



Time for Training

A Review of the
impact of the
European Working
Time Directive
on the quality
of training

Professor Sir John Temple

May 2010

Foreword

'Learning from experience; it takes too long. It often takes a lifetime.'

Reginald L. Hine 1949

The European Working Time Directive (EWTD) came into being in 1998, affecting a number of professions including dentistry, healthcare science, medicine and pharmacy. Doctors in training in the UK were exempt until 2009 in order for their working practices to be developed to allow its adoption.

Over the ensuing 12 years many other changes have affected society in general and the National Health Service (NHS) in particular. Until very recently, the response of the NHS has been to squeeze existing systems of service delivery into the reduced hours available, with training still based upon experiential learning.

There has been a drive to find more doctors of all grades to staff the service. Medical school expansion has been dramatic both in the numbers of sites and entrants, with the aim of making the UK self-sufficient in the supply of doctors. This has been coupled with dramatic consultant expansion, and the bringing in of large numbers of doctors from non-European countries to make up the extra staffing necessary to continue to deliver service in the traditional ways.

The full implementation of the EWTD in 2009 has meant that this structure has become increasingly threatened. Widespread concern has emerged about the ability of the NHS to continue to deliver safe service and high quality training for all its staff. Conclusive evidence of this potentially serious situation is not readily available, but it has become apparent that the experiential model of learning has to change dramatically if the NHS is to continue to produce well-trained and safe professionals in this changing environment. The Secretary of State requested that Medical Education England (MEE) commission an independent Review of the impact of the EWTD on training in relation to Dentists, Doctors, Healthcare Scientists and Pharmacists.

It has been my privilege to undertake this Review as the Independent Chair. Having been responsible for driving the

implementation of the Higher Specialist Training Reforms (Calman)¹ between 1995 and 2000, Chair of the Specialist Training Authority from 2000 to 2007 and a major contributor to *Unfinished Business*,² the Senior House Officer reforms in the early part of the decade from 2000 to 2010, it was a challenge that I readily accepted.

With the very able advice of an Expert Group of knowledgeable, involved individuals in the NHS, and excellent assistance from a team at PA Consulting, I have listened very widely to the views of the service and educational sections of the NHS as to how they perceive the effects of the introduction of the EWTD in general, and most recently the reduction to a 48-hour working week. I am indebted to all the organisations and individuals that attended oral hearings and gave us written information.

The validity of the findings and the outline recommendations were tested in focus group meetings. The report has been written with assistance from the Expert Group. In the final analysis, however, I as the Independent Chair have made the decisions as to what is in the report, and therefore the responsibility is mine.

While the recommendations suggest the way forward, the next steps and the implementation of the report's strategy will be for others to determine.

I recognise that the EWTD may be reviewed in due course. However, the transformation of training needed now is paramount and must be addressed regardless of any modifications, in order to produce well-trained professionals for the future.

I was heartened to hear examples of excellent practice in response to training in reduced hours, but these are not currently embedded universally. What is very clear though is that the status quo cannot continue if we are to train from now on the professionals of tomorrow for continued high quality healthcare delivery and patient safety.

A handwritten signature in black ink, appearing to read 'J Temple', written over a horizontal line.

Professor Sir John Temple

Executive summary

‘Training is patient safety for the next 30 years.’

There is ongoing debate among healthcare professionals, professional bodies and the wider public about the impact of the European Working Time Directive (EWTD) on the ability of the National Health Service (NHS) to deliver training within the 48-hour working week. The Secretary of State for Health invited Medical Education England (MEE) to arrange a Review of the impact of the EWTD on the quality of training of Doctors, Dentists, Healthcare Scientists and Pharmacists.

MEE asked Professor Sir John Temple to be the Independent Chair, conduct the Review and produce a report for the MEE Board and the Secretary of State.

The Review assessed information and opinions on this critical topic. It identifies a number of key findings and recommends how high quality training can be provided in the future.

The Review process

The impact of the full implementation of the EWTD on the quality of training of Doctors, Dentists, Pharmacists and Healthcare Scientists was reviewed.

The terms of reference for the Review are detailed in Appendix A.

The Review gathered information, opinion and evidence using the following methods:

- Literature review – 40 articles relevant to the EWTD and training were summarised and analysed
- Oral hearings – 41 professional bodies, organisations and trainees presented information to the Review
- Written submissions – over 100 were submitted to the Review. In addition to these formal responses, more than 150 articles referenced in these submissions were analysed
- Focus groups – nine focus groups were held with representatives from 32 organisations where initial findings were tested and recommendations validated.

This report was written following analysis of this information and with advice from an Expert Group.

Terms of reference for the Expert Group can be found at Appendix B.

A list of Expert Group and Working Team members can be found at Appendix C.

A list of the organisations that participated in the Review can be found at Appendix E.

Introduction

In the NHS, training and the delivery of patient care are inextricably linked. It is recognised that the majority of training should take place in a service environment and that quality training leads to professionals who deliver high standards of patient care and safety. The impact of the EWTD has to be considered within the context of a complex, ever-changing healthcare system and contemporary models of service and training delivery.

The traditional experiential model of training in England, which has an enviable reputation for producing competent and safe clinicians, has relied on trainees spending long hours in their place of work delivering service, during which time they developed their skills and knowledge. Given the reduction in the time available necessitated by the full implementation of the EWTD to 48 hours worked per week, the challenge now is to continue to deliver high quality training within the current service context.

The Review has not focused directly on the impact of the EWTD on any of the other healthcare professions nor the separate issue of compliance with the Working Time Regulations (WTR), although these are mentioned where applicable.

The Review relates specifically to the situation in England, but its findings and recommendations are almost certainly relevant to the rest of the UK.

EWTD predominantly affects doctors working in hospitals

Although the four professions of Medicine, Dentistry, Pharmacy and Healthcare Science were considered, the issues that emerged were almost exclusively in relation to the education and training of doctors. There was negligible reported impact on the current training in the other three professions.

Among doctors, the impact has largely been in the secondary care sector, and only affects general practice trainees when they are in hospital-based training.

‘Hard’ evidence of the effects of EWTD on training is lacking, but opinion and information are compelling

The short timeframe since the introduction of the 48-hour limit in August 2009 means that the conclusive effect on training has not been identified. There is also an absence of outcome measures which are not complicated by other variables such as changes in the structure of training, new ways of working and increasing service pressures.

Lacking conclusive data, the Review has taken consistent and repeated opinion and information as a proxy for evidence.

High quality training can be delivered in 48 hours

This is precluded when trainees have a major role in out of hours service, are poorly supervised and access to learning is limited.

Gaps in rotas result in lost training opportunities

Patient care, particularly out of hours, relies upon some form of rota or shift system involving the available workforce to provide cover.

- Although rotas are reported as compliant on paper, in practice they frequently have gaps
- Where there are gaps in rotas:
 - These are often in the evenings or at night and offer minimal supervision or fewer training opportunities
 - Trainees are moved from their daytime, more elective training commitments, at very short notice, to fill these service gaps
 - Trainees may thus have to sacrifice planned, supervised training opportunities
 - Locums are not a sustainable solution to fill the gaps
- The recent move to full shift working requires more doctors per rota and this can lead to an increase in gaps
- Full shifts have impacted on training, by reducing trainer:trainee interaction and increasing the number of handovers.

The impact of EWTD is greatest in specialties with high emergency and/or out of hours workloads

- The increasing emergency care workload exacerbates the loss of elective training opportunities for all trainees
- The impact of the EWTD is variable at different levels of training:
 - Higher trainees are often unavailable for more specialist elective training opportunities when they have to cover generalist emergency rotas
 - More junior trainees can be left feeling exposed without proper supervision out of hours.

Traditional models of training and service delivery waste learning opportunities in reduced hours

- There is a total of over 15,000 hours available to trainees working a 48-hour week in a seven-year training programme, but these are not all being used effectively for training
- The considerable increase in the number of training and other junior doctor posts in recent years has continued to support the traditional ways of working, but dilutes the quality and quantity of training opportunities
- The New Deal when combined with the EWTD adversely impacts on training opportunities.

Consultant ways of working often support traditional training models

- Despite significant consultant expansion, trainees are still responsible for initiating and frequently delivering the majority of out of hours service, often with limited supervision
- The flexibility in the consultant contract is not being used to the benefit of training
- Training is not prioritised in consultant job plans and ways of working
- High quality training is not routinely facilitated or rewarded.

EWTD can be a catalyst to reconfigure and redesign service and training

Service reconfiguration and redesign can provide a better, safer service to patients and enhance the quality of training. Where organisations have proactively designed new ways in which they work and train to meet all the changes affecting the service, a number of benefits have been identified. Particular examples include:

- The expansion of consultant presence can result in efficiency savings and enhanced patient safety
- Splitting services into elective and emergency has enhanced training, delivered EWTD-compliant rotas and improved quality of care
- Hospital at Night allows trainees to maximise their daytime working while providing safe patient care at night
- Simulation and new technologies can support training and accelerate learning
- Multidisciplinary team-working can provide trainees with valuable training opportunities and reduce their workload
- Mentoring and support of newly appointed consultants enables them to be both competent and confident.

Where EWTD has been implemented effectively, positive impacts of reduced working hours are seen

- Good rota design and management enables compliance with the EWTD and an improved work–life balance
- Appropriately experienced doctors are more involved in acute care situations
- Enhanced supervision of trainees out of hours leads to safer patient care and reduces the loss of daytime training opportunities
- Programme training opportunities can be increased.

International comparisons confirm that high quality training can be delivered within reduced working hours.

Recommendations

In the NHS, a trainee needs to learn in a service-based environment and the learning opportunity in every clinical situation must be realised.

To achieve this, fundamental changes to the way training and service are delivered must be made.

Implement a consultant delivered service

- Consultants must be more **directly** responsible for the delivery of 24/7 care
- Consultants will need to work **more flexibly** to deliver high quality training and service
- The roles of consultants need to be developed for them to be more directly involved in out of hours care
- A clear alignment between service need and the number of new Certificate of Completion of Training (CCT) awards, in terms of workforce planning, is urgently needed to enable a consultant delivered model
- The doctors clinically responsible for service delivery should be employed in substantive posts under the consultant contract
- An expansion of any other grade will not support the move to a consultant delivered service model
- Newly appointed consultants require mentoring and support
- Training should be delivered in a service environment with appropriate, graded consultant supervision.

Service delivery must explicitly support training

- Services must be designed and configured to deliver high quality patient care and training. This may be at a department, trust, regional or national level dependent on the local circumstances and specialty involved, but will require the necessary critical mass of professionals to maintain a viable service
- As the ratio of trainees to consultants changes with increasing consultant numbers, it may no longer be feasible to train in all hospitals
- Reconfiguration or redesign of elective and emergency services and an effective Hospital at Night programme are two of the ways in which healthcare can be changed to support training and safe services
- Rotas require organisation and effective management to maximise training in 48 hours
- Current employment contracts need to be reappraised to ensure that they support training within the EWTD
- Multidisciplinary team-working must be used to support training.

Make every moment count

- Training must be planned and focused for the trainees' needs
- Trainers and trainees must use the learning opportunities in every clinical situation
- Handovers can be an effective learning experience when supervised by senior staff, preferably consultants
- The co-ordinated, integrated use of simulation and technology can provide a safe, controlled environment and accelerate learning
- Where appropriate, skills and expertise should be learnt in a simulation environment and from other modern techniques, not on patients
- Mentoring and support for trainees must be improved
- Training requires a change from traditional perceptions of learning to a model which recognises the modern NHS
- Trainees must be involved in the decision-making and implementation of training innovations that affect their present and future careers
- Extending the hours worked or the length of training programmes are not sustainable solutions.

Recognise, develop and reward trainers

- All consultants when they come into contact with trainees in a clinical situation will have a role in teaching and supervising them
- Consultants formally and directly involved in training should be identified
- They must be trained, accredited and supported:
 - Their training responsibilities must be recognised in their job plans
 - They will need a reduced service load in order to be able to focus more on training
 - Trainees will be more closely aligned with this smaller number of training consultants
- Organisations involved in the standard-setting and regulation of training must co-ordinate their approach and ensure clarity of these training roles
- Trainer excellence must be appropriately rewarded.

Training excellence requires regular planning and monitoring

- Commissioner levers should be strengthened to incentivise training, ensure accountability and reward high quality and innovation
- Prioritise training in providers by linking training criteria to performance targets
- Educational governance must be recognised on every trust board by the appointment of a person specifically responsible for education and training
- Monitor the quality of training with a rational, realistic system that looks at a range of indicators to measure the impacts and outputs
- Include training outcomes as part of quality assessment of provider institutions.

The recommendations from this Review can be adapted and used in the other healthcare professions, as they move to longer working days involving shift systems and rotas.

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Throughout the report

- 24/7 and 'out of hours' relates to all forms of delivery of emergency care
- Emergency medicine (relating to specialty, consultants and departments) is synonymous with Accident and Emergency (A&E)
- The term European Working Time Directive (EWTD) is synonymous with Working Time Directive (WTD) and Working Time Regulations (WTR)
- The 48-hour week refers to the EWTD 6-month reference period.

1. Introduction to the Review

If the quality of training for dentists, doctors, healthcare scientists and pharmacists becomes compromised, it will ultimately affect patient safety. Therefore, it is crucial to review what the impact of the full implementation of the EWTD on training has been.

Training the future workforce in reduced hours has produced much debate and strong opinions. The Review needed to take this into account but has been very clear that it was looking for a balanced view.

It considered the four professions and was focused specifically on training in England. However, it is anticipated that the findings echo the position in Northern Ireland, Scotland and Wales.

The Review is a snapshot that took place in a dynamic environment. Many other factors have affected the way in which service and training are delivered.

1.1 Context and background to the Review

The EWTD (see Appendix D for details on the Directive) was fully applied to doctors and dentists in training on 1 August 2009.

The Secretary of State for Health commissioned this Review following concerns raised about the potential impact of working in reduced hours on the quality of training. It looked at the impact of the 48-hour week on the quality of the training that is necessary to ensure the continuing supply of a world class workforce which is able to deliver high quality services to patients.

The EWTD has been gradually implemented over a number of years. New Deal monitoring in September 2008 showed that approximately two thirds of doctors in training were working to 48 hours already. It has been relatively easy in some specialties but a greater challenge in others to implement. The need to have ongoing derogations for some rotas signals that some employers have not as yet been able to implement the EWTD in full in England.

The engagement of organisations to make positive changes to meet the EWTD challenge is something the Review investigated specifically. It tested whether those parts of the NHS that have embraced the change reported fewer concerns than those which achieved compliance by simply reducing hours without changing practices.

The Review took place in a changing environment with numerous factors affecting the service and workforce, such as:

- a challenging financial climate, where there is a real focus on reducing public sector spending and a bigger emphasis on ensuring that value for money is achieved
- changes in service and training delivery
- the ongoing implementation of Department of Health professional training programmes, for example Modernising Pharmacy Careers.

1.2 Dentists, healthcare scientists and pharmacists reported that EWTD had not had a significant effect on the quality of training

'We have consulted with members of both the hospital and academic committees and for the bulk of the dental profession this [the EWTD] is not an issue.'

Chief Executive,
British Dental Association

'The EWTD has had little or no impact on vascular science postgraduate training. The practical experience required for accreditation is generally delivered through a 37.5-hour working week. Urgent and elective care and exposure to training in these areas is not affected by the EWTD as the majority of labs/services currently operate Monday to Friday 9-5 and on-call and weekend services would not affect the Clinical Vascular Scientists role in such rotations.'

President, Society for Vascular
Technology of Great Britain
and Ireland

While the Review considered the effect on the training of all four professions, the greatest impact has undoubtedly been on doctors in training. This is largely due to the fact that medical trainees are so intrinsic to service delivery, particularly in the emergency and out of hours situations. Therefore the focus of this report is on doctors in training.

The training of doctors for general practice was not affected when they were training in a primary care environment but they faced the same challenges as other trainees when rotating through hospital-based specialties.

The only area of dentistry where the EWTD was an issue was in maxillofacial and oral surgery. The views of this specialty were considered in conjunction with the other surgical specialties in the Review.

There has not been an impact on healthcare scientists and pharmacists as training is delivered within a 37.5-hour working week. Even in situations where they train outside this time, the 48-hour limit is rarely, if ever, of relevance.

Some branches of the other three professions were considering a change to shift patterns of work to provide increased out of hours services. Where this becomes necessary, the EWTD time restrictions may become a factor. Given this, these professions should consider the lessons learnt from medicine.

1.3 High quality training produces professionals who are both competent and confident

The aim of training is to produce professionals who are both competent and confident. Given this, and the need for the Review to assess the impact on training, it was important to develop a consistent view of high quality training across the four professions. Therefore, the Review asked organisations and individuals to respond to this, both as part of the oral hearings and in their written submissions.

It was recognised that training programmes are required that both allow trainees to develop the appropriate competences required to do their job and provide them with the necessary confidence. It was also accepted that, to learn, trainees need to be challenged in their use of knowledge, develop their skills and acquire the necessary competence.

High quality training should:

- be well supervised, structured and competency based
- be measurable, i.e. consist of SMART (specific, measurable, achievable, realistic and time-bound) objectives which are nationally recognised for both trainers and trainees
- have appropriately skilled trainers with sufficient time and facilities
- enable practical experience to be gained but protect trainees from excessive service pressures
- ensure working at the correct competence level at any particular stage
- support trainees in making the necessary transition from totally supervised to more independent and remote working
- take place in a high quality care environment
- ensure a patient caseload that maps to the curriculum.

All respondents also recognised that the majority of training needs to take place in a clinical setting. Basic skill acquisition, however, is better taught away from patients in many disciplines, and early competence levels are acquired more quickly this way. It is also important to protect teaching time where the trainee can use a range of tools to achieve educational objectives.

Each trainee placement must:

- be appropriate to the level of knowledge and experience of the trainee
- provide induction
- recognise and provide appropriately for the training level of the trainee
- use multiple methods of training to maximise the learning opportunities
- be supervised by consultants or seniors, correcting mistakes, directing learning and giving feedback
- have clearly stated objectives working towards the achievement of known national standards
- follow a training curriculum that promotes the progressive acquisition of clinical and technical knowledge and skills
- have a robust review and assessment process to provide evidence that a trainee is making satisfactory progress, with early identification of issues that need to be resolved
- monitor outcomes and use feedback to improve future training.

Although the Review focused specifically on training in England, the situation elsewhere in the UK was referred to in numerous evidence sessions. It is anticipated that the findings echo the position in Scotland, Wales and Northern Ireland. The Review's findings and recommendations should therefore be relevant.

2. Methodology of the Review

The large volume of complex information gathered as part of this Review was comprehensively evaluated, thus providing a considerable data base on which findings and recommendations were formed. This provided a balance of views which was especially important given the strong but often opposing opinions received as to the impact of the EWTD on training.

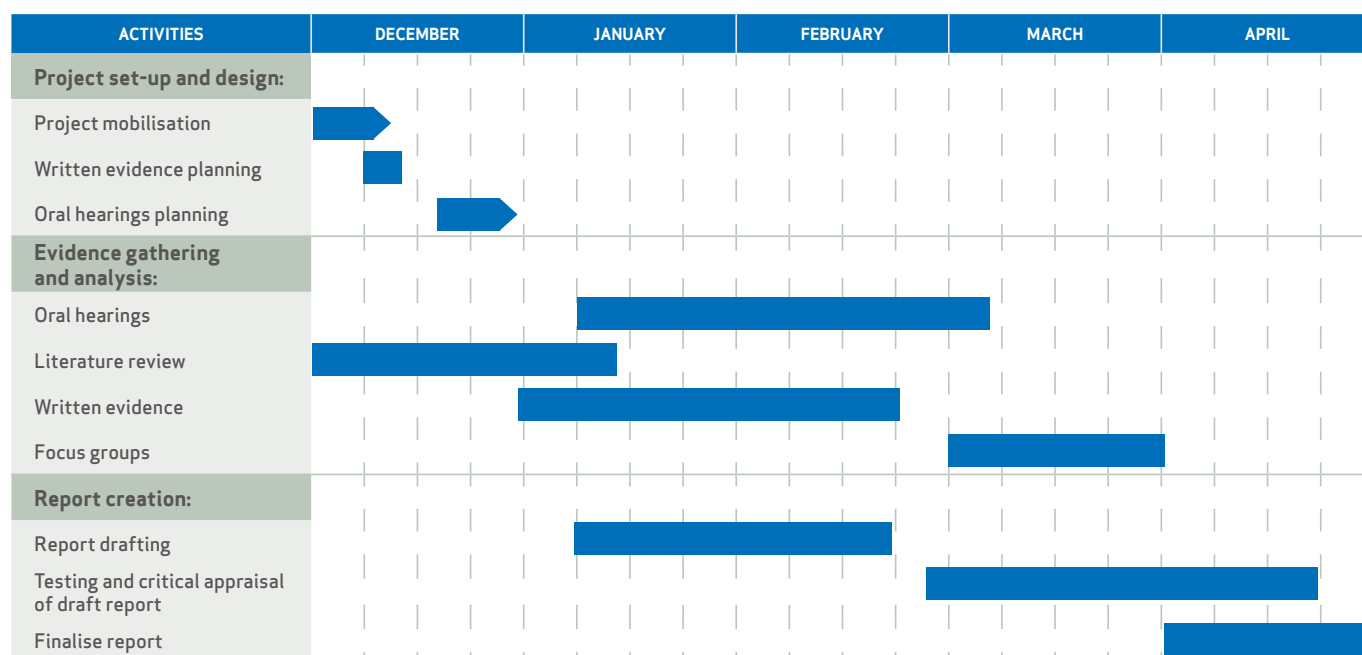
2.1 A comprehensive Review process was used

Preliminary work on the Review started in November 2009 with the formation of the EWTD Expert Group and the EWTD Working Team. (Membership of these groups is listed in Appendix C.) The members of the EWTD Expert Group were chosen for their depth of knowledge and experience of the NHS and not as representatives of any specific organisational body. The EWTD Working Team comprised the Independent Chair, representation from MEE and support from PA Consulting Group.

Four main information sources were used – a literature review, oral hearings, written submissions and focus groups. The outputs from these formed the basis on which the key findings and recommendations were developed.

A phased and iterative approach to information gathering was used, namely to collect the written work in parallel with the oral hearings but to phase the latter, so that initial analysis was done prior to working with the focus groups. This allowed validation of the emerging findings and testing of the recommendations.

The timeline of the Review



2.1.1 The literature review provided background for the analysis and development of key lines of enquiry

The literature review was conducted prior to, and independently from, the oral hearings, focus groups and calls for written submissions. This summarised the relevant national and international articles relating to the impact of the EWTD on the quality of training. This can be found on the MEE website (www.mee.nhs.uk).

This enabled key lines of enquiry for the oral hearings and written submissions to be more accurately developed.

2.1.2 Oral hearings supplied a rich information source

Selected professional, trainee groups and other organisations were invited to 41 oral hearings held between January and early March 2010. The organisations represented can be found in Appendix E.

To ensure that these hearings were objective and focused they were presided over by the Independent Chair, with at least one member of the Expert Group present and supported by the EWTD Working Team. The organisations attending the hearings were encouraged to voice their opinions and present information on the effect of the EWTD on training, prompted by a flexible set of general questions from the panel. Summary notes of the hearings were sent to attendees to confirm factual accuracy.

2.1.3 The written evidence submissions provided clear and meaningful information

Written submissions were requested from a broad range of organisations and professions who were invited to respond on the four key topics of the Review, which were:

- How would you define high quality training?
- What has been the impact of the introduction of the EWTD on the quality of training?
- How have those working in the healthcare 'system' (e.g. employers, trainers, service and training commissioners and providers) responded since the introduction of the EWTD?
- What lessons can be learnt from national and international experience about the delivery of high quality training within time constraints?

The public call for written views and information commenced on 22 December 2009 and closed on 15 February 2010. Over 100 written submissions were received, supplemented by more than 150 written articles.

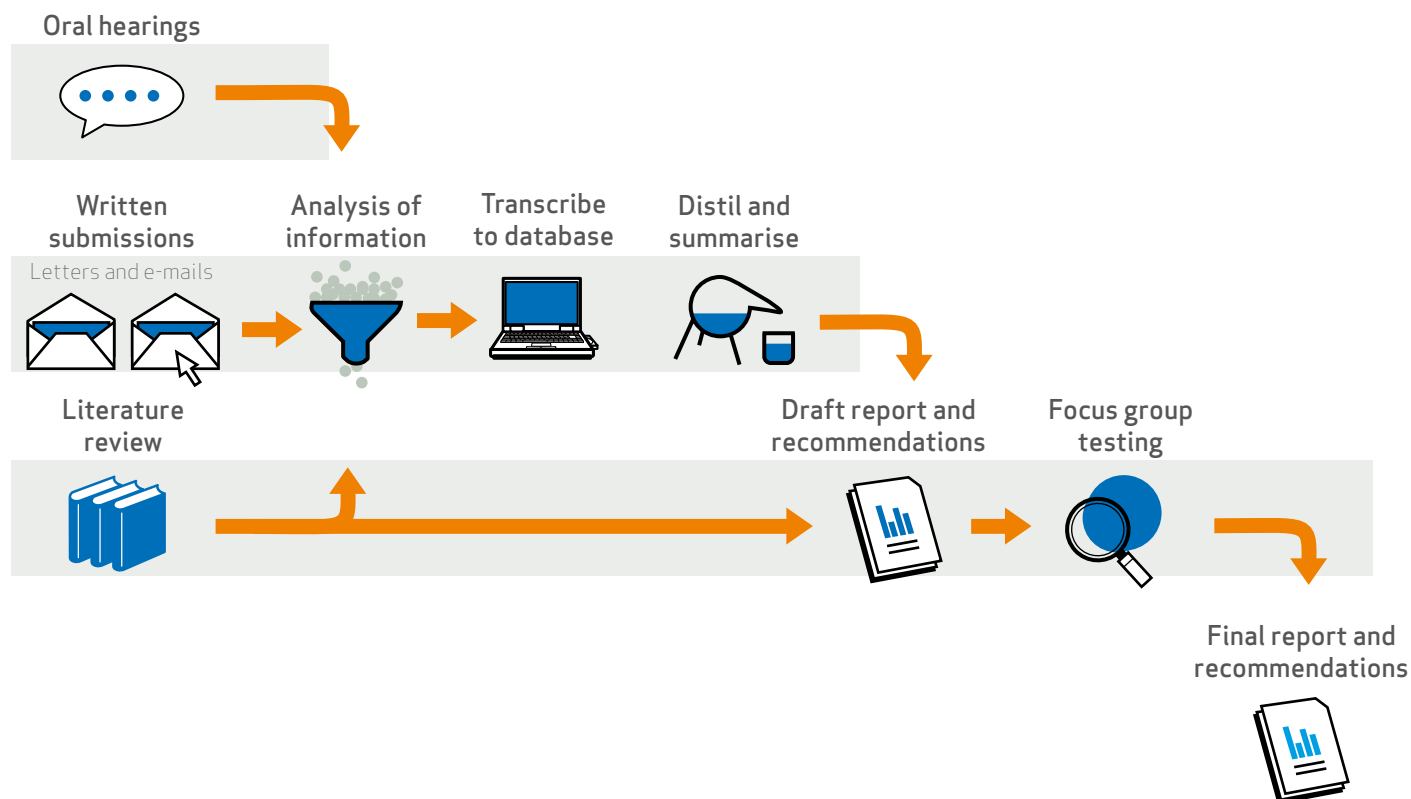
2.1.4 Focus groups enabled emerging findings to be validated and recommendations to be tested

Nine focus groups were held with individuals from selected organisations during March 2010. The list of those attending can be found in Appendix E. Emerging findings were validated and recommendations were tested. The focus groups were led by the Independent Chair and supported by members of the Expert Group and Working Team.

2.1.5 Each piece of information was analysed, summarised and systematically entered into a database

Each piece of information (whether it be from a hearing, written submission or notes from a focus group) was summarised and entered into a standard template. This enabled the key points and messages to be consistently entered into the database, which was used to distil the key messages and give support to the report by detailed referencing.

The comprehensive Review process



2.2 Evidence versus assertion – how the Review considered the information received

There is ongoing discussion and debate about the impact of the EWTD on the ability to deliver high quality training.

2.2.1 Compelling judgement and information were used as a proxy for evidence

When the same assertion, information or opinion was regularly expressed, the Review considered this to be consistent and compelling judgement and information. It was then used as a proxy for evidence. Put simply: when the same story is repeatedly reported from a multitude of sources, it is likely to have some validity. The perceptions of trainees were particularly important to the Review.

Where concrete evidence was available it was used. A large volume of survey data was received, much of this representing opinion and not fact and often compromised by small sample sizes and varying parameters, making comparisons difficult.

2.2.2 Indicators of the outputs and outcomes of training are long term and therefore much of the report relies on perception and not fact

With the reduction to 48 hours being in place for less than one year, there has been limited time for the impact to have become clearly discernable. The outputs of training (e.g. examination results) and outcomes (quality of care) are longer-term indicators and were therefore not available to this Review.

2.2.3 The full impact of EWTD and debates about compliance are ongoing

There is still much debate about the validity of compliance figures. Trainees often report that they are working more than their contracts, but this is not being reflected in returns to Strategic Health Authorities (SHAs). Recognising that the reference period for the EWTD is six months it is difficult to currently draw conclusions about compliance, except to say that monitoring of hours needs to be accurate and transparent, and trusts need to act on any breaches of contract.

2.2.4 Outcome measures on the quality of training are complicated by other variables

There is a lack of nationally agreed and validated quality measures which specifically focus on the output and outcomes of training. The true impact can only be measured when the current trainees who are only training in 48 hours achieve their CCT.

In addition, figures relating to cases of reported clinical negligence since the introduction of reduced trainee hours exist but the NHS Litigation Authority has stated that it is not possible to establish any correlation between clinical negligence data and the effect of the EWTD due to the complexity of the other influencing factors. NHS North West Standardised Mortality Rates and Re-admission Rates, however, are stable one year since the introduction of the EWTD 48-hour limit.³

3. Key findings

High quality training can be delivered in 48 hours.

This is precluded when trainees have a major role in out of hours service, are poorly supervised and access to learning is limited.

The tension between service and training in the NHS has increased with the decrease in trainees' hours. Patient care and safety remains the priority, but the current model of service provision relies on trainees to deliver much of this care, particularly out of hours. With the compression of available trainee hours from 56 to 48, a proportionally greater amount of time is taken to ensure that service requirements are maintained to the detriment of training where this is not well planned or managed. Trainees in specialties which have high emergency and out of hours service components are most likely to lose out on elective training.

The introduction of the EWTD for junior doctors has occurred alongside other significant changes in the NHS such as the move to competency-based learning, the focus on care in the community and the challenges presented by the current financial climate. These changes are further compounded where traditional models of training and working are not adapted or developed. Where there is good planning and management, high quality training and service can be delivered.

3.1 Gaps in rotas result in lost training opportunities

Two of the key functions of the NHS are the delivery of high quality patient care today and training the professionals of tomorrow. There has always been a tension between service and training but the reduction in hours, along with other training system changes, has caused some rotas to

become increasingly fragile and inflexible. The reduced hours have necessitated a move to shift patterns of work in many specialties which when badly constructed have impacted on training opportunities, continuity of care and trainee well-being. This is leading to training needs becoming increasingly threatened by the available time.

The effect that reduced hours can have on the time available for training

'There is insufficient time for teaching sessions or clinical training opportunities due to service commitments.'

Ophthalmology 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,
PMETB survey 2008/09

3.1.1 Trainees cover increasing numbers of rota gaps

Rota gaps result in trainees being moved from their daytime, more elective training often at very short notice to fill service gaps. These are usually out of hours where there is minimal supervision and therefore less training opportunity. This results in the trainee missing out on the planned training that day and often the next due to compensatory rest.

Although many rotas are compliant with 48 hours on paper, rotas have gaps.

Survey	Feedback from respondents
Royal College of Obstetricians and Gynaecologists survey of 893 trainees in January 2010	58.3% of trainees reported rota gaps in the previous three months, 89% saying that they or their colleagues had to cover these gaps
BMA junior doctor survey of 1,567 trainees in February 2010	41.3 % respondents reported vacancies in their rotas in 2009/10, an increase on the 29% reported in the 2008/09 survey
RCP London survey of 699 specialist registrars (SpRs) and 63 college tutors in January 2009	95% of reporting hospitals required locum cover to fill gaps in medical SpR rotas, and for more than three days per week in one-third of cases
ASiT survey of the 48-hour week of 466 trainees in January 2009	53% of respondents reported rota gaps. Of these 57% were covered by internal locums
Royal College of Anaesthetists trainee survey of 180 English trainees in August 2009	63% of anaesthetic and intensive care medicine rotas nationally have gaps

The move to resident shift systems to accommodate the 48-hour week means that more trainee doctors are required to cover the out of hours care if the structure of service cover remains the same. This increased requirement for doctors results in an increase in the number of rota gaps.

There are two types of rota gap: those where absence is known in advance and those where absence is unscheduled. Unplanned gaps caused the greatest issue as they have to be covered at short notice. For example:

- sick leave
- unexpected resignations and transfers.

Planned gaps should not present such a challenge as these are predictable and allow time for rota staffing to be organised. Where rotas are so tight and inflexible and there are recruitment challenges, even these planned gaps are becoming increasingly difficult to cover.

Planned gaps are due to factors such as:

- maternity or paternity leave
- out of programme leave
- annual leave
- study leave.

A number of factors were highlighted with regards to planned rota gaps:

Changes in workforce gender and working patterns. Currently, the majority of medical students are female and in England women represent 37% of all hospital medical staff and 25% of consultants.⁴ Female trainees were said to be more likely to start a family once they had a stable employment contract, for instance in a specialty training programme. Therefore gaps so created are more difficult to fill on a long term basis as appropriately competent doctors are less available at higher levels of training. Paediatrics, where 70% of the ST 1 level trainees are female, is currently addressing this by recruiting 1.4 trainees for every predicted CCT. A similar situation applies in general practice recruitment.

Less than full time (LTFT) trainees. There are a relatively small number of LTFT trainees in the NHS – currently 2,096 trainees (7%) work less than full time but more than half time. They are no longer supernumerary and therefore not available as additional support to rotas. They are now less flexible in their ability to fit into the system. The NHS may be more family friendly overall but this has not fed through to much of the culture of the LTFT trainees.

Out of programme experience (OoPE). There was reported to be an increasing number of trainees opting for out of programme time, which contributes to rota gaps. There are a number of different reasons for this, including:

- additional training experience
- research
- career break
- to delay the award of the CCT.

3.1.2 Recruitment challenges compound the difficulty in filling gaps

With the introduction of the trainee August annual recruitment cycle from 2007, vacancies in training programmes at other times of year have been much more difficult to fill. Even when programmes, and therefore rotas, are fully staffed in August, as each year progresses and trainees leave, more gaps appear. There are reported to be more training posts available in some programmes than there are trainees to fill them. Recruitment

(and rota-filling) issues are being further compounded by variable recruiting as Deaneries may leave a post unfilled one year and occupied the next.

The 'postcode' factor also affects the ability of a trust or region to attract trainees, with several parts of the country struggling to attract sufficient trainees to their available programmes.

The recent change in immigration law means that the UK is also less accessible to doctors from overseas and few have the immigration requirements to train here for more than two years. This makes the UK a less attractive venue for medical training. Consequently, this increases difficulties in filling gaps in rotas.

It was also noted that there are variations by specialty: paediatrics, emergency medicine, obstetrics and gynaecology, psychiatry and anaesthetics in particular most often have problems filling training posts.

There is an unsustainable reliance on locums to cover rota gaps

There is a reliance on locums, either internal or external, to fill gaps. Internal locums often result in trainees choosing to or having to opt out of the EWTD. Although this can result in financial benefits for doctors, they risk not realising the rest benefits of the EWTD or necessarily advancing their training. The use of internal locums frequently results in lost training opportunities and, although allowing a compliant rota on paper, usually means that the involved doctors work non-compliant hours. 'Moonlighting' appears to be quite common but contravenes the EWTD.

The use of internal and more particularly external locums carries with it great financial implications for the trust and can have patient safety consequences as it was recognised by many trusts that the competence of external locums varies considerably. This is supported by the results of a survey by the Royal College of Physicians of London⁵ in which only 21% of respondents described external locums as usually reliable and just 10% said they were of high quality. This is not a sustainable solution to the problem of rota gaps.

'When a rota is constructed well, trainees, consultants and managers are happy that the best balance has been struck between training, quality of life and service need. At its worst, there seems to be no training, no one sees their friends or family and yet the hospital complains they can never find the right doctor when they want them.'⁶

BMA Junior Doctors Committee, 2008

3.1.3 Rigid, poorly designed rotas result in trainees being unsupported and unsupervised

Rota design is crucial for training and service delivery

Current practice varies greatly but, generally, it was felt that where trainees were working in a team of fewer than eight people, training needs were not being met and service delivery was also likely to suffer. Most respondents felt that the pivotal number of trainees per team was usually a minimum of 10 to allow for planned leave. It was recognised that an out of hours team does not necessarily require doctors to all be in the same specialty but must be competency based for the patients' needs. The Review heard that high intensity workloads require full shifts which need more doctors in the 48-hour system than non-resident on-call rotas.

Poor rota design means that trainees are:

- being asked to work excessive hours, leaving them sleep deprived
- not routinely working alongside more senior colleagues, which means that they are not getting the on the job training and supervision
- often less able to attend more formal training events.

Rota compliance with EWTD was universally highlighted as an issue

Many confirmed that while a rota might be compliant on paper, the actual hours worked may not match this. Doctors would expect to remain to complete the clinical task in hand; however, there is confusion in the profession about the requirements of the EWTD, pressuring some to work consistently beyond their contracted hours. A number of surveys highlighted this issue.

Survey	Compliance with rotas
PMETB trainee survey 2008/09	10% of trainees were asked to falsify records on hours compliance at 56 hours
Royal College of Ophthalmologists survey of 189 trainees in August 2009	51.9% worked more than 48 hours per week
BMA junior doctor survey of 1,567 trainees in February 2010	51.1% reported working more than 56 hours in a 7-day period
Scottish Academy survey on the European Working Time Regulations (RCPE) of 1,360 trainers and trainees (56% from England) in autumn 2009	93% of respondents in England considered rotas to be fully or partially compliant on paper; however, only 63% believed that this reflects reality
ASiT/BOTA post-implementation survey of 1,600 surgical trainees in November 2009	84% of respondents worked in excess of their rostered hours and 67% were attending work out of rostered time to get training experience

3.1.4 Shift working has decreased training opportunities and impacted on trainee experience

There is a wealth of opinion that the introduction of shift working, widely instituted with the introduction of the EWTD and further compounded by the New Deal, has had an adverse impact on the quality of training in the following ways:

- reduction in trainer and trainee interaction
- lack of continuity of patient care
- diminish trainee well-being and quality of life.

Senior trainees have a better work–life balance and access to training when working an on-call rota particularly if non-resident rather than shifts. If New Deal requirements are in danger of being breached a common response of a trust is to put all trainees on a full shift system.

‘Trainees no longer follow a disease process from beginning to end. They rarely have the satisfaction of seeing the recovered patient that resulted from their initial actions.’

Medical Director, NHS Foundation Trust

‘You must be satisfied that, when you are off duty, suitable arrangements have been made for your patients’ medical care. These arrangements should include effective hand-over procedures, involving clear communication with healthcare colleagues.’⁷

General Medical Council, 2006

‘The definition of a clinical handover is “The transfer of professional responsibility and accountability for some or all aspects of care for a patient, or group of patients, to another person or professional group on a temporary or a permanent basis”.’⁸

National Patient Safety Agency

Fewer opportunities for interaction with trainers impacts upon trainee support and learning

Shift working often means that trainees, their trainers and educational supervisors are not practising at the same time of the day or night and therefore have less contact time. The erosion of this relationship was considered particularly detrimental to training.

The impact of shift working on training needs to be balanced carefully, as evidence suggests that organisations which have adapted their service and training delivery to the EWTD, and the other changes affecting the NHS, were less likely to report the loss of contact between trainer and trainee.

Loss of continuity of patient care by an individual trainee results in missed learning opportunities

Trainees often felt that shift working fragmented their learning experience. They missed out on the learning opportunities during the patient journey, such as the progression of disease and the response to treatment. Missing this vital experience and positive reinforcement of the benefit they have delivered is detrimental for trainee learning and morale. Continuity of patient care can be ensured and even enhanced in reduced hours, by a properly organised team approach.

The EWTD and shift working have increased the number of handovers that are necessary to maintain continuity of care. In many cases, handovers were reported as being an area of weakness in training and service delivery. Poor handovers are associated with:

- inaccurate clinical assessment and diagnosis
- delays in diagnosis and ordering investigations
- medication errors
- inconsistent or incorrect communication and duplication of results
- increased in-hospital complications and length of stay.

The problems experienced in handovers centre around inadequate systems, poor leadership and lack of specific handover locations.⁹ These all contribute to wasted learning opportunities.

More disruptive working patterns are detrimental to trainee well-being and work–life balance

Although with the reduction in hours there should be less sleep deprivation and better work–life balance for trainees, feedback was mixed. Shift patterns were stated to have decreased the quality of life, as work periods, although shorter, were more frequent, less regular and more antisocial. Fixed leave allocations, often introduced to enable shift rotas to be planned and managed, provide particular difficulties for many trainees.

Survey data supports this anecdotal evidence, with the highest stress levels in emergency medicine, general medicine, obstetrics and gynaecology and paediatrics.¹⁰

The negative impact of the EWTB upon trainees was evidenced by the increase in the sick leave reported to the Review. Although there may be other factors responsible for this there is perceived to be a link between the introduction of the 48-hour week and increased prevalence and longer periods of sick leave.¹¹ This is supported by a recent BMA survey which found that four in ten doctors were working more intensely to cover understaffed rotas.¹²

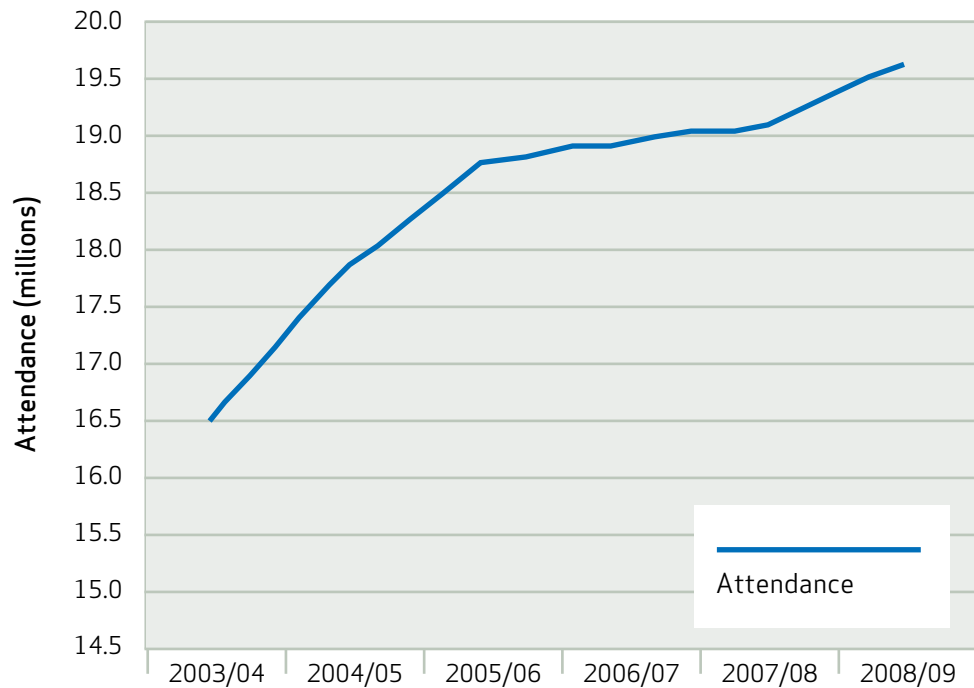
3.2 The impact of EWTB is greatest in specialties with high emergency and/or out of hours workloads

Acute hospital services are coming under increasing pressure, with rising patient numbers and rigorous service targets. Trainees in specialties with the responsibility for delivering these services often find that they have to miss training opportunities, particularly in elective care, to ensure that this service is maintained. These trainees were the most likely to feel that the EWTB had negatively impacted upon their training.

3.2.1 Increased pressure on acute services means that trusts must deliver care to increasing numbers of patients

The combination of a minimum 4-hour wait in Emergency Departments together with the change to the GP contract and its impact on out of hours care has resulted in rising attendance in Emergency Departments.

Emergency Department attendances in England 2003–09



Source: Hospital activity statistics and A&E attendances, Department of Health

It is becoming difficult for the out of hours services to cope with this demand, especially in emergency medicine, acute medicine and paediatrics. An increased pressure is felt by trainees, who are responsible for much of this frontline service delivery.

The use of service targets has resulted in reduced waiting times for patients but has had a knock-on effect for trainees who again find that their training needs are not met as the trusts' priorities centre on meeting service targets.

The 4-hour wait has reduced delays for emergency patients but has resulted in redirection of both junior trainees and more senior SpRs in acute specialties to the Emergency Department. Acute medicine and trauma and orthopaedics trainees were often working there, not because it was a training opportunity, but to increase the flow of patients through the Emergency Department so the 4-hour wait target could be achieved.

In emergency medicine, at current trainee intake levels and projected CCT awards, it will take until 2025 to achieve the recommended number of 10 full time equivalent (FTE) consultants, as a minimum available to provide a 24/7 service, in every department that is currently working. Service reconfiguration could, however, achieve viable, well-staffed and safe consultant delivered services in fewer departments much more quickly.¹³

3.2.2 The majority of specialties with high emergency and out of hours workloads perceived that EWTD has had a negative impact

Generalist emergency rotas are staffed at the expense of the training of subspecialty and higher trainees

The service often requires generalist cover for the emergency or out of hours workload, but for many higher trainees this results in them losing the more elective opportunities for their specialised training when they fill the rota gaps.

Specialty trainees, for example, in anaesthetics, paediatrics, obstetrics and gynaecology and surgery (especially trauma and orthopaedics, paediatric surgery and neurosurgery) are more likely to be moved from their regular programmed, often daytime, training opportunities to fill rota gaps or service a disproportionate emergency:elective caseload.

Survey	Impact on training
PMETB National Training survey 2008/09	Over 60% of surgical consultants said that standards of training would decrease with 48 hours
Royal College of Ophthalmologists survey of 189 trainees in October 2009	47.6% of trainees felt that the delivery of their training had been adversely affected by the EWTD
Interim results of the Royal College of Obstetrics and Gynaecology survey of 893 trainees in January–February 2010	43% of trainees felt that the EWTD had greatly reduced training opportunities
BMA junior doctor survey of 1,567 trainees in February 2010	54.2% reported that compliance with the EWTD had had a negative effect on their training overall
Scottish Academy survey on the European Working Time Regulations (RCPE) of 1,360 trainers and trainees in autumn 2009	65% of trainees in England felt that the EWTD had had a negative (major or minor) effect on training; 81% of consultants felt the same

Some trainees mentioned difficulty in obtaining the required experience for their level of training. They had less time in outpatient clinics and on the wards, or for elective training, operative or otherwise. For example, in an obstetrics and gynaecology trainee survey, 43.2% of middle grade trainees risk not achieving the required competences in surgical procedures for their level of training as they focus on labour ward duties.

The data from logbooks is one way of objectively analysing the quantity of experience although it was recognised that they do not necessarily reflect the quality. The current information on the impact of the EWTD is inconclusive. A paediatric anaesthetic trainee survey found that there was a 24% reduction in caseload after the introduction of the 56-hour week¹⁴ and this trend was paralleled in a comparison of trainee surgical logbooks a generation apart.¹⁵ A study on cardiac surgical training found that exposure to operative surgical training can be sustained despite shortening of working hours.¹⁶ This more positive view is supported by further studies on anaesthetic caseload¹⁷ and trauma and orthopaedic^{18,19} operative experience.

Some trainees are less confident in being able to progress through to more senior levels of responsibility, particularly in the move to middle grade rotas.

It is too early to monitor the impact on training using Annual Review of Competence Progression (ARCP) results although these should be used in future monitoring.

In specialties with lesser volumes of out of hours work the EWTD has had a minimal impact. Examples are pathology and occupational medicine.

3.3 Traditional models of training and service delivery waste learning opportunities in reduced hours

The training and service environment has changed over the past 10 years; however, training methods and practices have in some cases been slow to respond. Many consultants believe that the best system to train in is the one they themselves experienced. In addition, initiatives initially designed for other purposes, such as the New Deal and the increase in trainee and junior doctor posts, have diluted training in reduced hours.

3.3.1 In a 48-hour week, there are over 15,000 hours available for trainees during a seven-year specialty training programme

Although there are sufficient hours available for trainees during a specialty training programme, these are often not being used effectively for training.

Where training is being delivered successfully it is usually because new methods of service delivery have been employed or trusts have changed the way training is delivered (see section 3.5).

The Review found that:

- the current system is still over reliant on preserving the apprenticeship training model
- many consultant trainers' perceptions of how best to deliver medical education were aligned to traditional methods, involving long hours, personal sacrifices and learning, with limited formal educational support and supervision
- there was little support for extending hours or lengthening training programmes. These measures were seen to simply perpetuate the current situation described above and allow trainees to provide the frontline services out of hours, unsupported and without direct supervision
- trainees can spend a lot of their time in the hospital doing routine or administrative tasks with little educational value

- procedures and hours spent at work were often equated to standards of training received, with little recognition of the quality of learning experienced
- consultants and senior trainees were more negative about the impact of the EWTD than junior trainees.²⁰

3.3.2 The increase in trainee and other junior doctor posts has diluted the quality and quantity of training opportunities

There has been a substantial increase in junior doctor posts in recent years. This has resulted in fewer training opportunities and less supervision for trainees, leading to an overall increase in pressure on the training system. For anaesthetists, this has resulted in fewer first year trainees being able to 'go solo' when on-call after three months' initial training than was the practice previously.

As other professionals take up more traditional trainee tasks, this is further diluting the opportunities for training of junior doctors.

In psychiatry, as a result of the implementation of the new ways of working, consultants look after the most complex cases with nurses doing most of the initial assessment of patients. This poses the question of how to train junior doctors to deal with and have experience of all cases if they are not seeing them as part of their training.

3.3.3 The New Deal when combined with EWTD reduces flexibility

The New Deal has largely been beneficial in improving pay and working conditions for junior doctors. It introduces complexity into rota-planning which, when combined with the EWTD requirements, can have a serious impact on training opportunities, because the rest periods and short breaks of the two systems do not directly align.

Exceeding the New Deal limits results in higher pay bandings, which are a significant cost pressure to trusts. For example, one trust reported an additional £250,000 cost for an eight-person rota over a six-month period when one person in that team exceeded the banding on one occasion. The result has been that trusts are inclined to move from rotas to full shift resident on-call systems to minimise this risk.

As a result of this, rigid shift working, without alignment of shift patterns, has frequently been identified as detrimental to training, impacting on continuity of care, trainer and trainee contact and trainee well-being.

3.3.4 Trainees are using their right to opt out to enhance their training

Trainees in craft specialties are opting out more often and working additional hours, citing the need to supplement the volume of clinical experience they receive from their regularly scheduled service commitments, or to enable them to carry out working as locums (see section 3.1). Under the EWTD, all individuals have the right to opt out but the service has to be planned on the basis of the 48-hour week. The NHS cannot operate a service with the expectation that its staff may or may not opt out.

3.4 Consultant ways of working often support traditional training models

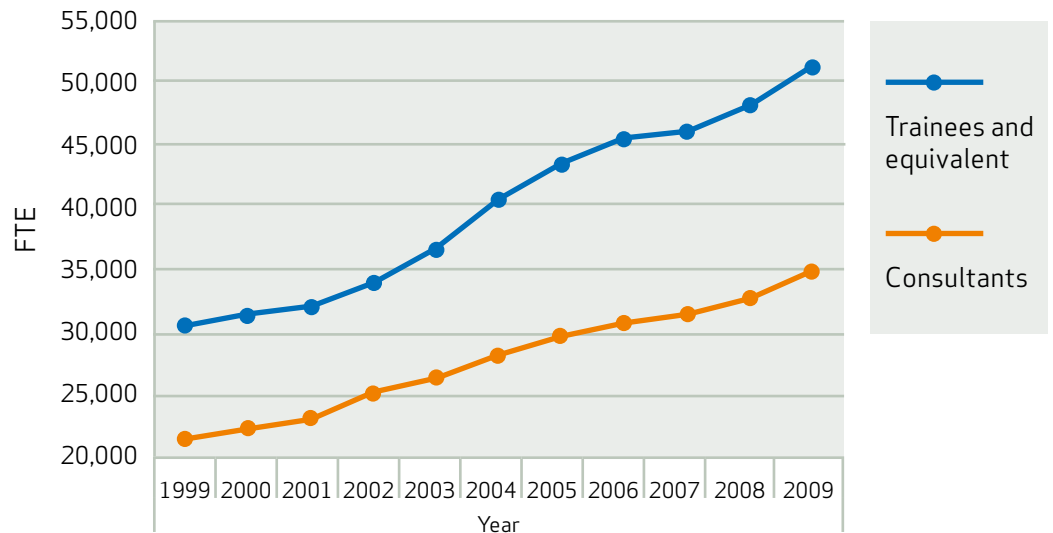
Many consultants still work in traditional ways. The mechanisms to support consultant working such as the consultant contract and consultant job plans are frequently not used effectively to support training and service needs in reduced hours.

3.4.1 Despite consultant expansion, trainees are still responsible for delivering the majority of out of hours service

The frequently expressed aim of the NHS to move to a consultant delivered service model has not been significantly advanced in many specialties, despite over a 62% expansion in the number of consultants between 1999 and 2009 from 21,410 FTEs to 34,654 FTEs across all specialties.⁴

One study found that consultant physicians were involved in direct delivery of patient care overnight in only 6.1% of teams.²¹

Consultant and trainee numbers in England, 1999–2009



In this time period the number of trainees and other ‘doctors in training equivalents’ has increased in almost similar proportions from 30,499 FTEs in 1999 to 51,216 in 2009,⁴ a 60% increase. This increase in junior doctors has enabled the maintenance of existing service delivery models. However, the number of trainees is set to decrease in the coming years with a 4% cut in numbers for 2010/11 and proposed further cuts in numbers for most specialties in the following years to pre-empt overproduction of CCT holders and possible medical unemployment on a significant scale. The reliance on trainees for service delivery will no longer be feasible.

In some specialties and trusts, more sub-consultant posts are being created. This provides the trust with a CCT holder or equivalent to deliver the service at a lower cost but without ultimate responsibility for clinical care. There was no enthusiasm among professional groups for the expansion of sub-consultant grades. Representations to the Review emphasised that the aspiration of the overwhelming majority of those entering training was to be able to achieve the CCT level. This indicates the ability and readiness to undertake independent clinical practice and thus be responsible for the delivery of service at consultant level.

There will always remain the opportunity for doctors who do not hold a CCT or equivalent but who have extensive experience and qualifications to provide valuable service at a level other than consultant. However, it is recognised that many in that position today have become eligible to apply to be on the Specialist Register of the General Medical Council (GMC) by obtaining a Certificate of Eligibility for Specialist Registration (CESR).

The increase in trainees has been underpinned by a steady increase in the number of UK medical students (from 2,000 per year in 1960 up to 8,000 per year in 2010). The declared aim of this has been to:

- reduce the dependency of the NHS upon doctors from overseas to staff the service
- increase the service that is directly delivered by trained doctors
- improve the care given to patients and
- enhance the training opportunities for trainees.

Despite this, trainees still have the major role in the frontline 24/7 delivery of service in many trusts and specialties. This has a direct impact on their learning and experience as they are often not appropriately supervised.

Some specialties have taken forward new ways of working, with much greater involvement of senior staff out of hours – notably paediatrics, obstetrics and gynaecology, emergency medicine and radiology. This has increased the proportion of care delivered by trained doctors, and also offers trainees better opportunities for training. Other specialties, including anaesthetics, medicine and surgery, still require many trainees to provide most of the frontline care out of hours, often with inadequate supervision. This results in a reduction in the opportunities for those trainees to attend specialist training sessions in daytime practice (e.g. outpatient clinics, specialist procedures such as endoscopy, cardiac interventions, or operating sessions).

'Translating the objectives of the trust into meaningful, measurable objectives in consultant or specialty job plans, allows consultants to identify the required changes to support growth and efficiency in their particular service area, and ensure their service remains attractive to commissioners.'

The consultant contract programme, NHS Employers November 2008

'In job planning, it is not what a consultant wants but about what the service needs.'

Chief Executive,
NHS Foundation Trust

3.4.2 The consultant contract was designed to allow flexibility for service and the delivery of high quality training but is often not implemented properly

The consultant contract, which was implemented in 2003, aimed to properly reward consultants so that more NHS patients would benefit from their time and skills. It also set out to ensure that investment brought with it new ways of delivering patient care. It is often not being used to change the way consultants work. There are several reasons for this:

- objectives in job plans do not always state specifically what an individual consultant (or team) will be expected to deliver and how this will be measured
- poor application of objectives – Clinical Directors do not always discuss objectives with their consultants or when they do they focus on service delivery now rather than training for the future
- supporting Professional Activity (SPA) time is not always being properly utilised – leading to projects that neither justify the time for the consultant nor deliver benefit for the trust or patient.

Milton Keynes Hospital NHS Foundation Trust: Aligning the objectives of consultants with trust objectives

This trust team has been successful in translating board-level objectives into job plan objectives for consultants, and attaching to these an amount of annualised SPA time. Following agreement with the consultant body, the local negotiating committee and the trust management team, presentations were made to all stakeholders. Ideas were then drawn up for job plan objectives from meetings that took place between Clinical Directors and Divisional Managers. Directorates are now inserting these objectives into individual job plans. The trust is moving to an annualised output-based approach to allocating SPA time.

3.4.3 Training is not prioritised in consultant job plans and ways of working

There is great variation in the levels of support that different trusts offer consultants involved in education and training:

- the employer has multiple activity and quality targets for which it is directly held to account, and training is not necessarily prioritised
- the consultant contract provides flexible use of SPAs and explicitly creates an expectation that these will almost always provide time for training. Through tightening resources it is increasingly common to require justification for SPA usage. There is no agreed formula for this
- some consultants have enhanced training responsibility and this is often not recognised in job plans.

3.5 EWTD can be a catalyst to reconfigure or redesign service and training

'The introduction of EWTD is an opportunity to modernise services. It provides an opportunity to emphasise the need for strong clinical leadership and involvement in medical education.'

Postgraduate Dean, Conference of Postgraduate Medical Deans (COPMeD)

In the current financial climate, it is more important than ever that training programmes deliver real value for trusts. The NHS enjoyed funding increases of over 7% a year between 2002 and 2007. The funding increase then slowed to 5.5% per year until 2011. From 2012, the NHS will be faced with a larger reduction in available funds with the Government setting a 0.5% rise in spending. This means that trusts will be very hard pressed to find any solutions to EWTD pressures that require extra investment and will need to see real benefit and value delivered by any programme of work they embark on.

This financial uncertainty has led many trusts to cut any additional spending but has acted as a catalyst for others, compelling them to institute reconfiguration and system redesign which have increased efficiencies and productivity within a reduced budget.

3.5.1 Service reconfiguration can provide a better, safer service to patients and enhanced quality of training

Some trusts and SHAs have engaged in redesigning services, or are addressing reconfiguration and networking solutions. These result in safer, better care to patients, and enhanced quality of training. In the current economic climate reconfiguration is an important way of making better use of scarce resources. A major service reconfiguration of acute paediatric services in the North West has already taken place. In the North East, from 2013, all emergency units for the north of the region will be co-located. As a result of this reconfiguration, all rotas are being moved onto one robust system, which has already resulted in improved training opportunities. Major benefits in service and training have been produced following the development of London's major trauma system centred around four hospitals, the Royal London (Whitechapel), St George's (Tooting), King's College (Denmark Hill) and St Mary's (Paddington).

The Review heard that reconfiguration can produce the following benefits:

- a greater focus on training and using all educational opportunities, such as post-take ward rounds, as learning experiences
- more frontline consultant care and therefore training
- better planning of training and integration with the service
- better team-working and improved supervision (when trainers and trainees are together)
- increased investment in roles such as nurse practitioners and physician assistants
- new training opportunities being identified and delivered; for example, because emergency operating lists are performed by trained staff in the evenings and at weekends this provides additional learning experiences for trainees
- improved mentoring and support of trainees and newly appointed consultants.

3.5.2 The expansion of consultant presence can result in efficiency savings

Investment in a consultant delivered service should not be seen as purely a cost pressure. Increasing the consultant presence in hospital can result in improved efficiencies in patient care through better assessment of risk and prompt decision-making. This is demonstrated when viewed against a number of efficiency indicators:

- **A decrease in average length of stay.** Consultant presence, with regular patient review, can decrease the duration of time spent in hospital resulting in earlier discharge of patients.²² McNeill et al.²³ showed that the overall length of stay in an Acute Medicine unit was significantly lower, by a mean of 1.3 days, when there was a consultant present.
- **Decrease in hospital admissions.** Increased presence of emergency medicine consultants has been shown to significantly decrease admissions rates.^{22,24} This is further supported by data from Kingston Hospital (admissions reduced from 21% to 16.7%) and Salisbury Hospital (admissions decreased by 25%).²⁵

International Emergency Department demonstrates that increasing consultant presence is cost effective

An Australian study showed that increasing the number of consultants in the Emergency Department not only decreased admission rates by 27%, complaints by 41% and waiting time by 15% but was also very cost effective, saving the hospital A\$9.48 million.²²

3.5.3 Splitting services into elective and emergency has enhanced training, delivered EWTD-compliant rotas and improved quality of care

In specialties such as paediatrics, obstetrics and gynaecology, and acute medicine, where emergency training opportunities are available 24/7, elective training opportunities, such as clinic attendance, ward rounds and operating lists, have suffered with the reduced hours available. Realigning services into emergency (hot) and elective (cold) provision is one way of improving the situation for the trainees. Elective work is relatively time driven and proactive, provides good specialty training and is relatively easy to make compliant with the EWTD. In contrast, emergency work is variable over 24 hours (but with predictable peaks) and can provide valuable

training but this is often not maximised as many trainees are unsupported and poorly supervised.

For those organisations which have realigned services there are a number of benefits, such as:

- reductions in elective cancellations
- more predictable workflow
- improved productivity
- excellent training opportunities in the management of emergencies
- more senior input into case management
- reduced unnecessary admissions
- improved quality of care.

The Homerton University Hospital NHS Foundation Trust has realigned services in this way. Other centres are splitting elective and emergency work, for example Sandwell and West Birmingham Hospitals NHS Trust, with similar benefits to service and training delivery.

Homerton University Hospital NHS Foundation Trust: 'Hot' and 'cold' realignment of services

The Homerton University Hospital in East London has realigned services into 'hot' and 'cold'. Two teams work in parallel to meet the service needs. The consultants have extended their working day to cover 12 hours, maximising the amount of time their trainees are supervised. In each six-month timeframe trainees spend six-week periods on emergency 'hot' work and then the remainder of time on 'cold' elective employment. When they are on the 'hot' team they work mainly in ACU and A&E, they have strong consultant leadership and they work as part of a well-defined multidisciplinary team. When they are on the 'cold' team they are ward based, their work has a strong multidisciplinary focus, they work mainly 8am to 5pm or 9am to 6pm (with some additional staggering of hours) and, importantly, they have protected teaching time enabling them to maintain continuity of patient care and see the patient journey.

'Hospital at Night is primarily set up for service provision not for training, but if it is done well it does provide learning opportunities.'

Department of Health

3.5.4 Hospital at Night can maximise training opportunities as well as supporting effective team-working, key decision-making and leadership skill development

Hospital at night (HaN) is a team-based approach to out of hours care that was originally proposed to allow trainees to maximise their daytime working while providing safe patient care at night. The early driver for the implementation of HaN was the reduction of junior doctor hours to 58 per week in 2004. Reviews of HaN published in 2006, 2007 and 2008²⁶ have shown that more than 70% of acute trusts in England state that they have a HaN programme. The success of HaN depends on a number of principles:

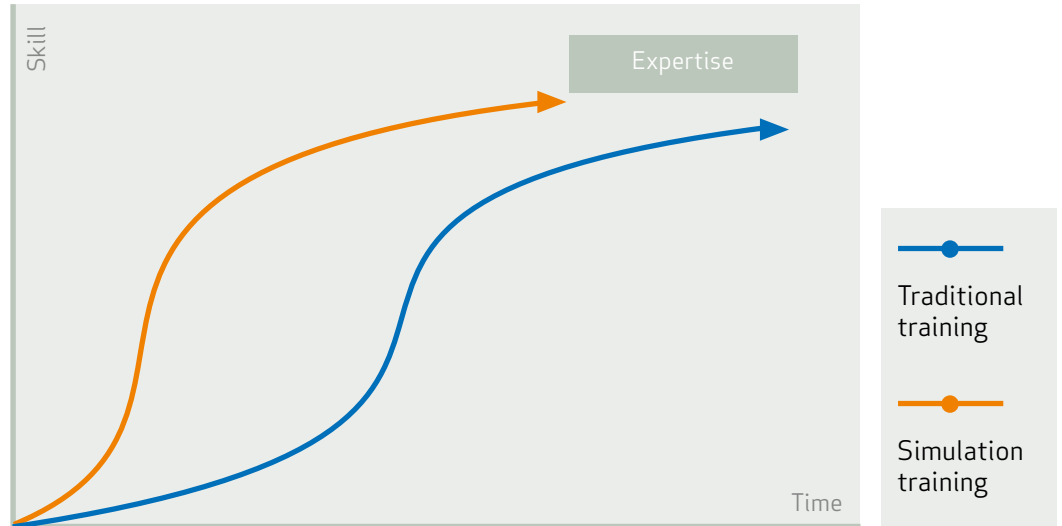
- HaN should have senior clinical leadership at consultant level and senior management support
- the team structure needs to reflect the needs of the organisation based on audits of activity and may differ between organisations
- handovers must be scheduled and led by a senior member of the team, ideally a consultant
- daytime work should be maximised with no routine work awaiting the night shift
- the HaN team must be linked with daytime clinical teams with appropriate rota design for evening 'twilight' work handing over to the night team.

HaN can produce better outcomes for patients and improve service delivery and efficiency.

3.5.5 Simulation and new technologies can support training and accelerate the learning curve

While it was consistently recognised that the early acquisition of clinical skills should not be carried out on patients, this can be a risk if trainees are required to deliver service before they have completed their basic training. Technologies such as simulation can propel the trainee along the learning curve and reduce errors.

Simulation training accelerates the acquisition of skills



Simulation-based training has an important role to shorten and flatten the learning curve on real cases. Subjects trained on a virtual reality laparoscopic simulator were twice as fast and twice as accurate as those who had not been. Importantly, this study shows that it is not number of procedures performed that leads to excellence, but rather the quality of the training. This is underpinned by the nature of the training process.²⁷

Simulation is a developing science, with the ability to teach and objectively assess skills required to become a proficient practitioner. Though tools have been available for almost a decade, the integration of such tools into training curricula has been patchy. Recent studies have shown that not only did simulation-based training improve performance subsequently on real cases, in terms of reduced time taken, fewer errors and decreased patient discomfort, but it also reduced the amount of time taken to achieve laparoscopic skills. Each hour spent on the simulator reduced the time taken to achieve proficiency on the real case by almost 2.3 hours.²⁸ Simulation has shown not only that it can be a more cost effective method of training, but also that it leads to enhanced levels of patient safety and trainee confidence.

One of the major benefits of training using simulation is that it enables a review of performance and the ability to make errors without clinical consequences.

Simulation can also be used to develop other skills which are vital for a doctor, for example teamwork, leadership and management. It is recognised that simulation technologies represent a substantial investment (although their affordability is improving with time – for example, inflatable simulated operating theatres, which can be erected anywhere) and they are not as yet widely available.

‘Simulation training in all its forms will be a vital part of building a safer healthcare system.’

Chief Medical Officer (CMO) of England’s Annual Report, March 2009

New 'low tech' solutions, such as delivering lectures via mp3 players and using i-bleeps for the A&E departments and HaN teams, were endorsed by the Postgraduate Deans as being beneficial to trainees especially given the reduction in working hours.

3.5.6 Multidisciplinary working can provide trainees with valuable training opportunities and reduce their workload

The Department of Health in 2000 explicitly supported multi-professional learning, stating that: 'The Government intends to build on the successful initiatives to make inter-professional education a key feature of NHS education over the next few years.'²⁹

One aspect of this is the concept of the multidisciplinary team (MDT). Properly resourced MDTs can provide more effective and seamless care. The rapid development of specialist nursing roles has yielded particular benefits, for example in cancer, acute care and chronic disease management. Overall, the benefits of multidisciplinary working are clear.

MDT meetings, for example in those units providing cancer services, have evolved rapidly in recent years with the need to adhere to peer reviewed standards. They significantly enhance the quality of care and provide high quality learning opportunities to all members and especially to trainees, delivered in a real time service environment. The more traditional 'clinical meetings' can be reorganised along similar lines to enable more structured discussion of patient management in many specialties, with consequent improvements in training and continuity of care.

3.5.7 Mentoring and support of newly appointed consultants enables them to be both competent and confident

The issue of competence versus confidence was frequently raised with the Review team in relation to readiness for the consultant role. There is nothing new in this perception as exactly the same issue was predicted following the implementation of the Higher Specialist Training Reforms¹ (Calman) between 1995 and 2000. In fact then, very few consultants failed in their early years of clinical practice. It is quite clear, however, that mentoring and support of newly

appointed consultants can provide much benefit at this stage of career development. It is important to recognise that mentoring and support are different and that they have distinct objectives and outcomes.

Mentoring is usually undertaken by someone outside the specialty or even profession, the purpose being to provide an individual with career guidance and expertise. The purpose of support is to assist the individual in day-to-day activities and decisions, and should be carried out by someone with whom the individual works and who can be a positive role model for them.

Northumbria Healthcare NHS Foundation Trust: Mentoring consultants for success

At the Northumbria Healthcare NHS Foundation Trust, as part of the recruitment process, all applicants for consultant posts undergo an assessment to identify any training and mentoring requirements. Subsequently, all newly appointed consultants have training needs identified and planned for. They are allocated a mentor and join a mentoring programme, both of which help them to adjust to the role more successfully. For those who have difficulties, the mentoring programme ensures that any problems are identified early and can be put right.

Consultant mentoring and support is currently patchy. Despite the clear link between good mentoring and a confident, competent workforce, the Review did come across reports of some resistance to the mentoring process.

3.5.8 International comparisons confirm that high quality training can be delivered within reduced working hours

The Review sought examples of good practice from the EU and wider fields. Comparisons with the British medical training system were complicated because:

- postgraduate medical training systems vary greatly across the EU, with many countries not so reliant on junior doctors for service delivery
- data on compliance with the EWTD across the EU is sparse and, where it exists, the reliability and accuracy have been questioned.

Some Scandinavian countries report training their doctors to high standards in under 48 hours a week for years. Belgium has been able to implement the restrictions of the EWTD without finding the issues that this Review has identified.

Successful training in 48 hours has been reported in Australia, although reduced hours are not implemented at a national level and therefore are not directly comparable with the situation in England.

3.5.9 Benefits from effective EWTD implementation

Where the EWTD has been implemented effectively, positive impacts of reduced working hours include:

- an improved work–life balance
- reduction in sleep deprivation
- appropriately experienced doctors are more involved in acute care situations
- enhanced supervision of trainees out of hours leads to safer patient care and reduces the loss of daytime training opportunities
- increased training opportunities.

4. Recommendations

The reliance upon doctors in training to deliver a 24/7 service has to change.

Increasing the hours or lengthening training programmes will not address the shortcomings of the current situation.

All trainees need to be supported by close, appropriate supervision and this will then increase the learning opportunities and improve the decision-making, diagnosis and treatment pathways, improving patient safety.

To achieve this **it is imperative that the NHS moves to a consultant delivered service.**

While the impact of the EWTD on training was the scope set out for this report, the evidence from organisations successfully implementing the EWTD regulations suggests that a 'whole system' approach is the key.

Thus the recommendations below are relevant, not just in a reduced hours context, but in a broader sense to improve the quality of training and service delivery.

4.1 Implement a consultant delivered service

'The British public have a right to receive healthcare that is always supervised, and usually delivered by trained doctors who are on the specialist or GP registers.'

Medical Workforce Project to identify the added value doctors bring to the healthcare team, Academy of Medical Royal Colleges, January 2008

'It will no longer be feasible to depend on junior doctors to provide out of hours service. There are in the training pipeline a large number of potential CCT-holders, sufficient to meet demand for consultants in almost all specialties over the next four years. These doctors will make the possibility of having a consultant-delivered service a reality for the first time.'

COPMeD

This Review emphasises the need for a 'consultant delivered service', rather than the more loosely defined 'consultant based' or 'consultant led service', to become a reality.

A consultant delivered service is defined as consultant 24-hour presence, or ready availability for **direct** patient care responsibility. Consultants may be the most costly members of the workforce but they make better decisions more quickly and are critical to reducing the costs of patient care while maintaining quality. A consultant delivered service should be seen as part of the solution to funding pressures.

For many years the case for a consultant delivered service in the NHS has been made²⁹⁻³² based on a number of drivers including good clinical care, patient safety, patient choice and resource management. Recently, this has been reinforced by many College position statements and professional working groups.³³⁻³⁷

Nearly all medical professional bodies interviewed came out in strong support of a consultant delivered service. The CCT or equivalent, followed by entry onto the Specialist Register of the GMC, leading to consultant appointment, should be the defining position to deliver this service.

To support the provision of this aim there has been significant consultant expansion within the NHS in the last 10 years, with FTE consultant numbers increasing by over 60% between 1999 and 2009 in England.⁴ Projected CCT numbers are set to increase in the next five years. In April 2010, the Department of Health Workforce Directorate Analysis Team predicted that between 2010 and 2016, there will be between 3,400 and 3,500 new CCT holders each year, and that this will then decrease to around 2,800 from 2016/17.

Despite the expansion of the consultant workforce, trainees are still largely relied on to deliver the clinical service commitments, particularly out of hours. With the planned reduction in the numbers of trainees by 2015 (see section 3.4), gaps in existing rota systems will increase and service delivery and training will suffer further unless the model of training and service delivery is transformed.

'...the College advocates a service that is consultant-delivered. In a consultant-delivered service the consultant surgeon is clinically responsible for the care the patient receives during the course of treatment. The consultant will either deliver or closely supervise in the clinical setting all aspects of the care the patient receives. Care may be delivered by other members of the surgical team but only under the supervision of the consultant who is alert to the needs of the patient being treated at all times.'

The consultant surgeon and the consultant-delivered service, Royal College of Surgeons of England, February 2009

'Making the consultant delivered service a reality by "extended day" working can improve patient care, provide excellent training opportunities and reduce the need for overnight cover.'

Working Time Directive 2009: Meeting the challenge in surgery, Royal College of Surgeons of England, June 2008

There is now sufficient evidence that a consultant delivered service has benefits for patient satisfaction and patient outcomes.^{22, 24, 33, 34, 37} As detailed in section 3.5, increasing consultant presence and involvement in delivery of patient care can also deliver efficiency savings to the service.

It is recognised that this is not a short term solution, but one that will take several years to implement fully.

4.1.1 Flexible consultant working is required to deliver high quality training and service

A consultant delivered service will necessitate more flexible consultant working and will require, in many cases, reconfiguration or redesign of the way that services are currently delivered. The health service needs to function with consultants providing an increasing proportion of direct clinical care. Where clinical need dictates, for example in busy Cardiology units, this may involve 24/7 consultant working which will mean consultants working on a shift system. Anaesthesia may require this level of cover for its general emergency, ITU/HDU and labour ward commitments in many trusts. A similar situation may exist for paediatricians, acute physicians and obstetricians at busy Maternity units and surgeons at large Trauma units.

In those disciplines with a lower intensity of work after 10pm, resident on-call consultants should not be necessary and immediate frontline cover should be provided through the HaN arrangements. In these situations surgeons, specialty physicians and interventional radiologists will be required to maintain additional services out of hours on a non-resident basis as at present, but with ready availability to provide appropriate care and supervision.

'...in the future, there will be 24-hour consultant presence in the majority of obstetric and acute gynaecology units as work patterns evolve.'

Responsibility of consultant on-call, Royal College of Obstetrics and Gynaecology, March 2009

'In order for ophthalmic care to be delivered to safe, appropriate and acceptable standards, the Royal College of Ophthalmologists has stated that ophthalmic services should be Consultant delivered. Other team members will participate in this service delivery under the umbrella of responsibility of the Consultant who is aware of the needs of the patient throughout their patient journey. Every member of the team will act within their sphere of responsibility and experience and will refer patients to appropriate colleagues when indicated.'

Royal College of Ophthalmologists, April 2009

Consultant cover extended in hospital to 16–18 hours per day will lengthen the time that they are available for service delivery and concurrent training. This is already practised in many hospitals and departments. Training opportunities are improved by increasing the availability of trainers out of hours and enabling trainees to gain experience under supervision. With a reduction in the number of hours available for trainees the NHS can no longer afford to sacrifice the training of the medical workforce of tomorrow to cover service today. This is evidenced by the frequent necessity to fill gaps in rota and shift systems but leaving trainees and their learning poorly supervised.

There may be a requirement for other staff, such as nurses, pharmacists, healthcare scientists and technicians, to adapt their working patterns and take a more active role in direct frontline patient care as part of the MDT.

Greater Manchester, East Cheshire and High Peaks Children, Young People and Families' Network: Delivering safer services

The Delivering Safer Service – Consultant Delivered Care for Maternity, Paediatric and Neonatal Services document for Greater Manchester provides detailed examples of the new approach, including rotas and costing, showing how trusts can institute the resident consultant model.

4.1.2 The consultant role needs to be further developed

Larger consultant teams working to the EWTD requirements will enable satisfactory systems to be put in place but will mean a change to the traditional consultant role and the traditional experiential apprenticeship model for trainees. Many are already practising this way. Others are still perpetuating the more traditional consultant and training structures with which they are familiar.

There is a need to change the ways of working in response to the needs of patients. This will require strong leadership from the professions and the service.

Concepts such as team job planning (with staff of a department jointly mapping their activities on an annual basis, taking into account variations in service demand and training responsibilities and then matching these to contracts for individual consultants) and the pooling of Programmed Activities (PAs) and SPAs among a team of consultants will

‘Although meeting the EWTD is a significant challenge, paediatrics is moving towards a consultant delivered service and the opportunity to appoint a significant number of new consultants must be grasped. The EWTD affords us the opportunity to change the way in which we deliver the service. Embracing EWTD means patient safety is key, their experience is improved and we have the right people providing the right treatment and care in the right place.’

Royal College of Paediatrics and Child Health

enable flexibility within a team. This will allow for some consultants to take a more active part in education while others take on greater roles in service delivery, clinical innovation, management and leadership.

The well-being of consultants must be protected in this model – therefore sufficient consultants are required to cover resident on-call shifts where these are required as well as non-resident on-call rotas. Initiatives such as the pooling of consultant team PAs and SPAs and reallocation are required to match the needs of the service and training. This will allow variation in roles and responsibilities as an individual’s career progresses. It will need careful planning and collaboration within a department or team and strong clinical leadership will be necessary.

4.1.3 Newly appointed consultants require mentoring and support

Appointment to a consultant post is a challenging experience with the increase in responsibilities and expectations. Newly appointed consultants will be well trained but may have less experience than consultants who were appointed in the past. It is becoming increasingly important to ensure a developmental and supportive environment for them (see section 3.5).

Trusts must facilitate access to mentoring for all consultants but particularly in the first two to three years. The concept of mentoring and support needs to be accepted by all consultants as a part of professional working throughout their careers.

Employers and those managing departments must ensure that systems for support are in place within a team. Examples include:

- an Obstetric and Gynaecology department in the South East has a ‘double-staffing’ system for the first six months of any newly appointed consultant position
- the establishment of on-call rotas whereby newly appointed consultants are supported by more senior consultants.

4.1.4 Train in a service environment with consultant support

A consultant delivered service does not mean that trainees will no longer have a service role. Trainees should not be ‘supernumerary’ except where clinical complexity makes that

‘You will not be the consultant you see today.’

Educational supervisor, NHS Trust

appropriate. Delivering direct patient care is an important part of training in both elective and emergency situations. With increased consultant presence out of hours, trainees will gain from the essential experience of working under supervision. This will allow them to learn prioritisation of tasks and clinical cases, practise team-working and gain invaluable experience operating under pressure and dealing with uncertainty.

There must be graded consultant supervision to allow the trainee the opportunity to take responsibility and enhance their competence and confidence. The consultant should provide supervision appropriate for the trainee's competence and level of training; this may vary from performing a procedure while observed by a junior trainee to being available to support a senior trainee remotely while they develop the skills required to practise independently.

This will produce the correct balance for specialist training and the opportunity for learning and adequate supervision, which is currently often not available out of hours.

4.1.5 Alignment of the number of consultants required for a consultant delivered model with the number of doctors in training

The number of new CCT awards needs to be more closely aligned with the number of consultant posts required, which should be defined by service and patient needs, and which must be specialty focused. This will fluctuate to account for changes in clinical practice, rates of anticipated retirement and attrition and the availability of LTFT consultants. It must also account for the changing needs of the workforce, particularly the increasing number of women in medicine and that men are taking more of a role in shared family care.

One critically urgent need is for a significant increase in the number of emergency medicine consultants, which is currently inadequate as discussed in section 3.2. A greater consultant presence at the front line of hospital care will allow patients to be seen and managed more quickly and prevent unnecessary admissions.²²⁻²⁴ This is a vital role as it reduces service pressures on other specialties, trainees and bed occupancy.

The Centre for Workforce Intelligence must urgently and accurately predict the estimated output from medical training by specialty over the next 10 years. This needs to be aligned with the projected number of consultants required for patient

care. This should take into consideration the changing nature of the workforce, with approximately 60% of the output of medical schools being female. Service and training must not be placed further at risk by training insufficient numbers of consultants for potential service need or creating an over supply of doctors, leading to medical unemployment.

4.2 Service delivery must explicitly support training

Ensuring high quality patient care tomorrow means providing excellent training for healthcare professionals today. However, training within the NHS cannot be divorced from service provision and therefore training has to be a fundamental part of the design and delivery of patient care. It is recognised that an institution which trains well also delivers high quality patient care.

All organisations involved in training should critically examine how they function and be prepared to change the way they do this to ensure that they are able to deliver excellent training and service. Reconfiguration is often controversial and sensitive. Yet it provides the opportunity to tackle huge underlying problems of efficiency and quality, as well as providing the solution to particularly difficult training issues. There are numerous examples where reconfiguration has been handled well and secured significant benefits.

There is not a single answer – the optimal model of service and training delivery will depend on local circumstances and patient needs.

4.2.1 Services must be designed and configured to deliver high quality patient care and training

In order to deliver safe and effective healthcare in a consultant delivered model, many places will require redesign or a reconfiguration of current services. The extent to which this is required will depend on the ability of the individual department, trust or region to deliver the healthcare required. This Review is set in the context of reducing resources and trainee availability, and reconfiguration provides opportunities to maximise efficiencies in service delivery.

In some particularly large conurbations there are several locations providing similar clinical services with inappropriately staffed rotas. Enabling these services to deliver excellent training in a consultant delivered model will involve the reconfiguration of services which can support larger rotas and ensure that consultants and trainees are in the right place at the right time.

HaN should be employed as an effective way of covering service and supporting training. When implemented successfully HaN can decrease out of hours work for trainees and provide valuable lessons in MDT working and clinical judgement. To be successful it must be set up adhering strictly to the HaN principles (section 3.5). If this is done it ensures that junior doctors are not covering specialties in which they do not have the necessary competence or experience.

When a service reconfiguration is required there needs to be a thorough education and training impact assessment of the proposed change.

There is often significant local political and public challenge to reconfiguring services and the drivers for better patient care and safety must be paramount in the design. There are many examples of where this has led to safer patient care and an improvement in length of stay³⁸ and re-admission rates.

Greater Manchester, East Cheshire and High Peaks Children, Young People and Families' Network: Safe and sustainable services

The Children, Young People and Families' NHS Network is leading a four-year whole-systems programme of change in paediatrics, maternity and neonatology (reducing the number of overnight sites for paediatrics and maternity from twelve to eight, and increasing the number of Neonatal Intensive Care units from two to three).

4.2.2 Regional or national reconfiguration solutions may be required for smaller specialties

Not only are service providers required to look at reconfiguration and service design but this must be considered in and between specialties.

Smaller specialties, for instance paediatric cardiac surgery, are consulting about configuration on a national scale to ensure that high quality service and training, and the necessary critical mass of staff, are in place to provide a sustainable service.

Disciplines with small numbers of consultants may have to merge with adjacent units to provide the correct critical mass

at senior and trainee levels to sustain rotas for service delivery and training. The ‘hub and spoke’ model of delivery is suitable in these situations.³⁹

‘We redesigned the pathway for emergency patients and achieved compliance with the European Working Time Directive 2009 without having to seek any additional resources. Financially, this was a very successful change for the trust.’³⁸

Director of Finance, Homerton University Hospital NHS Foundation Trust

4.2.3 Reconfiguration and redesign of elective and emergency services can benefit training and patient care

Separating emergency (hot) from elective (cold) services can produce benefits for training, patient safety and care at a more local level as opposed to regional or national level (see section 3.5).

Elective care is more predictable in terms of time and capacity and allows trainees to concentrate solely on the training required without having to attend to more pressing emergency service needs. Emergency exposure and experience is essential as a learning opportunity but is less predictable and usually requires 24/7 cover. Training is maximised when there is strong consultant leadership and presence.

Where elective procedures are performed in Independent Sector Treatment Centres a clear training role should be defined for these situations. This will require careful planning by the educational commissioners. This includes accreditation of the trainers who work in these centres. Training opportunities, particularly to develop competencies in less complex, elective surgical procedures, exist in these units and are a wasted training potential.

Skills for Health pilots: Taking care 24/7

Pilots, supported by the Skills for Health workforce projects team, looked at different models of taking care 24/7 on five sites, providing safer care around the clock and restructuring ways of working to protect junior doctors under the EWTD. These pilots demonstrate what can and must be done to maintain and develop training.

4.2.4 MDT working must be used to support training

Working efficiently in reduced hours will require a co-ordinated multidisciplinary approach of the relevant professions to ensure suitable alignment of roles and utilisation of their available skills, coupled with interdisciplinary learning, and removing repetition and duplication of tasks.

There must be a national strategy with clarity on the service responsibilities and cost efficiencies for the development of roles such as physician assistants, specialist nurses, advanced

nurse practitioners and surgical care assistants, as these professionals can reduce unnecessary demands on junior trainees and yet may be involved in their training. These roles should not dilute training opportunities for junior doctors. The nursing profession supports nurses being more involved in these developments.

MDT working should be a routine element of every trainee's experience and included as part of the training curricula. Trainees should learn from clear examples of how other professionals deal with patients and disease processes. All specialties should ensure that MDT meetings are held regularly, with mandatory trainee attendance, using a structured approach such as that developed for the management of cancer.

4.2.5 Service requirements and training quality may mean that it is no longer feasible to train in all hospitals

As consultant numbers increase and the numbers of trainees decline, the reliance on the availability of doctors in training to deliver service will reduce. Therefore, only departments and/or hospitals that can deliver high quality training and provide the resources and support for this should be designated training locations.

The transition away from teaching status (and funding) for units not accredited would require careful management to protect patient safety. Deaneries, SHAs, PCTs and trusts need to work together to define the accreditation of NHS training institutions.

In small specialties and subspecialties, it may be necessary to focus training in one or two units in each SHA and combine training programmes across SHAs. In very small specialties/subspecialties a few centres may train for the whole country.

The commissioners of medical education need to work closely with commissioners of service to effect this recommendation.

4.2.6 Rotas require organisation and effective management

Effective rota management is essential and better planning is required to develop rotas which support training within the constraints of the EWTD. Specialties and institutions cannot afford to spread trainees too thinly across their traditional

service and rota systems as this perpetuates the rota gap problem.

There is no definitive number of doctors required to ensure that a rota is EWTD compliant and supports training, nor is there one rota design that will work across all specialties and trusts. Rotas must be adapted to locality and specialty, particularly the out of hours requirements. Therefore, specialty-specific recommendations have not been covered in this Review. Guidance published by Colleges, Specialty Associations, Postgraduate Deaneries and the Skills for Health workforce projects team demonstrates examples of good practice and how rotas can protect training, provide appropriate elective and out of hours experience and benefit work–life balance.

General recommendations on rotas:

- formalise a collaborative approach to rota design by actively involving trainees. This should involve medical staffing, trainees and educational supervisors; and Regional Action Teams as necessary
- an educational supervisor or person with responsibility and understanding of trainee education and training requirements should assess and sign off the overall educational value offered in a rota
- use appropriate, available software tools to assist with the design of busy, complex rotas
- enable trainees to have some flexibility when planning annual and study leave which should be supported by trusts and taken into account when designing rotas.

4.2.7 Reappraise current employment contracts for doctors

The current employment contracts for trainees and consultants need to be adapted to better support training.

- The New Deal should reflect a contract that supports training in a professional manner. The aim must be to develop a junior doctor contract which will allow clear provision for training requirements, working hours, rest period stipulations and pay banding structures which can be modified to support a 48-hour week and align with the EWTD requirements. This needs to recognise the increasing demand for improved work–life balance for all trainees and must include the particular needs of LTFT trainees

- The consultant contract needs to be used to allow flexible consultant working and ensure the appropriate support for consultants who train. While the terms and conditions of the 2003 consultant contract (England) allow for extended consultant working hours and consultant resident on-call, it needs to be implemented by trusts in a way that strongly supports training. This will require management and clinical collaboration:
 - Clear guidance must be issued by the Department of Health on the use of the consultant contract to encourage and support training
 - Consultants must be prepared to work more flexibly
 - Clinical Directors should annually review consultant objectives specifically to state what an individual consultant or team must deliver and how this will be measured.

4.3 Make every moment count

Trainees can no longer be expected to learn simply through being around the hospital working. Training has to be planned, focused and, as far as possible, directed to the needs of the individual trainee. There is recognition that there is no 'one size fits all' model of training delivery, but there are a number of key principles that would support the achievement of training excellence in reduced hours.

What matters most in training doctors is not just the hours of work but what they do in those hours.

4.3.1 Training must be planned, focused and individualised

There needs to be an increased awareness by trainers and trainees of the learning opportunities in each and every clinical setting and training must be targeted and well planned in the 48-hour week.

The move from predominantly experiential to competency-based learning has advanced significantly in the last decade but needs to be further refined and developed. With fewer hours in the working week, trainees and trainers need to have a more individualised approach to education, with trainees spending time focused on developing the competences relevant to their particular clinical specialty. Colleges and

specialty associations should further define the requirements for each specialty, with educational supervisors adapting these for individual trainees.

Trainees should be able to move more quickly or slowly through their training programme based on their acquisition of competencies. The average length of the current hospital postgraduate specialty training programmes is adequate and any shortening or extension of specified programme times should be on an individual basis. Simply extending the length of the training programme for all reinforces traditional models of trainees delivering the service, which will not meet their training needs in a 48-hour week.⁴⁰

4.3.2 Handovers must be effective, safe and supervised

Patient handovers, of which there are more as a result of increased shift working, represent a real opportunity for learning. Wherever practical, handovers should be supervised by a consultant and used for learning and training. There should be handover guidelines for trusts and handovers should be part of the assessed curriculum. Good handover allows continuity of care and enhances patient safety.

Educational handovers are increasingly important. Systems must be put in place within rotations to ensure that when a trainee moves from one clinical supervisor to another, the relevant information regarding their experience, strengths and weaknesses, knowledge gaps and development areas is passed on to the next trainer. This prevents time being wasted with task repetition and will allow training to be individually tailored to meet trainees' needs.

4.3.3 Improved mentorship and support of trainees

Trainees today spend less time in the workplace with their individual trainers. Therefore, educational supervision needs to be strengthened with the selection of educational supervisors who are able to provide regular contact, support and guidance for trainees. Colleges and Deaneries should work together to develop the skills and values of educational supervisors, which should include competence in facilitating reflection on clinical and non-clinical experience, providing information and support for the trainee to gain additional understanding identified through discussion.

Clarity about the qualities and selection of consultants who want to take on this role will in turn encourage a better learning environment.

4.3.4 Accelerate learning by using simulation and technology in a safe, controlled environment

The effective use of simulation can help to lessen the impact of reduced hours and shift working by accelerating the acquisition of skills and transferring learning away from the patient.

Increased investment in simulation is required to fully realise the benefits this offers to training. There are numerous examples of successful use of simulation equipment ranging from simple procedural skills such as suturing to high fidelity team-based training (see section 3.5).

These technologies allow trainees to develop a level of competency in operational skills and in dealing with more human factors, working as part of a team and managing complex cases. A key part of the strategy must include the development of trainers in the use of simulation.

The Department of Health, Deaneries and Colleges should work together to produce a national strategy for the development of simulation and its inclusion in postgraduate training.

Web-based learning should be further investigated by Colleges and schools as part of the curriculum; for example, the e-Learning for Healthcare project provides online training resources. E-learning is a relatively economical, easy and flexible way of training whereby a trainee can gain more control over what, when and the pace at which they learn.

4.3.5 Implement better ways of training

Implementing better ways of training will involve combining current best practice and innovation. Many consultant trainers' perceptions are aligned to traditional models of training that they experienced, which involved long hours, personal sacrifices and less formalised support and supervision. To meet the challenges of the developing environment an alteration is now required in the way training is delivered.

Better ways of training will allow:

- consultants to develop the skills and values to help trainees learn complex decision-making through case discussion
- a shift in the focus from numbers of cases seen or logbook data to individual competences, strengths and weaknesses acquired
- an open-minded approach to learning from other professionals as part of an MDT
- a structured coaching approach to develop competence and then mastery in trainees
- team-working – continuity of patient care will be provided by a team, not an individual, and there will be increased responsibility on the individual, trainee and their trainers to follow up a patient and learn about the patient journey and the impact of the trainee's input. Regular, timetabled, one to one trainee and trainer interaction coupled with MDT meetings are very important in this context
- trainees to be more involved in decision-making and innovation in training. Such active representation will encourage organisations to recognise and address trainee issues more quickly. It will also develop trainees' experience in clinical leadership and foster a collaborative relationship between medical trainees and managers to manage change effectively.

4.4 Recognise, develop and reward trainers

'Educational and clinical supervisors must have the time, training and the tools to carry out their roles effectively and efficiently.'

Postgraduate Dean, COPMeD

Consultant educators need to be identified, trained, accredited and supported in their job plans,⁴¹ through mechanisms similar to those that currently exist for GP educators.

Reward is not about additional income but the allocation of protected PAs and the use of existing mechanisms such as Clinical Excellence Awards to reward high quality teaching.

With a decreasing number of trainees and the increased consultant presence, not all consultants will be required to have a specified training role, although all will need the skills to provide appropriate clinical supervision.

4.4.1 Flexibility for consultants to be training or non-training

The principles of the model used in general practice, in which not all principals are trainers and the trainer and trainee roles are clearly defined, should be adapted for hospital practice.

Every trust involved in training will need effective organisation and a strong network of educators. All consultants must have the ability to provide safe clinical supervision and, where relevant, skills to undertake workplace-based assessments. All consultants who work in a unit recognised for training must expect to behave as a role model to trainees, even if they are not a nominated trainer. They must promote and support safe practice and patient-centred medicine.

Trainees must have identified, dedicated educational supervisors who have responsibility for overseeing their education, provide support, and co-ordinate their work experience and training. All training units need educational leadership, which includes ensuring that consultants responsible for educational supervision and teaching in the workplace are competent to undertake these roles. As the ratio of consultants to trainees rises, this will allow consultants with fewer training responsibilities to be more service focused.

Consultants may have a specific educational role for part of their career but take on a greater service role at other times.

Postgraduate Deans need to ensure clarity on the various roles of consultants with regard to training. All organisations responsible for training must work together over the definitions and requirements for trainers.

4.4.2 Training must be recognised in consultant job plans

Every consultant's job plan must be reviewed annually to ensure that it remains appropriate for the changing service requirements and for training responsibilities.

Consultants who are nominated as trainers must have dedicated SPA time and appropriate resources to undertake their educational role. Their job plans should be designed with the priority given to training and service needs. The time for training should be accounted for and these consultants should have a reduced clinical load where appropriate. The Academy

of Medical Royal Colleges recommends that trainers should have at least 0.25 PAs per trainee per week for whom they are an educational or clinical supervisor.⁴¹

Trainees should be clearly aligned to a smaller number of consultants with dedicated training time and resources. Although they may work with a range of consultants on-call and may look to them for clinical supervision during their duty period, their main support and clinical activity should be focused with a smaller consultant team. This is equally important for junior and senior trainees to ensure the balance between service and training. This model will support the development of trainee and trainer relationships.

4.4.3 Trainers must be developed, supported and accredited

Training in a shorter week will mean that consultant trainers will need to learn new approaches to medical education.⁴² They will need to use their limited time with individual trainees effectively, drawing on the trainees' own knowledge and skills so that the time can be focused on assisting them to understand the complexity of decision-making. This will be a departure from the way that many consultants have been trained and investment will need to be made to develop new concepts and skills. Consultants who have training responsibilities (educational and clinical supervisors) should be appropriately trained and accredited.

Structured 'training the trainer' programmes must be further developed and should place emphasis on the ability of trainers to objectively assess a trainee.

This process of accreditation has already been started by the GMC.⁴³ Developing consultant trainers who are comfortable working in this new way will require investment and time. This is supported by the recent work done by the Academy of Medical Educators on the accreditation of educational supervisors in secondary care.

Trainers should also be actively involved in any service changes which may affect training.

4.4.4 Trainer excellence must be recognised and rewarded

Where trainer excellence is achieved it needs to be appropriately recognised and rewarded. This will encourage

'Trainer accreditation should be provided only for those who want to specifically invest time in training – it should be a pro-active desire rather than, as it is now, a default experience for any Consultant.'

Postgraduate Dean, COPMeD

individuals with aspirations as educators and promote a culture of learning which in turn will furnish the trainees with an array of role models. The Clinical Excellence Awards scheme can provide this opportunity. This recognition applies to all consultants, whether or not they have a formal educational role or provide excellence in clinical supervision when working with trainees. Awards as such the Association of Surgeons in Training (ASiT) Silver Scalpel Award for excellence in surgical training and the Hospital Doctor Awards are further examples of ways to specifically encourage, recognise and reward training.

4.5 Training excellence requires regular planning and monitoring

4.5.1 Strengthen commissioner levers to incentivise training

Commissioners of education and training must be able to effectively procure high quality, innovative training. This will require transparency of funding for training posts and accountability for how that funding is spent.

Service Level Agreements between Deaneries on behalf of SHAs and local education providers should contain objectives against which that local education provider can be held to account. Deaneries and SHAs need to be assured of the value for money delivered from their investment in training and education, and utilise the principles of World Class Commissioning.⁴⁴ Commissioners should have the ability to reward where appropriate and withhold funding where objectives are not adequately met, with the consequent sanction, where necessary, of removing trainees. This measure should cause much less of a direct service impact in a consultant delivered service.

4.5.2 Prioritise training at trust level

Trust Chief Executives are responsible for the management of training in their trusts. The training system must allow for transparency in the distribution of funding and clear accountability. Specific criteria related to the quality of training in the trust must be included in the performance management process.

Indicators that could be used to monitor training quality

The National Survey of trainers and trainees to include specific questions on perceptions of training in reduced hours*
 (*PMETB/GMC/COPMeD surveys)

Training quality indicators based on the Commissioning for Quality and Innovation (CQUIN) payment framework

Clinical incident report analysis

Analysis of performance in assessments such as ARCPs and exams over time

Logbook data, including assessment of the balance between elective and emergency procedures

Training quality ratings by trainees at ARCP and after completion of training

Educational governance must be highlighted by inclusion at board level of trusts, with a person specifically responsible for medical education and training. This should be someone in addition to the Medical Director, for example a non-executive director. This will raise the priority of training and ensure that issues are elevated to senior levels.

4.5.3 The quality of training must be monitored

The absence of definitive evidence on the impact of the outputs and outcomes of training highlights the need for a rational, realistic system for monitoring the effects of reduced working hours, and other system changes. This must result in actions being taken where deficiencies are found.

Less objective measures such as surveys can be used in conjunction with cohort studies to gain an overall picture of training quality. Commissioners using the GMC’s Postgraduate Board quality framework should monitor the quality of training in all their training provider trusts.

Training programmes should have available transparent quality ratings for trainees. COPMeD, working with the GMC and the Academy of Medical Royal Colleges, should review how this could be implemented.

There should be more effective use of the Planned Collaborative Review by the Care Quality Commission.

4.5.4 The recommendations from this Review can be adapted and used in the other healthcare professions, as they move to longer working days

The EWTD is primarily an issue about the training of doctors working in the secondary care sector at the moment. However, as clinical service delivery changes, other healthcare professions may adopt more shift working. The recommendations of this Review should be used as guidance to ensure that when changes are implemented, ample consideration is given to the impact on the quality of the training of dentists, healthcare scientists and pharmacists.

Appendix A

Terms of reference for the Review

Background and scope of the Review

- The Review of the impact of the European Working Time Directive (EWTD) on the quality of training for Doctors, Dentists, Pharmacists and Healthcare Scientists was commissioned by the previous Secretary of State for Health and is one of Medical Education England's (MEE's) key strategic priorities. The overall objective of the project is to identify the impact on the quality of training and make appropriate recommendations to the Secretary of State
- Stakeholders have expressed strong but often opposing opinions with regards to the impact of the EWTD, and it is therefore essential that we take this opportunity to take a thorough look at the issues. The MEE Board has agreed to develop specific advice to the Secretary of State as to any action that may need to be taken to safeguard the future of professional training in the light of a reduced working week, thereby ensuring the continued supply of an appropriately skilled and experienced workforce for the future
- The Review is to have a specific focus on the impact of reduced hours and consequent training patterns on the quality of the training experience and, where possible, the short term outcome. It should produce a report with clear evidence that enables MEE to provide specific advice to the Secretary of State and Department of Health about the steps that need to be taken to ensure that high quality training continues to be delivered into the future
- This is not primarily a review into safety of the service or patients, but it is a review of the quality of training as affected by the EWTD. The focus must remain on producing a consultant and trainee workforce fit for delivering a quality service to patients

- Evidence needs to be taken from a wide range of stakeholders from differing specialty and geographical settings
- The Review needs to consider a wide range of issues affecting access to appropriate high quality training, including, for example:
 - different rota and shift patterns
 - training in acute or unplanned services
 - training in elective and planned services or procedures
 - the role of experience
 - the differences between specialties
 - the ability of trainers and supervisors to carry out their roles
 - the emerging role of technology-assisted learning
 - the impact on work–life balance for trainees
 - impact on research and academic training
 - impact on context of training (e.g. hospital or community settings)
 - impact on those who are training less than full time hours
 - solutions put in place.

Appendix B

Terms of reference for the Expert Group

Purpose of the Expert Group

The Expert Group has been established as part of the Review of the 'impact of the European Working Time Directive on the quality of training'. It will provide support for the Independent Chair in conducting the Review, and in developing the final conclusions for the main Board of Medical Education England.

Aims and objectives

- Determine the sources of information and evidence to be considered for each of the four professions (Medicine, Healthcare Science, Dentistry, Pharmacy)
- Consider the reports and studies already undertaken in this area by other relevant organisations
- Support the Independent Chair in taking written and oral evidence from key stakeholders
- Discuss and support the analysis of the evidence and advise on the conclusions and recommendations to be made to the main Board of Medical Education England
- Monitor the progress of the Review against the agreed objectives
- Input in to the final Review report.

Appendix C

Expert Group and Working Team members

Expert Group membership

Professor Sir John Temple	Independent Chair
Trevor Beswick	Director, South West Medicines Information and Training
Dr Hugh Bradby	Consultant Physician and former Medical Director of Sandwell and West Birmingham Hospitals NHS Trust
Dr Shree Datta	Chair – Junior Doctors Committee, British Medical Association
Professor Sir Neil Douglas	Chairman, Academy of Medical Royal Colleges
Andrew Foster	Chief Executive, Wrightington, Wigan and Leigh NHS Foundation Trust
Maxine Foster	Director, Modernising Scientific Careers
Professor Jacky Hayden	Chair – English Postgraduate Deans
Christine Outram	Managing Director – Medical Education England
Professor Wendy Reid	Clinical Advisor for EWTD, Department of Health
Dr Damian Roland	Co-Chair, Academy Trainee Doctors Group

Working Team

Professor Sir John Temple	Independent Chair
Tim d'Estrubé	Consultant Analyst, PA Consulting Group
Julianne Hickey	Managing Consultant, PA Consulting Group
Dr Kirsten Miller	Consultant, PA Consulting Group
Heather Penny	Business Manager, Medical Education England
Anna Perkins	Managing Consultant, PA Consulting Group

European Working Time Directive terminology

D.1 The European Working Time Directive

D.1.1 The European Working Time Directive (EWTd) is health and safety legislation

The EWTd is a directive from the Council of Europe (93/104/EC) to protect the health and safety of workers in the EU. It lays down minimum requirements in relation to working hours, rest periods, annual leave and working arrangements for night workers. The EWTd became part of British law and applicable to the majority of workers on 1 October 1998. However, the Government negotiated an extension of up to 12 years to prepare for full implementation for doctors in training.

There has been a staged decrease of junior doctors' hours to fully meet the requirements of the EWTd regulations. In August 2004 the hours junior doctors were allowed to work were stipulated as 58 hours a week. On 1 August 2007 this was reduced to 56 hours per week and since 1 August 2009 this has been brought down to 48 hours per week.

In 2008/09 the Department of Health included £110 million in the allocation budget, which resulted in all PCTs receiving revenue growth of 5.5%, which was recurrent in the PCT baselines in 2009/10. An additional £200 million was made available to support EWTd implementation in 2009/10. £150 million was included and defined in the tariff uplift (0.2%) and SHAs were able to target £50 million towards supporting change, particularly in specialties with immediate acute responsibilities as well as supporting trained doctors solutions in paediatrics and obstetrics services. The spending of this allocation for the implementation of the EWTd has been determined locally by SHAs, PCTs and trusts.

D.1.2 The EWTD legal definition of working time

The EWTD specifies working time and rest breaks for all employees, including doctors, dentists, healthcare scientists and pharmacists in training:

‘Working time shall mean any period during which the worker is working, at the employer’s disposal and carrying out his or her activity or duties, in accordance with national laws and/or practice.’

This includes the following activities:

- job-related training
- working lunches
- paid and some unpaid overtime
- time spent ‘on-call’ at the workplace (see section D.1.5).

In addition to the overall hours limit, the EWTD requires the following rest and break entitlements:

- 11 hours’ continuous rest in every 24-hour period
- minimum 20-minute break when working time exceeds 6 hours
- minimum 24-hour rest in every 7 days **or** minimum 48-hour rest in every 14 days
- minimum 4 weeks’ annual leave
- average of no more than 8 hours’ work in 24 hours for night workers (junior doctors are not classed as night workers).

D.1.3 Shift working and the Directive

The definition of ‘shift work’ in Article 2 of the Directive includes the work patterns undertaken by doctors in training. Any doctor working to a rota that requires them to work different duty times at certain points on the rota can be considered to be a shift worker. This would apply regardless of the type of work undertaken or the duty arrangements, be they full shift, on-call or partial shifts. Equally, any doctor working a constant duty time throughout the rota (for example 9am to 5pm every day) would not be considered to be a shift worker.

Article 12 requires additional measures to be taken for shift workers, possibly including (but not limited to) risk assessments, occupational health checks and/or increased rest periods. In addition to Article 12, employers need to provide additional rest periods for workers who undertake work patterns that attract a greater risk to their health and

safety. This may be the case when a worker switches between different shift patterns regularly.

D.1.4 How the EWTD is monitored

It is monitored over a 26-week reference period for junior doctors (17 weeks for other workers). Employers need to take reasonable steps to ensure that their medical staff are compliant over this period of time.

It is generally accepted that continuous monitoring over 26 weeks is not an achievable method of assessing compliance, except for individual cases. For doctors in training, employers take the two-week diary card monitoring, put in place for monitoring New Deal compliance as a proxy for measuring EWTD compliance. Pay bandings 1A, 1B and 1C are pay bandings that should be compliant with the EWTD (working 48 hours or less). Monitoring has the benefit of showing not only the actual hours worked but the rest breaks and/or compensatory rest provided.

D.1.5 SiMAP/Jaeger court rulings and the impact on working patterns

The SiMAP and Jaeger cases were brought before the European Court of Justice (ECJ) by a Spanish medical union and a German doctor. In both cases, the ECJ ruled that on-call time, when a doctor is obliged to be resident in a hospital or health centre, counts as working time. (For example, a doctor resident on-call but asleep is counted as working.) In Jaeger, the ECJ also ruled that compensatory rest for missed rest must be taken immediately after the end of the working period, rather than aggregated and taken at a later time. Although the judgments applied to particular cases, the cases have set a precedent and the assumption has been that the same interpretations would apply to any UK doctors working similar patterns.

The main impact of the judgments has been to propel the NHS towards implementing a shift system because doctors could no longer work on-call shifts where only time spent actually working counted towards their contractual hours. The Jaeger judgment on compensatory rest impacts on all doctors, including consultants working non-resident on-call, because any work they do while on-call may attract immediate compensatory rest and this can disrupt their scheduled activities the next day.

D.1.6 Derogations provide contingency to enable longer working hours in the short term

There is a contingency which enables a 52-hour week in parts of the NHS that demonstrated that they could not achieve the 48-hour week by 1 August 2009. This is to support trusts where particular challenges arise in 24-hour immediate patient care, some supra specialist services and some small, remote and rural units. The Government wrote to the European Commission to seek a limited derogation from the EWTD for an extra four hours per week, to 52 hours, which could be applied to doctors in training working in hospital services delivering 24-hour immediate care, post 1 August 2009.

There were two rounds of derogation. All requests for derogation received from SHAs were subject to review by the National Scrutiny Panel. A total of 273 rotas in England (Scotland, Wales and Northern Ireland had implemented their own scrutiny process for assessing derogation requests) were granted derogation (200 in the first round and 73 in the second). These derogations expire in 2011. Further extension by 12 months is possible but requires further legislation.

Where derogation was granted, respective SHAs and trusts provided plans to demonstrate how compliance is to be achieved.

SHAs have provided updates on all derogated rotas. In January 2010, SHAs reported that 194 (69%) of the derogated rotas were reported by trusts as being compliant with 48 hours and derogation was not being used. According to the Department of Health, those currently operating at 52 hours have sustainable action plans in place and have indicated when compliance is expected to be achieved.

D.1.7 Individual opt-out

The Directive enables an individual to voluntarily opt out. While doctors can choose to work more than 48 hours per week, employers cannot require them to do so and cannot design services and rotas on the basis that all doctors working on a rota will opt out. It is not possible to negotiate a collective opt-out for a whole specialty or sector.

If an individual chooses to opt out and changes their mind, they need to give between one week's and three months' notice (depending on the period agreed when signing the opt-out).

These features of the opt-out can make it difficult to plan services with confidence. If a doctor in training chooses to opt out they cannot exceed an average of 56 hours of active work, or 72 hours including on-call time per week, as specified in their New Deal contracts. The employer must also agree for a doctor to opt out in their trust.

D.1.8 The New Deal is an employment contract for junior doctors

Doctors in training are required to work within the working time and rest break restrictions of both the EWTD (health and safety regulation) and the New Deal (the employment contract).

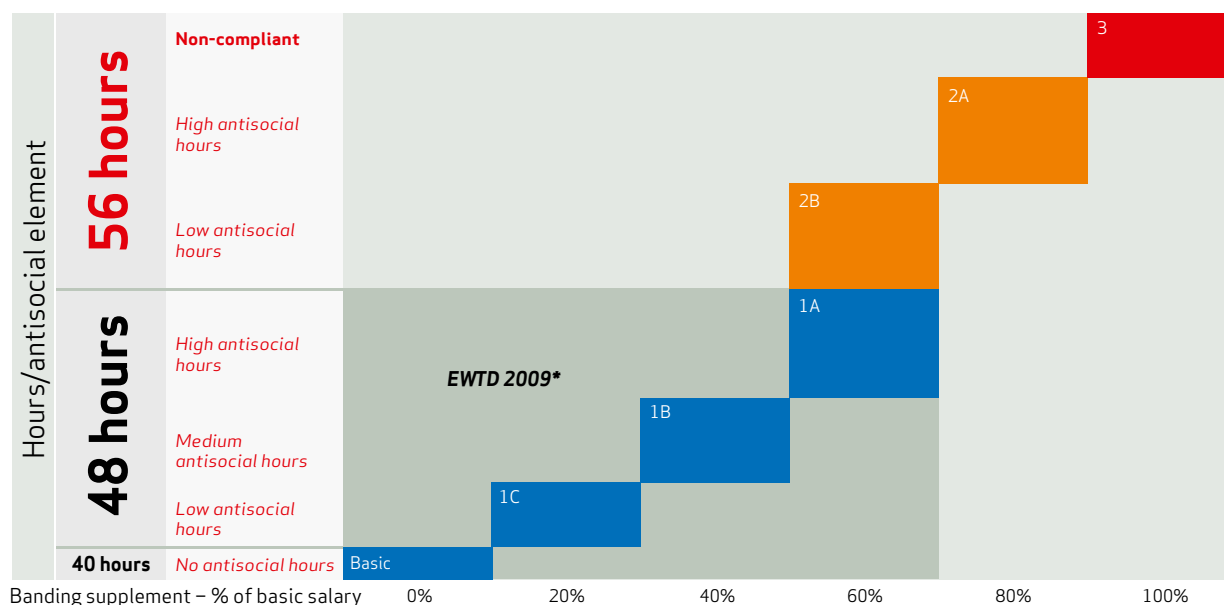
Since 1991, doctors in training have been covered by the New Deal, a package of measures to improve the conditions under which they work. One of the key features of the New Deal is the limits it places on the working hours of trainees and the stipulated rest breaks. From August 2003 all trainees were limited by contract to 56 hours of active work, though the contract stipulates various restrictions dependent on the rota patterns worked.

- **On-call:** Periods of duty not to exceed 32 hours (56 at weekends). Average duty hours for the week not to exceed 72 hours. Rest requirement: approximately 8 hours of rest in total (12 per weekend day), of which 5 should be continuous between 10pm and 8am.
- **24-hour partial shift:** Similar to an on-call rota except the period of duty does not exceed 24 hours and the average duty hours for the week should not exceed 64 hours. Rest requirement: 6 hours of rest in total, of which 4 should be continuous between 10pm and 8am.
- **Full shift:** Maximum length of duty for a full shift is 14 hours and the maximum average should not exceed 56 hours. Natural breaks of 30 minutes' uninterrupted rest should be taken every 4 hours.
- **Partial shift:** Maximum length of duty for a partial shift is 16 hours and the average duty hours for the week should not exceed 64 hours. Rest should total one quarter of the out of hours duty period.

There is a contractual requirement on trusts to monitor the working arrangements of their doctors in training to ensure that they comply with the requirements of the New Deal. The outcome of the monitoring is used to ensure that the correct banding supplement is in place for the work that is being undertaken. A trainee's banding is based on the average working hours within a collective rota. This is measured every six months by timecard monitoring covering a two-week period. Each trainee's timecard reflects the number of hours they have worked during that period and the total of the hours worked by all doctors on the rota is assessed to determine the overall compliance of the rota.

D.1.9 Pay bandings apply when working under the New Deal

The pay banding structure instituted under the New Deal contract



* If a rota is in these blue bandings it indicates that it is likely to be EWT D 2009 compliant on hours. For more information on the EWT D please see www.healthcareworkforce.nhs.uk

Source: Skills for Health, www.healthcareworkforce.nhs.uk

Appendix E

Organisations that participated in the Review

Organisations represented at oral evidence hearings

Academy of Medical Royal Colleges Trainee Doctors Group (ATDG)

Association of Surgeons in Training (ASiT)

British Medical Association (BMA)

British Orthopaedic Trainees Association (BOTA)

College of Emergency Medicine (CEM)

Conference of Postgraduate Medical Deans (COPMeD)

Department of Health – Chief Nursing Officer

Department of Health – Workforce and Medical Education teams

Federation of Surgical Specialty Associations (FSSA)

General Medical Council (GMC)

Joint Committee on Surgical Training (JCST)

Less than full time (LTFT) trainee representatives

Luton and Dunstable Hospital NHS Foundation Trust

Medical Schools Council (MSC)

National Association of Clinical Tutors UK (NACT UK)

NHS East of England

NHS Employers

NHS London

NHS North East

NHS North West

NHS South East Coast

NHS South West

NHS West Midlands

NHS Yorkshire and the Humber
Postgraduate Medical Education and Training Board (PMETB)
Remedy UK
Royal College of Anaesthetists (RCOA)
Royal College of General Practitioners (RCGP)
Royal College of Obstetricians and Gynaecologists (RCOG)
Royal College of Ophthalmologists (RCOPTH)
Royal College of Paediatrics and Child Health (RCPCH)
Royal College of Physicians and Surgeons of Glasgow (RCP&SG)
Royal College of Physicians of Edinburgh (RCPE)
Royal College of Physicians of London (RCPLond)
Royal College of Psychiatrists (RCPSYCH)
Royal College of Radiologists (RCR)
Royal College of Surgeons of Edinburgh (RCSEd)
Royal College of Surgeons of England (RCSEng)
Royal Pharmaceutical Society of Great Britain (RPSGB)
Skills for Health
Women in Surgery

Organisations represented at the focus groups

Academy of Medical Royal Colleges Trainee Doctors Group (ATDG)
British Medical Association Junior Doctors Committee (BMA JDC)
British Orthopaedic Trainees Association (BOTA)
British Pharmaceutical Students' Association (BPSA)
College of Emergency Medicine (CEM)
Conference of Postgraduate Medical Deans (COPMeD)
Federation for Healthcare Science (FHCS)
Federation of Surgical Specialty Associations (FSSA)
Less than full time (LTFT) trainee representatives
General Medical Council (GMC)
Joint Committee on Surgical Training (JCST)

Medical Schools Council (MSC)
National Association of Clinical Tutors UK (NACT UK)
NHS Employers
NHS London
NHS North East
NHS North West
NHS South East Coast
Northumbria Healthcare NHS Foundation Trust
Postgraduate Medical Education and Training Board (PMETB)
Remedy UK
Royal College of Anaesthetists (RCOA)
Royal College of General Practitioners (RCGP)
Royal College of Obstetricians and Gynaecologists (RCOG)
Royal College of Paediatrics and Child Health (RCPCH)
Royal College of Psychiatrists (RCPSYCH)
Royal College of Radiologists (RCR)
Royal College of Surgeons of Edinburgh (RCSEd)
Royal College of Surgeons of England (RCSEng)

Organisations that submitted written evidence

Academy of Medical Royal Colleges Trainee Doctors Group (ATDG)
Association for Clinical Biochemistry (ACB)
Association for the Study of Medical Education (ASME)
Association of UK University Hospitals (AUKUH)
Brighton and Sussex University Hospitals NHS Trust
British Association of Medical Managers (BAMM)
British Association of Oral and Maxillofacial Surgeons (BAOMS)
British Association of Otorhinolaryngologists (ENT UK)
British Association of Plastic Reconstructive and Aesthetic Surgeons (BAPRAS)
British Association of Urological Surgeons (BAUS) Specialist Advisory Committee in Urology

British Medical Association Junior Doctors Committee (BMA JDC)

British Neurosurgical Trainees Association (BNTA)

British Orthopaedic Association (BOA)

British Orthopaedic Trainees Association (BOTA)

British Paediatric Neurology Association (BPNA)

British Pharmaceutical Students' Association (BPSA)

College of Emergency Medicine (CEM)

Committee of General Practice Education Directors (COGPED)

Committee of Postgraduate Dental Deans and Directors (COPDEND)

Conference of Postgraduate Medical Deans of the United Kingdom (COPMeD) and English Deans

Dartford and Gravesham NHS Trust

Dental Schools Council (DSC)

Department of Health Medical Education Programme

Department of Health Research and Development Directorate

East of England Deanery

East Sussex Hospitals NHS Trust

Faculty of Dental Surgery, Royal College of Surgeons

Faculty of Occupational Medicine (FOM)

Federation for Healthcare Science (FHCS)

General Medical Council (GMC)

General Surgery Specialist Advisory Committee

Group of Anaesthetists in Training (GAT) Committee of the Association of Anaesthetists of Great Britain and Ireland (AAGBI)

Heart of England NHS Foundation Trust

Hereford Hospitals NHS Trust

Horton Hospital, Oxford Radcliffe Hospitals NHS Trust

Institute of Physics and Engineering in Medicine (IPEM)

Joint Committee for Specialist Training in Dentistry (JCSTD)

Joint Committee on Surgical Training (JCST)

Kent, Surrey and Sussex Deanery (KSS)

King's College Hospital NHS Trust
Mayday Healthcare NHS Trust
Medical Schools Council (MSC)
Medway NHS Foundation Trust
Modernising Pharmacy Careers (MPC) Programme Board
National Association of Clinical Tutors UK (NACT UK)
Neurosurgery Specialist Advisory Committee and Specialty Association (JCST)
Newcastle upon Tyne Hospitals NHS Foundation Trust
NHS East Midlands (which includes the East Midlands Healthcare Workforce Deanery)
NHS East of England
NHS Education South West
NHS Employers
NHS London
NHS Lothian
NHS North East/Northern Deanery
NHS North West
NHS South Central
NHS South West
NHS West Midlands
North Western Deanery
Oral and Maxillofacial Surgery Specialist Advisory Committee (JCST)
Oral and Maxillofacial Surgery, London, and Kent, Surrey and Sussex
Paediatric Surgery Specialist Advisory Committee (JCST)
Plastic Surgery Specialist Advisory Committee (JCST)
Remedy UK
Royal College of Anaesthetists (RCOA)
Royal College of General Practitioners (RCGP)
Royal College of Midwives (RCM)
Royal College of Obstetricians and Gynaecologists (RCOG)

Royal College of Ophthalmologists (RCOPHTH)
Royal College of Paediatrics and Child Health (RCPCH)
Royal College of Physicians and Surgeons of Glasgow (RCP&SG)
Royal College of Physicians of Edinburgh (RCPE)
Royal College of Physicians of London (RCPLond)
Royal College of Psychiatrists (RCPSYCH)
Royal College of Radiologists (RCR)
Royal College of Surgeons of Edinburgh (RCSEd)
Royal College of Surgeons of England (RCSEng)
Skills for Health
Society for Cardiothoracic Surgery in Great Britain and Ireland (SCTS) and the Cardiothoracic Specialist Advisory Committee
Society for Vascular Technology of Great Britain and Ireland (SVT)
Society of British Neurological Surgeons (SBNS)
South London and Maudsley NHS Foundation Trust
Trainee Advisory Group – Royal College of Anaesthetists (RCOA)
Trainees Committee – Royal College of Paediatrics and Child Health (RCPCH)
Trainees Committee – Royal College of Physicians of London (RCPLond)
Trainees in paediatric neurodisability
Trauma and Orthopaedic Surgery Specialist Advisory Committee
University Hospital of North Staffordshire NHS Trust
University Hospitals Birmingham NHS Foundation Trust
Wessex School of Anaesthetics
Women in Surgery
Yorkshire and the Humber Deanery
11 individual submissions from Medical Directors, consultants and trainees

Appendix F

List of abbreviations

24/7	24 hours, 7 days a week
A&E	Accident and Emergency (Emergency Department)
ACU	Acute Care Unit
ARCP	Annual Review of Competence Progression
BMA	British Medical Association
CCT	Certificate of Completion of Training
COPMeD	Conference of Postgraduate Medical Deans of the United Kingdom
EU	European Union
EWTD	European Working Time Directive
FTE	Full time equivalent
GMC	General Medical Council
GP	General practice
HaN	Hospital at Night
HDU	High Dependency Unit
ITU	Intensive Therapy Unit (or Intensive Care Unit)
LTFT	Less than full time
MDT	Multidisciplinary team
MEE	Medical Education England
NHS	National Health Service
PA	Programmed Activity (consultant contract time unit)
PCT	Primary care trust
PMETB	Postgraduate Medical Education and Training Board
RCPE	Royal College of Physicians of Edinburgh
SHA	Strategic health authority
SPA	Supporting Professional Activity (consultant contract time unit)
SpR	Specialist registrar (medical)

Appendix G

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My responsibility as the Independent Chair was to identify a balanced view of the issues and reflect them in the report. In the face of little real evidence but much opinion and anecdote I have endeavoured to achieve this and suggest the way forward.

It has been a privilege to carry out this important challenge and oversee the resulting report.

