

GUIDANCE ON WORKING PATTERNS FOR JUNIOR DOCTORS

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For action by:

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FOREWORD

From August 2004, the provisions of the Working Time Directive will begin to apply to junior doctors in the UK. This deadline is not negotiable. It is fixed in law. We must ensure that doctors can work safely and effectively without excessive workloads that might compromise patient care.

Accepting this as our starting point, we need to maintain the highest standards of safety and quality in the care we provide to our patients. We know that we will have to look constructively at on-call rotas, at our training requirements and at how we organise cover. But we have to do so from a clear perspective that places the highest premium on patient safety.

We need to ensure the continued viability of the fullest range of locally accessible services. We need to continue to develop the concept of clinical pathways and centres of excellence. And, we must ensure that any extra resources that are needed are focused accurately on the right solutions. We do not want to waste precious HPSS resources on solutions that only offer short term stop-gaps or which trap doctors in posts which won't allow them to develop their skills to the fullest possible extent and which won't improve patient services.

But we are not starting from a blank piece of paper. A lot of work has been done, by the Department, the Royal Colleges, the BMA and the NHS itself. This document contains some good examples of hospitals that are already tackling this issue.

There will be tough decisions to make; but we also believe that we should look at implementation of the Directive as more of an opportunity and not just as a threat - an opportunity to look at the skill mix across our hospitals and how we can make better use of all of the talents available to us; an opportunity to reduce medical workload and encourage greater career opportunities for non-medical staff. We must look critically at the efficiency of many of the traditional ways of doing things and whether they can't be improved - to the benefit of both patients as well as doctors and other healthcare staff. We need to be imaginative and to use solutions which don't just involve recruiting more and more doctors, important though that is. That is why the Department is funding a number of pilot sites to test approaches to implementing the Directive - testing out solutions and helping others prepare for 2004 and beyond.

More importantly, we need to take full account of our destination point, concerning the configuration of health services we want for 2009 and beyond. We want an expanded service providing faster access to higher quality care. We hope it will be this vision that drives forward how we implement the Directive, in partnership with all the major stakeholders - the Medical Royal Colleges, the BMA, the Postgraduate Dean, doctors at all levels, and Trusts. This document gives some useful ideas and examples about how this can be done.

GUIDANCE ON WORKING PATTERNS FOR JUNIOR DOCTORS

PART 1: - OVERVIEW – WHAT NEEDS TO BE DONE

1. INTRODUCTION

- 1.1 The past year has seen a renewed focus among all stakeholders – Government, Royal Colleges, Improving Junior Doctors' Working Lives Implementation Steering Group, Trusts, the Dean, the BMA, and junior doctors themselves - on the way junior doctors work within the HPSS.
- 1.2 Although the next key date for changes to regulations is not until August 2004, the changes are so profound that it is essential that the services takes full advantage of the preceding months to prepare for change. Decisions will have to be taken early in the preparation phase so this document should be regarded as the start of a process that if it has not done so already, must get underway immediately in all HPSS organisations.
- 1.3 Two recent developments make tackling junior doctors' hours an imperative. The first is the new junior doctors' banded contract¹, introduced in December 2000, which has refocused attention on the New Deal for Junior Doctors² hours requirements. This requires employers to compensate junior doctors for work at high intensity or during unsocial hours through a salary multiplier, with the compensation becoming a financial penalty on the employer when the junior doctor is required to work outside New Deal hours and rest criteria². Unlike the original agreements made at the time of the original New Deal agreed by the Government, the BMA and the (then) Conference of Medical Royal Colleges in 1991, the new contract has incorporated hours and rest requirements in the employment contracts of junior doctors. **From August 2002 for PRHOs, and from August 2003 for SHOs and SpRs, it will constitute a breach of contract to require a doctor to work outside these criteria, or for junior doctors themselves to work outside them³.**
- 1.4 The second is the rapidly approaching requirement to bring junior doctors within the scope of the European Working Time Directive (EWTD)⁴. The first milestone for implementation of the hours and rest criteria of the Directive is August 2004⁵. Furthermore, a judgement in the European Court of Justice arising from the directive⁶ has now changed the traditional definition of work that existed for junior doctors. The effect of this judgement is likely to make **all resident hours of duty count as actual working time under the terms of the directive.**
- 1.5 This document provides advice and support for all those involved in ensuring delivery of both the New Deal and the European Working Time Directive for junior doctors. It necessarily focuses on the immediate imperative of meeting New Deal targets for hours and rest, but also emphasises that the more stringent EWTD requirements will soon follow and that it would be foolish to plan and introduce new working patterns which do not also comply with the EWTD. **It does not replace or supersede the current Terms and Conditions of Service for junior doctors and should be read alongside them.**

- 1.6 In the context of this document, for the sake of clarity and consistency the term ‘junior doctor’ is used to describe a doctor undergoing a prescribed course of training in the grades of Pre-Registration House Officer, Senior House Officer and Specialist Registrar.
- 1.7 The document also looks at the implications of implementing the New Deal and the EWTD for service delivery and training, as changes to both will be needed if we are to continue to train junior doctors appropriately and to deliver high quality services to patients. The UK model of training, which rightly has a high reputation for producing excellent clinicians, has relied on junior doctors spending long hours at the workplace during which they both developed their skills and delivered services. This will not be possible in the future as hours are reduced and new arrangements will need to be put in place to maintain both high quality training and effective service delivery, making the best use of all healthcare staff.
- 1.8 The traditional view that the number of hours is directly proportional to the quality of training has been rightly challenged by several agencies recently⁷. Some of the Royal Colleges have made good progress on the concepts of competency based assessment and progression⁷. This will be a key factor in developing a new culture that views quality of training and quality of trainee as the important issue – i.e. the trainee’s competency in performing his or her tasks, not the total number of hours that he or she spends in the workplace. It should be possible, within the working pattern of a 48-hour week, to produce trained doctors fully able to deliver high quality of care. We may well, however, have to examine closely the methods by which this is delivered and assessed.
- 1.9 The major group that is going to have to be addressed with respect to educational and service balance is the SHO grade. The arguments for improvement have been well rehearsed^{8,9}, and have led to a specific commitment in the NHS Plan to ‘modernise’ the grade¹⁰. The action flowing from the proposals for reform of the SHO grade contained in the consultation paper “Unfinished Business”¹¹ issued by the Chief Medical Officer in England in August 2002 will be critical in this respect.
- 1.10 It is important that all those concerned in the delivery of the EWTD for junior doctors - Trusts, the Medical Royal Colleges, CoPMeD/Postgraduate Dean, the BMA, the UK Health Departments – work together to formulate new ways of working and training that can satisfy the criteria of the EWTD and New Deal. This document seeks to provide advice on ways of doing this, and includes several good practice tips that have aided compliance both in Northern Ireland and the mainland.

2. THE WORKING TIME DIRECTIVE

Background

- 2.1 The European Working Time Directive (EWTD)⁴ initially excluded junior doctors across Europe. However, after a process of negotiation, a timetable of staged implementation was agreed by Member States in May 2000⁵ – on the back of a clear intention that the hours limits in the Directive *should* apply equally to junior doctors. This is to be welcomed as an important measure aimed at improving the quality of patient care and safeguarding the health and safety of both doctors and patients. The staged implementation means that the full ‘**48 hour week**’ does not have to be introduced before **August 2009**; but that an interim position of a **58 hour week**, with significant changes in rest requirements, will come into force from **August 2004**. Junior doctors should in any case be working no longer than 56 hours a week after August 2003 under the new contract, but until 2004 may continue to provide on-call cover for up to 72 hours provided that their actual working hours do not exceed 56.

2.2 Timetable of implementation

DATE	DEADLINE	COMMENT
May 2000	Timetable set	--
August 2004	Interim 58 hour week	Rest and break regulations apply with any derogations
August 2007	Interim 56 hour week	--
August 2009	48 hour week	May have an interim 52 hour week for a further 3 years until 2012

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

1. 11 Hours Continuous Rest in every 24 hour period
2. Minimum 20 minute break when working time exceeds 6 hours
3. Minimum 24 hour rest in every 7 days OR
Minimum 48 hour rest in every 14 days
4. Minimum 4 weeks annual leave
5. Average of no more than 8 hours work in 24 hours for night workers (if applicable)

- 2.4 Under the EWTD it is permissible for individual countries to derogate from certain requirements of the Directive. In the case of junior doctors, the overall hours limit cannot be varied, but the potential exists to derogate from aspects of the rest requirements, in particular the minimum daily rest. The UK is seeking to derogate from the rest requirements so they no longer apply in their current form, in order to minimise compliance difficulties such as conflicts between long shifts and minimum rest periods. However even with derogation, junior doctors will be entitled to ‘compensatory rest’ equivalent to that lost when minimum rest is not achieved.

The SiMAP case

- 2.5 Under the New Deal there is a distinction made between hours of **Duty** and hours of **Work**. The New Deal allows junior doctors working resident on-call to be on **Duty** for periods of up to 72 hours a week, so long as they do not carry out actual **Work** for more than 56 hours. However, in October 2000 the European Court ruled on a case brought by Spanish doctors against their employers. This has become known as the **SiMAP case**⁶. The Court's ruling clarified the meaning of working time within European Law for medical practitioners and essentially means that, under the terms of the Directive, **all hours that are spent resident on-call will be considered as work and will count towards the weekly average**, even if under the New Deal they would have been considered as rest. The hours limits of the EWTD will therefore become limits, not on the hours of **Actual Work** for resident junior doctors (currently standing at 56 per week under the New Deal), but on hours of **Actual Duty**. This will be a major reduction from the current limits of 72 hours per week for On-Call Rotas, 64 hours per week for Partial Shifts and 56 hours per week for Full Shifts.
- 2.6 From August 2004, non-resident doctors may fall under the definition that '*work begins when a doctor is disturbed from rest and ends when rest is resumed*'. However, **doctors resident on-call will have all hours counted as working hours**.

Effects on working patterns

On-call rotas

- 2.7 The extension of the EWTD to cover doctors in training, taken together with the SiMAP judgement, means that the hours limits under the New Deal will be sharply curtailed for **resident doctors**. As indicated in the implementation table in the introduction, from August 2004 the maximum resident duty will be 58 hours, falling to 48 from 2009. These hours will be able to be averaged over an agreed reference period.
- 2.8 **Non resident** doctors who have actual hours of work of 48 or less will be able to remain on On-Call Rotas (OCRs) up to New Deal limits – as their EWTD limit will apply only to those hours spent at their place of work and time spent travelling to work while on call.
- 2.9 As a consequence, for resident doctors, the number of doctors required to run an OCR will increase from August 2004 to approximately 8 doctors *if a 40 hour basic working week is maintained and if fundamental changes are not made to the way in which services are organised and/or the skill mix of the staff who provide them*. However, where creative solutions are adopted, eg rethinking both consultant and junior working patterns and extending the roles of non-medical practitioners, it is possible to construct WTD compliant middle grade rotas with as few as 6 or even 5 middle grade doctors. These types of solutions will require non-medical practitioners prepared to assume a level of responsibility similar to that of junior doctors and working to clear agreed protocols.

- 2.10 If the rest criteria are strictly applied it **is** difficult to achieve OCRs that are compliant with the EWTD. As indicated above it is possible to derogate from the rest and break provisions of the EWTD (**but not from the hours limits themselves**). However, if rest requirements are derogated from, they must wherever possible be replaced with an equivalent period of compensatory rest. Compensatory rest is rest which replaces time worked, so that the total hours worked remain within the 56 or 48-hour limit. Derogating from these provisions would allow greater flexibility in designing compliant rotas while ensuring that doctors in training were not disadvantaged in terms of rest entitlements. Negotiated national guidance on compensatory rest is expected in the near future.
- 2.11 If the concept of compensatory rest is widely accepted and implemented, then lower intensity non-resident OCRs may well remain acceptable working patterns for the future. That being said, it is important to note that achieving this will depend on adequate **numbers of doctors or others being available** to maintain a compliant rota.
- 2.12 In areas where:
- a) there are already a minimum of 7-8 junior doctors on a rota, or other satisfactory staffing arrangements involving consultants and/or non-medical practitioners,
OR
 - b) geography or clinical overlap allow merging of units and rotas
AND
 - c) levels of intensity of out of hours work are limited
- it may be possible to run OCRs that satisfy the requirements of the EWTD, at least until August 2009.
- 2.13 This will be made easier by increased use of cross-cover. Clinically, it has been traditional to maintain clear divisions between subspecialty groups when on-call – even for the most junior doctors. This may no longer be practical as hours limits reduce. Furthermore many of the tasks performed by the most junior doctors in the out of hours period are generic – (as is indicated by most intensity surveys which have requested broadly similar information for ‘what you do when on-call’) – which suggests there is scope for making more effective and flexible use of junior doctors on-call.
- 2.14 It is possible to develop systems where resident junior doctors provide cross-cover for other rotas, for example broad medical or broad surgical rotas, when on-call, as long as they are appropriately supervised by a Higher Specialist Trainee and/or Consultant for each subspecialty that they cover. This ‘generic cover’ system is used to great effect in many medical systems, for example Australia¹², Canada¹³ and New Zealand – where the doctors at PRHO or SHO level are expected to be less sub-specialist when on-call.
- 2.15 This system is not incompatible with remaining attached to a sub-specialist team for the working week, enabling the development of a training and mentoring relationship to be preserved. It is important to ensure that proper supervision and handover regimes are in place.

Shift working

- 2.16 It is inevitable, at least in the shorter term, that increases in shift working will be necessary to implement the EWTD.
- 2.17 It should be remembered that the term 'shift working' can cover a multitude of different working patterns: a split weekend; a week, or half-week, of nights; 24 hours on, 24 hours off. In considering the introduction of shifts it is important to keep the following principles in mind:
- Compliance with the EWTD is **not** optional
 - It is possible to deliver training effectively in shorter working hours and with different types of working pattern^{14, 15}
- 2.18 It is unhelpful to focus on the type of working pattern per se (eg shift, on-call) rather than on whether or not it is a *good* working pattern which delivers training, meets service needs and WTD hours and rest requirements whilst allowing junior doctors a satisfactory quality of life.

3. ADDRESSING THE ISSUES

Monitoring

- 3.1 Effective and accurate monitoring of junior doctors' hours and working patterns underpins any attempt to identify areas of concern, establish good working practices and implement appropriate solutions. Successful working pattern design must be informed by good information on work intensity and hours data, which can only be achieved by properly designed and implemented systems of hours monitoring.
- 3.2 A mutual obligation upon both the junior doctor and Trust to comply with proper monitoring procedures is enshrined in the new contract¹⁶.
- 3.3 The proposed financial penalty for Trusts failing to monitor is severe. If they are shown consistently to fail to implement appropriate monitoring systems, a non-compliant salary multiplier will apply to the junior doctors concerned.
- 3.4 The potential consequences for junior doctors failing to monitor are also severe. If they do not comply, they are in breach of contract and liable to appropriate action by their employer.
- 3.5 Monitoring should normally be carried out at a minimum of twice a year although stable compliant posts may be monitored twelve-monthly with the agreement of all parties. In posts with obvious hours and rest problems, monitoring should occur more frequently, and certainly as part of the evaluation of working pattern or practice changes. Proper monitoring wherever possible and confirmation of New Deal compliance form an essential part of the agreed process to implement a change in banding, the process of which is set out in Terms and Conditions of Service¹⁷ and supported by an agreed national process¹⁸.
- 3.6 Many Trusts and ISG have made significant and successful efforts to improve the quality of monitoring data. The DHSSPS has set up a Working Group to look at the monitoring system, and has produced guidelines on the monitoring process to aid employers in enhancing and developing their local practice. The hours and rest limits are now enshrined within the legally binding contract of employment³.
 - **Maximum Duty** limits have been included in contracts from **1st December 2000** for all junior doctors.
 - **The hours of maximum Actual Work and minimum Rest** have been included in the **PRHO** contract from **1st August 2002** and apply to all other junior doctors from **1st August 2003**.
- 3.7 Persistence of working patterns outside these limits will constitute a breach of contract, as well as attracting the financial penalty of a high salary multiplier.

- 3.8 Further details on the new contractual arrangements and formulae for calculating actual hours of work under various working patterns are at Annex B.

Guide To Designing, Evaluating And Maintaining Compliant Working Patterns

- 3.9 It is important to review existing working patterns regularly to ensure they continue to meet the New Deal requirements and, in future, are compliant with EWTD. Some key design principles are set out at Annex C.

3.10 Stages of Review

1. Identify existence of problem

Is there a problem at all? If well designed monitoring indicates compliance with the New Deal, and if satisfactory training as judged by the appropriate authority is being delivered, then there is no problem in the short term though it will be important to keep the working pattern under review to ensure continuing compatibility with EWTD.

It is important that employers take steps both to identify and tackle any current or emerging problems working with local staff at an early stage. In addition to the monitoring required under the new contract, employers may wish to consider other strategies to identify problems with hours and rest criteria compliance. Examples include 'Snap shot' monitoring, or debriefing interviews with doctors leaving a post.

If monitoring has revealed a compliance problem:

2. Involve stakeholders and facilitators

It is important to involve all stakeholders in identifying and implementing solutions to compliance problems. As well as the junior doctors themselves, there needs to be involvement of Trust management, consultant medical or dental staff, trainers, and other staff working in the specialty/unit to clarify the issues and work on an action plan. It would be sensible also to involve the Trust Local Implementation Group at an early stage and to consider seeking advice from other groups who may have encountered similar issues elsewhere e.g. BMA junior representatives, ISG representatives and employees, and College representatives for training issues.

This process is vital to ensure ownership of the solution by all the key stakeholders.

3. Analyse the existing situation, key causes of the problem, and drivers to change

4. Discuss all possible solutions

It is important that this stage is conducted in an open, frank manner, without preconceptions or attitudes that any possible solution is automatically unacceptable either to junior doctors, to other staff or to Trust management. Within this stage it is helpful to clarify:

- Distribution and variations of workload and numbers of hours worked/levels of rest achieved
- Classification of duty periods within the working pattern and the frequency of the rota cycle
- Tiers of cover
- Definition of prospective cover

- Training requirements
- Service requirements and profile
- Resource requirements
- How potential solutions fit with New Deal/EWTD requirements

5. Agree a template of a theoretically workable solution

6. Institute a trial period of implementation

7. Evaluate change and effects on intensity, training etc.

Once a potentially workable solution has been identified it needs to be tested out. This must include a further period of monitoring - preferably to run over the cycle of the altered working pattern.

8. Meet key stakeholders to discuss trial and evaluation

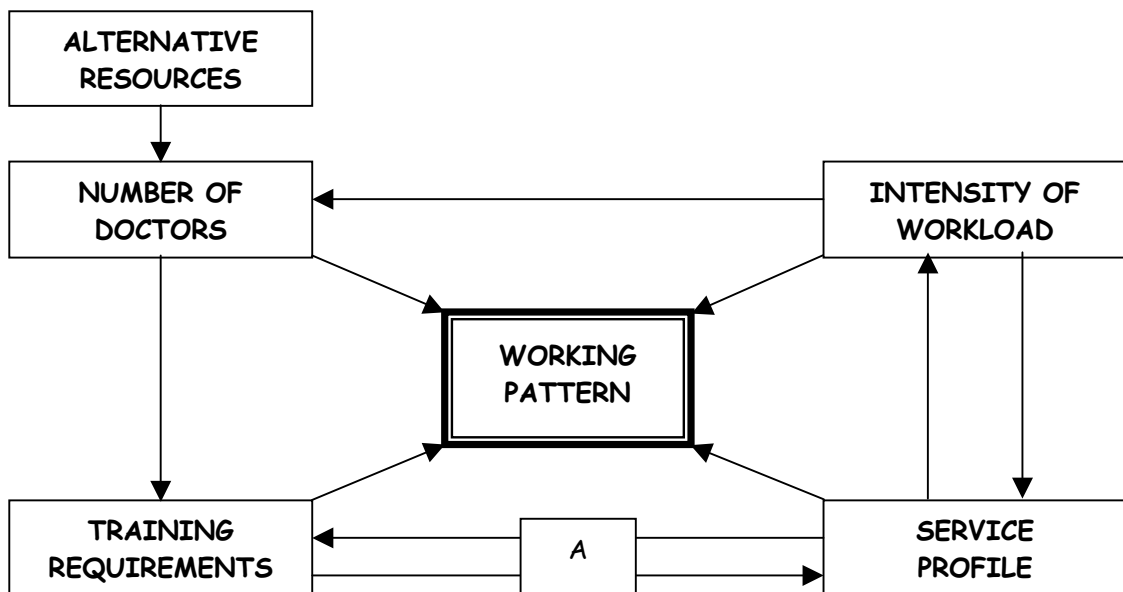
It is useful to try and maintain consistency of membership and approach with respect to the stakeholder group meetings

9. Agree alterations and further evaluation, or agree implementation

10. Continue with maintenance monitoring to ensure the working pattern continues to perform satisfactorily

11. Anticipate future changes in hours and rest limits, or future variations in workload/intensity

The appropriate working pattern will be dictated by the following inputs:



It is particularly important to ensure an appropriate balance [A] between service and training requirements. These will not be at odds in a well-structured post but in the past there have been concerns that service requirements have been dominant. It is important to remember that all junior doctors are trainees and to ensure that their posts make proper provision for this.

Hours protection

- 3.11 The aim of the new contract is to reduce junior doctors' hours over time, and both employers and junior doctors are required, under the terms of the junior doctors' contract of employment, to work together to bring posts into compliance with the New Deal. Any substantive changes to the working pattern that might lead to an increase in hours worked can only be introduced with the agreement of the postholder(s) and the ISG¹⁹. The mechanism for this approval is detailed in the guidance accompanying the new contract, and in agreed protocol. The proforma at Annexe F should be completed when posts are considered for rebanding purposes.

Mechanism for re-banding

- 3.12 A clear mechanism for re-banding posts has been agreed. This dictates that if a change takes place, monitoring must be carried out to ensure that the change has had the desired effect, and a notification, signed by representatives both of the Trust and the postholders, must be sent to the ISG for approval before the banding change can be finally instituted¹⁹. Either the employer or the postholders may instigate a review of arrangements at any time should they feel that the banding allocation no longer reflects correctly the working practices of the post.

PART 2: SOLUTIONS AND GOOD PRACTICE

4. POSSIBLE SOLUTIONS TO WORKING PATTERN PROBLEMS^{20, 21}

4.1 Some Trusts have already moved towards compliance; many **others are planning their first moves** in this direction. This section contains useful advice and examples of local solutions that have already been implemented, and we hope to publish further examples in due course. Solutions to identified problems, including planning for meeting the EWTD requirements, will depend on the local circumstances, pressures and resources of the unit involved, although there are some common patterns of problems and solutions. However, with the legal requirements on hours and rest enshrined in contract, *a working pattern that is non-compliant with the New Deal (and ultimately the EWTD) must be changed.*

4.2 The solutions can be broadly classified into:

- 1) Reducing inappropriate duties and enhancing support for appropriate ones
- 2) Diverting workload geographically, temporally or to other staff groups
- 3) Generating and allocating additional resources
- 4) Changing working patterns

4.3 It is important to go through a process of examining all solutions, rather than just those that first spring to mind, including challenging traditional practices and approaches, whether professional (cross-cover, reducing tiers of cover) or managerial (service organisation and structure). It is important to take a “whole systems” approach to solutions, starting with a “blank page” rather than simply tinkering with the working pattern without addressing other issues. A helpful approach to planning a new working pattern is to look at a triangle of interacting requirements:

- Service delivery – what services do patients need – when – and where?
- Training – the planned pattern must enable junior doctors to acquire the competencies they need for educational purposes, and
- Compliance with EWTD criteria – the planned pattern must enable doctors to achieve the EWTD hours and rest requirements, for their own health and safety and that of their patients.

Frequent areas of attention include:

4.4 **Bleep policies**

These can be extremely effective when used properly. The particular problem is *continued maintenance* of the policy. It may be useful to consider that only those doctors on-call or on crash teams actually hold a bleep, and that only certain staff groups are allowed to contact it.

Several Trusts have developed standard bleep policies that can be applied to most acute units. See Annex D for guidance.

4.5 **Organisation of workload**

Moving workload out of the Out Of Hours (OOH) period into the normal working day can significantly reduce night-time intensity. The provision of effective and staffed emergency operating sessions and acute clinics during the day can provide time for work that previously might have been delayed to the OOH periods. This not only reduces the intensity of OOH work, but also improves the service delivered to patients requiring urgent treatment.

Ensuring that appropriate senior support is organised around highest intensity periods – for example, senior medical staff working on admissions units or doing ward rounds in the evening to pre-empt night time problems. It may be appropriate to direct workload to different grades of staff within the professional group, accepting that their hours of work and educational imperatives should not be adversely affected.

An example of good practice would be to develop a system of Consultant Night Rounds, where the Consultant returns to the hospital at 21.00 hours to supervise a ward round that includes handover from the evening shift SHO to the night SHO. The on-call SpR could also be in attendance. The ward round covers the Special Care unit and the general ward. This allows the admissions for the day to be discussed with and assessed by a Consultant, with decision making for investigation and treatment being made at an early stage. Some patients are discharged that night. This allows the workload to be efficiently structured by involving all grades of staff on-call. It also allows training episodes to be used in the out-of-hours periods.

4.6 **Organisation of Tiers**

There may be inappropriate ‘repetition of care’ by having several tiers of junior doctors covering the same patient group. It may also be possible to identify broader groups of patients that will be amenable to cross-cover by larger, merged rotations of juniors.

In several Maternity Units it has been identified that many of the tasks performed by SHOs in the unit overnight could be performed by midwives who had received suitable training, while the more complex tasks still require Specialist Registrar input. By increasing the responsibility of the midwives, and linking their upward referral pattern directly to the Specialist Registrar, it would be possible to free the SHOs to go off shift at 21:00 hours. This would serve to reduce their hours of duty and work, and actually enhance daytime training, as the SHOs would no longer require the next day off, would be available for training adequately rested, and would not increase SpR workload.

4.7 **Skill Mix and Role Enhancement**

Developing the skills of other professional groups to undertake wider roles can both ease the workload pressures on doctors, and enhance the roles of those professional groups. The role of Night Nurse Practitioners and Specialty Nurses has been a major step forward in developing roles that were previously allocated to junior doctors. Many Trusts have training and development programmes to extend and enhance the roles of other professional groups in their hospitals.

Solutions that have been tried include:

- the employment of a Professional Practice Development Nurse, to co-ordinate such role enhancement and encourage development,
- the development of a Nurse Led Drug Administration policy, which allowed designated and trained nurses to supply drugs against a collectively agreed and medically signed patient group direction.

4.8 Transferring inappropriate tasks and those of “little educational value”

It is important to review how the range of services needed in a hospital is delivered out of hours to ensure that there is proper support for doctors in training and other professional staff.

Many Trusts are introducing automatic systems for the delivery of specimens to laboratories, for example, vacuum systems. It is important that back up protocols for automatic system failure exist, so that junior doctors do not become the ‘lowest common denominator’ for portering duties.

Some nursing staff, in A & E units, Medical Admission Units and on wards are trained in phlebotomy, cannulation and invasive vascular access procedures. It is more efficient, and provides superior patient care, for a nurse who is suitably trained to re-site an intravenous cannula, rather than having to identify which doctor is on-call, bleep them and wait for that doctor to attend the ward to cannulate the patient.

5 EXAMPLES OF GOOD PRACTICE FROM ENGLAND

5.1 Non-compliant surgical OCR moves to Partial Shift for Middle Grades

North Bristol NHS Trust

Originally two units with a total resource of 12 middle grade doctors. Southmead Hospital has a large elective workload at a purpose built Orthopaedic Unit and Frenchay Hospital a large trauma workload. The hospitals are situated about 3 miles apart.

Previously, both hospitals ran an A&E department with full orthopaedic middle grade cover.

The unit at Southmead stopped covering trauma with concentration on elective work. Major orthopaedic trauma was all directed to Frenchay, including transfer of appropriate patients from the A&E unit at Southmead. The middle grades adopted a 1 in 12 rota for both hospitals (1st on at Frenchay, 2nd on covering Southmead), making a 1 in 6 total. The 2nd on duty is low intensity. The weekends were split Saturday 1st on, Sunday 2nd on.

The Consultants merged their rotas, making a 1 in 12. All day trauma lists mean that only life- or limb-threatening cases are operated on at night.

The rota is therefore a compliant quiet non-resident 1 in 12, coupled with a busy, effectively resident 1 in 12 with split weekends. The registrars are well supervised, as the easing of the rota for the consultants mean that they can effectively use the out of hours period as training in addition. The decreased frequency of on call disrupts their daytime activities less.

Both consultants and middle grades are satisfied that the rota delivers service and training.

This is a good example of how service rationalisation and moving to a partial shift can be effective.

5.2 24-hour partial shift for SHOs and SpRs in General Surgery

Taunton & Somerset NHS Trust

A 24 hour partial shift has been provided for SpRs in General Surgery. Most working days run on a normal pattern of 0800 to 1700.

There is a rolling rota of weekday on calls, which start at 1200 and end at 1200 the next day – with the morning off before, and the afternoon off after the night on call. This allows a surgeon to operate on cases admitted overnight during daylight hours on a morning emergency list. The culture shift here was to move from the traditional 0800 to 0800 on call period. Rest periods that are staggered with the normal working day are more likely to be taken.

The weekends are on a one in six basis supported by staff grade participation in the rota, but with duties split so that duties will fall on every third weekend. The weekend is split to work Friday 1200 to Saturday 1200 and Sunday 1200 to Monday 1200 on one weekend, with Saturday 1200 to Sunday 1200 on a subsequent weekend.

Good practice would be to factor some handover time into such a rota as well.

The PRHOs in the department work on a full shift with a week of nights every seven weeks. A week with no rostered duties ensures weekly hours are kept below 56 and allows early starts (8am) and late finishes (6pm). There are three nurse practitioners employed solely to work in support of the PRHOs, providing routine work and provide cover and continuity during PRHO's absence on leave.

Good practice would again suggest splitting a week of nights into a maximum of four and three nights with suitable recovery time.

5.3 Multi-tier non compliance addressed by a whole systems approach

Sheffield Childrens Hospital

Sheffield Childrens Hospital is a busy city centre specialist paediatric teaching Trust. It had significant New Deal problems that were addressed by a whole systems approach.

New Deal compliance was made a **quality** issue, with the emphasis put on the improvements to patient care delivered by having junior doctors who complied with the New Deal. Compliance was set as one of the **corporate objectives**, with input, supervision and performance management at Trust Board level.

Dr D Burke, the Medical Director: ‘We had to work hard to drive a culture change, mainly in implementing new working patterns for medical staff where appropriate’; ‘it was important to make this issue an organisational objective’; ‘no-one claims that the system is now perfect, but there is agreement, especially among the more senior junior staff, that the current system is a marked improvement on non-compliant rotas’.

The change in Sheffield was achieved by an increased use of shift rotas where appropriate, coupled with significant consultant expansion – between 20% and 50% for different departments. The support for junior doctors achieved with this change was coupled with a successful commitment to deliver the EWTD hours limits for **consultants** – ensuring that senior medical staff were granted proper compensatory rest, and did not feel that their workload was simply expanding to accommodate the changes in juniors doctors hours.

Sheffield Childrens have now been able to disband their New Deal Local Implementation Group, as they have achieved the targets of the New Deal, but this has been replaced by a working group looking at implementation of the EWTD for junior doctors. This is coupled with a directorate level service planning exercise to anticipate the changes necessary for 2004.

5.4 Hybrid working pattern for Surgical SHOs

Princess Alexandra Hospital

Seven surgical SHOs work a normal working day of 0800 to 1700. A seven week rolling rota incorporates ‘late shifts’ of 0800 to 2030, on Monday (week 1), Tuesday (week 2), Wednesday (week 3), Friday to Sunday (week 4), Thursday (week 5) and a week of nights 2000 to 0900 from Friday of week 6 to Thursday of week 7 with three days of recovery time after the week of nights.

5.5 Partial Shift pattern for Medical SHOs

Warrington Hospital

Seven medical SHOs work a normal working day of 0900 to 1700. A rolling ‘late shift’ from 0900 to 2100 runs from Saturday/Sunday on week 1, through individual weekdays from week 2 to week 6 and incorporates a week of nights 2030 to 1030 on week 6/7, with three days of recovery time after the week of nights.

These two rotas above demonstrate the ‘week of nights’ principle. Research has shown that the week of nights can induce significant disturbance to the circadian rhythms of workers²², and it is better practice where possible to try and split the week of nights into at least one four-day and one three-day block, with sufficient recovery time afterwards.

5.6 24-hour Partial Shift Pattern for Medical SpRs

Newham Healthcare NHS Trust

Nine medical SpRs work a normal working day of 0900 to 1700 overlaid with a 24 hour partial shift running from 1200 to 1200 and 24 hours off after the on call period. The weekends are split Friday-Sunday and Saturday.

5.7 Full Shift Surgical SpR rota

Portsmouth

9 doctors working full shifts in 4 sub-speciality corners/teams, taking a team approach to care. Working with 18 to 22 patients on an average take; 16 seen during a long day. This is supported by changes in working practices in the rest of the team, and SHOs (only 5) now leave at midnight.

There is a full day consultant CEPOD list the day after on call, and an estimated 70% –90% of the emergency patients are seen by the ‘long day’ SpR who then operates the next day, giving enhanced education and continuity.

Normal day – 8am-5pm

Long day – 8am-10pm fixed Monday to Thursday for each corner, each SpR doing alternate weeks.

Weekend of long days Fri Sat Sun (trying to fix this to own Consultant on call)

Groups of nights – Friday to Sunday (3), or Monday to Thursday (4) 9pm to 10am

Handovers are built in but are often shorter than timetabled, and 2-4 hours rest is achieved overnight. The rota has been monitored compliant at 2B; this requires locum cover for study leave.

Even more could be done to improve any negative impact on day time experience by some rearrangement, and the nights could be run differently so that the rolling day, rather than the regular day is missed.

Educational sessions (research/ offsite experience) need to be timetabled for protection, with morning better than afternoon.

6. EXAMPLES OF LOCAL GOOD PRACTICE BY SPECIALITY

PRHOs

Mater HSS Trust

- 6.1 12 PRHOs work a compliant full shift rota at band 2A (with cross cover between Medicine and Surgery). This rota was initially non-compliant due to inadequate breaks and late finishes. However, all medical staff are now inducted on the requirements of the New Deal as each new set of doctors start, and written support is provided. PRHOs are advised of the times to take their breaks for all shifts and the times of the night shift were altered to facilitate the handover period.

Royal Group of Hospitals HSS Trust

- 6.2 10 general surgery PRHOs work a full-shift compliant rota at band 2A. This rota involves a full week of nights followed by a week of off-duty. The rota was initially non-compliant in part due to late finishes. However, to facilitate the PRHOs leaving on time, the SpRs agreed that the afternoon ward round would take place at 4pm instead of 5pm. PRHOs liaise with the senior nurse on their ward to leave handover details for the SpR. This means that only 1 PRHO need accompany the Specialist Registrar.

ACCIDENT AND EMERGENCY

Altnagelvin HSS Trust

- 6.3 8 SHOs now work a 1:8 full-shift rota at band 1A. The rota was initially non-compliant due to breaks, with 6 doctors working a full-shift pattern. When the Trust introduced 2 further SHOs to the rota, they also introduced a clear timetable for breaks for all shifts. Funding 8 doctors at band 1A has not increased costs and is the same as funding 6 doctors at band 3.

Causeway HSS Trust

- 6.4 7 SHOs work a 1:7 full-shift rota at band 1A. The rota initially involved 6 doctors working a full-shift pattern, which was non-compliant due to breaks. However, the Trust introduced an extra SHO and the rota was reworked to improve cover, thus allowing breaks to be taken. The cost of funding 7 doctors at band 1A is less than that needed to fund 6 doctors at band 3.

ANAESTHETICS

Altnagelvin HSS Trust

- 6.5 Altnagelvin has introduced a 2-tier junior doctor rota. The SHOs/1st on-call participate on a 24-hour partial-shift rota, with rest protected by the 6 SpRs who work a 1:7 full-shift rota. Both rotas are now compliant at band 2A.

MEDICINE

Ulster Hospital & Community HSS Trust

- 6.6 22 SHOs work a 1:22 full-shift rota compliant at band 2A. Night shifts are in blocks of 2 or 3.

Mater HSS Trust

- 6.7 12 SHOs work a compliant full-shift rota at band 2B. This rota was initially non-compliant due to inadequate breaks and late finishes. However, all new doctors are now inducted on the requirements of the New Deal, and written guidance is provided. SHOs are advised of the times to take their breaks for all shifts.

OBSTETRICS AND GYNAECOLOGY

Craigavon Area Hospital HSS Trust

- 6.8 7 SHOs work a 1:7 24-hour partial-shift rota, which is compliant at band 2A. Continuous rest is protected by rigorous adherence to the directorate's bleep policy.

ORTHOPAEDICS

Royal Group of Hospitals HSS Trust

- 6.9 6 doctors work a 1:6 16-hour partial-shift rota with a split week of nights, compliant at band 2A. This rota had previously been an on-call rota, which was non-compliant due to inadequate rest. The new rota has been designed to allow appropriate start and finish times to allow attendance at theatre sessions. Trainees report good training opportunities within this new work pattern. This tier is supported by a compliant 7 PRHO rota and a non-compliant 7 SpR rota.

PAEDIATRICS

Ulster Hospital & Community HSS Trust

- 6.10 7 doctors work a 1:7 full-shift rota compliant at band 2B. This rota had previously been a non-compliant 24-hour, and subsequently a 16-hour, partial shift due to inadequate rest. The shift times were reworked so that a full-shift pattern was applicable.

PSYCHIATRY

Mater HSS Trust

- 6.11 8 doctors work a 1:8 on-call rota compliant at band 2B. This rota was initially non-compliant due to inadequate total and continuous rest. There had been a significant out of hours workload from the busy Accident and Emergency department on site. The Trust has achieved compliance by;
- having discussions with local GPs which resulted in more open access to emergency in-hours appointments with the relevant clinical team
 - introducing a liaison nurse working 0900-1700 who supports any psychiatry patients coming through A&E
 - introducing bleep policies for both A&E and the wards, to protect continuous rest between 0100-0800 unless in an emergency situation.

South and East Belfast HSS Trust

- 6.12 7 doctors work a 1:7 on-call rota, which is compliant at band 2B. This rota was initially non-compliant due to inadequate continuous rest. The Trust has achieved compliance by introducing the following measures:
- junior doctors now do a clearing round of all the wards around midnight before going to bed
 - bleep policies have been established to protect continuous rest between 0100-0600 unless in an emergency situations
 - all calls to the SHO are vetted by the duty nursing officer
 - bed availability is now processed by the bed control centre at EASC

SURGERY

Causeway HSS Trust

- 6.13 6 doctors work a 1:6 16-hour partial-shift rota, with a split week of nights, compliant at band 2A. This rota was initially non-compliant with 4 doctors working an on-call rota.

7. CONCLUSION

- 7.1 The introduction of limits on contracted hours and of the EWTD puts demands on both the medical profession and health service managers to deliver patient care in new ways to meet legal requirements. It is important to stress both that the status quo is not an option and that there are ways of designing working patterns for doctors in training, and making proper use of the skills of other staff, which will enable these demands to be met. This guidance has demonstrated some approaches.
- 7.2 In addition the DHSSPS is working closely with the medical profession and with HPSS employers to identify other examples of good practice and to plan and pilot new ways of working to help Trusts to deliver the EWTD requirements.
- 7.3 In summary, the EWTD is undoubtedly going to present challenges to the HPSS. However, by involving all stakeholders in the process of developing new ways of working and training and continuing to increase the number of doctors working in the HPSS, we can maintain and enhance training for junior doctors, meet the requirements of the Directive and enhance patient care.

Banded contract

From 1st December 2000, the Additional Duty Hours (ADH) pay system was replaced with a pay banding system¹. The system reflects compliance with the New Deal (non compliance = **Band 3**). The bands for New Deal compliant posts reflect Actual Hours of Work up to **40 hours per week (Band F), up to 48 hours per week (Band 1), or up to 56 per week (Band 2)**; and the bands are subdivided by criteria based on type of working pattern, intensity of work and proportion of out of hours work.

Definition of work

For banding purposes, the definition of actual hours of work is as per the New Deal². This is *'all time spent carrying out tasks for the employer, but does not include rest while on call'*. (Note: this is different from the Working Time Directive definition of work, which defines working time as "... any period during which the worker is working, at the employer's disposal and carrying out his activity or duties, in accordance with national laws and/or practice.")

For the purposes of defining work **after 7pm** *'work begins when a doctor is disturbed from rest and ends when rest is resumed'*¹. This, therefore, includes providing telephone advice; or time *waiting* to perform a clinical duty, such as waiting for an operating theatre to be prepared or a patient to have a radiological investigation.

The only defined exclusion from this is a doctor who has been informed of a future need to return to the place of work from the place of rest that does not need to happen immediately. In this case, the time between being informed of future need and the time when attendance is required (if otherwise undisturbed) can be counted under the New Deal as rest time.

Definition of a weekend

The weekend is defined as the period **7pm Friday to 7am Monday**¹. The frequency of weekends worked is defined by the frequency with which the doctor is on duty at any time during this weekend period.

Definition of normal working week

For banding purposes, those full time doctors who work up to **40 hours per week** totally between the hours of **8am and 7pm** will receive no supplement, and therefore receive a basic salary only (1.0).

Flexible Trainees who work **less than 40 hours per week**, totally between the hours of **8am and 7pm** will be allocated to Band FC, will receive no supplement, and therefore receive a pro rata of basic salary only.

Types of working pattern

These can be classified under 5 types:

1. On-call rota
2. Partial-shift (including 24 hour partial shifts)
3. Full-shift
4. Hybrid rota
5. No out of hours work.

1. Introduction

Many charged with implementing the New Deal have struggled with the concept of prospective cover and the prospective cover allowance (PCA) calculation.

1.1 Prospective Cover and the Prospective Cover Allowance (PCA)

Employers may contract juniors in advance to cover the full annual (including public holidays) and study leave entitlement of all colleagues on that roster. This is known as prospective cover. The juniors on that roster are ‘prospectively covering’ the annual and/or study leave of their colleagues.

In practice, this meant that a junior can normally only take annual or study leave on a day when he/ she is rostered to work normal days, or the junior is therefore required to swap on-calls or shifts with a colleague on that rota in order to take leave. This practice is based on the assumption only the proportion of work outside of the normal working day requires to be covered. This assumption does not hold for many shift-working patterns.

- When Does Prospective Cover Apply?

Prospective cover applies in all cases, except on those rotas where;

- i) Locums are obtained to cover annual and study leave
- ii) A junior can take annual or study leave at any time on the rota, including when rostered to be working out of hours (e.g. a late shift, over night or an on call) and no junior on that rota is required to cover that shift.

- Fixed Annual Leave

If annual leave is fixed, prospective cover applies.

1.2 Principle of the Prospective Cover Allowance (PCA)

Consider a worker who works 20 hours per week. They will be paid for 20 hours for each week of their holiday entitlement. Likewise, an individual working 40 hours per week will be paid for 40 hours for each week of holiday. Junior doctors usually work more than 40 hours per week.

Example: A simple 1 in 5 on call rota is shown below.

	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Hours
1	On Call	Day	Day	Day	On Call	-	-	72
2	Day	Day	On Call	Day	Day	-	-	56
3	Day	On Call	Day	Day	Day	On Call	On Call	104
4	Day	Day	Day	On Call	Day	-	-	56
5	Day/AL	Day/AL	Day/AL	Day/AL	Day/AL	-	-	40
								328

Day = 9am to 5pm = 8 hours
 On Call = 9am to 9am = 24 hours

For illustrative purposes, it is assumed in this example that each doctor is entitled to 10.4 weeks of leave each year. This equates to 1 week of leave in each 5 week rota cycle. Week 5 contains no on call commitments. The juniors on this rota are expected to take annual leave when they have no on call commitment (i.e. they are prospectively covering their annual leave). Week 5 also contains less hours than any of the other four weeks. On average in the first 4 weeks, the juniors work

$$\frac{72 + 56 + 104 + 56}{4} = 72 \text{ hours}$$

The juniors in this example are therefore being paid for 40 hours for each week of their holiday entitlement, rather than the 72 hours that they work on average. A method was therefore required to account for this difference. Previously, the method used was the Prospective Cover Allowance (PCA). This method will not be described here as it has now been superseded.

1.3 Prospective Cover Allowance and Shift Working

The previous method of calculating the PCA works well for some on call rotas. Implementation of the New Deal has resulted in an increase in shift working patterns. Practical difficulties are encountered when applying the PCA calculation to these rotas. Therefore, a new method is required to calculate how many hours a doctor works on average per week when he/she is not on leave for all shift types.

2 The Riddell Formula for Hours Calculation

2.1 Introduction

The principle of the Riddell Formula for hours calculation is outlined below. However, an understanding of this principle is not required to analyse a rota.

2.2 Principle of the Riddell Formula

The Riddell Formula identifies how many hours a doctor is working on average per week by dividing the number of hours a doctor works when not on leave by the number of weeks worked when not on leave, or

$$\text{AverageHoursPerWeek} = \frac{\text{TotalHoursWorkedWhenNotOnLeave}}{\text{WeeksWorkedInRotaCycleWhenNotOnLeave}}$$

If we again consider our 1 in 5 on call rota;

	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Hours
1	On Call	Day	Day	Day	On Call	-	-	72
2	Day	Day	On Call	Day	Day	-	-	56
3	Day	On Call	Day	Day	Day	On Call	On Call	104
4	Day	Day	Day	On Call	Day	-	-	56
5	Day/AL	Day/AL	Day/AL	Day/AL	Day/AL	-	-	40
								328

The total hours worked when not on leave is the sum of hours total for weeks 1 to 4, thus

$$\begin{aligned} &= 72 + 56 + 104 + 56 \\ &= 288 \end{aligned}$$

The number of weeks worked in rota cycle when not on leave is 4.

Thus;

$$\text{AverageHoursPerWeek} = \frac{\text{TotalHoursWorkedWhenNotOnLeave}}{\text{WeeksWorkedInRotaCycleWhenNotOnLeave}} \quad (1)$$

$$\text{AverageHoursPerWeek} = \frac{288}{4}$$

$$= 72 \text{ hours}$$

This is the same answer we derived in section 1.2. We can therefore see that Equation (1) allows accurate determination of average hours per week for the above example. A formula is required to allow application to any rota type. It can be expressed mathematically and the derivation of this formula is explained in Appendix I to this Annex.

2.3 Use of The Riddell Formula

As described, the Riddell Formula identifies the number of hours a junior doctor is available for work on a given rota, i.e. the 'available hours'*. Therefore, the formula derives the available hours for a given rota, which can then be assessed against New Deal limits.

The terms 'available hours' and 'duty hours' are often used interchangeably under the New Deal

3 Determination of Theoretical Actual Hours Using the Riddell Formula

The major reason to calculate theoretical actual hours of a rota is to determine the potential banding. Calculation of theoretical actual hours is not routinely required to determine New Deal compliance of a rota on paper. True actual hours will be determined on monitoring, and must not exceed the New Deal limit of 56 hours.

The Riddell Formula above derives the average 'available hours' per week for a given rota. 'Actual hours' may be determined either by substituting total actual hours worked in the rota cycle for variable D, or by subtracting rest from the total hours worked in the rota cycle (variable D). This latter approach allows identification of a formula, shown below, that will calculate actual hours for all rotas, including hybrid rota patterns.

For our previous example rota, this would give:

$$\begin{aligned} \text{Rest} &= \text{Total on-call hours} / 2 \\ &= 128/2 = 64 \end{aligned}$$

$$\begin{aligned} \text{Average Actual Hours} &= \frac{(328 - 64) - \{(10.4/52 \times 5) \times 40\}}{5 - (10.4/52 \times 5)} \\ &= 56 \text{ hours} \end{aligned}$$

3.1 Determining a Normal Working Weekday Day

A normal working weekday can be identified in many rotas. This is the normal daytime shift that is worked Monday to Friday. In most rotas this is clear. If a normal working weekday day is not identifiable, it may be possible to determine times during which the juniors are expected to be working at full shift intensity during the week. This defines the 'in hours' period. If this is not identifiable then it may not be necessary to define a normal working day. In this case, total partial shift or on call hours should be used for F and G respectively.

3.2 Example of a rota without a normal working day

In this Accident and Emergency rota, there is no normal working day. Nights are worked at partial shift intensity with all other duty periods being at full shift intensity. The week marked as clinic/AL is a supernumerary week where the individual is either on leave or receiving specialty training. Annual leave and public holidays are covered prospectively with all study leave covered by external locums. Therefore there are 6.5 weeks of leave to cover per junior per year.

	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Avail
1	Early 9-16	Night 21-9	Night 21-9	Night 21-9	Night 21-9	Night 21-9	Night 21-9	79
2	Night 21-9	Teaching 9-10.30	Off	Off	Off	W/E Late 11-23	W/E Late 11-23	37.5
3	Off	Tue Early 9-21	Late 16-23	Middle 11-21	Fri Early 9-21	Off	Off	43
4	Middle 11-21	Tue Late 9-22.30	Early 9-16	Late 16-23	Off	W/E Early 9-21	W/E Early 9-21	63.5
5	Late 16-23	Teaching 9-10.30	Middle 11-21	Early 9-16	Fri Late 11-23	-	-	39.5
6	Clinic/AL 9-17	Clinic/AL 9-17	Clinic/AL 9-17	Clinic/AL 9-17	Clinic/AL 9-17	-	-	40
								302.5

Applying the Riddell formula:

$$\begin{aligned} \text{Average Available Hours} &= \frac{302.5 - \{(6.5/52 \times 6) \times 40\}}{6 - (6.5/52 \times 6)} \\ &= 51.9 \text{ hours} \end{aligned}$$

To determine the 'actual hours' for the rota, we first determine the rest entitlement. The full shift component of the rota requires natural breaks, which do not count towards rest, the partial shift component accrues one quarter of the duty period as rest. Therefore, the total rest for this rota is equal to:

$$\begin{aligned} \text{Rest} &= \text{Total partial shift hours} / 4 \\ &= (7 \times 12) / 4 = 21\text{hrs} \end{aligned}$$

$$\text{Average Actual Hours} = \frac{(302.5 - 21) - \{(6.5/52 \times 6) \times 40\}}{6 - (6.5/52 \times 6)}$$

$$= 47.9 \text{ hours}$$

4 Hours monitoring using the Riddell formula

Sections 2 and 3 described how to determine the theoretical ‘available’ and ‘actual’ hours of a rota on paper. For banding purposes, the true average available and actual hours for a given rota must be determined by monitoring.

Analysis of monitoring forms is often complicated by lack of data. This occurs for two main reasons:

- 1) The doctor is on annual leave
- 2) The doctor has not completed a monitoring form

It is essential to address this lack of data as outlined below. Failure to do so will result in an inaccurate result and may result in a post being inappropriately banded.

4.1 How to address annual leave in monitoring

Two problems arise when monitoring a rota. Firstly, it is unusual that a monitoring period with contain an absolutely representative amount of leave that would be expected on average to occur in a two- week period. Secondly, as discussed above, a worker is entitled to an average week as leave. However, many rotas allocate shifts to the annual leave week that may be worked if a junior is not on leave. These rarely equate to an average week. Therefore we require a method that will standardize these two variable factors.

Firstly, a ‘Leave Adjustment’ is calculated from the rota template using the following formula;

$$\text{Leave adjustment} = \frac{(\text{Average hours worked (from Riddell Eqn)} - \text{allocated leave week in hours}) \times \text{leave entitlement}}{52}$$

This should be calculated twice, once for actual hours and once for available hours.

4.2 Example

If we look at our example 5-week rolling on-call rota again we can see how the formula should be applied to monitoring data.

	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Avail	Actual
1	On Call	Day	Day	Day	On Call	-	-	72	56
2	Day	Day	On Call	Day	Day	-	-	56	48
3	Day	On Call	Day	Day	Day	On Call	On Call	104	72
4	Day	Day	Day	On Call	Day	-	-	56	48
5	Day/AL	Day/AL	Day/AL	Day/AL	Day/AL	-	-	40	40
								328	264

Day: 9am – 5pm = 8 hours

On-call: 9am to 9am = 24 available hours, 16 actual hours
(Weekend 12 actual hours)

From sections 2 & 3 we know that on paper this rota requires the juniors to be available for an average of 72 hours per week and to be actually working for an average of 56 hours per week. This is on the basis that the doctors cover all their leave internally and achieve the minimum rest requirements under the New Deal. To adjust for leave during the monitoring period we can apply the following formula:

$$\text{Leave adjustment} = \frac{(\text{Average week in hours} - \text{allocated leave week in hours}) \times \text{leave entitlement}}{52}$$

$$\begin{aligned} \text{'Available hours' leave adjustment} &= \frac{(72 - 40) \times 10.4}{52} \\ &= 6.4 \end{aligned}$$

$$\begin{aligned} \text{'Actual hours' leave adjustment} &= \frac{(56 - 40) \times 10.4}{52} \\ &= 3.2 \end{aligned}$$

Thus by providing internal cover, each doctor works on average an additional 6.4 available and 3.2 actual hours per week. These values must be added to the average hours determined during the monitoring exercise.

The Leave Adjustment must be added in all cases of monitoring, regardless of whether the monitoring included multiple or no doctors on leave.

In our example, we now monitor the post. When a doctor is on leave, we substitute in the rostered hours for the annual leave week, in this example 5 x 8 hours = 40 hours.

For each of the 5 doctors working this rota, their individual rotas for the 2 week period will be as follows:

Doctor 1

Week	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Avail	Actual
1	On Call	Day	Day	Day	On Call	-	-	72	56
2	Day	Day	On Call	Day	Day	-	-	56	48

Doctor 2

Week	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Avail	Actual
1	Day	Day	On Call	Day	Day	-	-	56	48
2	Day	On Call	Day	Day	Day	On Call	On Call	104	72

Doctor 3

Week	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Avail	Actual
1	Day	On Call	Day	Day	Day	On Call	On Call	104	72
2	Day	Day	Day	On Call	Day	-	-	56	48

Doctor 4

Week	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Avail	Actual
1	Day	Day	Day	On Call	Day	-	-	56	48
2	Day/AL	Day/AL	Day/AL	Day/AL	Day/AL	-	-	40	40

Doctor 5

Week	Mon	Tues	Wed	Thur	Fri	Sat	Sun	Avail	Actual
1	Day/AL	Day/AL	Day/AL	Day/AL	Day/AL	-	-	40	40
2	On Call	Day	Day	Day	On Call	-	-	72	56

If for the monitoring exercise we obtained 100% returns of monitoring forms, the individual juniors adhere to start & finish times and achieve exactly the rest required under the New Deal, then their monitored and paper hours would be identical. Thus the total available hours on the basis of monitoring for this rota would be:

$$72 + 56 + 56 + 104 + 104 + 56 + 56 + 40 + 40 + 72 = 656$$

We now divide this number by the 2 weeks of monitoring and the 5 doctors to give an average of 65.6 available hours per week. However, this does not reflect the additional duties worked by providing internal cover. By adding the Leave Adjustment derived above we obtain the true average available hours for this rota: $65.6 + 6.4 = 72$ hours

By applying the same principal to the actual hours totals we get:

$$56 + 48 + 48 + 72 + 72 + 48 + 48 + 40 + 40 + 56 = 528$$

We now divide this number by the 2 weeks of monitoring and the 5 doctors to give an average of 52.8 actual hours per week. Adding the Leave Adjustment as above we obtain the true average actual hours for this rota: $52.8 + 3.2 = 56$ hours

This worked example demonstrates not only how to accurately account for annual leave in a monitoring period, but also that addition of the Leave Adjustment is required for accurate determination of monitored hours.

4.3 Non- returned forms

Junior doctors are contractually required to comply with monitoring. Trusts are required to ensure that robust monitoring systems are in place. The New Contract states that a “minimum return rate for monitoring is 75% of all doctors in training on each rota... and 75% of all duty periods”. If this is met, the hours not accounted for by non- returned forms must be accounted for in the assessment of monitoring data to ensure an accurate assessment of hours for banding. The missing data cannot be ignored because, we may ignore a particularly quiet week, say 36 hours, which would artificially increase hours on monitoring and result in an inappropriately high band, and vice versa.

Therefore, providing the minimum return rate is met, any shifts unaccounted for should be added to the monitoring data as per the rostered hours.

Starting from this equation

$$AverageHoursPerWeek = \frac{TotalHoursWorkedWhenNotOnLeave}{WeeksWorkedInRotaCycleWhenNotOnLeave} \quad (1)$$

we must identify the variables that can be extracted from a rota to allow us to identify the numerator, total hours worked when not on leave, and the denominator, weeks worked in the rota cycle.

Total Hours Worked When Not On Leave

To determine total hours worked when not on leave (that is the numerator for our equation) we can take the total hours worked in the entire rota cycle (328 in our example) and subtract the week of annual leave (40 in our example). This is fine for rotas for which leave occurs in convenient multiples. In the case of our example, one week leave in every 5 equates to leave requirement of $\left(\frac{52}{5}\right)=10.4$ weeks per year.

For rotas in which leave does not occur in such convenient multiples, we must first determine the proportion of leave which a junior is entitled to in each rota cycle. This is expressed as;

$$\frac{Leave}{52} \times NumberOfWeeksInRotaCycle \quad (2)$$

By multiplying this equation (2) by the number of hours in the leave week we now have a figure (in hours) for the amount of annual leave the junior is entitled to in each rota cycle of a specific rota. If we subtract this figure from the total hours worked in the entire rota cycle, we determine the ‘total hours worked when not on leave’, which is our numerator.

Thus, total hours worked when not on leave

$$= TotalHoursInRota - \left[HoursInLeaveWeek \times \left(\frac{LeaveEntitlement}{52} \times WeeksInRotaCycle \right) \right] \quad (3)$$

Weeks Worked In Rota Cycle When Not On Leave

This is the denominator for our equation. In our example, to determine the number of weeks worked in the rota cycle when not on leave we need to take the five rostered weeks and subtract the one week leave, giving 4 weeks.

To apply this to all rota types, we must take the number of weeks in the rota cycle and subtract the proportion of leave which to each junior is entitled. This last figure we determined in equation (2).

Thus;

$$\text{WeeksWorkedInRotaCycleWhenNotOnLeave} = \text{WeeksInRotaCycle} - \left(\frac{\text{LeaveEntitlement}}{52} \times \text{WeeksInRotaCycle} \right)$$

(4)

The Riddell Formula

Therefore, taking equation (1)

$$\text{AverageHoursPerWeek} = \frac{\text{TotalHoursWorkedWhenNotOnLeave}}{\text{WeeksWorkedInRotaCycleWhenNotOnLeave}}$$

we can substitute in equations (3) and (4) to give;

$$= \frac{\text{TotalHoursInRotaCycle} - \left[\text{HoursInLeaveWeek} \left(\frac{\text{LeaveEntitlement}}{52} \times \text{WeeksInRotaCycle} \right) \right]}{\text{WeeksInRotaCycle} - \left(\frac{\text{LeaveEntitlement}}{52} \times \text{WeeksInRotaCycle} \right)}$$

If;

- A = total leave entitlement for the year (in weeks)
- B = number of weeks in the rota cycle
- C = number of hours in a leave week
- D = total hours worked in the rota cycle if no leave is taken
- E = (A/52 X B)

Then;

$$\text{Average Hours per Week} = \frac{D - (E \times C)}{B - E}$$

DESIGNING, EVALUATING AND MAINTAINING COMPLIANT ROTAS GOOD HEALTH AND SAFETY PRACTICE

Appropriate design of the working patterns for junior doctors has been clearly shown to be an important health and safety issue. This applies both to patient and personal safety. The BMA Health Policy and Economics Research Unit (HPERU) published in August 2000 a review of the evidence held within scientific literature on the implications for health and safety of junior doctors' working patterns. This review is available as a resource document from the BMA²⁹.

Patient Safety

When junior doctors work for long periods of continuous duty without adequate rest, their performance becomes significantly impaired – that is now established beyond debate²⁶. However, the performance drop over relatively short periods of sleep deprivation is greater than commonly appreciated. The effect of a single night's lack of sleep on cognitive and manual dexterity performance measures performed the next day show a level that is equivalent to alcohol consumption over the legal limit for driving^{23,24}. A clear link has been established between sleep deprivation, long duty and deterioration in reasoning and information processing abilities.^{25,26}

Other professional groups whose work involves care of, or risk to, other persons acknowledge this and limit hours by strict legal control or professional agreement (eg coach drivers, airline pilots, train drivers).

The potential risks to patient care make it vital that working pattern design takes into account such evidence – and seeks to construct systems of hours of work, rest, supervision and communication that protect patients against such risks.

The risk of negligent actions is increased by working long hours^{27,28}. The intensity of work and concurrent demands upon staff increased dramatically over recent years, but this has also been matched by an increasingly litigious public, who are better informed and more demanding about the quality of healthcare and information that they receive.

Personal Safety

It is clear that the working hours of junior doctors account for a considerable proportion of their occupational morbidity. The stress of work relates to duty period, actual hours worked, sleep deprivation, disruption of circadian rhythm and levels of supervision. This not only has an effect on health and well-being, but upon family and social life.

Health and safety law provides that employers have a duty to provide a safe system of working and duty to take reasonable care of the safety of the employee.

Principles

The HPERU study on implications for health and safety of junior doctors working arrangements²⁹ derived key design principles for working patterns. These are as follows:

1. Employees should be involved in the development of the schedule. This is a situation that has been all too rarely practised for junior doctors. The research in the HPERU study, backed up by the recommendations of the recent Government Taskforce on Staff Involvement³⁰, indicate that acceptance and successful implementation of a well designed rota can only occur if the staff working on that rota are involved in its conception and design.
2. Where practicable, shift duration should not exceed 12 hours. This would fit with the EWTD requirement of an 11 hour period of continuous rest each day.
3. Total hours of work per week should not exceed 48.
4. Continuous shift systems, which include weekends, should include some free weekends with at least a 48 hour period of continuous rest. This is to avoid the concept of cumulative exhaustion. Shifts should rotate clockwise – morning, noon, night.
5. Consecutive night shifts should be kept to a minimum.
6. Morning shifts should not start too early
7. The period of the shift that falls in the night sleep zone should be as short as possible.
8. Night shifts, where possible, should include short ‘anchor’ or ‘power’ sleeps.
9. Good lighting, ventilation and facilities for meals should be provided.
10. When the employee sleeps on the premises, the environment should be conducive to sleep – comfortable, temperature controlled, dark, quiet and free from interruption.
11. Intervals between 2 shifts should be long enough for the worker to have sufficient sleep, as well as to wash, eat and travel.
12. Overtime should be avoided, especially if shifts are long. Employees should not be called in on their days off.
13. Schedules should be flexible enough to meet the personal needs of the individual
14. Rotas should be set in advance to allow employees to plan for leisure time.

Many hospitals have produced policies regarding 'Call out of Medical Staff' or a 'Bleep Policy'. It is recognised that any such policy must be tailored to the individual unit, and this paper therefore acts as a guideline to assist discussions when developing such a policy. It is unlikely that any policy will be perfect first time, and so monitoring must be ongoing.

It is recommended that a working group is developed. Representatives from the following groups should be considered: nurses, junior doctors, consultants, administrators, telephonists and portering staff.

Once agreed the bleep policy should be included in the induction programme for all hospital staff.

1. Introduction

1.1 A bleep policy should seek to consolidate existing good practice in the area of communication between nursing and medical staff. A bleep is a useful device when a doctor needs to be contacted urgently, but can be counter-productive if calls for routine items disrupt a doctor's working pattern. This may lead to inefficiency and annoyance for all staff. In general the bleep should not be used unless there is a compelling reason to call the doctor immediately. Examples of such reasons are given in section 2.

1.2 All qualified nurses/midwives are accountable for patient care, and should be able to contact the doctor if they are concerned about a patient's condition.

1.3 There will always be differences of interpretation with any policy; individual problems should be resolved by discussion between the doctor and the nurse. However it is recommended that each unit should develop a process for auditing the use of bleeps and the effects once a bleep policy has been introduced.

1.4 The bleep policy must take into account the working pattern of the junior doctors involved:

1.4.1 It is now a contractual requirement that any junior doctor working a traditional on-call type pattern should have a reasonable expectation of 8 hours rest during a 32 hour weekday duty period, and 12 hours rest during a 24 hour weekend duty period. At least 5 hours of this rest must be uninterrupted and continuous.

1.4.2 For partial-shifts the period of rest should be 4 hours in each 16-hour duty period.

1.4.3 For full shift systems it is expected that doctors will work for effectively the whole time they are on duty (barring natural breaks)'.

1.5 Provision needs to be included in a bleep policy for the following:

1.5.1 Life threatening emergencies

1.5.2 Urgent calls

1.5.3 Non-urgent and routine calls

2. Life Threatening Emergencies

2.1 This situation is usually covered by the hospital's 'crash' call procedure.

2.2 It is recommended that in the event of such an emergency, the call to medical staff should be initiated by an appropriate person.

3. Urgent Calls

3.1 Individual hospitals should define what is understood by all staff to constitute an urgent call. These may include:

- 3.1.1 Any major change in a patient's general condition that will not wait until the doctor's next routine visit.
- 3.1.2 Distressing symptoms, which may cause the patient undue suffering if not dealt with before the next routine visit of the doctor to the ward.
- 3.1.3 Relatives requiring to see the doctor because of deterioration in a patient's condition.
- 3.1.3 The arrival of an urgent admission.

4. Non-Urgent Calls

4.1 A system which avoids the inefficient use of bleeps should be devised to meet local circumstances. The goal should be that the bleep system is reserved almost exclusively for emergency and urgent calls. Where this has been achieved the attitude and response time when answering bleep calls has markedly improved resulting in a more efficient and happy working environment.

4.2 Good planning reduces the need for non-urgent use of bleeps. Planning should include:

- 4.2.1 Development of a policy regarding patient falls (eg. When the patient has clearly not received significant injury or experienced severe pain).
- 4.2.2 Development of policy regarding the administration of minor analgesics, hypnotics or other medication.
- 4.2.3 How the writing/rewriting of prescription charts and the documentation of expected discharges can be organised so that they are always incorporated into routine work.

4.3 Other systems that should be considered include the following:

- 4.3.1 The ward should be aware of the next planned visit by the doctor. This could be either by use of a white or black board etc., or by agreed times for visit. The latter can be facilitated by wards having copies of doctors' working timetables with these times identified on them.
- 4.3.2 Out of usual working hours medical staff should visit all wards at a pre-agreed time(s) to deal with queries or problems. It should be recognised that unforeseen events and emergencies will always take precedence and therefore delays to certain wards are possible. There should also be regular routine visits at weekends, though these are likely to be less frequent than during the week.
- 4.3.3 It is recommended that each ward keep a book to co-ordinate work required of the doctor at the next ward visit. If introduced, nursing staff should list all the routine and non-urgent tasks for the doctor to fulfil at the next visit. The doctor should confirm with the nursing staff that an item has been resolved by crossing the item off in the book. This book should also be used by the medical staff to leave messages for the nursing staff. Doctors should be encouraged to contact the senior nurse on duty on arrival and when leaving the ward.

4.4 A system which allows relatives to book an appointment to talk to a doctor and/or other members of the team should be developed. Relatives must be made aware of these arrangements. The most appropriate person is a senior member of the team responsible for the patient. It is unreasonable to expect a doctor to speak to relatives of patients under the care of another doctor/team.

5. Using a Bleep

5.1 It is recommended that one member of the nursing staff per ward/area should be responsible for co-ordinating usage of the bleep system. Whenever possible at night, calls to doctors should be channelled through the nursing sister on duty. In general student nurses should not bleep doctors at night unless in an emergency.

5.2 Most hospitals have systems whereby a bleep can be activated from a telephone without going through the switchboard. Entering the wrong number can be a common problem resulting in either the wrong doctor, or no doctor at all being called. It is prudent therefore that the bleep number is double-checked, and if there is no response to contact switchboard sooner rather than later.

5.3 In many circumstances it is more appropriate for a doctor retiring to bed to leave the on-call room telephone extension number. If the same on-call room is always used by a particular grade of staff, the telephone extension should be recorded in a prominent place on each ward. It is usually easier to respond to a telephone call than to a bleep whilst asleep.

5.4 In some circumstances communication can be improved if the doctor always informs the ward (or switchboard) when retiring to bed, or when working during the night. This may even form the basis for a system to co-ordinate calls regarding non life-threatening situations. Units may wish to consider that at night a nominated doctor may be on-call for second on type work for the whole of the hospital (or across more specialties/wards than usual).

6. Associated Considerations

6.1 When considering the introduction of a bleep policy it is recommended that the following policies be considered at the same time.

6.2 Unit drug policy incorporating nurse administration of IV drugs and nurse administration of drugs without prior medical prescription.

6.3 Confirmation of expected death.

PROTOCOL FOR THE RE-BANDING OF TRAINING GRADE POSTS**Issue**

1. There has been some confusion and variable quality of process during the exercise to bring PRHO posts into compliance for the 1st August 2002. As a result, the national issue of further joint guidance and documentation is felt necessary.

Action

2. Action Teams must:
 - Ensure that in all instances where re-banding of posts is carried out, the process as laid out in the attached proforma document is followed in all cases, and recorded using the proforma a copy of which will be retained by the Action Team together with supporting documentation.

Background

3. The procedure for re-banding existing posts is laid out the Terms and Conditions of Service.
4. The Department and the BMA agree that a mechanism which re-bands posts using in-post monitoring, rather than assessment of compliance on paper or using other theoretical means, is the proper way of proceeding in the vast majority of cases. Such re-banding is most effectively carried out mid-post in, for example, May or November, to allow rotas to bed in and to allow 'fine tuning' after monitoring. Both sides accept, however, that there will be a few occasions, where significant changes to rotas or staffing levels make it impractical to fully implement changes to working practices before new staff come into post, where it will be necessary to assess the likely banding of a rota in advance of its implementation, to allow an employer to offer posts to new employees on a realistic basis.
5. Such occasions will be rare. It cannot be taken for granted, for example, that full-shifts will always be compliant as natural breaks may not be achieved or shifts may over-run. Similarly, the rest requirements of other types of rota pattern cannot be assumed and it will therefore not be appropriate to assume that particular working patterns can be offered at a predicted band. However where for example service reconfiguration or merger means that it is not possible to implement and monitor a full-rota before its proposed date of introduction, the facility is needed to allow an employer to offer a post at an expected band. This must be dependant upon the employer demonstrating to the satisfaction of the ISG that it was not possible to implement a full-rota in advance, although the employer should where possible make arrangements to test in advance those parts of the new arrangements most likely to be non-compliant. It also places a responsibility on the employer to monitor and confirm the banding within a fixed timescale following the introduction of the new working arrangements.
6. The pro-formas attached covers the normal re-banding process, with the facility to allow for the provisional re-banding of a post in advance of practical monitoring.
7. As with all instances of backdating pay under the banding system, repayment where a lower band that has been paid is subsequently found to be inappropriate must be paid from when salaries at the provisional lower band were first paid.

Notes

1. The Proforma should be used both as a checklist to ensure that all the necessary stages of the re-banding process have been adhered to, and as a record of the process for payroll purposes.
2. Column headings are to be interpreted as:
 - Stage: a step in the process which must be completed
 - Evidence Required: documentation/data/input that must be available in order to facilitate a decision at the relevant Stage
 - Documentation: the formal confirmation that the Stage has been followed through to successful completion.
3. In the Proforma, references to the ISG should be taken to refer to the Implementation Support Group for Improving Junior Doctors Working Lives.
4. Where a decision from the ISG is indicated, such a decision must be agreed by, at a minimum, both junior doctor employee and BMA representation, and will be co-ordinated by an officer acting with the full authority of, and nominated by, the ISG Chair.
5. The proforma at Annex F should be completed and confirmed in all cases of rebanding
6. Where provisional banding is authorised monitoring should take place within six weeks of the implementation of new working arrangements, and all necessary actions taken to ensure that the results of the monitoring are reflected in banding and salary.

NORTHERN IRELAND ISG REBANDING FORM FOR JUNIOR DOCTOR ROTAS

Trust:	Hospital:
Specialty:	Grade(s):

Number of doctors on rota:	
Grade of doctors working rota:	
Current band:	Proposed band:
Proposed start date for new band:	

Steps to reband a post: (Source: HSS (TC8) 1/01)	Evidence which needs to be submitted with this form:	Confirmed Y/N
1. Consult postholders on changes to rota proposed and obtain agreement of the majority participating on the rota.	New rota template signed by majority of participants on the current rota.	
2. Obtain agreement from Postgraduate Dean (for PRHOs), College Tutor (for SHOs) or Speciality Advisor (for SpRs) for education purposes.	Signed letter from Dean / Supervisor/ Advisor confirming that new working pattern meets educational requirements.	
3. Submit details of the New Rota to the Implementation Support Group (ISG) for information & invited comment	Rota template agreed by ISG Medical Project Officer	
4. Monitoring of working pattern.	Summary of monitoring information – pages 3 + 4 of this form	
5. Postholders notified of monitoring outcome	Copy of letter from Trust to postholders detailing monitoring outcome.	

Signatures to approve the rebanding of the rota:

(If you do not agree to sign this rebanding application, please specify your reasons on page 4)

	Signature	Name (please print)	Date
Trust signature (Consultant with management responsibility for rota)			
Junior doctor representative of the junior doctors working the rota			

For use by the rebanding subcommittee only:

BAND AGREED : (SPECIFY BAND)	EFFECTIVE FROM: (SPECIFY DATE)
COMMENTS:	
SIGNATURE (REPRESENTATIVE OF REBANDING SUBCOMMITTEE):	

**NORTHERN IRELAND ISG REBANDING FORM FOR JUNIOR DOCTOR
ROTAS
ROTA INFORMATION (FROM TEMPLATE ROTA)**

Trust:	Hospital:
Specialty:	Grade(s):

Working pattern

Number on rota:	Shift Type:
Additional information (eg. any staff grade cover for nights):	

Arrangements for cover of study and annual leave (eg. any locums provided)

Shift Length Information (please provide information on all shifts in rota)

Name of shift	Type of shift (normal day, full, partial, on call)	Start time	Finish time	Length of shift
Eg. D	Normal day	0900	1700	8

Average Contracted/ Duty hours per week (from rota template)

Without PC:	PC value if applicable:	With PC:
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PC= prospective cover

NORTHERN IRELAND ISG REBANDING FORM FOR JUNIOR DOCTOR ROTAS MONITORING SUMMARY

Monitoring Period (give dates):	
Number of monitoring returns:	Percentage of monitoring returns:

Monitoring information on each shift type

Name of shift	% shifts where Natural Breaks are met (30 minutes continuous rest after approximately 4 hours continuous work in full shifts; normal working days and normal working day part of other shifts) RULE: 75%	% shifts where total rest is met (minimum 50% of out of hours duty in on call; ¼ shift length in 24h partial shift; ¼ of the out of hours in 16 h partial shift) RULE: 75%	% shifts where continuous rest is met (minimum 5 hours between 10pm and 8am in on call; 4 hours between 10pm and 8am in 24 hour partial shift) RULE: 75%	number of shifts which exceed duty length maximum <ul style="list-style-type: none"> • Full=14h • 16h partial= 16h • 24h partial= 24h • on call- weekday=32h • on call- weekend=56h RULE: ONLY ALLOWED IN EXCEPTIONAL CIRCUMSTANCES	New Deal limits achieved (Y/N)

To establish % of out of hours actually worked (for partial and on call shift patterns only)

Shift name			
Average total rest achieved (hours)			

	Average hours per doctor per week (1)	Prospective cover allowance (2) (if applicable)	Total hours (1 plus 2)
Duty (again from rota template)			
Actual* (from monitoring)		**	

*actual hours= hours worked including natural breaks, but not including rest on partial or on call shifts

**actual =duty PC for full shifts; for other shift patterns please contact the ISG officer OR LEAVE BLANK

Further Information

	Results as per monitoring	New Deal limits achieved?
Minimum time off between shifts		
Maximum number of continuous duty days		
Appropriate 48 hrs & 62 hrs off duty?		

**NORTHERN IRELAND ISG REBANDING FORM FOR JUNIOR DOCTOR
ROTAS
MONITORING SUMMARY**

Please sign to indicate that you agree with the monitoring information above

	Signature	Name (please print)	Date
Trust signature (consultant with management responsibility for the rota)			
Junior doctor representative of the junior doctors working this rota			
To be signed by majority of postholders on the rota			

If you as Junior Doctor Representative/ Trust Signatory, do not wish to sign off this rebanding application, please state the reason(s) why below:

Signed:

Date:

Print name:

ANNEX G

EDUCATIONAL AND SERVICE BALANCE ISSUES: INTERNATIONAL COMPARISONS

These are often the most hotly debated issues when changes to working patterns are suggested. The need to ensure educational quality is sometimes used as an argument to resist change to the status quo, rather than for sound educational reasons.

Junior doctors are in the Health Service to be trained, not simply to provide services. We need to aim for an equilibrium which will provide good quality training and service in balance.

Information from other European Union and Scandinavian countries and developed Commonwealth countries suggests that while many of the countries examined have similar problems to our own, several have already addressed them, and are providing high quality healthcare, with good training systems while incorporating working patterns that are more compatible with EWTD compliance. Examples include Australia¹⁵, New Zealand, Denmark and the Netherlands. Common factors amongst these countries is:

- that they enjoy a much higher doctor/patient per capita ratio than the UK (1.7/1000 in the UK compared to 2.2-3.0/1000 in the aforementioned nations)³¹;
- that shift type patterns of work are more common – although *not* universal – and have been accepted, often in the face of considerable resistance, as providing acceptable delivery of training, if well structured ;
- that patient care is more often delivered as part of a consultant delivered service;
- that the principle of lowering hours, stress and workload as an *enhancement* to an atmosphere and culture of good training, rather than a block to it is accepted.

Denmark has had tightly limited hours for doctors in training since the wartime years, and the Netherlands implemented change that would fit the EWTD in 1993. Both countries have excellent quality of care outcome statistics³², albeit with differing population dynamics to the UK.

This should provide us with optimism that with proper investment in numbers of staff, and development of culture, that the EWTD should be attainable in the UK, while still maintaining the high standards of training, education and quality of patient care that is expected.

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