Royal College of Anaesthetists

The Anaesthetic Workforce: UK State of the Nation Report

November 2024

Contents

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Executive summary

- Anaesthetists are vital to addressing the NHS waiting list crisis, because most operations cannot take place without an anaesthetist.
- Although numbers of consultant and SAS (specialists, associate specialists and specialty doctors) anaesthetists in the UK rose from 10,149 in 2020 to 10,628 in 2022, demand has increased further. Numbers are 15% lower than what is needed, with a shortfall of around 1,900 anaesthetists across the UK.
- We estimate that this shortfall is preventing roughly 1.4 million operations and procedures from taking place per year, exacerbating the NHS's waiting list crisis.
- The new Westminster Government has also pledged to clear waits over 18 weeks and reduce waiting lists by 'millions' by the end of this parliament. These are worthy goals but will need anaesthetists to deliver them.
- The supply of anaesthetists is constrained by inadequate numbers of training places and poor retention.
- Demand for healthcare services, including surgery, is set to increase due to factors such as the growing and ageing UK population.
- At the current insufficient growth rate, the NHS could have a shortfall of 11,000 anaesthetists by 2040 to meet this additional demand. This deficit, unless addressed, could prevent 8.25 million operations and procedures from taking place each year, so urgent action must be taken now.
- Workforce shortages impact the existing workforce by putting additional workload on doctors, fuelling burnout and harming retention. Of anaesthetists who retired or left the profession early, 25% did so because of issues to do with mental wellbeing, burnout, or stress.
- Necessary solutions involve the following: the development of national plans for specialty training; boosting the number of funded anaesthetic training places; improving development opportunities and recognition of SAS-grade doctors; addressing the causes of poor retention; and ensuring that previous detrimental policies, such as a punitive pension taxation regime, do not return.

1. Introduction

Following the recent general election, the UK faces a new political landscape. However, the NHS remains in a state of crisis. Waiting lists are at near-record level: 7.6 million people are waiting for treatment in England,[1] while Scotland, Wales and Northern Ireland report 864,500,[2] 617,200,[3] and 404,200,[4] respectively†. It is, therefore, imperative that the Westminster Government and devolved administrations improve the capacity and the efficiency of health services.

After the publication of the last edition of this report in February 2022, we have collected new data showing that the UK-wide shortfall of anaesthetists has grown from around 1,400 to 1,900 – 15% lower than what is needed. This represents a fundamental bottleneck in our health system. Simply put, unless the number of anaesthetists in the NHS is increased, the required reduction in the elective backlog is unlikely to occur.

The anaesthetic workforce shortage not only limits NHS capacity, but also drives up costs. Increasingly, anaesthetic departments are having to spend large amounts of precious budget on expensive agency locums and bank staff or on overtime to cover operations that otherwise could not take place. However, even these expensive options can increase capacity only so far. There is only so much overtime that anaesthetists can safely do, and locum anaesthetists can fill only a fraction of the current gaps.

Since our last report in 2022, England,[5] Wales,[6] Scotland,[7] and Northern Ireland[8] have set out elective recovery plans. Also, following our representations in 2022, Health Education England (now part of NHS England) granted 70 extra higher anaesthetic training places per year for three years.[9] Although this was very welcome, these places need to be made permanent. In Wales, six new higher anaesthetic training places were granted in 2023 and, in Scotland, six new places were granted in 2024. Although useful starts, many more are needed to address the workforce shortfall.

In addition to the above, in June 2023, NHS England published its 'Long Term Workforce Plan'.[10] This included pledges to double medical school places from 7,500 in 2023 to 15,000 in 2031/32 and 'growth in foundation placement capacity, as those taking up these new places begin to graduate, and a commensurate increase in specialty training places that meets the demands of the NHS in the future'.

Although such pledges of growth in specialist training at some point in the future are welcome, ultimately, they are too vague and too slow. The shortage of anaesthetic training posts is a huge problem here and now. The need is immediate and there are already vast numbers of doctors finishing foundation training who want to progress to specialty training but can't do so due to lack of funded places to progress to. Furthermore, there are still doctors who have finished core anaesthetic training, but do not have higher anaesthetic training places to go to. These dual bottlenecks waste talent and constrain NHS capacity.

In September 2024, Lord Ara Darzi published the results of his 'Independent Investigation of the NHS in England'.[11] This set out the perilous state the NHS; the impact of years of under-investment; and the productivity challenges the system faces. These factors are well known to our members. The investigation also set out that NHS healthcare staffing levels in hospitals are high compared to other nations. This may be true in general, but is definitely not true in relation to anaesthesia, where staffing levels lag far behind other comparable nations.[12]

The new Westminster Government has also pledged to clear waits over 18 weeks[13] and reduce waiting lists by 'millions' by the end of this parliament.[14] These are worthy goals but will need anaesthetists to deliver them.

With the Westminster Government now developing a new 10-year NHS plan and an update to the NHS Long Term Workforce Plan, there is a need for urgent action. The shortfall of anaesthetists must be closed in every nation of the UK if our health services are to function properly, elective backlogs are to be addressed, and targets (such as 18 weeks for referral to treatment) are to be met.

In this report, we provide a comprehensive overview of the anaesthetic workforce, the training pipeline, retention issues, and reiterate very worrying projections of future demand. We also set out what actions are needed now to set UK nations in a positive direction.

† For details of how we calculated waiting lists, see Appendix A.

2. Methodology and data sources

Many figures in this report come from our 2022 workforce survey, which was sent to all clinical leads in anaesthesia working in the NHS in England, Scotland, and Wales or Health and Social Care in Northern Ireland. The response rate was high at 84%, but lower than the response rate to our last full census in 2020, which received a 97% response rate. We accounted for missing data using the scaling method set out in full in Appendix B, to give regional, national, and UK-wide estimates of anaesthetic workforce numbers.

Figures about training capacity come from an internal survey carried out in 2023, which was sent to College tutors and heads of school about their ability to take on extra anaesthetists in training (AiTs).

With regard to anaesthesia associates (AAs), some data comes from an additional 2023 survey of clinical leaders and a 2023 survey of Royal College of Anaesthetists' (RCoA's) members.

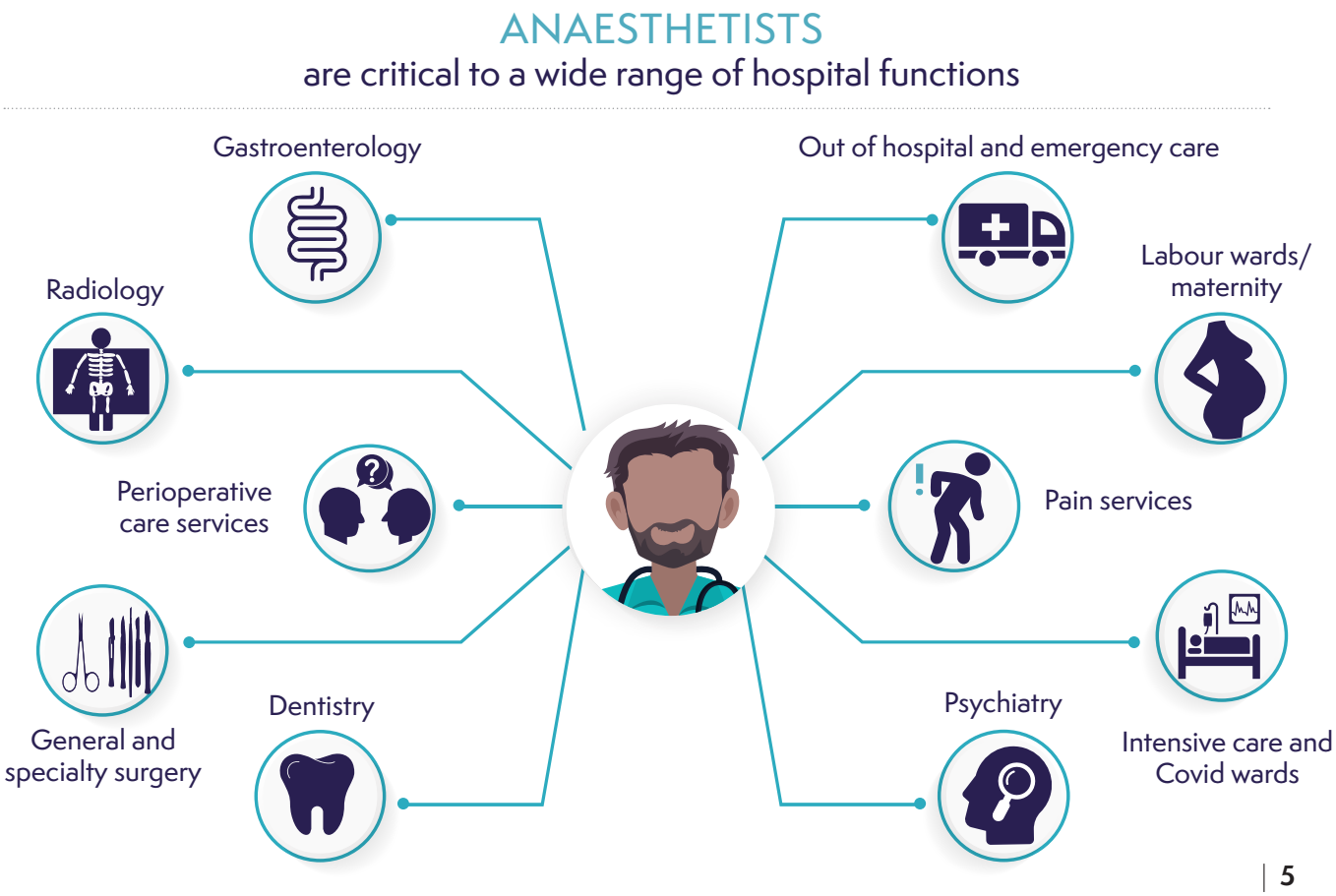
In some cases, we used data from other sources, for example, from the General Medical Council (GMC), on matters such as burnout and workforce age profiles.

3. What anaesthetists do

The role of the anaesthetist is vital to the functioning of the NHS. Most operations cannot take place without an anaesthetist. In the operating theatre, the anaesthetist administers the anaesthetic and, importantly, monitors and responds to changes in the patient's vital functions to ensure that they remain safe and stable during the operation.

However, the work of anaesthetists extends beyond operating theatres. Their skills and expertise are needed for patients of all ages in a large range of settings where resuscitation, anaesthesia and pain relief are needed, including pre-hospital care, emergency departments, maternity services, intensive care units, interventional radiology suites, acute and chronic pain services, gastroenterology, dentistry, and psychiatry.

They are also involved in preoperative assessment and preparation of patients ahead of surgery, training of many medical and other health staff, and research and governance.



3.1 Role during surgery

The job of the anaesthetist is complex. Careful consideration needs to be given to both the type and the dose of anaesthetic, as well as how it is administered. This varies with the condition being treated, the patient's demographics, the medication that they currently take, and their comorbidities. Knowledge of how drugs interact and how negative interactions can be avoided or mitigated is a vital part of the role.

General anaesthetic drugs suppress not only the patient's consciousness, but also their physical reflexes such as blinking, swallowing, and breathing. The anaesthetist will support these functions as necessary, for example by supporting or taking over the patient's breathing. They provide additional pain relief and, if necessary, anti-sickness medication.

The anaesthetist monitors and treats the patient throughout the surgery, assessing pulse, blood pressure, oxygen levels, brain activity, and much more, to ensure that they remain safe and stable throughout.

3.2 Role in training and supervision

Many anaesthetists, including consultants and SAS doctors (specialists, associate specialists and specialty doctors), play a key role in the education and supervision of AiTs, medical students, and other healthcare staff, including nurses, midwives, and paramedics.[15]

3.3 Research and governance

Anaesthetists often play an important role in research and governance. Some may have specific leadership roles at a departmental or organisational level. More generally, anaesthetists are involved in ensuring that clinical guidelines are produced, updated, and maintained to support safe and high-quality patient care.[16] Anaesthetists are also involved in educational quality improvement and academic projects.

4. Grades of anaesthetist

There are different grades of anaesthetist, employed under different contracts; these include: consultant anaesthetists; specialist, associate specialist, and specialty doctors (SAS); locally employed doctors (LEDs); and anaesthetists in training (AiTs).

Table 1 Different grades of anaesthetists

Anaesthetists in training (AiTs)
AiTs are already qualified and registered doctors. By the time that they start specialist training in anaesthesia, they have already completed their medical degree (often five years) and general foundation training (two plus years). Although there are a number of different anaesthetic training pathways, the most common is to do three years of core training (years CT1–3), after which they can become an SAS doctor. However, most advance through an additional four years of higher training (years ST4–7), which allows them to become consultants. AiTs do not just learn, they also provide direct clinical care to patients during normal working hours and, after their initial three months of training, cover night-time or weekend shifts under the supervision of an on-call consultant or autonomously practising SAS doctor. Without the clinical care provided to patients by AiTs, the NHS would struggle to function.
Specialist, associate specialist and specialty doctors (SAS)
At a minimum, SAS doctors have completed core anaesthetics training (or equivalent), but often have many more years of experience working as an anaesthetist. Specialist grade doctors are senior SAS doctors with at least twelve years of medical experience since obtaining a primary medical qualification, including six years in anaesthetics. They often focus on direct patient care, although many do have non-clinical, educational or managerial duties. Some, for example, specialist grade doctors, work at levels similar to a consultant.
Locally employed doctors (LEDs)
LEDs (also known as 'trust doctors') are usually employed on different contracts to SAS doctors, because they are set by a local trust rather than nationally. They typically work at the level of a junior anaesthetist in training (core training years CT1–3).
Consultant anaesthetists
A consultant anaesthetist is the most senior grade of anaesthetist. They usually have around 14 years of medical training, including seven years of specialist training in anaesthetics, before becoming a consultant. In addition to clinical care, consultant anaesthetists often have managerial and education duties, and they are overall responsible for the care of patients.

5. Current numbers and gaps

5.1 Permanent consultants and SAS doctors

Between 2020 and 2022, the UK anaesthetic workforce saw moderate growth. The number of consultant anaesthetists rose from 8,495 to 8,777, an increase of 3.3%, and the number of SAS doctors rose from 1,654 to 1,851, an increase of 11.9%. The combined total of consultants and SAS doctors rose from 10,149 to 10,628, an increase of 4.7%.

Within the UK headline figures, there is national and regional variation. For example, Wales saw a decrease in consultant numbers, but an increase in SAS doctor numbers, whereas Scotland showed the reverse, with an increase in consultant numbers, but a decrease in SAS doctor numbers. The North-East of England was the only area of the UK to show an overall decline in anaesthetist numbers, which applied to both consultants and SAS doctors.

Table 2 Anaesthetic workforce numbers by UK nation and English region, 2020 and 2022

	Consultants			SAS doctors			Combined numbers		
	2020	2022	% change	2020	2022	% change	2020	2022	% change
East of England	616	618	0.3	140	172	22.9	756	790	4.5
West Midlands	739	746	0.9	124	134	8.1	863	880	2.0
South-East	707	789	11.6	175	227	29.7	882	1,016	15.2
North-East	445	441	–0.9	71	70	–1.4	516	511	–1.0
South-West	957	1,044	9.1	209	198	–5.3	1,166	1,242	6.5
Yorkshire and the Humber	682	739	8.4	124	130	4.8	806	869	7.8
London	1,382	1,388	0.4	163	215	31.9	1,545	1,603	3.8
East Midlands	517	530	2.5	136	156	14.7	653	686	5.1
North-West	1,022	996	–2.5	228	255	11.8	1,250	1,251	0.1
Channel Islands	6	6	0	19	19	0	25	25	0
Northern Ireland	275	311	13.1	40	48	20.0	315	359	14.0
Scotland	714	742	3.9	92	81	–12.0	806	823	2.1
Wales	433	427	–1.4	133	146	9.8	566	573	1.2
England	7,067	7,291	3.2	1,370	1,557	13.6	8,437	8,848	4.9
UK	8,495	8,777	3.32	1,654	1,851	11.9	10,149	10,628	4.7

5.2 Locum anaesthetists

Between 2020 and 2022, the number of locum consultants across the UK rose from 392 to 399, an increase of 1.8%. However, this headline figure hides dramatic variation at national and regional levels. In North-West England, for example, there was a 52% rise in the number of locum consultants, compared with a 46.7% decrease in the West Midlands.

Table 3 Number of locum consultants by UK nation and English region, 2020 and 2022

	Locum consultants		% change
	2020	2022	
East of England	45	36	-20.0
West Midlands	30	16	-46.7
South-East	40	26	-35.0
North-East	14	10	-28.6
South-West	31	41	32.3
Yorkshire and the Humber	30	35	16.7
London	69	78	13.0
East Midlands	18	21	16.7
North-West	42	64	52.4
Channel Islands	2	2	0
Northern Ireland	10	6	-40.0
Scotland	35	40	14.3
Wales	26	24	-7.7
England	319	327	2.5
UK	392	399	1.8

It must be noted, however, that the workforce data collected in 2022 looked at locum consultants exclusively; it did not cover locum SAS doctors or locum AiTs. In addition, locums can be employed on different contracts. Trust-employed locum consultants are employed on a fixed-term contract with salaries comparable to permanent members of staff. However, hospitals sometimes use external or agency consultant, SAS, or AiT locums who are paid a daily or sessional rate. The workforce data collected does not distinguish between these types of locums. It does, therefore, provide only a partial snapshot of the locum workforce.

Data from the last two full censuses showed that there were 310 locum consultants in 2015 and 392 in 2020, a 23% rise. In addition to locum consultants, the 2015 figures showed that there were 145 locum AiTs, increasing just one to 146 in 2020, and 100 SAS doctor locums working in NHS trusts/boards across the UK in 2020. It is unclear whether these numbers have increased or decreased since.

5.2.1 The cost of locums

Although locums are a useful resource to draw on to offer short-term cover, the chronic nature of the anaesthetic workforce shortfall means that they may now be needed for long periods of time.

The cost of locums varies considerably depending on their contract. Trust-employed locum consultant posts are cost neutral and can provide beneficial flexibility to anaesthetic departments.

However, external or agency locums are significantly more expensive. We have heard from NHS trusts/boards that considerable amounts are being paid for agency locums – sometimes as much as £1,760 per day. One trust of which we are aware spent £316,800 on a single agency locum to work for 180 days. This is much higher than for a permanent consultant, and many multiples of the cost of a higher anaesthetic trainee.

Failure to address shortages of in-house anaesthetic staff can, therefore, be a huge financial drain on an overstretched NHS.

A single agency locum can cost the NHS **£1,760** per day

CASE STUDIES

from our network of Clinical Directors (anaesthesia)

> *We have had one agency locum working four days per week for about a year. Assuming he took some annual leave, he has probably worked about 180 days over the last 12 months, costing £316,800.*

> *We used locum consultant anaesthetists for 321 days from April 2020 until April 2021 and 96 days from April 2021 until August 2021 – estimated cost £733,920.*

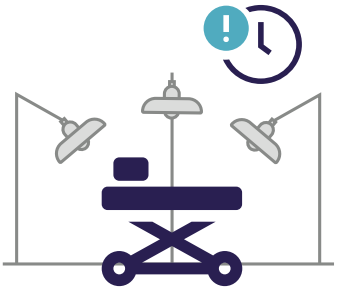
5.3 Workforce gaps

Although there have been increases in the number of consultant and SAS anaesthetists, these numbers are still way below what are needed. Unfortunately, there remain large and growing gaps in the workforce. As shown below, there is a consultant workforce shortfall of 1,418 (14% lower than what is needed), and an SAS shortfall of 442 (19%). This gives a combined workforce gap of 1,860 (15%). This is a dramatic rise from 2020, where the gap was 1,484‡ meaning that in just two years the workforce gap has increased by two percentage points.

Workforce gaps have **increased from 13% to 15%**

Given that most operations cannot take place without an anaesthetist, these gaps are putting an intolerable restriction on the ability of the NHS to reduce the elective backlog. Based on the caseload of the average anaesthetist, we estimate that current workforce shortages are preventing roughly 1.4 million operations and procedures from taking place per year.

The current shortfall of **1,900 anaesthetists** could result in **1.4 million operations and procedures** being delayed every year



‡ This figure is slightly different to the one published in our 2022 State of the Nation report because we have now been able to account for missing data. See Appendix B for our methodology.

Looking at the numbers below, we see some variation in the demand for staff across regions and nations; however, the central message is that in every area of the UK (excluding the Channel Islands) there is a shortfall of both consultant and SAS anaesthetic doctors.

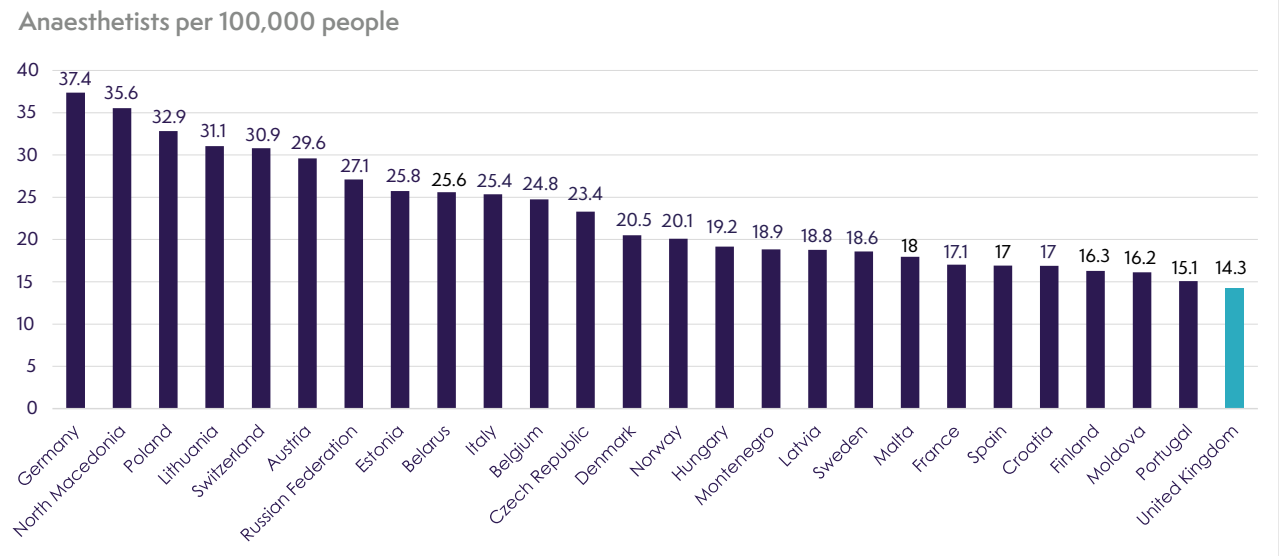
Table 4 Anaesthetic workforce shortfalls by UK nation and English region, 2022

	Consultant gaps		SAS doctor gaps		Combined numbers	
	2022	% lower than what is needed	2022	% lower than what is needed	2022	% lower than what is needed
East of England	125	17	53	24	178	18
West Midlands	117	14	40	23	157	15
South-East	127	14	55	20	182	15
North-East	78	15	28	29	106	17
South-West	144	12	51	20	195	14
Yorkshire and the Humber	91	11	16	11	107	11
London	240	15	55	20	295	16
East Midlands	49	8	16	6	65	9
North-West	208	17	65	20	273	18
Channel Islands	0	0	1	5	1	4
Northern Ireland	42	12	16	25	58	14
Scotland	94	11	29	26	123	13
Wales	103	19	17	10	120	17
England	1,179	14	379	19	1,558	15
UK	1,418	14	442	19	1,860	15

Efforts must be made to fill these gaps if anaesthesia is to be put on a sustainable footing and UK governments' stated aims around reducing their record-breaking elective backlogs are to be achieved. We discuss solutions in section 15 of this report.

5.4 International comparisons

In 2024, the results of 'The Global Anesthesia Workforce Survey' were published.[12] This showed that the UK had 14.23 anaesthetists per 100,000 people. This means it is lagging behind other large high-income European nations such as Germany (37.37), Italy (25.34), and France (17.02), and even many lower-income European nations such as Moldova (16.12). Overall, the UK's anaesthetists per 100,000 people levels are 26th in Europe, and 34th in the world.



6. Expansion of the anaesthetic workforce

6.1 Anaesthetists in training

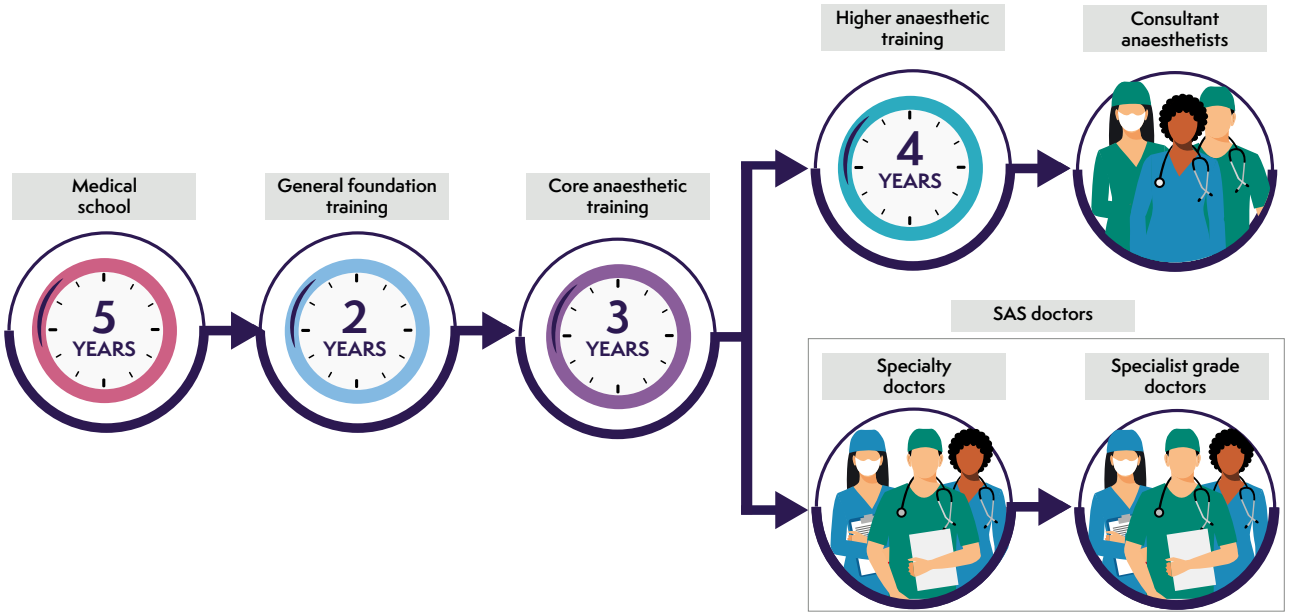
Anaesthetic training places are key to securing the future anaesthetic workforce. AiTs also spend a significant proportion of their time providing clinical service, including covering most resident on-call rotas for emergency work, which makes them vital to NHS functioning. It often takes as little as six months from the time someone starts core anaesthetics training to the point where they are providing a level of independent clinical service with distant supervision.

It is, therefore, wrong to think of AiTs as just 'trainees' who will eventually provide clinical service in the future – they are a vital part of the NHS workforce here and now.

6.1.1 The training pathway

While, as mentioned, AiTs provide a level of independent clinical service, they are also learning a structured curriculum.

From start to finish, becoming a consultant anaesthetist can take 14 or more years. As of 2023, the current standard training path involves five years at medical school, two years of general foundation training, three years of core anaesthetic training, and four years of higher anaesthetic training. However, the training pathway may be longer than this because, for example, some choose to train less than full time, and bottlenecks between different stages of training do not always allow immediate progression to higher levels. The process can be shorter for SAS doctors, who may not undertake higher anaesthetic training. There are also other routes, which we describe in more detail below.



6.1.2 Types of trainees

Core/Higher (CT/ST): The standard RCoA training pathway comprising three years of core training (CT1–3) and four years of higher training (ST4–7).

Acute care common stem (ACCS) anaesthesia: After foundation training, this is a four-year scheme where trainees rotate around a number of acute specialties for the first two years – emergency medicine, intensive care medicine, internal medicine, and anaesthetics – before specialising. If they choose to specialise in anaesthetics, they will then complete two years of specialty training (equivalent to core training) in anaesthetics before applying for higher training (ST4) places.

ACCS non-anaesthesia: As above, but trainees exit into a specialty other than anaesthesia, either emergency medicine or internal medicine.

Locum appointment for training (LAT): These posts are fixed-term contracts which contribute to the time needed to complete specialist training. These last from three months to a year. They exist to help cover short/medium-term vacancies within a training programme. LAT posts currently exist only in Scotland.[17]

Medical Training Initiative (MTI): This permits doctors who gained their primary medical qualification from a low- or middle-income country to train within the NHS for up to two years.

The RCoA Global Fellowship Scheme: This provides an opportunity for anaesthetists, intensivists and pain medicine doctors who work and train in high-income countries to undertake a period of subspecialty training within the NHS.

Locally employed doctors (LEDs; also known as 'trust doctors'): These are doctors employed on a contract set locally rather than nationally. They typically work at the level of a junior anaesthetist in training (core training years CT1–3). These positions are for doctors not currently in a training post who may be taking a break from training, have come from overseas, or want some time to consolidate their knowledge. They may keep a portfolio to demonstrate what they have learnt in the instance that they want to return to training.

Research fellow: These are trainees who are taking out-of-programme time to complete research projects in line with NHS priorities.

Post-CCT fellow: An individual who has passed all of the Fellowship of the Royal College of Anaesthetists (FRCA) examinations and has successfully completed the training programme, but is undergoing additional training or qualifications before commencing a consultant post.[18]

6.1.3 What anaesthetists learn

As mentioned above, it can take 14 years or more to train to become a consultant anaesthetist. This is due to the complexity of the tasks that they perform – and the need to have the knowledge and experience to know what to do in a variety of circumstances, including emergencies.

Anaesthetists need a thorough grounding in anatomy, physiology, diseases and pharmaceutical drugs to do their job. They also need to learn how anaesthetics can be delivered safely, what drugs are appropriate for different situations, and how various pharmaceuticals interact with different processes, diseases, and other medication that the patient may be taking. It is a role that involves making life or death decisions – and can be critical to the success of operations and procedures.

During their training, anaesthetists develop knowledge, understanding and clinical decision-making across a broad range of areas. This includes paediatrics, obstetrics, general and regional anaesthesia, perioperative care, emergency, trauma, and supporting critically ill patients.

Table 5 Number of AiTs, 2020

	Core	Higher	ACCS anaesthesia only	ACCS non-anaesthesia	LATs	MTI	LEDs	Clinical research fellow	Post-CCT fellow
Northern Ireland	39	97	3	12	0	0	3	8	0
Scotland	99	257	26	27	12	4	11	14	5
Wales	97	144	18	12	1	12	37	25	0
England	737	2,064	328	272	9	130	468	274	76
UK	972	2,562	375	323	22	146	519	321	81

Note 1: Although College tutors reported 10 LATs in England and 1 LAT in Wales, this grade is recruited only in Scotland.

Note 2: There is a greater number of higher trainees than core trainees because higher training is longer and a greater proportion of higher trainees work less than full time, resulting in more individuals in the system.

6.1.4 CCT recommendations

An anaesthetist is qualified to become a consultant when they achieve their Certificate of Completion of Training (CCT). The number of CCTs shows how many potential new consultants are entering the workforce each year from domestic training routes.

Often doctors train only in anaesthetics; however, some complete dual or joint CCTs, for example, with intensive care medicine (ICM) or pre-hospital emergency medicine (PHEM).

Table 6 Number of anaesthetists receiving Certificates of Completion of Training (CCTs)

	2020		2021		2022		2023	
	Anaesthetic only	All anaesthetic	Anaesthetic only	All anaesthetic	Anaesthetic only	All anaesthetic	Anaesthetic only	All anaesthetic
England	272	359	275	362	306	394	341	436
Wales	10	13	20	23	17	23	19	23
Northern Ireland	11	14	11	13	13	20	11	13
Scotland	33	39	37	50	29	40	33	47
Defence	1	3	2	3	1	2	0	0
UK	327	428	345	451	366	479	404	519

Note: 'All anaesthetic' includes dual ICM, joint ICM, and PHEM subspecialties in addition to anaesthetic CCTs only.

6.1.5 Recent Government actions to increase training numbers

In 2022, Health Education England (now part of NHS England confirmed that 70 more higher anaesthetic training places were to be funded, with the same numbers for 2023 and 2024. However, it has not yet been confirmed that these additional posts will be made permanent.

In Scotland, 15 new posts were approved for August 2022 and 6 for 2024. In Wales, five additional core posts were created for August 2021–2022 and 15 additional higher training posts in anaesthesia were created between 2020 and 2023.

Adding together the various figures for funded higher anaesthetic training places, there has been an increase of 106 since 2020.

6.1.6 The need for further increases

Although the increases announced to date are welcome, they are not sufficient to provide the NHS with the number of anaesthetists that it needs either now or in the future. This applies even if the 70 additional places per year in England are made permanent.

Fortunately, in theory, it is relatively easy for the Government to increase numbers further.

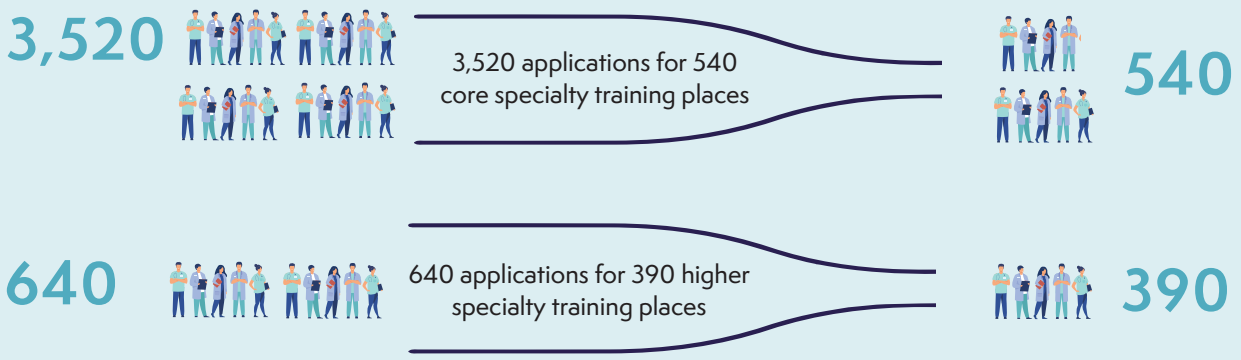
First, across the entire medical training system, there is a huge bottleneck between foundation and core training. In 2024, there were 54,012 applications (from 26,138 unique applicants) for just 9,341 specialty training places.

This affects anaesthesia at least as much as other specialties and anaesthetic training programmes have considerably more applicants than there are funded places available. In 2024, there were 3,520 applications for an available 540 core anaesthetic training places - a competition ratio of 6.5:1.[19]

Between core and higher anaesthetics training, there were 640 applications for 390 places in 2024 – a competition ratio of over 1.6:1.[19] This has reduced from a ratio of 2.7:1 in 2021 but is something that we continue to monitor.

As is obvious, there is no shortage of eligible applicants for anaesthetic training. Bottlenecks in the training pathway not only deny the NHS the consultant and the SAS workforce that it needs, but also represent a waste of resources and undermines morale.

Anaesthetic training bottlenecks



Second, we know that there is capacity in the system to do additional training. In 2023 we surveyed college tutors and heads of school about their capacity to take on extra AiTs, which revealed, at a conservative estimate, space for at least 59 extra core training places per year, and 81 extra higher training places and likely more.[20]

Unfortunately, despite plenty of willing applicants and the capacity to train them, the money to fund these additional places has not yet been made available by Government. Provision of this money would rapidly increase anaesthetic capacity because (as stated above), after only 6 months in training, AiTs provide a level of independent clinical service and put the anaesthetic profession on a more stable footing for the future.

Such increases could be included as part of a much needed comprehensive plan for specialty training. It must be noted that anaesthesia is not the only specialty facing workforce shortages. It is imperative that the next iteration of the NHS Long Term Workforce Plan includes a funded plan for the expansion of specialty training posts across the board.

6.2 Anaesthetists from abroad

Anaesthetists who obtained their primary medical qualification (PMQ) abroad constitute a third of the current anaesthetic workforce in the UK.[21] These doctors provide an invaluable contribution to the NHS, and it is almost impossible to see how the system could function without them.

6.2.1 Numbers of anaesthetists from abroad

According to 2022 GMC data,[21] 3,605 (31.7%) consultant anaesthetists and intensivists§ (combined) have a PMQ from abroad. Both the numbers and the percentages have declined since 2013. Also, the percentage is

§ An 'intensivist' is a doctor in ICM. They often share a level of training with anaesthetists and are sometimes grouped together in GMC statistics.

lower than that for all UK doctors with a PMQ from abroad (41.9%). Nevertheless, the contribution of overseas anaesthetists to the UK health workforce remains vast.

Table 7 Consultant anaesthetists and intensivists with primary medical qualifications (PMQs) from overseas

GMC data: numbers of consultant anaesthetists and intensivists with PMQs from overseas								
	2013		2016		2019		2022	
	Number	%	Number	%	Number	%	Number	%
UK	6,080	62.1	6,435	64.3	6,985	66.0	7,761	68.3
EEA	1,464	15.0	1,291	12.9	1,272	12.0	1,203	10.6
IMG	2,240	22.9	2278	22.8	2,329	22.0	2,402	21.1
Overseas total	3,704	37.9	3,569	35.7	3,601	34.0	3,605	31.7
Overall total	9,784		10,004		10,586		11,366	

Note: EEA refers to doctors from the European Economic Area; IMG stands for international medical graduate and refers to doctors from beyond the EEA.

Table 8 All doctors with primary medical qualifications (PMQs) from overseas

GMC data: numbers of all doctors with PMQs from overseas								
	2013		2016		2019		2022	
	Number	%	Number	%	Number	%	Number	%
UK	164,704	63.4	178,164	63.5	191,284	61.4	202,098	58.1
EEA	27,195	10.5	30,612	10.9	33,326	10.7	35,511	10.2
IMG	67,759	26.1	71,999	25.6	86,709	27.9	110,472	31.7
Overseas total	94,954	36.6	102,611	36.5	120,035	38.6	145,983	41.9
Overall total	259,658		280,775		311,319		348,081	

6.2.2 Overseas recruitment

Although the GMC data gives the total number of anaesthetists and intensivists with PMQs from abroad, our own workforce survey and census work show the scale of new recruitment. In 2022, our data showed that 310 doctors entered the UK workforce from abroad, including 38 consultants and 272 SAS doctors. The number of new consultants had declined since 2020, but the number of new SAS doctors had increased considerably.

Table 9 Overseas doctors entering the UK workforce by UK nation

	New overseas consultants		New overseas SAS doctors	
	2020	2022	2020	2022
Northern Ireland	0	0	9	10
Scotland	2	2	9	8
Wales	2	0	24	33
England	49	36	174	221
UK	53	38	216	272

This suggests that NHS trusts/boards are becoming increasingly reliant on overseas recruitment to fill SAS workforce gaps.

6.2.3 Pathways to practice

Anaesthetists from abroad have a number of routes to practice in the UK. The first is by demonstrating that their knowledge, skills, and experience align with the high-level learning outcomes of the GMC-approved, UK anaesthetic curriculum via the portfolio pathway route. Alternatively, AiTs from certain countries can train for up to 24 months in the UK to further their experience, via sponsorship pathways including the Medical Training Initiative (MTI) and the RCoA Global Fellowship Scheme.

Portfolio pathway

The portfolio pathway[22] (previously known as the 'certificate of eligibility for specialist registration' or CESR pathway) entails applicants submitting a body of evidence to demonstrate that they have acquired the knowledge, skills, and experience necessary to practise as an anaesthetic consultant in the UK. This is in order to join the specialist register held by the GMC.

Under the CESR route, the assessment process required applicants to demonstrate that their training and qualifications were equivalent to the UK CCT in anaesthesia. However, the new guidance no longer refers to equivalence. Instead, it assesses an applicant's knowledge, skills, and experience, giving the GMC flexibility to accept a broader range of evidence.

The portfolio pathway route is commonly used for anaesthetists who qualified abroad. However, it is also used by some domestically trained SAS doctors who wish to become consultants or by doctors who cannot or do not wish to follow the standard training pathway route.

Table 10 CESR/portfolio pathway applications

	Number of CESR/portfolio pathway applications in the UK
2020	41
2021	47
2022	76
2023	119

Medical Training Initiative (MTI)

The MTI pathway[23] is a government scheme allowing doctors from low- and middle-income countries to undertake anaesthetic training in the NHS for a maximum of 24 months. The College has a role in coordinating the anaesthetic part of the scheme and supporting MTI doctors for the duration of their training.

The MTI scheme utilises unfilled training capacity within the NHS in England, Scotland and Wales (but not Northern Ireland). It allows eligible (not the European Economic Area [EEA] or Switzerland)[24] international medical graduates (IMGs) to engage in learning opportunities and contribute to service provision. The training received by doctors on the MTI scheme varies; however, it will follow the CCT curriculum. The training depends on the doctor's level of experience, specific interests, and training available within the placement hospital. These doctors will agree their specific training objectives with their educational supervisor.[25]

The RCoA Global Fellowship Scheme

The RCoA Global Fellowship Scheme[26] provides opportunities for eligible anaesthetists, intensivists, and pain medicine doctors from high-income countries to practise and train in the UK. Typically, individuals will be in advanced stages of their training, or have recently completed training in their home countries. Often, they are looking for experience in subspecialty areas at advanced levels to which they may not previously have had access.

6.2.4 Impact of Brexit

Perhaps, unexpectedly, our 2022 workforce survey showed that the potential negative impact of Brexit on recruitment has been limited: 60% of clinical directors surveyed reported that Brexit had no impact on recruitment, with a further 20% reporting not much impact. This is perhaps because doctors from beyond the EEA already constituted the largest group of overseas doctors. Furthermore, medical practitioners are on the Government's 'Immigration Salary List'[27] which makes it easier for UK employers to recruit doctors from overseas (whether EEA or not) compared with other non-medical professions.

In the minority of cases where clinical leaders indicated that there had been some detriment to their recruitment due to Brexit, some noted that they had seen reduced interest from European applicants.

Table 11 Impact of Brexit on recruitment

What has been the impact of Brexit on recruitment?								
	None		Not much		Some detriment		Unknown	
	Number of clinical directors	%	Number of clinical directors	%	Number of clinical directors	%	Number of clinical directors	%
Northern Ireland	7	78	1	11	0	0	1	11
Scotland	12	57	7	33	1	5	1	5
Wales	6	67	2	22	0	0	1	11
England	76	59	23	18	21	16	8	6
UK	101	60	33	20	22	13	11	7

7. Workforce exits, capacity restraints and retention challenges

In addition to assessing the pipeline into anaesthesia, it is equally important to assess current and future exits from the profession, as well as trends and factors around the hours that anaesthetists work. In this section we consider retirement levels, age profiles, less than full-time working, retention challenges, and the specific impact of pension taxation.

7.1 Retirements

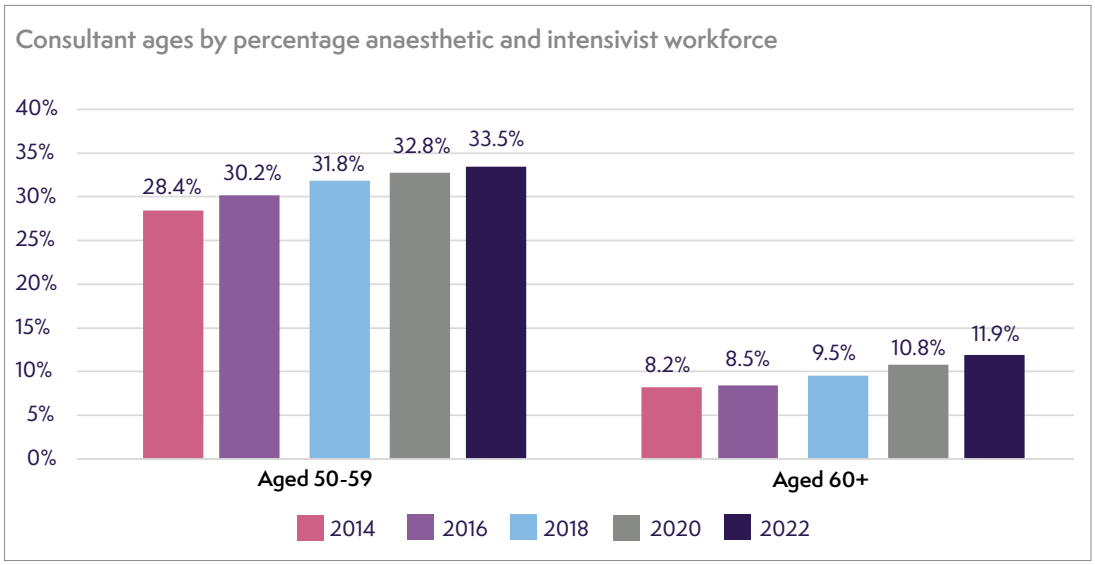
Our workforce survey data show that the number of anaesthetists retiring in the UK has increased from 341 in 2020, to 365 in 2022, an increase of 7%. As we discuss in the next section, retirement levels have likely been driven by both the age profile of anaesthetists and Government policies around pension taxation. Changes to retirement flexibility may also play a role.

7.2 Age profiles

The anaesthetic and intensivist workforce is ageing. GMC data show that the percentage of licensed anaesthetic and intensivist consultants aged over 60 has risen from 8.2% in 2014 to 11.9% in 2022.[21] The percentage in the 50–59 age group was 33.5% of the workforce in 2022, compared with 28.4% in 2014. This likely partly explains why retirement levels have increased and poses a challenge for the future. Although not all the anaesthetists in the aforementioned age groups are set to retire immediately, they are likely to do so over the next five to ten years. This has the potential to increase the anaesthetic workforce gap.

Table 12 Age of consultant anaesthetists and intensivists

	Age 50–59		Age 60+	
Year	Number	Percentage	Number	Percentage
2014	2,786	28.4	807	8.2
2016	3,019	30.2	846	8.5
2018	3,315	31.8	992	9.5
2020	3,567	32.8	1176	10.8
2022	3,805	33.5	1354	11.9



7.3 The retention challenge in anaesthesia

In October 2021, the RCoA published its report 'Respected, valued, retained – working together to improve retention in anaesthesia'.[28] This brought together evidence from a literature review and a membership survey on the factors affecting retention in anaesthesia, a summary of which can be seen in Table 13.

Table 13 Why anaesthetists retire or leave early

Why do anaesthetists retire or leave early? [a]	%
Not feeling valued or well supported, including relationships with colleagues and managers	42
Wanting to pursue leisure interests and spend time with family	36
Concerns about taxes or pensions	36
Bureaucracy and leadership issues	35
Improving mental wellbeing, reducing stress or burnout	25
Could not sustain workload or being on-call	25
Lack of flexibility, reduced hours, breaks or leave	19
Lack of autonomy and respect	16

a. This percentage is of anaesthetists who have retired or retired and recently returned.

Table 14 What influences anaesthetists to stay longer

What would influence anaesthetists to stay longer? (b)	%
Reduced or no on-call work	80
Being able to adjust clinical practice or the environment to account for physical changes with age	77
Contract flexibility [c]	67
Being able to work flexibly and less than full time to have a better work–life balance	67
Having supportive colleagues and managers who are respectful and appreciative	66
Advice about pay, pension and taxation issues	66

b. This is the average of consultants, SAS doctors, AiTs and anaesthetists who have retired.

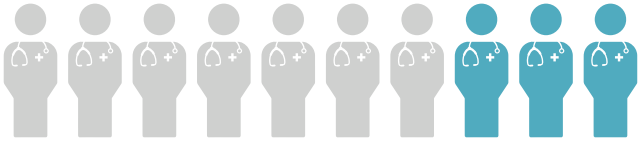
c. Figures presented are weighted averages of the responses from SAS doctors and consultant anaesthetists. For a full breakdown by grade and employment status, see our Respected, valued, retained – working together to improve retention in anaesthesia.

The report also explored career intentions for anaesthetists at different grades and revealed that:

- 1 in 4 (25%) consultants and 1 in 5 (20%) SAS anaesthetists planned to leave the NHS within five years.
- Around 1/3 of respondents said that Covid-19 made them less inclined to stay working in the NHS.

The report also showed that our members are finding their workload increasingly unmanageable.

3 in 10
anaesthetists thought that their workload would not be sustainable as they got older



6 in 10
anaesthetists thought that their workload would only be sustainable with adjustments

The report identified work–life balance and the need for flexibility (or lack thereof) as two key factors affecting career decisions in anaesthesia. However, our members have told us that flexible working and appropriate job planning are not consistently available to them. This has led many to leave or retire early out of frustration with rigid policies, unfavourable terms and conditions for those choosing to retire and return, and a reluctance to provide the adjustments that they need. Key to addressing these issues are regular conversations among staff, managers, and the wider team to find solutions that work for everyone.

7.4 Pension taxation

Until recently, a major factor affecting the anaesthetic workforce was the pension taxation regime. In 2020, our census data showed that 1,133 consultants (14.4%) were reducing their working hours due to pension taxation.[29] Furthermore, of the 341 consultants and 45 SAS doctors who retired in the year preceding the census, 82 (22%) had chosen to retire for that reason. The pension taxation regime was, therefore, having a considerable negative impact on workforce capacity.

The RCoA pushed strongly for the pension taxation regime to be reformed. Fortunately, in the March 2023 budget, many changes were made that we believe will alleviate pension taxation problems for the majority of doctors – although some may still be affected. At the time, the chancellor, Jeremy Hunt, stated that the changes should 'stop over 80% of NHS doctors from receiving a tax charge.'[30]

We note that the new Government in Westminster has expressed concerns that the aforementioned pension tax reforms are too broad and would prefer a solution aimed exclusively at doctors.[31] In theory, we are comfortable with a doctors-only solution, so long as it genuinely alleviates the problems that doctors face. At the time of writing, the new Government has not set out the specifics of its plans. We retain an open mind but caution against any move that could return the country to a situation where doctors are forced to reduce their hours, or retire early, to mitigate against large, unpredictable tax bills.

7.5 Less than full-time working

Our report on retention, and our 2020 census, point to an increase in less than full-time working. This is due to a number of factors, including the desire for better work–life balance, childcare responsibilities, issues around pension taxation, and terms and conditions.

Our retention report showed that one in ten SAS and consultant anaesthetists are currently working less than full time and at least two in ten are considering working less than full time within the next five years.[28] If this were to be extrapolated more widely, it could mean that around a third of the workforce may wish to work less than full-time in the near future.

One-third of the anaesthetic workforce may be working less than full time within five years.

A similar trend can also be seen in the next generation of anaesthetists, with 30% of AiTs considering working on a less than full-time basis after they complete their training.

More anaesthetists opting to work or train in a less than full-time manner will have implications for the design of future job plans and more general workforce planning.

8. SAS doctors

SAS doctors have at minimum completed core specialist training in the UK or an equivalent postgraduate training from abroad, but many have much more experience.

8.1 Roles

Like other grades of anaesthetist, SAS doctors are involved in elective and emergency services, and often fill on-call and out-of-hours rotas. Depending on their experience, some SAS doctors will require some supervision by a consultant, while others may work autonomously. Some SAS doctors are involved with management, teaching, appraisal and administration – which the RCoA supports and encourages.

8.2 Contracts

There are a number of different SAS contracts. Since 2021, the contracts open to new entrants are the 'specialty doctor' contract and 'specialist grade' contract. There was also an older 2008 'specialty doctor' contract which closed in 2021[32] and an 'associate specialist' contract which closed to new entrants in April 2009.

Specialty doctors in anaesthesia on the 2008 and 2021 contracts have at a minimum completed foundation training and core training in anaesthesia or equivalent.[33] Specialist grade contracts are for SAS anaesthetists who have at least twelve years of medical experience since obtaining a PMQ, including six years in anaesthetics.[34] Associate specialist doctors on 2008 contracts have at least ten years of postgraduate medical practice, of which two years are in anaesthesia.[35]

8.3 Numbers

As mentioned in section 6.1, the number of SAS doctors rose from 1,654 in 2020 to 1,851 in 2022 – an increase of 11.9%. Despite the growth in the supply of SAS doctors, there has been an even greater increase in demand. The shortfall of SAS doctors grew from 363 (18% below what is needed) in 2020 to 442 (19%) in 2022. Without addressing these shortfalls, the number of operations that the NHS can conduct is reduced and its ability to address the elective backlog is hindered.

8.4 Concerns

SAS doctors are vital to the delivery of elective and emergency services and ensuring 24-hour anaesthetic cover. However, sometimes SAS doctors, despite their experience in the specialty, feel that they are not recognised or valued for their work.

Survey work from the GMC shows that 35.8% of SAS doctors do not feel that they are always treated fairly.[36] In England, the NHS Long Term Workforce Plan included a commitment to support SAS doctors and pledged to improve 'equitable promotion'. While this is welcome, it is only part of the issue. For example, our own survey work has shown that 34% of departments have a policy for senior consultants to come off the on-call rota compared with only 7% for senior SAS doctors.[28] We have also found that SAS doctors have to wait until the age of sixty years to come off on-call rotas, five years later than the average consultant.[28]

Our work also shows that SAS doctors feel that they do not have enough support for career progression or to join the specialty register held by the GMC via the portfolio pathway, as outlined in section 6.2.3.

8.5 Measures to help and promote SAS doctors

There are many ways to help ensure that SAS doctors are respected and treated fairly and that the role is more generally promoted. The RCoA has set out a number of measures to help and promote SAS doctors,[37] some of which we have set out below. The RCoA also supports the 'SAS charters' for each of the UK nations produced by the British Medical Association (BMA) and the Academy of Medical Royal Colleges (AoMRC) and the 'Six SAS Principles' promoted by the SAS Collective, a group of SAS doctors working to improve the careers and retention of SAS doctors across the UK.[38]

8.5.1 Working hours

We believe that SAS doctors should have an appropriate balance between elective and out-of-hours work and a degree of choice in the work that they do. Elective work can give SAS doctors opportunities for professional development. It can also provide a degree of choice, which helps ensure that the work they do is better suited to their interests and expertise. This would have benefits for wellbeing, retention, and recruitment. Daytime work also helps doctors feel part of their department rather than detached from it.

To ensure fairness, all arrangements for coming off the on-call rota must include SAS staff on equitable terms with other doctors.

8.5.2 Being valued in departments

We believe that SAS doctors should be integral to the work of anaesthetic departments and that their skills, views, and expertise should be valued and respected. As part of this, SAS doctors should be able to attend clinical governance meetings in the same manner as consultants and AiTs. Cover for any emergency lists taking place at the same time should be shared equitably.

8.5.3 Supporting professional activities

SAS doctors, and the departments in which they work, benefit from being able to devote time to 'supporting professional activities' (SPA). Such time allows for job planning, appraisal, revalidation, teaching, research, and clinical management. Currently, the 'specialty doctor' contract stipulates at least one four-hour session of SPA per week. However, the BMA and the AoMRC recommend 1.5 sessions.

8.5.4 Professional development

SAS doctors should be supported in their professional development, including by having a personal development plan agreed at their annual appraisal, and being given the same study leave entitlements and budgets as consultants. Their training should also be supported to allow them to sit the fellowship examination or collect evidence for a portfolio pathway if they choose to follow these routes of progression.

8.5.5 SAS advocates

The RCoA also recommends that every trust and board have an SAS advocate to promote the health, wellbeing, and profile of the SAS workforce.

SAS advocates can assist SAS doctors with contractual, cultural, and organisational issues in their workplace, and translate work done at a national level with regard to SAS doctors at a local level. They are also there to promote SAS engagement in survey work about their experiences and signpost to resources such as 'freedom to speak up guardians'¶[39]

SAS advocates also provide an opportunity for trusts and boards to demonstrate commitment to improving the experience for SAS doctors and assist in sharing of good practice.[40]

8.6 Recommendations

SAS doctors are an important part of the anaesthetic workforce. They should be valued and active efforts should be made to support them in their roles. This includes the appointment of SAS advocates, support being given to SAS professional development and more equitable treatment in working hours, including coming off the on-call rota.

9. Anaesthesia associates

Anaesthesia associates (AAs) – previously known as physicians' assistants (anaesthesia) PA(A)s – work as part of the anaesthetic team providing patient care alongside consultant, SAS, and other anaesthetic doctors.

AAs are not doctors and their training is shorter and narrower than that of an anaesthetist. They work under supervision, with one anaesthetist supervising either one or two AAs.

9.1 NHS expansion plans

Although NHS England's Long Term Workforce Plan did not contain specific pledges about training places for doctors in specialties such as anaesthesia, it did include a pledge to increase the number of AAs to 2,000 by 2036/37.[10] NHS England has since stated that their proposals, 'will only go as fast as safety, support and quality of experience for patients, doctors in training, physician associates and anaesthesia associates and their educators allows'.[41]

Our members' survey on AAs, which received a 35% response rate, revealed that the majority of anaesthetists who responded are opposed to the expansion plans – and many hold concerns about the impact of AAs on patient safety, the reduction of training opportunities for AiTs and their value for money.[42]

Given these concerns, which were also expressed at an extraordinary general meeting of College members in October 2023, the RCoA has called for a pause on recruitment of new student AAs.[43]

The RCoA will be further developing its position on AAs over the coming months. However, in the meantime we believe that the focus should be on boosting the number of training places for anaesthetists, particularly at a higher training level.

9.2 Numbers of AAs

Below are the numbers of AAs across the UK, as recorded in our 2020 census, our 2022 workforce survey, and a more limited 2023 survey of clinical leaders.

Unfortunately, no survey achieved a 100% response rate, so we have attempted to correct for missing data as set out in Appendix B.

¶ Freedom to speak up guardians 'support workers to speak up when they feel that they are unable to in other ways. There are over 1,000 freedom to speak up guardians in the NHS and independent sector organisations, national bodies and elsewhere'. [39]

Table 15 Number of AAs, 2020–2023 [d]

Nation	2020	2022	2023
Northern Ireland	3	3	5
Scotland	22	19	31
Wales	9	8	12
England	135	124	248
UK	169	154	296

d. Numbers differ from *State of the Nation* report published in 2022 because we learned that there were some inconsistencies in this data. For example, Northern Ireland reported eight AAs in the 2020 census, but, on making further enquiries, we found there had only been three.

Table 16 Numbers of student and qualified AAs, 2023

2023 breakdown			
Nation	Student AAs	Qualified AAs	Total AAs
Northern Ireland	2	3	5
Scotland	16	15	31
Wales	0	12	12
England	96	152	248
UK	114	182	296

10. Expected increase in demand for anaesthetic services by 2040

As explained earlier in this report, there is a current shortfall of around 1,900 anaesthetists in the UK. Unfortunately, unless urgent action is taken, this gap could grow to as many as 11,000 by the year 2040. This will be driven by rising demand for anaesthetists – due to factors such as population growth and ageing, increasing numbers of surgical interventions on offer and the expansion of anaesthetists' roles across the surgical pathway.

For this reason, we commissioned the York Health Economics Consortium (YHEC) to produce projections[44] on future demand for anaesthetists and how that would compare to the supply if current rates of growth were maintained.

The YHEC projections are based on earlier work for the Centre for Workforce Intelligence (CfWI) which produced official anaesthetic workforce projections for the NHS in 2015.[45] The CfWI report used a 'Delphi Study' – essentially a means of bringing together expert opinions to quantify likely increases in demand. YHEC used the CfWI projections and updated them slightly using a new round of expert opinion.

10.1 Increases in demand

10.1.1 Population growth and ageing

The UK has a growing and ageing population. By 2045 the total population of the UK is set to expand to 71 million, from 67.1 million in 2020.[46] Furthermore, the number of people at pensionable age is set to increase by 3.3 million compared to 2020, considerably increasing healthcare demand.

As a larger population requires more surgery, and an ageing population further increases healthcare demand, demographic changes alone equate to a 1.25% increase per year in demand for anaesthetists.

10.1.2 Expansion of surgical interventions

In addition to an ageing population, it is also the case that scientific, technical, and medical knowledge continue to increase. This means that new surgical procedures are developed and more medical conditions become amenable to surgery. Although this is a positive thing, it also means more clinical staff are needed to perform these operations. In line with the findings of the CfWI report, this will likely result in a 1.3% increase per year in demand for anaesthetists, over and above demographic changes.

10.1.3 Expansion of the anaesthetist's role

Anaesthetists are increasingly involved in perioperative care, that is, helping patients across all stages of the surgical pathway, from preparing people for surgery, to assisting in discharge planning. This expanded role can lead to considerable efficiencies in terms of reducing cancelled operations, preventing surgical complications, accelerating recovery, and cutting down readmissions into the health system. Ultimately, this can save the NHS money and time, for example, by reducing length of stay. However, it also means that demand for anaesthetists will increase as a result of these extra duties.

Based on expert opinion, this will likely result in a further 1.3% increase in demand for anaesthetists per year.

10.1.4 Bringing it all together

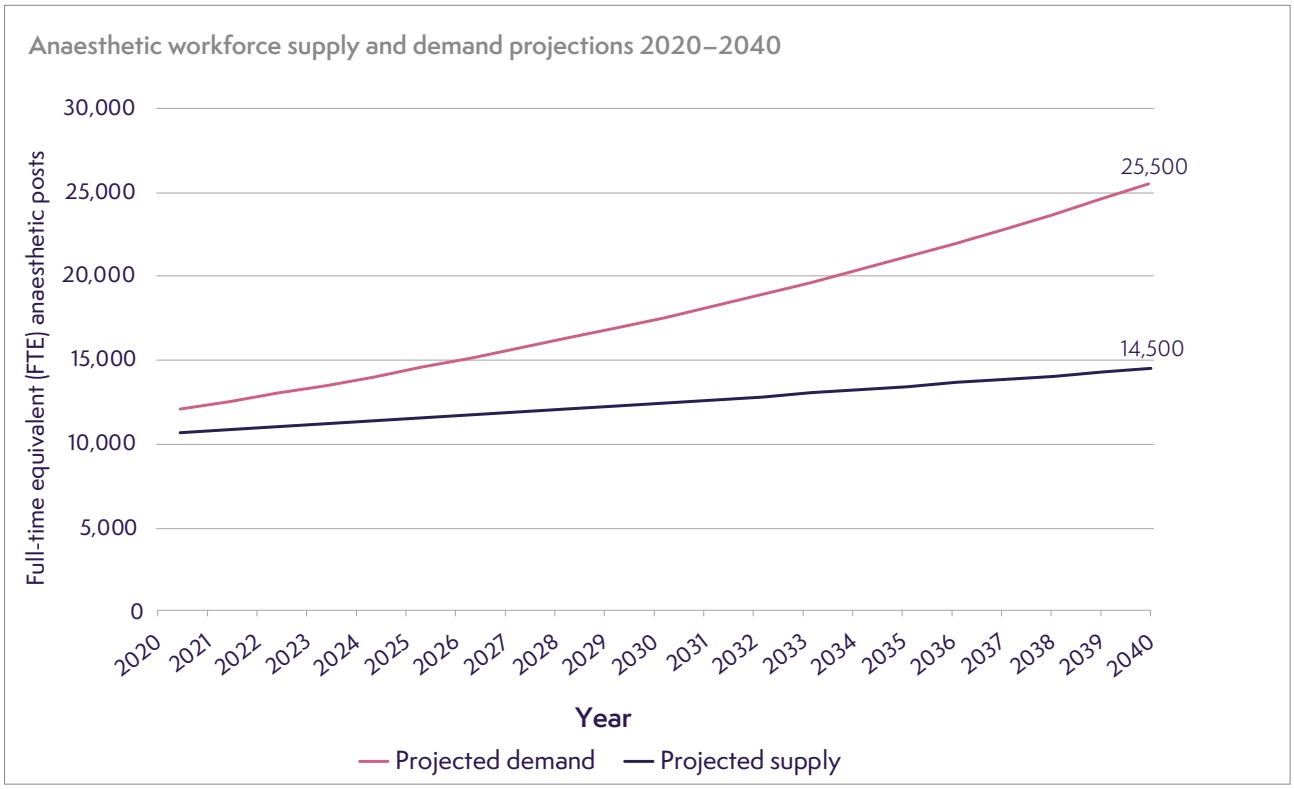
Taking all of the above into account, demand for anaesthetists could increase by 3.85% per year. If true, this would mean a need for around 25,500 anaesthetists by 2040. That is the challenge that the Government and the NHS must face.

10.2 Increases in supply

Between 2010 and 2020, the number of fully qualified anaesthetists in the UK increased at a compound rate of 1.54% per year. On the assumption that this trend would continue, YHEC expected anaesthetist numbers to rise from around 10,700 in 2020 to 14,500 by 2040. It must be noted that even this small annual increase will not happen on its own. It is dependent on Government action, such as increasing the number of training places.

10.3 Growing gap between supply and demand

As may be immediately noted from the above, the increase in demand for anaesthetists over the next couple of decades could far outstrip the number of anaesthetists available. By 2040 there could be a demand for around 25,500 anaesthetists, but only 14,500 available if current rates of growth continue. This could lead the current shortfall of around 1,900 anaesthetists to grow to around 11,000 unless urgent action is taken.



10.4 Breakdown by nation

Demand for anaesthetists currently outstrips supply in every UK nation. In 2020 (which was the baseline for the YHEC projections), England was around 1,100 short, Scotland 120, Wales 150 and Northern Ireland 60. By 2040, these gaps are expected to grow considerably, as shown in Table 17.

Table 17 Expected increase in demand for anaesthetic services by 2040

Nation	2020 numbers	2020 shortages	Projected numbers in 2040	Projected demand in 2040	Projected gap in 2040
UK	10,700	1,400	14,500	25,500	11,300
England	8,800	1,100	11,900	21,000	9,100
Scotland	900	120	1,200	2,200	1,000
Wales	650	150	900	1,700	800
Northern Ireland	350	60	500	900	400

Note 1: UK figures may not always sum exactly due to rounding.

Note 2: We used the 2020 numbers as set out in the YHEC report.

10.5 Projections becoming reality

As noted earlier in the report, the 1,400 shortfall recorded in 2020 increased to 1,900 in 2022. This demonstrates that our prediction that the gap would rise is playing out in reality – and brings home the urgency of the need to expand the anaesthetic workforce.

10.6 Impact on patient care and the NHS

The simple truth is this: unless action is taken to boost the number of anaesthetists, the ability of the NHS to reduce the elective backlog is severely limited. Furthermore, unless governments act to boost recruitment and retention of permanent anaesthetic staff, the NHS will have to rely on a limited supply of expensive agency locums – costing the NHS considerably more money.

10.7 Severe constraints on NHS capacity

At the time of writing, 7.5 million people are on NHS waiting lists in England.[1] As emphasised throughout this report, most operations and procedures cannot take place without an anaesthetist, yet the NHS is 1,900 anaesthetists short. Given that the average full-time anaesthetist administers 750 anaesthetics per year, this equates to roughly 1.4 million operations and procedures that cannot take place due to shortage of anaesthetic staff. This represents a severe reduction in NHS capacity.

Furthermore, by 2040, the shortfall of anaesthetists will grow to around 11,000. This equates to roughly 8.25 million operations and procedures that will not take place due to a lack of anaesthetic staff.

11. Wellbeing, mental health and burnout

The wellbeing of the anaesthetic workforce must be supported and protected. Wellbeing is not only important to anaesthetists in their own lives, but also to their motivation, their need to take leave due to ill-health and their decisions on whether to remain in the profession. If anaesthetists are in danger of becoming burnt out or are already burnt out or demoralised, this could undermine efforts to tackle waiting lists and could put patient safety at risk. Our retention work[28] showed that 25% of those who retired or left the profession early did so because of issues to do with mental wellbeing, burnout, or stress.

25%

who retired or left the profession early did so because of issues to do with **mental wellbeing, burnout, or stress**.

11.1 Workload

Workload, and support in managing it, are key factors in feeling valued at work and people's wellbeing. Of anaesthetists, 8% said that they work over their rostered hours daily, with 30% working over their rostered hours weekly.** Among anaesthetists in training, 11% reported that they work over their rostered hours daily or weekly – similar to the rate of trainees in all specialties.[47]

11.2 Burnout

Studies suggest that burnout may result in exhaustion, cynicism, the reduction of working hours or staff leaving the profession.[48] It may also have negative impacts on professional performance.[49]

According to GMC data[47] across the UK, 22% of the anaesthetic trainer workforce, and 36% of the AiT workforce reported feeling high or very high levels of burnout in 2023. This is compared to 27% of trainers and 43% of trainees across all medical specialties. Although this figure suggests that anaesthetists in training fare slightly better than some other specialties, it is still the case that burnout remains at worrying levels. Burnout varies by UK nation. Among AiTs, the highest levels of burnout were found in Northern Ireland, with 41% reporting high or very high levels of burnout. Among anaesthetic trainers, the highest levels were found in England, with 22% reporting similarly.

Table 18 GMC data: levels of burnout among anaesthetic trainees and trainers, 2023 [47]

	Trainee, high and very high (%)	Trainer, high and very high (%)
England	38	22
Scotland	30	18
Wales	37	16
Northern Ireland	41	15
UK	36	22

** Compared with 26% of all doctors working over daily and 32% over weekly, possibly resulting from staff shortages.[47]

11.3 Drivers

Good mental health and wellbeing likely have many drivers. These may include simple, but often neglected, things like having access to adequate rest and refreshment services and the availability of parking that is close by, safe and affordable. It also includes relationships between staff, and manageable workloads and working hours. The latter issues may be influenced by staff shortages. In England, the NHS Long Term Workforce Plan urged hospital trusts to address some of these issues.[10] We have seen some action to take this work forward; however, this work needs to go further and faster.

The RCoA produces the Guidelines for the Provision of Anaesthetic Services (GPAS) to support and promote high-quality anaesthetic services.[50] 'The good department' chapter of this document includes recommendations to protect and promote the wellbeing of anaesthetists, such as:

- departments should promote a caring and supportive culture
- access to mentorship
- having a departmental health and wellbeing policy and a lead with access to appropriate expertise and resources
- openness about fatigue and promoting the need for rest
- promoting a sensible work–life balance.

We encourage all anaesthetic departments to implement the GPAS recommendations.

The RCoA, in partnership with the Faculty of Intensive Care Medicine (FICM) and the Association of Anaesthetists (AoA), have also established a 'Fight Fatigue' campaign, which calls for a minimum provision of free rest facilities within hospitals. This includes resources for hospitals to use as part of their staff inductions.[51]

11.4 Overall

Rates of burnout and mental health issues among anaesthetic staff remain worryingly high. Governments and health service leaders must take this issue seriously and take a wide-ranging, multi-faceted approach to tackling it, including via implementation of the recommendations of the GPAS.

12. Impact of waiting lists on patients

Waiting lists for elective care have severe impacts on patients. According to a national inpatient experience survey published by the Care Quality Commission, 41% of elective patients said that their health deteriorated while waiting to be admitted to hospital.[52]

In a survey carried out by the Office for National Statistics (ONS), 70% of adults waiting for NHS treatment reported that it had negatively impacted their lives.[53] Among these respondents, 57% said the wait affected their wellbeing for reasons such as anxiety, stress, loneliness or boredom. Long waits also affected patients physically, with 40% reporting that it reduced their ability to exercise, 28% that it made their condition worse, and 36% that it affected their mobility.

Long waits can also impact patients' working lives. In the ONS survey[53], 31% of working adults waiting for NHS treatment said that their work had been affected. Among these people, 52% had to change the tasks that they did at work and 21% were unable to go for promotion or training opportunities. In addition, 14% had to reduce their working hours, 13% had to find new employment and 11% went on long-term sick leave. The Institute for Public Policy Research has estimated that getting people off waiting lists could bring a value equivalent to £73 billion over a four-year period.[54]

Reducing waiting list times for elective care, and supporting patients during this time, are critical to ensuring that patients can get the treatment that they need, reduce the burden of pain and mental health deterioration, and enable them to continue with their lives. Ensuring that there is a full complement of anaesthetic staff is critical to this end.

41%
of elective patients reported that **their health deteriorated** while waiting for treatment

13. Transformation of the surgical pathway

The RCoA hosts the Centre for Perioperative Care (CPOC), which has shown how every stage of the surgical pathway could be optimised to reduce costs, improve efficiency and improve patient outcomes.

This involves factors such as 'prehabilitation' (improving a patient's health ahead of an operation, for example, through smoking cessation or exercise), shared decision-making, and proper discharge planning.[55] All these interventions can help reduce the rate of surgical complications, on-the-day cancellations, lengthy hospital stays, and readmission to hospital after discharge.

We remain committed to working with the Government and our stakeholders on identifying the right numbers and skills mix required to build a stronger and more resilient 'team anaesthesia' and enable the specialty to deliver anaesthetic and perioperative care services fit for the future.

14. Recommendations

This report highlights the huge challenges that NHS organisations are facing – and shows how those challenges will grow year on year unless action is taken.

A key task of the new Government in Westminster, and devolved administrations across the UK, must be to grow the anaesthetic workforce in line with the needs of NHS organisations and the patients whom they serve. Only an expanded anaesthetic workforce will allow NHS services to meet current and future demand, tackle elective backlogs, prevent unnecessary expenditure and ensure that targets (such as 18 weeks for referral to treatment) are met.

Addressing workforce challenges is complex and, like other specialties, anaesthesia will require a multi-faceted approach. We have set out what we believe are the key solutions below.

14.1 Increasing anaesthetic training places

From section 6.3 of this report, we know that there is an anaesthetic workforce gap of approximately 1,900. Furthermore, in section 11 our projections show that this could grow to 11,000 by 2040 unless urgent action is taken. The most obvious way to fill the gap is to increase the number of anaesthetic training places – and that requires Government funding.

On top of the 70 extra higher anaesthetic training places announced in England in 2022, we estimated in section 7.1 that the system can currently cope with at least 59 extra core and 81 higher training places – and likely more. These should be funded immediately and secured for the long term. Although far more anaesthetists are needed than this, this is what we believe the training system can currently cope with. New AiTs could immediately contribute to the work of anaesthetic departments, provide a basis for a future consultant workforce, and reduce reliance on agency staff.

Bringing new anaesthetic training places online could be done as either a stand-alone measure or part of a wider plan for specialty training. The next iteration of the NHS Long Term Workforce Plan provides an opportunity for such a plan to be developed. Either way, action is needed urgently.

14.2 Sensible pension taxation rules

As discussed in section 8.4, pension taxation was a major factor in pushing anaesthetists to reduce their hours or retire. Following from the changes to pension taxation rules in April 2023, many of these issues seem to be resolved. However, it is important that these measures – or other measures that equally protect doctors – are maintained. The Government must avoid actions that would lead to a return to the previous problems.

14.3 Promoting, valuing, and utilising SAS roles

All NHS bodies must make efforts to promote and support the SAS role. This includes embedding and supporting development opportunities and fair treatment, and ensuring that SAS doctors' contributions to anaesthetic teams is appropriately valued. This would aid recruitment and retention of staff in these roles, improve morale and help them achieve their full potential.

14.4 Wellbeing, burnout, and mental health

Efforts to boost levels of wellbeing and good mental health, and minimise burnout, are key components of retaining the anaesthetic workforce, addressing the elective backlog, and maintaining patient safety. Governments and health service leaders must do all that they can on these fronts.

In the first instance, we urge all hospitals to improve rest, refreshment and parking facilities, and refer to and implement the recommendations of 'the good department' chapter of the GPAS.

The RCoA, together with the AoA, have encouraged departments to adopt a 'wellbeing lead' and will continue to gather information on the rollout of this programme. We have also led, with the FICM and the AoA, the 'fight fatigue' campaign. We are currently looking at how best to implement the campaign in the profession. We will continue to study the drivers of wellbeing on the anaesthetic workforce with a view to making more detailed recommendations in future.

14.5 Career progression and job flexibility

Better communication around career progression, and more flexibility in job plans to improve work–life balance and support anaesthetists of all grades to stay in work as long and as healthily as possible, is needed, including a more standard offer around flexibilities and terms and conditions for those approaching retirement and wishing to reduce their hours.

14.6 Transformation of the surgical pathway

Perioperative interventions and practices should be rolled out and adopted as advocated by the CPOC and the RCoA, such as prehabilitation, shared decision-making, and improved discharge planning.

For more information, please contact advocacy@rcoa.ac.uk.

Appendix A: Waiting time figures

Waiting time numbers are calculated as follows:

Scotland: the figure is based on 558,900 people waiting for an outpatient appointment, 155,600 people waiting for inpatient or day-case admission, plus 150,000 people waiting for diagnostic tests.

- NHS waiting times – stage of treatment, Public Health Scotland
- NHS waiting times – diagnostics Public Health Scotland

Wales: the figure is based on 464,200 people waiting for outpatient appointments plus 153,000 waiting for an admitted diagnostic or therapeutic intervention. All stats from patient pathways waiting to start treatment by month, grouped weeks and stage of pathway.

- Patient pathways waiting to start treatment by month, grouped weeks and stage of pathway, Stats Wales, NHS Wales

Northern Ireland: the figure is based on 230,500 patients waiting for outpatient appointments plus 52,000 patients waiting for inpatient or day-case admission and 121,700 waiting for diagnostic intervention.

- Hospital waiting times statistics, Department of Health Northern Ireland

Appendix B: Methodology

In 2020, we conducted a full workforce census and in 2022 we conducted a more limited survey to provide updates on key headline figures.

The 2022 survey had an 84% response rate, somewhat lower than the 97% response rate in 2020. To obtain results that were comparable, for our consultant and SAS doctor figures we scaled both years' data to an estimate of what they would have been if a 100% response rate had been achieved.

To produce these estimates, we looked at trusts/boards, on a region-by-region basis (or nation-by-nation basis in the case of AAs due to lower numbers), where we had full data for both 2020 and 2022. From this, we could calculate an average percentage increase for various grades of anaesthetists in that region.

If, for example, in region A there was an average 3% increase of consultants in trusts where we had complete data for 2020 and 2022, we could then apply that percentage increase (or decrease) to other trusts where data were missing for one or both years. If trust Y had data on consultant numbers in 2020, but had supplied none in 2022, we assumed that numbers had increased by 3% – in line with the average increase in that region. Similarly, if we had 2022 data, but none for 2020, we could estimate the 2020 numbers by using the methodology in reverse.

In the small number of cases where the data was missing in both years, we assumed that the trust had the average number of anaesthetists of various grades in that region.

Where there were vast disparities between the 2020 and 2022 data, we considered these anomalies and sought to contact the trusts concerned. If we could not resolve the issue through contact, we then scaled accordingly (only in two cases across the data) from the most credible data point available.

Taken together, we believe our methodology creates the most accurate depiction of the anaesthetic workforce that we could get without complete data.

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