labour Force Survey. Nationalities are recorded as British/UK, Irish Republic and Other. We have therefore grouped nationality as British and non-British at the highest level. For country of birth, we have used UK/non-UK groupings at the highest level.
2. Some of those working in the private sector could be contractors or agency staff working within the NHS. Guidance on whether an industry is ‘public’ or ‘private’ sector is provided, for example, doctors and dentists (and others working in their practices) are coded according to whether the practice is mainly NHS or private.

## 4 . Hospital and specialist workforce in England

This section looks at a sub-set of the overall health workforce, focused on public sector staff working in NHS hospitals and community health services in England. The data presented are full-time equivalent (FTE) estimates and exclude NHS infrastructure support staff.

## Higher proportions of doctors and nurses were non-British nationals than in other staff groups

NHS Digital publish data on [NHS Hospital and Community Health Services \(HCHS\) staff groups working in Trusts and Clinical Commissioning Groups \(CCGs\) in England](#) (excluding primary care staff). There were over 1 million people (913,789 FTEs) working in healthcare roles in NHS hospitals in England in March 2019: 81% of the workforce were British nationals, 6% EU, 8% Non-EU and 5% unknown<sup>1</sup> (Figure 4).

### Figure 4: Most healthcare workers with an EU nationality are from the EU15 and most non-EU nationals are from South Asia

NHS HCHS healthcare staff working in Trusts and CCGs by nationality, England, March 2019

#### Notes:

1. Data based on FTEs.
2. Excludes NHS infrastructure support staff.

[Download the data](#)

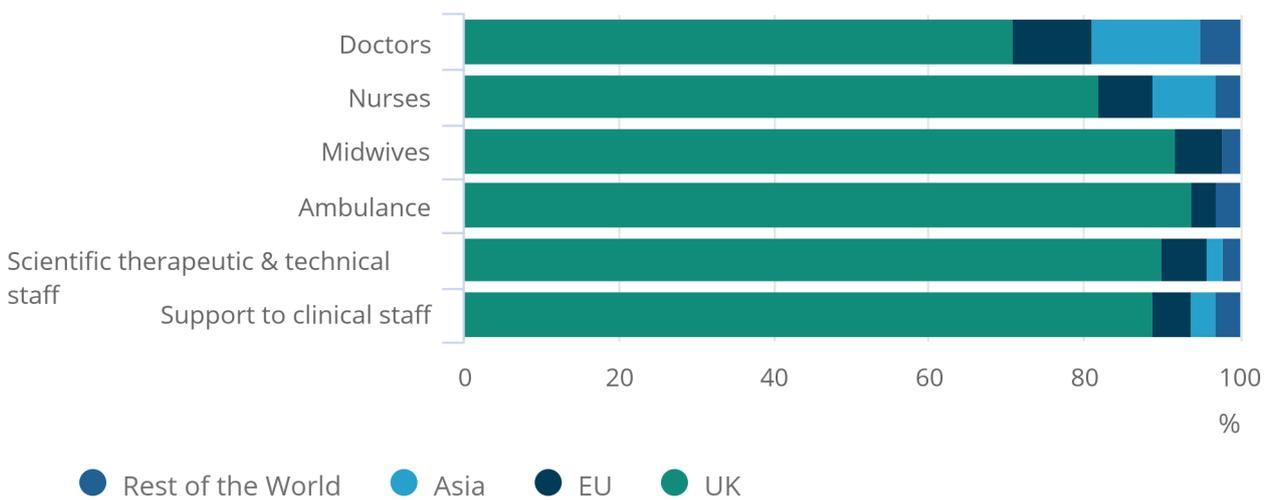
The proportion of staff who were non-British nationals varies by staff group. Excluding those with unknown nationality, the proportion of non-British nationals was highest among doctors and nurses – 29% and 18% respectively (Figure 5).

**Figure 5: Higher proportions of doctors and nurses were non-British nationals than in other staff groups**

NHS HCHS healthcare staff working in Trusts and CCGs by staff group and nationality, England, March 2019

### Figure 5: Higher proportions of doctors and nurses were non-British nationals than in other staff groups

NHS HCHS healthcare staff working in Trusts and CCGs by staff group and nationality, England, March 2019



Source: NHS Digital - NHS Workforce Statistics

**Notes:**

1. Chart excludes those with an unknown nationality. For each staff group, the proportion of unknown nationalities is similar to the overall figure (5%) with the exception of ambulance staff, which has 14% unknown.
2. Data based on FTEs.

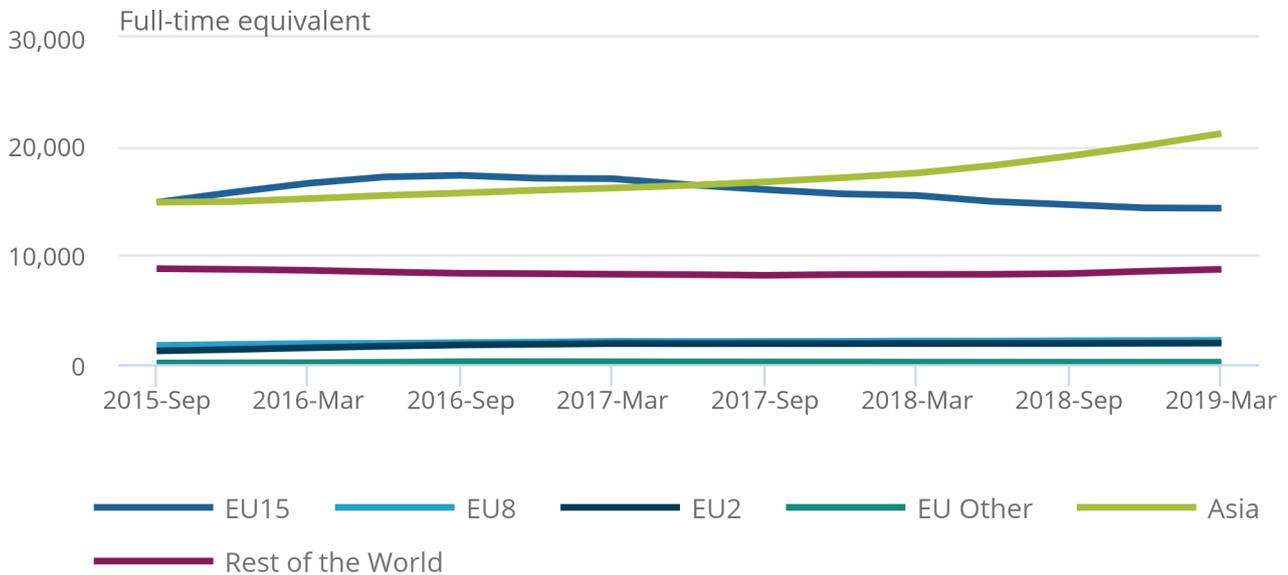
Since June 2016, the number of EU15 nurses has decreased. In the same time period, there was an increase in Asian nationalities, particularly Filipino nationalities, which increased from approximately 8,000 in March 2016 to 12,000 in March 2019. However, the number of nurses with an unknown nationality also decreased and could account for some of this change.

**Figure 6: The number of EU15 nurses has decreased while the number of Asian nurses has increased**

NHS HCHS nursing workforce in Trusts and CCGs by nationality, England, 2015 to 2019

Figure 6: The number of EU15 nurses has decreased while the number of Asian nurses has increased

NHS HCHS nursing workforce in Trusts and CCGs by nationality, England, 2015 to 2019



Source: NHS Digital - NHS Workforce Statistics

Notes:

1. Chart excludes those with an unknown nationality, the number of whom decreased over time.
2. Data based on FTEs.

Doctors was the staff group with the highest proportion of non-British nationals. Excluding unknown nationalities, 10% of doctors were EU nationals and 19% non-EU nationals. Within the EU nationals category, those from the EU15 account for the majority and within the non-EU nationals category, this is South Asia (Figure 7).

**Figure 7: Most non-British national doctors had either a South Asia or EU15 nationality**

NHS HCHS doctors workforce in Trusts and CCGs by nationality, England, March 2019

Notes:

1. Data based on FTEs.

[Download the data](#)

**Notes for: Hospital and specialist workforce in England**

1. Although analysis has shown that the proportion of unknown nationalities within the data is decreasing over time, it is still high so care should be taken when using this information.

## 5 . General practice workforce in England

This section looks at a further sub-set of the total healthcare workforce, focused on public sector staff working in general practice (and not in hospitals and community health services).

There are no data collected on the nationality of General Practitioners (GPs), but NHS Digital publish data on [the country in which GPs gained their primary medical qualification](#). Unless otherwise stated, the proportions presented exclude those with unknown country of qualification (which accounts for 9% of all GPs – excluding locums) and are headcount estimates. Full-time equivalent (FTE) data are not published by country of qualification. GP data for the EU cover countries in the European Economic Area (EEA).

### One in five fully qualified and permanent GPs gained their qualification outside of the UK

Overall, including GPs qualified in the UK, there were nearly 45,000 GPs working in England in March 2019. Around 34,500 are fully qualified and permanent GPs and of these, one in five gained their primary medical qualification outside of the UK – 16% in non-EU countries, with most of these being in South Asia and Africa (around 11% and 3% respectively), and 4% in the EU (Figure 8). These proportions have remained similar since March 2016.

#### Figure 8: Majority of GPs who qualified outside the UK did so in South Asia, the EU and Africa

GPs by region of primary medical qualification, England, March 2019

##### Notes:

1. All qualified permanent GPs (excludes registrars and locums). Data are available for registrars separately.
2. Percentages are calculated for GPs where country of qualification is known.
3. South Asia is made up of Bangladesh, India, Pakistan, the Maldives, Nepal and Sri Lanka.
4. Data for the EU refer to the EEA.

[Download the data](#)

Over half of all GPs gained their primary medical qualification in three countries (India, Pakistan and Nigeria). While within the EU, [the Republic of Ireland and Germany each account for around 20% of qualified GPs](#).

North West, North Central and East London and the East of England regions<sup>1</sup> had the highest proportions of qualified permanent GPs whose primary medical qualification was gained outside the UK; all were over a quarter.

#### Figure 9: London and the East have higher proportions of GPs who qualified outside the UK

Proportion of GPs whose primary medical qualification was gained outside the UK by Clinical Commissioning Group, England, March 2019

##### Notes:

1. All qualified permanent GPs (excludes registrars and locums). Data are available for registrars separately.
2. Percentages are calculated for GPs where country of qualification is known.

[Download the data](#)

## One in four GP Registrars gained their qualification outside the UK

Data are published separately for GP Registrars (trainees) in England. A slightly higher proportion of GP Registrars, one in four, gained their primary medical qualification outside the UK in March 2019. This proportion increased slightly from one in six in March 2016.

East of England, East and West Midlands regions had the highest proportions of GP Registrars whose primary medical qualification was gained outside the UK (over a third), while in contrast to fully qualified and permanent GPs, London had the lowest proportion (less than 10%).

In England, GPs form the majority of the general practice workforce, but nearly 24,000 nurses and just over 19,000 direct patient care staff also work in general practice providing clinical care. There are currently no published data to indicate nationality or country of qualification for GP locums and the non-GP general practice workforce in England.

### Notes for: General practice workforce in England

1. Regions refer to Health Education England regions.

## 6 . Who is joining and leaving the healthcare workforce?

We have considered the current size of the healthcare workforce overall and across different staff groups, but data are also available from NHS Digital on the number of people who join and leave the workforce in England. Data are also available from the Home Office on those people who require a visa and apply for sponsorship to come to the UK as a health professional. Data presented from NHS Digital are full-time equivalent (FTE) estimates.

### Slightly more EU nurses were leaving the NHS in England than joining, but this shortfall is offset by joining non-EU and British nurses

In England in the year end to March 2019, overall there were more people joining NHS Hospital and Community Health Services (HCHS) than leaving according to [NHS Digital data](#): 123,400 joiners and 97,100 leavers<sup>1</sup>. For EU nationals, the number of joiners was slightly higher (around 900 higher) than the number of leavers, whereas for non-EU nationals the number joining was more than double those leaving (7,500 leaving and 16,600 joining). For British nationals, approximately 92,700 joined, while 76,100 left.

For nurses, there were more EU nurses leaving NHS HCHS than joining, with a net loss of 1,300 nurses. However, this has been more than offset by non-EU and British nurses as there was an overall increase of 3,700 nurses.

Further data on individual nationalities, age and Health Education England regions are available in the [NHS Workforce Statistics](#) collection.

[General Practice Workforce experimental statistics](#) on recruitment from overseas are available but only a handful of staff are reported as being recruited from abroad each year in England. Data on the destinations of leavers are only available for less than half of the healthcare staff in general practice and show just over 100 General Practitioners (GPs), nurses and direct patient care staff left to go abroad. These were mostly to non-EU countries.

## Most visa applications to work in health care in the UK were as either Health Professionals or Nursing and Midwifery Professionals

Data from the Home Office provide information on Certificates of Sponsorship used in applications made overseas for Tier 2 (skilled work) entry clearance visas. These data cover non-European Economic Area (EEA) nationals and cover applications for entry clearance visas to the UK, not just England.

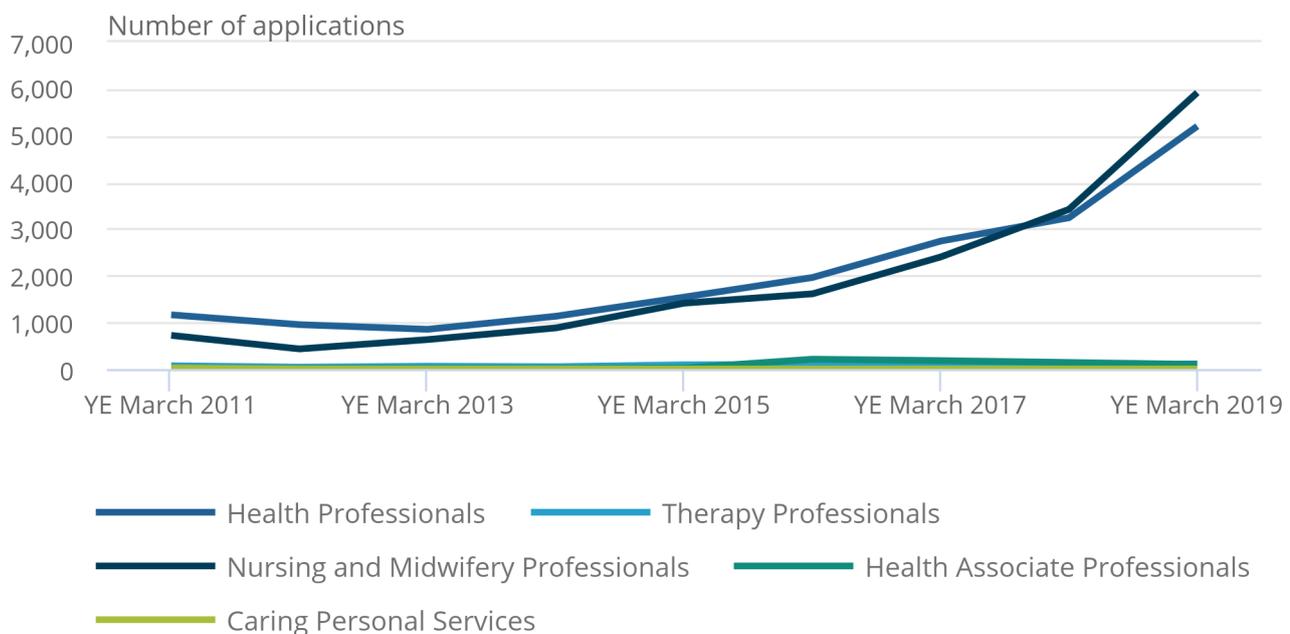
Most visa applications to work in healthcare occupations were as either Health Professionals or Nursing and Midwifery Professionals. Since the year ending March 2013, the number of applications in these two groups has increased from approximately 850 to 5,200 in the year ending March 2019 for Health Professionals and from approximately 630 to 5,920 in the year ending March 2019 for Nursing and Midwifery Professionals (Figure 10).

**Figure 10: Visa applications for Health, Nursing and Midwifery professions have increased since 2013**

**Certificates of Sponsorship for Tier 2 visa applications in healthcare occupations, UK, year ending March 2011 to year ending March 2019**

### Figure 10: Visa applications for Health, Nursing and Midwifery professions have increased since 2013

Certificates of Sponsorship for Tier 2 visa applications in healthcare occupations, UK, year ending March 2011 to year ending March 2019



**Source: Home Office - Certificates of Sponsorship for visa applications**

**Notes:**

1. Includes Certificates of Sponsorship used in Tier 2 (skilled work) visa applications only.
2. Groups are formed based on Standard Occupational Classification codes in [Annex B](#).

**Notes for: Who is joining and leaving the healthcare workforce?**

1. These numbers of joiners and leavers are not directly comparable to the annual change in the workforce in Section 4 because, for example, they do not take into account people's changing work patterns and movements between staff groups.

## 7 . Other workforce data in England

### Independent Healthcare Providers

According to NHS Digital [experimental statistics](#), there were over 48,000 full-time equivalent (FTE) staff working for Independent Healthcare Providers in September 2018 in England (not all providers' data are available to NHS Digital). Some nationality data are reported but 44% of FTEs record unknown nationality. Of those FTEs with a nationality recorded, 4.4% had EU nationality and 3.8% had non-EU nationality.

## 8 . Data

We have used four main data sources to provide insight into the migrant healthcare workforce:

- Annual Population Survey (APS) – Office for National Statistics
- NHS Workforce Statistics – NHS Digital
- General Practice Workforce experimental statistics – NHS Digital
- Visa Sponsorship data – Home Office

Each of these sources have coverage and definitional differences so care should be taken when making any comparisons between them – see [how these data are measured](#).

### [International migration and the health care workforce](#)

Dataset | Released 15 August 2019

Data on how many migrants work in health care in the UK and their age structure, location and changes over time and data on specific health professions in England, such as hospital nurses and General Practitioners.

## 9 . Glossary

### EU nationality groups

EU estimates exclude British nationals. Nationals of countries that were EU members prior to 2004, for example, France, Germany and Spain, are termed the EU15; Central and Eastern European countries that joined the EU in 2004, for example, Poland, are termed the EU8; EU2 comprises Bulgaria and Romania, which became EU members in 2007.

### European Economic Area (EEA)

EEA General Practitioner (GP) workforce estimates exclude the UK and include the EU, Iceland, Liechtenstein, Norway and Switzerland.

### General Practice

A General Practice is an organisation that offers primary care medical services by a qualified GP who can prescribe medicine and where patients can be registered and held on a list. This does not include prisons, army bases, educational establishments, walk-in centres or specialist care centres including drug rehabilitation centres. Generally, the term describes what is traditionally thought of to be a high street family doctor's surgery.

### GP Registrar

A [GP Registrar](#) or GP trainee is a qualified doctor who is training to become a GP through a period of working and training in a practice. They will usually have spent at least two years working in a hospital before you see them in a practice and are closely supervised by a senior GP or trainer.

## Full-time equivalent (FTE)

FTE within the NHS workforce statistics is based on the proportion of time staff work in a role. FTE does not, therefore, measure the total hours in which work is carried out. For example, a doctor may be expected to work 48 hours in a week, which would be an FTE of one. A nurse is usually expected to work 37.5 hours each week, which is also one FTE. In some cases, staff may work longer and do overtime; however, this is not captured within the data.

## 10 . Understanding these data

The sources of data included in this release are not directly comparable but taken together provide a better indication of the overall picture of the migrant healthcare workforce than any single source alone.

### Annual Population Survey (APS)

To understand how international migration contributes to the overall healthcare workforce, we have analysed data from the APS, which tells us people's nationality and country of birth. For consistency with NHS data, we present nationality in the article but also include country of birth in the accompanying data tables.

We use the single-year APS data to explore time trends. To provide detailed information of the characteristics of those working in health care, we use data from the APS three-year pooled dataset. Specifically, this dataset is created by combining data across the years January 2016 to December 2018. The three-year pooled dataset was designed to provide more robust analysis that is not always possible using the single-year APS. The pooled dataset contains a sample size of around 550,000 respondents. The APS is weighted to the UK population totals to be representative of the whole household population. The APS is a household survey and so does not cover most people living in communal establishments, some NHS accommodation, or students living in halls of residence who have non-UK resident parents.

It is not possible to survey all people resident in the UK, so these statistics are estimates based on a sample of people living in households, not on precise figures, and are therefore subject to a margin of uncertainty.

More information about the APS can be found in the [Quality and Methodology Information report](#).

### NHS workforce statistics

NHS Digital publish data on [NHS Hospital and Community Health Services \(HCHS\) staff groups working in Trusts and Clinical Commissioning Groups \(CCGs\) in England](#). In this release we report on the March 2019 data for "professionally qualified clinical staff" and staff groups classed as "support for clinical staff". We exclude "infrastructure support staff" and "other staff or those with unknown classification".

The NHS HCHS workforce includes staff working in core NHS organisations (NHS Trusts and CCGs) and wider NHS organisations (central bodies and support organisations). Wider NHS organisations are national and regional organisations set up by the Department of Health and Social Care to manage and support the NHS in England. These data are an accurate summary of the validated data extracted from the NHS's HR and Payroll system.

## General Practice Workforce experimental statistics

[General Practice Workforce experimental statistics](#) in England are compiled from data supplied by practices to NHS Digital. The data are currently classified as experimental statistics. The [Data Quality Statement](#) published by NHS Digital outlines the data quality. The General Practice workforce includes staff working in General Practices contracted to the NHS in England. Not all doctors who hold the speciality of General Practitioner (GP) are recorded by NHS Digital in their data. Those providing services in the HCHS or in the independent sector are not counted in these data.

[General Practice Workforce experimental statistics](#) provide data for GPs, nurses, direct patient care and administrative or non-clinical staff. For the purposes of this release, we exclude administrative and non-clinical staff from the healthcare workforce. Data are available for GPs by country of primary medical qualification, but there are currently no published data to indicate nationality or country of qualification for the non-GP General Practice workforce in England.

GP data are published separately for qualified permanent GPs and GP Registrars by NHS Digital, and they are derived from a different source data. We use headcount data for GPs as full-time equivalent (FTE) data are not published for country of primary medical qualification.

## Visa sponsorship data

The Home Office visa data relate to Certificates of Sponsorship used in applications made overseas for Tier 2 (skilled work) entry clearance visas, rather than visas granted, and cover the whole of the UK. They include applications sponsored by both public sector and private sector employers. The analysis presented in this article has been subset based on the Standard Occupational Codes in [Annex B](#).

For more information, please see the [User Guide to Home Office Immigration Statistics](#).

## Independent healthcare providers

The [Independent Healthcare Provider \(IHP\) workforce statistics](#) include staff directly employed in a range of independent healthcare organisations in England. They do not represent the entire workforce employed across this sector and do not only show the staff providing NHS commissioned services.

These data are provisional experimental statistics. Data are based on those organisations that provided data to NHS Digital or whose data could be extracted from the Electronic Staff Record.

## Experimental statistics

[Experimental statistics](#) are new official statistics that are undergoing evaluation and are published to involve users and stakeholders in their development.

## 11 . More workforce data

There are a number of other research papers and data sources in the public domain that report on the healthcare workforce and most only include self-reported nationality as a migrant indicator. The majority of these use data sourced from NHS Digital, including the [NHS staff from overseas: statistics](#) from the House of Commons Library and the Health Foundation's report into [NHS staffing trends, retention and attrition](#).

NHS workforce information for other countries in the UK are available via:

### [NHS Workforce in Wales](#) | Wales (Welsh Government)

Numbers of staff directly employed by the NHS (excluding locum or agency appointments), and rates of sickness absence. Does not include nationality breakdowns.

### [NHS Workforce in Scotland](#) | Scotland (ISD Scotland)

NHS Hospital and Community Health Services (HCHS) staff groups working within Health Boards in Scotland. Allows for quantifying those working in secondary care. ISD Scotland is part of NHS National Services Scotland. Does not include nationality breakdowns.

## [Health and Social Care Workforce in Northern Ireland](#) | Northern Ireland (Department of Health)

Detailed statistics on health and social care employees and vacancies in Northern Ireland. Does not include nationality breakdowns.

[Welsh Government has also published some data on doctors by country of qualification.](#)

## [General Medical Council \(GMC\) data explorer tool](#) | UK (GMC)

Includes data on licensed doctors in the UK by country of primary medical qualification. The data are updated daily. These data may overlap with the data we have used from NHS Digital on hospital doctors and General Practitioners.

## [Nursing and Midwifery Council \(NMC\) | UK \(NMC\)](#)

Register of nurses, midwives and nursing associates currently able to practise in the UK. Includes data by location – UK, EEA or non-EEA – for initial registration, first-time registration and people who left the register.

## [Skills for Care](#) | England (Skills for Care)

Skills for Care maintain an [adult social care workforce dataset](#) and have made [workforce nationality estimates](#).

## [Health and Care Statistics Landscape for England](#) | England (Government Statistical Service)

The English Health Statistics Steering Group have developed this health and social care landscape that provides links to all main official health and social care statistics in a central place. The landscape is intended to help all users find relevant statistics and associated information on specific health topics and cross-cutting themes. The landscape is new and experimental and will continue to be developed. User feedback is welcomed.

The [World Health Organization](#) (WHO) and the [Organisation for Economic Co-operation and Development](#) (OECD) make comparisons across countries for the healthcare workforce. For example, the WHO report on the international migration of doctors and nurses in their recent report on [Health Employment and Economic Growth](#).

## 12 . You may also be interested in

### [Migrant labour force within the tourism industry](#)

Article | Released 15 August 2019

This article presents the current demographic composition of those working in the UK's tourism industry and considers movements into and out of the industry.

### [International migration and the education sector – what does the current evidence show?](#)

Article | Released 8 May 2019

An exploration of what the current evidence can tell us about international migration's impact on and contribution to the education sector.

### [Transformation of the population and migration statistics system: overview](#)

Article | Released on 21 June 2019

Latest update on our population and migration statistics transformation journey.

### [Office for National Statistics \(ONS\) international migration articles](#)

Articles | Various release dates

All ONS articles relating to international migration.

### [International migration – table of contents](#)

Dataset | Released on 28 February 2019

Tool to locate the datasets for all ONS international migration outputs.

# 13 . Annex

## Annex A: Defining health care

“[Health care or healthcare](#) is the maintenance or improvement of health via the prevention, diagnosis, and treatment of disease, illness, injury, and other physical and mental impairments in people. Health care is delivered by health professionals (providers or practitioners) in allied health fields.” (Source: Wikipedia) As such, we define the healthcare workforce as those roles, occupations and professions that have direct contact with and provide direct health care to a patient, or as roles that include direct support to do so.

Where possible, we have based our analysis on full-time equivalent (FTE) and not headcount data. This is to account for those who are working part-time and across multiple sectors.

## Annex B: Standard Occupational Classification (SOC)

The Annual Population Survey (APS) and Home Office visa sponsorship data use [Standard Occupational Classification \(SOC\)](#) to identify people who work in health care as their main occupation. We identified healthcare occupations as those that aligned with NHS staff groups that were most likely to have direct contact with and be providing direct health care to a patient, or where the group’s role included direct support to do so. Table 1 shows the groups and codes from the SOC used in our analysis.

Table 1: Standard Occupational Classifications codes used to define the healthcare workforce

<b>SOC group/code</b>	<b>Alignment with NHS staff grouping</b>	<b>Include in our analysis?</b>
22 HEALTH PROFESSIONALS	Aligns with 'Professionally qualified clinical staff'	Include – occupation is providing direct patient care
221 Health Professionals		
2211 Medical practitioners		
2212 Psychologists		
2213 Pharmacists		
2214 Ophthalmic opticians		
2217 Medical radiographers		
2218 Podiatrists		
2219 Health professionals n.e.c. <sup>1</sup>		
2215 Dental practitioners		
2216 Veterinarians	Not applicable	Do not include – not applicable
222 Therapy Professionals	Aligns with 'Scientific, therapeutic & technical staff'	Include – occupation is providing direct patient care
2221 Physiotherapists		
2222 Occupational therapists		
2223 Speech and language therapists		
2229 Therapy professionals n.e.c.		
223 Nursing and Midwifery Professionals	Included under: 'Professionally qualified clinical staff'	Include – occupation is providing direct patient care
2231 Nurses		
2232 Midwives		
24 BUSINESS, MEDIA AND PUBLIC SERVICE PROFESSIONALS	Not applicable	Do not include – align with social care occupations in future
244 Welfare Professionals		
2442 Social workers	Not applicable	Do not include – not applicable
2443 Probation officers		
2444 Clergy		
2449 Welfare professionals n.e.c.		
32 HEALTH AND SOCIAL CARE ASSOCIATE PROFESSIONALS	Aligns with 'Ambulance staff' and 'Support to clinical staff'	Include – staff provide support to professionals providing direct patient care e.g. Health care assistant, Ambulance technician
321 Health Associate Professionals		
3213 Paramedics		
3216 Dispensing opticians		
3217 Pharmaceutical technicians		

3218 Medical and dental technicians

3219 Health associate professionals n.e.c.

61 CARING PERSONAL SERVICE OCCUPATIONS

Aligns with 'Support to clinical staff'

Include – staff provide support to professionals providing direct patient care e.g. Health care assistant, Ambulance technician

614 Caring Personal Services

6141 Nursing auxiliaries and assistants

6142 Ambulance staff (excluding paramedics)

6143 Dental nurses

Not applicable

Do not include:

6144 Houseparents and residential wardens

- dental technicians included in NHS staff groups but not dental nurses

6145 Care workers and home carers

- others align more with social care occupations

6146 Senior care workers

6147 Care escorts

6148 Undertakers, mortuary and crematorium assistants

## Notes

1. N.E.C. = Not Elsewhere Classified.

## Annex C: NHS Staff Groups

The NHS Hospitals and Community Health Services (HCHS) categorises their workforce into staff groups. In line with our healthcare workforce definition, Table 2 shows the staff groupings in the NHS workforce statistics that have been included in our analysis.

Table 2: NHS Staff groupings used to define the healthcare workforce

<b>Staff group</b>	<b>% of total NHS workforce<sup>1</sup></b>	<b>Include in our analysis?</b>
Professionally qualified clinical staff	53.7%	Include – staff are providing direct patient care
HCHS doctors		
Consultant		
Associate Specialist		
Specialty Doctor		
Staff Grade		
Specialty Registrar		
Core Training		
Foundation Doctor Year 2		
Foundation Doctor Year 1		
Hospital Practitioner / Clinical Assistant		
Other and Local HCHS Doctor Grades		
Nurses & health visitors		
Midwives		
Ambulance staff		
Scientific, therapeutic & technical staff <sup>2</sup>		
Support to clinical staff	29.9%	Include – staff provide support to professionals providing direct patient care e.g. Health care assistant, Ambulance technician
Support to doctors, nurses & midwives		
Support to ambulance staff		
Support to ST&T staff		
NHS infrastructure support	16.0%	Do not include – no clinical qualification or patient care required in these roles
Central functions		
Hotel, property & estates		
Senior managers		
Managers		
Other staff or those with unknown classification	0.4%	Do not include – small group and roles unknown

Source: NHS Digital - NHS Workforce Statistics

Notes

1. Data are for the March 2019, NHS HCHS monthly workforce statistics for full-time equivalents (FTEs).
2. Includes chiropody; podiatry; dietetics; occupation therapy; orthoptics or optics; physiotherapy; radiography; art, music or drama therapy; prosthetics and orthotics; speech and language therapy; pharmacy; dentistry; psychological therapy; and operating theatres.