MEDICAL WORKFORCE CENSUS REPORT 2015

THE ROYAL COLLEGE OF ANAESTHETISTS

THE ROYAL
COLLEGE OF
ANAESTHETISTS

MEDICAL WORKFORCE CENSUS REPORT 2015

ISBN: 978-1-900936-13-2

All enquiries in regard to this document should be addressed to:

The Royal College of Anaesthetists
Churchill House
35 Red Lion Square
London WC1R 4SG

020 7092 1500 info@rcoa.ac.uk www.rcoa.ac.uk

Design and layout by The Royal College of Anaesthetists.

CONTENTS

I am delighted to write this foreword for the 2015 College census. It is a tribute to the extraordinary commitment of you, the Fellows and Members, that the census was completed in record time with 100% of UK anaesthetic departments participating.

FOREWORD

I would particularly like to thank the Census coordinators in each hospital, who ensured that the data-set is the most accurate and comprehensive available. This undoubtedly gives the College a distinct advantage when presenting to policy makers the case for development of the future anaesthetic workforce.

As a specialty that interacts with 68% of all patients in the secondary and tertiary sectors, anaesthesia is pivotal to the delivery of safe and effective healthcare. In the financially challenging environment in which we all practice, this Census provides the most comprehensive data on all aspects of our workforce. Against the background of the current political debate on seven-day working in the NHS, it clearly demonstrates our commitment to delivering 24/7 services, with large numbers of consultants delivering elective and emergency care (separate from on-call responsibilities) at evenings and weekends.

The huge contribution that Staff & Associate Specialist (SAS) colleagues make to our specialty is also highlighted, as they account for over 21% of the trained anaesthesia workforce – more than in many other secondary care specialties. The College believes that it must do more for these members of our specialty, and along with our SAS members of Council we are exploring how we can better work in collaboration with colleagues from the Association of Anaesthetists of Great Britain and Ireland (AAGBI) to meet the varied needs of SAS colleagues in the specialty. Of particular concern, is the trend towards an increasingly ageing workforce, especially amongst consultants. A consultant appointed today faces the prospect of working until the age of 68 before they are eligible for their pension. The implications of an ageing workforce, particularly in acute, high-pressure specialties such as anaesthesia and intensive care medicine (ICM), are significant, with implications for safe patient care and for the welfare of clinicians. The College, along with colleagues at the AAGBI, is raising these concerns at the highest levels in political circles, and the data from this Census is vital as we lobby on behalf of the specialty.

Trainee issues are given a much more comprehensive exploration in this Census compared with previous surveys. Gaps in rotas and vacancies are of great concern as we consider the impact on the training, wellbeing and morale of our trainee colleagues, and all of this has been highlighted by the current contract dispute.

Collating this vast and complex data-set has been a tour de force, and I would like to extend my thanks on behalf of Council to all those involved, particularly Paul Spargo, John Colvin, Russell Ampofo, Afsana Choudhury and Neil Wiseman. They have worked enthusiastically to extract the maximum amount of information and produce the rich, cohesive report that you have before you.

Overall, the Census provides a wealth of information that highlights positives and negatives for our specialty in 2015. It is a unique, essential resource for those who will be making the case for change and arguing for increased resources in many different aspects of our work on behalf of patients. I commend it to you as the definitive document on the state of UK anaesthesia workforce in 2015.

Dr Liam Brennan
President

SUMMARY OF MAIN FINDINGS

Consultants

There are 7,422 consultants in England, Wales, Scotland and Northern Ireland (7,439 including those from Crown dependencies such the Isle of Man and the Channel Isles). Overall, throughout the UK there was an 8.4% increase in consultant numbers between 2010 and 2015 (and a 10% increase between 2007 and 2010) and this equates to an increase of around 2.3% per year between 2007 and 2015.

A total of 68% of the anaesthetic consultant workforce is male and 32% is female. The percentage of female consultants has risen in each of the devolved nations over the period 2007 to 2015. Nearly three-quarters (74%) of consultants currently work more than ten Programmed Activities (PAs) and of these 75% are male and 25% are female. 8.5% of consultants work nine or fewer PAs, and there are more female consultants than male in this group (5.4% versus 3.1%).

There has been an 8% expansion in the total number of consultants between 2010 and 2015 and a 28% increase over the same period in the number of consultants aged between 50 and 59 years, indicating an ageing consultant population. Around 40% of departments have consultants doing both elective and emergency CEPOD sessions (separate from on-call duties) on weekday evenings. Almost a third of departments have consultants doing elective work at weekends. Over half of departments have consultants doing emergency CEPOD sessions (separate from on-call duties) at weekends.

Staff and Associate Specialist (SAS) Doctors

There are 2,033 SAS and trust-grade doctors in England, Wales, Scotland and Northern Ireland (2,047 when those from the Crown dependencies are included). There has been an increase of 14.7% since the 2010 Census, equating to an increase of 2.9% per year. They make up 21.6% of the trained anaesthetic workforce (2,047 SAS doctors versus 7,439 consultants). Overall, 61% are male and 39% female and, except in Scotland, there have been increases in the proportion of female SAS and trust-grade doctors between 2010 and 2015 in all of the UK nations. SAS doctors have similar work patterns to consultants, with nearly three-quarters (74%) currently working more than ten PAs. 10% of SAS doctors work nine or fewer PAs, and there are more female SAS doctors than male in this group (7% versus 3.1%). The age distribution of SAS doctors is similar in 2015 to what it was in 2010 – in both censuses just over a quarter (27%) are aged between 50 and 59 years.

Gaps in the consultant out-of-hours or on-call rota

In England just over a quarter of respondents (26%) stated that a gap in the consultant rota occurred approximately once a week. In Scotland this figure is higher at 30%, in Northern Ireland it is 50%, and in Wales the number approaches 60%. This adds to the workload of an already stretched workforce and generates additional expenditure.

Retire and Returns

This Census identified 250 doctors, of whom 202 (81%) were consultants, and 48 (19%) SAS doctors who had returned to work after retirement. Although only an approximation, of the total number of trained anaesthetists (consultants and SAS doctors) currently working, about 2.5% in England have retired and returned. The equivalent figures for Northern Ireland, Scotland and Wales are 1.49%, 1.66% and 3.88% respectively. Males are nearly twice as likely to retire and return than females (3.1% versus 1.7%).

Consultant and SAS posts needed in the next two years

Over 50% of the 217 respondents expected to require 0–5 posts and over 30% 5–10 posts in the next two years. A further 10% suggested they would require 10–20 posts. In a separate question, of those trusts and boards that at the time of the Census had advertised posts, 55% were advertising replacement posts and 27% were advertising new posts (giving a ratio of 2:1 replacements to new appointments).

Vacancies

In the UK 4.4% of consultant posts and 11% of SAS and trust-grade doctor posts are empty. A breakdown by devolved nation can be found in the body of the report. The majority of respondents use internal locums – that is they cover vacancies from the existing complement of staff. Only a relatively small proportion use external locums cover.

Training Grades

We were unable to collect accurate robust data for the total number of LETB/deanery funded full-time or less-than-full-time trainees working in each department, but College data suggests that there are in the region of 4,500 training grade anaesthetists across the UK. However, we asked about the number of empty posts in each department and, although there were some non-responders to parts of the question, we identified a total of 424 empty LETB/deanery funded training posts throughout the UK. An additional 248 trainees were absent because of maternity, paternity or long-term sick leave, or because of Out-of-Programme Experience. Taken together, 15% of all LETB/deanery funded training posts were unfilled at the time of the Census.

Gaps in the trainee/SAS rotas

Overall, nearly 70% of departments have to cover gaps in the trainee/SAS rotas more frequently than once a week, with 19% needing to do so every day. When this is broken down by UK nation, 35% of departments in Scotland have to cover gaps in the trainee or SAS rotas once a week or more. The figures for England, Wales and Northern Ireland are 89%, 92% and 100% respectively. Just over half (55%) of respondents stated that the number of trainee/SAS rota gaps have increased over the last 12 months although 30% stating that they had remained the same. 98% of respondents said they use internal locums, almost three-quarters (74%) use external locums and nearly half (48%) use consultants 'acting down'.

Decommissioning of posts and the CT/ST interface

When responses are categorised by either deanery or LETB it is evident that most regions have empty or unoccupied posts at ACCS, core, or Specialist Training level. England and Wales (but not Scotland or Northern Ireland) appear to be affected by decommissioning with 22% of respondents answering in the affirmative (although it is not clear at what level). College data indicates that the UK-wide ST3 fill-rate for August 2015 was 94%. The fill-rate at core level was 100%, but variable attrition rates may contribute to recruitment difficulties at ST level. There continues to be an argument for improving the ST3 fill-rate by expanding the current core training numbers.

The relatively high proportion of specialty training (ST3–7) vacancies identified in this Census may be due to gaps created when an ST7 obtains CCT. There is good evidence that the period of grace is not fully utilised. Trainees are moving into consultant posts in the UK (nearly 70%) or obtaining fellowship posts (19%). Because of the biannual national recruitment process there is an inevitable delay in their replacement.

BACKGROUND

Anaesthesia is the largest single hospital-based specialty. Nearly 20 years ago, the Audit Commission published a report 'Anaesthesia under Examination'[1] in which it commented that, anaesthetists' activities affect up to two-thirds of a trust's income yet they consume only 3% of the trust's expenditure.

The work that anaesthetists do is often poorly understood. They provide anaesthesia for a wide range of surgical specialties, and also have clinical skills in intensive care medicine, acute and chronic pain management and obstetric anaesthesia. As the needs of the service have changed, the demand for anaesthetists and their skills have increased and they have become involved in pre-hospital care, inter-hospital transfer, trauma and resuscitation, and, more recently, in the field of perioperative medicine. This diversity may account for the current difficulties in service provision, as job plans have often not changed sufficiently to reflect these increased activities.

In 2015, the Royal College of Anaesthetists (RCoA) Workforce Advisory Group (WAG) devised and carried out a Census with the purpose of reviewing the current anaesthetic workforce, thus ensuring that the College is optimally placed to contribute to present and future workforce planning.

A key responsibility of WAG is to ensure that the College has up-to-date and accurate information on anaesthetic workforce numbers across the UK. To bring together the future needs of the UK as a whole, the Group comprises representatives of the four nations and of the Faculties of Pain Medicine and Intensive Care Medicine, as well as representatives of trainees and specialty doctors. There is also representation from other appropriate external bodies, in particular the AAGBI, the General Medical Council (GMC) and Health Education England (HEE). Such collaboration is imperative in order to formulate a structured workforce planning strategy that meets the needs of patients and ensures the sustainable delivery of anaesthetic, critical care and pain medicine services and training throughout the UK.

Decisions about the shape and size of the specialty and any future investment cannot be made in isolation, and must be based on clear, transparent evidence. WAG uses sources such as national recruitment data, CLWRota data, and GMC data on trainee progression. HEE is responsible for overseeing workforce planning in England. The devolved nations have separate procedures. HEE and the Department of Health jointly commissioned the Centre for Workforce Intelligence (CfWI) to conduct an in-depth review of the Anaesthesia and ICM workforce in England, and this was published in February 2015.[2] The College made a significant contribution to this report, along with a range of other expert stakeholders. The report highlights concerns that the demand for Anaesthesia and ICM services could outstrip supply over the next 20 years, noting a need for growth of 4.7% per annum in both specialties. It also recognises an existing unmet need of 15% for anaesthetics and 25% for ICM. The CfWI suggested that HEE considered continuing to fill the current number of higher specialty trainee (ST3) posts for Anaesthetists and Intensivists in England to minimise the risk of short-term undersupply. This is supported by the College, though the College additionally recommends an increase in Core trainee (CT) numbers.

Recently, the CfWI's responsibilities for workforce planning were transferred to Health Education England. This is of concern to the College, as the CfWI was an organisation that was independent of Government in providing its information and advice. The College has raised concerns over whether HEE will continue to ensure that they receive independent advice and input into workforce planning, and urges them to adopt an open and transparent approach by linking the outputs from this workforce Census to the CfWI report.[3] The national workforce plan is developed from the bottom up, based on plans prepared by local providers, including NHS trusts and NHS foundation trusts. HEE obtains information from these via the Local Education and Training Boards (LETBs). The financial position of acute hospital trusts has deteriorated, and their financial performance is forecast to worsen

still further. Understandably, their priorities will be influenced by this, but this will be in the overall context of a requirement to continue to meet rising demand for a whole range of acute and chronic care, much of which has an absolute need for specialist anaesthesia services. A recent National Audit Office report commented that trusts risk understating their true staff needs by focusing on efficiency targets when balancing financial sustainability and service requirements. This could result in HEE commissioning too few places to train new staff.[4]

Over the last few years, the College has increased its influence in the annual setting of national training numbers in all parts of the UK. It has built a strong evidence base through the annual specialty return to HEE's 'Call for Evidence' (CfE) which is a joint College/AAGBI document presenting the specialty perspective on anaesthesia workforce issues. The CfE[5] highlights College concerns that the ST3 fill-rates have not been 100% across the country. As a result of this the College has undertaken work to examine the interface between the CT and ST programmes, and also examine the rates of attrition. Similarly, work is going on to establish the individual career choices made after successful completion of the training programme. It is anticipated that the Census findings will help the College to further develop its position on CT and ST numbers, particularly in relation to specialty doctor supply and demand factors, and the developing workforce relationships between anaesthetics and ICM.

The College has access to increasingly accurate and powerful data both across the UK and by individual nation. Whilst the College will continue to influence the national bodies, it is also conscious of the need to support local and regional engagement using the established clinical director and regional adviser networks. The College strongly supports a combined approach, and encourages training and service leads to approach the LETB planners in their regions. This will help inform decision makers, commissioners of services, workforce planners and other stakeholders in understanding the current position of, and issues impacting on, the workforce both locally and nationally.

The most recent College censuses were carried out in 2007 and 2010, now over five years ago. The CfWI 2015 in-depth review recommended a stock-take, so the current Census is timely.

The aim was to obtain workforce data from every anaesthetic department in the UK, recognising that a high response rate was vital. This Census, like the two previous ones, achieved a 100% response rate, which is a significant testament to the willingness and professionalism of the anaesthesia community, and recognition of the importance attached to this aspect of College activity.

About the Census methodology

In August 2014 the Workforce Advisory Group (WAG) of the Royal College of Anaesthetists set up a short-duration working party to devise and administer a Census to be sent to all clinical directors throughout the UK. The questions were based on the 2007 and 2010 censuses, expanded or updated where appropriate. The online questionnaire was live between 20 May 2015 and 21 August 2015, and all clinical directors or heads of service were invited by email to complete it. They were asked to liaise with their college tutors and departmental administrators where appropriate. Email and telephone reminders were sent where necessary to generate an eventual 100% response rate from 224 clinical directors. In total this included 185 NHS trusts or health boards and 324 hospitals. Not all respondents answered every question, and allowance has to be made for this when attempting to interpret the findings of the Census.

Acknowledgements

We are grateful to all clinical directors, heads of service, College tutors, departmental administrators, and all others who became involved for taking the time and care to participate in the Census.

We should also like to thank the staff of the Royal College of Paediatrics and Child Health for their help and advice.

DETAILED RESULTS

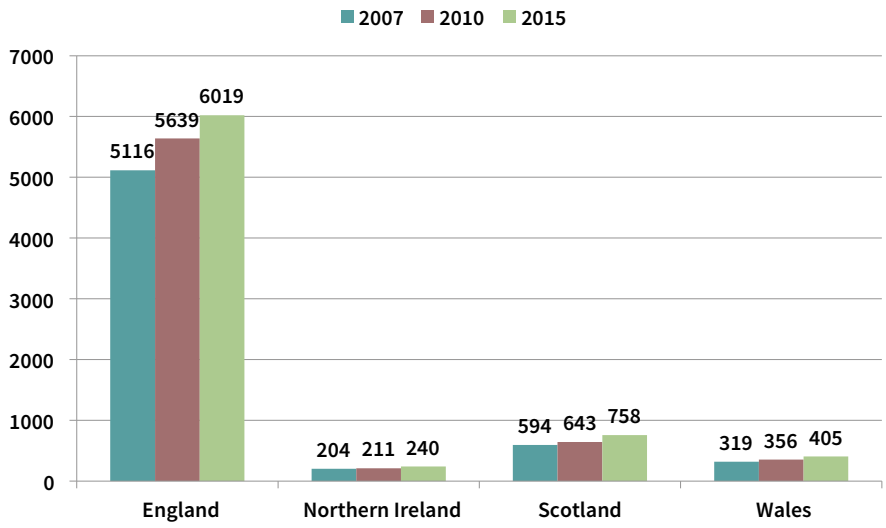
1 Focus on the workforce

(a) Consultants

According to the 2015 Census returns, there are a total of 7,422 consultants in England, Wales, Scotland and Northern Ireland (7,439 if the Crown dependencies such the Isle of Man and the Channel Isles are included). Overall, throughout the UK there was an 8.4% increase in consultant numbers between 2010 and 2015 (and a 10% increase between 2007 and 2010). This equates to an increase of around 2.3% per year between 2007 and 2015.

The number of consultants in each of the devolved UK nations compared with data from 2007 and 2010 is shown in Figure 1. In England there was a 10% increase in consultant numbers between 2007 and 2010 and 6.7% between 2010 and 2015. In Northern Ireland the percentage increases are 3.4% and 14%, in Scotland 8.2% and 18%, and in Wales 11.6%and 13.8% respectively.

Figure 1 Total number of consultants



The gender distribution of consultants is shown in Table 1 and Figures 2 and 3

Table 1 Gender distribution of consultants

England	2007	2010	2015	NI	2007	2010	2015
Total	5,116	5,639	6,019	Total	204	211	240
Male	3,589(70%)	3,947(70%)	4,097(68%)	Male	157(77%)	153(73%)	166(69%)
Female	1,455(28%)	1,692(30%)	1,922(32%)	Female	45(22%)	58(27%)	74(31%)
Gender unknown	72				2		
Scotland	**2007**	**2010**	**2015**	**Wales**	**2007**	**2010**	**2015**
Total	594	643	758	Total	319	356	405
Male	410(69%)	430(67%)	503(66%)	Male	226(71%)	245(69%)	267(66%)
Female	181(30%)	213(33%)	255(34%)	Female	93(29%)	111(31%)	138(34%)
Gender unknown	3			Gender unknown	0		

In this 2015 Census of the UK anaesthetic workforce, the proportion of male consultants is 68% and the proportion of female consultants is 32%. Furthermore, from Table 1 it can be seen that the percentage of female consultants has risen in each of the UK nations over the period 2007 to 2015. Of the 17 consultants in the Crown dependencies, 15 are male and two are female (not shown in Figures 2 and 3).

Figure 2 Number of male consultants

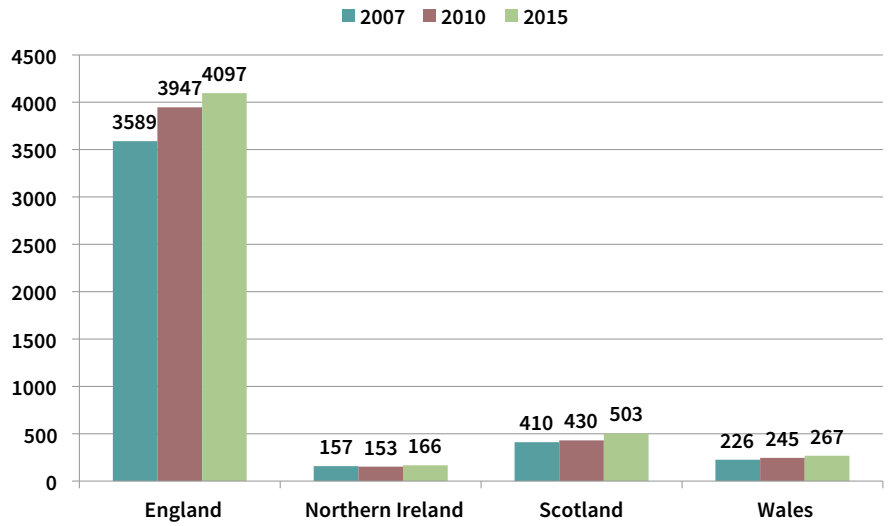


Figure 3 Number of female consultants

43 of 209 departments (20%) still have some consultants on the pre-2003 contract. The present consultant contract came into force in 2003. A standard full-time job plan contains ten PAs with up to two extra PAs by mutual agreement between employer and employee. The distribution of PAs throughout the UK is shown in Table 2 and Figure 4.

Table 2 The distribution of consultants' PAs

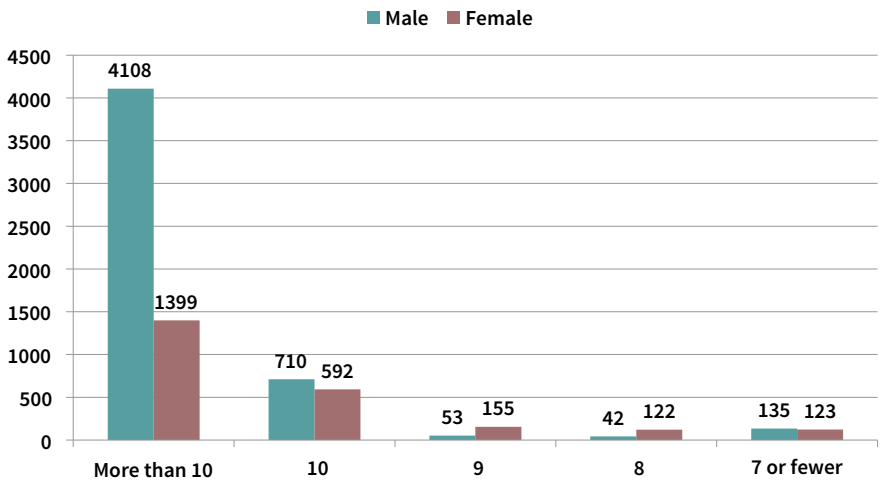
Number of PAs	Male	%	Female	%	Total	% of both males and females
More than 10	4,108	81	1,399	25	5,507	74
10	710	14	592	46	1,302	18
9	53	1	155	75	208	3
8	42	1	122	74	164	2
7 or fewer	135	3	123	48	258	3
	5,048	100	2,391	100	7,439	100

Participation rates

It is interesting to note that only 17.5% of consultants work to a ten PA contract, with a slight preponderance of males over females (9.5% and 8% respectively). Nearly three-quarters (74%) of consultants currently work more than ten PAs, and of these 75% are male and 25% are female. Whether future generations of consultants will have the same or different attitudes to work-life balance is unknown. This trend is only likely to be known from future analysis in this area.

Equally important, 8.5% of consultants work nine or fewer PAs, and there are more female consultants than male in this group (5.4% versus 3.1%). As the proportion of female consultants has risen over the last three censuses (Table 1 and Figure 3), this may impact on the future headcount requirements.

Figure 4 Number of consultants by numbers of PAs worked



In this Census we did not ask about the split between DCC-PAs and SPAs. A breakdown by devolved nation is shown in Figures 5 and 6, with 'full-time' equating to ten or more PAs and 'less-than-full-time' to fewer than ten PAs. It can be seen that there is a preponderance of male consultants working more than ten PAs compared with female consultants. The reverse is true with less-than-full-time working.

Figure 5 Consultants working full-time

Figure 6 Consultants working less than full time

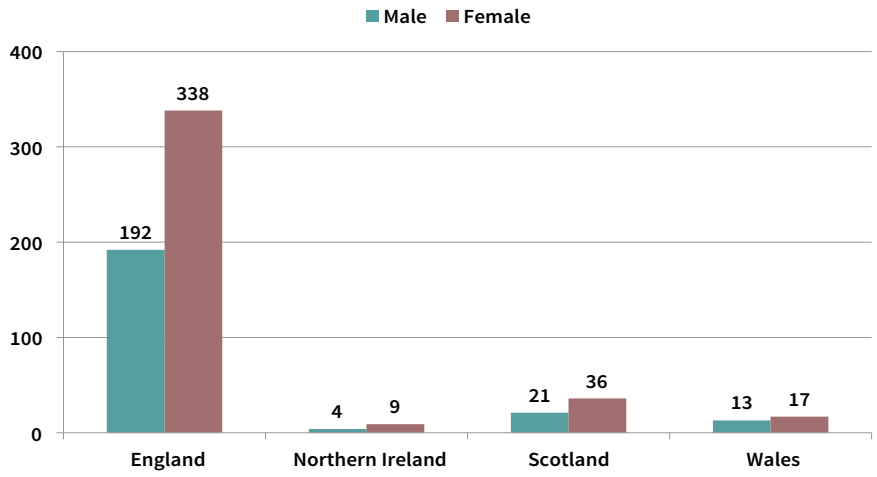


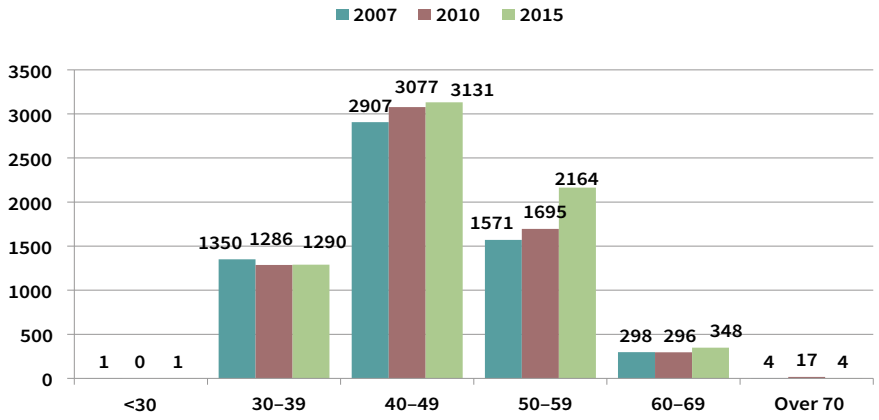
Table 3 Age distribution of consultants (2015)

Age (yrs)	England	Northern Ireland	Scotland	Wales
<30	1	0	0	0
30–34	116	4	25	10
35–39	878	58	128	71
40–44	1280	45	149	69
45–49	1289	42	157	100
50–54	1055	40	151	81
55–59	662	28	100	47
60–64	257	7	24	15
65–69	39	0	2	4
70 or over	3	0	0	1

The age distribution of consultants at the time of the latest Census throughout the UK broken down by UK nation is shown in Table 3. A consultant's choice of retirement age is no longer as clear as it may have been in the past. Changes to the NHS pension scheme, attitudes towards work-life balance, and working conditions are influencing an individual's choice of retirement date. In this Census, rather than ask clinical directors about the likely age of retirement of consultants in their department, we chose to ask about the ages of their consultants. Likely retirement profiles can then be modelled on the data. It can be seen that the greatest cohort of consultants in England is aged between 40 and 50 years. Those aged 50 are likely to retire in 10–15 years time (2025–2030), and the exodus will require a larger number of trainees to enter anaesthetic training seven years before 2025, in 2018. There is a similar pattern in the other devolved countries.

There has been a rise in the number of consultants aged between 40–49 and 50–59 years since the censuses of 2007 and 2010 (Figure 7), perhaps reflecting the overall increase in consultant numbers. However, although there has been an 8% expansion in the total number of consultants between 2010 and 2015 (6,849 and 7,439 respectively), there has been a 28% increase in the number of consultants in the 50–59 year age range (1,695 and 2,164 respectively) over the same period indicating an ageing consultant population.

Figure 7 The difference: 2007, 2010, 2015 consultant ages



Gaps in the consultant out-of-hours or on-call rota

Although nearly 30% of departments rarely need to cover gaps in the consultant rota, nearly 30% need to cover gaps about once a week (Figure 8).

Figure 8 How often does your department cover gaps in the consultant rota?

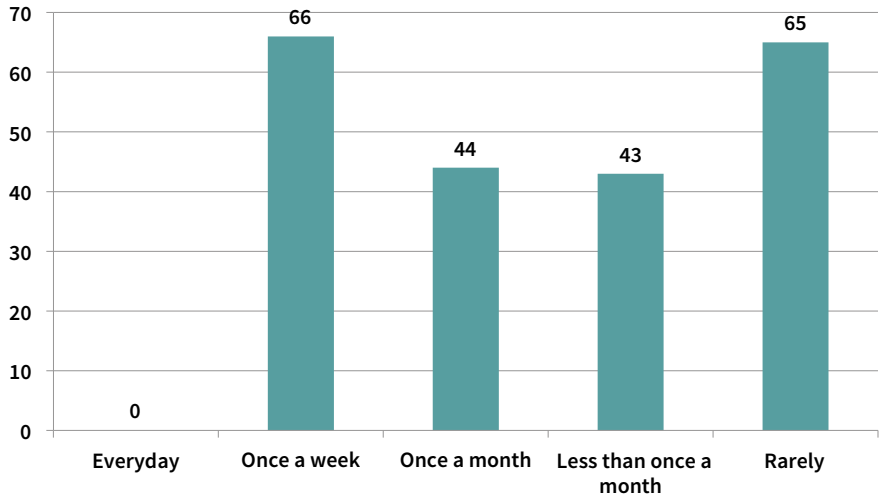
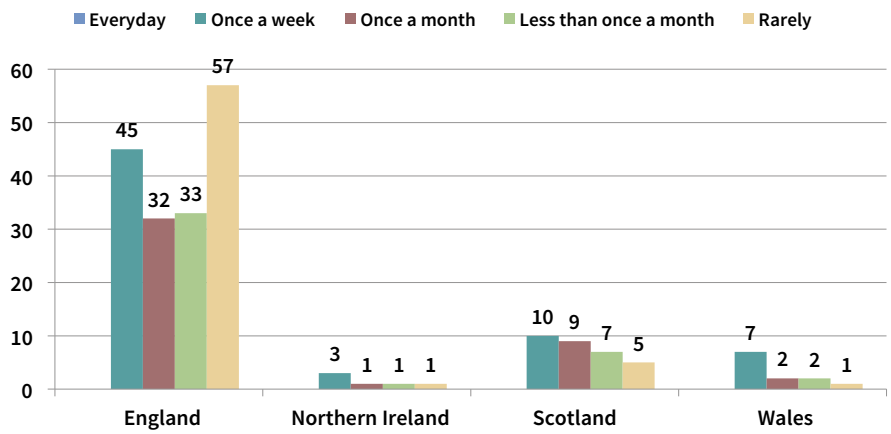


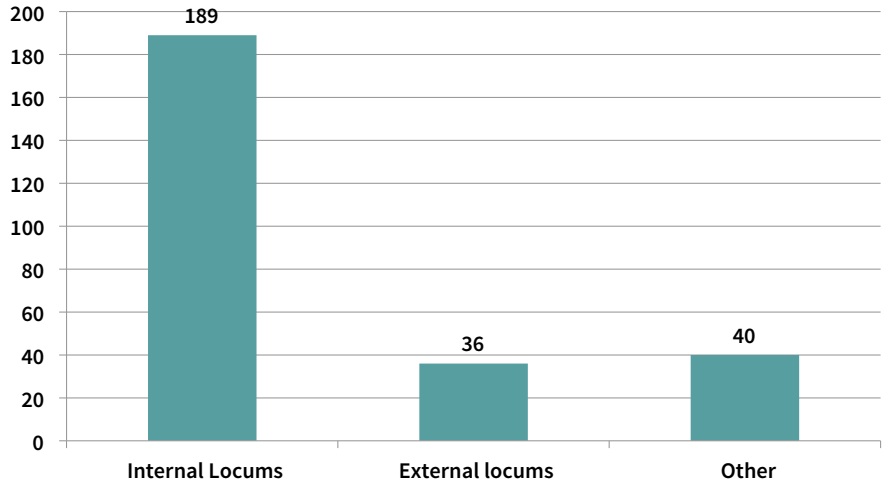
Figure 9 illustrates the frequency with which departments have to cover gaps in the consultant rota by UK nation. In England, just over a quarter (26%) of departments need to cover gaps once a week. In Scotland the figure is higher at 30%, in Wales the number approaches 60% and in Northern Ireland it is 50%.

Figure 9 Frequency of gaps by UK nation



Clinical directors were asked whether they used internal or external locums or 'other' ways to cover gaps in the consultant rota. More than one category could, of course, apply, but it can be seen from Figure 10 that the majority of respondents use internal locums; that is they cover gaps from the existing complement of staff. Only a relatively small proportion use external locum cover.

Figure 10 How are gaps in the consultant rotas covered?



Unmet need

We previously showed (Figure 4) that nearly 75% of consultants work more than ten PAs weekly and Figures 8–10 illustrate the regular need to cover gaps in consultant rotas (and how they are covered) raising issues over sustainability and perhaps confirming the findings of the CfWI in-depth review that there is a level of unmet need.

Elective and Emergency weekday and weekend work

The way consultants work is changing. Consultants are in the hospital in the evenings and weekends. We asked clinical directors whether their trust or hospital runs weekday evening elective operating theatres or emergency 'CEPOD' lists[6] done by consultants and if so the average number per week (Figures 11–14). Around 40% of departments have consultants doing both elective and emergency sessions on weekday evenings, with around 25% having between one and five sessions per week for elective and a similar percentage for emergency work. 10% of trusts and boards have between five and ten sessions per week for each type of work.

Figure 11 Elective weekday evening PAs done by consultants

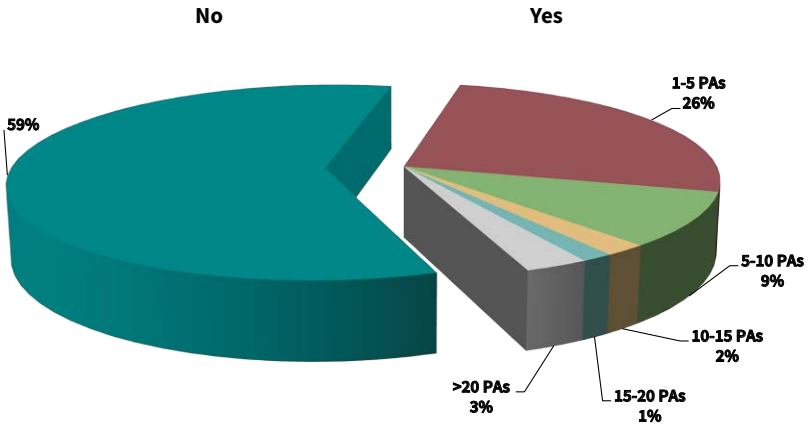


Figure 12 Emergency weekday evening PAs done by consultants

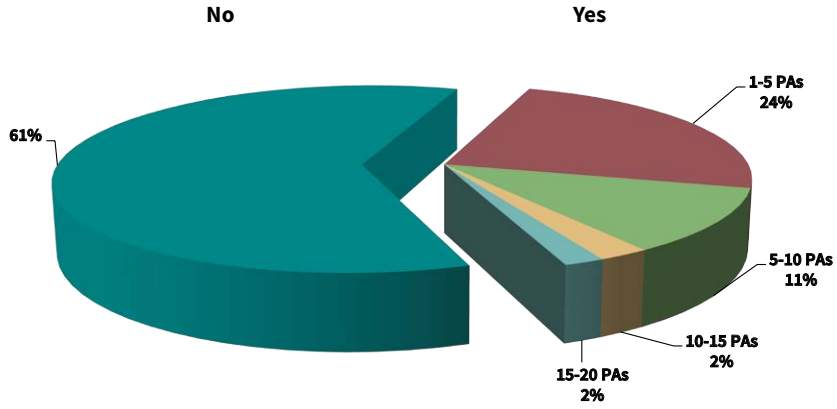


Figure 13 Elective weekend PAs done by consultants

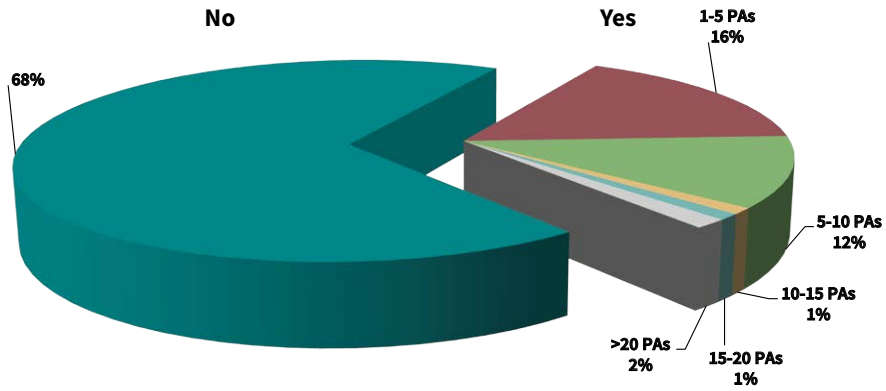
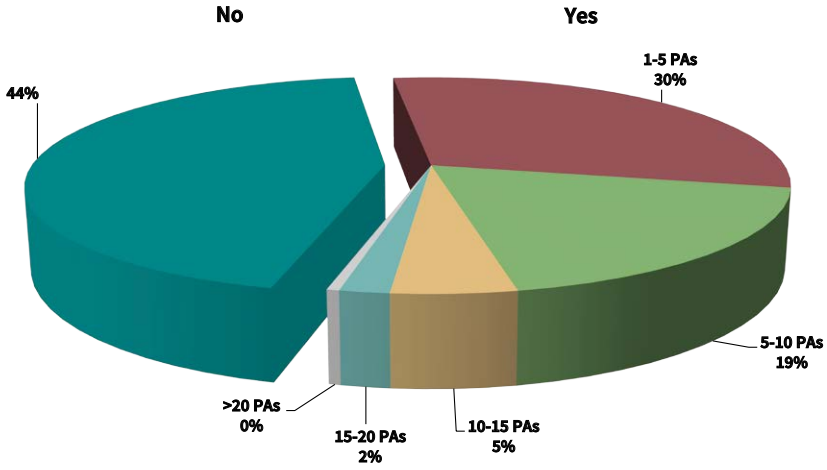


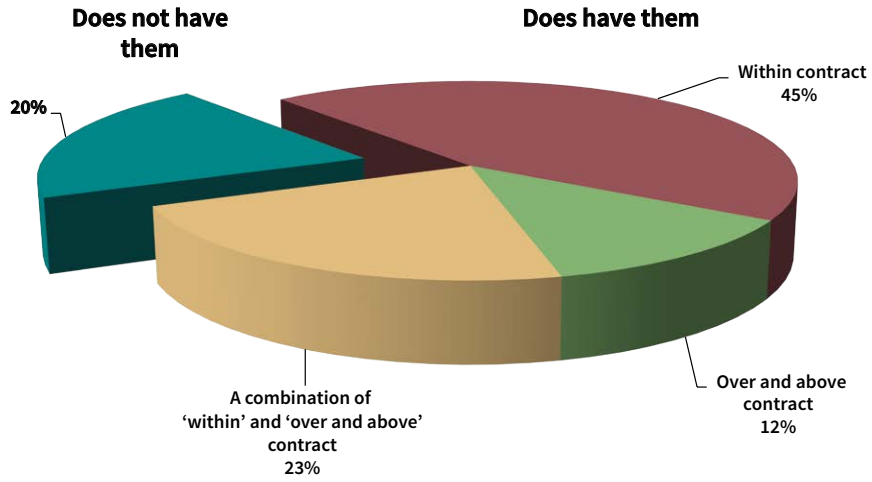
Figure 14 Emergency weekend PAs done by consultants



The same question was asked of weekend elective or emergency PAs. Almost a third of departments have consultants doing elective work at weekends with 28% of departments having up to ten PAs allocated. Over half of departments have consultants doing emergency CEPOD sessions (separate from on-call duties) at weekends with almost half (49%) of departments providing up to ten PAs for this purpose.

Clinical directors were asked whether weekday evening and weekend sessions are performed within, or over and above the consultant contract. The results are shown in Figure 15. Nearly half (45%) of the departments with such sessions, offer them within a consultant's contract and 12% offer them over and above their contract. Almost a quarter of respondents operate both systems side by side with some consultants on contracts that include weekday evening and weekend sessions and other consultants performing the sessions over above their contract.

Figure 15 Weekday evening or weekend, elective or emergency PAs done by consultants within or above contract



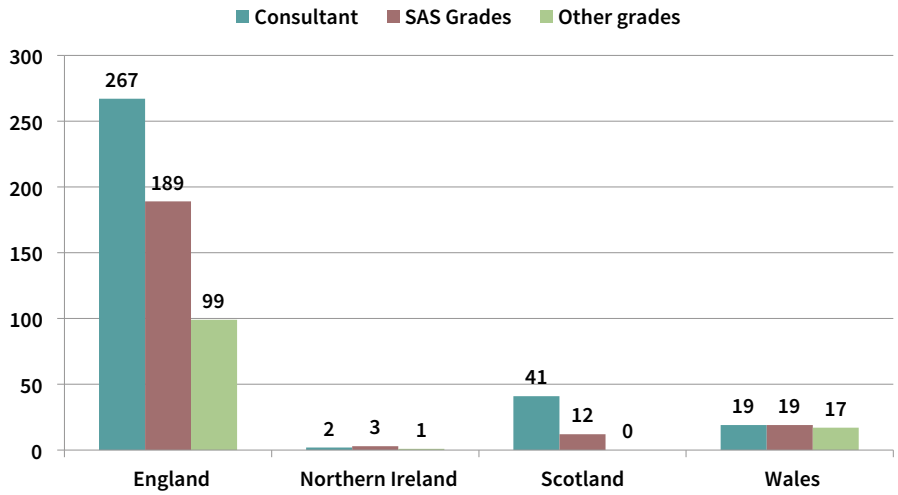
Unfilled posts

Respondents were asked how many unfilled consultant, SAS or other posts (except LETB or deanery funded posts) there were in their trust/board. The total numbers are shown in Table 4 and Figure 16.

Table 4 Filled and unfilled posts at consultant and SAS (and trust-grade) level

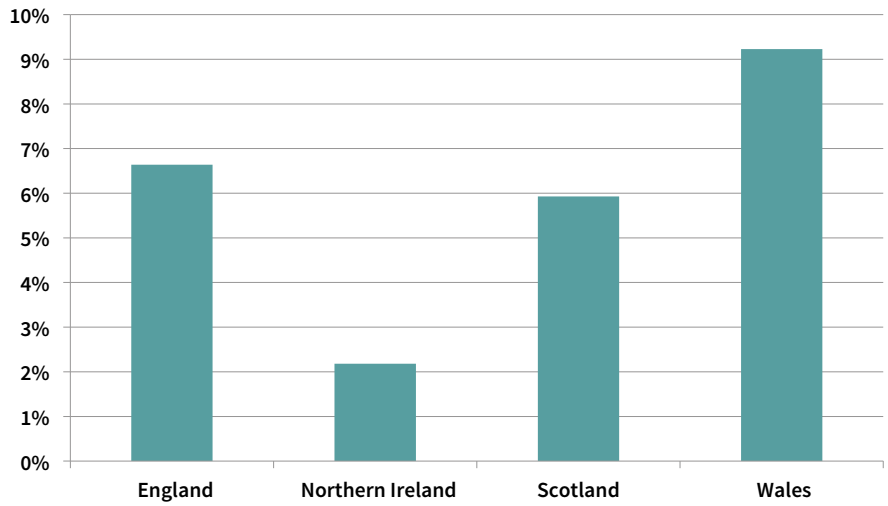
Total numbers	England	Northern Ireland	Scotland	Wales
Consultants	6,019	240	758	405
SAS and trust grades	1,785	29	83	136
Subtotal	7,804	269	841	541
Unfilled posts	555	6	53	55
Total potential posts	8,359	275	894	596
Percentage of posts unfilled	6.64%	2.18%	5.93%	9.23%

Figure 16 Number of unfilled posts



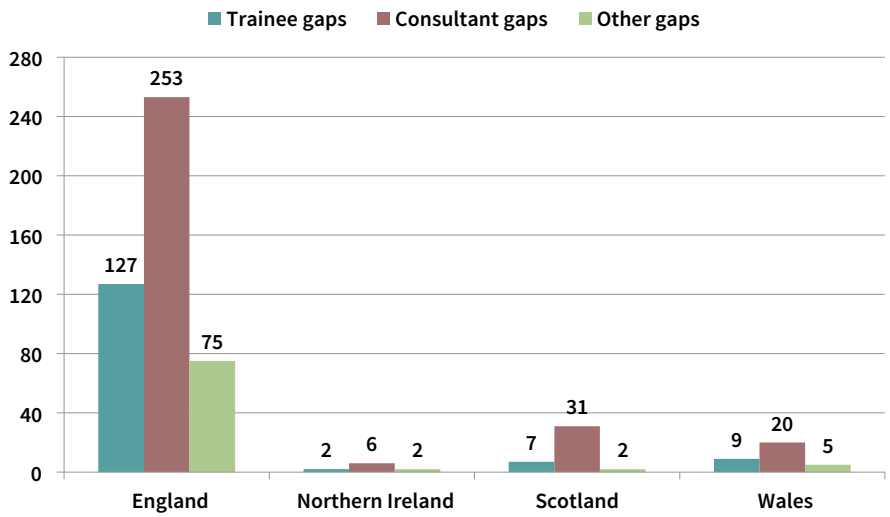
The number of unfilled posts as a percentage of the total potential numbers of consultants and SAS and trust doctors is 6.6% in England, 2.2% in Northern Ireland, 5.9% for Scotland and 9.2% in Wales (Figure 17).

Figure 17 Percentage of total consultant, SAS and trust-grade posts that are unfilled



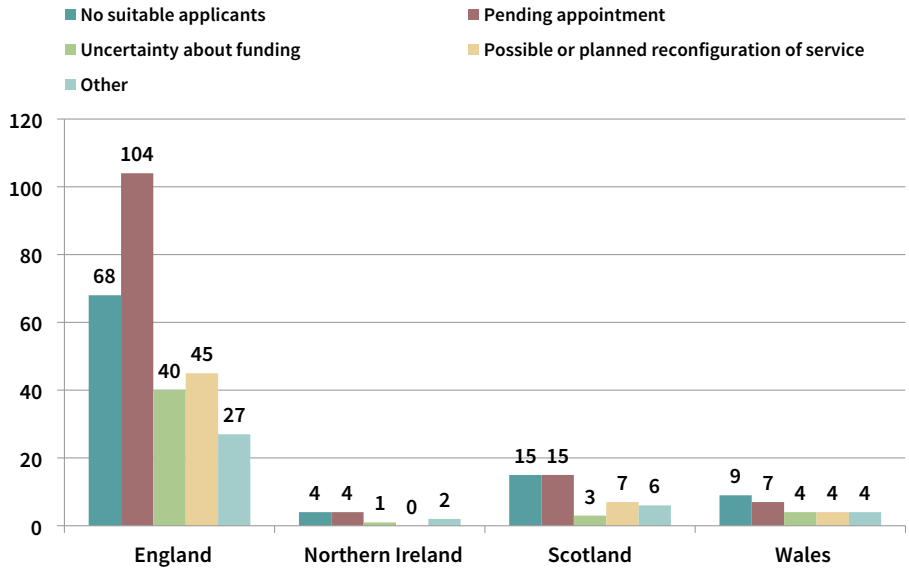
In a different question, respondents were also asked how many locums were currently in post to cover LETB or deanery-funded trainee gaps, consultant gaps or other gaps in their departments. The results are shown in Figure 18 by UK nation. There may be locums covering gaps at several levels in the same hospital, so the total numbers may exceed the number of respondents. Respondents were asked how many locums were in post at each level up to a maximum of five. If there were more than five they were asked to tick a 'greater than 5' box. This response was grouped with the '5' responses. The numbers shown in Figure 18 are therefore a minimum. At the time of the Census there were 310 locum consultants out of a total of 7,439 (4.2% of the total consultant posts). There were 79 incomplete responses in the 'other' group, so no conclusion can be drawn about this category. It is not possible to estimate percentages for the trainee group, as the total numbers were not established in this Census.

Figure 18 Number of locums in post to cover gaps



There are a number of reasons why a post may be unfilled. Where an unfilled post is filled by a locum the reason no substantive post had been made is shown in Figure 19. In the fourth 'other' group, free text comments were invited, and maternity or long-term sick leave were the commonest causes. (At the time of the Census there were no unfilled posts in the Crown dependencies).

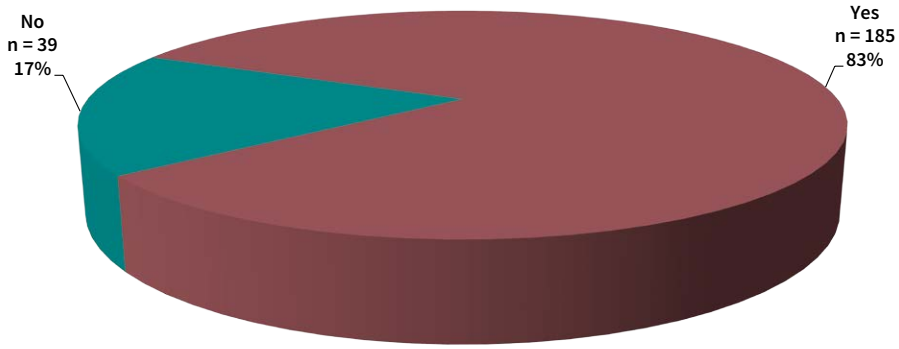
Figure 19 Locum filling posts – reasons



Waiting-list initiatives

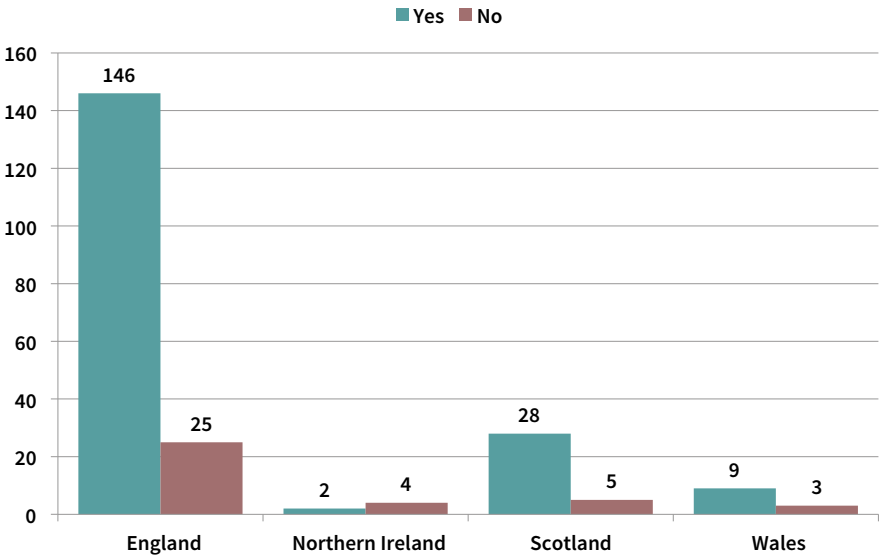
Much, but not necessarily all, of the elective work done on weekday evenings and at weekends is waiting-list work. Some might be due to extended lists (commonly referred to as 'three-session days'). It is interesting to find that over 80% of respondents stated that their trust or hospital offered regular waiting-list sessions, again confirming the CfWI's findings of an existing unmet need (Figure 20).

Figure 20 Does your trust/board offer regular waiting-list initiative sessions?



Waiting-list initiatives are a feature of working life in all the UK nations (Figure 21), but to differing degrees. In England, 85% and in Scotland, 84% of respondents stated that waiting-list initiatives take place. In Wales and Northern Ireland, the figures are 75% and 33% respectively.

Figure 21 Does your trust/board offer regular waiting-list initiative sessions? By devolved nation.



Furthermore, of those who do offer such sessions over half (59%) have had more than 20 in the previous three months (Figure 22). Consultants do the majority (73%) with only 8% being done by SAS doctors and 19% by 'other' groups (Figure 23).

Figure 22 Breakdown of number of waiting-list initiative sessions in last three months

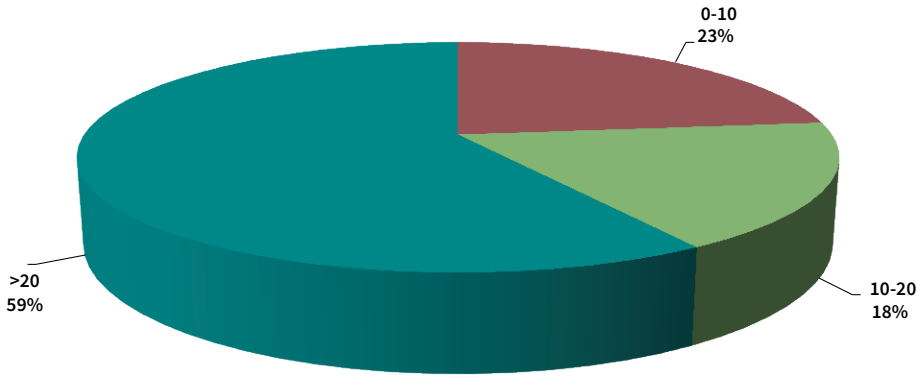


Figure 23 Breakdown of grades involved in waiting-list initiative sessions

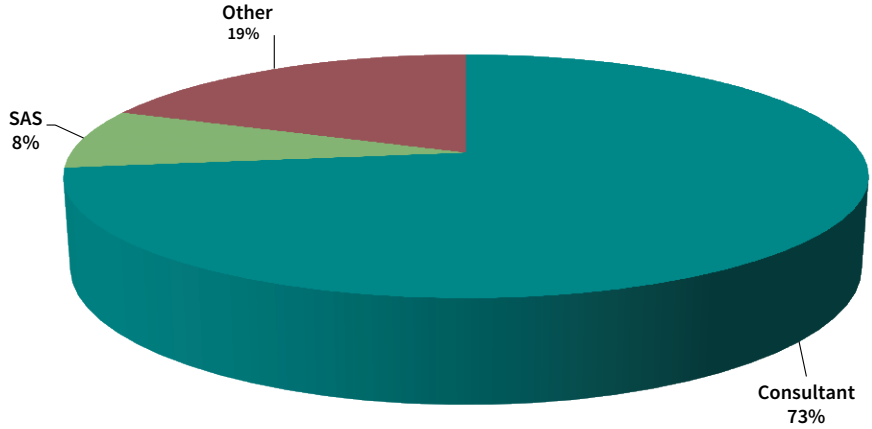
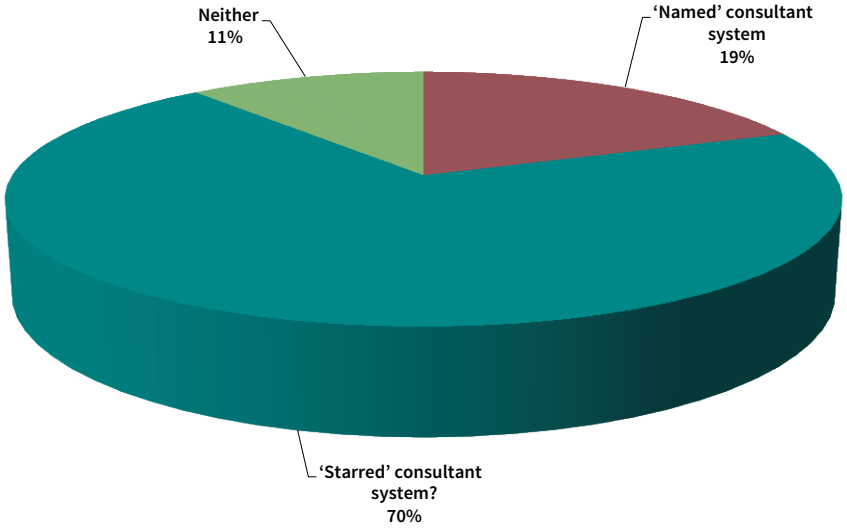


Figure 24 The 'named' and 'starred' consultant



The need for explicit supervision of trainees and other non-consultants on elective operating lists is increasingly important. This is variably recognised and resourced, either as a dedicated or shared consultant commitment. A key point for the provision of anaesthetic services is that all departments should have an agreed system whereby a named consultant is identified and recorded for every patient.[7] This will be the person to whom trainees or SAS doctors should turn for advice or help about patients under their care.

Having a named consultant for the session or day, who has no other duties and is always free to respond to trainees' and SAS doctors' needs must be the gold standard, although it does depend on the size and geography of the hospital.[8] A 'starred' consultant who will usually be responsible for a patient or patients in a neighbouring theatre or intensive care unit, but who is accompanied by another anaesthetist of sufficient experience, may or may not be able to respond rapidly. 19% of respondents to this Census now operate in their trust or hospital a 'named' consultant system, 70% operate a 'starred' consultant system and 11% operate neither. Providing a 'fit for purpose' system of supervision may not always be considered high priority by hospital management, but is increasingly important to achieve a suitable balance between the maintenance of patient safety and the delivery of effective anaesthetic training.

(b) SAS grade doctors

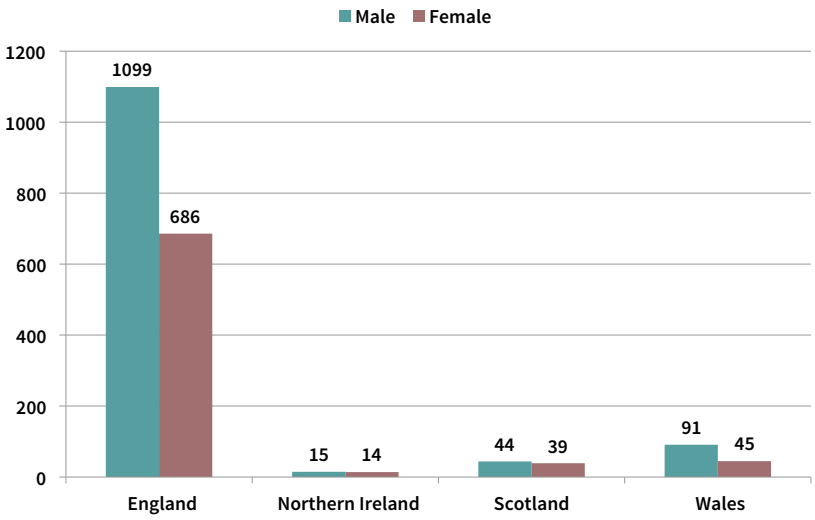
Staff and Associate Specialist (SAS) doctors are a heterogeneous group which includes associate specialists, specialty doctors and staff grade doctors. These groups have contracts under Terms and Conditions of Service that have been nationally negotiated. For the purposes of this Census, other groups that have been appointed by hospitals or trusts with varying and often individualised contracts such as 'trust-grade' doctors, have also been included. Where appropriate, this has enabled comparisons with the previous censuses to be made, as their numbers were also grouped together in this way. Doctors on the Medical Training Initiative (previously known as the Overseas Doctors Training Scheme) have been excluded, as they are a small number – about 100 distributed throughout the UK,[9] and most return to their home countries after two years. Pre- or post-CCT fellowship appointments are considered separately later.

According to the 2015 Census returns and when considered in this way, SAS grade doctors make up 21.6% of the anaesthetic workforce (2,047 SAS grade doctors versus 7,439 consultants) if LETB or deanery-funded trainees are not included. There are 14 SAS doctors in the Crown dependencies that have been included in this figure.

Due to differences in the way data about SAS doctors was collected, it has not been possible to compare data from the 2007 Census with that of later ones. However, comparisons between the 2010 and 2015 censuses have been possible for some of the data. In the 2010 Census the total number of SAS and trust-grade doctors throughout the UK was 1,784. In 2015 this figure is 2,047 representing an increase of 14.7% over five years, equating to an increase of about 2.9% per year.

The gender distribution of SAS and trust-grade doctors from data obtained in the 2015 Census is shown in Figure 25. Overall 61% are male and 39% female (the equivalent figures for consultants are 68% and 32% respectively).

Figure 25 SAS and trust-grade posts by gender



No information on gender was collected in the 2007 Census so we have only been able to compare the data from the 2010 and 2015 censuses. Comparative data of the gender distribution of SAS and trust-grade doctors by UK nation in 2010 and 2015 is shown in Table 5 and Figures 26 and 27. With Scotland being the exception there have been varying increases in the proportion of female SAS and trust-grade doctors between 2010 and 2015.

Table 5: Gender distribution of SAS and trust-grade doctors

England	2010	2015	NI	2010	2015
Total	1,553	1,785	**Total**	27	29
Male	1,017 (65%)	1,099 (62%)	**Male**	23 (85%)	15 (52%)
Female	536 (35%)	686 (38%)	**Female**	4 (15%)	14 (48%)
Scotland			**Wales**		
Total	99	83	**Total**	105	136
Male	46 (46%)	44 (53%)	**Male**	72 (69%)	91 (67%)
Female	53 (54%)	39 (47%)	**Female**	33 (31%)	45 (33%)

Figure 26 SAS and trust-grade posts (male) by devolved nation

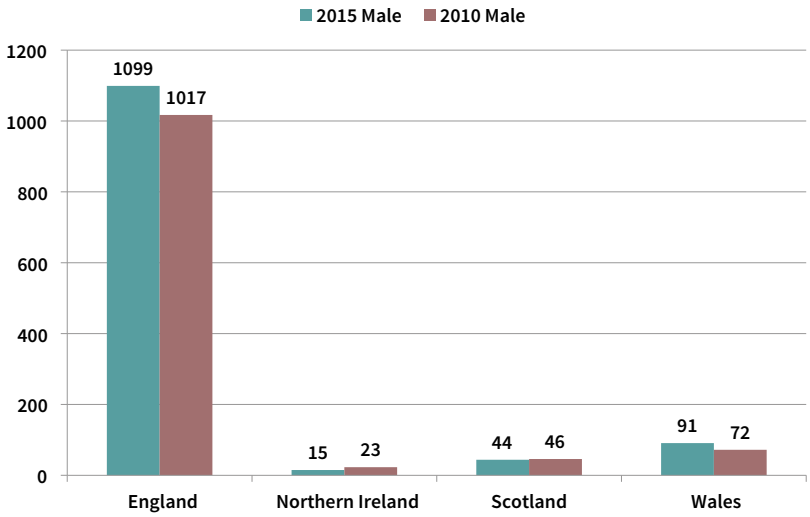
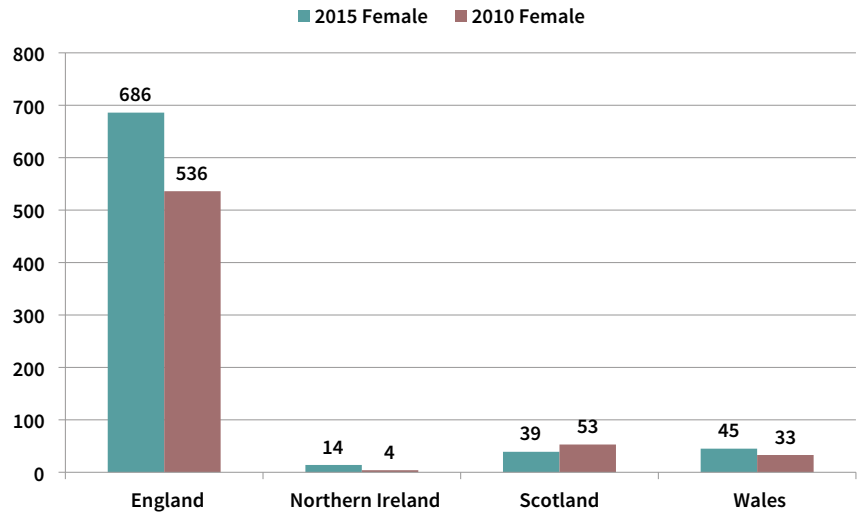


Figure 27 SAS and trust-grade posts (female) by devolved nation



Participation rates

A breakdown of those working full-time (ten PAs or more) or less-than-full-time (less than ten PAs) according to UK nation is shown in Table 6 and Figure 28.

Table 6 Participation rates

	England	Northern Ireland	Scotland	Wales	
FT	1,631	25	70	118	1,844
LTFT	154	4	13	18	189
					2,033

(Data excludes 14 SAS doctors in the Crown dependencies)

Figure 28 SAS and trust-grade posts (full-time and less-than-full-time) excluding 14 SAS doctors from the Crown dependencies

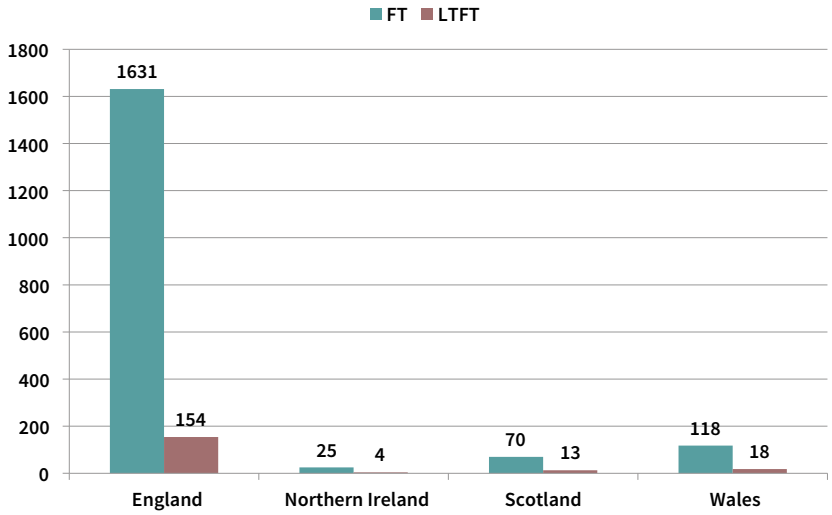


Table 7 SAS doctors (Trust grades excluded in this section)

Number of PAs	Male	%	Female	%	Total
More than 10	846	71	349	29	1,195
10	129	50	129	50	258
9	8	28	21	72	29
8	10	24	32	76	42
7 or fewer	33	36	59	64	92

SAS doctors have similar work patterns to consultants. Only 16% of SAS doctors work to a ten PA contract with males and females represented equally (8% of each). A more detailed breakdown of the number of PAs worked is shown in Table 7 and Figure 29. Like consultants, nearly three-quarters (74%) of SAS doctors currently work more than ten PAs, and of these 71% are male and 29% are female. Equally important, 10% of SAS doctors work nine PAs or fewer than nine PAs, and there are more female SAS doctors than male in this group (7% versus 3.1%). As the proportion of female SAS doctors has increased over the last five years (Table 5 and Figure 26 and 27), this may impact on future workforce numbers.

Figure 29 Number of SAS grades by numbers of PAs worked

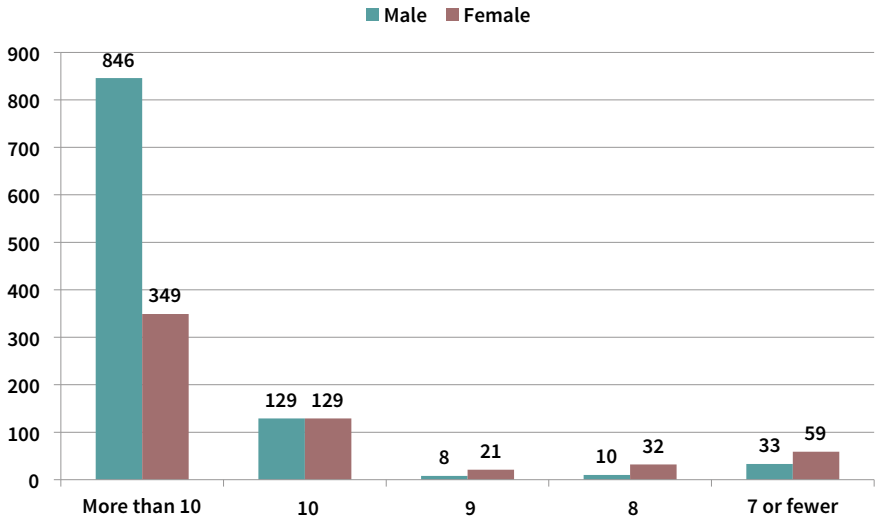


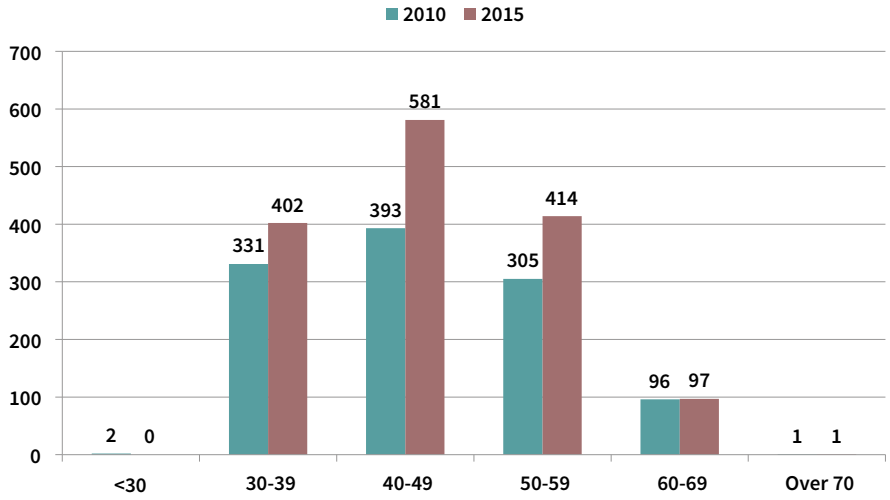
Table 8 Age distribution of SAS doctors

Age (yrs)	England	Northern Ireland	Scotland	Wales
<30	0	0	0	0
30–34	123	3	7	10
35–39	224	4	13	18
40–44	264	7	17	23
45–49	231	5	11	23
50–54	201	5	17	13
55–59	152	1	13	12
60–64	63	3	3	11
65–69	14	0	0	3
70 or over	1	0	0	0

In the 2015 Census the largest cohort of SAS doctors is aged between 40 and 54 years (Table 8). Retirement plans will vary and, as is the case with consultants this must be taken into account when planning replacement posts. There is anecdotal evidence that recruitment to this grade may be getting more difficult, and that vacancies may be replaced by other categories such as PA(A)s or consultants.

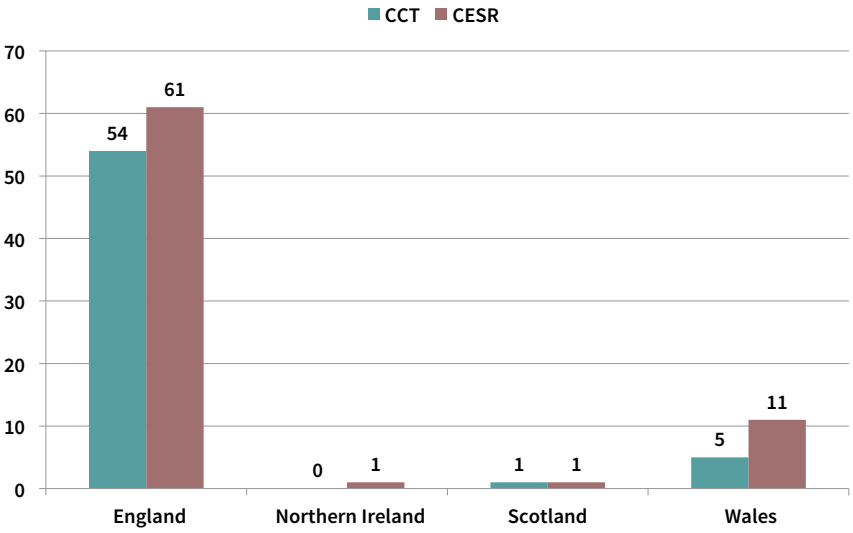
It is apparent from Figure 30 that the age distribution in 2015 is similar to that in 2010. In both censuses, just over a quarter (27%) are aged between 50 and 59 years.

Figure 30 The difference: 2010 and 2015 SAS ages



Interestingly, a significant number of SAS anaesthetists hold a CCT or CESR (Figure 31). This may signify a desire for an alternative or more flexible work/life balance from that of consultants.

Figure 31 Number of SAS grades with CCTs and CESRS



As we did for the consultant group, we asked clinical directors whether their trust or hospital has weekday evening and weekend elective or emergency (we used the term 'CEPOD' list)[6] PAs done by SAS doctors and, if so, the average number per week. The results are shown in Figures 32 to 35. Seemingly, a relatively small percentage of trusts have SAS doctors who do weekday evening elective or emergency work (12% and 24% respectively). The results are not dissimilar for weekend working. This, of course is not to say that SAS doctors do not work in the weekday evenings and at weekends. The more likely explanation is that SAS doctors contribute to the various tiers of 'in-house' shifts (covering work in emergency theatres, obstetrics and intensive care) because the number of LETB or deanery-funded trainees is often insufficient to cover these without them. The exact contribution of SAS and trust-grade doctors to such rotas is unknown and was not established in this Census. It may also make them less available to undertake waiting-list sessions (Figure 23).

Figure 32 Elective weekday evening PAs done by SAS grades

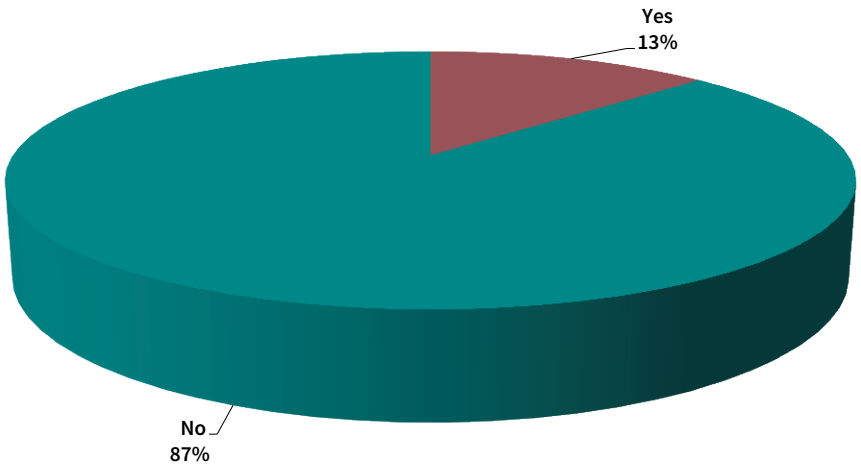


Figure 33 Emergency weekday evening PAs done by SAS grades

Figure 34 Elective weekend PAs done by SAS grades

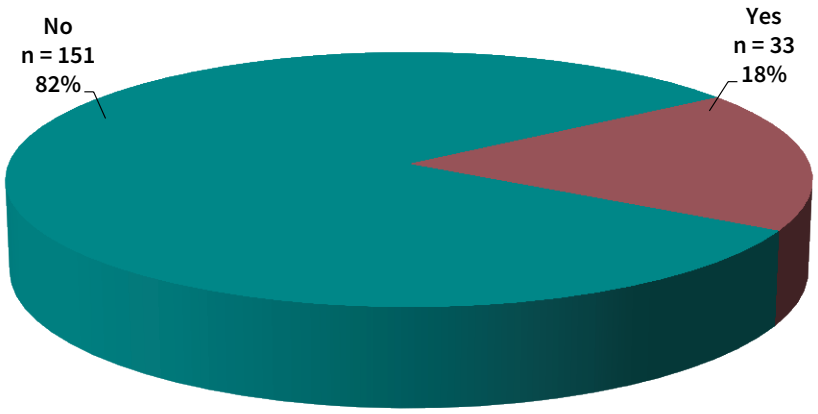
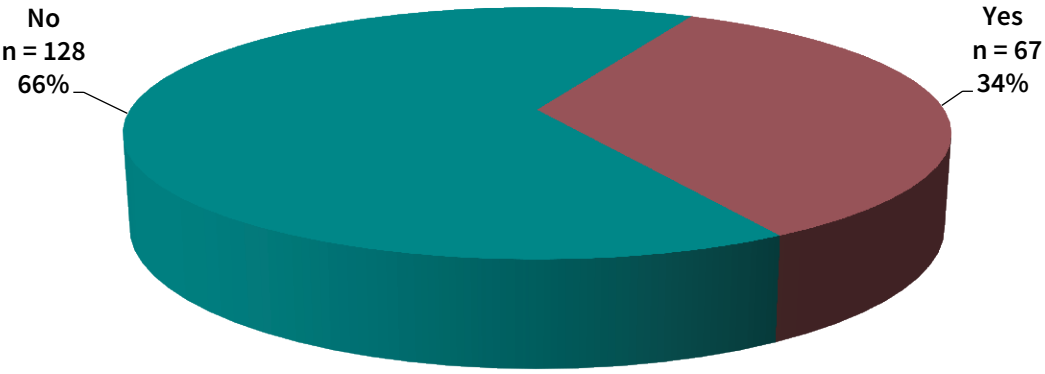
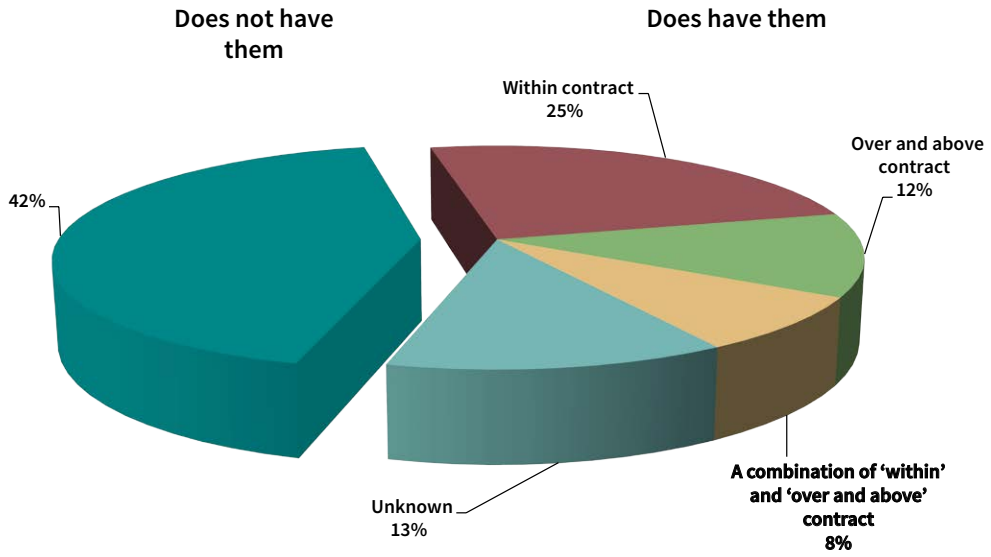


Figure 35 Emergency weekend PAs done by SAS grades



A total of 25% of respondents said that their SAS doctors perform weekday evening and weekend elective or emergency PAs within their contract, 12% of respondents said they do so over and above their contract, and 8% said that they did a combination of both (Figure 36).

Figure 36 Breakdown of weekday evening and weekend PAs performed by SAS doctors within or over and above contract

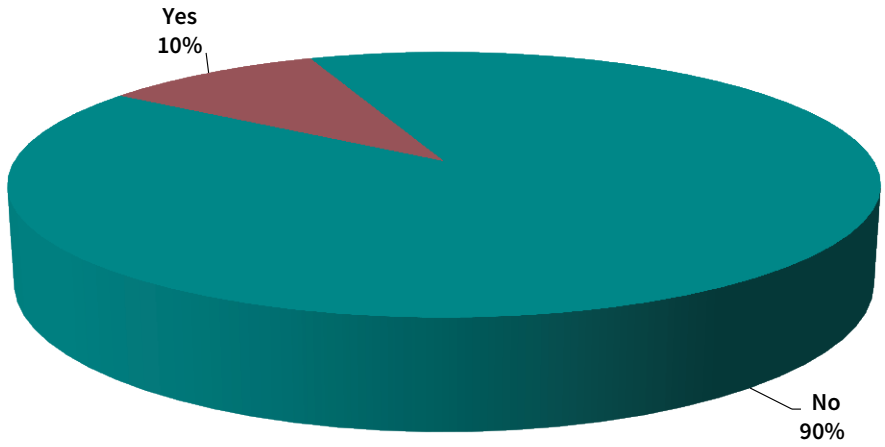


Guidance for coming off the rota or modifying contribution to the out-of-hours rota with age

We asked clinical directors whether their departments had any guidelines or a policy regarding older consultants or SAS doctors coming off the on-call rota. It is interesting to note that whilst nearly 30% of departments have such guidelines for consultants, only 10% have them for SAS doctors (Figures 37 and 38). This difference in practice might raise concerns regarding indirect discrimination. Although the reason varies, it is probably most often due to ill health, and the decision to come off the rota is usually mutually agreed between employer and employee on an individual basis. Formal regulation might be difficult.

Figure 37 Are there guidelines or policies for older consultants coming off the on-call rota?

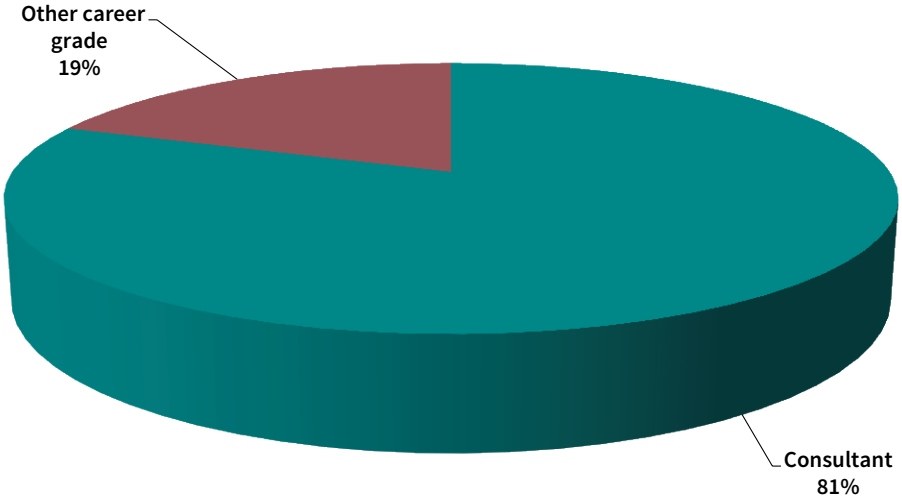
Figure 38 Are there guidelines or policies for older SAS grades coming off the on-call rota?



Retires and Returns

As a result of changes to NHS and state pension regulations, and as a result of changing attitudes to work, actual retirement age has become more difficult to predict than in the past when many, perhaps most doctors worked until 65 years of age. Senior doctors are choosing, and employers are prepared to offer, 'retire and return' positions in their trusts. This Census identified 250 doctors who had returned to work. 202 (81%) of these were consultants and 48 (19%) were SAS doctors (Figure 39). There may be more than this number as not all respondents answered this question fully.

Figure 39 'Retire and Returns' by grade.



However, the conclusion that we can draw from the data is that as a proportion of the total numbers currently working, a minimum of 2.7% of doctors (consultants or SAS doctors) in England have retired and returned. The equivalent figures for Northern Ireland, Scotland and Wales are 1.49%, 1.66% and 3.88% respectively (Figure 40).

Similarly, we estimate that a minimum of 2.7% of the total consultant workforce and a minimum of 2.4% of SAS doctors have retired and returned (Figure 41). From Figure 42 it can be seen that males are nearly twice as likely to retire and return as females (3.1% of males versus 1.7% of females). As stated elsewhere, if the proportion of females in the workforce is increasing, the fact that female senior doctors are less likely to return to work after retirement will need to be taken into account.

Figure 40 'Retire and Returns' by devolved nation

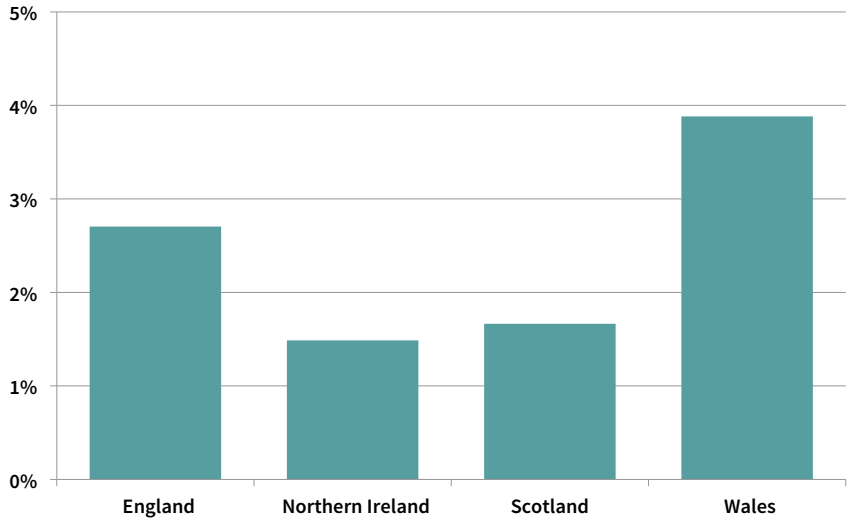


Figure 41 'Retire and Returns' by grade

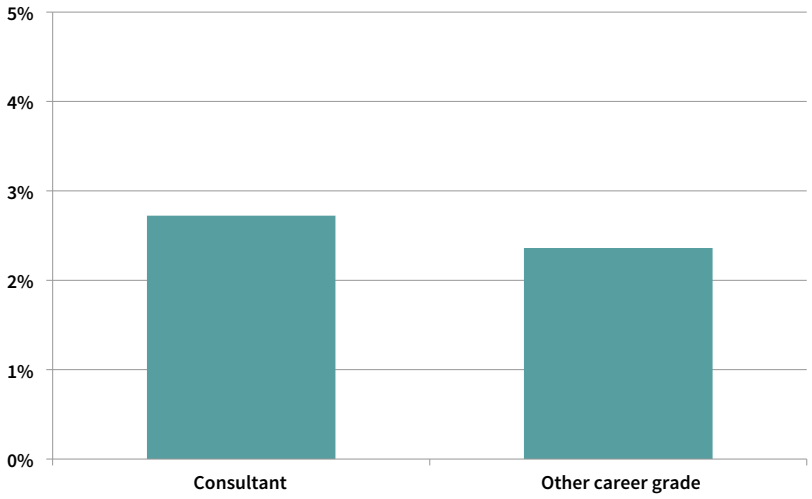
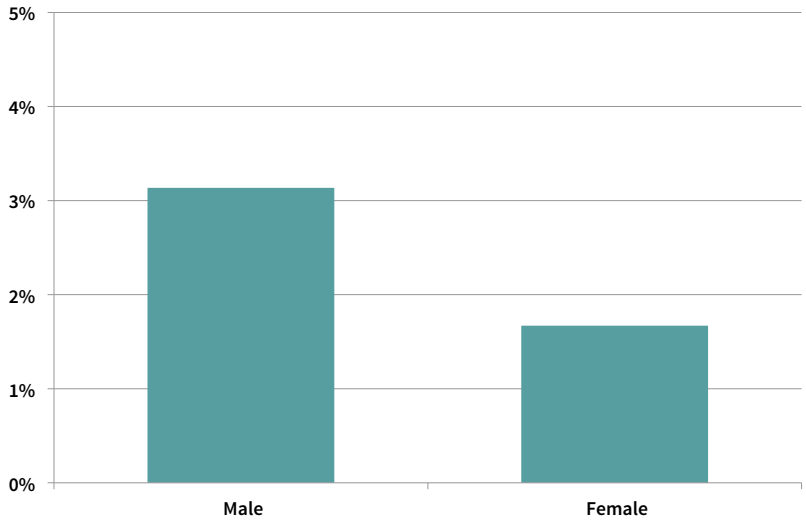


Figure 42 'Retire and Returns' by gender



Consultant and SAS posts needed in next two years

Over 50% of the 217 respondents (out of a maximum possible of 224) expected to require 0–5 posts, and over 30% 5–10 posts in the next two years. 10% suggested 10–20 posts. Although we did not ask whether these would be replacement or new posts, we did ask this in a separate question about currently advertised posts (Figure 44). 55% of those trusts that at the time of the Census had advertised posts were advertising replacement posts and 27% were advertising new posts (giving a ratio of 2:1 replacements to each new appointment). 18% of trusts had advertised for 'other' posts.

Whilst the data cannot be extrapolated to exact or total overall numbers, it is clear that those responsible for the staffing of UK anaesthetic departments at a local level are expecting continued expansion. In 2012, HEE took over the functions of Strategic Health Authorities and now conducts, via LETBs, an annual exercise of demand forecasting as expressed by providers. Their 2016 workforce plan for England has not been published. The CfWI 2015 report's 'principal demand projection' – which is the 'expected' or 'most likely' future demand scenario shows a potential increase of 4.7 per cent annually and this would see the number of anaesthetic and intensivist CCT holders needed (in England) rising to 11,800 full-time-equivalents in 2033.

Figure 43 Number of posts envisaged as needed in the next two years

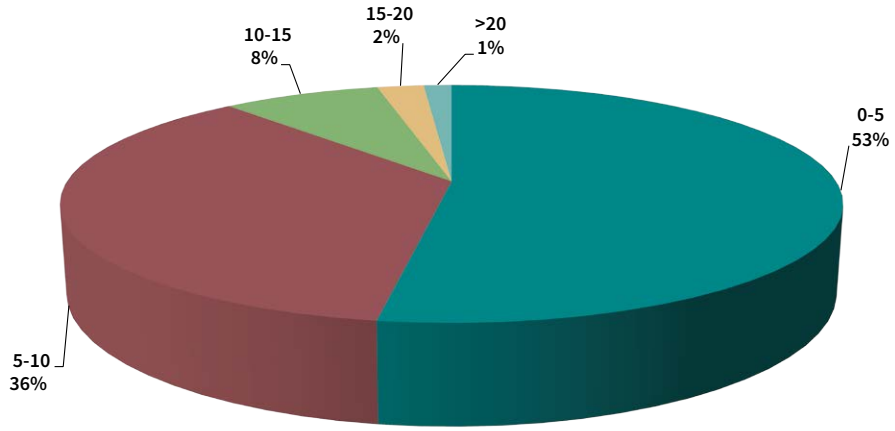
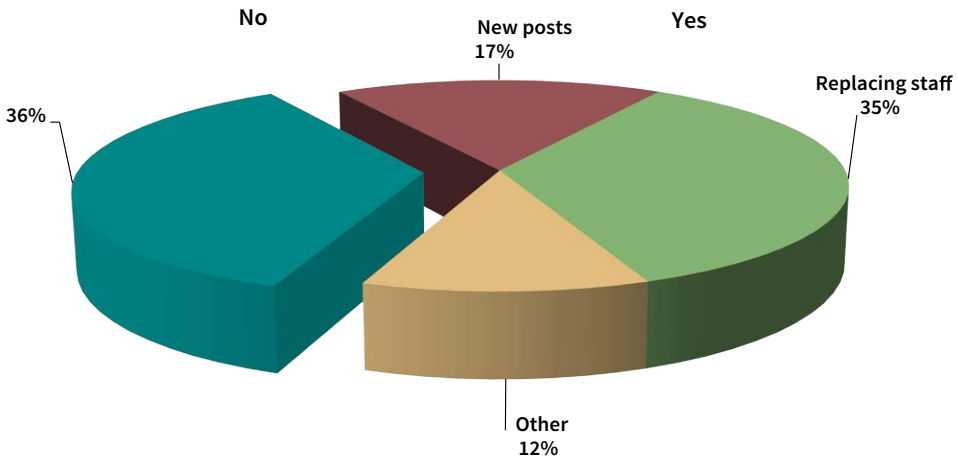


Figure 44 Are there any posts currently advertised?



(c) The training grades

In this Census we were unable to collect accurate robust data of the total number of LETB/deanery funded full-time or less-than-full-time trainees working in each department. This information can be sourced elsewhere and College data suggests a figure of around 4,500 UK-wide. We asked about the number of empty posts in each department (Figure 45) and, whilst there were some non-responders to parts of these questions, we identified a total of 424 empty LETB/deanery funded training posts throughout the UK (48 empty or unoccupied ACCS, 95 core training and 281 specialty training posts). Failure to recruit was the cause in 166 of the responses (Figure 46). If the 248 trainees absent because of maternity leave, paternity leave, long- term sick leave or Out-of-Programme Experience are included in the total (Figure 51), approaching 15% of all LETB/deanery funded training posts were unfilled at the time of the Census.

In many hospitals SAS doctors and other groups contribute to the same rotas as trainees. It was noted earlier in this report that 223 of the 2,047 UK SAS doctor posts are unfilled (Table 4 and Figure 16). When the LETB/deanery funded trainee gaps and unfilled SAS posts are taken together with other trust-grade posts, fellowships and Medical Training Initiative (MTI) doctors, approximately 14% the total are empty or unoccupied.

Figure 45 Number of LETB or deanery trainee posts empty or unoccupied

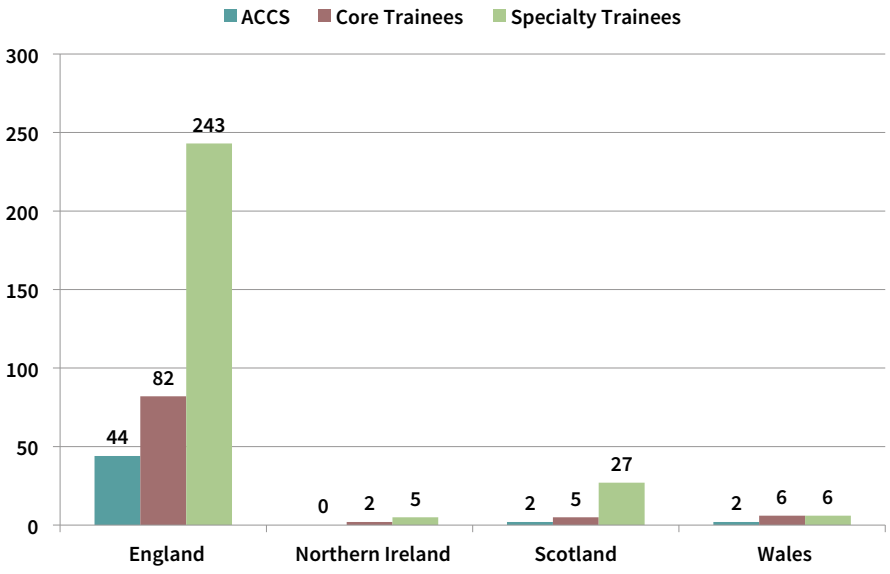
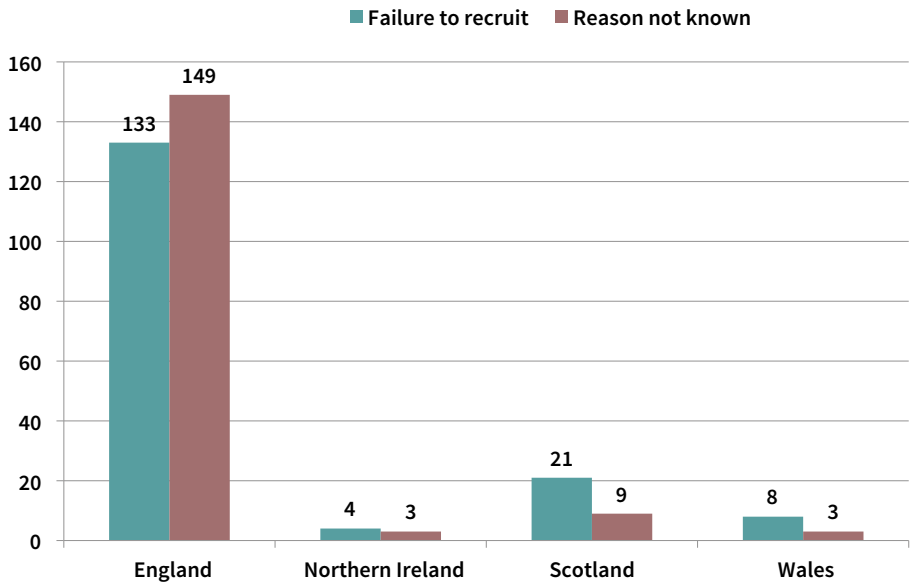


Figure 46 Reason for empty LETB or deanery trainee posts



We also asked about 'gaps' in the trainee or SAS rotas. Overall nearly 70% of departments have to cover gaps in the trainee/SAS rotas more frequently than once a week, with 19% needing to do so every day (Figure 47). When this is broken down by UK nation, 35% of departments in Scotland have to cover gaps in the trainee or SAS rotas at least once per week. The figures for England, Wales and Northern Ireland are 89%, 92% and 100% respectively (Figure 48).

Figure 47 How often does your department cover gaps in the Trainee/SAS rotas?

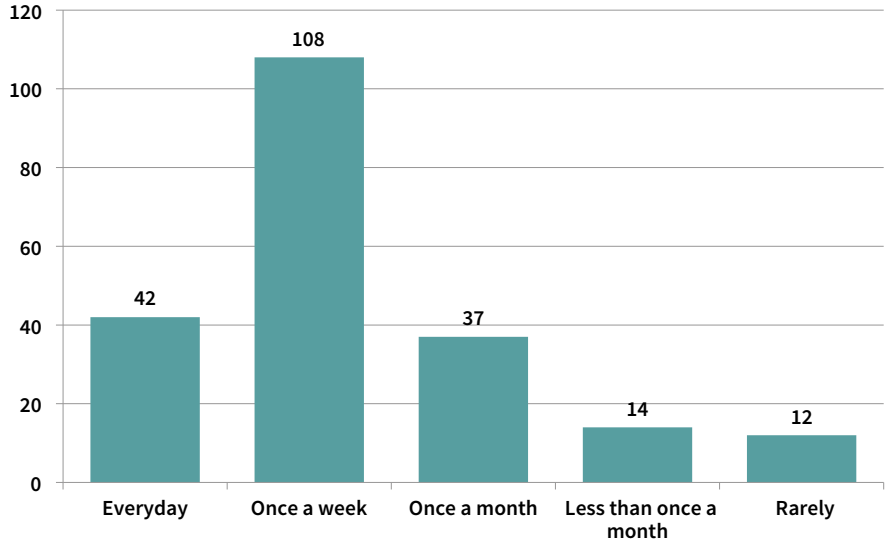
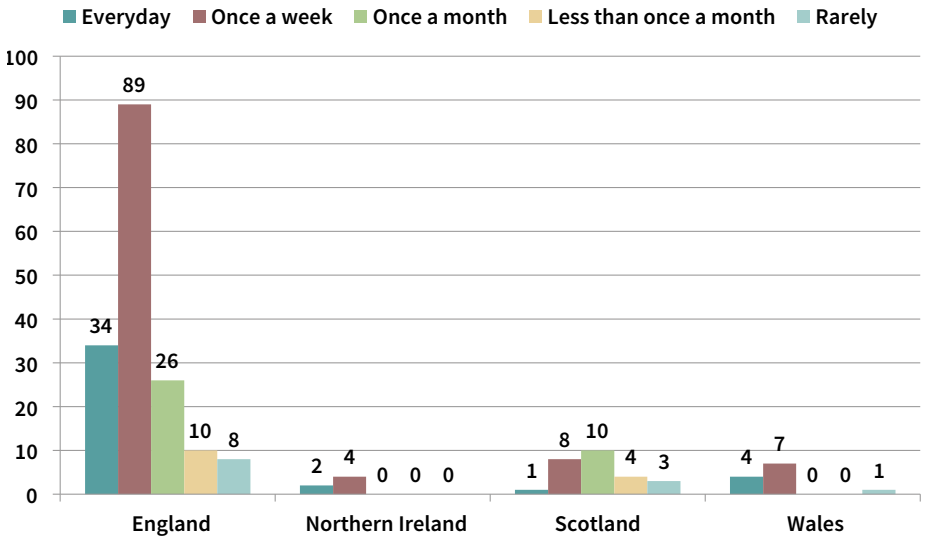
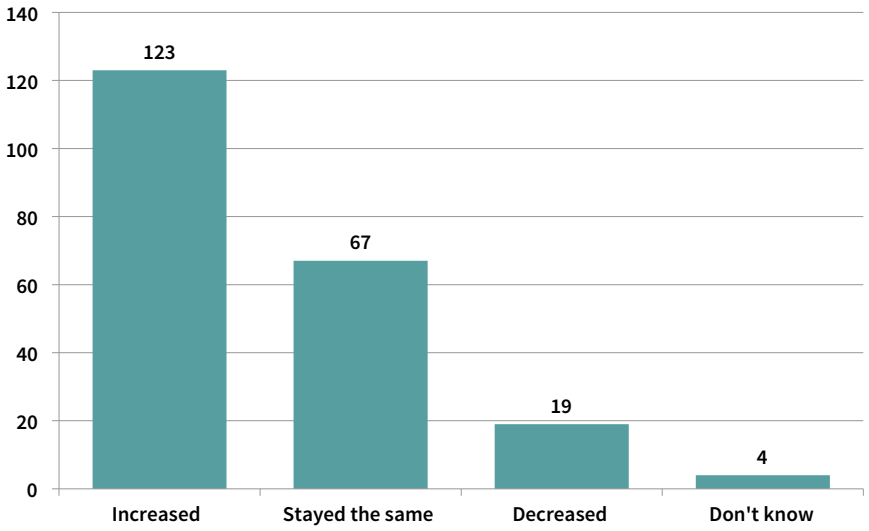


Figure 48 How often does your department cover gaps in the Trainee/SAS rotas? By devolved nation



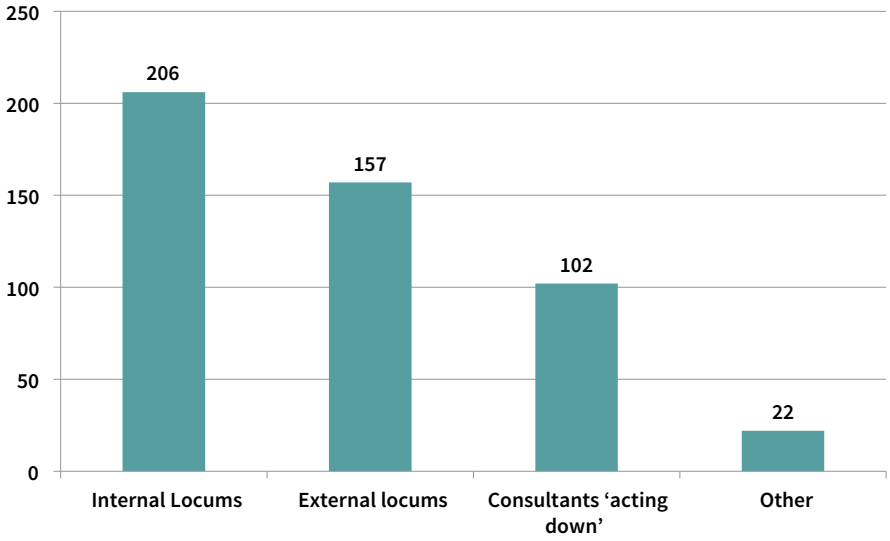
Just over half (55%) of respondents stated that the number of trainee/SAS rota gaps have increased over the last 12 months, with 30% stating that they had remained the same (Figure 49).

Figure 49 Trainee/SAS rota gaps within the last 12 months



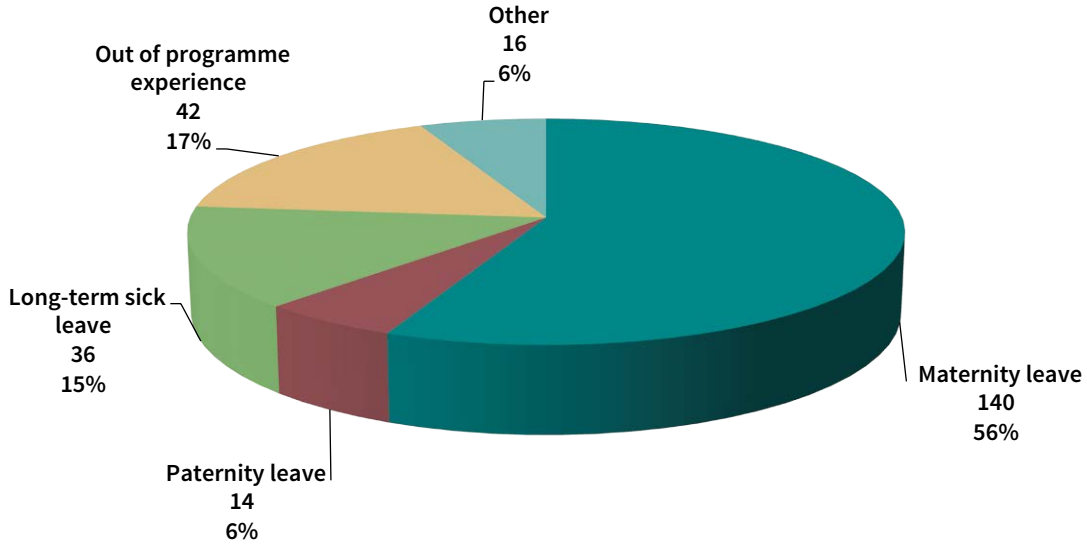
It can be seen from Figure 50 that internal locums are employed to cover the majority of gaps in the trainee rotas. In other words, trainees who are already working in a department are being asked to do, or will offer to do, additional shifts in the same department. This will inevitably reduce the available weekly training opportunities. Others are being employed elsewhere as external locums, and there will be a similar effect. Departments may employ more than one of the categories to cover gaps, so they are not mutually exclusive. It is worth noting that it is not uncommon for consultants to 'act down'. Of the 211 respondents to this question, almost all (98%) used internal locums, almost three-quarters (74%) used external locums, and nearly half (48%) used consultants 'acting down'.

Figure 50 How are the gaps in trainee rotas covered?



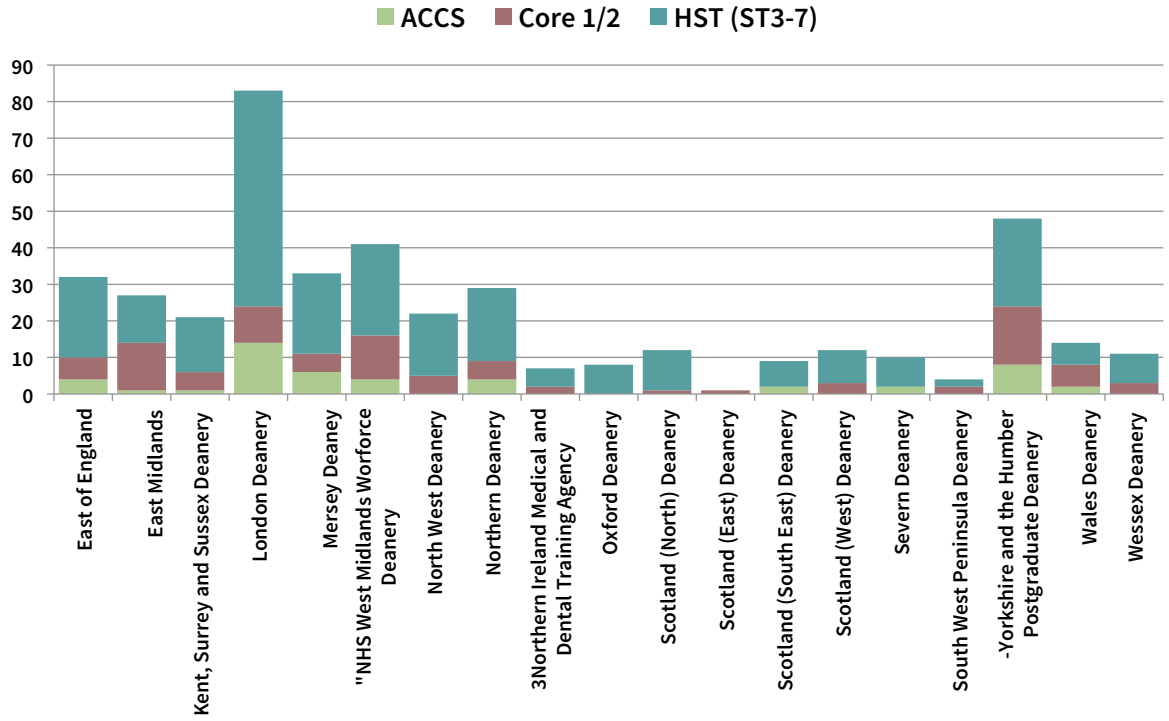
Rota gaps may not necessarily be due to a failure to recruit. They may be due to an employee (in this case a trainee) not being at work. Figure 51 shows that, when asked for the reasons why an incumbent trainee may not be at work, over half of the respondents (56%) gave maternity leave as a reason. Other reasons included long-term sick leave, paternity leave and Out-of-Programme Experience. The situation is complex but it is not always possible to find or fund a replacement to cover such absences. Gaps in the trainee rotas are thus inevitable.

Figure 51 Reasons for trainees not being at work



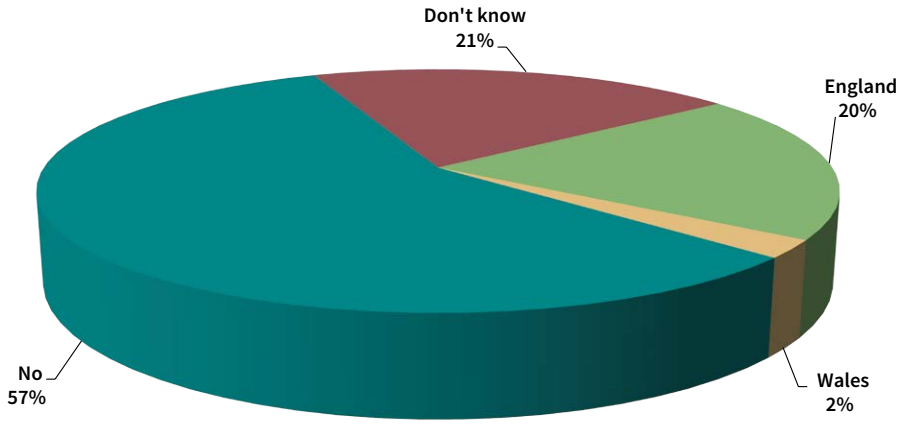
The break down by deanery of the data on empty or unoccupied posts by level of training is illustrated in Figure 52. It can be seen that there is a considerable number of unfilled ACCS and core training posts, and that this varies according to deanery or LETB. College data indicates that the UK-wide ST3 fill-rate for August 2015 was 93% with a range of 52–100%. Fill-rates at core level are usually 100%, but concerns have been expressed about attrition rates during core training, which also vary according to deanery or LETB. There is therefore a strong argument for improving the ST3 fill-rate by expanding the current core training numbers. The relatively high proportion of HST (ST3–7) vacancies identified in this Census may be also be due to gaps created when an ST7 obtains CCT. There is evidence from a recent survey of CCT choices, to be published in a future issue of the RCoA Bulletin, that the period of grace is not fully utilised, with only 24% using any of it and just over three-quarters of those surveyed not using any time at all. Of those that do, 54% of respondents used 0–3 months and 36% 3–6 months. Of those trainees who responded to the survey, nearly 70% moved into a consultant post and 19% obtained a fellowship post. Because of the biannual national recruitment process, there is an inevitable delay in their replacement.

Figure 52 Number of LETB/deanery funded anaesthetic posts empty or unoccupied (by deanery)



Respondents were asked if they knew whether any LETB or deanery anaesthetic posts were being decommissioned from their hospitals. Only England and Wales appear to be affected by decommissioning, with 22% of respondents answering in the affirmative (Figure 53). It is not clear if these are ACCS, core or HST posts, but overall this contradicts the recommendations of the CfWI's 2015 in-depth review.

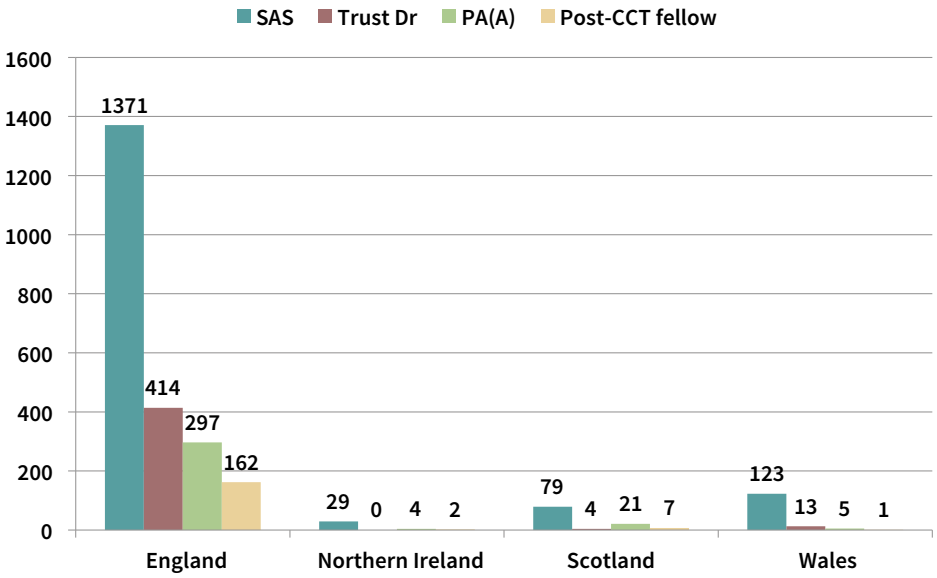
Figure 53 Are LETB/deanery anaesthetic training posts being reduced/decommissioned?



Trust-grade and fellowship posts

It has been the case for some time that as a result of the limit on deanery or LETB funded training posts and the gaps in rotas we have highlighted in this Census, trusts have appointed their own 'trust-based' non-training posts to help with service provision. They are variously called 'locum appointment service' (LAS) posts, 'trust–grades', 'middle grades', 'fellowship posts', and so on. Such posts may also fulfill a useful purpose for the incumbent, who is motivated to apply for such a post for a variety of reasons.[10] Some are between core and HST whilst, others have completed their training and are post-CCT. Previous censuses have not identified these groups separately, but there is an impression that they have increased in number over recent years. It is interesting to note that the 2015 Census has identified 431 trust doctors and 172 post-CCT fellowship posts.

Figure 54 Breakdown of other career grade anaesthetists



(d) Physicians' Assistants (Anaesthesia)

Respondents to the 2015 Census may not have considered Physicians' Assistants in Anaesthesia PA(A) as a discrete and separate workforce because the number revealed in this Census is markedly different from existing College data. Other groups, such as Advanced Critical Care Practitioners and Nurse Practitioners, may have been included, resulting in an overestimate. Exact PA(A) numbers in Figure 54 are therefore inaccurate. However, we know from the Association of Physicians' Assistants in Anaesthesia and from the University of Birmingham that, as of February 2016, there are a total of 165 PA(A)s. The numbers obtained in this Census have therefore been excluded. The College is currently working to establish a register of all PA(A)s in employment within the UK, and we hope to be able to provide accurate data regarding this workforce in due course.

2 Focus on hospitals

In the 2015 Census, clinical directors or heads of service were asked for some basic information on the size of their hospitals or trusts. We asked for the total number of surgical beds in the hospital or hospitals for which the respondent was answering, the number of Level 2 and Level 3 critical care beds, the number of deliveries in the obstetric unit, and the specialist services provided.

It can be seen (Figures 55–57) that 67% of 224 hospitals have between 101 and 500 surgical beds. Interestingly, 27% of hospitals have ten or fewer Level 2 or 3 critical care beds, with a further 43% having between 11 and 20 such beds. 20% (1 in 5) of obstetric units have less than 2,500 deliveries per year, and 37% have between 2,500 and 5,000. From these data, it seems that, although potentially unpopular, the reconfiguration of smaller units must be considered.

Figure 55 Breakdown of hospitals by number of surgical beds

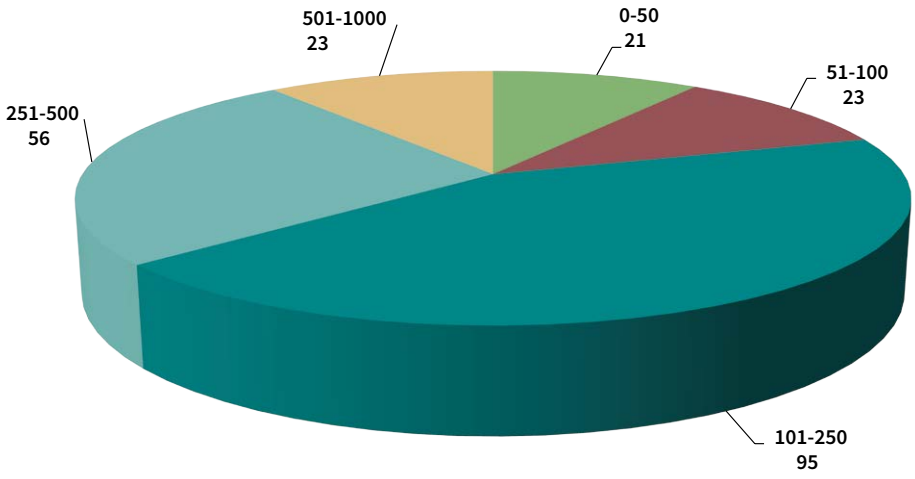


Figure 56 Breakdown of hospitals by number of critical care beds

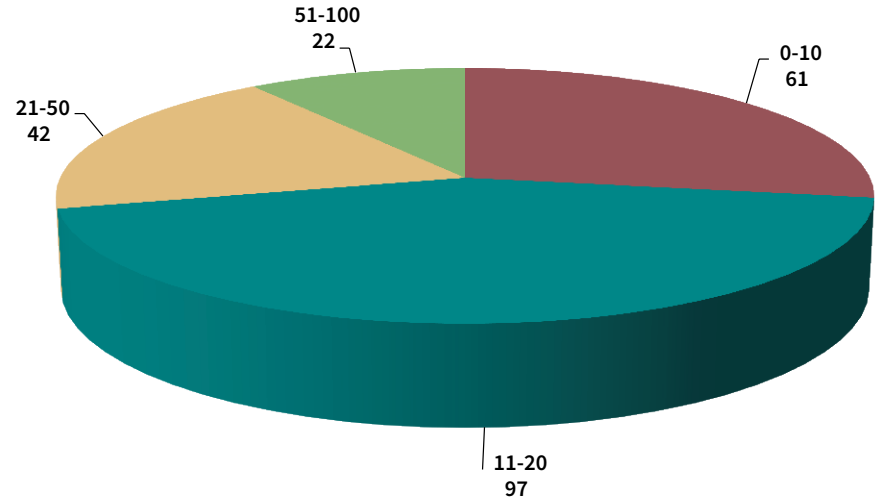
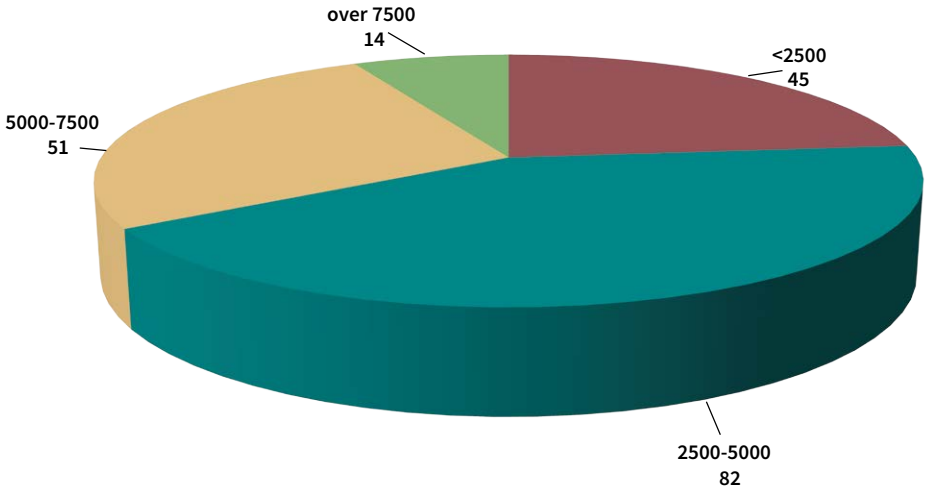
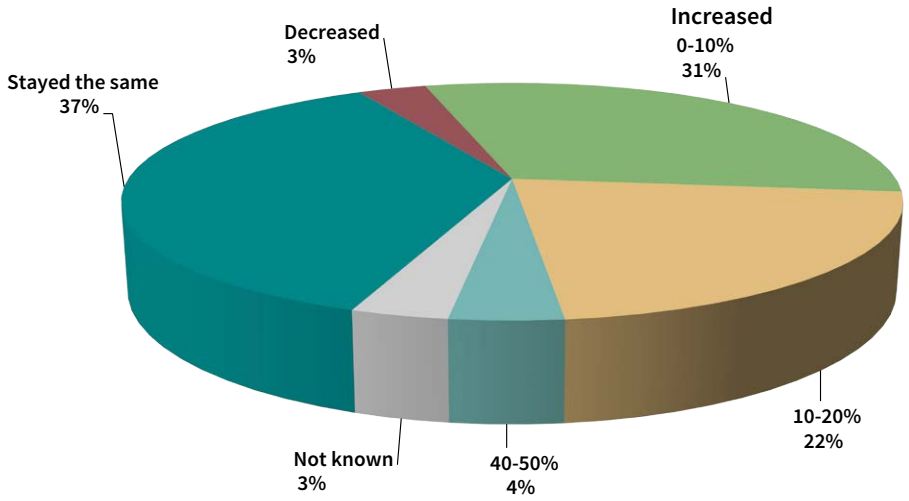


Figure 57 Breakdown of hospitals by number of obstetric unit deliveries



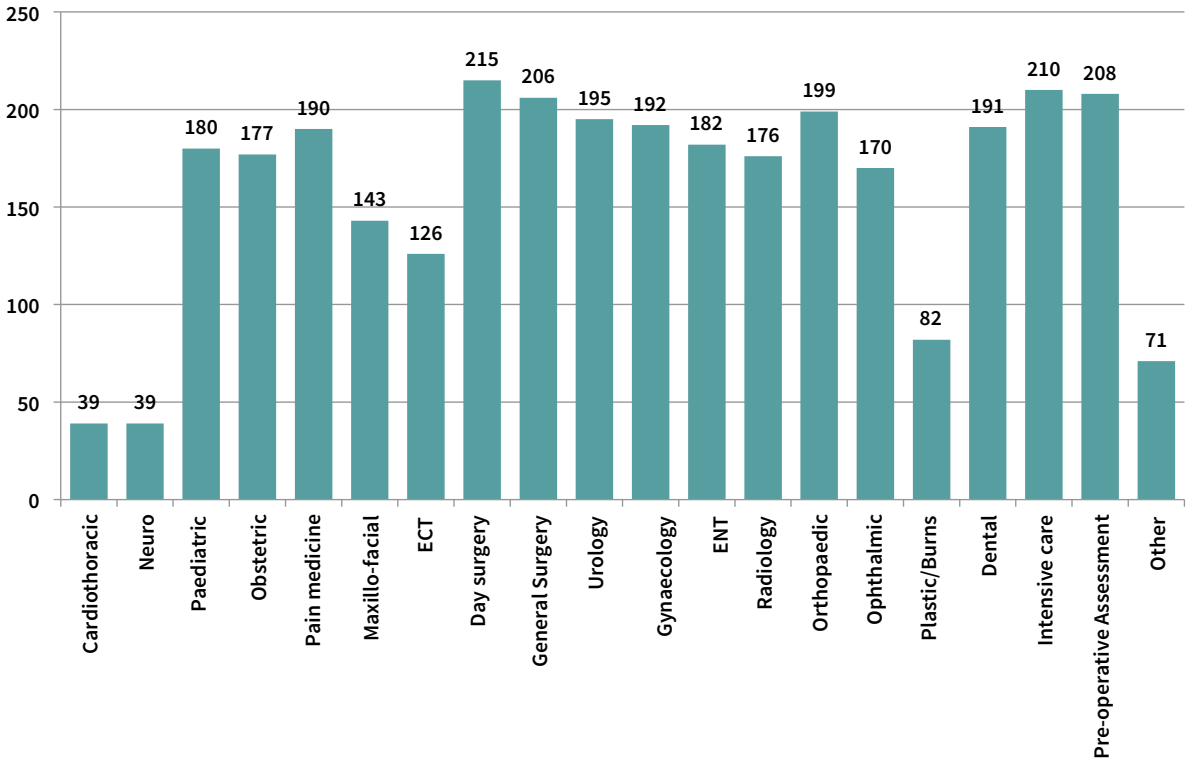
As documented elsewhere,[11] the workload of the obstetric anaesthetist continues to increase. Respondents were asked if the obstetric workload in their trust or hospital had changed over the last two years (Figure 58). 60% stated that it had increased, just under 40% said it had remained the same, and only a very small number said it had decreased. When asked about the percentage increase in workload, nearly one-third of respondents (in trusts where the workload had increased) confirmed that it had increased by up to 10% and a further one-fifth said that it had increased by between 10 and 20%.

Figure 58 Has the obstetric workload increased and, if so, by how much?



Respondents were asked what surgical specialties are available in their hospital and these are shown in Figure 59.

Figure 59 Provision of services by hospitals



They were also asked about the numbers of consultants and SAS doctors with PAs in each specialist area. It is common, but not universal, for a consultant or SAS doctor to have PAs in more than one specialist area. The data obtained must be interpreted with caution as for the purposes of this Census, where a department had more than 50 consultants in any one area we recorded the number as 50. Figures 60 and 61 give an indication of the way in which PAs are distributed among the specialist areas for consultants and SAS doctors respectively. The key points to note from both figures is the large numbers of both consultants and SAS doctors who have flexible sessions. The numbers that are allocated to preoperative assessment clinics is also interesting. These commitments probably represent responses to the changing needs of the service.

Figure 60 Numbers* of consultants with PAs in each specialist area (*where the respondent stated 'more than 50' the number recorded is 50)

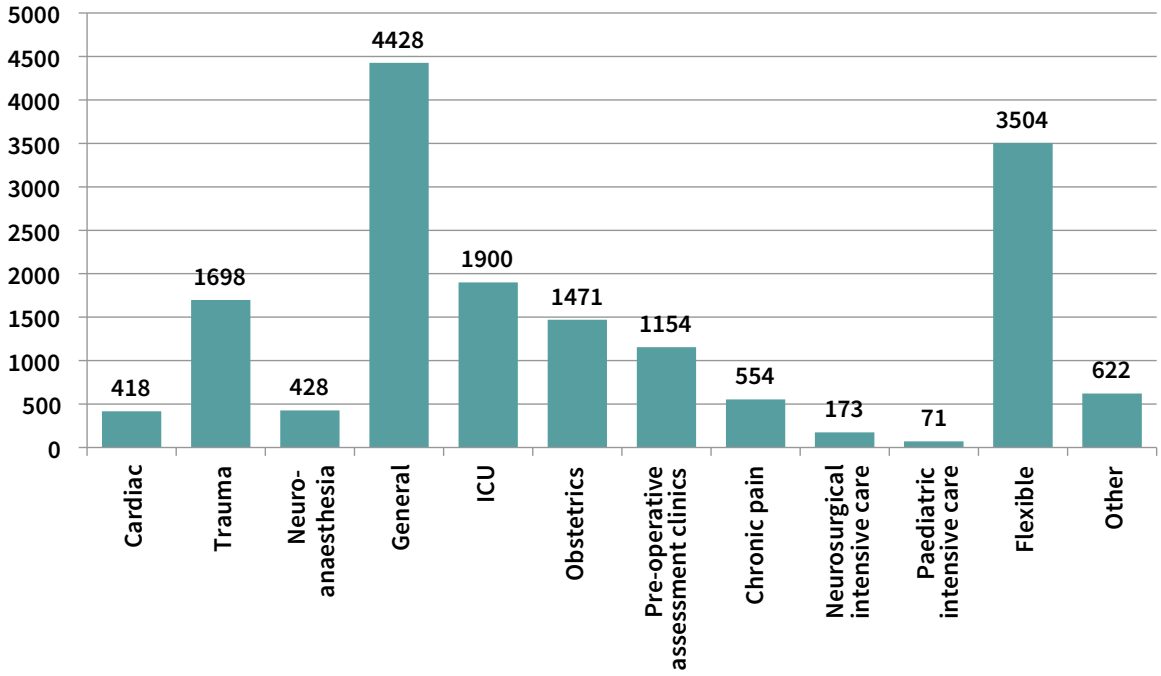
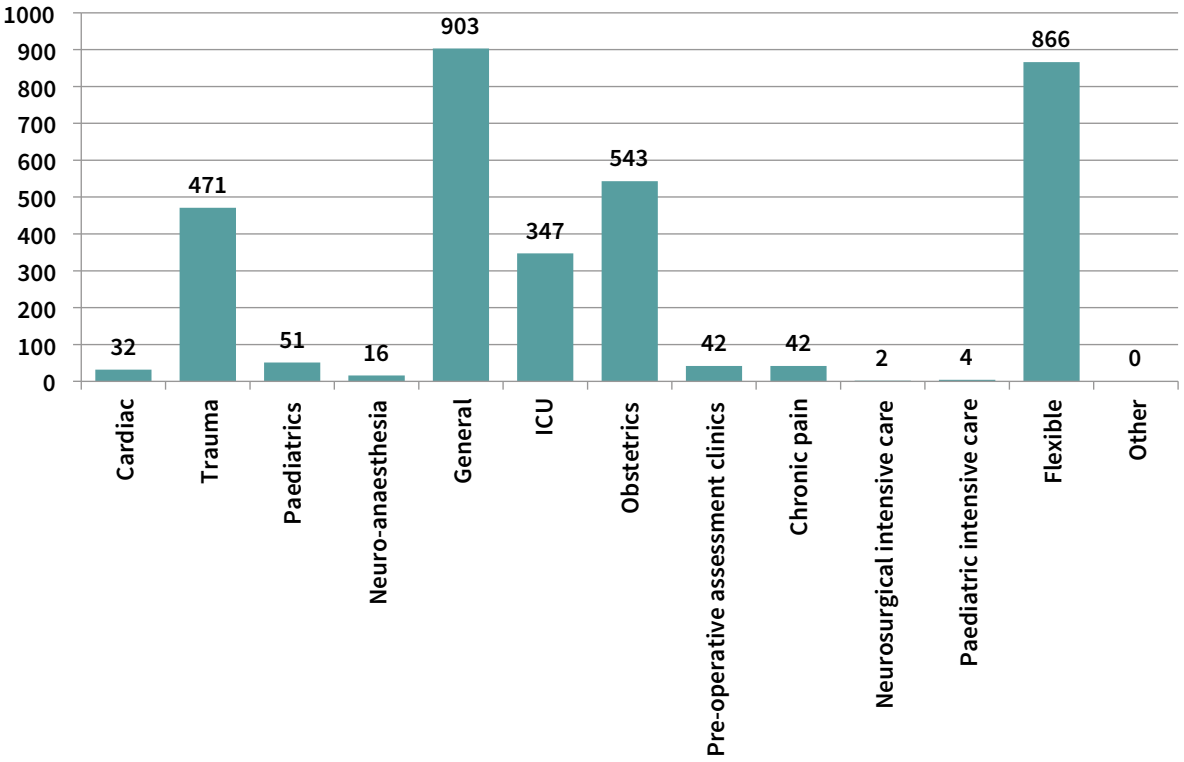


Figure 61 Numbers* of SAS doctors with PAs in each specialist area (*where the respondent stated 'more than 50', the number recorded is 50)



CONCLUSION

Most anaesthetists will be only too aware of the increasing service demands placed upon them and the financial constraints their trusts and boards are under. Objective information is essential when making the case for additional resources, and this Census provides comprehensive data on all aspects of our workforce. There have been significant and welcome increases in the numbers of trained anaesthetists (consultants and SAS doctors) since the previous Census in 2010, but this 2015 Census also confirms an existing unmet need, identified elsewhere. The specialty is embracing more flexible working patterns, and many consultants and SAS doctors have onerous workloads and are already contributing to elective and emergency work, as distinct from on-call commitments, outside conventional working hours (evenings and weekends). Flexible sessions are common. Gaps in consultant rotas are not infrequent, and are usually covered internally, with consultants also 'acting down' on trainee rotas. A significant percentage of consultant and SAS posts are unfilled, and the consultant population appears to be ageing. Female consultant and SAS doctors form a greater proportion of the anaesthetic workforce than in previous censuses, and they may have attitudes towards work that are different from those of their male counterparts. Indeed, this difference may be reflected more generally in the younger generation of doctors striving for a more acceptable work-life balance for themselves and their families. The participation rates of female consultants and SAS doctors are seen as more likely to be lower than those of their male colleagues; they may also be less likely to want to return to work after retirement. In the light of changes to the NHS pension scheme, additional work to investigate the retirement behaviour of all groups is necessary.

A significant number of LETB/deanery funded training posts are unfilled, either due to failure to recruit or, equally importantly due to long-term absence on maternity, paternity or sick leave. There are regular and frequent gaps in trainee and SAS doctors' rotas. Internal locum cover of these gaps is common, which may detract from training. Some posts have been decommissioned. Existing data within the College confirms that although the fill-rates at CT level are 100%, this is not the case at ST entry. More work is underway to establish attrition rates and the causes, and there are plans to look at the CT/ST interface because of this. Although not part of this Census, recent work by the College has established that the 'period of grace' is not fully utilised. Trainees are moving into available consultant posts, and a significant number obtain post-CCT fellowships; the reasons for the latter also need to be explored in more detail. PA(A)s are only present in small numbers at the moment, but collaborative work to develop their role is now underway and they will undoubtedly assume greater importance over time. The MTI scheme may also assume more importance.

Summary of future plans

The College plans to integrate the findings of this Census with emerging work in collaboration with CLWRota to map the magnitude of clinical work carried out in non-consolidated sessions such as waiting-list initiatives, ad hoc locum sessions, and regular trainee lists as a further measure of need for growth. We also plan to carry out further qualitative study of how gaps in training grade rotas are addressed, including the collection of evidence on need and the use of LATs, LAS posts, fellowships, and other non-regular grades.

Further key areas for investigation include:

- Attrition rates during core training and the fill-rates at ST entry.
- The SAS grade.
- The retirement plans of consultants and SAS doctors and different ways of working towards the end of a career.
- The developing interaction between intensive care medicine and anaesthesia.
- Further stock-takes in the form of regular censuses.

REFERENCES

1 Anaesthesia under examination: the efficiency and effectiveness of anaesthesia and pain relief services in England and Wales. *The Audit Commission*, London 1997.

2 In depth review of the anaesthetic and intensive care medicine workforce. *CfWI*, London 2015 (http://bit.ly/1WlyPgv).

3 RCoA: President's News, February 2016. *RCoA*, London (http://rcoa.it/smshx).

4 Managing the supply of NHS clinical staff in England. *NAO*, London (www.nao.org.uk/?p=56534).

5 HEE Workforce Planning 2015/2016 – Call for Evidence. Joint RCoA/AAGBI Response. (http://rcoa.it/j0bf5).

6 Who operates when? A report by the National Confidential Enquiry into Perioperative Deaths 1 April 1995 to 31 March 1996 (http://bit.ly/1NsUwK1) and the 2003 Report of The National Confidential Enquiry Into Perioperative Deaths (http://bit.ly/1NsUZM9).

7 Guidelines for the Provision of Anaesthetic Services (GPAS). *RCoA*, London 2016 (www.rcoa.ac.uk/GPAS2016).

8 McHugh GA, Thoms GMM. Supervision and responsibility: The Royal College of Anaesthetists National Audit. *Br J Anaesth* 2005;**95(2)**:124–129.

9 Rehman H, Owen L. The Medical Training Initiative (MTI) Surveys. *RCoA Bulletin* 2015; **94**:36–37.

10 Low A, Plunkett E. Attrition rate between core training and specialty training in anaesthesia. *AAGBI Anaesthesia News* 2016;**342**:12–13 (http://bit.ly/1WlDAGR).

11 Guidelines for Obstetric Anaesthetic Services. Obstetric Anaesthetists' Association (OAA) and Association of Anaesthetists of Great Britain and Ireland. *AAGBI*, London 2013 (http://bit.ly/1NLxkS3).

GLOSSARY

AAGBI	Association of Anaesthetists of Great Britain and Ireland
ACCS	Acute Care Common Stem
CCT	Certificate of Completion of Training
CEPOD	Confidential Enquiry into Patient Outcome and Death
CESR	Certificate of Eligibility for Specialist Registration
CfE	Call for Evidence
CfWI	Centre for Workforce Intelligence
CT	Core Trainee
DCC-PA	Direct Clinical Care – Programmed Activity
GMC	General Medical Council
HEE	Health Education England
HST	Higher Specialist Training
ICM	Intensive Care Medicine
LAS	Locum Appointment for Service
LAT	Locum Appointment for Training
LETB	Local Education and Training Board
MTI	Medical Training Initiative
PA	Programmed Activities
PA(A)	Physicians' Assistant (Anaesthesia)
RCoA	Royal College of Anaesthetists
SAS	Staff and Associate Specialist
SPA	Supporting Professional Activities – Programmed Activity
ST	Specialty Trainee
WAG	Workforce Advisory Group

NOTES

The Royal College of Anaesthetists
Churchill House
35 Red Lion Square
London WC1R 4SG

020 7092 1500
info@rcoa.ac.uk
www.rcoa.a.uk