

The impact of the implementation of the European Working Time Directive (EWTD)

A qualitative research report prepared for the
General Medical Council (GMC)

15th April 2011

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1. Executive summary

1. Executive summary

- This study is based on a total of 21 telephone depth interviews conducted with European regulators, European speciality societies and non-European speciality societies. In addition, an online discussion group was held with trainees across Europe. The aims of the study were to explore: how other countries in the EU and internationally have addressed training issues generated from the implementation of restricted hours; whether there are any evaluation tools and mechanisms that have been used to assess the impact, outcomes and effects on training; and, to understand what a valid way of measuring the impact of the EWTD might be for any future longitudinal study.

Implementing the EWTD

- Generally, there is a sense that some kind of restriction on the number of hours worked is helpful for both staffs' wellbeing and for improving levels of patient safety. However, stakeholders found it much easier to discuss the challenges associated with implementation of restricted hours than the benefits that they can bring. In the main, there were concerns that the EWTD would negatively affect training. Beyond this though, there were also issues raised around the fact that restricted hours may decrease the UK's competitiveness relative to other countries, that trainees may find that there has been a negative impact on their pay and that capacity has been adversely affected as well.
- In implementing the EWTD, stakeholders reported that the greatest barrier to doing so successfully was working in a culture that was resistant to a change of this nature. There was frequent discussion of how medical staff pride themselves on the number of hours worked and, thus, the transition to restricted hours is particularly problematic. This was especially so in the UK, which was seen as being rather traditional in its outlook. There were also speciality-specific concerns raised with those working in areas which require a high level of practical skills (such as anaesthesia and surgery) worried about the impact that restricted hours would have on the quality of training.
- These issues were not, however, believed to be insurmountable. Indeed, stakeholders mentioned a number of enablers which helped with the successful adoption of the EWTD. These included designing improved rotas, using technology and simulations for training purposes and using more junior staff for some of the less skilled duties.

Mitigating the impact of the EWTD

- It largely followed that those countries most opposed to the concept of working restricted hours experienced the greatest number of problems in implementing the policy. These problems centred around staffing, as given trainees' large administrative and on-call role, their access to consultants and apprentice-style learning could be limited. Linked in with this, the EWTD was also thought of as causing inflexibility within the system with rotas and resourcing becoming more rigid. These issues were thought to be particularly acute in the UK given that, relatively, it was believed that there are fewer trainees working and so any impacts on staffing are felt more keenly.
- Other negative impacts discussed were the effects that the EWTD and other working time restrictions had on training with trainees being forced to choose between classroom based and hands-on experience. Additionally, there was also thought to be problems with competitiveness, lower morale, and the fact that working restricted hours means that trainees are less likely to witness the trajectory of a disease within a single patient thus limiting their learning. There were, however, positive impacts mentioned and, most commonly, these were cited as being an improved work-life balance for trainees which, in turn, led to greater levels of patient safety.
- In spite of the negative consequences, stakeholders cited a number of measures that could be taken to ensure that the quality of training does not suffer. Firstly, many stated that the length of time set aside for training could be increased though this could have an effect on how far trainees could progress within their career. Similarly, others stated that the subjects trainees undertake be narrowed. Improving the efficiency of training, through e-learning and simulations of rarer events for example, was also cited while some mentioned the importance of Continued Professional Development as a means of ensuring any gaps after formal training were plugged effectively. Both Norway and Denmark were mentioned as being good examples of best practice in this regard.

Measuring the impact of the working time regulations

- None of the countries that we engaged with as part of this research were currently monitoring the impact of the EWTD and other working time regulations in any more of a systematic way than simply anecdotally. For instance, there were reports from Poland that there are a greater number of calls for residencies to be prolonged. Similarly, those from the Royal College of Anaesthetists suggested that trainees are

now taking longer to go through the system. However, aside from this, there was no formal measurement of the impact of the EWTD and other working time regulations, largely because stakeholders suggested that this was a very difficult job to do and one which they admired the GMC for contemplating.

- Given this lack of experience, stakeholders found it difficult to suggest ways in which the impact of the EWTD and other working time regulations could be appropriately measured. Potential metrics included practical, objective measurements such as trainee completion rates, an assessment of how many procedures a trainee completes and trainee knowledge on a variety of issues. More subjective measures were also mentioned including trainee confidence and the patient experience. On this last point, it was considered very important that any attempt to measure impact looks at the issue from all perspectives and ensures that the views of patients, consultants, nurses and trainees are taken into account.
- Even if all this were done, however, there was a note of caution expressed by stakeholders. Those in the UK in particular suggested that, in the current climate, it would be very difficult to differentiate between the impact of the WTRs and the impending programme of NHS reforms. More generally, demographic changes and developments in public health were thought to muddy the issue further still.

2. Background and methodology

2. Background and methodology

This section of our report examines the objectives underpinning the work which, in turn, framed our approach to it. It also examines the methods we used to answer the research questions posed.

2.1 Understanding the context

The European Working Time Directive (EWTD) took effect in October 1998 but the final stage of implementation as the Working Time Regulations (WTRs) in the UK with working hours limited to 48 hours took place recently in August 2009. The issue with this is thought to be that with a reduced number of hours available for training, there is a potential risk to the quality of that training. As the regulator of medical education and training in the UK, it's important for the GMC to understand the impact these changes may have on this matter.

The GMC has already conducted some research in this area, including an extensive literature review and reports summarising the regulatory evidence of EWTD. However there are still significant gaps in knowledge about the impact of EWTD and the GMC is keen to ensure that these are filled. This, in turn, shaped the research objectives we worked to and these are outlined in more detail below.

2.2 Research aims and objectives

Given these issues, the GMC commissioned Ipsos MORI to conduct some scoping research with international stakeholders in order that it could learn from their experiences of implementing the EWTD. In total, we wished to examine three main issues:

- How other countries in the EU and internationally have addressed training issues generated from the implementation of restricted hours;
- Whether there are any evaluation tools and mechanisms that have been used to assess the impact, outcomes and effects on training; and
- What the most reliable and valid quantitative and qualitative outcome measures might be for assessing impact in a future longitudinal study.

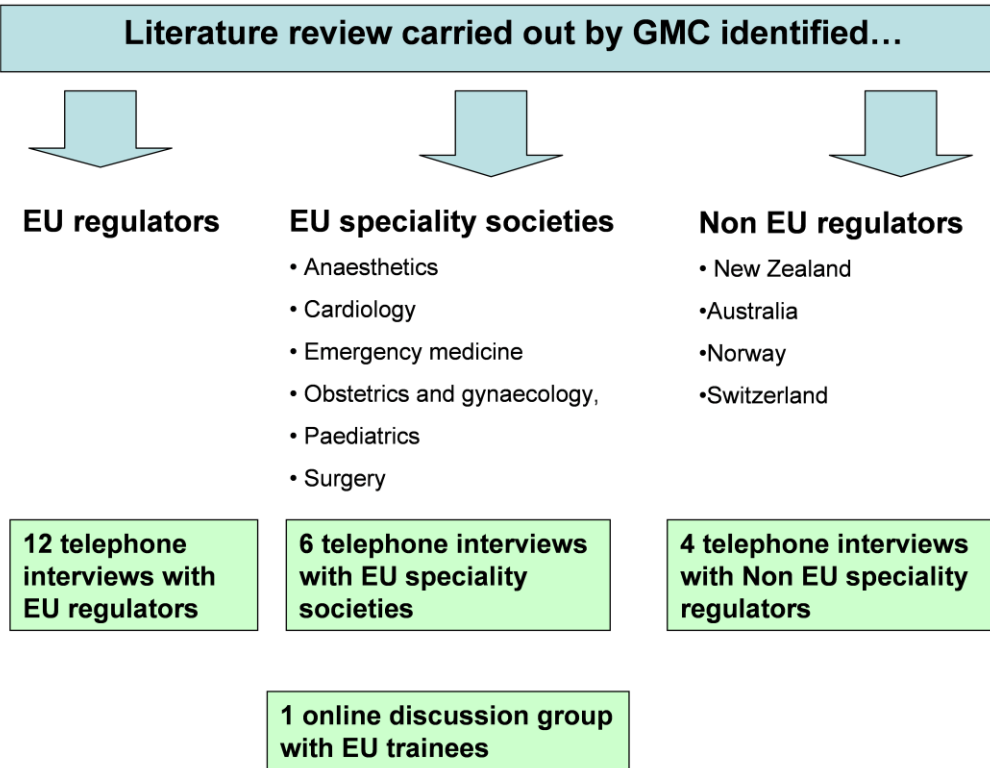
It was hoped that by addressing these objectives, the GMC will be able to better manage the WTRs in the UK so that lessons can be learnt from the experiences of others. This, in turn, will ensure that the GMC understands how to mitigate known risks, how negative impacts

can be reduced and how it should adapt training offered accordingly. This work will also feed into longer term plans of the GMC which are to identify any indicators that may be used to assess and measure the impact that the WTRs have on training.

2.3 Methodology

A qualitative methodology was adopted for this piece of work. Qualitative research was thought to be ideal as it allowed for the issues to be uncovered in depth and also enabled us to understand the drivers of stakeholders' opinions. Logistically, qualitative research was also deemed to be appropriate as it ensured we were able to canvass a broad range of views and experiences in a cost effective manner. Qualitative research is also generative and, therefore, ideally placed to help understand how the GMC could measure the impact of the WTRs in the future.

To best meet the needs of the study and answer the research questions we had, we adopted a mixed methodological approach comprising telephone depth interviews and online discussion groups. Our approach is highlighted in the chart below.



Both of the two approaches we adopted for this research had specific advantages which leant themselves well to the objectives of the research and the type of stakeholders we were engaging with. For instance, telephone interviews are a convenient means of engaging with those who have a number of demands on their time. Additionally, the one-on-one nature of a depth interview means that complex issues can be discussed at length and probed in detail. In contrast, online group discussions offer the same convenience and flexibility in that participants can log on and comment at a time that suits them, but it also generates an interesting dynamic that can help us better understand the experiences and views of trainees. This occurs through participants being exposed to the comments of others which they can then respond to. All depth interviews lasted around 45 minutes, while the bulletin boards for the online discussions were kept open for comments for three weeks.

Recruitment was conducted in house by the Ipsos qualitative field team in English and in the participants' own languages. Stakeholders were sent an invitation letter with Ipsos MORI and GMC branding. They were then recruited by telephone. In the case of EU specialist societies we often spoke to UK representatives. See appendix for a full list of countries included.

Trainees were recruited for the online bulletin board via an advertisement on Junior Doctors. EU. They were also sent invitation letters asking whether they would like to take part. They all took part in a short questionnaire before taking part where they provided demographic details such as their specialism and country of origin.

2.4 Report structure

Following this section, the report is divided into four distinct chapters.

1. Implementing EWTD
2. Mitigating impacts of EWTD;
3. Measuring impacts of EWTD; and
4. Conclusions and recommendations.

Each of these sections explores the issues raised by stakeholders from a number of perspectives, and also supports the views held with verbatim comments made by those we engaged with.

2.5 Presentation and interpretation of data

Two of the key strengths of qualitative research are that it allows issues to be explored in detail and enables researchers to test the strength of people's opinion. However, it needs to

be remembered that qualitative research is designed to be *illustrative* rather than *statistically representative* and therefore does not allow conclusions to be drawn about the extent to which views are held. It is also important to bear in mind that we are dealing with perceptions, rather than facts (though, of course, perceptions *are* facts to those that hold them).

2.6 Acknowledgements

We would like to thank everyone who has taken part in this research, all of whom contributed for no financial recompense.

2.7 Publication of data

Our Standard Terms and Conditions apply to this, as to all studies we carry out. No press release or publication of the findings of this research shall be made without the advance approval of Ipsos MORI. Such approval would only be refused on the grounds of inaccuracy or misrepresentation.

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3. Implementing the EWTD

3. Implementing the EWTD

This section of the report looks at regulators', specialists' and trainees' views and experiences of the implementation of the EWTD.

3.1 Initial views of the EWTD

Regulators and specialists have different views around the benefits of restricting working hours and the effects that this can have on training. Most participants believe that some restriction on working hours is desirable as it is seen to deliver a number of benefits for both patients and staff, all of which are discussed in more detail in the next section of the report. However, in spite of this initial positivity in relation to restricted hours, there is a widely held sense that such regulations are challenging to implement. Partly, this view is driven by the experience of those we engaged with; many of the regulators and specialists we spoke to suggested that, as a trainee, they worked in environments where there was no real limit to the hours in which trainees would work. While such a working environment is considered potentially damaging (both in terms of patient safety and with regard to the quality of life afforded to the doctors who operate in such conditions), for many, it is what they have known and, therefore, conceptualising alternative working models is difficult for them.

In light of this, many regulators and specialists spontaneously speak of the challenges associated with the implementation of restricted hours. However, there is a great deal of polarity in relation to how different groups of stakeholders view the prevalence and extent of these challenges and, in turn, how easy they believe they are to overcome. For some the challenges are very minor, whilst for others there are very major issues associated with implementing restricted working hours.

Differences in opinion on this matter can be partly explained by country of origin and, to a lesser extent, specialism. For instance, regulators from countries (such as Portugal and the UK) where working hours have traditionally been long, and where trainees have a role in managing hospital work (rather than, for example, simply observing and learning from the work of specialists) the challenges associated with restricted hours are generally considered to be much greater. In contrast, regulators from countries where there is more of a focus on the importance of maintaining a work-life balance, (such as France and Sweden) and where trainees have less of a role in hospital work (such as Italy) describe the transition to working restricted hours as being easier and, thus, reported the EWTD as being easier to implement.

3.2 Support for restricted working hours

This section goes onto explore the various factors which led to stakeholders believing that working restricted hours could bring a number of key benefits. These have been grouped thematically according to whether they benefited the patient or the medical staff.

Patient safety

For most regulators and specialists, the most important benefits of restricted working hours centred around increased levels of patient safety. Many regulators argue that it is impossible for doctors to work safely if they are feeling fatigued. Consequently, there is a strong sense that working restricted hours should lead to a reduction in accidents related to tiredness that could put patients at risk.

“The directives and laws in my opinion have a purpose: 1) protect the worker 2) protect the patients! I wouldn't like to be treated by a doctor who hasn't slept for over 24 hours. It is not safe! I don't believe there are any learning possibilities in doctors that work for over 48 hours a week; it is only a matter of "survival"”
EU Trainee Denmark

“It should help patient safety with doctors being more alert”
EU Regulator Malta.

This perception is not driven by their experience alone. Indeed, regulators from several countries corroborated their view here by citing evidence¹ for the link between reduced fatigue and improved patient safety.

“There is very clear evidence between fatigue and poor performance both technically and in terms of decisions and prescribing and so on... [so] the principle of restricted hours is good”
EU Paediatrics UK

By limiting the hours of trainees, there is the expectation that consultants may have to become more closely involved in patient care and that this, in turn, will result in positive changes in relation to patient safety. The thinking here is that, as trainees will be working fewer hours, there will not be the reliance on them that there has traditionally been. Consequently, it is thought that consultants will have to become more closely involved in the care and treatments of patients which will improve outcomes.

“I strongly believe that patients are getting a better deal out of a) not having tired doctors and b) this drive to improve the supervision that they get from more senior colleagues and the more senior input into, so that I regard the Working Time Directive as having been a driver for better change for a better service for patients”
EU Paediatrics UK

¹ Cappuccio FP. 'Hospital at Night' improves outcomes: does the evidence support opinions? (Commentary) [Q J Med 2009; 102: 583-4](#)

Furthermore, this key benefit was further reinforced by the opinions of the trainees that took part in this research. They agree that the quality of their work can suffer when their hours are too long. To illustrate, some mention that they can find that become more irritated and less able to offer patients a personal service while others speak of being concerned that the quality of their decision-making suffers.

“My partner works shifts this year that include 7 days of 12.5 hour night shift, followed by 3 days off, then 4 days of 8 hour shifts. The first week is 87.5 hours. The second week is 32 hours. The average is just under 60 hours. When leave is included, the average over the reference period works out at 48 hours. Why is it acceptable to be “safe” one week, then unsafe by working almost 90 hours in another? At the time she was a 24 year old doctor in her first year. She had little experience and was the first line of care for 400 patients overnight. On her 7th day, she was simply not safe. Why should patients expect doctors that are stressed and tired? This is unsafe and affects patient safety. Contact me direct if you would like the rota as evidence”
Trainee, UK

A Portuguese regulator explained that trainees cannot make important decisions about patient treatments after a night shift as they are too nervous about making a mistake. The result is greater inefficiencies as decisions are left until the next shift. More broadly, an Australian doctor explained that he had previously worked 80 hours a week. He believed that the additional hours he was working would lead to worse outcomes, as tiredness compromised his abilities.

Achieving a good work life balance

There is also a wide-spread belief that reduced working hours can improve the work-life balance of doctors and trainees allowing them to have outside interests or spend more time with their families. This not only benefits the individual but is also believed to bring advantages to the patient; some spoke of the link between personal satisfaction and effectiveness in the workplace and mentioned that, by working restricted hours, medical staff are more likely to be personally fulfilled and that this, in turn, will translate into improved patient care.

“Supports individuals and families to achieve... a good balance between career and family”
EU Regulator Malta

More broadly, trainees speak of the benefits that they derive from working restricted hours. They discuss how they find working in this way much less stressful as it ensures they have sufficient time to wind down from work, relax and recuperate.

“From the point of view of the doctors it is a help from the, their health point of view, from the quality of life point of view. In fact it is this balance which has to be

struck, it has to be struck between the opportunities for training, the trainee specialist's quality of life including the length of training, and social dimension"
EU Regulator Malta

"It gave us regulations, regulation of the working time and so it helped to avoid overwork burnout in fact so it helped after all, it helped us to avoid work related stress, burnout, this is the positive point"
EU Emergency Medicine France

In particular, the EWTD is recognised as a useful way of legitimising the importance of a work-life balance to women joining the profession. In turn, this will help change the culture of medicine from that of one which is predominantly 'macho' as described earlier.

"There's plenty of women who are fully committed to the NHS, but they just don't want to give more than let's say 56 hours a week because they value their life outside the NHS. And they won't necessarily organise themselves, it'll just happen that they will be really happy that the EWTD liberates them to do that"
EU Cardiology UK

Indeed, stakeholders from areas where reduced working hours are more established (such as Australia and New Zealand²) suggest that the request for a better work-life balance has spread from junior and trainee doctors to doctors of all ages as the reduced times have been implemented and the benefits felt.

However, while all regulators agree that a good balance is in the interest of the doctors and trainees in terms of their personal lives, there is some disagreement about whether such a balance is in the interests of health services or in the interests of trainees' professional lives.

3.3 Concerns with the EWTD

In general terms the UK is seen as being more traditional than other countries with those working in the medical profession viewing working long hours as being something of a rite of passage. This sense of tradition, therefore, goes hand-in-hand with greater levels of resistance to increased working hours than have been experienced in many parts of Europe and in other countries where restricted working hours have been implemented. Stakeholders in the UK themselves suggested that, while the New Deal 56 hours was 'about right', restricting working hours to 48 hours goes too far.

² In New Zealand doctors are limited to 38 hours per week although there is local variation/opt-out. In Australia the limit is slightly higher at 40 hours per week.

“There is no doubt that the vast majority of trainees [feel] that something was needed. Equally I think they have gone too far. .. [there is now] an imbalance between their life outside of cardiology and there need to be ... good cardiologists [by having both] good training experience and doing the job”
EU Cardiology UK

More broadly though, stakeholders find it much easier to discuss the negative consequences of working restricted hours rather than the potential advantages that it can bring. Largely, this was because working unlimited hours was the system that they had known and were used to and, thus, found it hard to imagine how medicine could operate effectively on any other basis. These concerns fell into four main categories including concerns around training, competitiveness and pay and are discussed throughout the remainder of this section.

Restricted hours will affect training time

Those regulators who are less positive about the EWTD often argue that it is very challenging to train doctors sufficiently within a shorter working week. Indeed, this was an issue voiced by the trainees themselves.

“Increased anti social hours has decreased training opportunities greatly. If you do a week of nights, followed by a week of back shifts and then have a few days off, you can easily go 3 or 4 weeks without teaching”
Trainee, UK

One concern arising from this is that restricted hours can make it difficult for trainees to regularly see the same patients over the course of their treatment. This is believed to matter as stakeholders argue that, without this experience, trainees do not get to see the development of an illness and so lack a thorough understanding of patient experiences.

“When I was a trainee there was a belief that you learnt a lot from the patients themselves.” I think the involvement of an individual trainee with an individual patient is now so fragmented that they neither learn the natural history of illness as they see it in one patient nor do they get formal teaching or supervised care looking after the same patient”
EU Cardiology UK

Linked in with this, regulators and specialists argue that trainees who work fewer hours are less likely to witness more complex and rare cases. This means that trainees are less experienced at having to make fast and potentially risky decisions about patients' treatment. A possible solution to such a problem would be the greater use of simulated circumstances; something that is made extensive use of in Australia to ensure that no patient is put at risk and that trainees feel comfortable handling any given situation.

Stakeholders from a number of countries report that trainees have sought to make up some of training time lost by attending additional training courses or by increasing the amount of time they spend studying beyond their official working hours.

“No allowance was made for training needs. So, for instance, in most specialities, but certainly in cardiology, presenting patients in a public forum is a very important part of training, because it helps the trainee to organise their thoughts, it helps them to go and look up the literature, and it helps them to develop the confidence of giving an opinion on a case. Now that, the time needed to spend in case presentations is simply not available within the 48 hour week. And so the result is that trainees have to do that in their own time, which they are resentful about as they feel that they’re now doing the same amount of work, which is more than can possibly be got into 48 hours weeks, and they’re being paid less for it”.
EU Cardiology, UK

While this may be compliant with the working time regulations, trainees suggest that there is a risk that they may still become fatigued which, in turn, could compromise patient safety. Some trainees also suggest that they now have less time to study while on call than they previously had, typically because they are now working in busier periods due to the shifts in their rotas that have been made as a result of the implementation of the EWTD. Consequently, it may not always be possible for trainees to attend external courses due to their shift patterns.

Patient experience

UK trainees suggest that there have been some problems associated with the implementation of the WTRs. For instance, trainees in the UK report working very varied shift patterns whereby they work up to 100 hours in one week, but much fewer hours the week after. This disparity means that, on average, they are still working 48 hours per week so are compliant with the WTRs. Furthermore, while they recognise that working such long hours could potentially pose a risk to patient safety they state that what it does allow for is continuity of care. Thus, from their perspective, they believe that there are issues here with restricted hours leading to discontinuity of care which in turn negatively impacts on patient experience.

International competition

When discussing concerns related to the implementation of the EWTD, a number of regulators and specialists mention the risk that, by working restricted hours, medical professionals from the UK will not be able to compete with those from countries where no such working limitations are in place. This is seen to be particularly the case for junior doctors and it is thought that, by reducing the number of hours available for training, they will be at a disadvantage to their peers internationally.

“Lets say that the USA had an 80 hour working time directive, and in China and Japan they have nothing at all... the competitiveness of trainees will be impacted when confronted with trainees from these places”
EU Regulator Malta

This is more of an issue in those countries where training standards are perceived as being higher and, additionally, where a large proportion of doctors speak English, even if not as a first language. Denmark is often mentioned by stakeholders in this regard where the concern is that, after being trained, doctors will leave to advance their career elsewhere. Building on this though, the Danish regulator believed that one advantage of greater harmonisation would be that it would be easier for doctors to work abroad – and hospitals employing them would be more confident that those doctors had been trained sufficiently. Furthermore, this concern about doctors leaving to work elsewhere is not a universally held view. Indeed, some suggested that such an impact is merely temporary and that, in time, doctors settle down to work in their own country.

Trainees concerns about reduced pay

One effect on reducing the numbers of hours that trainees work can be a related reduction in their level of pay. This is a particular concern amongst trainee doctors in Portugal who suggest that the current levels of pay are already very low, particularly given the current recession and the rise in prices. The Portuguese regulator explained that, as a result of this, trainee doctors generally work very long hours both to ensure that adequate cover is available and to boost their basic salaries given the rate at which overtime is paid.

The experience of trainees from the UK, Spain and the Netherlands, however, is slightly different. In these countries, trainees report that they are encouraged to under report their hours so that the hospitals they work in ostensibly comply with the legislation, at least on paper. The result is that they can find themselves working additional hours without pay. Indeed, this was a view that was corroborated by various EU regulators who state that many trainees are increasingly likely to work or study beyond their paid hours.

“In Scotland we are working over the EWTD compliant rotas and it is unpaid. I recently carried out a freedom of information request and found that a rota was set with 12.5 paid hour days and the doctors were told to do 13 hours. The extra 30 minutes unpaid doesn’t sound like a lot but it adds up over the year”
EU Trainee UK

“The time needed to spend in case presentations are simply not available within the 48 hour week and so the result is that trainees have to do that in their own time... so they feel they’re doing the same amount of work ... and being paid less for it”
EU Cardiology UK

Thus, as this section has shown, there are a number of barriers to the successful implementation of restrictions on working hours, particularly given the traditional culture in the UK. The next chapter goes onto explore ways in which any negative impacts can be mitigated.

4. Mitigating the impact of the EWTD

4. Impact and mitigating actions

The EWTD and similar working time regulations had been implemented in each of the countries we engaged with as part of this research. Some countries implemented the regulations over ten years ago (New Zealand for example), whilst others have done so more recently. The impacts that have been felt as a result, however, are broadly similar. What is different though are the steps that countries have taken to mitigate these impacts and to ensure that training remains of a high quality within the constraints of the regulations. Further, this has influenced the extent to which regulations have been made to work. Such issues are explored in more detail throughout the remainder of this section.

4.1 Impacts, outcomes and effects on medical education and training

It's important to start by raising an important finding from the research. There were many *possible* negative impacts that were raised as a result of implementing restricted hours. However, there were countries where none of these had been realised and this was largely believed to be a result of the fact that the ethos underpinning the legislation had been adopted and efforts made to adapt training to ensure that it 'works' within the dictates of the directive (Denmark and New Zealand for example). In other countries, training did not really need to be altered because reduced hours in these countries pre-dated the EWTD (Norway for example).

In contrast though, there were a few countries (Malta, Holland, UK) where there were much greater levels of opposition to the EWTD and less evidence of efforts being made to adapt training accordingly. Many of the respondents we spoke to had the impression that the UK has a culture whereby the *quantity* of training correlates with the *quality*; that, as mentioned, consultants look back on their training and view working excessive hours as a rite of passage. Such firmly held beliefs about the role of a trainee are in direct opposition to the successful implementation of WTRs and the resultant conflict makes it very difficult to drive through the changes to training that are required. Thus, there was almost a sense that the introduction of WTRs is *expected* to be problematic in the UK, as there is not the support behind it to make it work.

4.1.1 Specific impacts

A number of specific impacts emerged during the course of this research. These included:

- 1) Staffing and reporting problems
- 2) Training adapts negatively
- 3) Trainee morale suffers
- 4) Trainees see fragmented cases

These are all discussed in more detail throughout the remainder of this section.

1) Staffing/resourcing problems

A number of regulators and trainees have argued that there are simply insufficient resources available to cover the time lost when doctor's hours are reduced. This may be because the finances are not available to pay for more staff and/or because there are insufficient trainees to meet the needs of hospitals.

“The negative affect is increased anti social hours and increased work intensity. To remain compliant in Scotland they seem to be using less doctors to cover wards. This results in long periods of being the main doctor covering hundreds of patients, which is a scary and dangerous thing for your first ever job”
Trainee, UK

“It's necessary to regulate working hours and in that way this new direction is a good thing. However everything gets a bit more complicated as we have a limited number of trainees and it can be quite hard to remain compliant and appoint staff for the 24 hour cycle. The big thing is that the doctors “on call time” now counts as working time”
EU regulator, Sweden

This issue is exacerbated in countries such as Czech Republic, Australia and Portugal where there are hospitals in more isolated areas. This, in turn, results in there being insufficient staff available to provide cover.

“Sometimes we are failing the rules of the Working Time Directive because the pressure in the hospitals, especially in the small hospitals, it's really very high and not all trainee contracts [in terms of hours] which they are signing are really kosher I have to say”
Eu Regulator Czech Republic

In these cases, regulators explain that staff do not necessarily have to work such intensive hours as are needed in urban hospitals, and consequently that they may need to work longer hours to gain the same level of experience that other staff may gain (such as those working in a busy urban emergency room).

There can also be resourcing problems in areas where work needs to be managed by a doctor with a more specialist role. One example of this would be the need for radiologists to manage PCIs to treat blood clots. As this is a form of treatment that should be administered quickly there is a need for specialists to be available for long hours at any given time.

A specialist from Germany explained that these problems have been exacerbated by the demands of patients and government. For example, in Germany, patients tend to have higher expectations and are more likely to insist on being treated by a senior clinician. This reduces the opportunities for trainees to develop their skills, and adds increasing pressure on the resources available.

Working time restrictions are also viewed as causing inflexibility within the system. Rotas and resourcing are become more rigid and the impact here is that there is less room for trainees to swap shifts or extend their shift. This, in turn, can potentially lead to shortages.

“Another inconvenience is that ... if someone wants to work more, well, he cannot work more because it’s illegal so there you go, it means that if someone cannot come to work, it becomes difficult to ask others to work more to cover for this person so this leads to resource difficulties”
EU Emergency Medicine France

With this in mind the Royal College of Anaesthetists have recommended that rotas dictate no more than 1 in 8 night shifts for trainees but it is recognised that the practicalities of implementing this in busy hospitals can make it impossible. So, if there are not enough trainees to ensure that this is viable then each trainee will have to work on-call shifts more frequently than the guidelines stipulate. Therefore, some feel that the directive would ultimately require a greater number of trainees to be working to ensure that rotas can be covered compliantly.

“Financial implications, due to the increased employment which will certainly become necessary”
EU Regulator Malta

However, this brings with it another risk. For instance, some suggest that with greater numbers of trainees working there will, in time, be issues related to their long-term career progression – particularly if the number of available consultant posts does not rise at similar levels.

The loss of partial shifts is also being seen as a cause for concern. For instance, there is a view that the directive does not take account of specialisms (such as Anaesthetics) where activity in the out-of-hours period is relatively low. To illustrate further, in some specialisms

the on-call shift may be spent largely resting and the current restrictions do not take account of this, forcing the trainee to leave the hospital in the morning rather than work through the day. There seems to be a frustration that this has not been thought of and that the directive does not allow “*common sense flexibility*”.

“But it would be better if we had the old system of partial shifts where they could work slightly longer hours but in their say 16 hour shift would be expected to go to bed for a period of time”

EU Anaesthetics UK

The specialisms most affected are those where hands-on experience is most important, where training is seen to be dependent on an apprentice style approach (such as in the UK, Malta and Germany). Where this is the case, limiting the time trainees can spend in hospitals and reducing the proportion of these hours where there is access to consultants is viewed as very damaging to the training that can be given.

“The greatest impact would be in specialties which, rather than speak of one specialty I think it is specialties which need hands on training experience, which have a good bit, or a distinct amount of emergency commitment”

EU Regulator Malta

Related to this is the issue of volume. If trainees are spending a large proportion of their week covering on-call then it is important that time is utilised to gain experience. However, if the volume of cases (for example in surgery where no elective surgery happens at night) is relatively small then this becomes difficult and the exposure of trainees is jeopardised.

“Where the volume of experience approaches critical levels, this is something which is more, perhaps, particular to us because of our smallness. But if you’ve got a specialty which copes with the volume it has, but that volume approaches critical levels, then if you reduce time of exposure it might fall short of that, and therefore you will not be able to train in that specialty”

EU Regulator Malta

“In some specializations residents are required to make 4 night shifts in a month, which takes away the time they can spend in the treatment centre during the day. Since the majority of courses and medical procedures are done during the day, they are missing the most”

EU Regulator Poland

Perceptions of UK specific staffing and resourcing issues

The adaptation of the training infrastructure to accommodate working hour restrictions is so variable and, consequently, there are specific impacts that affect different countries, and areas in different ways.

“Well there are places that are giving the training without any problems. They can do it in 48 hours and have been happy and have been compliant for some time. But they’re hospitals where they, their balance of manpower to a service requirement were already correct”

EU Anaesthetics UK

There is a perception both within the UK and from other countries looking in that the UK does not have a current system that allows working time restrictions to work and therefore the impacts are felt particularly strongly. For instance, some suggest that the UK suffers from a comparative lack of trainees which, in turn, means that the impact of the WTRs is felt more keenly. This puts pressure on managers to limit the training that trainees receive.

“We don’t have enough manpower or appropriately trained manpower in the country to provide the service. So therefore if you reduce the hours, the temptation is to make them spend a larger proportion of their time working out of hours, a smaller proportion during the daytime in order to maintain the service and that’s bad for training”

EU Anaesthetics UK

The consultant contract is also felt to be limiting as it makes it difficult and expensive to get consultants to work on-call hours and therefore trainees, who cover a lot of on-call shifts, end up working a significant proportion of their hours without supervision.

“In order to get trainees present during the day somebody’s got to do the night work. So the logical extension of that is that consultants may have to do the night work and the current consultant contract makes that extremely expensive and very unpopular”

EU Anaesthetics UK

Thus, looking at these staffing issues in more detail it seems that the matters raised do not suggest that junior doctors cannot be trained in 48 hours. Instead, the problems stem from the fact that the role of trainees means that those 48 hours cannot be used efficiently for training. Too many of the 48 hours will be spent doing tasks that they will not learn from and covering shifts where there are not the cases or the supervision to create training opportunities.

2) Training adapts negatively

With the hours trainees are able to work limited there are concerns that they are forced to make difficult choices about what is a priority. For instance, some stakeholders suggest that the regulations encourage trainees to miss classroom-based training in favour of the hands-on ward experience. As both activities must fit into the working time restrictions, trainees find ways to 'fake' the number of hours spent in classroom based learning by not attending sessions. Here, the regulations and how they are operating in some countries push trainees into a position whereby they feel that they must make compromises, and in some cases 'cheat the system', to allow them to train within the reduced hours.

“Residents manage to get the signature, but whether they did the course fully in reality is a question”
EU Regulator Poland

“When I was F1&2, I was doing so many bad shifts that the majority of my training was in my own time. I had to go to compulsory training days. The fact that they put these on must show that they know you don't get taught much on the awful shifts. When I had a job list of 40 things to do at night and my senior was running around like mad too there was just no chance of training. I was too tired to take it in anyway”
Trainee, UK

There are also concerns that the restricted hours will limit the extent to which trainees can get involved with non-patient related aspects of the hospital. To illustrate, if working hours become precious, trainees must make choices and this will naturally involve withdrawing from non-training related activities such as hospital management. In the long term this affects their career progression into more managerial and strategic positions.

“Trainees just do not get involved in management issues, which I think is bad for the NHS as a whole. And I think EWTD is clearly a factor that inhibits that because if you're not allowed to be in a hospital then you can't be helping with management”
EU Cardiology UK

Others cite the problem that trainees are so keen to increase their hours for training that they come into work unpaid during their personal time so that they can observe and increase their time on the wards. This is concerning as it demonstrates efforts to *get around* the regulations which is not a desirable or legitimate way to make the WTRs work. Furthermore, it also indicates that the beneficial impacts of restricted hours, such as an improved work-life balance, are not being felt. Indeed it could be seen as symptomatic of a view that the training infrastructure in place has not sufficiently adapted to the reduced hours that are available.

“They quite often come in to get training experience and you don’t actually know that they’re not meant to be there. But they are looking for experience in their own time and especially when they’re supernumeraries because if they’re supernumerary it’s not obvious that they’re not meant to be there”
EU Anaesthetics UK

“During my rota I work a week of long days and it’s bearable till day 4 when the fatigue kicks in. My wife tells me that I am grumpy, snap easily and act clumsily when I get home and that’s in a stress free environment. The last three days are always hard and I could never promise that I don’t make mistakes”
Trainee, UK

In addition, where trainees form a significant backbone to the running of hospitals, with a large administrative and on-call role, it can be very difficult to ensure that rotas allow for training opportunities. A large proportion of a trainees’ time can be spent covering on-call slots and doing patient related administration and therefore their access to consultants and apprentice style learning opportunities can be limited. In a system or specialism that heavily relies on this form of learning, restricting the hours trainees can work impacts negatively on their training. The most affected specialisms would be the ones where trainees have to do the most night shifts e.g. obstetrics and emergency medicine. In such cases, trainees are required to make four night shifts in a month, which takes away the time they can spend in the treatment centre during the day. Since the majority of courses and medical procedures are done during the day, there is a concern they are missing the most.

“And so if they end up, even if you have people in teaching them at night or teaching them in the evening, they won’t get the spectrum of exposure to cases that they need. So it’s having a detrimental effect on the number of cases that they’re seeing and the breadth of cases they’re seeing is suffering”
EU Anaesthetics UK

The impacts of training on such specialisms are already being seen with training taking longer and frustrations arising as a result. For example, a stakeholder explained that there are pressures in Spain for the training period to be extended so that trainees do not lose out on opportunities to get involved in research, as well as their core training. Specialisms in the UK also mentioned that this was an issue for them too.

“In Andalucía if you overpass the maximum of on-call hours per month you do not get paid for the extra time you work. The main problem of this situation is that research has to be done after work because we attend a lot of patients during the working hours. Many residents do not get involved in research projects because of this, which is probably the biggest lack of our training system. Now the government is working on a new law to re-organize the training. This process will probably lead to an increase in the number of years of training for some specialities”
Trainee, Spain

“Craft specialty and you’ve got to have the skills to be allowed, you’ve got to demonstrate you’ve got the ability to be allowed off the reigns for more work. And

I think in a highly specialised field if they're not getting the case experience it's taking them longer to get there and even longer before they're useful"
EU Anaesthetics UK

3) Trainee morale suffers

If the training is not sufficiently adapted to the directive there is a risk that the number of trainees failing courses will rise and that this will damage morale. Indeed, those working in the UK reported that this was *already* happening.

"We're definitely seeing evidence, we've got various milestones within the training, we have something called the Initial Assessment of Competence which would normally, we used to be passed about three months when now the average is taking four months"
EU Anaesthetics UK

This issue was believed to be surmountable. Specialism's suggested that flexibility is key here and that training needs to be conducted over a longer period of time to ensure that trainees get the guidance they need. They were, however, keen to stress that for those progressing quickly then their career development should not be hampered by these longer time frames.

"And if somebody's doing well and progressing well they could move on faster rather than having to give them a failing report and give them an extension"
EU Anaesthetics UK

In this sense, training is affected by the fact that there is little effort within the system to mitigate impacts and so the result is that trainees simply fail their courses. For instance, trainees in the UK report feeling very isolated as changing shift patterns mean that they have fewer opportunities to work with others and receive less supervision from consultants.

More broadly, some trainees and Royal Colleges/speciality representatives working in the UK suggest that a reduction in trainees' hours has resulted in them having less supervision and feeling more isolated at an early stage of their career where they would prefer to have more support. This, in turn, has negatively affected their morale as they feel less connected to their peers and superiors and, furthermore, has meant that they don't feel as though they are part of a team. The concern here is that it will mean that, without any team spirit, medicine becomes less of an attractive career proposition and so people will either leave the field entirely or will work elsewhere where the working time regulations are more flexible.

“I think that the long term impacts of the EWTD will be a decreased sense of team. There is no feeling of unity and we all feel that we are overstretched. This is already starting to show with more and more people leaving medicine for other sectors or moving to Australia!
Trainee, UK

4) Trainees see fragmented cases

Although most state that working restricted hours will bring value to patients in that there are likely to be improved levels of safety there are some longer term concerns. For instance, some stakeholders mention how working time regulations will inhibit the chance for trainees to observe the trajectory of disease within an individual patient.

“The involvement of an individual trainee with an individual patient is now so fragmented that they neither learn from the natural history of illness as they see it in one patient, nor do they get formal teaching or supervised care looking after the same patient”
EU Cardiology UK

This fragmentation is seen as damaging to training as trainees see symptoms and outcomes at a point in time and do not necessarily witness the sequence of events that can occur within an individual patient. Thus, this may negatively affect the care they are able to offer in the long term.

4.2 How might training issues be addressed?

In spite of the barriers mentioned in this report, those supporting the EWTD believe that reduced hours can be implemented without any negative affect on training. A number of solutions are suggested to manage this including better designed working rotas (which are centred around training needs rather than staffing needs), the greater use of technology and simulations, the use of training sessions that can be undertaken by trainees from a number of areas; and a greater use of more junior staff members for some of the less skilled duties that staff can take on.

“The problem is not the working time directive, the problem is our working patterns do not allow trainees to train ... even in hours they do not get the experience and training that they should have”
EU Paediatrics UK

Participants from countries that have smoothly introduced working time restrictions argue that the quality of the training provided is more important than the time that trainees spend working. For example, a regulator from New Zealand explained that there were no major problems with training associated with introducing restricted working hours (locally tailored

but hours usually limited to 38 hours per week). This was because trainees are judged on the number of operations they have done rather than the time they have spent working.

“Rather than time on the job, it is much more an experimental type learning environment... if you are given a choice between a purely time based training environment rather than a competency based system, the competency based system should win every time”

Non-EU Regulator New Zealand

Norway would appear to be the country that has adapted most readily to working hour regulations. Trainees there are limited to 40 hours yet training is still considered to be effective due to a number of reasons. First and foremost, Continuing Professional Development (CPD) is not only a reality, it is much more valued. Therefore, it does not matter as much if not all the key issues are covered in formal training. Additionally, there is a more favourable doctor to patient ratio and the medical staff there are seen to work more efficiently, making better use of handovers and meetings for instance. Specific changes have also been made which have been beneficial, such as excluding consultants on call in some highly complex specialities (neo natal surgery, transplantation). Finally, there is seen to be a much stronger emphasis on the importance of securing a favourable work-life balance and, therefore, the EWTD is viewed positively as being a useful tool to achieve this.

Extrapolating from this, the remainder of this section explores the measures that could be implemented to ensure that training is not affected.

A change in attitudes towards WTR

While the greatest concern about the *impact* of working restricted hours relates to training and capacity, with regard to actually *implementing* the EWTD, stakeholders speak most often and strongly of there being cultural resistance to change in many countries and amongst some specialisms in particular. Some believe that there has been a traditional macho culture in some areas where people expect to work long hours, and take pride in the fact that they cope with working hours that many people would struggle with. Regulators from some countries suggest that this view is more prevalent amongst older and senior clinicians who feel that younger people should have to manage the long hours that they coped with as trainees.

“There’s an uncomfortable feeling that the older consultants have around letting go something that was a crucial part of the way that they were trained”

Non-EU Regulator New Zealand

Indeed, this cultural transition to working restricted hours is seen as being particularly problematic for those who have been working in the medical profession for some time and,

consequently, were used to working the hours they wished or needed to. To illustrate, a specialist operating in France explained that there some physicians had had to learn to adjust by counting the number of hours they worked when, previously, no such restrictions were in place.

However, while seen as difficult there is evidence to suggest that this barrier is surmountable with time. This view is particularly prevalent among regulators from Australia and New Zealand where those working in the profession have experienced longer periods of reduced working hours. Such stakeholders suggest that older consultants have been won over with time as they have been able to witness how, in spite of working restricted hours, the concerns they had have not materialised. This view is even expressed by regulators from other EU countries, albeit to a lesser extent, who state that they are now less concerned about the working time regulations that they were when they were first introduced.

“My first view was that this [EWTD] was impossible. The resources would not be in place to manage and training would be affected. My views have moderated a little although I still think there are problems”
EU Specialist Surgeon Germany

Increase the length of time for training

An instinctive antidote to the squeeze on hours is to extend training over a greater number of years. This is, in many respects, the simplest option as it does not require any changes to the method, content or style of training. It was thought that it would be helpful if there could be flexibility here, however, to ensure those that are high-flyers are not held back.

“It would be better to have planned the extension and accept that that is going to take a bit longer. And if somebody’s doing well and progressing well they could move on faster rather than having to give them a failing report and give them an extension”
EU Anaesthetics UK

This counter measure was not really given a lot of credence though, particularly as the UK already has some of the longest working hours. Furthermore, there was the suggestion that extending the training over a greater number of years would negatively affect trainees’ career progression in that they would not reach the senior positions until they were reaching the end of their working lives, if at all. This, in turn, could affect motivation and morale.

“You can increase the length of time spent in training, which is the most logical. From that point of view I think both in Malta and in Britain we’ve got the longest training period. Let’s say in surgery, after graduation it’s ten years. I don’t think we can extend that otherwise specialists, people will become specialists when they’ve got a long, grey beards, do you see? And I don’t think that will be either acceptable, or even advisable”
EU Regulator Malta

However, there is the argument that if no other changes are made to mitigate the reduced training hours then failing to extend the length of time for training is short sighted as trainees will fail to complete within the required time.

Decrease the width of training

As well as increasing the length of training, there is the option to decrease the breadth of the training. By shortening the curriculum trainees have less to learn and therefore can do this within fewer hours. As the stakeholder below highlights though the problem with this is that specialisms become narrower which is not necessarily desirable. The result would be a workforce that looks very different and, potentially, is not fit for purpose.

“We can decrease the width of the curriculum. We can decrease the width of the curriculum but at a cost, because you’ll have specialists who are more narrow, and in a country like ours, where the catchment for the subspecialties will be small, then there will be a problem with volume. And if you insist, as you would, naturally, to have generalists, the generalists will be poorly trained and will need a lot of help”
EU Regulator Malta

Improve the efficiency of training

Improving the efficiency of training arose as a way of ensuring that the quality of training can be maintained within reduced hours. Opportunities to do so included things like:

- **Better handovers** between staff to ensure that patient care does not suffer due to lack of continuity. Stakeholders from countries (such as Norway) that have had shorter working hours for a longer period of time suggest that they can solve continuity problems if handovers are made to be effective.
- **Simulators** are seen as a useful method of helping trainees to experience unusual and complicated situations. They can be used to ensure that all trainees gain some experience of these situations – something that might not occur when working restricted hours – where they would have fewer opportunities to face rare events.

- A focus on improving the **utilisation of trainees' time** has helped implementation in the Netherlands and Austria. Reviewing job descriptions and responsibilities has assisted in stopping trainees from carrying out routine administrative jobs so they can focus more of their time on training, whilst achieving greater efficiencies. This demonstrates a need to make sure that people are working at the correct level – often so more junior staff members can take over some of the more routine and basic tasks.
- **E-learning** allows trainees to learn from professionals who may be particularly skilled at training young doctors. One potential disadvantage of a more practical apprentice system is that training doctors may not always be the best use of some consultants' time.

“You can make surgical training more efficient. Now this sounds very nice, and you can do a lot of things, I mean maximise training opportunities, you can do service reconfiguration, we can utilise the latest technology to reduce running costs, for example the use of simulators, virtual reality, video conferencing, e-learning, electronic controlled assessments, and hopefully these all happen outside hours of work”
 EU Regulator Malta

In suggesting these alterations, stakeholders drew on the experience of those working in other countries where the impact of working restricted hours has been successfully managed. For example, in Holland the rota system has been adapted and it has been ensured that junior doctors only undertake appropriate tasks to make best use of their time. They have also adapted rotas so that doctors do not sleep on call and, instead, they work their hours.

Making non-patient training exempt

There was suggestion that training should be considered in two parts – patient and non-patient – and that the latter should be exempt from working time restrictions. The emphasis instead is in restricting the hours trainees spend with patients but allowing non-patient training to take place outside of the restricted hours. This is perhaps not an ideal solution though as it fails to recognise the role of the directive in achieving a positive work -life balance.

“One does not count on call hours and training on things, or training which is not connected with patients, which is not work related, let's say on simulators that we have been describing, then it might be enough”
 EU Regulator Malta

As an alternative, an approach taken in France is to ring fence the training time for junior doctors. This ensures that the 48 hours they are limited to is not eaten up by on-call shifts and is instead utilised in a way that maximises training opportunities. This approach was also endorsed by some working in the UK as being a potential way forward for the profession.

“You have shift work and non shift work is the time spent on other tasks and here you have things like teaching, researching, and many other things like that, it’s called non shift work and the fact that you don’t have the necessary resources well this is a handicap and because of this physicians do only shift work”
EU Emergency Medicine France

“Protected time for non-patient training related activities would I think be sensible for trainees”
EU Cardiology UK

However, while this approach has been successful in ensuring that training hours are not reduced, trainees have also found that they have less time for activities such as research and management that fall outside the core shifts. This can prove detrimental by limiting the non-patient related training opportunities.

“When they start doing 48-hour workweeks, well, if we don’t manage the practitioners well enough, you cannot give our practitioners any non shift work. Non shift work, by this I mean time that is not spent in hospital with patients. Shift work is the time at work, time spent being a doctor only”
EU Emergency Medicine France

Reforming training

In Denmark there were initial problems with the implementation of restricted hours. For instance, some senior surgeons felt that young doctors could never reach the standards that they had done by working reduced hours only. A particular problem of there not being enough supervised and observed surgery arose and, in turn, this led to training reforms which commenced in 2004.

“The surgical societies and the young doctors claimed that the training possibilities were too bad [with the restrictions] and especially for technical training using operations under surgery, under supervision and so on. So that was why the government commission said that they should look upon the whole system of postgraduate and medical training and gave a heavy report which has been the schedule and the framework for this reform which started in 2004”
EU Regulator Denmark

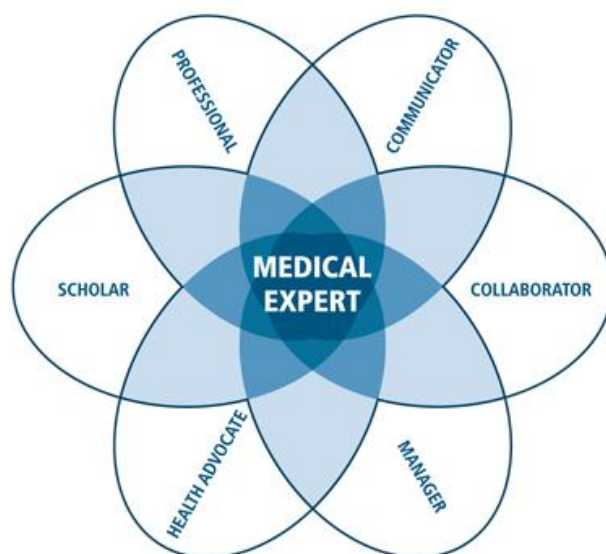
As a result of these reforms, each competency had to be checked by senior doctors and trainers in their hospital. The new system was based on the Canadian CanMED training system where trainees were assessed specifically on their achievements in seven roles as a doctor. The advantage of this system is thought to be that there are measures in place to

ensure that trainees are developing all the competencies they need for their careers, as highlighted by the case study below.

CanMEDs – framework for medical education

CanMEDs is a framework for medical education of essential physician competencies. Developed by the Royal College of Physicians and Surgeons of Canada, CanMEDs is primarily an initiative to improve patient care. The focus of CanMEDs is on articulating a comprehensive definition of the competencies needed for medical education and practice.

The CanMEDs framework is organised around seven Roles: Medical Expert (central Role), Communicator, Collaborator, Health Advocate, Manager, Scholar and Professional.



The framework is competency based. "Competencies" are all observable knowledge, skills and attitudes. Competencies are organised around seven key physician "Roles". These seven Roles are clarified and defined by key competencies. Each key competency is been further outlined into multiple enabling competencies. The enabling competencies specify the behaviours, skills and attitudes that must be displayed by the postgraduate learner. These enabling competencies are outlined in detail in the CanMEDs framework.

Each CanMEDs Role also has a list of "Elements" which are a series of terms or phrases that describe the Role in more detail. The elements can be used to further define each Role. These descriptors or elements can be used to understand the Role in more detail.

Continued Professional Development

As mentioned in the introduction to this section, several stakeholders talked about Norway and the reasons why training there can be accommodated within the EWTD. One of the reasons given was the focus on CPD and ongoing training. Training is not restricted to a

finite period, after which the individual is qualified and given little further training. CPD is given great credence and therefore if gaps remain at the end of formal training it is not viewed as problematically as it would be if CPD was not available.

“So Norway actually extend the training, but not formally. Rather formally, but not as training, it is then called continuous professional development, but it’s still continuous training, so it’s sort of like a telescopic extension of the training”
EU Regulator Malta

The important thing here seems to be how training is viewed and therefore the implications if that training does not quite cover everything that it should. In Norway this is accepted and CPD can pick up the gaps, in other countries where this is not the case the formal training period must cover everything with there being no room for continued development.

Opt out for some specialities

For some stakeholders, the only way to mitigate the impact in some specialities is for them to be excluded from the directive. This was particularly true of those complex specialisms such as anaesthesia.

“They do have some problems, for example in highly complex subspecialties such as transplantation, neonatal surgery and anaesthesia, that is neonatal anaesthesia, as well as consultants on call in small hospitals. They do have problems, but they solve them by direct opt out, in other words a direct agreement between the hospital management and the doctors’ union for, particularly for those small groups”
EU Regulator Malta

This approach to mitigating the impact calls for discretion, recognising that some specialities cannot adapt to the restrictions imposed by the EWTD. This may of course not be possible but does represent a fairly widespread view that the directive is rigid and could benefit from some flexibility where a strong and justified case can be made.

Better use of innovative training

Altering the way training is delivered and thought about is the signature of countries that have had the greatest success in implementing the EWTD. They have seen the directive as an opportunity to restructure training and make better use of the time available. For example, where the volume of cases is low or certain procedures a rarity, simulation could be used to create training opportunities. This gives greater control of trainees’ time and the exposure to procedures they are subject to. Indeed, most of the respondents we spoke to expressed enthusiasm for working in this way more frequently.

“But you could mock that up nowadays with simulation. We could do a cardiac arrest. We could do a theatre disaster with a simulated situation in, electively in daytime hours”
EU Paediatrics UK

Better use of consultants

In the UK in particular the utilisations of consultants is seen as one way of lessening the impact of the WTRs. The consultant contract is raised as a barrier to this but in the long term some stakeholders describe an ambition whereby consultants work a greater number of on-call shifts and are therefore available for training during on-call shifts.

“We’re seeing an increasing number of consultants that are contributing to the out of hours service but not at the rate that perhaps it should be to mitigate all the effects and to optimise training”
EU Anaesthetics UK

“In Denmark I find that we have a big problem in a lack of senior doctors to educate a rising amount of young doctors. We have too many hours on our own - without supervision - and if you could put in as many hours you like, there is still a limited quality of education, if you don’t get supervision - how will you learn what you did good, could do better and worst did wrong!”
Trainee, Denmark

To make more effective use of consultants there are issues about the volume of such posts. Again the contract is brought up as causing difficulties but were this not in place, more consultants who are paid less is seen as a long term strategy to reforming training to make it possible to deliver it within the restrictions imposed.

“To expand consultants and to if possible get some good middle grades from overseas but that’s very difficult with the immigration rules but the financial climate is making that extremely difficult”
EU Anaesthetics UK

Altering the contract is a long term strategy but the fact that it was raised by a number of respondents indicates that it is a real hurdle to overcome in the UK. Currently, there is a perception that if the WTRs are to be fully embraced in the UK then revisions to the consultant contract will be a key consideration.

Rotas

As trainees are required to plug the on-call gaps on the rota, the Royal College of Anaesthetists has suggested that they work a maximum of 1 in 8 nightshifts to ensure that the majority of their time is spent covering day shifts where the opportunities and supervision are available. In Spain this approach to rotas and limiting night shifts has been implemented and is working reasonably well.

“A minimum rota of one in eight is, anything more onerous than one in eight is going to be very detrimental to training”
EU Anaesthetics UK

“In Spain training is correlated to working with patients. Having a control of the number of night-shifts per month (a maximum of seven by our law) due to the EWTD helps to attend more days to the Hospital during activity hours (from 8am till 3pm). This allows residents to spend more time with patients, and therefore to be trained better”.
Trainee, Spain

However, there is speculation that simple lack of manpower can make this ratio impossible. Furthermore, a greater number of trainees per consultant makes it harder for trainees to receive the full training that they need.

“There’s nothing wrong with 48 hours. If we have enough manpower so that we were flying with the one in eight ratio and we had 48 hours we could train people”.
EU Anaesthetics UK

Thus, the evidence from this work is that there are a number of mitigating actions that can be taken to ensure that training is not adversely affected by WTRs. In doing this though, the GMC will need to learn from those countries where implementation of the EWTD has been successful. Norway is one such example of this, as highlighted in the case study below.

The Norwegian experience

When thinking about the EWTD, Norway is an interesting case. Many European respondents cited Norway as an example of a country that has successfully mastered the delivery of medical training within restricted hours. However, whilst talking to the Norwegian respondent it quickly became evident that he was fascinated about why he was being interviewed at all. It is this contradiction that is at the heart of the Norway experience – Norway has such a long standing commitment to the importance of people having a work-life balance that working hour restrictions have been in place for many years and there is no resistance amongst the medical fraternity. Indeed since 1970 the Norwegian Working Environment Act has restricted weekly working hour limits to a maximum of 40 hours. Such a long standing commitment to reduced working hours means that medical training has and continues to be successfully delivered within even tighter confounds than the EWTD.. Reasons given for how Norway delivers training successfully in reduced hours include:

1. The social dimension e.g. quality of life, is considered most important. They regard the EWTD as a useful tool that provides support for individuals and families to achieve a good balance between opportunities for training, patient safety and doctors' quality of life, which includes a reasonable length of training prior to specialization and the social dimension e.g. the balance between career, quality of life and family life.
2. Great emphasis on CPD after being included on the Specialist Register, on the part of both the Heads and the trainees themselves, to make up for the shortfall in pre-specialisation exposure.
3. A more favorable doctor-patient ratio in Norwegian hospitals imposing a 40 hour week by law.
4. More disciplined attitude resulting in increased efficiency in compliance and work output of doctors.
5. Cultural differences leading to more efficient organisation.
6. Their hierarchical structure avoids a rigid pyramidal model, since the latter is considered to breed "a junior doctors' proletariat".

Despite all this, problems do arise even in Scandinavian countries: In highly complex sub-specialties e.g. organ transplantation, neonatal anesthesia and surgery, as well as consultants on-call in small hospitals. They solve these by direct agreements between hospital management and doctors' unions, which may be considered as a very limited mini-opt-out.

5. Measuring impact of EWTD

5. Monitoring the impact of EWTD

Measuring the impact of the EWTD and similar working time regulations was not something that any of the countries we spoke to were doing. There was some agreement that it was useful but other respondents who felt that the search for an impact implied that there would be a negative one to find. Whatever position was held, there was widespread recognition that measuring the impact would be almost impossible due to the confounding factors and lack of pre-data.

5.1 Issues around measuring the impact

The trouble with trying to measure the impact that the EWTD has is that there are many other variables that come into play. Where it may be possible to identify the possible metrics and measure these, trying to attribute changes to the reduced hours trainees are working is a minefield that many thought would be extremely difficult.

“It is really difficult to get objective evidence”
EU Paediatrics UK

This difficulty in objective measurement is the reason that it has so far not really been done. None of the countries we spoke to were, or intended to, assess the impact of the directive. The slight exception to this is in Poland where they have noticed that the Ministry now received more requests to prolong the residency. This clearly shows, according to the respondent, that residents do not manage to do all the training in the required time. Similarly, the Royal College of Anaesthetists have noticed that trainees are taking longer to move through the system.

That was admiration and interest in the GMC thinking about measuring the impact though, along with other respondents who questioned the value and necessity. There was also disagreement about what any measurement should be looking at – the negative impact to training or the positive impact to work life balance and patient safety. Indeed, stakeholders were keen that any measurement was not used as a tool for arguing for the repeal of the EWTD but, instead, kept the focus on understanding the system in place better with a view to improving it.

“But I hope the end game is to measure properly the effects of improving the system for patients rather than we’ve got to repeal the Working Time Directive”
EU Paediatrics UK

The start point is an interesting concept to think about as in some ways it is a measure of how accepting countries are to the directive. Looking for negative impact implies a position

of resistance. Looking at the benefits that can be achieved, the ethos from which the directive was spawned, implies some acceptance that the directive is not going anywhere and therefore needs to be successfully integrated.

5.2 Qualitative and quantitative metrics

As already mentioned, respondents were not very forthcoming as to the best metrics to use. This was largely because they had not contemplated measuring the impact of the EWTD so approached this section of the discussion with limited reference points to fall back on. However, once we gave stakeholders time, they were able to think of a number of metrics that ought to be covered as part of any assessment of the impact of the EWTD.

Notably, stakeholders were unable to think of any one key question that would answer the question as to the impact that the EWTD has. Indeed, the impacts are thought to be so varied that, in turn, the questions assessing its impacts will also need to cover a wide range of issues. This suggests that the GMC will, in time, need to consider whether a single score benchmarking the impact is appropriate or whether a composite measure will allow for more nuance and detail.

The metrics discussed by stakeholders covered more subjective measures (such as emotional impacts) through to tangible outcomes. The main issues mentioned are listed below and included:

- trainee completion rate;
- how many procedures a trainee completes;
- trainee confidence;
- trainee competence;
- patient outcomes;
- patient safety;
- patient experience; and
- trainee knowledge, efficiency, effectiveness, clinical reasoning, management of ambiguous decisions, teamwork, social impact.

Furthermore, such metrics need to be measured from all angles, allowing patients, consultants, nurses, peers and the trainee themselves to contribute. Only by doing this would it be possible to capture a *rounded* assessment of the impact of the WTRs.

“It has to be assessed from the point of view of peers and the recipients of the service, which are the patients. So basically the test would be based, the

assessment test would be based on matrices which you can draw out of a good definition of professionalism in medicine”
EU Regulator Malta

However, even if assessed and measured over time there remains the difficulty of attributing any changes to WTRs alone. This is particularly true at the moment given that impending NHS reforms will be a huge confounding factors if measuring any of the above.

5.3 Sources of existing metrics

Developing a composite measure does not necessarily mean collecting new information. A wealth of data is already collected and it may be possible to utilise these existing metrics.

The **NHS staff survey** includes questions that cover staff views on:

- Whether they feel their Trust is committed to helping staff balance their work and home life.
- Whether they feel that they work in a team that is effective.
- Whether there are enough staff at this Trust for me to do my job properly.
- Whether there is strong support for training.

The **CQC patient surveys** include questions such as:

- Did you have confidence and trust in the doctors treating you?
- When you had important questions to ask a doctor, did you get answers that you could understand?
- How would you rate how well the doctors and nurses worked together?

Other available data:

- Hospital episode statistics
- Exam pass rates, attrition from courses, trainee feedback.

Whilst the metrics above do not by any means cover all the aspects that would required for a composite measure of impact they do demonstrate that there is a great deal of existing data available that could be utilised to monitor the impact the WTR's is having. The key task will

be identifying the range of data is available and how best elements can be extracted so that real insight can be gained into the impact WTRs may or may not be having on patients, trainees, hospital culture and all the other areas identified in this report.

6. Conclusions and implications

6. Conclusions and implications

That there are impacts resulting from the implementation of the working time restrictions goes without saying. Indeed, what this research has shown is just how varied these impacts can be ranging from emotional effects such as lower morale through to the very tangible risk that restricted hours poses to the quality of training received by trainees and the subsequent effect that this has on their career. Furthermore, the evidence from this research suggests that these impacts vary according to specialism, with those working in more practical roles (such as anaesthesia and surgery) bearing the brunt.

But, it does seem to be the case that mindset and attitudes shape how keenly these impacts are felt and, while positivity cannot smooth the transition to a restricted working hours culture entirely, it can go a long way to helping. Indeed, this view was reinforced by the experience of those working in Scandinavia who had fewer reservations about such directives and so found ways to make them work without negatively affecting the quality of care.

“A good long term outcome will be when the NHS realises what the EWTD is for. When they get rid of the 100 hour weeks and reduce doctor fatigue, they will have a happier work force and less legal cases from patients taking legal action due to mistakes made by the tired doctors”
Trainee, UK

What is more, even among those who paint the darkest picture about the various scenarios that could emerge as a result of the WTRs there is an acceptance (albeit a grudging one in some cases) that the principles underpinning the directive are worthy and should be pursued as the rewards are great; higher levels of staff satisfaction, improved patient safety and a more diverse workforce as a career in medicine and family life will no longer be as mutually exclusive as, perhaps, they have been in the past.

However, in light of the potential ramifications of the WTRs and the fact that there is a certain amount of scepticism about it in the UK it would seem propitious that the GMC is establishing whether it is both desirable and possible to measure the impact that the directive has. On the first point, there is a general consensus among stakeholders that if a sensible and objective measurement can be formulated then this, of course, would be a welcome move. Indeed, a great deal of admiration for the GMC was expressed for it even thinking of attempting this, such are the complexities involved.

While welcome though, working towards a useful and definite measurement will be very challenging. Given the number of different impacts that WTRs can have, then any future

longitudinal survey will need to take account of all of these – either scoring them separately, or combining them in a composite measure. So, the survey would need to look at emotional impacts (such as confidence and experience) as well as much more practical matters (including completion rates and outcomes). On this, difficult decisions would need to be made about what the most important impact is, and how each should be scored. What is more, such a questionnaire would need to look at the issues from a range of angles covering off the views of the patients as well as medical staff.

This is, therefore, no easy task for the GMC. Furthermore, the climate in which it is attempting to understand this matter is increasingly challenging; many suggested that it will prove difficult to untangle the impact of WTRs from those caused by the wider NHS reforms that are due to be implemented shortly. However, while problematic, there was a strong sense that measuring the impact of restricted working hours would be a valuable exercise, and an area in which the UK could lead so others could follow.

7. Appendix

7. Appendix

7.1 Sample

EU regulators

Malta

Austria

Czech Republic

Denmark

Hungary

Holland

Italy

Germany

Poland

Portugal

Sweden

Non-EU regulators

New Zealand

Australia

Norway

Switzerland

European specialist societies

Emergency Medicine (French representative)

Cardiology (UK representative)

Anaesthetics (UK representative)

Paediatrics (UK representative)

Obstetrics (Belgium representative)

Surgery (German representative)