

# The surgical workforce: 2007 update

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND

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The Royal  
College  
of  
Surgeons  
of  
England

## Introduction

This short report aims to bring up to date the College's thinking on workforce issues and builds upon our main 2005 workforce report<sup>1</sup> and our 2006 interim report and policy update.<sup>2</sup> This year has been different and difficult but a number of the developments were forecast in our previous reports, particularly the transitional difficulties caused by the Modernising Medical Careers (MMC) process, the need to reduce trainee numbers, the increase in the staff and associate specialist (SAS) grade, uncertainty over the surgical consultant replacement strategy of some hospital Trusts, evidence of a new wave of reconfigurations and an increasing diversity of surgical provision.

The recruitment situation under the MMC initiative is still unclear and continues into round 2. This update aims to look beyond 2007 at the workforce challenges ahead. An understanding of these issues is important in informing College policy development in an era of rapid change. Workforce matters are particularly important with respect to our aim to support surgeons throughout their professional life and to develop and provide the training and support they need to meet the challenge of revalidation.

## Background

In the early 1990s the need for surgical consultant expansion was clearly identified. This policy was supported by the pump-priming of training posts. Over the past decade there has been a 60% increase in consultant surgeon numbers, coupled with an 80% increase in SpRs. This growth was necessary and has been welcomed. The College supported this expansion in the knowledge that when the workforce reached 'steady state,' the numbers of trainees would need to be reduced from the current ratio of one trainee for every two surgical consultants to a ratio nearer one trainee for every three or four consultants (although this will vary across the specialties).

Other factors such as specialisation, reconfiguration, and changes in working hours brought about by the EWTD mean that the consultant-delivered service of the future will be supported by fewer trainees. Both consultant surgeons and their employers need to be aware of this and of the impact on service delivery.

## Workload

### Finished consultant episodes (FCEs)

Analysis of surgical workload in England between 1998 and 2006 reveals that trauma and orthopaedics, and urology have seen a steady rise in finished consultant episodes (FCEs) of approximately 21% and 18% respectively. General surgery FCEs rose by 6% over the same period. ENT and cardiothoracic surgery have seen a reduction in FCEs of approximately 11% and 10% respectively.

### Emergency admissions

Over the period 1998–2006, general surgery has seen an 80,000 increase in the number of emergency admissions (18%) with urology admissions increasing by 16% and trauma and orthopaedics by 5%. ENT has seen an approximate increase in emergency admissions of 4%, while neurosurgery and plastic surgery have risen by around 22%. Cardiothoracics has seen a 14% decrease in emergency admissions and paediatric surgery a 3% decrease.

Further information on workload (FCEs, emergency admissions, waiting list admissions, day cases, etc) is available from [www.rcseng.ac.uk/service\\_delivery/workforce/](http://www.rcseng.ac.uk/service_delivery/workforce/).

## Workforce data

As outlined above, the consultant workforce has expanded significantly over recent years. For example, in England over the period 2002–2006, the general surgical workforce grew by 21%, trauma and orthopaedics by 28%, urology by 14%, plastic surgery by 25%, oral and maxillofacial surgery (OMFS) by 22%, ENT by 18%, neurosurgery by 16% and cardiothoracics by 18%. Paediatric surgery is the only specialty not to have experienced sustained consultant expansion over the period. In fact the paediatric surgical consultant workforce has fallen by 1%.

The increased turbulence brought about by MMC means that it is more than ever difficult to predict career prospects for any specialty and recent inquiries have shown that even the best sources of workforce data have serious deficiencies. The College has worked with relevant bodies in an attempt to clean up the data in order to have the most accurate picture of the surgical workforce. There remains, however, significant difficulty in obtaining accurate workforce data. The Department of Health (DH) annual census is probably the most accurate in terms of the consultant workforce; however, recent data collection by the Joint Committee on Surgical Training (JCST) has revealed the numbers recorded by the DH in the ‘registrar’ group to be inaccurate. Table 1 shows the disparity.

Specialty	No. consultants 2006 (DH data)	SAS surgeons 2006 (DH data)	No. registrars 2006 (DH data)	NTN holders 2007 (JCHST data)
Cardiothoracic surgery	240	19	251	78
General surgery	1,756	423	1,302	867
Neurosurgery	187	8	208	105
OMFS	306	218	131	89
Otolaryngology	552	216	310	250
Paediatric surgery	104	6	95	57
Plastic surgery	254	43	244	164
Trauma and orthopaedic surgery	1,710	496	1,193	768
Urology	510	148	294	208
<b>Total</b>	<b>5,619</b>	<b>1,577</b>	<b>4,028</b>	<b>2,586</b>

**Table 1:** Disparity between DH and JCST data on workforce and the potential impact on SAS grades. (Source: Department of Health. Annual Workforce Census as at 30 September 2006 (May 2007). JCHST data, unpublished, June 2007)

## Service grades

Table 1 shows the large discrepancy between the number of registrars counted by the DH and those who actually have a national training number (NTN). This would suggest that a large number of Trust/service grades are actually counted as ‘registrars’ by the DH. This could mean that there are at present at least 3,000 non-consultant surgeons in ‘service’ posts. In addition, MMC will likely increase the number of non-consultant service grade posts significantly but there appears to be no clear policy from the DH about the career prospects or the numbers affected. It should be noted, however, that the NHS Workforce Review Team uses data from deanery monitoring to inform planning of training opportunities. These data will be more accurate than those obtained from the DH.

The College is increasingly concerned about the SAS grade. This significant group of surgeons currently have no defined terms and conditions and lack career structure and development opportunities. In most surgical specialties the SAS group of surgeons has been very important to the delivery of the service. Now that the College is focusing on both training and supporting career-grade surgeons in the workplace, the future educational and development needs of this group will need to be examined and supported, particularly because they have in many cases enhanced their capacity to migrate into areas of developing service need.

In specialties such as neurosurgery, SAS surgeons make up a very small percentage of the overall workforce. Neurosurgery is committed to restructuring its workforce to ensure that the number of SAS surgeons does not increase. The College is currently surveying SAS surgeons to ascertain how it can better support this grade.

## Modernising Medical Careers

The College supports the underlying principles of MMC. However, in the rush to implement MMC reforms there was a failure centrally to take the time required to develop, test and evaluate new methods of selection.

The method of introducing MMC was in sharp contrast to the evolutionary development and high-quality control of College activities such as the intercollegiate FRCS examination. The College repeatedly identified potential problems with the implementation of MMC and we were continually reassured. However, in the event the performance of the DH team, deaneries and the Postgraduate Medical Education and Training Board left a number of questions unresolved and the issue of responsibility remains clouded. It is significant that when the crisis needed urgent resolution these bodies turned to the Colleges as the only means to provide the expertise and commitment to deal with the situation within a very short timescale.

MMC was introduced with little thought to transitional arrangements, creating a temporary bulge of high-quality applicants for higher training. The College recommended that transitional pressures be accommodated over more than one year but the DH insisted on immediate implementation.

The president suggested an expansion of training opportunities at ST3 for a period of three years (in general surgery, trauma and orthopaedics, plastic and paediatric surgery). It was clearly important that these additional opportunities were capable of providing training to the higher levels required and did not create significant oversupply. To this end, in discussions with the DH, NHS Employers and the deans, the president successfully negotiated additional ST3 opportunities (for 2007 only). These have been agreed as 16 in plastic surgery, 6 in paediatric surgery, 21 in general surgery and 6 in trauma and orthopaedics. No plans have been announced for additional opportunities for the next two years, which may be required to smooth the transition and the College will pursue this.

Recommendations to increase training opportunities at ST3 temporarily are made on the basis of equality of opportunity for those existing SHOs who may otherwise be disadvantaged by transition arrangements. They will need to be balanced against the significant danger of oversupply in some specialties. Concomitant with the increase in ST3 posts for 2007 and in keeping with longer-term workforce plans, there will need to be a reduction of opportunities at ST1 in 2008 and in ST1 and ST2 from 2009 onwards.

As outlined above, our estimates suggest that in the long term the surgical workforce requires a ratio of 3–4 consultants to every one NTN holder in order to achieve an appropriate replenishment rate. This ratio will of course be slightly different for each specialty. It is vital that consultant surgeons and employers understand this dynamic change. Consultants will be required to take on a more front-line role and, with reduced trainee support, will need to embrace team working with their consultant surgeon colleagues. Employers will need to recognise the impact that the reduction in trainee numbers will have and take appropriate action to ensure the safe care of patients and continued service delivery.

## Current workforce picture

Current modelling techniques suggest that general surgery and trauma and orthopaedics are already close to reaching the workforce expansion targets set by the specialist associations. In paediatric surgery and plastic surgery, modelling suggests that both specialties will still be significantly below their workforce expansion targets in 2015. However, reconfiguration of services in both plastic and paediatric surgery may force a review of workforce targets.

Cardiothoracic surgery is currently exceeding its workforce targets and a significant number of CCT-holders are unable to find consultant positions. Neurosurgery and ENT CCT-holders are in a similar (although less severe) position. This is thought to be a temporary concern. OMFS requires some national planning of numbers to achieve the required growth. The training pathway for urology has been changed to create consultant urologists and consultant urological surgeons as a response to changes in case mix.

## The surgical workforce of the future

The College, specialist associations and specialist advisory committees, working with the NHS Workforce Review Team, the deans and others have achieved the desired consultant expansion in most specialties. There is now emerging evidence that in future we will be able to support the service without the use of overseas doctors. The recent and continuing expansion of medical schools, which has been unprecedented, raises a serious risk of oversupply.

The NHS Plan<sup>3</sup> made a commitment to a consultant-delivered service. The College believes this is essential to ensure patient safety and quality of outcome. There is, however, a lack of clarity over the current aim of the NHS in this regard. A consultant-delivered service implies that patient care will be provided exclusively by consultant surgeons and those in regulated training. In reality the workforce structure is more complex, with SAS surgeons and trainees currently providing large amounts of service in some specialties. Clarification of this position is urgently required from the DH in order to develop the College's policy for all those providing surgical services.

Due to financial and reconfiguration uncertainties, some Trusts have been reluctant to appoint to consultant vacancies and there is evidence of a large number of ad hoc locum or service positions being advertised to maintain service during this period of uncertainty. The College is particularly concerned about this on a number of grounds – firstly, these 'Trust consultant posts' are non-standard positions and therefore not bound by statute. The College has no influence or external oversight to the appointments process and therefore cannot ensure the appropriate standards are met to facilitate safe patient care.

Secondly, while the employment of such surgeons will inevitably be in the short term a less expensive option for Trusts, providers should be aware that these temporary employment tactics will affect the reference cost of providing the service and will therefore lower the payment-by-results tariff paid for each procedure.

Data from the Joint Committee on Intercollegiate Examinations suggest that the average out-turn from the intercollegiate exams over the period 1998–2006 is in the region of 542 a year. This is significantly larger than the expected number of consultant surgeon post advertisements. This provides additional evidence that in most specialties the trainee workforce needs to be gradually reduced in order to prevent oversupply and future unemployment.

## Next Steps for the College

The College must continue to:

- > Support the fully trained consultant as the ultimate guardian of specialty standards.
- > Support surgeons in their current practice and in the future for revalidation.
- > Be actively involved in collecting, collating and checking workforce data.
- > Make an active contribution to the service reconfiguration debate focusing on patient safety and high clinical standards.
- > Ensure that whatever the diversity of provision, the improvement of surgical standards remains our primary focus.

## Challenges for surgeons

The rapidly changing landscape of the NHS raises significant challenges for surgeons. As knowledgeable and experienced health care professionals, surgeons should be actively involved in service development and reconfiguration issues in their locality and continue to provide inventive developments within the specialty.

Surgeons should also engage more effectively in developing skills in leadership and management<sup>4,5</sup> and some should focus on becoming more expert trainers. There is evidence that some surgeons are unable to function to their full capacity due to poor infrastructure and support. It is important that surgeons use the opportunities offered by revalidation to drive forward standards in the workplace.

## Conclusions

Despite the uncertainties referred to above, it is clear that in the future:

- > The proportion of SAS surgeons is likely to increase in most specialties until a consultant-delivered service is specified in departmental and commissioning policy.
- > Service delivery will be based on a more diverse set of models which will include stand-alone elective centres for many procedures, some intervention in primary care and the networking of services. This will permit the aggregation of specialist care into units of critical mass for more efficient teaching and service delivery.
- > It seems premature to suggest that foundation trainees can enter run-through training in surgery while selection processes, assessment and redirection have not been validated, although some highly specialised disciplines may take a different view.
- > The era of confident central direction appears to be drawing to a close. Recent events indicate the continuing need for surgeons to take an active role in the arrangements for service and training and to work constructively with managers, authorities and politicians to ensure that surgical expertise and initiative are fully utilised.

Queries relating to surgical workforce matters can be forwarded to [workforce@rcseng.ac.uk](mailto:workforce@rcseng.ac.uk).

## References

1. The Royal College of Surgeons of England. *Developing a Modern Surgical Workforce*. London: RCSE; January 2005.
2. The Royal College of Surgeons of England. *The Surgical Workforce 2006*. London: RCSE; October 2006.
3. Department of Health. *The NHS Plan: A plan for investment, a plan for reform*. London: DH; July 2000.
4. The Royal College of Surgeons of England.. *The Leadership and Management of Surgical Teams*. London: RCSE; June 2007.
5. Academy of Medical Royal Colleges. *Enhancing Engagement in Medical Leadership*. London: AoMRC; June 2007 ([http://www.institute.nhs.uk/building\\_capability/enhancing\\_engagement/engagement\\_in\\_medical\\_leadership.html](http://www.institute.nhs.uk/building_capability/enhancing_engagement/engagement_in_medical_leadership.html)).

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