

BMJ Open UK doctors' views on the implementation of the European Working Time Directive as applied to medical practice: a qualitative analysis

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ABSTRACT

Objectives: To report on what doctors at very different levels of seniority wrote, in their own words, about their concerns about the European Working Time Directive (EWTD) and its implementation in the National Health Service (NHS).

Design: All medical school graduates from 1993, 2005 and 2009 were surveyed by post and email in 2010.

Setting: The UK.

Methods: Using qualitative methods, we analysed free-text responses made in 2010, towards the end of the first year of full EWTD implementation, of three cohorts of the UK medical graduates (graduates of 1993, 2005 and 2009), surveyed as part of the UK Medical Careers Research Group's schedule of multipurpose longitudinal surveys of doctors.

Results: Of 2459 respondents who gave free-text comments, 279 (11%) made unprompted reference to the EWTD; 270 of the 279 comments were broadly critical. Key themes to emerge included frequent dissociation between rotas and actual hours worked, adverse effects on training opportunities and quality, concerns about patient safety, lowering of morale and job satisfaction, and attempts reportedly made in some hospitals to persuade junior doctors to collude in the inaccurate reporting of compliance.

Conclusions: Further work is needed to determine whether problems perceived with the EWTD, when they occur, are attributable to the EWTD itself, and shortened working hours, or to the way that it has been implemented in some hospitals.

INTRODUCTION

The implementation of the European Working Time Directive (EWTD) across the National Health Service (NHS) represents one of the most significant changes in UK doctors' employment conditions for several decades, causing debate within the health service and commanding significant media

Strengths and limitations of this study

- This study reports views on the European Working Time Directive (EWTD) expressed by the UK medical graduates of 1993, 2005 and 2009, surveyed during 2010, the first year of full implementation of EWTD. The cohorts include doctors at various career stages.
- As with all surveys, non-responder bias is possible. Furthermore, respondents were not specifically asked to comment on EWTD. Those who chose to comment on EWTD may not be representative of the whole population. Hence interpretation should be limited to consideration of the views expressed and issues raised, rather than the frequency with which particular comments were made.
- The study represents the subjective views of doctors and does not include any objective impact of the EWTD on the National Health Service (NHS), junior or senior doctors.
- Respondents may have had difficulty in separating the effects of EWTD itself, and the way it has been implemented, from those of other reforms to the NHS and medical training.
- We have no information on various factors, such as hospital size or the nature of rotations and the organisation of shift work.

attention nationally. It is now widely accepted that many doctors are critical of the implementation of the EWTD. Particular points of controversy have included views about its impact on patient safety and continuity of care, on workforce morale and on doctors' postgraduate training. However, doctors' concerns have not previously been extensively and systematically studied, and little is known about them except by anecdote. Concerns about the EWTD led to a decision by the UK government, in October 2013, to establish a national Taskforce to report to the Secretary

of State for Health on practical solutions to concerns about the EWTD.

A brief history of policies to reduce doctors' hours of work is as follows. From 1991, the New Deal in England restricted junior doctors' average hours per week to 56. EWTD restricts hours per week to 48 and has applied to consultants in England since 1998, but implementation was staggered for junior doctors until August 2009. Individual doctors may opt out of EWTD but must comply with New Deal restrictions.¹ For convenience we refer to EWTD throughout, rather than Working Time Regulations (WTR), which is the implementation of the EWTD into British law. All NHS Hospital Trusts in the UK are required to ensure that their employment conditions for doctors-in-training comply with the EWTD, the aim of which is to promote the health and safety of the European workforce by regulating the number and pattern of hours worked. EWTD also stipulates that workers are entitled to 11 h continuous rest in every 24 h period (limiting shift length to a maximum of 13 h). Two important rulings (the Jaeger and SiMAP rulings) have asserted that all time spent at the hospital, or immediately available for work, counts as work for the purpose of the EWTD.² Full implementation of the Directive has therefore required a major overhaul of hospital rotas in many NHS Trusts (which have traditionally relied heavily on long working hours, on-call rotas and opportunistic rest periods), with a concomitant rise in shift working-patterns and in the frequency of handovers between shifts.

Various interested parties have reported on the implementation of the EWTD, including the General Medical Council (GMC), the Postgraduate Medical Education and Training Board (PMETB), the British Medical Association's Junior Doctors Committee, the Association of Surgeons in Training, and the Royal Colleges of Surgery, Anaesthetics, Obstetrics and Gynaecology, and Paediatrics and Child Health.³⁻⁶ While most observers have welcomed the trend towards reduction in junior doctors' hours, representatives of certain specialties where complex practical procedures are common, such as surgery, anaesthetics and obstetrics and gynaecology, have been particularly outspoken regarding the perceived detrimental impact of the 48 h week on trainees' learning opportunities.⁷⁻⁹

There is a relatively small peer-reviewed literature which has sought to evaluate the effects of EWTD implementation systematically.¹⁰⁻¹⁴ Regarding patient safety, various studies find no association, positive or negative, between the EWTD and quality of patient care, as assessed using in-hospital mortality, length of hospital stay, and hospital readmission rates.^{12 14} One single-blinded intervention study linked EWTD-compliant working hours with decreased levels of medical error.¹¹ Another paper reported a negative association between the EWTD and junior doctor welfare, as measured by the proxy of sick leave (total number of sick leave episodes increased by 170% after introduction of EWTD).¹⁴

In 2010, Professor Sir John Temple's report *Time for Training*,¹⁵ prepared for Medical Education England, considered the impact of EWTD implementation on the quality of training. It was based on oral and written submissions and focus groups of stakeholders, and made recommendations for maximising training opportunities in a consultant-led service context, enabling training to be supported fully within the EWTD. A recent systematic review of the impact of restricted working hours on patient care and doctor training argues that the effects of 56 or 48 h weeks in the UK have not been sufficiently evaluated in high-quality studies to draw any substantive conclusions.¹⁶

The UK Medical Careers Research Group (MCRG) systematically surveys the views of Britain's doctors on their careers, work and training using longitudinal surveys of all UK medical graduates from a number of year-of-qualification cohorts to inform UK policy in medical education, healthcare and workforce planning. The studies collect both quantitative and qualitative data. In 2010 and early 2011 we undertook national multipurpose studies of the qualifiers of 1993, 2005 and 2009. We did not ask specific questions about the EWTD. We were struck, however, by spontaneous comments made about it by the respondents. We reasoned that formal qualitative analysis of their comments, when conducted systematically and represented accurately, could add depth of understanding about doctors' concerns about the EWTD.

We report the reasons why doctors, at three different levels of seniority, expressed concerns about the implementation of the EWTD. The qualifiers of 2009 were Foundation Year 1 doctors (doctors in their first year after graduation); the qualifiers of 2005 were mainly specialty registrars (middle-grade doctors in specialty training posts, 5 years after graduation); and the qualifiers of 1993 were mainly consultants and general practitioners (GPs), doctors 17 years after qualification who have completed specialist training. All responded in the first year of fully EWTD-compliant working patterns in the UK. As it was a qualitative study, it was not our intention to quantify the level of opposition or support for the changes brought about by EWTD; rather, we aimed to identify issues, even if they were raised by small numbers of individuals, worthy of consideration.

METHODS

The MCRG surveys UK-trained doctors' views nationally, using self-completed postal and web-based questionnaires. We track the careers of all graduates from all UK medical schools in selected year-of-graduation cohorts, by surveying the doctors towards the end of their first and third years after graduation and at longer time intervals thereafter. Our methods are described in detail elsewhere.¹⁷

To set the context, we summarise the main objectives of the MCRG surveys, the cohorts surveyed, the timing

of the surveys and some of the main themes that we cover. Our research brief is to determine the career choices of doctors, at regular intervals after qualification, to study factors which influence choices, to study career progression, comparing it with earlier career choices and to determine factors which have influenced any change. We have surveyed doctors who graduated in selected graduation years from 1974 to 2012. Each MCRG survey covers the participants' career choices and intentions, training and actual career posts; and views and attitudes on issues of career relevance, such as job satisfaction, quality of training, and future career opportunities. We emphasise to the doctors that all replies are treated in the strictest confidence and that we are independent of any employing body or organisation associated with the doctors' work or employment. We believe that we get very honest answers and comments.

The questionnaires include closed questions on a range of themes, and a direct invitation to provide free-text comments 'on any aspect of (your) training or work'. The former yield quantitative data; the latter provide an indication of the current thoughts, views and preoccupations of each generation of doctors. The invitation to provide comments, on which this paper is based, was worded slightly differently, depending on how far the doctors had progressed in their careers. For the qualifiers of 2009, 1 year after qualification, we specified: "Please give us comments, if you wish, on any aspect of your training or work. We are interested, for example, in any comments about (a) medical school experience, (b) foundation year experience, (c) future career choice or job prospects, (d) working in medicine." For the qualifiers of 1993, 17 years after qualification, we specified: "Please give us comments, if you wish, on any aspect of your training or work. We are interested, for example, in any comments about (a) your own training, (b) your work in training others, (c) your specialty choice, (d) your future plans, (e) working in medicine, (f) working in the NHS."

All free-text comments received from each cohort were transcribed verbatim and screened for information that might inadvertently identify individuals or institutions. After redaction of such data, all comments were imported into NVivo software to facilitate thematic analysis. Two researchers (RTC and AP) independently read and re-read every comment, developing a systematic coding frame that reflected both anticipated and emergent themes. The similarities and differences in each researcher's understanding and interpretation of the data were discussed and used to refine the coding scheme. Following this initial coding process, the material coded to 'EWTD' and 'working hours' was reanalysed using the method of constant comparison, with a number of subthemes emerging.¹⁸ Prior to coding, anticipated themes were developed from a literature review comprising MEDLINE and Embase searches, without date or language restriction, using the terms "European Working Time Directive," "EWTD", "working

patterns", "working hours" and "rota(s)". Position papers and non-peer-reviewed reports from the Royal Colleges and other medical bodies were also sought through online searches.

RESULTS

Response

Excluding those who were deceased, or known to be abroad and for whom we lacked a current address, the response rate to the surveys ranged from 72% (the qualifiers of 1993) to 47% (the qualifiers of 2009), of whom around a third (2459 doctors) chose to write free-text comments. Within these, the EWTD emerged as a theme, with over a 10th of responders (279 doctors) choosing to raise it, despite the fact that the questionnaire did not mention the Directive specifically. The great majority of comments mentioning the EWTD and its implementation—two aspects which were not always easy to distinguish in the data—did so critically (table 1).

Key themes

The key themes that emerged were: the mismatch between the hours actually worked by trainees and their contracted hours; methods allegedly used by Trusts and individuals to misrepresent juniors' hours as EWTD-compliant; the impact of the EWTD on (1) quality of patient care, (2) training, (3) junior–senior relationships, and (4) morale; and the doctors' ideas for improvements.

Quotations

In an online supplementary file, we reproduce exemplar quotations exactly as written, which we have selected to illustrate the main issues and themes raised by respondents. Each quotation is followed by the unique numerical identifier for that respondent, where the prefix 'F' denotes a foundation year 1 doctor, 'M' denotes a middle grade doctor and 'S' denotes a senior clinician who has completed their training and is now either a consultant or GP. We refer in the following text to the numerical identifier for the exemplar quotation in the online supplementary file, which is relevant to each point being made.

'Grey rotas': EWTD-compliance on paper, but not in practice

Trainees at both Foundation and Registrar level drew a distinction between the EWTD-compliant hours they were contracted to work on paper, and those they worked in practice. The disparity was often quantified: for example, several trainees cited 12–13 h days as being the norm, as opposed to their timetabled 9:00–17:00. A problem reported by some trainees was that, although juniors' hours had been reduced, their overall workload had remained constant, leading to endemic understaffing (see comment F69 in the online supplementary file).

However, Trusts' reluctance to employ locum doctors to cover rota gaps, even when absences were anticipated

Table 1 Overview of numbers of respondents

Characteristics	Year of graduation			
	1993	2005	2009	Combined
Cohort size	3479	4254	6254	13 987
Responders	2507 (72% of cohort)	2326 (51% of cohort)	2918 (47% of cohort)	7751 (58% of cohort)
Commenting	933 (37% of responders)	732 (31% of responders)	794 (27% of responders)	2459 (32% of responders)
EWTD comments	98 (11% of commenters)	87 (12% of commenters)	94 (12% of commenters)	279 (11% of commenters)
Broadly positive comments	1 (1% of total)	4 (5% of total)	4 (4% of total)	9 (3% of total)
Broadly negative comments	97 (99% of total)	83 (95% of total)	90 (96% of total)	270 (97% of total)

EWTD, European Working Time Directive.

well in advance, was cited repeatedly as leading to excessive working hours and increased stress. Workforce planning problems such as this do not necessarily owe anything to the implementation of EWTD itself (see comment M22 in the online supplementary file).

Most respondents drew no distinction between the aims of the EWTD in principle, and its implementation in practice; however, a few trainees distinguished the Directive per se from specific working patterns adopted locally in order to achieve compliance (see comment F123 in the online supplementary file).

Some Foundation doctors interpreted the hours they actually worked, exceeding the legal maximum, as evidence of a policy to cap their salary (see comment F9 in the online supplementary file).

Impact of EWTD on quality of patient care

Doctors at all grades expressed concerns that EWTD-compliant working patterns potentially compromised quality and continuity of patient care (box 1). More

Box 1 Reasons why the current European Working Time Directive (EWTD) implementation may compromise patient care, described by trainees and consultants

- ▶ Decreased supervision/support of junior doctors by senior colleagues, particularly during nights and weekends
- ▶ Juniors making decisions beyond their level of competence, because of lack of senior support
- ▶ Decreased continuity of care for individual patients
- ▶ Increased numbers of handovers, across shifts, between doctors and teams
- ▶ Doctors being stretched too thinly across large numbers of patients to respond adequately to their needs
- ▶ Fewer opportunities for seniors to identify trainees in difficulties
- ▶ Juniors being less tired, but more out of their depth when on call, cross-covering multiple specialties of which they have little experience
- ▶ Night shifts being 'full intensity' for the duration of the shift, with no opportunity for rest, making it difficult to maintain concentration, mental-acuity and decision-making skills

broadly, the loss of the traditional medical 'firm' and its replacement by shift-based working patterns was perceived by some doctors to have adversely affected standards of patient care, notably by reducing the opportunities that doctors have to get to know their patients thoroughly or by reducing consistency of care during the patients' stay (see comment M68 in the online supplementary file from a general medicine year 1 specialist trainee).

Impact of EWTD implementation on training

No doctor stated that the EWTD had improved training opportunities. Doctors at all levels of seniority commented on adverse effects, in their view, on training through, for example, doctors being too overstretched to train juniors; loss of sustained relationships between seniors and juniors in an apprenticeship model of working; fewer opportunities for juniors to work alongside their seniors and competing demands of service provision versus training, with the former overriding the latter (see comment M93 in the online supplementary file from a general medicine registrar).

Many respondents, particularly (but not exclusively) those from surgical specialties, commented on what they saw as a conflict between the principle of protecting trainees by curtailing their hours, and the practice of mastering a craft such as surgery, anaesthetics or obstetrics and gynaecology through many hours of clinical exposure. Some contrasted contemporary working patterns with their own training in which the acquisition of skills and expertise had hinged on many hours of practice (see comment S6 in the online supplementary file from an obstetrics and gynaecology consultant).

Consultant physicians as well as surgeons expressed concerns that, in the long term, the cumulative effect of the reduction in trainees' working hours would be a new generation of consultants who lacked the confidence and competence for independent practice, with the possible erosion of standards of patient care (see comment S12 in the online supplementary file from a general practice principal).

Though most consultants characterised their own training as superior to that provided by EWTD-compliant working patterns, several made the point that, in their day, training was less than ideal, being ‘piecemeal’ (see comment S23 in the online supplementary file) and ‘haphazard and mostly self-driven’ (S67). A few consultants did not regard the EWTD as necessarily incompatible with good quality training, arguing that a greater commitment to training from staff at all levels of seniority, including managerial staff, was the key to addressing current deficiencies (see comment S74 in the online supplementary file from an obstetrics and gynaecology consultant).

How non-compliance happens

Some trainees described being put under pressure by seniors, both clinical and managerial, to misrepresent the hours they worked during EWTD-monitoring periods, so that their Trusts appeared EWTD-compliant when they were not (see comment M17 in the online supplementary file from a year 3 specialist trainee in chest medicine).

Trainees identified a range of specific techniques deployed by Trusts to achieve apparent compliance during monitoring periods (box 2). In addition, they reported more insidious pressures such as seniors in a working culture ‘institutionally opposed’ to hearing complaints from juniors; doctors being emotionally blackmailed or bullied into reporting only timetabled hours, and individuals being made to feel that working excessive hours was a personal failure of time management rather than the consequence of a systemic mismatch of workload to staff. Some trainees described being willing to work in excess of 48 h a week, but angered by being asked to lie about doing so.

Box 2 Techniques used by Trusts to promote apparent compliance, as reported by some trainees.

- ▶ Doctors asked to sign statements saying they will stay after scheduled hours only for ‘their own educational purpose’
- ▶ Doctors asked to repeat the monitoring exercise if hours they submitted were non-compliant: second period scheduled for doctor’s annual leave week
- ▶ Extra staff employed by Trust for duration of monitoring period
- ▶ Doctors told they will not be insured by their Trust for hours they work beyond their shifts
- ▶ Consultants refusing to counter-sign non-compliant monitoring cards
- ▶ Threats of failure to sign off F1 year if non-compliant hours are submitted
- ▶ Threats of failure in career progression if non-compliant hours are submitted
- ▶ Threats of being labelled with ‘poor time keeping’ on end-of-rotation assessment
- ▶ Hours recorded by Trust as compliant when doctors claim that they all submitted non-compliant forms

Impact of EWTD implementation on junior–senior relationships

Some senior-grade and middle-grade doctors voiced concerns about a ‘clocking off’ attitude among Foundation doctors, often framed in contrast to the hours they themselves were willing to work. They perceived the new rotas to ‘corrode’ juniors’ professionalism, promoting attitudes of “it’s the end of my shift, so it’s not my problem” (see comment S23 in the online supplementary file). Conversely, several Foundation doctors described a lack of awareness among seniors of what contemporary working patterns were really like (see comment F50 in the online supplementary file).

Some consultants directly attributed an increase in hours they themselves now worked to the reduction in hours of their juniors, with a few blaming the EWTD for increased stress and decreased job satisfaction among seniors (see comment S91 in the online supplementary file from an intensive care consultant).

Impact of EWTD implementation on morale

Some trainees singled out the EWTD as being positively beneficial to their morale in eliminating excessively long hours and improving work–life balance (see comment M62 in the online supplementary file from an anaesthetics year 3 specialist trainee).

A greater proportion of Foundation doctors commented on the detrimental impact of the introduction of EWTD on their morale, sometimes describing feeling angry, let down or disillusioned. Specific reasons included the mismatch between their contracted hours and those actually worked; not being paid for excess hours worked; being encouraged/forced to misrepresent hours worked, and loss of the traditional firm structure causing juniors to feel isolated and unsupported. For a minority, this led to consideration of leaving the NHS, or of quitting medicine altogether (see comment F65 in the online supplementary file).

Proposed improvements to current working patterns

Doctors whose comments were critical of the EWTD sometimes suggested specific, positive ways in which current working patterns could be improved. Proposed improvements fell into two groups—those advocating an increase in overall doctor-hours worked (via increasing individuals’ weekly hours, increasing numbers of trainees and/or increasing numbers of years or specialist training), and those proposing alternative reconfigurations of working patterns within the 48 h week (table 2). Some respondents fully endorsed the principle of setting a cap on the maximum number of hours worked by trainees, while arguing that an optimal minimum, greater than 48 h weekly, is also necessary for effective training, buoyant morale and good quality patient care (see comment M68 in the online supplementary file from a general medicine year 4 specialist trainee).

Regrets were expressed about moves away from the traditional ‘firm’ structure. Those consultants who

**Table 2** Ways to improve current working patterns, as advocated by some trainees and consultants

Foundation doctors	Registrars	Consultants/GPs
<p>Increased doctor-hours</p> <p>Match timetabled hours realistically to F1s' actual workload</p> <p>Employ more junior doctors</p> <p>Introduce an FY3 year allowing exposure to a broader variety of posts</p> <p>Not necessarily hours-based</p> <p>Provide trainees with more clinical experience</p> <p>Reduce amounts of paperwork F1 do</p> <p>Enable juniors to spend more time with seniors, learning by example/supervision</p> <p>Have a clocking in, clocking out system to highlight the true numbers of hours being worked each week</p> <p>Pay juniors for hours they work in excess of those timetabled</p>	<p>Increased doctor-hours</p> <p>Increase number of hours worked by juniors to 60–65 h per week</p> <p>Not necessarily hours-based</p> <p>Create more opportunities to develop close working relationships with seniors who guide, advise and teach</p> <p>Less service provision, more training/surgical operating time</p>	<p>Increased doctor-hours</p> <p>Increase number of hours worked by juniors—around 60 h per week cited most commonly</p> <p>Increase numbers of junior doctors to compensate for their reduced hours</p> <p>Increase number of years of specialist training to maintain standards in the face of trainees' reduced hours</p> <p>Not necessarily hours-based</p> <p>Return to a traditional firm structure</p> <p>Return to apprenticeship models of working</p> <p>Reintroduce longer term, sustained relationships with juniors, leading to better training and the formation of meaningful relationships</p> <p>Move away from shift systems which break up teams of colleagues</p> <p>Develop new ways of training to fit new working patterns</p>

GPs, general practitioners.

wanted a return to traditional, firm-based medicine, as a way of improving current working patterns identified a number of specific reasons why this change would be beneficial (box 3).

DISCUSSION

We have found dissatisfaction among some doctors with the current implementation of the EWTD in the UK; and our aim, with this paper, is to give an account of why these doctors express concern. Particular areas of reported concern include the impact of the EWTD on postgraduate training and on doctors' job satisfaction. We were told about perceived attempts by some NHS Trusts to subvert systems for the monitoring of junior doctors' working hours. Ours is a qualitative study. As such, it does not seek to quantify the level of concern, or to infer from the comments made by a minority of the respondents what the views of the majority may be.

Box 3 Consultants' views on the benefits of firm-based hospital practice *Firms, they argued, would:*

- ▶ Provide individual firm members with a sense of belonging to a team
- ▶ Give Foundation year doctors a sense of ownership of their patients
- ▶ Foster the formation of close, meaningful working relationships
- ▶ Improve morale
- ▶ Improve continuity of care resulting in improved standards of patient care
- ▶ Enable apprenticeship styles of learning, particularly at the bedside.

The value of the study is in identifying issues which are raised by some doctors, and crucially that raise points that deserve consideration by doctors and policymakers, rather than quantifying the numbers of doctors with a particular concern or point of view.

The findings should be treated cautiously, and regarded as incidental findings arising in the course of a study whose primary purpose was not to examine reactions to the implementation of EWTD. They also relate to 2010, and circumstances and reactions to EWTD may have changed since then. Nonetheless, several aspects of the study's findings merit further consideration. The finding that some doctors, at all levels of seniority, perceive that the introduction of EWTD has contributed to deterioration in continuity of patient care, and in extreme cases potential compromises of patient safety, is of particular concern. However, Cappuccio *et al*¹¹ found that a trend towards improved safety outcomes could be achieved following the implementation of an EWTD-compliant schedule in a UK NHS Trust, provided that additional measures were introduced in parallel.

The training of junior doctors is of great importance as it contributes to the maintenance of a highly skilled workforce, improves job satisfaction among the health-care workforce (possibly with productivity benefits), and underpins patient safety in the long term. Guidelines such as those published by the GMC^{19 20} place great emphasis on the quality of training and measures to optimise it. Papp *et al*²¹ noted that chronic fatigue associated with unregulated excessive work hours impairs medical trainees' learning. However, none of the respondents felt moved to comment that the EWTD changes had facilitated or enhanced training. The finding that

doctors (both trainees and senior colleagues) frequently perceived that the training of junior doctors has been adversely affected was anticipated. It is consistent with reports^{6–10} which have highlighted these concerns, typically in subgroups within a particular speciality.

It was clear that the EWTD was sometimes not observed by NHS Trusts, with some rotas reportedly being non-compliant even after the August 2009 deadline. We were told by some respondents that rotas may be compliant on paper, but there was an explicit or (more commonly) implicit expectation that junior doctors undertake (often, cumulatively, very substantial) unpaid overtime. Furthermore, these additional hours of work would not be recognised by senior colleagues, or by the Trusts, since to do so would have meant admission that the rota was non-compliant, and therefore ‘illegal’ (and would also carry financial implications for the Trust). This contributed, for some doctors, to a feeling that the EWTD prevented them from being recognised for work which they have undertaken, often willingly, and engendered cynicism towards Trust management.

Some consultants indicated that they felt beleaguered by carrying some of the workload which used, in the pre-EWTD era, to be undertaken by their junior colleagues. We cannot tell from our study, but if this were a generally held view, the EWTD may have inadvertently given rise to new tensions in the relationship between seniors and juniors.

Even when the EWTD is observed, it may not always be achieving its stated aim of protecting workers’ welfare: the EWTD focuses heavily on working hours, and the design of rotas is primarily intended to restrict the number and pattern of hours worked. It does not take into account aspects of doctors’ welfare not captured by hours alone.²² These include, for example, the feeling of working in a team, the feeling of having contributed meaningfully to a patient’s care over a sustained period, and the feeling of having been actively trained. A reconfiguration of existing working patterns which readopted, for instance, the model of the traditional firm with its long-term working relationships, sense of team spirit and opportunities for mentorship, apprenticeship, and meaningful feedback, may well be compatible with restricted hours. International comparisons suggest that such working models, though resource intensive, are feasible, with trainees in Norway, for example, working a 40 h week but with training that is considered adequate because of the emphasis placed on continuing professional development and on favourable doctor–patient ratios.²³

Elsewhere we have reported²⁴ that, alongside reservations that doctors may have about the shortening of working hours and experience, they are increasingly positive about the amount of time that their job allows for outside-of-work activities.

Strengths and limitations

Ours is a large scale national study with good response rates and the respondents come from various career

stages. They are a well-qualified target group to comment on EWTD and its implementation, and the survey timing in 2010 was opportune as the full implementation of EWTD had just happened across England.

However, we recognise several potential weaknesses in this study. The survey is confined to UK medical graduates, and so does not capture the views of doctors who qualified outside the UK. Some studies have found that migrant doctors frequently perceive themselves to be marginalised and disadvantaged²³ compared to non-migrant colleagues. The EWTD may differently affect these doctors, and further study of this important group is warranted.

We do not know whether doctors who responded to the survey have similar views to doctors who did not respond. Equally, respondents who expressed views about the EWTD in the comment section of the survey may differ from those respondents who did not. Indeed, in each case, it is likely that those with the strongest views (and perhaps those with the strongest negative perceptions) are more likely to comment than those with more moderate (or perhaps strongly positive) views. Accordingly, for our next scheduled surveys, which were of the qualifiers of 1999 and 2000, undertaken in 2012, we added a specific section on views about the EWTD, inviting all doctors to reply to it. We report on this in the accompanying paper.²⁵ In summary, in that paper we show that the implementation of the EWTD is not widely endorsed. Only 12% (498/4136) of the 1999/2000 graduates surveyed in 2012 agreed that the implementation of the EWTD had benefited the NHS, 9% (505/4196) of 1999/2000 graduates surveyed in 2012 agreed that the implementation of EWTD had benefited senior doctors, while 31% (1311/4205) agreed that it had benefited junior doctors.²⁵

Further depth could be achieved by extended narrative interviews, and we recognise the incremental value that such studies would have in this field. It was frequently difficult, in considering comments, to determine whether a doctor’s criticisms related primarily to the fundamental restrictions of working hours imposed by the EWTD itself, or whether it was the particular manner of implementation in a particular country, hospital Trust or unit which was at fault. Sometimes it is clear that the criticism is of the actual Directive itself, and sometimes clearly the local implementation, but frequently these were difficult to resolve from the comments.

CONCLUSION

We advise caution: the results of this study should not be over-interpreted and some comments we report may pertain to the situation in 2010 and to issues which may have been addressed subsequently. However, the data suggest several areas for possible future research. Studies which evaluate the views of doctors excluded from, or under-represented in, our sample would provide helpful information about doctors’ views on EWTD as a whole.

Some doctors reported what they saw as unacceptable practices by some Trusts to ensure apparent compliance to the EWTD regulations. This is an area of concern, if accurately reported, whatever the number of cases involved, and is worthy of further investigation. More positively, further insights into potential solutions appropriate to different specialties may be gained by detailed narrative interviews with doctors in different branches of medicine and at different levels of seniority. Studies which can isolate the effects of the EWTD rules themselves from the rota design and implementation are particularly important. Policymakers need to consider whether the current arrangements strike the best balance between the need to ensure what is perceived to be a safe working environment for junior doctors, and the needs of patients to experience continuity of care, of trainees to receive adequate training and of all doctors to work in an environment which is conducive to job satisfaction.

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Supplementary file – Verbatim comments referred to in Results

Identifier	Quotation
F69	“The EWTD is only existent on paper - most other junior doctors I know come in early and stay late and this goes completely unrecognised and unpaid. It is ridiculous to restrict our hours without giving us enough staff on the ground, which I often find to be the case.”
M22	“Workforce planning is a major problem for us in Paeds - there have been ‘gaps’ in almost every rota I’ve worked in, which often leaves us scrambling to cover unfilled shifts. In some departments it is unheard-of to get a locum, even for solid reasons with plenty of notice (e.g. maternity leave uncovered!). This has extended to being asked to go home at 11am from work to come back in at night to cover the night shift, despite a number of days warning that this shift would not be filled.”
F123	“The EWTD is not an excuse for the shambolic rota organisation and shift allocation currently endemic.”
F9	“The hours spent in unpaid overtime are significant and ignored. Yet the hospital would not function without [them]. The NHS is laughing all the way to the bank, considering all the unpaid overtime many, many doctors work.”
M68	“Having returned to work in General Medicine as an SHO again, having done so previously in 2008, I have been able to appreciate the significant difference the EWTD has made to the lives of doctors on the ‘shop floor’... Due to ensuring that everyone has sufficient time ‘off’... a standard week would be as follows: Monday I would be covering one team (because their doctors were all off (on annual leave or on call), Tuesday I myself would be on call, Wednesday I would have off because of having worked the previous weekend, Thursday I would cover my own team but alone as all my junior team members would be on call or nights, and Friday I again would be drafted in to cover another team. This meant that each day I was having to get to know all the patients I was caring for from scratch... It produces poor job satisfaction and ultimately poorer care for patients. Long gone are the days where you felt that you belonged in a team M68, General medicine year 1 specialist trainee and that you knew your patients well and could follow them through their journey from admission to discharge.”
M93	“The EWTD has destroyed the opportunity for most learning in the hospital since we went to 48 hours, as doctors are spread too thinly to support each other or to train each other. Most time I am in the hospital, the seniors are too busy to teach me, as they are covering for each other only working 48 hours. Likewise I am so busy in my 48 hours, that I no longer have as much time to teach students or junior doctors.”
S6	“My own post-graduate training, whilst relatively unstructured, was excellent because it was vocational - an apprenticeship - learning from my senior grade and as a craft specialty (O&G), doing plenty of hours was crucial to

	gaining competence, self-esteem & professionalism - i.e. reliability, industry & attendance.”
S12	“Because of their reduced hours, [FY2s] do not have the diagnostic or therapeutic confidence that was expected during my training at the same level. They just have not experienced enough medicine.”
S23	“My own training felt piecemeal - it was more by good luck and my own endeavours that I learned things (excluding my GP training posts with one to one teaching when I was taught more than in all of the hospital posts). Training now seems more structured and supervised. The change in junior working patterns seems to be producing a different type of GP - they do not seem to take ownership of patients and seem to have an employee `it's the end of my shift so not my problem` sort of attitude. I fear for the professionalism of future doctors.”
S67	“My training was haphazard and mostly self driven. However, at least the self selection for stubbornness/determination stands me in good stead for the actual job to be done.”
S74	“Whilst I believe that [the] EWTD can work, I think it requires tremendous commitment both from trainees and trainers and unit managers to achieve meaningful and effective training. Too often I see service coming before training. In the short term, this may well be necessary for patient concerns, but units need to take responsibility for their trainees' long term development. No or poor training means no or poor professional development. Old style consultants decrying their juniors as `not up to scratch` - not fair on the trainees!”
M17	“I have seen colleagues put under pressure in relation to working hours, particularly when it comes to monitoring exercises. Unfortunately these pressures come from senior colleagues, e.g. medical directors, as well as those in management. Some of these individuals seem to believe that it is reasonable to expect junior staff to stay late if necessary for clinical reasons but then not record that they have been expected to do so – a policy of ‘if the problem is ignored, it does not exist’.”
F50	“[My] main issue is consultants still believing that it should be like ‘good old days – 120 hour working weeks’, not understanding the difference in patient load, non-ward-based work, new on-call systems.”
S91	“As I moved through training, the trainees in more junior positions worked fewer hours so I had to work more to compensate. This has followed through to consultant level such that now consultants do the work they used to do as juniors. This is demoralising & I feel cheated.”
M62	“The 48 hour week is continually derided in the press and by (particularly) the Royal College of Surgeons, but for me it has been a very interesting change for the better. When I started, it was normal to work seven night shifts of twelve and a half hours consecutively (i.e.: nearly ninety hours), finishing on Friday morning and we were then to return to

	<p>normal duties on Monday morning. I was never able to revert back to `daylight` hours so quickly and so spent the first couple of days of the following week feeling drained and constantly tired. Since the introduction of the EWTD, those sort of hours have been consigned to history and I think that it`s a good thing and should be praised. I accept that we may have to work more frequent shifts on-call but I don`t have the same feeling of being achingly tired and knowing that I have to work yet another twelve hours.”</p>
F65	<p>“Working beyond allotted hours is hugely bad for morale. I work an hour extra every day at the moment, on average. I know various very talented doctors who love treating patients and hate their jobs... The problems are: Too much work, too few people doing it, little support, no positive feedback, too little time with patients.”</p>
M68	<p>"The European Working Time Directive no doubt has had a negative impact on the logistics of organising and providing consistent cover and on the overall continuity of care. It is a rule we could all do without. That does not mean coming back to the 110 hours my father used to work but a more balanced rota that allows for patient continuity, that does not break up teams irremediably and that is still compatible with personal life. The Royal Colleges have suggested a rota of 65 hours a week and this seem reasonable.”</p>