



The College of Emergency Medicine

# Emergency Medicine Consultants

## Workforce Recommendations

April 2010

## Summary of Key Findings and Recommendations

A survey of type 1 Emergency Departments (EDs) in England undertaken by the College of Emergency Medicine in late 2009 has demonstrated that the average number of Consultants in each ED is 4.39 (See appendix, table 1). This is self-evidently woefully inadequate.

As indicated in the survey data, the majority of type 1 Emergency Departments see in excess of 60,000 new patients per annum (60% of EDs), with many seeing between 70,000 – 80,000 new patients (See appendix, table 2).

The trend for ED attendances is one of steadily increasing numbers and increasing acuity.

Recent attempts at demand management, including walk-in-centres and other initiatives, have not resulted in a decline in ED attendances despite significant investment. There is now recognition that such demand management programmes are of little or no benefit in terms of influencing the ED attendance pattern (See appendix, figure 1).

Internationally, comparing Emergency Medicine Consultant staffing in England with similar models in Australasia and North America, the current Consultant numbers in Emergency Medicine in England are less than half those that would be provided in similar departments in these regions.

The College of Emergency Medicine (CEM) is therefore pursuing an agenda of Consultant expansion with an aim to provide 10 whole time equivalent (wte) Consultants as a minimum in every Emergency Department (See appendix, table 3). Greater numbers would be required in the larger departments and those providing 24/7 Emergency Medicine Consultant presence (See appendix, table 3).

Evidence is building regarding the tangible and demonstrable benefits of such Consultant presence.

The benefits of such Consultant expansion may be summarised as follows:

- Emergency Medicine Consultant shop floor presence from 08:00 and into the late evening up until midnight seven days a week
- Such presence will provide Consultant-led care of patients in the Emergency Department
- The Consultant will drive clinically and cost efficient processes
- The quality and safety agenda will be addressed more efficiently
- The patient experience would be significantly enhanced.

The total number of whole time equivalent (wte) Consultants required in England to achieve such staffing levels is 2222 (at current ED attendance levels) (See appendix, table 3).

The current number of Consultants in England is 852 (wte) (See appendix, table 1).

In the view of The College of Emergency Medicine, such Consultant expansion is required as a matter of urgency. At current projections of trainee intake levels and CCT awards, it will take until after 2025 to achieve the recommended number of wte Consultants.

The prospect of a reduction in Emergency Medicine training numbers will therefore be completely incompatible with the much needed Consultant expansion.

The College of Emergency Medicine would therefore recommend in the strongest possible terms continued expansion of training numbers in Emergency Medicine.

## Introduction

The Emergency Department has long been recognised as the 'shop window' of the NHS and the universally recognised point of access for patients seeking twenty-four hour care seven days a week.

The public place their confidence and trust in the service provided in Emergency Departments. This is reflected in the numbers of patients attending EDs in England each year, currently in the order of 14 million.

Emergency Medicine (EM) Consultants play a vital and growing role in the delivery of high quality care. There have been growing concerns regarding the staffing of EDs, particularly with regards to numbers of Consultants, the increasing demands on Consultant time and the ever-expanding demands of EM work.

This paper sets out the findings of a recent College survey (see appendix) which highlights the insufficient numbers of the current EM Consultant workforce in England and calls for an urgent expansion in EM Consultant numbers.

### Emergency Medicine Consultants – The benefits for the NHS

The College has identified four main arguments for increasing the number of EM Consultants:

- Improving the quality of patient care
- Enhancing patient safety
- Developing emergency care
- Cost efficiencies.

## 1. Improving the Quality of Patient Care

A recent College of Emergency Medicine survey established that the mean average number of whole time equivalent (wte) Consultants in an ED in England is 4.39; with a typical attendance per department of over 60,000 new patients per annum.

At present, in England, the total number of wte Consultants in Emergency Medicine leading this care is 852. There is a clear and profound mismatch between attendance figures and Consultant numbers which compromises the ability of EDs to provide the consistent high standards of care our patients expect and deserve.

The UK compares unfavourably with models of Emergency Medicine provision in similar health systems; for example Australasia where a typical Emergency Department seeing 60,000 – 80,000 patients per annum would be staffed by 14 Consultants, who would primarily deliver the service.

With sufficient EM Consultants, all patients could be seen by a Consultant prior to discharge in a manner similar to the attending role practiced successfully in EM in the United States. Initially however, given the current limited numbers of Consultants, such an approach would have to be restricted to high risk groups of patients such as headache, chest and abdominal pain.

Increased EM Consultant numbers would allow the Consultant to undertake a key role in the direct clinical management of such patients presenting to the "majors side". There are well recognised areas of risk when patients with such conditions are assessed by less experienced clinical staff.

Despite the outstanding commitment and dedication of current EM Consultants, it is manifestly impossible to provide Consultant presence in the ED for more than a fraction of the period required. The nature of EM work is that the need for Consultant presence extends into the evenings and weekends when the numbers of patients attending and,

crucially, their acuity with serious illness and injury, remains high.

## 2. Enhancing Patient Safety

Patient safety is significantly compromised by the failure to invest in EM Consultants. Recent dramatic examples in the Midlands and elsewhere have demonstrated the profound difficulties which may arise wherever the ED is not adequately staffed at Consultant level. In many other hospitals, there is concern regarding the safety profile when EM Consultant presence is not provided in the particularly vulnerable periods in the evenings and at weekends.

There are growing examples of where increased EM Consultant presence in the ED can reduce risks to patient safety. A recent paper cites a 9% reduction in inappropriate discharges by virtue of increased ED Consultant presence<sup>1</sup>.

Increased numbers of EM Consultants can improve safety by providing:

- Consultant-led care
- Enhanced clinical decision making, in particular leading the resuscitation of the critically ill or injured
- Increased supervision of more junior members of the ED medical team
- Reduced numbers of serious untoward incidents
- Less unplanned returns
- Fewer missed x-rays.

## 3. Developing Emergency Care

### *Co-ordination of initiatives*

The staffing of Emergency Departments has lagged dramatically behind with neglect and limited investment over the past 10-20 years.

Much of this failure to invest has been predicated on assumptions that the majority of patients attending Emergency Departments could be seen by a Primary Care Clinician. Although this approach has been evidence-free and has recently been corrected by the report from the Primary Care Foundation<sup>2</sup>, a strategy to divert patients from the Emergency Department wherever possible has been adopted by many PCTs.

These expensive and evidence-free initiatives in demand management have proved almost universally unsuccessful, have made little difference to Emergency Department activity and have attracted significant investment away from consolidating and supporting the Emergency Department.

In addition, such strategies have led to a highly fragmented urgent and emergency care system, which patients consistently report to be confusing and unreliable.

The College of Emergency Medicine fully supports the concept of an integrated model of care delivered in conjunction with colleagues from Primary Care. This single point of access, easily identified by the public by the red "Emergency" sign would provide prompt high quality emergency care 24/7 with optimal use of limited resources including staff, diagnostics and hospital capacity. Duplication would be avoided.

### *Sustainable careers*

Emergency Medicine is an intense and demanding specialty. The unrelenting workload and challenges experienced by Consultants in EM on a daily basis should be acknowledged. It is appropriate, therefore, to consider that the EM Consultants' practice should evolve during the course of their career.

The College of Emergency Medicine view is that increased Consultant numbers allow such career planning, which has previously been impossible given the very small Consultant numbers in each ED. CEM recommends the following:

- In those EDs providing 24/7 Consultant presence, Consultants over the age of 50 should no longer undertake the overnight shifts
- In all EDs, Consultants over the age of 55 should have the option to withdraw from the on-call rota
- These changes would clearly be reflected in the individual Consultant's job plan
- Annualisation of Consultant hours is one possible strategy to distribute activity to match the demand and pressures of departments
- Such a configuration would ensure that the experience and expertise of the more senior EM Consultant continues to be provided.

Such career progression is likely to ensure that EM remains attractive, especially to young trainees, and continues to attract and retain doctors of the highest calibre.

### ***Models of Consultant-led care***

The following is an illustration of the roles an EM Consultant would provide in Consultant-led care:

- The EM Consultant works as part of a team which may include a junior doctor and nursing colleague
- The Consultant undertakes a relevant and focused history and examination
- Relevant and appropriate investigations are ordered including pathology and imaging
- A provisional decision is made regarding the disposition of the patient, i.e. admit, Clinical Decision Unit (CDU) or discharge. A suitable bed may be booked at this stage
- The nursing member of the team will undertake a set of observations, including a Medical Early Warning Score and pain score, site an IV etc.

- Initial treatment, including pain relief, is commenced as indicated
- The EM Consultant reviews the investigation results with the junior doctor and makes an informed decision confirming the patient's disposition, i.e. admit, CDU or discharge
- This provides an excellent training and assessment opportunity for the junior doctor and nurse involved.

This system offers the following benefits:

- The initial history and examination is expedited
- Only relevant investigations are ordered
- Duplication is reduced
- An early informed decision is made regarding the patient's correct disposition
- Unnecessary admissions to scarce in-hospital beds are averted
- Potentially unsafe discharges are avoided
- Compliance with the four-hour operational standard is optimised.

The safety and quality of the patient's care is improved.

### ***Clinical Decision Units***

The Clinical Decision Unit (CDU) is essential to ensure optimal Emergency Department function.

The case mix of patients suitable for this area and the principles of practice are described in the College of Emergency Medicine strategy document *The Way Ahead 2008-2012*<sup>3</sup>.

In summary, the CDU provides the ideal venue for the management of patients along the following principles:

- The CDU is an integral part of the Emergency Department
- The CDU is configured as a ward and therefore not subject to the 4-hour standard

- The CDU is for ED patients and is managed by ED medical and nursing staff
- Admission to the CDU will avoid unnecessary admissions into the main hospital and unsafe discharges
- The maximum length of stay is 24 hours. Many patients will stay for less than 12 hours
- The quality, safety and productivity agenda is addressed
- Affordability should be addressed within an agreed tariff reflecting the work undertaken in this area.

CDU activity at Frenchay Hospital, Bristol provides an example of the effectiveness of a CDU:

- Bed occupancy 150% - 500 patients per month
- 22% of CDU patients referred for admission = 78% admissions avoided
- Total 350 admissions saved per month
- 4-hour standard compliance: 98.6% when Consultant present; 95.2% when Consultant not present.

### **Observation Medicine**

There is increasing recognition of the role of observation medicine led by Emergency Department Consultants. This involves the management of a wide range of conditions where the length of stay is anticipated to be less than 24 hours.

Exemplar conditions would include:

- Head injury
- Low risk chest pain
- Elderly fallers
- Self-harm
- Post-procedure/manipulation.

Within this concept is the opportunity to develop the Emergency Department role in providing ambulatory care for the range of conditions described in the *Directory of Ambulatory Emergency Care for Adults*<sup>4</sup>.

Such work is already undertaken in a number of EDs. The College view is that observation medicine and ambulatory

care represent core ED activities led by EM Consultants.

## **4. Cost efficiencies**

The evidence base of the benefits of EM Consultant expansion in terms of clinical care and cost efficiency is growing.

Below is a list of key findings from papers and the recent CEM survey:

White et al, 2010<sup>1</sup>

- Admissions reduced by 12%
- Ambulance admissions reduced by 21%
- Inappropriate discharge reduced by 9%
- Increased discharge of 22%
- Referral reduction of 62%
- Appropriate operational throughput increased 35%

Geelhoed et al, 2008<sup>5</sup>

- Admissions decreased by 27%
- Complaints fell by 41%
- Average waiting time fell by 15%
- Net saving to the hospital of £3 million

Kingston Hospital, London<sup>6</sup>:

- Admissions reduced from 21% to 16.7%
- Returns reduced by 30%
- Complaints reduced by 40%
- Compliments increased by 350%
- Hospital length of stay reduced
- Increased trainee satisfaction score

Salisbury Hospital, Wiltshire<sup>6</sup>:

- Admissions reduced by 25%
- 10% reduction in hospital length of stay
- 25% increase in CDU work

Basingstoke Hospital, Hampshire<sup>6</sup>:

- Emergency Medicine Consultant-led procedural sedation for children
- Reduced admissions as quoted in NHS Institute for Innovation and Improvement, *Focus on children*

*and young people in Emergency and Urgent Care pathway, June 2008*

North Wales Hospitals<sup>6</sup>:

- o Consultant delivered service – admission rate of 16% (Wrexham Maelor Hospital)
- o Non-Consultant delivered service – admission rate 24-31% (Glan Clwyd Hospital, Rhyl and Ysbyty Gwynedd, Bangor)

In one DGH EM Consultant expansion and extended on site presence resulted in 240 additional discharges from the ED each month - at 1.5 days per admission which equated to 13 beds saved at a cost saving of £650,000.

### Recommendations

The College believes there is a compelling argument for urgent EM Consultant expansion to establish sufficient EM Consultant numbers to provide Consultant presence in the ED 16 hours a day, 7 days a week *as a minimum* in all EDs.

The view of the College is that such rotas require a *minimum* of 10 wte Consultants in every ED, with greater numbers in those particularly busy departments seeing 80,000 – 100,000 patients a year and in the 24/7 Regional Centres providing major trauma care.

There is a strong argument for 24/7 Emergency Medicine Consultant presence in hospitals other than the major trauma centres, particularly given the difficulties in staffing ED middle grade rotas and the impact of the working time directive in eroding experienced support from in-hospital specialties. Increasingly, the Emergency Department is the sole venue for guaranteed 24/7 high quality safe assessment and initial management of patients.

There is an increasing body of evidence regarding the benefits of such investment. Although the scale of the expansion required is impressive, it is important to

remember that we are addressing twenty years of under-investment. In addition, the investment required in terms of the overall local health economy is modest.

The College of Emergency Medicine recognises the difficulties presented by the current financial climate. However, the crucial issues of productivity and affordability sit well within the portfolio of benefits delivered by Emergency Medicine Consultant expansion.

April 2010

### References

1. White AL, Armstrong PAR, and Thakore S. The impact of senior clinical review on patient disposition from the emergency department. *Emerg Med J*, 2010;27:262-265
2. Primary Care Foundation. *Primary Care and Emergency Departments*. March 2010. Available at: <http://www.primarycarefoundation.co.uk>
3. The College of Emergency Medicine. *The Way Ahead 2008-2012*. 2008 <http://www.collemergencymed.ac.uk>
4. NHS Institute for Innovation and Improvement. *Directory of Ambulatory Emergency Care for Adults*. 2007
5. Geelhoed GC, Geelhoed EA. Positive impact of increased number of emergency consultants. *Arch Dis Child* 2008;93:62-64
6. CEM survey, Sept – Dec 2009.

## Appendix

Table 1: CEM survey of EM Consultants in England 2009

Region	Number of Type 1 EDs	WTE Consultants (in post)	Vacant Funded WTE	Mean Av (in post) wte per ED	Type 1 Attendances 08-09
EM	10	54.25	9	5.43	809,383
EoE	18	66.7	7	3.71	1,252,698
Lon	31	137.76	11.1	4.38	2,766,767
NE	12	62	3	5.17	716,322
NW	32	143.4	18.5	4.48	2,113,038
SC	12	48.85	6	4.07	743,595
SEC	17	53.85	18.2	3.17	940,644
SW	19	99	8	5.21	1,049,767
WM	22	88.4	10.5	4.02	1,520,245
Y&H	21	98	16	4.67	1,480,398
<b>ENGLAND</b>	<b>194</b>	<b>852.21</b>	<b>107.3</b>	<b>4.39</b>	<b>13,392,857*</b>

Note: Attendance figures were obtained from the DH quarterly returns of type 1\*\* attendances for 2008-2009. Number of EDs obtained from DH 4 hour target quarterly returns 2008-2009 and College survey Sept-Dec 2009. Number of wte in post and vacant funded posts obtained from College survey Sept-Dec 2009.

\*Figure does not include some PCT returns – overall type 1 is listed in fig 3.

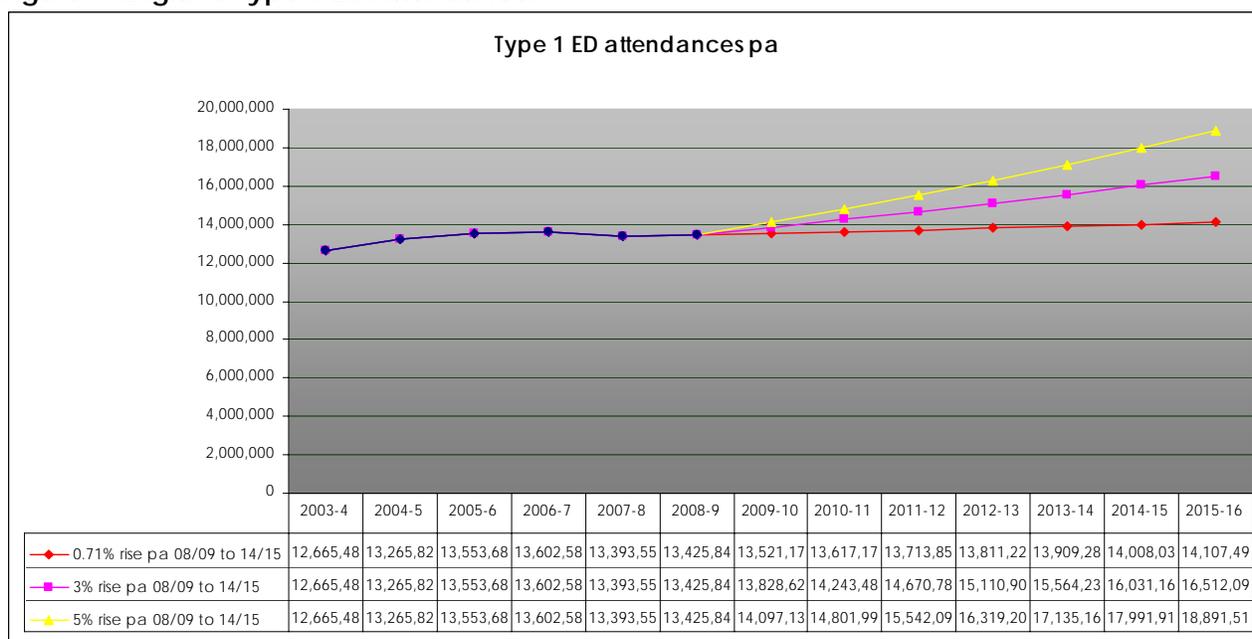
\*\* Type 1 ED: A consultant led 24 hour service with full resuscitation facilities and designated accommodation for the reception of emergency patients.

Table 2: ED attendances over 60,000 per annum

Attendance	Total	Percentage
EDs >60k	116	59.79%
EDs <60k	78	40.21%
<b>ENGLAND</b>	<b>194</b>	<b>100.00%</b>

Note: Attendance figures were obtained from the DH quarterly returns of type 1 attendances for 2008-2009.

Figure 1: England Type 1 ED Attendances



Notes: 2003/04 to 2008/09 figures are from DH quarterly returns. Type 1 attendances rose overall by 6% from 2003-4 to 2008-9. Projections in red assume a 0.71% rise per annum. \*Source: Workforce Review Team projections for population increase.

**Table 3: Recommended minimums of wte Consultants in Type 1 EDs in England**

ED size by attendance per annum	Number of Type 1 EDs in England	Recommended minimum number of wte Consultants per ED to achieve up to 16/7 'shopfloor' presence	Recommended total number of wte Consultants to achieve up to 16/7 'shopfloor' presence
<50,000	48	10	480
50,000 to 80,000	78	10	780
80,000 to 100,000	51	12	612
>100,000	17	16	272
<b>TOTALS</b>	<b>194</b>		<b>2144</b>

	Number of Major Trauma Centres (MTCs) in England*	Additional number of wte Consultants per MTC to expand from 16/7 to 24/7 cover	Total additional number of wte Consultants to expand from 16/7 to 24/7 cover
	13	6	78
<b>TOTALS</b>			<b>2222</b>

Note: Attendance figures were obtained from the DH quarterly returns of type 1 attendances for 2008-2009. Number of EDs obtained from DH 4 hour target quarterly returns 2008-2009 and College survey Sept-Dec 2009. Recommended minimums were calculated using standard consultant contract terms (wte=10pa with 7.5 DCC/2.5 SPA split – see below).

\* It is assumed that there will be 4 MTCs in London and 1 each in all other SHA regions.

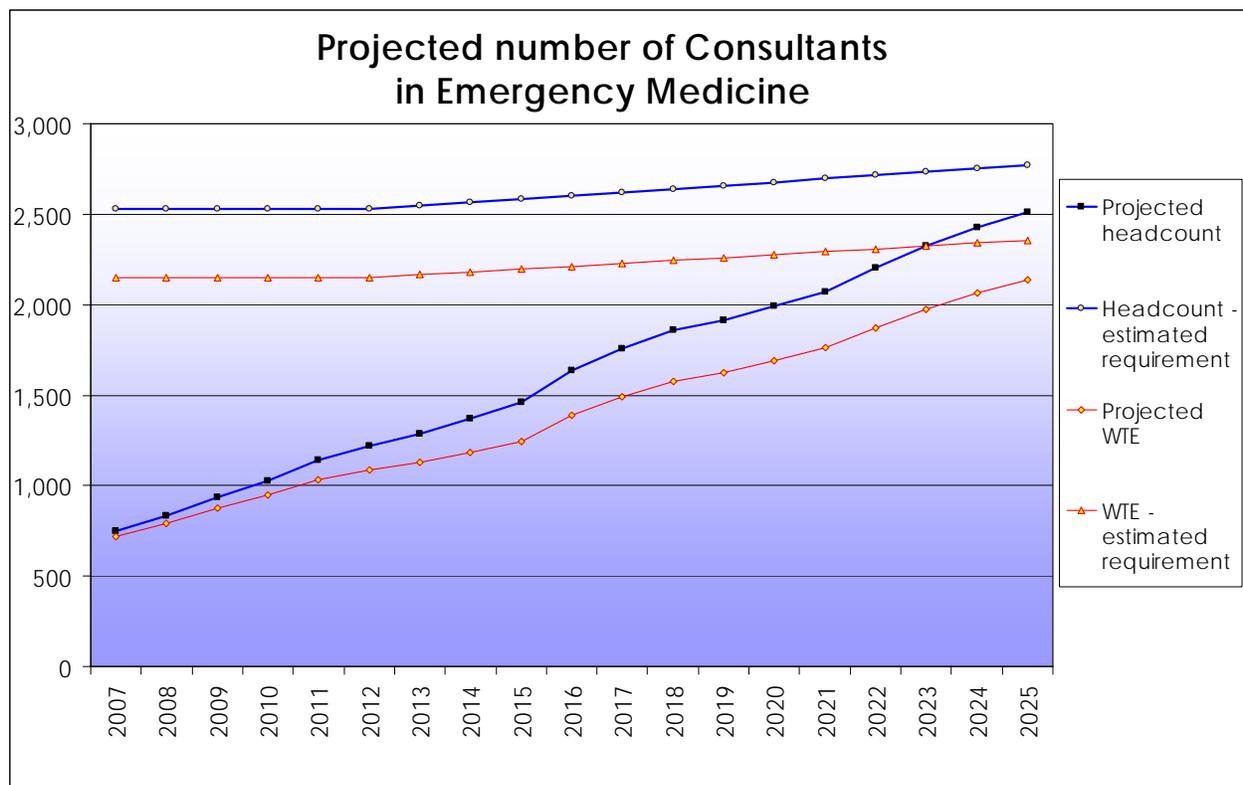
[The MTCs may be in EDs which see 80-100,000 pa. These would need 12 consultants for 16/7 cover and 18 for 24/7 cover. If the ED was bigger e.g. 100,000 then it would need 16 consultants just for 16/7 cover – consequently for 24/7 cover they would need more than the 18 that a smaller department requires.]

## EM Consultant Job Planning

The CEM recommendations are based on job planning guidance produced by the BMA in conjunction with the College – *The Consultant Contract and Job Planning for Emergency Medicine Consultants (Sep 2009)*. A short summary of key points follows:

- A wte consultant is typically a 10 PA contract with a 7.5 DCC / 2.5 SPA split
- The staffing recommendations take into account prospective cover requirements
- 16/7 'shopfloor' presence would require a minimum of 10 consultants participating fully in an out of hours rota. This will allow for one consultant working clinically during premium time up to midnight.
- 10 wte consultants can achieve 16/7 cover in EDs with attendances up to 80,000 per annum. Above this additional consultants would be required (see 4)
- For 24/7 on site clinical cover a minimum of 18 wte consultants participating fully in the out of hours rota would be required (on a basis of three shifts at weekends on a 1 in 6 rota rather than 1 in 5 because of the higher intensity of a rota that includes nightshifts).
- For 24/7 cover in sites with high attendances (100k+) such as major trauma centres more consultants would be required.

Figure 2: EM Training Numbers



These predictions are based on current training figures and the following assumptions from the Workforce Review Team:

- Participation rate from 0.80 up to 0.85
- For existing and future trainees, the expected delay rates are now for 70% to complete within the expected timescale, 20% to complete a year later and 10% to complete 2 yrs later
- Percentage of VTNs staying after completing training from 100% down to 95%
- Trainee wastage rate increasing from 1 to 3%
- Conversions from AS or staff grade up to CCT holder for 2008 this was 16, 2009 this was 3, and assumed to be 5 p.a. thereafter
- Return of recent CCT holders increases from 17 to 20 p.a.
- PMETB 14 assumed to be 0 p.a.
- Young leavers have increased from 21 to 25 p.a.
- Average retirement to be modelled at 60, with those 61+ expected to retire equally distributed over the next 5 years (i.e. 20% p.a.).

With the current level of trainee numbers, the recommended number of wte consultants will not be achieved until after 2025.

**If current ST1 intake is cut by 5% it will further delay reaching the recommended levels of wte Consultants.**

**Table 4: Comparison: Consultants by specialty 2008 (wte)**

<b>Specialty</b>	<b>2007</b>	<b>2008</b>	<b>Numbers</b>	<b>% Change</b>
General Medicine (Total)	21989	23565	1576	7.17%
Consultants	6855 (31%)	7239 (31%)	384	5.60%
Paediatrics (Total)	6600	7000	400	6.06%
Consultants	2012 (30%)	2073 (30%)	61	3.03%
Obs and Gynae (Total)	4710	4947	237	5.03%
Consultants	1432 (30%)	1492 (30%)	60	4.19%
Radiology (Total)	3075	3199	124	4.03%
Consultants	2023 (66%)	2148 (67%)	125	6.18%
<b>Emergency Medicine (Total)</b>	<b>4568</b>	<b>4747</b>	<b>179</b>	<b>3.92%</b>
<b>Consultants</b>	<b>720 (16%)</b>	<b>790 (17%)</b>	<b>70</b>	<b>9.72%</b>
Anaesthetics (Total)	10010	10382	372	3.72%
Consultants	4661 (47%)	4853 (47%)	192	4.12%
Surgery (Total)	18670	19311	641	3.43%
Consultants	5981 (32%)	6116 (32%)	135	2.26%
Pathology (Total)	3764	3880	116	3.08%
Consultants	2301 (61%)	2364 (61%)	63	2.74%
Psychiatry (Total)	8750	8972	222	2.54%
Consultants	3624 (41%)	3692 (41%)	68	1.88%

Note: Data obtained from 2008 NHS workforce census.