National Training Surveys 2008-2009
Key findings
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- All the deanery survey contacts who supplied the trainee and trainer data necessary to administer the survey;
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- The college contacts that supplied and agreed the specialty-specific items.

The contractors who provided IT support to collect and report on these data:

Nathan Collins  Web-Labs developer who provided the forms software and a bespoke reporting tool website to PMETB’s specification.

Adrian Brotherton  Selcom director, who provided hosting for the forms and reporting websites.

Richard Alexander  PMETB IT tester.

The members of the Surveys Working Group who attended meetings over the course of this survey cycle. The group advised PMETB on the survey items, survey administration and the reporting of the survey results. However PMETB was responsible for all of the final decisions.

The members of the Surveys Working Group are as follows:

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Dr Sue Cavendish  Quality Management Advisor, East Midlands Healthcare Workforce Deanery
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PMETB is indebted to Professor Elisabeth Paice and others who developed the *Point of View* survey which formed the basis of these surveys and for her ongoing advice and support during the project.
Foreword

I am delighted to present the summary report of PMETB/COPMeD’s National Surveys of Trainees and Trainers 2009. These two surveys are one element of PMETB’s Quality Framework and I am pleased to say that, once again, the response rates were higher than previous years. This reflects not just the passion that doctors feel for training and education but also the high level of engagement from our partners and supporters in drafting the questions and ensuring wide participation. My sincere thanks to all of you, for what is a major achievement.

This was the third year of the surveys but the first time we have combined the results into one summary report. I know from monitoring the visits to PMETB’s reporting tool website that thousands of you are already looking at the data locally. This report provides stakeholders including policy makers, deaneries, education providers, trainers and junior doctors with some analysis of the themes that emerged from the data nationally.

My hope is that it will be of interest and will enrich some of the lively debates already taking place, for example on Workplace Based Assessments and the European Working Time Directive. The survey does not provide definitive answers and this report should be read alongside other literature and evidence sources.

Mr John Smith
Chair of the Surveys Working Group
PMETB Board Member
Summary of chapters

Chapter 1: Trainees’ satisfaction with training

What can satisfaction tell us about the quality of training?

This chapter looks at satisfaction as measured by the National Survey of Trainees and investigates correlations between trainees’ ratings of the various facets of their posts such as clinical supervision and their overall satisfaction with the post. It seeks to answer the following questions:

- What is the overall satisfaction score for all trainees and are there differences between specialty groups?
- What are the factors linked with high satisfaction?
- How satisfied are GP trainees with their hospital experience when compared to their specialty colleagues?

Chapter 2: Service versus education

Exploring the tension between providing a service while receiving an education.

This chapter uses the data from both the National Survey of Trainees and the National Survey of Trainers. It seeks to provide some insight to inform the discussion on the service versus education debate. It examines the following questions:

- Do trainees have access to departmental and regional teaching and how do they rate its quality?
- What impact do service demands have on trainees’ experience?
- What impact does redistribution of tasks to other health professionals have on trainees’ experience?
- What impact does simulator training have on trainees’ experience?
- What is the relationship between clinical and educational supervision?

The analysis is discussed in the context of some recent research findings.

Chapter 3: Workplace Based Assessment

Consultants views of Workplace Based Assessment and issues of under-performance.

This chapter explores consultants’ and GP trainers’ views of Workplace Based Assessments (WPBA) as reported in the surveys by looking at their training, experience and rating of WPBA tools. It also looks at issues of underperformance and its management. It seeks to answer the following questions:
To what extent are consultants and GPs carrying out WPBAs and have they received training?

How do consultants and GP trainers rate assessment tools?

Is there a link between consultants and GP trainers’ views on whether their trainees are competent and the existence of effective mechanisms to manage poorly performing trainees?

Have trainers been appraised for educational activities?

Do consultants want responsibility for a trainee?

Are trainees prepared to be a consultant/GP?

The analysis is discussed in the context of current policy and guidance and some recent research findings.

Chapter 4: Medical error

Factors associated with making and reporting medical errors

This chapter presents an analysis of the data from the National Survey of Trainees about medical error by looking at error reporting rates and analysing the data for the factors that are associated with making and reporting an error in the workplace. It seeks to answer the following questions:

- Do junior doctors who make an error report it locally?
- What are the factors associated with reporting a medical error on the survey form?
- What reasons do junior doctors give for making an error?
- What are the factors associated with reporting the medical error locally?

The analysis is discussed in the context of other national data and some research findings.

Chapter 5: European Working Time Directive (EWTD)

EWTD and its impact on training and perceptions about training

This chapter analyses data gathered in the National Survey of Trainers and the National Survey of Trainees about the impact of the European Working Time Directive (EWTD). It is important to note that both surveys took place before the 48-hour week was introduced in August 2009 and therefore reporting refers to the 56-hour week that had been in place since 2004. It explores relationships between EWTD compliance and the perceived quality of educational experiences.

It seeks to answer the following questions:

- What is the relationship between EWTD compliance and self-reported medical errors?
- What is the relationship between EWTD compliance and trainees’ rating of the experience they get from a post?
• What are the relationships between EWTD compliance and other facets of training such as attendance at formal teaching sessions?
• Are there particular features of providers that relate to their ability to comply with EWTD as measured by the trainees?
• Do consultants’ views on EWTD relate to trainees’ perceptions of compliance?
• What are trainees’ and trainers’ qualitative perceptions of the EWTD and do these align with the data?

The analysis is discussed in the context of some recent research and current policy.

Chapter 6: Stress

Factors associated with reporting stress
This chapter explores the impact of stress on junior doctors as reported in the National Survey of Trainees. This chapter seeks to answer the following questions:

• Do some trainees report more stress than others?
• What factors are associated with trainees reporting stress and are they related to the perceived quality of training?

The analysis is discussed in the context of other national data, research and current policy.
Introduction and scope of report

Every year for the last three years, the Postgraduate Medical Education and Training Board (PMETB) and the Conference of Postgraduate Medical Deans (COPMeD) have undertaken a National Survey of Trainee Doctors. For the last two years PMETB has also carried out a survey of their trainers. The data provide an overview of trainers’ and trainees’ perceptions of postgraduate medical education and training. The data also form one part of PMETB’s Quality Framework and have a critical role in supporting and maintaining standards.

Who was surveyed?

The following population definitions were used for these surveys.

Trainee Survey

**Trainee:** All trainees in posts within PMETB approved programmes, Academic Clinical Fellow (ACF)/Clinical Lecturer (CF) posts and foundation posts (except posts approved as Out of Programme Experience) on January 2, 2009.

**Included:**
- Foundation trainees (FY1 and FY2 trainees on the Foundation Programme)
- Core trainees
- Specialty trainees
- GP trainees
- Fixed Term Specialty Training Appointments (FTSA) trainees
- Locum Appointment for Training (LAT) trainees
- SpR trainees
- Military trainees – all military trainees working in NHS organisations and within the military services
- By agreement with the Faculty of Public Health, non-medical public health trainees
- Trainees in Clinical Lecturer and Academic Clinical Fellowship posts approved by PMETB
- Trainees working for non-NHS organisations, for instance occupational medicine, pharmaceutical medicine and palliative medicine

**Excluded:**
- Trainees on maternity leave on January 2, 2009
- Trainees on Out Of Programme Experience on 2 January 2009
- Dentists
- SpRs/StRs who have been awarded their CCT but are awaiting a consultant post

Trainer Survey

**Included:**
- All consultants
- All approved GP trainers
- All GPs with foundation trainees

Note: Details of the administration of the survey can be found in the briefing notes issued to deaneries, see www.pmetb.org.uk/traineesurvey and www.pmetb.org.uk/trainersurvey
Each year the surveys are reviewed with researchers, trainees, trainers and other stakeholders to ensure they stay relevant and fresh while still allowing us to make comparisons over time. This year, for example, new questions were introduced on the trainee survey which asked about the redistribution of tasks from junior doctors to other health professionals, such as nurses and also on the use of simulators in medical training.

The full results for both surveys can be accessed via the PMETB reporting tool, [http://reports.pmetb.org.uk](http://reports.pmetb.org.uk) which allows results to be viewed by local education provider, specialty and deanery. These results are part of the shared evidence base used across the postgraduate medical education community to assess the quality of training.

This report goes further by summarising the data. It draws out some of the trends and themes that have emerged from the surveys and analyses the relationships between variables. PMETB believes this analysis is useful to education providers, employers and policy makers.

**National Survey of Trainee Doctors**

The idea for a national survey of trainees was suggested to PMETB in a paper by Janet Grant et al.¹ and contains items first developed from the existing *Point of View* survey used by several postgraduate deaneries in the UK (London, Kent, Surrey and Sussex and East of England). The survey now has the support of employers and junior doctor representatives from the British Medical Association’s Junior Doctors’ Committee and the Academy of Medical Royal Colleges Trainee Doctors Group. In its current form, the survey provides PMETB and those responsible for the delivery of postgraduate medical education and training with invaluable and direct information that helps to improve the quality of medical education throughout the UK. All parties are committed to developing the survey and building on its success to date and beyond PMETB’s merger with the GMC in 2010.

The 2008/09 survey took place between 7 January and 9 April 2009 and included all trainees in a PMETB approved posts (except posts approved as Out of Programme Experience) on 2 January 2009, whose data were supplied to PMETB by the deaneries in response to a data request on the 8 October 2008.² Trainees on maternity leave were excluded as were trainees who had completed their training and were awaiting a consultant post. Trainees were sent an email with an unique Survey Access Code asking them to complete a web-based form. Those that didn’t complete were sent reminder emails – this is detailed in Table 0.2. The database sent a total of 201,038 emails.

Trainees who were not on the deanery lists were able to request a Survey Access Code directly from PMETB. Respondents that came via this route were assigned to the appropriate deanery and are included in Table 0.1 below (in both the numerator and the denominator). In total 1,169, 2.7 per cent of the 42,714 respondents came via this route.

This year 42,714 doctors in training out of 50,145 for whom PMETB had a valid record in the surveys database, took time to answer the survey giving a response rate of 85 per cent (see Table 0.1 below). The survey has a median completion time of 24 minutes so that amounts to approximately 711 days of doctor time. The survey is currently mandatory for specialty trainees (paragraph 7.36 of the *Gold Guide 2008*³) and from 2010 it will also be mandatory for foundation doctors.
Table 0.1 Trainee response rates by deanery (source of trainee details)

<table>
<thead>
<tr>
<th>Deanery name</th>
<th>Responses</th>
<th>Denominator</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defence Postgraduate Medical Deanery</td>
<td>53</td>
<td>119</td>
<td>44.5%</td>
</tr>
<tr>
<td>East Midlands Healthcare Workforce Deanery</td>
<td>2,510</td>
<td>2,856</td>
<td>87.9%</td>
</tr>
<tr>
<td>East of England Deanery</td>
<td>2,266</td>
<td>2,666</td>
<td>85.0%</td>
</tr>
<tr>
<td>Faculty of Pharmaceutical Medicine</td>
<td>69</td>
<td>159</td>
<td>43.4%</td>
</tr>
<tr>
<td>Kent, Surrey &amp; Sussex Deanery</td>
<td>2,139</td>
<td>2,361</td>
<td>90.6%</td>
</tr>
<tr>
<td>London Deanery</td>
<td>8,775</td>
<td>10,212</td>
<td>85.9%</td>
</tr>
<tr>
<td>Mersey Deanery</td>
<td>1,684</td>
<td>2,057</td>
<td>81.9%</td>
</tr>
<tr>
<td>NHS Education For Scotland (East)</td>
<td>441</td>
<td>559</td>
<td>78.9%</td>
</tr>
<tr>
<td>NHS Education For Scotland (North)</td>
<td>612</td>
<td>771</td>
<td>79.4%</td>
</tr>
<tr>
<td>NHS Education For Scotland (South East)</td>
<td>947</td>
<td>1,150</td>
<td>82.3%</td>
</tr>
<tr>
<td>NHS Education For Scotland (West)</td>
<td>2,080</td>
<td>2,689</td>
<td>77.4%</td>
</tr>
<tr>
<td>NHS Education South Central - Oxford</td>
<td>1,297</td>
<td>1,446</td>
<td>89.7%</td>
</tr>
<tr>
<td>NHS Education South Central - Wessex</td>
<td>1,835</td>
<td>2,005</td>
<td>91.5%</td>
</tr>
<tr>
<td>NHS Education South West - Peninsula Deanery</td>
<td>1,228</td>
<td>1,379</td>
<td>89.1%</td>
</tr>
<tr>
<td>NHS Education South West - Severn Deanery</td>
<td>1,717</td>
<td>1,845</td>
<td>93.1%</td>
</tr>
<tr>
<td>NHS West Midlands Workforce Deanery</td>
<td>3,519</td>
<td>4,222</td>
<td>83.3%</td>
</tr>
<tr>
<td>North Western Deanery</td>
<td>2,708</td>
<td>3,204</td>
<td>84.5%</td>
</tr>
<tr>
<td>Northern Deanery</td>
<td>2,230</td>
<td>2,623</td>
<td>85.0%</td>
</tr>
<tr>
<td>Northern Ireland Medical &amp; Dental Training Agency</td>
<td>1,162</td>
<td>1,453</td>
<td>80.0%</td>
</tr>
<tr>
<td>Wales</td>
<td>2,190</td>
<td>2,386</td>
<td>91.8%</td>
</tr>
<tr>
<td>Yorkshire and the Humber Postgraduate Deanery</td>
<td>3,252</td>
<td>3,983</td>
<td>81.6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42,714</strong></td>
<td><strong>50,145</strong></td>
<td><strong>85.2%</strong></td>
</tr>
</tbody>
</table>

This is a slight change from the table published at the end of the survey 30 April 2010, as a further 28 cases were removed in the analysis stage, due to comments made by respondents.
Table 0.2  Response rate by number of emails sent

<table>
<thead>
<tr>
<th>Number of sends</th>
<th>Running total of valid responses received</th>
<th>Response rate at this point (where N = 50,145)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>0.0%</td>
</tr>
<tr>
<td>2</td>
<td>22,323</td>
<td>44.5%</td>
</tr>
<tr>
<td>3</td>
<td>27,926</td>
<td>55.7%</td>
</tr>
<tr>
<td>4</td>
<td>32,933</td>
<td>65.7%</td>
</tr>
<tr>
<td>5</td>
<td>36,139</td>
<td>72.1%</td>
</tr>
<tr>
<td>6</td>
<td>38,161</td>
<td>76.1%</td>
</tr>
<tr>
<td>7</td>
<td>39,344</td>
<td>78.5%</td>
</tr>
<tr>
<td>8</td>
<td>40,407</td>
<td>80.6%</td>
</tr>
<tr>
<td>9</td>
<td>41,321</td>
<td>82.4%</td>
</tr>
<tr>
<td>10</td>
<td>42,017</td>
<td>83.8%</td>
</tr>
<tr>
<td>11</td>
<td>42,382</td>
<td>84.5%</td>
</tr>
<tr>
<td>12</td>
<td>42,616</td>
<td>85.0%</td>
</tr>
<tr>
<td>13</td>
<td>42,651</td>
<td>85.1%</td>
</tr>
<tr>
<td>14</td>
<td>42,714</td>
<td>85.2%</td>
</tr>
</tbody>
</table>

Improvements to the methodology

In 2009, for the first time, the survey form was pre-populated with the following deanery provided data about the post the trainee was evaluating in the survey form: deanery, provider, programme specialty, post specialty, GP programme if applicable and grade. Respondents were asked to confirm or amend these details as required. This should have improved the accuracy of reporting (the mapping of the trainee’s evaluation to the post details), as it reduces data entry on the part of the respondent and ensures that the deanery held data are checked.

For the first time trainees were emailed a receipt as proof of completion to provide at their ARCP/RITA if required.

Method variance

Some observers query whether there are certain types of trainee who may be keener to complete the survey than others, for example do the trainees who want to complain complete first? The time from sending the first email to completion in days was calculated for each respondent. When this was correlated with the scale indicator scores, no
correlation was greater than 0.053, suggesting there is very little variation by time to complete. Splitting the time to completion into quartiles and comparing the mean indicator scores across the quartiles illustrates the point that the differences are small. For the Overall Satisfaction Score, the highest score was 78.17 for those completing within the first quartile of completion times and the lowest was 76.77 for those completing in the fourth quartile of completion times. For the 16 (out of 22 Indicators) where these correlations were statistically significant (most things are statistically significant with Ns this large), 13 of the correlations were negative: a longer time to respond correlating very slightly with lower (not as good) indicator scores.

Free text comment analysis

The survey was largely quantitative but there was space at the end for free text comments (no limit on the size) and 9,435 respondents used this facility although the question was not mandatory. All these comments have been read and some of them have been used to illustrate the findings in this summary report. The comments were filtered for relevant words or groups of words including: EWTD; working time; rota; hours; stress; service; education; errors; bullying; undermining; assessment; and pressure. The comments were also searched for positive comments using words including; excellent; supportive; enjoy; impressed; happy; fantastic. Comments used to illustrate points in this report were selected from these filtered lists and are used purely to illustrate the findings of the main analysis. The responses chosen were not selected using any scientific method and it cannot be determined precisely how representative they are of the general views expressed in the comments section.

A note on terminology: what are post specialty groups?

In many of the subsequent chapters, the analysis uses post specialty groups. The deanery data request provided and the survey form itself collected both the trainee’s post and programme specialties. Post specialty refers to the trainee’s current post. For example a trainee on a core medical training programme may be in a cardiology post; a trainee on a GP programme may be in a paediatric post. For post-specialties the list of specialties and sub-subspecialties that appear on CCTs is used. They are grouped by college to give post specialty groups, so for example surgery means any post in any of the nine surgical specialties. If, as the case in the analysis that follows, there is no use of programme specialty trainees in the definition, “surgery” posts could have foundation, core, GP or specialty trainees as their incumbents. GP group means trainees working in GP practices; these could be F2 doctors or GP trainees. A note describing the reports available on the reporting tool can be viewed at: [http://www.pmetb.org.uk/surveysnationalreports](http://www.pmetb.org.uk/surveysnationalreports). In some of the reporting tool reports the definitions used are more complex and programme and post specialties are used (see reports tool faqs).

National Survey of Trainers

The National Survey of Trainers was developed by the Surveys Working Group (see acknowledgements for membership). It was designed to test PMETB’s Standards for trainers vii, which apply to all doctors who have completed their training and act as supervisors and also those who are formal educational supervisors. The standards were published in January 2008 and are expected to be fully implemented by January 2010. The survey collects evidence on whether trainers consider that they are able to undertake their duties as trainers effectively, whether these duties are formally recognised in their job...
plans and training and how supported trainers feel in their role. This information helps to inform future policy and enables trainees and trainers to get more recognition of the resources required to support postgraduate training.

The survey took place between 26 March 2009 and 23 June 2009 and targeted all consultants regardless of whether they were identified as trainers as well as all GP trainers (and GPs with foundation trainees) on the basis that they all have the potential for having responsibility for supervising trainees. For consultants the response was calculated differently depending on the data the deanery provided. Some deaneries provided a full list of their consultants; in which case this list was used as the denominator. Generally these deaneries achieved a higher response rate (see Table 0.3). Other deaneries did not do this and in these cases the response rate is based on the available census data. In all cases the target population was all consultants.

For deaneries that were unable to list out all consultants, a cascade methodology was employed to try and capture the remainder: deaneries nominated a contact at each provider, who was asked to forward an email from PMETB to their consultant colleagues. This meant that some people were targeted via both routes, which lead to some duplicate responses (removed from the dataset) and complaints from deaneries and colleges. PMETB will be reviewing the methodology.

In addition it was possible to access the form directly by requesting a code using a form where the respondent was asked to supply their GMC number and other details. 2,077 consultants, 20 per cent of 10,133 trainer consultants completed after accessing via this route. This is a reflection of the quality of the data supplied to PMETB by the deaneries for this survey, 18 per cent of which was not usable. In one deanery the emails included address of employees who were not doctors.

For GPs the denominator is the list of approved GP trainers collected by PMETB’s approval team and the details of the GPs with foundation trainees provided by the deaneries. Response rates for GPs were higher see Table 1.4, but still below 50 per cent overall.
<table>
<thead>
<tr>
<th>Deanery name</th>
<th>Responses</th>
<th>Denominator from email count</th>
<th>Denominator from Census</th>
<th>Response rate calculated from</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Midlands Healthcare Workforce Deanery</td>
<td>505</td>
<td>590</td>
<td>2,219</td>
<td>Census data 2008</td>
<td>22.8%</td>
</tr>
<tr>
<td>East of England Deanery</td>
<td>557</td>
<td>638</td>
<td>3,031</td>
<td>Census data 2008</td>
<td>18.4%</td>
</tr>
<tr>
<td>London Deanery</td>
<td>1,839</td>
<td>4,091</td>
<td>6,905</td>
<td>Census data 2008</td>
<td>26.6%</td>
</tr>
<tr>
<td>Mersey Deanery</td>
<td>422</td>
<td>498</td>
<td>1,704</td>
<td>Census data 2008</td>
<td>24.8%</td>
</tr>
<tr>
<td>NHS Education South Central - Wessex</td>
<td>319</td>
<td>386</td>
<td>1,470</td>
<td>Census data 2008</td>
<td>21.7%</td>
</tr>
<tr>
<td>NHS Education South West - Severn Deanery</td>
<td>329</td>
<td>394</td>
<td>1,632</td>
<td>Census data 2008</td>
<td>20.2%</td>
</tr>
<tr>
<td>NHS West Midlands Workforce Deanery</td>
<td>1,079</td>
<td>2,387</td>
<td>3,385</td>
<td>Census data 2008</td>
<td>31.9%</td>
</tr>
<tr>
<td>North Western Deanery</td>
<td>502</td>
<td>630</td>
<td>2,583</td>
<td>Census data 2008</td>
<td>19.4%</td>
</tr>
<tr>
<td>Northern Deanery</td>
<td>574</td>
<td>679</td>
<td>2,172</td>
<td>Census data 2008</td>
<td>26.4%</td>
</tr>
<tr>
<td>Wales</td>
<td>304</td>
<td>367</td>
<td>1,959</td>
<td>Census data 2008</td>
<td>15.5%</td>
</tr>
<tr>
<td>Yorkshire and the Humber Postgraduate Deanery</td>
<td>712</td>
<td>894</td>
<td>3,282</td>
<td>Census data 2008</td>
<td>21.7%</td>
</tr>
<tr>
<td>Defence Postgraduate Medical Deanery</td>
<td>7</td>
<td>8</td>
<td></td>
<td>Deanery email list</td>
<td>87.5%</td>
</tr>
<tr>
<td>Kent, Surrey &amp; Sussex Deanery</td>
<td>594</td>
<td>2,012</td>
<td>2,089</td>
<td>Deanery email list</td>
<td>29.5%</td>
</tr>
<tr>
<td>NHS Education for Scotland</td>
<td>1,421</td>
<td>4,343</td>
<td></td>
<td>Deanery email list</td>
<td>32.7%</td>
</tr>
<tr>
<td>Deanery name</td>
<td>Responses</td>
<td>Denominator from email count</td>
<td>Denominator from Census</td>
<td>Response rate calculated from</td>
<td>Response rate</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-----------</td>
<td>-----------------------------</td>
<td>-------------------------</td>
<td>-------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>NHS Education South Central - Oxford</td>
<td>304</td>
<td>960</td>
<td>1,304</td>
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<tr>
<td>NHS Education South West - Peninsula Deanery</td>
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<td>866</td>
<td>981</td>
<td>Deanery email list</td>
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<tr>
<td>Northern Ireland Medical &amp; Dental Training Agency</td>
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<td></td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10,133</strong></td>
<td><strong>9,279</strong></td>
<td><strong>30,342</strong></td>
<td></td>
<td><strong>25.6%</strong></td>
</tr>
</tbody>
</table>

**Census data sources:**

DH English Census data: supplied by Naomi Sang AH3258_on 18 June 2009. Census as at 30 September 2008. A headcount aggregation by location and specialty and grade was used for this calculation. More information is available here:


Wales census data taken from consultants listed here:

http://www.statswales.wales.gov.uk/TableViewer/TableView.aspx?ReportId=1281

Dentists removed by taking data from here:

http://www.statswales.wales.gov.uk/TableViewer/TableView.aspx?ReportId=1279
<table>
<thead>
<tr>
<th>Deanery (GPs)</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Response rate</th>
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<tbody>
<tr>
<td>Defence Postgraduate Medical Deanery</td>
<td>8</td>
<td>43</td>
<td>18.6%</td>
</tr>
<tr>
<td>East Midlands Healthcare Workforce Deanery</td>
<td>183</td>
<td>274</td>
<td>66.8%</td>
</tr>
<tr>
<td>East of England Deanery</td>
<td>171</td>
<td>380</td>
<td>45.0%</td>
</tr>
<tr>
<td>Kent, Surrey &amp; Sussex Deanery</td>
<td>227</td>
<td>512</td>
<td>44.3%</td>
</tr>
<tr>
<td>London Deanery</td>
<td>250</td>
<td>561</td>
<td>44.6%</td>
</tr>
<tr>
<td>Mersey Deanery</td>
<td>98</td>
<td>198</td>
<td>49.5%</td>
</tr>
<tr>
<td>NHS Education For Scotland (East)</td>
<td>27</td>
<td>70</td>
<td>38.6%</td>
</tr>
<tr>
<td>NHS Education For Scotland (North)</td>
<td>68</td>
<td>118</td>
<td>57.6%</td>
</tr>
<tr>
<td>NHS Education For Scotland (South East)</td>
<td>93</td>
<td>166</td>
<td>56.0%</td>
</tr>
<tr>
<td>NHS Education For Scotland (West)</td>
<td>154</td>
<td>271</td>
<td>56.8%</td>
</tr>
<tr>
<td>NHS Education South Central - Oxford</td>
<td>68</td>
<td>168</td>
<td>40.5%</td>
</tr>
<tr>
<td>NHS Education South Central - Wessex</td>
<td>125</td>
<td>274</td>
<td>45.6%</td>
</tr>
<tr>
<td>NHS Education South West - Peninsula Deanery</td>
<td>97</td>
<td>144</td>
<td>67.4%</td>
</tr>
<tr>
<td>NHS Education South West - Severn Deanery</td>
<td>112</td>
<td>244</td>
<td>45.9%</td>
</tr>
<tr>
<td>NHS West Midlands Workforce Deanery</td>
<td>276</td>
<td>584</td>
<td>47.3%</td>
</tr>
<tr>
<td>North Western Deanery</td>
<td>203</td>
<td>443</td>
<td>45.8%</td>
</tr>
<tr>
<td>Northern Deanery</td>
<td>103</td>
<td>285</td>
<td>36.1%</td>
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<tr>
<td>Northern Ireland Medical &amp; Dental Training Agency</td>
<td>51</td>
<td>142</td>
<td>35.9%</td>
</tr>
<tr>
<td>Wales</td>
<td>162</td>
<td>246</td>
<td>65.9%</td>
</tr>
<tr>
<td>Yorkshire and the Humber Postgraduate Deanery</td>
<td>275</td>
<td>465</td>
<td>59.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,751</strong></td>
<td><strong>5,588</strong></td>
<td><strong>49.2%</strong></td>
</tr>
</tbody>
</table>
The role of the trainee survey in improving the quality of postgraduate medical education and training

PMETB launched the Quality Framework in 2007 and the two surveys form one of its five elements. The results are shared and used by a range of stakeholders including providers of education, deaneries, quality managers, trainers, trainees and policy makers. They inform PMETB’s teams as they visit deaneries and providers.

PMETB put this year’s trainee survey results into the public domain via the on-line reporting tool on May 27, 2009. By July 31, 2009 there had been 28,027 absolute unique visitors (Source: Google analytics). Many of these were trainees responding to an email announcing the results with a link to the page for their provider and cohort (foundation, core and specialty). As in previous years, the provider level reports are the most popular. At the time of writing, data on the trainer survey reports were not available as they had not been released into the public domain.

Trainers completing this year’s National Survey of Trainers were asked about the trainee survey. Two-thirds (65 per cent, N = 12,884) were aware of the survey. Of those that were aware, 48 per cent were aware of the results for their department and 29 per cent (N = 8,331, those aware of the survey only) said that action been taken in response to the findings.

The role of the surveys in previous years

All deaneries are required to publish an action plan as part of their Annual Deanery Report (ADR). The action plans are the key, forward looking part of the ADR, identifying actions to be taken to resolve areas of concern. These action plans routinely build in feedback from the trainee survey and can be viewed here:

How the survey can be used in quality improvement

The past three years of the trainee surveys and two years of trainer surveys have been used by PMETB and those who deliver postgraduate medical education and training to improve the quality of training and to ensure that it does not fall below PMETB’s standards. The surveys are only one source of evidence and PMETB expects postgraduate deans and others to use the information and feedback from the other elements of the Quality Framework in the context of their own quality management and the information arising from that work.

Below are some examples of how the survey has been used by deaneries as part of their work. This information is drawn from the action plans published on PMETB’s website.

**East of England**
Survey data is triangulated with deanery quality management mechanisms to highlight key areas of concern. For example, workload and EWTD was made evident as a concern from both the survey and deanery. As a result "the document 'Investment in the Educational Infrastructure' has defined the roles and identified resource for those nominated to undertake the education of doctors in training” and “heads of these schools have implemented a visiting programme to address these issues with all our local education providers in these specialties”.

**Wessex**
Educational supervision was highlighted as an area for improvement by the Wessex Deanery as a result of the National Survey of Trainees 2007. To resolve this issue, Wessex Deanery have stated in their action plan that they will identify consultants lacking educational supervision skills and offer them places on courses such as the educational supervisor development course. They will also ensure that all trainees have a named and trained educational supervisor.

**Northern**
Northern Deanery noted findings of bullying and harassment in the PMETB trainee survey in some specialties. The actions ensuing from this include monitoring progress on zero tolerance to bullying and harassment through regular quality management reviews. A research project has also been initiated to explore the most effective ways of reducing bullying in the workplace. Courses are continuing to be run and monitoring persists through trainee focus groups, trainee surveys and heads of school visits to training units.

**West Midlands**
West Midlands Deanery compared the trainee survey results of 2006 and 2007 and found an increasing number of below outliers for handover scores. The deanery has put in place an action plan to help develop appropriate protocols for monitoring untoward incidents. The survey results are also used to demonstrate improvements within trusts.

**North of Scotland**
PMETB surveys are used with findings from visits conducted by the quality management team. After evaluating the results of visits and surveys, action plans are created to improve areas of concerns.

**West of Scotland**
West of Scotland Deanery has arranged site visits to trusts that had concerns in the National Survey of Trainees 2007. Written reports have also been requested to indicate how improvements will be made. The deanery is planning to carry out follow-up visits to monitor the situation.
Chapter 1: Trainees’ satisfaction with training

What can satisfaction tell us about the quality of training?

Trainee satisfaction has been measured by this survey for the last three years and it has consistently shown high levels of satisfaction, as expressed by most trainees who rate the quality of teaching and supervision in their current posts as “good” or “excellent”.

The survey asks trainees about various aspects of their current post such as how they rate the quality of teaching and supervision and how useful the post will be for their future career. These items make up the Overall Satisfaction Score. So far no analysis has been undertaken to link overall satisfaction with educational outcomes or indicate that the outcomes of the overall training programme are considered satisfactory, nevertheless it is a proxy measure of the quality of training offered by groups of posts defined by specialty within providers.

The survey data can be analysed for correlations between trainees’ ratings of the various facets of their posts such as clinical supervision and their overall satisfaction with the post.

This section seeks to answer the following questions:

- What is the Overall Satisfaction Score for all trainees and are there differences between specialty groups?
- What are the factors linked with high satisfaction?
- How satisfied are GP trainees with their hospital experience when compared to their specialty colleagues?

This analysis includes some new items, introduced in the 2009 survey, which ask trainees about who provides their clinical supervision, whether they have access to simulators in training and the impact of redistributing tasks to other professionals such as nurses. The latter two were developed by the BMA’s Junior Doctors Committee.
Overall Satisfaction measure – all trainees

In general, trainees scored highly on the Overall Satisfaction Score, with 25 per cent scoring 88 or more (out of a possible 100). This means that trainees are generally giving ratings of “good” or “excellent” to the individual items that make up the score. In total, 50 per cent of trainees scored 79 or more and 75 per cent scored 67 or more.

Looking at the five items within the score highlights the different aspects that contribute to high satisfaction reported by trainees:

- 77 per cent rated the quality of experience in their current post as good or excellent.
- 76 per cent said their current post would be useful for their future career.
- 75 per cent rated the quality of supervision in their current post as good or excellent.
- 71 per cent would describe the post as good or excellent to a friend who was thinking of applying for it.
- 63 per cent rated the quality of teaching (informal and formal) as good or excellent.

Similarly 74 per cent of respondents (N = 42, 714) reported witnessing behaviour from consultants that they had found inspirational.

Overall satisfaction by post specialty group

The 2006 survey showed that the Overall Satisfaction Score varied by the specialty in which the trainee was working at the time of the survey (post specialty group), irrespective of their eventual career destination and their programme specialty. The 2009 data showed the same pattern (see Chart 1.1): trainees of all grades and programme specialties in surgical posts (any trainee including foundation and GP trainees in a post in any of the nine surgical specialties) gave the lowest rating; trainees in GP posts (including F2 trainees) gave the highest ratings.
The data were analysed for links between a high Overall Satisfaction Score and other indicators in the survey (see http://www.pmetb.org.uk/surveysnationalreports for details). Indicators are sets of items that taken together make up a composite score. The analysis showed that the only two indicators related to Overall Satisfaction across all eleven post specialty groups were the Clinical Supervision and Feedback scores: across all specialties trainees who get good supervision and receive regular feedback are more likely to report being satisfied. Many of the other indicators were significantly associated with Overall Satisfaction in more than five specialties; for instance a higher Consultant Undermining Score was associated with lower satisfaction in ten specialties. Full details are from the PMETB website: http://www.pmetb.org.uk/surveysnationalreports

In 2009 three new indicators were introduced. These asked about who provided the clinical supervision in an attempt to unpack differences for trainees supervised by consultants versus other grades of doctor (Clinical Supervision – Who Score); the different sort of training opportunities available to trainees, such as simulators that allow them to practice skills and techniques without involving “live” patients (Procedural Skills Score); and the Redistribution Score which explores the extent to which clinical work previously undertaken by junior doctors is allocated to different health professionals such as nurses and the impact of this on training. Analysing the relationship between these indicators and the Overall Satisfaction Score showed the following patterns, all of which were statistically significant.

- Clinical Supervision Who Score: overall satisfaction was higher in some post specialty groups when the trainees were supervised by a consultant rather than a lower grade of doctor after statistically controlling for the grade of the trainee doctor. This was the case for trainees in posts in the following specialty groups:

Table 1 Occupational medicine and public health were excluded due to small numbers.
anaesthetics, emergency medicine, medicine, obstetrics and gynaecology, ophthalmology, paediatrics and child health, radiology and surgery.

- Procedural Skills Score: overall satisfaction was higher in some groups when they had access to training tools such as simulators. This was the case in anaesthetics, emergency medicine, general practice, medicine, obstetrics and gynaecology, paediatrics and child health and surgery.

- Redistribution Score: overall satisfaction was lower in some post specialty groups when they had poor perceptions about the impact of redistributing tasks to other health professionals. This was the case in anaesthetics, medicine, obstetrics and gynaecology, paediatrics and child health, radiology and surgery.

GP trainees in hospital posts

Anecdotally it has been suggested that trainees on GP training programmes working within hospitals posts are less satisfied than their colleagues training in hospital-based specialties.

Some research has supported this, for example a 2002 paper by the UK Medical Careers Group reported:

"Postgraduate general practice training in hospital-based posts was seen as poor quality, irrelevant and run as if it were of secondary importance to service commitments."

However, there was no evidence from the survey data to support this. GP trainees in hospital posts were compared to their specialty counterparts at the same stage in training on the Overall Satisfaction Score. As Table 1.1 shows, no statistically significant differences were found, although a larger sample may show a small difference for obstetrics and gynaecology posts in the predicted direction, with GP trainees slightly less satisfied than obstetrics and gynaecology trainees.

Table 1.1 Overall Satisfaction Score – GP trainees compared to their specialty counterparts

<table>
<thead>
<tr>
<th>Trainee group</th>
<th>Mean overall satisfaction score</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP trainees in medical posts</td>
<td>71.45</td>
<td>573</td>
</tr>
<tr>
<td>Core medical trainees- year 1</td>
<td>71.87</td>
<td>1,196</td>
</tr>
<tr>
<td>GP trainees in medical posts</td>
<td>70.66</td>
<td>313</td>
</tr>
<tr>
<td>Core surgical trainees- year 1</td>
<td>71.19</td>
<td>605</td>
</tr>
<tr>
<td>GP trainees in obstetrics and gynaecology posts</td>
<td>72.81</td>
<td>203</td>
</tr>
<tr>
<td>Obstetrics and gynaecology trainees - year 1</td>
<td>75.13</td>
<td>239</td>
</tr>
</tbody>
</table>
Trainee group | Mean overall satisfaction score | N
--- | --- | ---
GP trainees in paediatric posts | 80.38 | 210
Paediatric trainees - year 1 | 79.22 | 378

Discussion

Most trainees are satisfied with their current posts and this is illustrated by some of the positive comments they made in the survey.

"This is an excellent training post with numerous opportunities for training and learning. There is excellent consultant support and supervision, plenty of opportunity to pursue special interest sessions and inspirational consultants who create an excellent culture for training rather than service provision."

**Obstetrics and gynaecology trainee**

"This is an excellent training post and the level of educational supervision and indeed clinical supervision has been of the highest standard."

**General surgery trainee**

"Overall I have really enjoyed my training at this hospital. The formal educational meetings are excellent and the supervision and support from consultants has also been excellent."

**Pediatrics trainee**

"I have an excellent training job at a fantastic surgery and feel very privileged to work there. The supervision is excellent and everyone is very supportive and accessible. It is my dream job."

**General practice trainee**

Some trainees were very unhappy with their post, as shown by these comments:

"Poor staffing has hampered training and supervision, where more than half the time the department was covered with locums who were not interested in teaching/training. Consultants were also only concerned with looking after their service commitments, which hampers training."

**General practice programme trainee working in an acute trust**

"There was very little senior supervision available resulting in daily concerns for patient welfare."

**Foundation trainee**

These comments – both positive and negative - reflect the value that trainees place on clinical supervision in particular, a factor also highlighted in this analysis and in previous years, which shows that supervision, feedback and satisfaction are closely linked. In particular, trainees in surgery, medical, ophthalmology and radiology posts report higher satisfaction when they are supervised by consultants.

Two new indicators were also linked to satisfaction in some specialty groups. Trainees working in seven specialty groups all had higher satisfaction scores when they had access to a range of opportunities to improve their procedural skills, for example surgical...
simulation. This is in line with research showing that these tools can lead to effective learning, including a Best Evidence Medical Education review which concluded: “High-fidelity medical simulations are educationally effective and simulation-based education complements medical education in patient care settings.”

The other correlation was a negative: trainees in six specialty groups reported lower satisfaction where they perceived that some tasks had been redistributed to other health professionals. This echoes concern about the impact of new practitioner roles. For example, the BMA’s ongoing study of medical graduates of 2006 reported in June 2009: “One third of cohort doctors feel that there are tasks carried out by other health professionals that would be beneficial to their training for them to undertake. The tasks and roles of nurse practitioners and specialist nurses were the main areas identified by cohort doctors where opportunities for junior doctors to practice their skills had decreased and more experience would be useful.” This concern was also illustrated in the comments made by trainees in this survey. For example:

“I think that the current system has too many people trying to do the same role. Nurse practitioners are doing the same job as junior doctors - assessing and treating patients – and this is not useful for junior doctors’ training.”

Foundation trainee

“I am concerned about doctors’ roles being continually delegated to other health care professionals such as advanced nurse practitioners and pharmacists. I feel it has directly affected my training opportunities and experience.”

Foundation trainee

Not everyone agreed. This trainee had a different perspective:

“I think the Advanced Neonatal Nurse Practitioners need to be encouraged to provide more of a teaching/training role as I feel they are a resource that is underused. The training of ANNPs has occasionally detracted from opportunities to perform procedures, but the opportunities have been shared fairly.”

Paediatrics trainee

Of the five items making up the Overall Satisfaction Score, satisfaction with teaching scored lower with less than two thirds of respondents rating the quality as good or excellent. This is also reflected in the comments made by trainers, a large number of whom said allocated time for teaching would be the single thing that would most improve the quality of the education they could provide. For example one consultant said:

“There is no formal allocation of time for training included in a job plan as it is considered a supporting professional activity and clinical workload reduces ability to spend time teaching.”

Another added that he/she needed:

“Protected time in my job plan that recognises the important role of training.”
Chapter 2: Service versus education

Exploring the tension between providing a service while receiving an education.

Introduction

The debate over whether doctors in training contribute too much to the needs of the service at the expense of their needs as trainees is long running. The vast majority of junior doctors are in posts which contribute to the service, are paid as employees by the NHS and expected to do a job. However, they are also in education and during their time as trainees they are expected to undertake training activities as well as learn from their in-service experiences, particularly as the posts they are in are funded as educational posts.

Changes to the working pattern of junior doctors, including the EWTD and Hospital at Night reforms are changing the way training and service interacts. Consultants are concerned too that their own service demands impinge on the time they have available to teach (see discussion below). The solutions tried so far have included the redistribution of clinical tasks to other health professionals, notably nurses and the introduction of simulators that allow trainees to practice their skills away from the clinical setting.

What does PMETB say about service versus education?

**Domain 6: Support and development of trainees, trainers and local faculty**

**Standard:** Trainees must be supported to acquire the necessary skills and experience through induction, effective educational supervision, an appropriate workload, personal support and time to learn.

**Requirements:**

6.9 Working patterns and intensity of work by day and by night must be appropriate for learning (neither too light nor too heavy).

6.12 While trainees must be prepared to make the needs of the patient their first concern, routine activities of no educational value should not present an obstacle to the acquisition of the skills required by the approved curriculum.

*Generic Standards for Training, July 2008*

This chapter seeks to provide some insight to inform the discussion on the service versus education tension by examining:

- Do trainees have access to departmental and regional teaching and how do they rate its quality?
- What impact do service demands have on trainees’ experience?
- What impact does redistribution of tasks to other health professionals have on trainees’ experience?
- What impact does simulator training have on trainees’ experience?
- What is the relationship between clinical and educational supervision?
Do trainees have access to departmental and regional teaching and how do they rate its quality?

The trainee survey asked:

- Is specialty-specific teaching provided on a deanery/regional/school wide basis?
- Is specialty-specific teaching provided on a local/departmental basis?

Most trainees did receive teaching at deanery/regional/school wide level and/or departmental level, as follows:

- 95 per cent (N = 19,307) of specialty trainees
- 95 per cent (N = 3,246) of GP trainees in acute settings
- 98 per cent (N = 3,061) of GPs in GP practices
- 91 per cent (N = 6,008) of core trainees

Only 5.4 per cent (N = 31,622 - these items are not applicable to foundation doctors) of core and specialty trainees reported having no regional or department teaching.

Trainees reported that over 88 per cent (N= 25,234) of departmental training was delivered by senior doctors or a mixture of senior doctors and trainees.

- 81 per cent rated the teaching a good or excellent rating when it was delivered exclusively by senior doctors (N = 6,674).
- 38 per cent rated teaching as good or excellent when it was delivered exclusively by other trainees without senior supervision (N = 533).

Of those that reported having departmental teaching (N = 25,723), 10 per cent reported having to leave every teaching session at least once per session to answer clinical calls. For 30 per cent of trainees the time was protected and they never had to leave the session.

Overall, trainees in this survey, who attended both types of training, gave higher ratings to deanery/regional/school teaching than departmental teaching. However only 24 per cent (N = 23,556) of trainees reported being able to attend these teaching sessions every time. By far the most commonly selected reason for not attending was service commitments, cited by 51 per cent of trainees (N = 23,567). There was a wide variation depending on which specialty the trainee was working in (post specialty group, see Chart 2.1) ranging from below 10 per cent in general practice to over 69 per cent for those in paediatrics. This probably reflects the working patterns and typical volume of direct patient responsibilities of the various specialties.
What impact do service demands have on trainees’ experience?

Trainers were asked about the extent to which they felt service demands impacted upon training at their provider. By linking their views with those of trainees as expressed on the Adequate Experience Score, it is possible to explore whether trainees and trainers agree. The results are shown in Table 2.1 and demonstrate a clear agreement. Trainers at providers with one or more outliers on the Adequate Experience Indicator (in other words, where experience is least adequate as rated by trainees) are more likely to report that service demands impacted negatively on training.

Table 2.1 Adequate Experience outliers on the trainer survey against trainer ratings of the service demands affecting trainees’ experience

<table>
<thead>
<tr>
<th>Number of outliers for the provider on the Adequate Experience Indicator across all three provider level reports (foundation, core/GP and specialty) from the trainee survey</th>
<th>Service demands in my department mean that trainees are unable to ... take advantage of formal teaching sessions - % responding on a weekly or daily basis</th>
<th>Service demands in my department mean that trainees are unable to ... take adequate advantage of the clinical learning opportunities available - % responding on a weekly or daily basis</th>
<th>N (trainer respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 no trainee reports indicator a possible problem</td>
<td>21.4%</td>
<td>31.9%</td>
<td>2,750</td>
</tr>
<tr>
<td>1 or more trainee reports indicator a possible problem</td>
<td>29.6%</td>
<td>45.3%</td>
<td>7,383</td>
</tr>
<tr>
<td>Overall</td>
<td>27.3%</td>
<td>41.6%</td>
<td>10,133</td>
</tr>
</tbody>
</table>
What impact does redistribution of tasks to other health professionals have on trainees’ experience?

Trainees were asked: “The redistribution of tasks in this post to other health professionals prevented you from achieving curriculum outcomes required for this placement.” Those who agreed most strongly were more likely to give low ratings for the experience offered by their post – see Table 2.2.

Table 2.2 Redistribution of tasks and Adequate Experience ratings

<table>
<thead>
<tr>
<th>The redistribution of tasks in this post to other health professionals prevented you from achieving curriculum outcomes required for this placement</th>
<th>How would you rate the practical experience you are getting in this post? - % responding “very poor” or “poor”</th>
<th>How confident are you that your current post will help you acquire the competences you need at this stage of your training? - % responding “not at all confident” or “not very confident”</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not agree</td>
<td>5.4%</td>
<td>5.5%</td>
<td>36,524</td>
</tr>
<tr>
<td>Agree or strongly agree</td>
<td>13.1%</td>
<td>13.5%</td>
<td>6,117</td>
</tr>
</tbody>
</table>

The extent to which trainees felt that they were being prevented from undertaking tasks they needed to meet the curriculum outcomes varied by post specialty group – see Chart 2.2. Trainees in obstetrics and gynaecology were most likely to report being unable to undertake tasks required by their curriculum.
What impact does simulator training have on trainees’ experience?

There is a wide range of simulation training, ranging from high tech computerised mannequins that mimic live patients to full-scale mocked up theatres, from IT-based mock epidemics to virtual-reality endoscopes. Broadly, though, simulation-based training involves trainees learning new skills without involving live patients and can model a range of clinical scenarios.\textsuperscript{xiv}

Trainees who report that they have used a simulator are less likely to give low ratings on the Adequate Experience see Table 2.3.
Table 2.3  Use of simulator training and Adequate Experience ratings

<table>
<thead>
<tr>
<th>How would you rate the practical experience you are getting in this post? - % responding “very poor” or “poor”</th>
<th>How confident are you that your current post will help you acquire the competences you need at this stage of your training? - % responding “not at all confident” or “not very confident”</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you had any procedural skills trained with simulator training in this post?</td>
<td>No</td>
<td>7.9%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

Use of simulator training varies by specialty, with what might be deemed the technical specialties such as obstetrics and gynaecology and anaesthetics scoring highly, see Chart 2.3.

Chart 2.3  Use of simulator training by post specialty group
What is the relationship between educational supervision and clinical supervision?

As can be seen from Chapter 4 on medical error, this survey has highlighted the importance of clinical supervision. Trainees also expect to receive educational supervision and this section seeks to explore the complicated relationship between the two.

PMETB defines an educational supervisor as: "a trainer who is selected and appropriately trained to be responsible for the overall supervision and management of a specified trainee’s educational progress during a training placement or series of placements. The educational supervisor is responsible for the trainee’s Educational Agreement." In this survey, trainees were asked: “Do you have a designated educational supervisor (the person responsible for your appraisal) in this post?” The National Association of Clinical Tutors uses the same definition.

Overall 98 per cent of trainees said yes (N= 42,714), a slight increase from the previous year of 96 per cent (N = 32,852 - National Survey of Trainee Doctors, 2007/08). Trainees working in two specialties - general practice and paediatrics and child health – have a 99.5 per cent of their trainees reporting having a designated educational supervisor. Trainees in surgical posts are the least likely to report having an educational supervisor at 96 per cent (N = 7,819).

Halpern and McKimm (2009) note that educational supervision includes some aspects of clinical supervision because issues that emerge in educational supervision include aspects relating to clinical practice. Clinical supervision covers a wider range of issues around specific clinical issues. So it is not surprising that in previous years the national survey data has shown that it is clinical supervision that is related most strongly to trainees’ overall satisfaction with the post and their self-reported (on the survey form) medical errors. PMETB defines a clinical supervisor as "a trainer who is selected and appropriately trained to be responsible for overseeing a specified trainee’s clinical work and providing constructive feedback during a training placement. Some training schemes appoint an educational supervisor for each placement. The roles of clinical and educational supervisor may then be merged."

Examination of the relationship between the Medical Error Score; the Clinical Supervision Score; and the Educational Supervision Score finds that Clinical Supervision Score mediates the relationship between Educational Supervision and Medical Error, because a series of regressions gave the following results (see http://www.pmetb.org.uk/surveysnationalreports):

1. When both types of supervision are used to predict the Medical Error Score only Clinical Supervision is found to be related to Medical Error.
2. When just Educational Supervision is used to predict the Medical Error Score, it is related to Medical Errors.
3. Educational Supervision is related to Clinical Supervision. Better educational supervision is correlated with better clinical supervision. An examination of the items in these indicator scores (Table 2.4) illustrates this point.
This suggests that Educational Supervision is related to Medical Error reporting via its relationship with Clinical Supervision. Analysis of the items within these two Indicators shows that:

Table 2.4 shows that those trainees with a designated educational supervisor were more likely to give better ratings on clinical supervision items. For example, 82.9 per cent report knowing who their clinical supervisor is compared to 60.6 per cent of those with no educational supervisor. They were more likely to report working in an environment where reporting of near misses is encouraged and followed up (77.0 per cent versus 56.6 per cent).

**Table 2.4 Designated educational supervisor and Clinical Supervision Score items**

<table>
<thead>
<tr>
<th>Clinical supervision item</th>
<th>Response to clinical supervision item – a high % is more positive in all cases</th>
<th>Do you have a designated educational supervisor (the person responsible for your appraisal) in this post?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No and not sure responses</td>
<td>Yes</td>
</tr>
<tr>
<td>In this post how often have you felt forced to cope with clinical problems beyond your competence or experience?</td>
<td>% Never 18.6% 23.5%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N 905 41,740</td>
<td></td>
</tr>
<tr>
<td>In this post how often, if ever, have you been supervised by someone who you feel isn't competent to do so?</td>
<td>% Never 58.6% 66.9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N 908 41,806</td>
<td></td>
</tr>
<tr>
<td>In this post how often have you been expected to obtain consent for procedures which you do not carry out yourself?</td>
<td>% Never 52.4% 61.4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N 822 35,573</td>
<td></td>
</tr>
<tr>
<td>In this post do you always know who is providing your clinical supervision when you are working?</td>
<td>% Yes and they are accessible 60.6% 82.9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N 893 41,440</td>
<td></td>
</tr>
<tr>
<td>In this post please indicate your perception of the way in which critical events and near misses are reported in your department.</td>
<td>% Reporting is encouraged and followed-up 56.6% 77.0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N 905 41,740</td>
<td></td>
</tr>
</tbody>
</table>

**Discussion**
The data here show that although trainees by and large have a range of teaching opportunities on offer, significant numbers of them report they are unable to attend or have their attendance interrupted because of service needs. Trainers are also concerned that service demands prevent trainees from taking advantage of formal teaching sessions and clinical learning opportunities – with a clear link between how seriously they take this issue and how seriously trainees say they are affected.

This picture is backed up anecdotally by the comments from trainees:

“My experience has been foundation year ones being used in surgery primarily for service delivery, resulting in a learning experience which is exhausting, demoralising and next to useless and patient safety is severely compromised.”

**Foundation trainee**

“Service provision is the mainstay of my job. Staffing is poor and as a result my training has been affected. It is difficult to get to teaching and no informal consultant teaching happens. This has seriously affected my learning and has left me disillusioned with the training I am provided with.”

**Paediatric trainee**

“We spend too much time on service delivery at the expense of training/teaching.”

**Clinical radiology trainee**

Likewise, trainers complained of service needs taking priority over teaching of juniors both for themselves as teachers and their trainees. They were asked what single thing would improve training. The following comments were typical: “Less reliance on trainees for service provision.”

**Trainer in anaesthetics**

“Service driven departments (due to work pressures and EWTD) have led to the focus being on treatment rather than teaching.”

**Trainer in paediatrics**

“Bleep free protected teaching with no service commitments.”

**Trainer in anaesthetics**

“Clinical demands are huge at the moment. Sorry but trainees lose out.”

**Trainer in ophthalmology**

Addressing this is a complicated issue. Not only is the service element vital to running the NHS, it is also highly valued by many who see it as a vital part of their training and the way they learn about treating patients. The wide variation between specialities and providers of education suggests that there may be scope for learning from each other about how to improve the educational experience of posts.

The analysis here also shows that in some cases the solution seems to have exacerbated the problem with junior doctors concerned that handing their work to other health professionals has undermined their chance to gain experience. This may be because the work that has been handed over is not necessarily the service tasks that were taking up junior doctors’ time in a way that wasn’t useful for training, but instead is the work that used to be used for training but which can more efficiently be done by other health professionals as their sole role – thus prioritising service delivery (by other health professionals) over training (for junior doctors). For example, juniors report anecdotally that endoscopy lists in some LEPs have been given over to nurse endoscopists and are now no longer available for training junior doctors, largely in order to meet clinical targets and clear waiting lists.
This is discussed in Chapter 1 on trainees’ satisfaction with training. In other cases, innovations that attempt to reduce the service/education tension such as the use of simulators are associated with trainees giving better ratings for experience gained. This is in line with current research which has shown various benefits of this type of training, including providing realistic training prior to patient care; uniformity of case experiences among trainees; and opportunities for trainees to develop technical expertise early in their education.\textsuperscript{xix} Others reasons cited in support of the use of simulators are reductions in teaching time, limited availability of patient subjects, and rapid advances in the number and complexity of diagnoses and treatments as several reasons for a demand for new teaching methods.\textsuperscript{xxi}

The analysis of clinical and educational supervision highlights the relationship between the two and should also prompt thinking about how educational supervisors can be empowered to support junior doctors when clinical supervision is inadequate. As Halpern and McKimm point out, education supervision may entail discussing issues with others; one might argue that this includes ensuring that clinical supervisors are providing the necessary assistance to their trainees. For instance, one educational supervisor said that he tells his trainees that if they cannot get hold of their clinical supervisors they should call him. Such an approach may well help ensure the availability of senior colleagues through senior peer pressure. Strong educational supervision can help ensure better clinical supervision and so lower medical errors. Educational supervisors can provide a mechanism for dealing with concerns regarding clinical supervision immediately.
Chapter 3: Workplace Based Assessment

Consultants’ views of Workplace Based Assessment and issues of underperformance.

Workplace Based Assessments (WPBA) were introduced into postgraduate medical training over the past few years. They were designed to test trainees’ clinical and practical skills in the workplace, rather than as a component of formal examinations, as had previously been the case. According to the Academy of Medical Royal Colleges, "assessment drives learning" and in order for training posts to be educational rather than service-based, it is crucial that trainers are able to undertake WPBAs that contribute to the professional development of the trainee.

This chapter seeks to answer the following questions:

- To what extent are consultants and GPs carrying out WPBAs and have they received training?
- How do consultants and GP trainers rate assessment tools?
- Is there a link between consultants and GP trainers’ views on whether their trainees are competent and the existence of effective structures and processes to manage poorly performing trainees?
- Have trainers been appraised for educational activities?
- Do consultants want responsibility for a trainee?
- Are trainees prepared to be a consultant/GP?

The discussion section at the end considers the results of this analysis in the context of other research and current policy.

To what extent are consultants and GPs carrying out WPBAs and have they received training?

The survey asked consultants whether they undertook WPBAs (the assumption is that all GP trainers are undertaking them as they are all approved trainers) and asked all trainers whether they had received training to support them. The results showed:

- 83 per cent (N = 10,133) of the consultants surveyed undertook WPBAs
- 18 per cent of these (N = 8,427) had never received training
- 97 per cent (N = 2,751) of the GP trainers and GPs with foundation trainees had received training in WPBAs

The percentage of consultant trainers who perform assessments has increased by 13 per cent since the last survey and most deaneries have shown an improvement see Chart 3.1. The percentage of GP respondents who have had training in WPBA has also increased by 3 per cent. In 2007 67 per cent of consultants performing WPBA had been trained; in 2009 80 per cent (N = 7,411) of consultants performing WPBA had been trained.
The survey asked the trainers who perform WPBAs if they had turned down trainees’ requests for input into a WPBA because of the pressure of work in the four weeks before completing the survey. 22 per cent (N = 8, 427) of consultants said they had. Only 10 per cent (N = 2, 751) of GPs reported doing so.

All consultant and GP trainers, regardless of whether they themselves undertook WPBAs, were asked about the impediments to the use of WPBA within their department, see Chart 3.2. Lack of time was by far the most frequently cited reason.
How do consultant and GP trainers rate assessment tools?

Consultants were also asked about the use of tools for carrying out WPBAs and how they rated them. These ratings are the assessors’ reported ratings for their own implementation of the tools; not the tool per se. Chart 3.3 shows that those who had been trained in WPBAs were more likely to rate the tool as providing a meaningful and sufficient data set about trainees’ competency. The differences were statistically significant across all four tools (see [http://www.pmetb.org.uk/surveysnationalreports](http://www.pmetb.org.uk/surveysnationalreports)). The Mini-CEX received a lower rating than the other three tools currently in use in medical education. None of the tools received a rating higher than 41 per cent from consultants, even from those trained in their use.
Chart 3.3 Consultant trainers by WPBA trained status and ratings of WPBA tools

WPBA tool rating by whether the trainer has been trained in WPBA

<table>
<thead>
<tr>
<th>WPBA Tool</th>
<th>Not Trained</th>
<th>Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini Clinical Evaluation (Mini-CEX)</td>
<td>N = 1,173</td>
<td>N = 5,282</td>
</tr>
<tr>
<td>Directly Observed Procedural Skills (DOPs)</td>
<td>N = 1,207</td>
<td>N = 4,917</td>
</tr>
<tr>
<td>Case Based Discussion (CBD)</td>
<td>N = 1,283</td>
<td>N = 5,635</td>
</tr>
<tr>
<td>Multi-Source Feedback (MSF)</td>
<td>N = 1,046</td>
<td>N = 5,216</td>
</tr>
</tbody>
</table>

Chart 3.4 shows that GP trainers give the highest rating to the Consultation Observation Tool and the lowest rating to the Patient Satisfaction Questionnaire. The numbers of untrained GP’s were too low for comparison across trained and untrained GP users.

Chart 3.4 GP trainers ratings of WPBA tools

WPBA tool rating

<table>
<thead>
<tr>
<th>WPBA Tool</th>
<th>% rating sufficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Satisfaction Questionnaire</td>
<td>40%</td>
</tr>
<tr>
<td>Multi-Source feedback</td>
<td>60%</td>
</tr>
<tr>
<td>Clinical Evaluation Exercise</td>
<td>30%</td>
</tr>
<tr>
<td>Direct Observation of Procedural Skills</td>
<td>40%</td>
</tr>
<tr>
<td>Case-based Discussion</td>
<td>50%</td>
</tr>
<tr>
<td>Consultation Observation Tool</td>
<td>20%</td>
</tr>
</tbody>
</table>
Is there a link between consultants’ and GP trainers’ views on whether their trainees are competent and the existence of effective structures and processes to manage poorly performing trainees?

Consultant trainers were asked whether they felt some trainees had not reached the appropriate standard. This was then analysed for a link with consultants’ views on whether there are effective processes in place for managing poorly performing trainees. The results are shown in Table 3.1.

In summary, the data show that those who believe that there are not effective processes in place for managing poorly performing trainees are far more likely to believe that there are trainees who have been signed off despite not reaching the appropriate standard. The same pattern is present for the GP respondents but fewer believe that there are trainees who have not reached the appropriate standard (Table 3.2):

- 18 per cent (N = 10,133) of consultant trainers think there are trainees who have been signed off who have not reached the appropriate standard.
- 7 per cent (N 2,751) of GPs think there are trainees who have been signed off who have not reached the appropriate standard.

Table 3.1  

<table>
<thead>
<tr>
<th>There is an effective structure and process to manage a poorly performing trainee in place within my:</th>
<th>Are you aware of trainees within your deanery being signed off on their ARCP/RITA/Foundation when in your view they have NOT reached the appropriate standard? – % Yes</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Employing organisation</td>
<td>No</td>
<td>41.4%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>16.0%</td>
</tr>
<tr>
<td>b) Training programme</td>
<td>No</td>
<td>51.1%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>15.5%</td>
</tr>
<tr>
<td>c) Deanery</td>
<td>No</td>
<td>55.7%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>15.5%</td>
</tr>
</tbody>
</table>
Table 3.2  GPs and effectiveness of systems to manage poorly performing trainees and inappropriate sign-off

<table>
<thead>
<tr>
<th>There is an effective structure and process to manage a poorly performing trainee in place within my:</th>
<th>Are you aware of trainees within your deanery being signed off on their ARCP/RITA/Foundation when in your view they have NOT reached the appropriate standard? – % Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Programme</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>14.6% 96</td>
</tr>
<tr>
<td>Yes</td>
<td>7.2% 2,415</td>
</tr>
<tr>
<td>b) Deanery</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>24.7% 81</td>
</tr>
<tr>
<td>Yes</td>
<td>6.8% 2,415</td>
</tr>
</tbody>
</table>

Among consultants there were no differences by trainer role (training programme director, educational supervisor, clinical supervisor) on the extent to which trainers believed inappropriate sign-off was occurring. Among GPs, respondents who were training programme directors were more likely to report inappropriate sign-off was taking place: 13 per cent (N = 233), compared to 7 per cent (N = 2,518).

There is variation by trainer specialty group (not necessarily the specialty of the trainees) on the extent to which trainers believe trainees are being inappropriately signed-off, with trainers in emergency medicine and obstetrics and gynaecology being more likely to believe that inappropriate sign-off was occurring (Chart 3.5).
Have trainers been appraised for educational activities?

Trainers were asked whether they had been appraised for educational activities in the last year:

- 71 per cent (N = 2,723 “not applicable” responses exclude) of GP trainers had been appraised.
- 44 per cent (N = 9,868 “not applicable” responses excluded) consultants had been appraised.

Do consultants want responsibility for a trainee?

The vast majority of consultants would like to have responsibility for a trainee given the choice; newer consultants are very slightly more likely to want this:

- 95 per cent (N = 3,127) of respondents who have been a consultant for five years or less want responsibility for a trainee.
- 93 per cent (N = 6,931) of respondents who have been a consultant for six years or more want responsibility for a trainee.

Are trainees prepared to be a consultant/GP?

The majority of the survey is concerned with the trainees’ evaluation of their current post at a point in time (not necessarily the end of their time in the post) and does not provide data on whether trainees’ programmes as a whole provide trainees with the experience they need to meet the requirements of their curricula and so become independent practitioners. However, 4,229 trainees in a specialty programme or in a GP programme working in a GP practice reported that they would be becoming a consultant or GP within the next year. Of these 4,229, 8 per cent reported that they were not prepared. These trainees will have been at varying lengths of time from their CCT date.
The data were then analysed for the associations between readiness to become a consultant and a number of demographic factors (see http://www.pmetb.org.uk/surveysnationalreports). The following factors were associated with reporting not being prepared and are associated independently – that is, after accounting for the other factors:

- Trainees in general practice and radiology group (includes clinical radiology and clinical oncology) posts. This was the strongest association.
- Trainees who are female.
- Trainees graduating from a non-UK medical school.
- Trainees with lower Impression Management Scores; that is trainees who scoring lower on the items used to determine the extent to which the trainee is trying to present themselves in a positive light on the survey.
- Trainees from an ethnic minority.

There was no association between feeling prepared and whether the respondent trained flexibly or whether they had seen a copy of their curriculum.

Those who reported not feeling being prepared were asked to comment on the areas in which they felt underprepared; as Chart 3.6 shows trainees were least confident about their ability to manage a service.

Among GP trainees, the most frequently areas in which they felt under-prepared were, in descending order:

- Planning and managing the service
- Clinical
- Leadership
- Dealing with managers

Among other specialty trainees, the top concerns were:

- Planning and managing a service
- Dealing with managers
- Leadership
- Clinical
Discussion

Workplace Based Assessment has proved controversial amongst some. Where in one paper surgeons complained of it being bureaucratic and potentially impacting on productivity and competency another has found it potentially useful – if trainers are trained and have protected time for doing assessments. Another found that trainees appreciate the feedback that comes with WPBA and reassurance of satisfactory performance, but found assessments time-consuming and difficult to organise. In July 2009, the Academy of Medical Royal Colleges published a review of WPBAs which concluded that they were implemented in a hurry, with unrealistic timescales, lack of resources and inadequate assessor training. This had led to what the AoMRC has called “a crisis in assessment” which has “seen the development of undesirable practices”. PMETB has published clear guidance on the use of WPBAs: Workplace Based Assessment (WPBA) A Guide for Implementation.

Among the report’s many recommendations was that: “All assessors should be trained to improve the standards of WPBA delivery.” The results highlighted here show that most – but by no means all – consultants and GP trainers have now been trained in WPBA and that the rate of training is improving. At current rates it will be another two years before all consultants are trained (assuming that responding to the trainer survey is not associated with attendance at WPBA training sessions for consultants) and GPs could be trained within another year.

Van Der Vleuten describes a framework for evaluating WPBAs. It includes five components: educational impact, validity, reliability, cost-efficiency and acceptability. For WPBAs to be accepted by those tasked with using them, they must be seen to have face validity (which does not necessarily mean the tool has construct validity). This survey shows that consultants are more likely to rate tools highly if they have been trained. There may be some way to go before consultants and GPs fully accept and trust the tools on offer.
AoMRC notes that it must be feasible to conduct WPBA assessment within the "normal time and resource constraints of clinical practice." This echoes findings from the pilot of core medical training in 2007xxix, which also identified the time required for effective supervision and WPBAs as an important issue. The results from this survey show that a significant number of consultants in particular have turned down trainees’ requests for input into their WPBA because they have too much else to do.

This is illustrated by some of the comments on the survey, which ranged from a handful of consultants who wanted to scrap WPBA to those who wanted more time and better training. For example:

"Better guidance on the completion of e-portfolio for FY2s and appropriate online assessment forms for lab-based specialities."

Consultant in histopathology

"Less bureaucracy and form filling in trainee assessments."

Consultant in renal medicine

"Proper allocated time to trainee assessments, feedback etc."

Consultant cardiologist

"Give more dedicated time for trainee assessments and feedback."

Consultant paediatrician

Trainees too had a great deal to say about WPBAs, illustrating the points raised by the data about lack of training by consultants, lack of faith in the tools and the lack of support from senior colleagues:

"I find the learning portfolio a valuable resource however I feel I am consistently on the computer reflecting or typing in a scenario that fails to appreciate the value of clinical work. I have yet to see any consultant value the use of DOPS, TABS, CBD, Mini-CEX. Their common response is that these are a waste of time. It makes me feel why am I doing these things anyway if no-one even looks at them?"

Foundation trainee

"There is this pressure, completely on trainees to fill this portfolios. It is us chasing our seniors around to arrange all the crap that this entails. In this post, which was a nightmare, the last thing I wanted to be doing after working a long day was then pursuing my seniors for feedback. Partly because they are bullies, but also, because they seem so disinclined to actually help."

Foundation trainee

"Whilst in theory I believe that DOPS, Mini-CEX and CBDs are a good learning method, at the moment I don’t think they are as good as tools of assessment as there is a huge variation in how they are filled in."

Foundation trainee

"Educational supervisors are completely unprepared for what they are supposed to be doing. The online portfolio in particular has caused so many problems as
consultants don’t know how to log in let alone use them. I have spent a ridiculous amount of time just trying to arrange meetings and get things signed off as they are too busy (which is understandable). Then when you do meet they have no idea what they are doing. More training needs to be done to make this work as all it’s doing at the moment is adding to stress and not helping with training in the slightest.”

Foundation trainee

The evidence from this survey is that consultant and GP trainers need more training and support if learning is really to become driven by assessment.

More broadly, this survey found a significant cohort of consultants and a smaller cohort of GP trainers whose educational activity has not been appraised. This is an important issue and one that relates back to supervision already highlighted in Chapters 1 and 2 of this report. The AMEE (Association of Medical Education in Europe) Guide to effective educational and clinical supervision makes the link explicit, saying that supervision is seen as important but that practice is highly variable. Supervisors need training in, among other things, assessment, appraisal and feedback. It acknowledges the concern about failure to formally to address underperformance and calls for better systems to address both underperformance and inadequate supervision.

This point ties into another of the findings presented here: around half of trainers who felt there was no effective system for managing underperforming trainees felt trainees had been signed off who had not reached the standard. The data do not reveal anything about the number of trainees who were underperforming or indeed offer any evidence about whether the trainees had in fact been signed off inappropriately. It does highlight a significant degree of concern among consultants. The AoMRC report makes it clear that one of the purposes of WPBA is to provide evidence to inform the Annual Review of Competence Progression.

PMETB has published Standards for curricula and assessment systems, which contains the following requirement under standard 11: “The measurement of trainee performance and progression must be an integral part of the wider process of monitoring and evaluation, and use objective criteria.” There is some evidence that deaneries are moving to develop and improve systems for managing underperforming trainees. For example Oxford Deanery provides an on-line checklist. Nevertheless, the results presented here must be a cause for concern.

The findings on whether trainees felt ready to become a GP/consultant chime with existing research. For example, Higgins highlights needs such as management and leadership training for new consultants – similar to the issues highlighted in this analysis, namely planning and managing service and leadership.
Chapter 4: Medical error

Factors associated with making and reporting medical errors.

Introduction

Medical errors, how they are reported and how they are dealt with, have long been a concern in the NHS because of the harm they cause patients and the expense to the taxpayer. Nearly a quarter of NHS complaints are about patient safety, which includes medical errors\textsuperscript{xxiv}. The NHS Litigation Authority paid out £769m in connection with clinical negligence claims in 2008/09 compared with £633m in 2007/08.

As long ago as 2000, the Chief Medical Officer’s expert group on learning from adverse incidents, recommended that:

"The NHS should encourage a reporting culture amongst its staff which is generally free of blame for the individual reporting error or mistakes, and encourage staff to look critically at their own actions and those of their teams."\textsuperscript{xxxv}

More recently Lord Darzi’s Next Stage Review, \textit{High Quality Care for All} \textsuperscript{xxxvi}, identified safety as one of the threads that runs through a high quality NHS.

The trainee survey asked a series of questions about medical errors allowing analysis against a range of factors. This section attempts to answer the following questions:

- Do junior doctors who make an error report it locally?
- What are the factors associated with reporting a medical error on the survey form?
- What reasons do junior doctors give for making an error that they reported on the survey form?
- What are the factors associated with reporting the medical error locally?

The discussion section at the end considers the results of this analysis in the context of other research and current policy.

Do junior doctors who make an error report it locally?

The survey asked junior doctors whether they had made a serious error in the last month, whether they had made a potentially serious error and whether they had used their employer’s formal local reporting systems to flag up any of the medical errors that they had reported on the survey form. The survey did not define “serious” or “potentially serious” and it is not possible to extrapolate from the data to calculate the frequency of real errors made by doctors working in the NHS reliably. The results are summarised in Table 4.1.

Overall between 8 per cent and 9 per cent (N= 41, 566) of trainees said they had made a medical error within the last month; 8 per cent said this was a potentially serious medical error and one third of them did not report it locally. Another 1 per cent said they made a serious medical error, with around one in five of these not reported locally. This would suggest that there may be considerable underreporting of medical errors at the local level.
Table 4.1  Overall prevalence of medical errors and their reporting

<table>
<thead>
<tr>
<th></th>
<th>% one or more errors</th>
<th>N²</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any medical error serious or potentially serious (Medical Error Score)</td>
<td>8.6%</td>
<td>41,566</td>
<td>8.4%</td>
<td>8.9%</td>
</tr>
<tr>
<td>In the last month, have you made a serious medical error?</td>
<td>1.4%</td>
<td>42,645</td>
<td>1.3%</td>
<td>1.6%</td>
</tr>
<tr>
<td>In the last month, have you made a potentially serious medical error?</td>
<td>7.9%</td>
<td>42,645</td>
<td>7.7%</td>
<td>8.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>% reported locally</th>
<th>N³</th>
<th>Lower 95% CI</th>
<th>Upper 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was this serious medical error reported [locally]?</td>
<td>80.5%</td>
<td>517</td>
<td>76.8%</td>
<td>83.7%</td>
</tr>
<tr>
<td>Was this potentially serious medical error reported [locally]?</td>
<td>66.0%</td>
<td>2,747</td>
<td>64.2%</td>
<td>67.8%</td>
</tr>
</tbody>
</table>

What are the factors associated with reporting a medical error on the survey form?

Previous surveys in this series have shown that some junior doctors are more likely than others to report making an error in the survey\(^{xxxvii}\). The data from 2009 are consistent with previous years in showing that the likelihood of a junior doctor reporting a medical error on this survey is linked to the specialty of their post (post specialty group) and their grade. For example, doctors working in emergency medicine reported making more errors than doctors working in pathology or public health. Foundation trainees were more likely to report making an error than higher grades of trainees. See Charts 4.1 and 4.2.

---

2 “Do not wish to answer” answers excluded
3 “Don’t know” answers excluded
After statistically controlling for post specialty group and grade (see [http://www.pmetb.org.uk/surveysnationalreports](http://www.pmetb.org.uk/surveysnationalreports)), the following factors are most important, in descending order, in determining whether a trainee reported on the survey form that they had made an error:

1. Trainees’ ethnicity and where they qualified (see Chart 4.3)
2. The extent to which trainees wished to present themselves positively on the form (Impression Management Score)
3. Clinical Supervision Score
4. Reported stress
5. Whether trainees felt undermined by other staff (Other Staff Undermining Score)

Trainees’ ethnicity and where they qualified

Trainees who graduated from UK universities are more likely to report making a medical error on the survey form. There is no evidence to suggest that they make more errors – only that they are more likely to report an error in this survey.

Chart 4.3 Ethnicity and where the trainee qualified and error reporting

Medical Error reporting by respondent background

<table>
<thead>
<tr>
<th>Group</th>
<th>% Reporting One or More Serious or Potentially Serious Errors in the Last Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK and white N = 20,227</td>
<td>10%</td>
</tr>
<tr>
<td>UK and non-white N = 7,732</td>
<td>14%</td>
</tr>
<tr>
<td>Non-UK and white N = 2,048</td>
<td>8%</td>
</tr>
<tr>
<td>Non-UK and non-white N = 8,776</td>
<td>4%</td>
</tr>
<tr>
<td>Total N = 38,783</td>
<td></td>
</tr>
</tbody>
</table>

Impression management

The Impression Management Score measures the extent to which trainees wished to present themselves in a positive light on the survey form and is the mean of the following three items, which were designed for use with doctorsxxxviii. Respondents were asked to indicate the extent to which the statements described them on a four-point scale from badly to well:

- I’m always willing to admit it when I make a mistake
- No matter who I’m talking to, I’m always a good listener
- I sometimes feel resentful when I don’t get my way

The analysis shows that 4 per cent (N = 2,456) of trainees scoring in the top quartile on this scale (i.e. those who most want to give a good impression) reported a medical error; this result is likely to be farthest from the true rate. This compared to 12 per cent (N = 6,516) in the lowest quartile, which is more likely to be an accurate figure as people in this group were less concerned about being seen in a good light when completing the survey.
This would suggest that the “true” rate for the medical error score (one or more serious or potentially serious errors in the last month) may be over 10 per cent.

**Clinical supervision**

As noted in the 2006 report, the Clinical Supervision Score is strongly related to reporting medical errors on the survey form. This is an obvious relationship but one that serves to demonstrate the construct validity of the score (i.e. that the items measure what they purport to measure – namely clinical supervision) and therefore why local education providers should take it seriously when their trainees give low ratings on this indicator and they are consequently flagged as an outlier.

Analysis at provider level in 2009 also illustrates this relationship: trainees at providers with one or more negative outliers on the Clinical Supervision Score (i.e. those who felt poorly supervised) were marginally more likely to report medical errors on the survey form (see Table 4.2). The figures show that doctors at the providers with negative outliers on the clinical supervision score reported making 11 per cent more errors on the survey than the doctors at providers with no outliers on the Clinical Supervision Score.

**Table 4.2 Clinical Supervision Outliers and Medical Errors level (for trainees at providers with 30 or more cases only)**

<table>
<thead>
<tr>
<th>% of trainees reporting one or more medical errors</th>
<th>Number of trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>No outliers on Clinical Supervision Score at the trainee's provider</td>
<td>8.4%</td>
</tr>
<tr>
<td>One or more outliers on Clinical Supervision Score at the trainee's provider</td>
<td>9.3%</td>
</tr>
</tbody>
</table>

The analysis showed that there was no statistically significant link between medical error reporting and the scores measuring:

- Access to educational resources
- Who provided clinical supervision
- Educational supervision
- Quality of induction

---

4 Named Supervision in 2006 to match the text of the *Generic standards*, but subsequently renamed Clinical Supervision to ensure that it is distinct from Educational Supervision Score; the items have been the same across all three years.

5 Outliers are flagged on the reporting tool and are defined as a mean score for the given group that is in bottom quartile and outside the confidence intervals of the national mean when compared to relevant benchmarking group. For more information see page 47, 2006 Trainee Summary Report, available here [http://www.pmetb.org.uk/uploads/media/NationalTraineeSurveySummaryReport_02.pdf](http://www.pmetb.org.uk/uploads/media/NationalTraineeSurveySummaryReport_02.pdf)

6 Providers can access this information at the PMETB reporting tool website [http://reports.pmetb.org.uk/](http://reports.pmetb.org.uk/)
- Internet access
- Access to other learning opportunities.

**Stress**

Trainees who report being stressed (i.e. answering yes to “During this post have you felt unwell as a result of work-related stress?”) are between 1.4 and 1.7 times more likely to report making a medical error on the survey form. It also worth noting that there is a slight effect for the Adequate Experience score: trainees reporting better experience are more likely to report making an error on the survey after adjusting for other items.

**Other staff undermining**

Trainees who reported being undermined by other members of staff are between 1.3 and 1.7 times more likely to report making a medical error on the survey form. This replicates last year’s finding xxxix.

**What reasons do junior doctors give for making an error?**

When asked, trainees are most likely to attribute their potentially serious errors to overwork, lack of knowledge, sleep deprivation and lack of supervision; see Chart 4.4. These are also the top four factors which trainees attribute to their serious errors.

**Chart 4.4   Reasons given for potentially serious medical errors**

Which of the following factors made you more error prone?

Further analysis (see [http://www.pmetb.org.uk/surveysnationalreports](http://www.pmetb.org.uk/surveysnationalreports)) looking at these trainee-attributed factors against the indicator scores, shows that:

- Medical errors linked to overwork are more likely in posts that are not EWTD compliant. Trainees who attributed their error to overwork had 64 per cent (N = 880) EWTD compliance. This compared to 77 per cent (N = 2,022) EWTD compliance for those who did not attribute their error to overwork.
- Medical errors linked to clinical supervision are less likely when the Clinical Supervision Score is higher. Trainees who attributed their error to a lack of clinical supervision had a Clinical Supervision Score of 68 (N = 678) against a score of 81 (N = 2,689) for those who did not attribute their error to this.

- Junior doctors who attributed their error to a lack of clinical supervision were less likely to report being supervised by a consultant. Only 15 per cent (N = 679) of those who attributed their error to lack of supervision were supervised by a consultant or GP. By contrast, 33 per cent (N = 2,691) of those who did not attribute their error to lack of supervision were supervised by a consultant or GP. This difference existed across all grades with available data and for the majority of grades this was statistically significant.

**What are the factors associated with reporting the medical error locally?**

Having ascertained that some junior doctors who reported making an error on the survey form did not report it locally, the data were analysed for factors associated with trainees stating that the error reported on the survey form was reported locally (http://www.pmetb.org.uk/surveysnationalreports). Neither the post specialty group nor the trainee’s grade was associated with reporting locally. However:

- Trainees with high scores on Impression Management were more likely to say they reported the error locally.

- Ethnicity and where the trainee qualified were also associated with whether they reported the error locally (Chart 4.5), with non-UK and non-white trainees more likely to report it locally. This was independent of their Impression Management Score.
Chart 4.5  Ethnicity and where the trainee qualified and local error reporting (of errors reported on the survey form)

Was this potentially serious medical error reported?

The culture of the organisation was also important, see Chart 4.6. Trainees were more likely to report an error locally where reporting was encouraged and followed up and less likely where there was a culture of blame. The following links were also found (see http://www.pmetb.org.uk/surveysnationalreports):

- Errors associated with problems with handover and problems with the multi-disciplinary team were more likely to be reported locally.
- Errors associated with the trainee’s lack of knowledge were less likely to be reported locally.
Discussion

Many of these findings are supported elsewhere in the literature, although this should not be cause for complacency.

Figures from the National Patient Safety Agency’s National Reporting and Learning System indicate that most medical errors do no harm. In the first quarter of 2009, it received reports of 250,059 incidents in England\(^\text{41}\), of which just 1 per cent caused severe harm. This survey did not ask about harm to the patient but showed that 1 per cent of trainee doctors (N = 42,645) felt they had made a serious error in the month before the survey; overall 15 per cent of the errors they reported on this survey were classified as “serious”\(^7\). The NPSA does not categorise its data by a doctor’s grade or specialty although others have linked experience with the likelihood of making an error. Williams, for example, points out that most medication errors are the result of poor prescribing and often involve relatively inexperienced staff\(^\text{xii}\).

Doctors have been encouraged to report their medical errors and NHS organisations are encouraged to set up blame-free reporting and learning systems. As a consequence the NPSA has seen patient safety incident reports rising from 18.8 incidents per 1,000 admissions in 2005-6 to 48.2 incidents per 1,000 in 2007-08. Again this is in line with the findings here. Trainee doctors are more likely to report making an error when they work in an NHS organisation that encourages reporting and follows up incidents. They are less likely to report incidents where there is a blame culture or where reporting is haphazard and not followed up. The following comment made on the survey illustrates the point and demonstrates the support that trainees need when they report an error.

\(^7\) See Table 4.1. Based on 572 reports of one serious 40 reports of more than one serious error and 3,113 reports of one potentially serious error and 257 reports of more than one potentially serious error \(\frac{572+(40*2)}{(3113+572+(40*2)+257*2)}\)
"The medical error that I made was discussed with senior colleagues, who do not feel that I actually made a mistake, and probably gave the treatment and advice to the patient that they would have, given the results of my history and clinical examination. I have felt supported throughout the entire event. When concern was raised about my loss of confidence, I was taken aside by one of the consultants and actively encouraged to discuss any issues that were troubling me. All the consultants and SpR trainees in this department are accessible and helpful and I am grateful for the excellent support offered."

**Foundation doctor**

This analysis shows that trainees are also more likely to report an error on the survey when they are less experienced, overworked, lacking knowledge, lacking sleep, stressed, lacking clinical supervision and feeling undermined by colleagues. It also highlights a significant level of under-reporting at local level, with lack of knowledge a factor in failure to report an error locally. There is a considerable literature to back up these findings. Repeated studies have shown that trainee doctors feel under-prepared for their new role in prescribing and that they require curricula that cover not just prescribing but patient safety in general, combined with close supervision and assessment. Others have identified bullying as a patient safety issue. Some of this has been addressed. For example, in 2007 the NPSA commissioned the Royal College of Physicians to develop an education programme on patient safety aimed at second year foundation trainees. The Safe Foundations: Junior Doctors and Patient Safety programme now forms part of the new curriculum for foundation years.

The analysis also shows that doctors working in some specialties are more likely to report making an error in the survey and while this might also be expected, there appears to be little investigation of it in the literature. It is possible to speculate that some working environments may create more opportunity for errors, for example where patients are moved around from area to area. At the same time, there may be factors that make people in some specialties more likely to actually report any errors that do occur, for example the subculture of a specialty group around admitting mistakes and learning from them.

The quality and level of clinical supervision is a particular issue highlighted by this analysis, which shows it is linked to the likelihood of making an error (as measured by self-report on the survey form). In one sense the data is reassuring as trainees who report being supervised by doctors other than their consultant are not more likely to report making a medical error, even after accounting for differences across grades and post specialty groups. However, trainees who attributed their error to a lack of clinical supervision are less likely to report being supervised by a consultant. Consultant clinical supervision can be important. The point is illustrated in this comment:

"I previously mentioned a potentially serious error. I have to state that the error was completely averted due to the close consultant supervision offered at my current post."

**Clinical radiology trainee**

This all raises some interesting questions, particularly about supervision. Are poorly supervised juniors noticing their errors more because no-one is around fixing them? Are they concerned at their lack of supervision and using the survey to report it? Does making an error engender negative feedback that a trainee then interprets as “undermining” behaviour?
This analysis indicates that there is still work to be done to improve the attention paid to patient safety during clinical supervision. This may be particularly true of those training providers who have groups of trainees with an outlier on the Clinical Supervision Indicator on PMETB’s reporting tool.

There was one surprising – and so far unexplained – finding on the link between ethnicity and place of graduation. Those least likely to report making an error were non-white and non-UK graduates. They were also the most likely to report the error reported on the survey form locally. These are statistically significant findings that PMETB will be following up in a further publication.
Chapter 5: European Working Time Directive

EWTD and its impact on training and perceptions about training.

The impact of the European Working Time Directive (EWTD) on doctors’ training was widely debated in the run up to its full implementation on 1 August 2009. The Royal College of Physicians and the Royal College of Surgeons of England, for example, warned that enforcing a 48-hour week for trainees could have unacceptable consequences for the quality of their training, with knock-on effects for patient care and safety. The Department of Health, meanwhile, restated its case that doctors must not go back to the long-hours culture. The EWTD was good news for patient safety, as "tired doctors are not safe doctors", said Dr Wendy Reid, National Clinical Director for the EWTD. The Health Secretary Andy Burnham stated clearly: "The UK remains absolutely committed to enabling all junior doctors to work and train safely, in compliance with the EWTD." Lord Darzi, then health minister, urged hospitals to stop looking at hours and start looking at the quality of training, telling the House of Lords: "We need to start a dialogue not around the number of hours of training but around how we can improve the quality of hours of training."

On 1 August 2004, junior doctors in the National Health Service and other healthcare systems throughout Europe became subject to the European Working Time Directive. Their working hours were limited by law, first to 56 hours a week and then, by 1 August 2009, to 48 hours.

The surveys asked trainee doctors and their trainers about EWTD. It is important to note that they both took place before the 48-hour week was introduced in August 2009, although many employers were reporting compliance with a 48-hour week well in advance of August 2009. The survey data refer to the 56-hour week that had been in place since 2004. Even so, the answers may help to shed some light on how they perceive the EWTD and whether there are any relationships between compliance and the perceived quality of educational experiences.

Results

Three-quarters (73 per cent, N = 42,643) of those surveyed reported compliance with the 56-hour working week at the time they completed the survey. One in ten respondents said they had been asked to falsify their working hours. Overall 78 per cent (N = 36,079) of trainees reported that their hours were compliant and they had not been asked to falsify.

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8 The EW indicator score presented on the reporting tool, cases where the trainee did not know whether the hours were compliant or not and who had not been asked to falsify were excluded from the denominator.
This section seeks to answer the following questions using data from both surveys:

1. What is the relationship between EWTD compliance and reporting medical errors on the survey form?
2. What is the relationship between EWTD compliance and trainees’ rating of the experience they get from a post?
3. What are the relationships between EWTD compliance and other facets of training such as attendance at formal teaching sessions?
4. Are there particular features of providers that relate to their ability to comply with EWTD as measured by the trainees?
5. Do consultants’ views on EWTD relate to trainee perceptions of compliance?
6. What are trainees’ and trainers’ qualitative perceptions of the EWTD and do these align with the data?

This is an important issue and PMETB will be examining the impact of the EWTD on postgraduate medical education, using a wide range of sources, through the Quality Framework during 2009/2010. This report can only ever be a partial analysis of the issue and the Board encourages others to consider the data from the survey and other sources.

**What is the relationship between EWTD compliance and self-reported medical errors?**

The survey asked trainees about EWTD compliance and whether they had made a serious or potentially serious error in the last month. When links between these two were investigated, the analysis (see [http://www.pmetb.org.uk/surveysnationalreports](http://www.pmetb.org.uk/surveysnationalreports)) showed that EWTD-compliant trainees were between 0.79 and 0.96 times less likely to report making any medical error. This difference exists across all post specialty groups (see Table 5.1). For example, 12 per cent of EWTD-compliant trainees in an emergency medicine post had reported an error compared to 17 per cent of those in a non-compliant post.
Table 5.1  Medical error reporting by post specialty group and EWTD compliance

<table>
<thead>
<tr>
<th>Post Specialty Group Label</th>
<th>Hours not compliant and/or asked to falsify - % reporting 1 or more medical errors in the past month</th>
<th>Hours compliant and not asked to falsify - % reporting 1 or more medical errors in the past month</th>
<th>Hours not compliant and/or asked to falsify - N</th>
<th>Hours compliant and not asked to falsify - N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medicine</td>
<td>16.5%</td>
<td>12.2%</td>
<td>357</td>
<td>1,625</td>
</tr>
<tr>
<td>Medicine</td>
<td>13.4%</td>
<td>9.6%</td>
<td>2,475</td>
<td>7,165</td>
</tr>
<tr>
<td>General Practice</td>
<td>11.3%</td>
<td>8.9%</td>
<td>179</td>
<td>3,194</td>
</tr>
<tr>
<td>Surgery</td>
<td>10.6%</td>
<td>8.5%</td>
<td>2,119</td>
<td>4277</td>
</tr>
<tr>
<td>Anaesthetics</td>
<td>9.8%</td>
<td>9.2%</td>
<td>509</td>
<td>2,723</td>
</tr>
<tr>
<td>Paediatrics and Child Health</td>
<td>9.2%</td>
<td>7.8%</td>
<td>546</td>
<td>2,422</td>
</tr>
<tr>
<td>Radiology</td>
<td>8.8%</td>
<td>4.3%</td>
<td>171</td>
<td>939</td>
</tr>
<tr>
<td>Obstetrics and Gynaecology</td>
<td>8.2%</td>
<td>8.0%</td>
<td>575</td>
<td>1,521</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>7.3%</td>
<td>3.5%</td>
<td>109</td>
<td>374</td>
</tr>
<tr>
<td>Pathology</td>
<td>4.8%</td>
<td>3.2%</td>
<td>63</td>
<td>590</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>3.2%</td>
<td>2.9%</td>
<td>436</td>
<td>2,434</td>
</tr>
<tr>
<td>Occupational Medicine</td>
<td>0.0%</td>
<td>1.3%</td>
<td>4</td>
<td>79</td>
</tr>
<tr>
<td>Public Health</td>
<td>0.0%</td>
<td>0.9%</td>
<td>11</td>
<td>342</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11.1%</strong></td>
<td><strong>8.1%</strong></td>
<td><strong>7,554</strong></td>
<td><strong>27,685</strong></td>
</tr>
</tbody>
</table>
What is the relationship between EWTD compliance and trainees’ rating of the experience they get from a post?

Two items on the survey measure the experience gained in the post and together they constitute the Adequate Experience Scale (scored from 20 to 100, with 100 being positive and indicating greater experience gained).

- How would you rate the practical experience you are getting in this post?
- How confident are you that your current post will help you acquire the competences you need at this stage of your training?

Trainees in EWTD-compliant jobs scored higher on the Adequate Experience Score, at 80.13 (N = 28,310) versus 75.07 (N = 7,769) for trainees in non-compliant posts. The difference was statistically significant and the relationship is statistically significant across all large post specialty groups, including surgery (see http://www.pmetb.org.uk/surveysnationalreports). It also holds across all grades, except trainees at StR8. EWTD-compliant posts offer better experience than non-compliant posts, as measured by these two items from the survey used in the Adequate Experience Score.

What are the relationships between EWTD compliance and other facets of training such as attendance at formal teaching sessions?

Trainees who reported being in posts that are EWTD compliant were:

- More likely to report being encouraged to take study leave, 56 per cent (N = 24, 945) compared to 43 per cent (N = 6, 248) in non-compliant posts.
- Less likely to have to leave local teaching sessions, 50 per cent answering never (N = 17, 485) compared to 32 per cent (N = 3, 968) in non-compliant posts.
- More able to attend deanery/regional/school specialty-specific training events with 27 per cent able to attend every time (N = 15, 780) versus 17 per cent (N = 3, 793) for trainees in non-compliant posts.

For details see http://www.pmetb.org.uk/surveysnationalreports

On balance trainees in EWTD compliant posts had more access to educational opportunities as measured by this survey. This is a statistical association and may reflect the quality of the general organisation of the post, including EWTD, rather than any cause and effect.

Are there particular features of providers that relate to their ability to comply with EWTD as measured by the trainees?

Previous surveys have shown that EWTD compliance varies by post specialty group and by grade. This is also true for the latest survey. In addition to this variance at the level of trainee, multi-level modelling shows that there are differences across providers in the level of compliance with EWTD, after accounting for these differences by post specialty group and grade (for details see http://www.pmetb.org.uk/surveysnationalreports). In other words, some of the variance in EWTD compliance at provider level cannot be
explained by differences in grade and specialty mix. Looking at the 296 providers with more than 30 trainees, compliance as reported by trainees varied from a low of 44 per cent to one provider with 100 per cent compliance, with a median of 77 per cent. Of the 20 with the lowest levels of reported compliance adjusted for post specialty and grade, nine were district general providers in outer London or just outside the M25 motorway and three were in Belfast. Of the 20 providers with the highest levels of reported compliance, only one was a district general hospital in London; three were in Scotland and the rest within the English regions.

**Do consultant views on EWTD relate to trainee perceptions of compliance?**

Consultants, GP trainers and GPs with foundation trainees working across the UK were asked a number of questions that assessed their attitudes towards compliance with EWTD as part of PMETB’s National Survey of Trainers:

- Are the training needs of your trainees met within the 56-hour week?
- Do you expect your trainees to work beyond the EWTD hours?
- Have you changed the way you teach as a result of the EWTD?
- Will your department be able to deliver the same standard of training from August 1, 2009?
- Are your trainees as confident and independent as you were in your training days?

The results across all these questions varied by specialty group.

As Chart 5.1 shows consultants in the ‘craft’ specialties were least likely to feel that the training needs of their trainees were met within 56-hours a week.

**Chart 5.1** **Trainers’ views on training needs and EWTD**

![Chart showing trainers' views on training needs and EWTD](chart5_1.png)
As Chart 5.2 shows attitudes vary by specialty group with consultants in surgical specialties being most likely to expect their trainees to stay and work beyond EWTD hours on a daily or weekly basis.

**Chart 5.2 Trainers’ view of working beyond the hours**

Many consultants report that they have already changed the way they teach their trainees in response to changing working patterns; see Chart 5.3. Respondents answering “not applicable to me, there have been no changes in hours or rota since I started here” are excluded from this analysis.
Chart 5.3  Trainers’ views on changing their teaching

I changed the way I teach my trainees in response to the shorter working week and changes to the rota

Trainers in the ‘craft’ specialties were most likely to be pessimistic about their ability to deliver training once the hours were reduced as shown in the Chart 5.4 below, which highlights the percentage of trainers who felt they would not be able to deliver training to the same standard from 1 August, 2009.

Chart 5.4  Trainers view of EWTD and training standards

Our department will be able to deliver training to the same standard from 1 August 2009 when the EWTD hours are reduced to 48 per week
There appears to be some correspondence between the attitudes of the consultants and trainees’ reported compliance: surgical trainees are least likely to report compliance and consultants working in surgical specialties are the most likely to report wanting their trainees to stay on beyond their hours and the most adamant that more time is required to deliver training to the required standard both at the time these data were collected and when the hours were to be reduced, as they now have been.

As Table 5.2 shows, consultants who are less positive towards EWTD and do not think training needs are met within the hours are more likely to feel the current cohort of trainees is less able than they were at that stage of training. Nine out of ten of these less positive consultants said their trainees were less able than they had been, compared to two thirds of the more positive consultants.

**Table 5.2 Training needs and EWTD against rating of current trainees’ confidence (consultant respondents only)**

<table>
<thead>
<tr>
<th>My trainees are less confident and so less able to work independently in comparison to me and my peers when we were trainees.</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall the training needs of my trainees are met within the hours specified by the European Working Time Directive (currently a maximum 56h/week for trainees)?</td>
<td>No</td>
<td>2.5%</td>
<td>3.1%</td>
<td>7.2%</td>
<td>27.9%</td>
<td>59.3%</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>2.9%</td>
<td>13.7%</td>
<td>17.9%</td>
<td>35.6%</td>
<td>29.9%</td>
</tr>
</tbody>
</table>

**What are trainees’ and trainers’ qualitative perceptions of the EWTD and do these align with the data?**

The survey offered trainees the chance to give some qualitative feedback in an optional free text box. Trainers were asked what single factor would help improve the training they deliver. Comments were checked for references to the EWTD.

Overall, 12 per cent of trainees’ 9,453 free text comments concerned the EWTD. In general surgery, trauma and orthopaedic surgery and neurosurgery, this rose to one in three comments. Most were negative about the EWTD and the following comments are representative, highlighting trainees’ concerns about the impact of EWTD on their training and their workload.
"I feel strongly that EWTD-compliant rotas are restricting experience and access to teaching without improving work-life balance."

**Acute care common stem trainee**

"Reducing working hours is having a huge, and detrimental, impact on our training, especially surgical core training. All it means is that we are not being paid for many of the hours we are working and we will still not be ready to move on to the next stage due to lack of skills - no incentive to work!"

**Core surgical training trainee**

"With EWTD the training opportunity has come down a lot and most of the time you seem to end up being used for service commitment."

**Anaesthetics trainee**

"EWTD has resulted in bizarre shift patterns to ensure compliance but not enough hours which is neither good for work-life balance nor experience - worst of both worlds."

**General practice programme trainee**

"Our training has been compromised by trying to satisfy EWTD. We are ushered off educational ward rounds so the post is seen to be compliant. Sadly the post isn’t compliant despite this effort. So we pointlessly loose out on training."

**Trainee in paediatrics**

Trainees were not unremittingly negative. A few highlighted some benefits of the EWTD.

"EWTD means more days off and better work-life balance. However when I am at work the intensity is too great as there are not enough doctors, and so my training is suffering."

**Core medical training trainee**

"[I] would have liked to fill out this form during my first placement (surgery) which was not EWTD compliant and which was a shambles. Current placement is fine."

**Foundation Programme trainee**

"I think the present Working Time Directive just gives us enough exposure for training. Reducing the working time further would be disastrous for our training."

**Anaesthetics trainee**

Trainers frequently cited scrapping or opting out of the EWTD as the single factor that would improve the training they offer.

"EWTD doesn’t allow the trainee to be with the team for 60 per cent of the time which affects the continuity of patient care and ultimately learning, for the trainees."

**Consultant**
“Scrap EWTD as a one-size-fits-all rule. It is impossible to learn the surgical management of congenital heart disease under these conditions and I suspect that is true of many other disciplines.”

Consultant

“I think it is out of my control, but scrapping the EWTD would be the single most important act to improve training.”

Consultant

Discussion

The statistical analysis presented here shows broadly that compliance with the EWTD went hand in hand with a better reported experience of training and lower rates of medical error reporting on the survey form. Trainees in EWTD-compliant posts were more likely to report being encouraged to take study leave, less likely to report leaving local study teaching sessions and found it easier to attend training events. Trainers reported making changes in the way they teach in response to the shorter hours.

There were some differences between specialties and grades. Surgical specialties were the least likely to report compliance with EWTD and this has been a consistent pattern over three years of the trainee survey. Foundation doctors were least likely to report being in compliant posts (see http://www.pmetb.org.uk/surveysnationalreports for Charts relating to these points for 2009 data). Surgical trainers were least positive about EWTD and were the most likely to report asking their trainees to work beyond EWTD hours. They were also most likely to report making changes to the way they teach, perhaps reflecting the mounting pressure to become EWTD compliant that came to bear during the survey period.

This broadly positive picture painted by the items with rating scales is at odds with the comments that trainees and trainers made about the EWTD, which were almost overwhelmingly negative about the impact of the EWTD. It would appear that trainees are attributing training deficiencies to EWTD, but the survey is not detecting these. This could be because the items on the survey aren’t at the appropriate level of granularity or it could be because trainees’ perceptions of causality are coloured by the current coverage of EWTD issues in the medical press. Next year’s data can be analysed to determine whether those who predicted problems with training when the hours were reduced to 48 hours were correct or not.

This analysis is in line with the research on EWTD. There is a wealth of evidence that doctors are worried about its impact on training and that surgeons and anaesthetists in particular are fearful that it will have a detrimental effect. This is pan-European, with doctors from Ireland to Poland expressing similar reservations. The analysis of trainers’ perceptions of the EWTD is also in line with other qualitative research showing that consultants regarded “current trainees as less confident and less able to work independently in comparison to themselves” and that this was in part due to changes associated with EWTD. However, there is very little evidence that the concerns about the EWTD reducing the quality of training are borne out in practice and some evidence that complying with the EWTD may increase patient safety by improving sleep hygiene.

Where one study has shown that EWTD is associated with a reduction in training opportunities by SpRs in paediatric anaesthesia, another has shown that where there is commitment and a suitable training module, exposure to operative surgical training can be sustained within shortened working hours.
Clearly concerns remain about the introduction of EWTD and its impact on training that need to be addressed. A PMETB panel is considering the impact of the 56-hour average week and will then consider and monitor the implementation of the 48-hour average week through PMETB’s Quality Framework.

The degree to which doctors are being asked to falsify their working hours should be a matter of concern. This survey found 4,497 doctors admitting to this practice, although it was not clear from these data what exactly junior doctors meant by falsifying their hours, whether this was by five to ten minutes, hours or days. The comments would indicate that many junior doctors are happy to work beyond their contracted hours to improve their training although some may be falsifying under duress. PMETB’s discussion with postgraduate medical education colleagues on this indicates that at least one dean views this as the “thin end of the wedge” with regard to the professional integrity demanded of doctors by the GMC. Certainly this requires further investigation.

The other area of concern raised by the survey analysis is the hospitals where low levels of compliance were not explained by grade or specialty mix. The analysis here shows that there may be particular problems in achieving compliance in outer London district general hospitals and in Belfast. This may require further investigation and attention.
Chapter 6: Stress

Factors associated with reporting stress.

Work-related stress is the biggest cause of working days lost through occupational injury and ill health in the UK and it would be extraordinary if medical trainees were exempt from its effects. They are not: one in five said they had felt unwell in their current post as a result of stress at work.

This chapter seeks to answer the following questions:

- Do some trainees report more stress than others?
- What factors are associated with trainees reporting stress and are they related to the quality of training?

The discussion section at the end considers the results of these analyses in the context of other research and current policy.

Do some trainees report more stress than others?

The survey asked one question about self-reported stress: "During this post have you felt unwell as a result of work-related stress?" Overall 20 per cent (N = 42,714) said yes. This is very close to the rate found by the National NHS Staff Survey 2008, which showed that 21 per cent (N = 2,138) of doctors in training had felt unwell in the last 12 months as a result of work-related stress.

The survey data show that there is wide variation between specialty groups (Chart 6.1) and grades of trainees (Chart 6.2). Doctors working in emergency medicine reported the highest stress levels, with one in three reporting feeling unwell as a result of stress at work. Those working in medicine, obstetrics and gynaecology and in paediatrics and child health reported levels above average. Those working in radiology and GPs reported the least stress. Comments from these junior doctors in emergency medicine illustrate the point for them:

"Training is compromised by the quest to meet government targets, for example the four-hour wait. This creates a stressful working environment, which neither serves patient care and safety nor the training needs of junior doctors. Managers bear down on nursing sisters and/or doctors for referral decisions when there is insufficient clinical information available. On occasion it leads to intimidation on the verge of bullying and is inappropriate. The present culture would put me off working in this department in future."

**Emergency medicine trainee**

"My last post in A&E was very stressful. I slept only four to five hours daily due to the long working hours, inflexibility of the rota and responsibility for two young children under five years old. My department was not supportive."

**Core medical training trainee**
There was also variation by grade (Chart 6.2) with foundation doctors reporting more stress than doctors from other grades, and those in their first year of foundation training reporting highest of all. This comment illustrates the finding:

"It is almost impossible and definitely stressful to perform a good job at work when you are not given a detailed job description nor told what is expected of you and without seniors that are easily contactable for support."

Foundation doctor
What factors are associated with trainees reporting stress and are they related to the quality of training?

The survey also asked about a range of factors that are known to be risk factors for work-related stress. The data were examined for a link between reported stress and other survey variables including:

- How trainees rated their induction
- How trainees rated their clinical supervision
- Whether they were able to take study leave
- How many errors trainees reported
- Whether they had felt undermined by consultants?
- Whether they had felt undermined by other staff
- How trainees rated their workload

A high workload was the most strongly associated with stress. The measure included factors such as how often the trainee worked beyond their rostered hours, how often they felt short of sleep at work and how they rated the intensity of their work.

Other factors were also important (see http://www.pmetb.org.uk/surveysnationalreports). Trainees who reported consultant undermining were between 2.7 and 4.7 times more likely to report stress than their colleagues; and those who reported feeling undermined by other staff were between 2.2 and 4.0 times more likely to report work-related stress. Those who had reported a medical error on the survey were between 1.4 and 2.3 times more likely to report stress. This may be an indication of a trainee’s willingness to admit a mistake rather than a measure of whether a stressed trainee is more likely to make an error. For both of these the relationship is an association and does not imply causality or the direction of any causality, which could be in either direction: for instance the trainee is stressed because they have made an error. Trainees giving lower ratings to the quality of their induction and clinical supervision (as measured in this survey) and those who were less able to take study leave were also more likely to report stress.

Comparison to the NHS staff survey and to other industries.

Self-reported work-related stress is a serious problem. The Labour Force Survey\textsuperscript{Lxvii} 2007/8 estimated that 442,000 working people in Britain believed that they were experiencing work-related stress severe enough to make them ill and estimated that self-reported work-related stress, depression or anxiety accounted for an estimated 13.5m lost working days in Britain that year.

The health professions and those working in the public sector appear to be more vulnerable to work-related stress than other occupational groups. The Labour Force Survey identifies teachers, nurses and people in public administration and defence as having high prevalence of work-related stress. The 2007/08 Confederation of British Industry/AXA survey of absence and turnover found that public sector workers were far more likely than private employers to identify work-related stress as a cause of short-term or long-term sickness absence\textsuperscript{Lxviii}.
Doctors, however, are not as vulnerable as some other groups. The National NHS Staff Survey 2008 (all trust figures) found that overall 22 per cent (N = 9,222) of doctors (all grades) had suffered work-related stress in the last 12 months. This compared to 33 per cent (N = 46,347) of registered nurses and midwives 30 per cent (N = 28,762) of allied health professionals and 31 per cent (N = 3,203) of ambulance staff.

Discussion

Some of the results from the survey of trainees are supported by existing literature. The Health and Safety Executive’s Management Standards for work-related stress identify workload and unacceptable behaviour such as bullying as risk factors. In the survey junior doctors reporting high levels of stress also reported undermining by colleagues and high workload. This is illustrated by doctors who commented in the survey:

“The one post I didn’t enjoy almost caused me to quit medicine for good due to bullying from the consultant. I understand that after complaints by myself and another trainee, the consultant had to undergo disciplinary action and the situation has improved for subsequent trainees.”

Core medical trainee

The high levels of reported stress suffered by foundation doctors chimes with the Whitehall Studies by Professor Sir Michael Marmot. These long term studies involving more than 10,000 civil servants, started in 1967 and still ongoing, have identified a work-related stress gradient in which those at the bottom who have least control over their working lives suffer the most stress. Similarly, doctors working in acute specialties, such as emergency medicine might be expected to report high levels of stress. Among ambulance workers, paramedics and emergency care practitioners have the highest stress levels.

However, to say results are not unexpected should not be an excuse to dismiss them. The Whitehall Studies have also shown that there is a high burden of disease, such as cardiovascular disease, chronic lung disease and depression, linked with high levels of work-related stress. The UK government is committed to reducing work-related stress and has developed guidance on this.

The results clearly link work-related stress with some core quality issues for employers, notably the quality of induction and clinical supervision, the availability of study leave and the workload placed on junior doctors. By looking at the issues raised by trainees in these areas, there is the potential for employers to reduce reported stress and possibly working days lost to stress-related absence. PMETB could consider placing a stress indicator on the reporting tool.
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