BMA

NHS Employers

GOOD ROSTERING GUIDE

MAY 2018

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INTRODUCTION

As part of the 2016 ACAS agreement between NHS Employers and the British Medical Association (BMA), a commitment was made to work collaboratively to develop good rostering guidance to support employers and doctors.

This guidance sets out the ways in which good rostering practice can be utilised to develop rotas. It aims to support and create an effective training environment that also meets the needs of the service, while enabling flexibility for doctors and employers, both of whom have a stake in the process.

The ongoing challenges facing the NHS underline the importance of organising resources effectively and efficiently in a way which brings mutual benefits to organisations, patients and doctors in the planning and delivery of high quality patient care. We have put together this good rota design and roster management guidance based on principles that we believe can be used to provide the framework for a collaborative approach. This guide will enable rota co-ordinators, managers and doctors to meet their shared responsibility for providing the best possible patient care and improving work life balance for doctors.

We are grateful to members of the NHS Employers working group and to representatives of the BMA for their work in developing this guidance.

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KEY PRINCIPLES OF GOOD ROSTERING UNDER THE 2016 JUNIOR DOCTOR CONTRACT

Key overarching principles
Technological solutions to improve both rostering and managing a live rota should be used wherever possible, particularly to support safe shift swapping where needed.

These principles, and the rostering guidance as a whole, are aimed at doctors in training but may be relevant to other staff groups with rostering challenges.

It is important to remember that staff on a rota are individuals with lives, families, commitments and priorities outside work. Thoughtful rostering that takes this into account can help improve work/life balance which has a significant impact on overall quality of life for doctors. This is vital when ensuring trainees with protected characteristics are afforded their rights under equalities legislation.

Rotas should be designed intelligently and thoughtfully, taking into account the conclusions from relevant studies on the negative implications of fatigue for doctors and patients. Rotas must be designed and managed in a way that allow juniors to get the breaks they are entitled to according to the contract, as financial penalties can apply when these are missed.

Working patterns vary significantly across different specialties and work environments so often there is no one size fits all approach. The views of trainees with knowledge and experience of a given specialty, or working pattern type, should be taken into account to ensure rotas are designed correctly for them. When designing rotas, consideration should be given to the intensity of workload and the demand that will be placed upon doctors working these rotas.

There should be a clear process in place for managing the live roster, in particular ensuring flexibility is possible for those booking leave or anyone who needs to swap shifts.

Rota design
Rota design should be a collaborative process, with equal opportunity for both employers and doctors to input into the process, and a commitment to reach agreement on final rota design through a clear and transparent process.

All rotas should comply with both the letter and the spirit of the law. A rota may be strictly compliant with the rules, but can still be poorly designed. Being compliant with all the relevant rules in the terms and conditions is the minimum that is required, and workload intensity should also be taken into account when considering whether a working pattern is safe.

A well-designed rota avoids excessive variability of shifts which can increase fatigue. It has a balanced rota cycle, with different types of shifts evenly distributed, allowing for flexible access to annual leave so that all those on the rota have an even share.

When designing rotas, managers will need to ensure that all doctors can take their full leave allowances (study, annual, etc) with sufficient capacity to be prepared for unexpected absences such as sick leave.

Rotas should reflect a realistic and safe assessment of service need, with actual work done when on-call, shift handover, and administrative time included accurately.

The process of rota design should start as early as possible, to ensure that accurate job information can be made available well in advance of the start of a post to ensure adherence with the code of practice timeframes.

Training is work for junior doctors, and rotas should be structured around training needs as well as service needs to ensure that there is sufficient time for training and access to study leave.

Shifts should be rostered according to genuine service and training needs, not in a way that is designed to reduce the payment of enhancements such as for night and weekend work.

It can be particularly challenging to design rotas effectively for less than full time (LTFT) trainees. These should be designed taking into account the specific needs of these trainee(s) instead of being planned with a full-time worker as the automatic default.

Non-resident on-call (NROC) rotas can be particularly challenging to design, the roster should accurately reflect the work that will be done to allow for both fair pay and sufficient rest and breaks.

Consideration should be given to whether the rota needs to be designed to be a standalone or whether it could be combined with another to create a greater pool of resource and allow greater flexibility.

Managing a live roster

Once a rota is designed and finalised it should not be forgotten about, but regularly checked and updated where necessary, taking into account unforeseen issues that may arise when it is used in practice – with a clear process for implementing changes including notice periods.

The existence of rota gaps should be acknowledged and steps taken to find a resolution, adhering to rota-specific minimum safe staffing levels and any other constraints, such as the required flexibility for leave across the roster.

It is important to ensure training time is protected for all trainees, including LTFT trainees, and not compromised by reduced working hours. Flexibility is also especially important for a number of trainees, for example those who have caring responsibilities or health needs.

Where a doctor has specific working requirements for health reasons, recommendations made by occupational health must be factored into the design of the roster.

It is important to check regularly whether NROC is still the most suitable working pattern, or if changes in the nature of the workload merit a switch to using full shifts, and that the expected hours of actual work reflect the reality.

Rotas should facilitate the commitment in the 2016 contract to compensation such as pay or time off in lieu (TOIL), for any additional work junior doctors are required to do outside of their agreed work schedule. Rotas should be amended accordingly where exception reporting leads to a work schedule review.

Terminology:

Rota – template working pattern design.
Roster – rota populated with specific details including staff names and dates.

ROSTER DESIGN
INTRODUCTION

A roster, in its most general form, is used to:

- forecast the staffing levels and duties required to maintain the safe running of a service
- facilitate the training and professional development of staff
- allow for full leave entitlements to be taken.

Once a rota has been established, the rostering process will transform the generic rota template into a live document detailing the deployment of staff within specialties, teams and/or departments on a day-to-day basis.

The design of a roster will consider factors such as patient needs, staff needs, organisational (employer) needs, the staffing levels and skills required to deliver service, the provision of training, quality improvement, development, and general workforce availability/rota gaps.

An approved roster should provide a live record that can identify whether training and service obligations will be met which, in turn, provides the ability to monitor for potential issues and highlight where intervention is required to tackle these early on.

Rostering is an essential function. It ensures that resources are appropriately allocated, and that patients are cared for by staff who have been effectively and equitably deployed. A roster is the means by which the hypothetical rules and requirements of a contract are used in practice and, if done intelligently, can make a significant difference to a shift worker's quality of life.

Who is responsible for rostering?
The link between staff engagement and quality outcomes is well understood and evidenced among high performing organisations. As such, good rostering practices will encourage all staff to be involved in ensuring they are effectively and equitably deployed. To facilitate this, employers should aim to provide training, and have processes in place, to enable wider engagement and ownership of good rostering across their organisation. This allows doctors the opportunity to be involved in designing and maintaining their own rotas, with appropriate support from administrative and human resources staff.

Where processes highlight workloads exceeding capacity, it will require an organisational response to manage demand or increase workforce through recruitment mechanisms. Ultimately, it is the responsibility of the employer to provide a safe and sustainable working environment.

What are the aims and outcomes of good rostering?
Aims

- Shift patterns are developed locally through open and transparent consultation with all staff to ensure the best possible use of resources in meeting service and training requirements.
- Staff are empowered to take ownership of their working patterns to facilitate (where possible) the best work-life balance and quality of service.
- Working patterns are rostered below the contractual limits with sufficient capacity to accommodate additional hours where required without the risk of a breach occurring, and to provide greater flexibility (ie shift swaps) for staff to balance work and personal commitments.
- Staff are able to access their leave in full.

- Sufficient time is available for activities such as teaching and assessment, e-learning, quality improvement, and reflective practice.
- Standardisation of rostering processes for fairness and consistency across services and departments within organisations.
- Greater utilisation of technology and e-rostering solutions (where the new technology can demonstrate an improvement on current practices), as recommended by Enhancing Junior Doctors' Working Lives and the May 2016 ACAS agreement.
- National coordination of rostering best practice through partnership working and communication of service innovations for the benefit of all organisations.

Outcomes

- Ensuring that there is safe and appropriate staffing for departments as a result of fair and consistent rostering processes.
- Improved oversight and monitoring to align staffing levels with service needs, training opportunities, and the budgets in each department.
- Better management and oversight of educational opportunities in order to allow doctors to meet the outcomes required for progression at the Annual Review of Competence Progression (ARCP).
- Ensuring that all staff are able to complete all aspects of their role within working hours.
- Improved planning and management of leave.
- Increased opportunities for doctor involvement in rostering design, development and management of their rosters.
- Better management and oversight of resources to increase effectiveness in workforce planning, with the aim of reducing reliance on temporary staffing arrangements.

Aspirational best practice

- Outstanding employers will give staff the opportunity to self-roster where possible, supported with clear guidance on the mandatory duties and shift types that must be undertaken.

THE ROSTER DESIGN PROCESS

The process of designing a roster can be complex. A well-designed roster will balance and bring together various important factors highlighted in the introductory section of this paper.

Most employers have existing processes on the design and approval of rosters. Typically, these processes will incorporate the following stages.

1. Development and evaluation of the core components within the template rota.
2. Creation of the draft roster.
3. Validation and authorisation of the draft roster as fit for purpose.
4. Publication and communication of the finalised and approved roster.
5. Review and maintenance of the roster.

The table below sets out further detail on the considerations linked to the above stages that trusts should undertake throughout the rostering lifecycle.

PROCESS STAGE	CONSIDERATIONS AND ACTIONS
Developing the template	• Develop rota in line with total whole time equivalent (WTE) staff allocated, the annual budget, and the required staffing profile to run the service, including requirements for leave. • Determine the optimum number of staff required for each duty and type of shift (ie day, night, long shift, twilight, weekend, non-resident on call (NROC) etc) • Ensure that the rota is compliant with the contractual requirements (ie hours, consecutive shifts, rest and ability to take leave flexibly). • The design of the template should involve and take into account feedback from doctors and wider staff groups. • Ensure the rota satisfies education and training requirements, including time allocated with the educational/clinical supervisor, time for quality improvement and patient safety activities, periods of formal study (other than study leave), audit and e-portfolio activities. • Ensure that the rota can be responsive to different working arrangements (such as LTFT or flexible working) and health and safety considerations (such as occupational health recommendations). • Ensure that the rota has the capacity to be responsive to known workload variations, seasonal fluctuations and other events. • Consider leave planning, training needs and likely rates of short-term sickness absence – clearly specify the maximum and minimum number of staff that can/must be off on any one day. • Ensure that shifts reflect adequate time for handover.
Creating the roster	• Create the roster using the employer's local processes and rostering system. • Identify vacancies or gaps in service that will need to be filled according to local vacancy management processes (ie locum/ temporary staff processes or additional substantive recruitment). • Confirm that there are sufficient staffing numbers incorporated into the roster to meet training and service needs and, if not, revert to the template rota design process.
Validation and approval	• The roster should present approvers with all the information needed to decide if the roster is safe and effective. • Approving staff should be provided with this guidance on what good rosters look like. • Approval should be undertaken at departmental level, with involvement of senior doctors in the department, staff who are going to work the rota (including structures such as the junior doctors' forum (JDF), and local trade union representation of those staff (this may be British Medical Association (BMA) local negotiating committee (LNC), regional junior doctors' committee (RJDC), or other regional structures as appropriate).

PROCESS STAGE	CONSIDERATIONS AND ACTIONS
Validation and approval cont.	• Approvers should carefully review: - whether there are any actual or potentially unsafe shifts - that the roster reflects agreed contracted hours - that the roster is compliant with the contractual working limits and rest requirements - that training and service needs are equitably balanced - that full leave entitlements can be taken - that known gaps are highlighted, risk assessed and escalated through local vacancy management processes. • Approvers should also consider whether the roster they are approving is one they would be content to work on • Where there is disagreement over the approval of a roster there should be a clear escalation process in place for it to be raised and addressed.
Publication and communication of the roster	• The approved roster should be published at the earliest opportunity to allow for gaps to be filled and leave requests to be submitted. • As a minimum, the roster must be made available to doctors no later than six weeks prior to commencement, as per the code of practice guidelines. • Staff should be provided with the necessary information to enable them to understand the roster and how it operates. • Changes to the roster following publication should be avoided where possible, particularly regarding shifts that attract an enhancement.
Maintenance	• Rosters should be continuously updated to reflect live changes or outcomes as a result of exception reporting (such as TOIL) and/or work schedule reviews. • Any changes to the roster should be reassessed against the contractual safety and pay requirements. • Staff involved in the management of rosters should have an appropriate amount of time allocated as part of their standard working hours, as agreed locally, to manage the required duties. • It is recommended that trusts undertake a safe staffing audit every three months, linked to the publication of the guardian of safe working's quarterly report, to ensure that the roster reflects the required staffing numbers and skill mix to meet the changing need of services and patient demand. • An agreed roster template should be evaluated and signed off annually as safe, effective and financially achievable. • Roster management should be a collaborative process with good medical engagement in the process from both senior and junior medical staff alongside dedicated medical staffing representatives.

ROSTER MANAGEMENT

There will be occasions where changes need to be made to rosters after implementation. It is essential that employers, roster managers, and doctors have a clear process to follow when making changes to a live roster as part of agreed policy. Awareness, and adherence to, this policy will be most significant for roster managers, who will lead the implementation of any changes, and for those leading on changes (ie head of service). This policy is one that should be easily accessible to all doctors, and one they are made aware of.

Changes to a live roster – guidelines

- Rosters should be provided that reflect the timescales set out in the code of practice. Effort should be taken to ensure there are a minimal amount of changes to the roster once provided to doctors.
- Changes to a live roster must be discussed with all affected staff members.
- Input from the guardian of safe working or director of medical education should be sought in situations where there is disagreement over changes to a live roster.
- All employers should have a policy, or equivalent, clearly stating the requirements of both the roster manager and doctors working under the roster, which has been agreed and signed off by the local negotiating committee (LNC). This policy should be sent to all doctors when they start a new rota. It should set out timeframes and processes for:
    - when a doctor requesting a change must inform the roster manager
    - when an employer requesting a change due to service needs must inform the affected doctor(s)
    - how quickly a roster manager must update a roster with the changes and inform any doctors who are affected
    - any engagement that must be undertaken prior to such changes being implemented.

Individual changes

- Roster managers should ensure rosters are continuously updated to provide the most accurate and up-to-date picture of the staffing arrangement. Therefore, rosters should be updated continually to reflect any changes such as approved leave, shift swaps, sickness, end and start time changes, and gaps requiring temporary staffing.
- Doctors should aim to provide as much notice as possible to the roster manager when arranging swaps, and the roster manager should be flexible, where possible, in regard to shift swaps.
- Doctors and roster managers must ensure that shift swaps are between two doctors of commensurate grade.
- The roster manager must ensure that a doctor's requested swap does not result in them breaching any of the contractual hours or safety limits. (Rosters that do not provide enough flexibility for swaps without breaches of safety limits should be reviewed to ensure adequate numbers of doctors present on the rota.)
- When changes need to be made to a live roster, which will have an impact on other doctors on the roster, the optimal approach will be to openly consult those doctors to see if anyone will volunteer themselves for their personal roster to be amended. If changes are made, every effort should be taken to avoid affecting any previously arranged leave or training.
- A doctor will be prepared to perform duties in occasional emergencies and unforeseen circumstances, if they are able and safe to do so, such as short-term sickness cover, where the employer has had less than 48 hours' notice, and for less than 48 hours' duration of cover.
- There is no requirement to payback shifts missed due to sick leave.

Wholesale changes

- There should be a minimum of six weeks' notice, in accordance with the code of practice, for any implementation of a new roster or changes affecting existing doctors on the rota.
- When wholesale changes are required to a roster, doctors' training requirements and individual circumstances should be given due consideration in the design of the new roster.
- All training requirements should be incorporated and prioritised when designing the new roster, to ensure doctors are given the opportunity to progress at the Annual Review of Competence Progression (ARCP).
- Doctors should be encouraged to activate the work schedule review process if there are any concerns with a new roster, as per Schedule 5 of the 2016 Terms and Conditions of Service (TCS).

Managing leave and other staff entitlements when changes are made to roster

- The required leave to be taken before the end of the rota period should always be close to the pro rata amount for the remaining length of the rota period. The roster manager and affected doctors should ensure all of their leave entitlement is used during the roster period.
- If there is adequate assessment of leave entitlements, training needs, and likely rates of short-term sickness absence within a roster, and an appropriate amount of staff on leave at any one time has been achieved (or close to), then the honouring of the remaining staff entitlements requirements will be easier to facilitate, and thus ensuring that staff morale is maintained.
- Existing approved leave requests should be honoured during any change to a new roster pattern.

Managing time off in lieu (TOIL)

- If an individual doctor chooses not to take compensatory rest within 24 hours, they may accrue TOIL. The employer cannot instruct the doctor to stay beyond safe working hours.
- When safe working hours (such as the 72-hour limit in any consecutive 168 hours) are threatened, then TOIL within 24 hours would be the preferred option. If an individual doctor does not take compensatory rest within 24 hours, they may accrue TOIL.
- TOIL can be accrued for up to three months, at which point it should be taken or payment given for hours worked.
- If there is insufficient capacity in the roster for TOIL to be taken without knock-on impacts, such as increased workload for other doctors leading to further TOIL, then payment should be made.
- Processes should be put in place for the accurate monitoring of accrued and taken TOIL.
- TOIL should not routinely be carried over across rotations, and payment should be made at the end of the rotation for any untaken TOIL.

When does a roster need to be redesigned?

Indicators that redesign might be required include the following:

- if the average number of hours per week required of doctors is close to, or above, the 48-hour average limit
- if doctors are unable to access the necessary training and educational opportunities to meet their curriculum requirements
- a high number of exception reports being submitted by doctors, especially if these reports are not attributable to a singular, non-recurrent, event (ie an unforeseen emergency)
- if numerous exception reports are being submitted, resulting in fines for the employer
- requests for work schedule reviews are being submitted by doctors working under the rota with outcomes that affect the roster
- if the guardian has directly raised concerns regarding the viability of a rota and/or roster
- the shift pattern is close to breaching the hours and rest requirements of doctors
- when there are breaches of the minimum rest requirements for non-resident on-call shifts
- if there is insufficient flexibility within a roster around when doctors can take their leave
- if there is insufficient capacity required to accommodate full leave entitlement, training needs and likely rates of short-term sickness absence for the rota to operate effectively
- if doctors on the roster are due to go on maternity/ paternity/ adoption leave this may not be required, dependent on: the length of the roster, where in the roster the absence is occurring, and the overall gap that the absence leaves
- if there are significant changes in demand on the service, which require a different level of staffing
- if there are changes to the service, which significantly affect how the service can be rostered (ie closed theatres).

MANAGING LEAVE REQUESTS IN ROTAS, ROSTERS AND WORK SCHEDULES FOR DOCTORS IN TRAINING

The rules relating to all types of leave (annual leave, study leave etc) should be adhered to, as set out in Schedule 9 of the TCS.

This guidance sets out principles to support the design of rotas and how to manage leave to enable doctors to access their full leave entitlement, while still running safe and effective services.

Rotas need to be designed with sufficient capacity to facilitate all types of leave. Employers need to ensure the rota is, and will, remain compliant with the contractual safe working limits as set out in the TCS.

Roster design

- Consideration needs to be given to the average amount of leave taken by each doctor in each roster cycle. Each specialty or department should identify the **maximum** and **minimum** number of staff who can be away at any one time and then work within these ranges to appropriately and evenly distribute leave throughout the period covered by the roster.
- Managers may use previous data around sickness absence, annual leave and study leave to calculate a figure to use when setting a minimum staffing level.
- The maximum and minimum staffing levels and provisions for booking leave should be communicated in writing to staff.
- If the amount of leave required to be taken each week by doctors on the rota is such that, for example, at least three doctors need to be off for one day, then the rota should have sufficient cover to allow for that leave to be taken each week. In addition, consideration should be given, where possible, to identify extra capacity to allow for other flexible requests for additional leave above the average amount.
- Employers also need to consider how to manage leave requests during peak periods, where higher numbers of doctors (and other staff) may wish to take leave (eg school holidays, Christmas, Easter). While the needs of the service must still be met, if there are, for example, theatre closures or reduced numbers of clinics in these periods, it may be possible to allow for more doctors to be on leave at that time. In such circumstances, the minimum and maximum numbers might be varied to allow greater flexibility for annual or study leave at these times.
- Once consideration has been given to ensuring sufficient capacity to take annual and study leave, then the remainder of the roster should be checked to ensure it allows for mandatory teaching days and for doctors to access appropriate clinics, theatre lists, and other education and training opportunities.

Annual leave requests

- Self-rostering and e-rostering solutions are recommended as a useful tool in handling issues linked with managing leave.
- Leave requests should be submitted to the rota manager sufficiently early for approval to be granted six weeks in advance of the start of the leave (this may be fewer than six weeks if the reasons for the delay are beyond the doctor's or employer's control – for example, where fewer than six weeks' notice of the rotation or roster has been given). Employers should respond to leave requests positively wherever possible.
- A mechanism should be in place for planning and submitting leave requests prior to a doctor starting in a post (a sample template can be found on both the NHS Employers and BMA websites). This template, or similar, should be issued with the offer of employment and work schedule for doctors to complete and return to the rota manager prior to the duty roster being issued.
- There is a mutual obligation to plan leave to take into account reasonable requests while balancing the need for adequate staff cover to provide a safe service and ensuring that all staff can take their full leave entitlement.
- Leave should be taken proportionately across the length of a placement, in accordance with normal trust processes. Where a doctor has submitted no (or insufficient) leave requests, there may come a point where rota managers need to allocate leave to individual doctors to ensure all doctors can take and do take their full leave entitlement.[1] However, most leave entitlements should be managed without the need to resort to the allocation of leave.
- The use of fixed leave must not be incorporated into a rota. A rota should not be so restrictive in its design that it gives the appearance fixed leave is incorporated into the rota.
- Doctors rotating between specialties with the same employer may, in exceptional circumstances, request annual leave to be carried over between rotations. However, approval for any such request would need to be agreed with the heads of both departments.
- Where either employers or doctors (or both) feel there is not enough flexibility in the rota to allow for proper taking of annual leave, a work schedule review should be considered.

Definitions

Fixed leave

- Fixed leave occurs where rota templates are designed with fixed periods of annual leave built into the template, and doctors are either pre-allocated a slot or are required to select a slot. There is little or no flexibility over when leave can be taken.

Allocated leave

- Allocated leave occurs when it is identified, while a doctor is in post, that their full leave entitlement is at risk of not being possible to take, and the rota manager has to designate a particular period as annual leave for that doctor.

Study leave

- All requests must be agreed prospectively with the educational supervisor and can include periods of study linked to a course or programme, approved research, teaching, taking relevant examinations, attending relevant, approved conferences for educational benefit, and attendance at rostered training events.
- Other than in foundation year 1, this can also include time for private study to prepare for examinations.
- Other areas for which study leave might be requested for consideration include occasions where there is limited availability of mandatory courses, such as advanced life support (ALS) or the European Trauma Course, ensuring appropriate availability and flexibility for those doctors who require these courses for their professional development.

[1] Please refer to recommended timeline on page 16.

- As study leave is counted as working time, approved study leave for courses undertaken on non-working days should be compensated for with time off in lieu (TOIL). For example, if a doctor has study leave approved on what would otherwise be a rostered day off, they would get a normal working day off in lieu.

Additional points to consider

Leave for supernumerary trainees

Management of leave for supernumerary trainees varies, the way in which leave is managed should be on a case-by-case basis. All trainees, including supernumerary trainees should be treated fairly and equitably with regards to the allocation of leave, taking into consideration the running of a safe and effective service.[2]

Managing days off in lieu, ie when public bank holidays are worked

If the doctor is scheduled to work at any time on a bank holiday, or have a rest day for hours and rest purposes on a bank holiday, or if they are scheduled to work a night shift running into a bank holiday, they get a day in lieu – ie an extra day of annual leave.

If the doctor is scheduled to work a night shift running into a bank holiday and a night shift on the bank holiday as well, they will only get one day in lieu, as they have only 'missed' one bank holiday.

Designing rotas to facilitate opportunities for doctors to swap shifts to allow longer runs of leave

Where possible, employers may wish to concentrate out-of-hours duties into a small number of weeks (but only where it is safe to do so). This can be beneficial as it increases the flexibility for doctors to request annual leave. Where at all possible, the roster should be designed to have at least two, if not three, consecutive weeks without out-of-hours duties, to be able to grant requests for longer periods of leave. If this is not possible there should be a mutual responsibility to find a suitable swap for shifts and notify the rota manager.

Additionally, doctors may need time off for study leave and in some cases, a large group of doctors working on the same rota may require study leave for an exam or to attend a course at around the same time. Doctors need to submit a request to their employer of the dates as soon as the doctor is notified, to allow employers to plan – it may be that reduced amounts of annual leave can be granted in those weeks to allow maximum flexibility for study leave. Employers should, where possible, grant time off for approved study leave purposes.

Knowing when other staff are on leave

It is helpful for staff to have sight of approved leave for colleagues on the same rota/department. This may be used to assess the most suitable times to request leave. This can be important across grades, for example so a trainee will know when their clinical/educational supervisor is on leave.

Job interviews

Job interviews should be considered professional leave, with time off accommodated appropriately and should not require annual or study leave for these interviews to take place. Rota coordinators should be given as much notice as possible to plan effectively.

Compassionate/special leave

Managing requests for special or compassionate leave can be challenging for both the employer and employee. Requests for any circumstances may be granted at the employer's discretion, in line with local policies. Responding positively to requests for compassionate leave will improve morale and relationships between the employer and its employees.

[2] For those working in purely supernumerary training settings, including in general practice, trainees should not be integral to the running of the service, and so where a trainee has requested leave with six weeks' notice this should be permitted.

AT LEAST 12 WEEKS PRIOR — EMPLOYERS AND DOCTORS NOTIFIED OF PLACEMENT

- Doctors submit leave request form identifying preferred dates of annual leave.
- Rota manager is provided with as much notice of leave requests as possible to support high quality rostering and planning of the rota/duty rosters.

AT LEAST 8 WEEKS PRIOR — DOCTORS RECEIVE GENERIC WORK SCHEDULE

- Employer recirculates leave request form and doctors request specific periods.
- This is a good time for the employer to share information the specifics of how to organise leave and swaps on this rotation.
- The timeframe provides suitable notice to be able to work through known challenge periods. For example, when too many doctors have submitted leave requests for periods known to have significant proportions of leave requested (eg Christmas).

AT LEAST 6 WEEKS PRIOR — DOCTORS RECEIVE DUTY ROSTER

- Doctors receive specific working pattern and approval of leave already requested.
- This is a good opportunity for the employer to highlight to the doctors how much of their leave entitlement they have already requested and reinforce the importance of spreading leave throughout the placement.

START OF PLACEMENT — DOCTORS ATTEND INDUCTION

- Further opportunity to explain how to manage leave during the rotation and the process for booking the various different types of leave.
- It is also useful to encourage doctors to develop informal mechanisms for arranging swaps, etc.

HALF-WAY THROUGH PLACEMENT — REVIEW OF LEAVE ENTITLEMENT REMAINING

- Communication to doctors outlining how much leave they have taken and how much remains unallocated.
- This allows the opportunity to ensure doctors are on track to take their full leave entitlement and helps to avoid having untaken leave at the end of the rotation.
- If issues are identified, the rota manager may need to consider allocating leave and will contact the doctor(s) concerned to discuss.

NON-RESIDENT ON-CALL ROTAS

This guidance paper sets out principles for assessing work during on-call periods.

Non-resident on-call (NROC) working patterns are required when employers do not need on-site cover, but require the doctor to be available to provide advice over the phone and/or to return to the site if needed. The terms and conditions of service (TCS) define on-call as:

> A doctor is on-call when (s)he is required by the employer to be available to return to work or give advice by telephone but is not normally expected to be working on site for the whole period. A doctor carrying an 'on-call bleep' while already present in the workplace as part of their scheduled duties does not meet the definition on-call working.

Five key areas have been identified in developing appropriate NROC rotas. This will also help facilitate and address any ongoing issues arising with the rotas.

- **How to prospectively calculate hours for work done**
- **Determining predictable and unpredictable work**
- **NROC rota design process**
- **Exception reporting for on-call periods**
- **Effective management of the rota after the design and**
- **implementation process**

How to prospectively calculate hours for work done
To ensure the hours of work set out in the work schedule are correct, on-call working patterns require employers to make a prospective estimate of average work carried out while on-call. They will then need to use the exception reporting and work schedule review processes to address variation from this estimate. Relevant available data should also be used, including feedback from staff rostered for on-call duties.

To begin, the number of hours for on-call work across an actual (and typical) week should be totalled. From this, an average amount of work for each weekday (Monday to Friday) and weekend (Saturday and Sunday) can be calculated. For example, a rota where each week of on-call generates on average 7.5 hours of work spread across the five weekday nights (in addition to the normal working day) and each weekend generates 7.5 hours of work across the two days of the weekend.

- To determine how many prospective hours of **actual work** done Monday to Friday, employers will need to divide 7.5 hours by 5 (no of nights). 7.5 hours / 5 nights = 1.5 hours (average) per night (plus 8 hours for the normal working day).
- To determine how many hours of **actual work** done on weekends, employers will need to divide 7.5 hours / 2 days = 3.75 hours (average) per duty period.

Employers will need to identify, from each of the five nights, what the busy (maximum hours) and quiet (minimum hours) times are for each of these periods in the working pattern. Assessing how frequent the rota is deviating from the maximum or minimum hours. For example, it might be that the quietest night required 15 minutes of work and the busiest required five hours.

Speaking to colleagues in the departments, obtaining feedback from doctors working on the rota and using historic (but recent) monitoring data will help to determine how many of the above average hours are likely to be worked between 2100 and 0700 and therefore to attract the 37 per cent enhancement.

Prospective hours should be communicated to doctors in advance of starting work so they are aware when they may be risking a breach of rest requirements. Employers should provide clarity on the working pattern, for example, Wednesdays on-call may typically include working until a certain time before midnight, etc.

Note:
For the sake of clarity, in calculating whether a working pattern meets the limit of 72 hours across seven days, it is recommended that employers and doctors seek to work within both the spirit and the letter of this provision and consider the limit to be 72 hours in any consecutive 168 (7 x 24) hour period.

The 72 hours should be the maximum limit of hours and not a benchmark. Employers should try wherever possible to roster below this limit to provide a safety margin for doctors working close to these limits.

Determining predictable and unpredictable work

It is important for the rota managers to be clear in specifying the average number of hours of actual work expected to be carried out during each of the duty periods, and the time(s) of day when the work would be expected to be done.

- For example, over three on-call duty periods, a doctor may be expected to work nine hours, an average of three hours per night.
- The work schedule should include an indication of the amount of predictable and unpredictable work before and after 9:00pm. Examples of predictable work may include activities such as a ward round or handover time. An example of unpredictable work may include calls from the emergency department.
- Giving as much information as possible, as set out above, allows the doctor to know what is reasonable to expect and there may be variations in shifts, and thus allows for sensible judgements about when an exception report might be appropriate (ie where an individual night falls outside of the normal range), or a work schedule review (where the total of hours looks likely to cause the average to be higher, or lower than the work schedule hours than expected).

Employers will need to identify, from each of the five nights, what the busy (maximum hours) and quiet (minimum hours) times are for each of these periods in the working pattern. Assessing how frequent the rota is deviating from the maximum or minimum hours. For example, it might be that the quietest night required 15 minutes of work and the busiest required five hours.

NROC rota design process

When designing NROC rotas attention to the following points should be considered.

- Clearly identify the start and end times of all duty periods. All travel time when the doctor is required to return to work, or travel between sites, is part of the duty.
- Consider whether the doctors on-call will normally be able to get sufficient rest at night. Can this be audited? Has there been a bleep/telephone call audit to check how intense the duty is at night? How might the failure to get sufficient rest be compensated to keep the doctor safe?
- Using historical (but recent) monitoring, diary cards, bleep and telephone audits data may be helpful to use when setting up the initial working patterns, particularly in identifying the predicted range, timing and average number of hours worked during on-call duty periods.
- Consideration should be given to variations in work occurring after a telephone call. For example, is the doctor regularly required to return to the hospital after a call or is there a routine amount of after call work that can be accounted for in the design of the rota?
- Include sufficient handover, this is critical for safe transfer of patient information to deliver continuity of care and good quality patient management. Rotas must contain sufficient time for handover. Most services will require a minimum handover of 15 to 30 minutes, some services may need to allow for 60 minutes or (in rare cases) longer. Coming in specifically to attend handover and telephone handover is classed as the duty period.
- Once the rota is designed and implemented, problems with the rota can and should be raised via exception reporting and if necessary resolved through a work schedule review.

Exemptions

- If safe and acceptable, the employer and trainee may agree to roster longer runs of consecutive on-call periods, covering up to a maximum of seven consecutive days as per Schedule 3 para 27.
- If the trainee works a low on-call intensity weekend as defined in Schedule 3 para 35, a maximum of 12 days (rather than eight) can be rostered or worked consecutively.
- As on-call duty periods should comply with safe working rules around overnight rest, the expectation on almost all on-call working patterns is that the trainee can (and should normally) be rostered to work the next day (unless other safety provisions of the contract make it impractical). Where on-call duty periods can be busy this should be for no longer than five hours, timetabled to follow the on-call duty both to allow for effective handover and to ensure meaningful rest at the end of the following shift.
- On occasion however, work at night may be such that the doctor is unable to come in the next day. Where this is happening on a regular basis, then the working pattern will need to be reviewed – it may be that an on-call roster is no longer appropriate for that service/grade.
- Employers may want to put a day off after an NROC shift, to give the trainee the opportunity to rest if the NROC has been unusually busy – however, due consideration should be given to the potential impact on the continuity of patient care, including the need for handover and/or the doctor's training opportunities before making any such decision.

Exception reporting for on-call period

Given the nature of NROC work, the average hours are likely to fluctuate to some extent and the hours worked may well differ from the average hours, simply because some nights will be busier than others (which is why an average is used for the purposes of pay, as it is for consultant and SAS work patterns). Busier nights, which fall within the expected range and pattern, would not necessarily require an exception report, nor would they necessarily trigger additional time off or extra payments (although they might, in some circumstances).

However, if the doctor perceives that the on-call activity does vary significantly, or regularly, from what has been predicted, then an exception report should be completed.

If the rota hours are breached, this should be highlighted at the first available opportunity by an exception report. This gives employers real-time information and helps identify key issues over safe working and/or missed educational opportunities.

There is also a need to assess the usual timing of work episodes. This is to ensure that the work is paid at the correct rate and mandatory rest can be achieved.

Exception reporting for an on-call period would be expected when:

- the doctor considers his/her actual hours worked create an immediate safety risk, eg if the doctor has worked throughout much of the night
- the actual hours worked create the risk of a breach of the contractual safety rules, eg the limit of 72 hours worked in a seven-day period
- the actual hours do not create an immediate risk, but vary ‘significantly and/or regularly from the agreed work schedule’ (TCS Schedule 5, para 2)
- a trainee stays later than expected during the predictable, ‘shift work’ element of a period of on-call duty (eg the twilight handover period)
- a trainee does more than the expected average hours during the unpredictable element of a period of on-call duty.

Immediate safety risk/potential breach of contractual limits

- Where an exception report indicates a concern and there is an immediate and substantial safety risk, the procedure in Schedule 5, paragraph 17 should be followed and time off given as necessary. This is required on safety grounds, even when the average hours worked while on-call have not been exceeded over the rota cycle.
- Where an exception report indicates the hours worked are likely to breach the contractual limits (72 hours over 7 days/168 hours as above), the supervisor must ensure time off in lieu (TOIL) is granted so the doctor does not exceed those limits and the breach does not occur. This is required even when the average hours assigned to work done while on-call have not been (or are unlikely to be) exceeded over the rota cycle. Contractual penalties will apply if the relevant limits are breached and the guardian may need to intervene to ensure there are no further breaches of this nature.

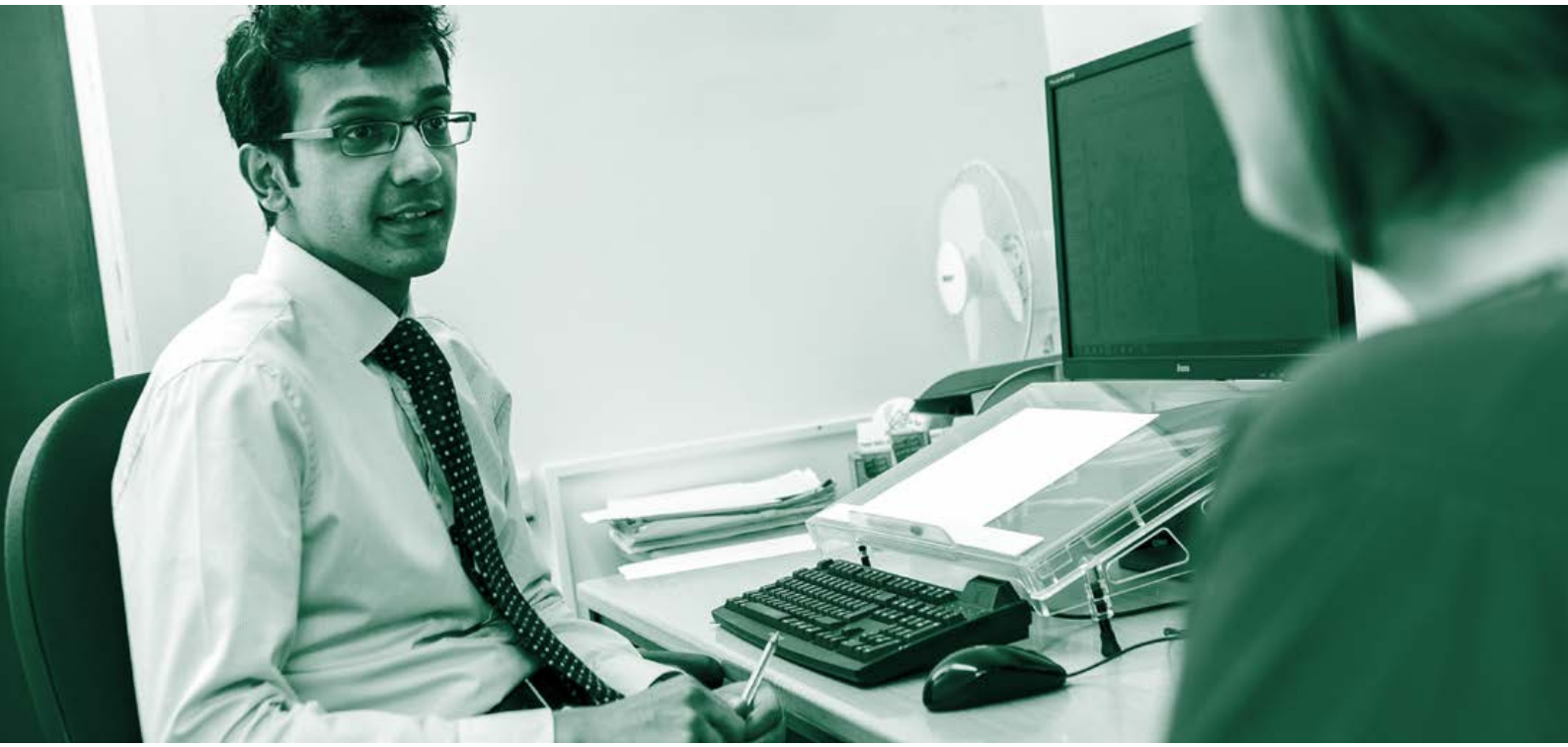
Significant or regular variation from the work schedule

- Where a doctor is working beyond the agreed hours and/or missing breaks, this must be highlighted by an exception report at the first available opportunity. This gives employers real-time information and helps identify key issues over safe working and/or missed educational opportunities.
- An exception report may indicate a concern that there is a significant or regular variation from the work schedule. This should be explored in discussion between the doctor and the supervisor.
- Exception reports requesting consideration for additional payment should be submitted by the doctor within seven working days of the event and should be responded to by the supervisor within seven working days of the report being submitted.

Managing the roster after the design and implementation process

Effective rostering means rosters are reviewed on a regular basis to ensure they meet service and training requirements. The rotas should be reviewed on a regular basis, using the contractual provisions for managing exceptions and the work schedule review process as set out in the TCS where these are appropriate.

In circumstances where the trainee is regularly exceeding the maximum hours or never hitting the minimum number of hours per shift, a work schedule review is required. In the former case, consideration might need to be given to changing the working pattern to a full shift, having an additional doctor on-call or reducing the workload covered by the on-call doctor.



GOOD ROTA DESIGN AND ROSTERING RECOMMENDATIONS FOR LTFT DOCTORS

Overview
LTFT (less than full time) training allows doctors to work part time in posts that are fully recognised for training. It covers any arrangement with reduced working hours.

There are many reasons, such as caring commitments, disability or ill health, or the undertaking of a particular activity outside of medicine, which may mean that a doctor wishes to train LTFT.

Working LTFT has many benefits and has become a requirement for many within the modern workforce. For doctors, LTFT working can reduce fatigue and allow greater enthusiasm for work by providing a better work-life balance. It facilitates a wider variety of experience within the system and helps retain a diverse cross-section of doctors in training who might otherwise have been lost from the workforce

Regardless of the reason, the practicalities of working LTFT can be difficult. Balancing work and personal commitments can often be demanding and exhausting, and deficiencies in rota design and rostering can exacerbate feelings they are not achieving as they might wish in either area.

Identifying individual needs, facilitating flexible working patterns, and providing consistency and stability (with sufficient notice for changes) are key to underpin the process of good rota design and rostering for LTFT doctors, allowing them to be effective team members in helping meet service needs.

Types of LTFT training post
HEE local offices offer different ways of incorporating LTFT training into rotas, however access to the different post types is variable.

The most common LTFT training arrangements are:

Slot share

- A training post (or more than one post) divided between doctors, so that all duties of the full-time post(s) are covered by the doctors. In a slot share the LTFT doctors are employed and paid as individuals (often for 60% or more) and work together. The doctors share the educational slot(s) but not a contract and may overlap sessions.

- It is important to note that a doctor training at 60% of full-time, for example, is not necessarily the same as a doctor working at 60% of full-time, although they may, in some circumstances, be the same. The 60% LTFT status approved by HEE refers to the percentage of training time that a doctor will get in relation to their full-time colleagues. It does not necessarily mean that the doctor will work exactly 60% of the hours of a full-time doctor in the same department (although they may do so), they could work more than 60% or less than 60%.

Job share

- A full-time contract for a training post shared between two doctors, usually at 50% each. The doctors are each paid half of the full-time salary, work half the hours and receive 50% of the training opportunities.

Reduced sessions in a full-time post

- Where a doctor only undertakes some of the hours available within an existing full-time post. This can result in the remaining hours being carried over as a gap in the rota, or the extra hours left over being shared between other doctors on the rota (where agreed).
- While the above arrangements are the most common, other LTFT training arrangements and working patterns (for example supernumerary posts and term time working) are available in certain specialty programmes. Any recommendations outlined below should equally apply to any LTFT arrangements not specifically referenced above.

Recommendations for good rota design

- The rota should be built in collaboration with the doctor(s), the department, the doctors' educational supervisor and any LTFT contribution to the rota should be planned with LTFT representatives as required (ie LTFT lead or flexible training champion) to ensure the personal and educational needs of the doctor and the service needs of the department are met.
- Each LTFT doctor must have a personalised work schedule built for them to ensure they are working the correct proportion of hours and shift types, included in the full-time template for their LTFT percentage, and are being paid correctly.
- The work schedule should highlight the individual pro-rata entitlement to study leave and annual leave (inclusive of pro-rated public holidays) of the doctor to ensure the earliest opportunity to allow the planning of leave.
- The rota should be designed to have the capacity to facilitate the full entitlement of each doctor's study leave and annual leave entitlements.
- The rota template should usually span the length of the placement where an atypical or flexible working pattern is in place to ensure accuracy in calculating pay.
- The starting basis for an LTFT rota should be to count the number of shifts of each type contained in the full-time rota cycle then pro-rate it down accordingly, checking that it aligns with the LTFT percentage and making any necessary amendments where it does not. Additional work, such as increased out-of-hours participation, may then be factored in, but only where agreed by the doctor.
    - In a slot share, out-of-hours work should be split equally at 50% rather than the doctor working above this to match their LTFT percentage, unless otherwise agreed by the doctor(s). Any remaining hours required to meet the doctor's LTFT percentage should be made up with educationally beneficial normal working hours.
    - In a single slot on the rota the LTFT doctor's average hours should represent their relative proportion of the full-time average weekly working hours, this figure should be inclusive of leave deductions and adjustments for hours/safe working controls (ie zero hours days).
    - The process must ensure that LTFT doctors do not end up on a completely different rota pattern to a full-time colleague, unless by agreement.

- Selecting rota slots should be a collaborative process with the involvement of all doctors on the rota, and not issued on a first come first served basis. Doctors should be able to state a preference for slots with the ability to raise any specific circumstances aligned to the need for that particular slot. This may include advance notification of caring responsibilities that need to be discussed when personalising the work schedule and requests for leave for life-changing events.
- Where mixed slot share posts are developed (ie 60%/60%/80%) care must be taken to ensure working patterns are fair and consistent. Appropriate and consistent runs of twilight or night shifts should be encouraged and good forward rostering (day/twilight/night) patterns should be maintained to minimise fatigue.
- The LTFT contribution to the rota should be designed to maximise and preserve educational opportunities while maintaining a safe service. Where possible, clinics and theatre time should be prospectively designed into rotas.
- Different working arrangements may promote different patterns of flexible working (for example sessional work vs specialties with the acute take) therefore different patterns of working such as flexi-hours may be more suited to specific working environments and should be considered on a case-by-case basis.

Recommendations for good rota design

- All attempts should be made, where possible, to facilitate set working day patterns where requested by the doctor in line with the statutory right to request flexible working, provided that service needs can be met. Many LTFT doctors prefer to work on fixed days each week with the same days off each week. This can be particularly important when organising arrangements for caring responsibilities, as most care providers are unable to offer varying days each week.
- Where fixed working day patterns are agreed, the fixed pattern should be put in place for the duration of a placement, and where possible across multiple rotations.
    - Adequate notice must be provided should the fixed working days need to be changed in the next placement and this should be with doctor agreement if remaining with the same host employer.
    - If changes are required to those with caring responsibilities, the adequate length of notice should take into account the minimum timeframe that care providers require to vary their services.
    - Input from the flexible working champion should be sought on any areas of disagreement.
- All LTFT doctors should have the opportunity to personalise their work schedule to ensure they are able to meet their curriculum requirements of the placement and should be encouraged to exception report deviations from their work schedule.
- LTFT doctors will be expected to make a proportional contribution to the out-of-hours rota where possible. Night shift patterns should take into consideration fixed working day patterns and off days. Where night shifts are required, steps should be taken to minimise disruption to the doctor's pattern.

- Working patterns should look to maintain as close as possible the agreed working days of the doctor.
- For example, where a doctor's normal working days are Monday to Wednesday, a run of night shifts worked on these days should only encroach on a maximum of one non-working day within that fixed pattern (ie. the first shift could start on Sunday night or the final shift could finish on Thursday morning, but the run of nights should not include both non-working days)
- Slot share patterns should seek agreement between the LTFT doctors with input from the flexible working champion on areas of disagreement. An agreed pattern should aim to be consistent with the principle of making a proportional contribution to the rota, but should be balanced with any reasons linked to working LTFT that specify certain shifts cannot be worked or should be worked in a specific pattern (for example, where recommended by occupational health).
- Where a doctor is working LTFT for health reasons, recommendations made by occupational health must be factored into the design of the roster.

- Unless agreed, a normal day, long day or twilight shift should not be rostered on a non-working day in a fixed working pattern.
- Attendance at mandatory regional teaching should be factored into LTFT work schedules at a minimum of a pro-rata basis. Fixed days of mandatory teaching will need to be incorporated into LTFT work schedules to facilitate this occurring.
- Study leave should be prospectively sought for all teaching, courses and educational opportunities that fall on non-working days and where study leave approval is granted it must be compensated with TOIL.
- The roster should be a live document which is reviewed regularly, taking into account any variations highlighted through exception reporting, to ensure that any additional work or scheduled rest maintains the doctor's average working hours in line with their LTFT percentage.
- Where a doctor's working hours fall below their LTFT percentage and are required to 'make up' shifts, the additional shifts worked should be normal working days unless otherwise agreed.

APPENDIX A

Example 1 – rotas training at 60% of full-time and working at 60% of full-time

Full time (over 16 weeks)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	0900-1800	0900-1800	0900-1800	0900-1800	0900-1800			45
2	0900-2200	0900-2200			0900-2200	0900-2200	0900-2200	65
3			0900-1800	0900-1800	0900-1800			27
4	0900-1800	0900-1800	0900-2200	0900-2200				44
5	0900-1800	0900-1800	0900-1800	0900-1800	0900-1800			45
6	2100-1000	2100-1000			2100-1000	2100-1000	2100-1000	65
7			0900-1800	0900-1800	0900-1800			27
8	0900-1800	0900-1800	2100-1000	2100-1000				44
9	0900-1800	0900-1800	0900-1800	0900-1800	0900-1800			45
10	0900-2200	0900-2200			0900-2200	0900-2200	0900-2200	65
11			0900-1800	0900-1800	0900-1800			27
12	0900-1800	0900-1800	0900-2200	0900-2200				44
13	0900-1800	0900-1800	0900-1800	0900-1800	0900-1800			45
14	2100-1000	2100-1000			2100-1000	2100-1000	2100-1000	65
15			0900-1800	0900-1800	0900-1800			27
16	0900-1800	0900-1800	2100-1000	2100-1000				44
							Average[3]	**45.25**

Rota contains: 40 normal days
14 long days
14 nights
Weekend frequency 1:4

Slot share: 60% LTFT – each doctor works 60% of normal days and 50% of out of hours (over sixteen weeks)

Doctor A

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	0900-1800	0900-1800	0900-1800	OFF	OFF			27
2	0900-2200	0900-2200		OFF	OFF	0900-2200	0900-2200	52
3			0900-1800	OFF	OFF			9
4	0900-1800	0900-1800	0900-2200	OFF	OFF			31
5	0900-1800	0900-1800	0900-1800	OFF	OFF			27
6	2100-1000	2100-1000		OFF	OFF			26
7			0900-1800	OFF	OFF			9
8	0900-1800	0900-1800		OFF	OFF			18
9	0900-1800	0900-1800	0900-1800	OFF	OFF			27
10	0900-2200	0900-2200		OFF	OFF			26
11			0900-1800	OFF	OFF			9
12	0900-1800	0900-1800		OFF	OFF			18
13	0900-1800	0900-1800	0900-1800	OFF	OFF			27
14	2100-1000	2100-1000		OFF	2100-1000	2100-1000	2100-1000	65
15			0900-1800	OFF	OFF			9
16	0900-1800	0900-1800		OFF	OFF			18
							Average	**24.875**
							Rounded average	**25**

Rota contains: 24 normal days (60% of full-time)
7 long days (50% of full-time)
7 nights (50% of full-time)
Weekend frequency 1:8 (50% of full-time)

Percentage of full-time trained: 60%
Percentage of full-time worked: 25/45.25 x 100 = 55%

[3] Please note that for the purpose of these examples the average hours figure is derived from the rota template before leave entitlement is calculated.

Doctor B

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	OFF	OFF	0900-1800	0900-1800	0900-1800			27
2	OFF	OFF			0900-2200			13
3	OFF	OFF	0900-1800	0900-1800	0900-1800			27
4	OFF	OFF		0900-2200				13
5	OFF	OFF	0900-1800	0900-1800	0900-1800			27
6	OFF	OFF			2100-1000	2100-1000	2100-1000	39
7	OFF	OFF	0900-1800	0900-1800	0900-1800			27
8	OFF	OFF	2100-1000	2100-1000				26
9	OFF	OFF	0900-1800	0900-1800	0900-1800			27
10	OFF	OFF			0900-2200	0900-2200	0900-2200	39
11	OFF	OFF	0900-1800	0900-1800	0900-1800			27
12	OFF	OFF	0900-2200	0900-2200				26
13	OFF	OFF	0900-1800	0900-1800	0900-1800			27
14	OFF	OFF						0
15	OFF	OFF	0900-1800	0900-1800	0900-1800			27
16	OFF	OFF	2100-1000	2100-1000				26

Average	**24.875**
Rounded average	**25**

Rota contains: 24 normal days (60% of full-time)
7 long days (50% of full-time)
7 nights (50% of full-time)
Weekend frequency 1:8 (50% of full-time)
Percentage of full-time trained: 60%
Percentage of full-time worked: 25/45.25 x 100 = 55%

However, as not all of the zero hour days in the rota are in there as a safety control, subject to funding, the employer and the doctor(s) could agree to add more normal days into the rota to lift each doctor back to 60% overall

Doctor A

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	0900-1800	0900-1800	0900-1800	OFF	OFF			27
2	0900-2200	0900-2200		OFF	OFF	0900-2200	0900-2200	52
3			0900-1800	OFF	OFF			9
4	0900-1800	0900-1800	0900-2200	OFF	OFF			31
5	0900-1800	0900-1800	0900-1800	OFF	OFF			27
6	2100-1000	2100-1000		OFF	OFF			26
7	0900-1800	0900-1800	0900-1800	OFF	OFF			27
8	0900-1800	0900-1800	0900-1800	OFF	OFF			27
9	0900-1800	0900-1800	0900-1800	OFF	OFF			27
10	0900-2200	0900-2200		OFF	OFF			26
11			0900-1800	OFF	OFF			9
12	0900-1800	0900-1800		OFF	OFF			18
13	0900-1800	0900-1800	0900-1800	OFF	OFF			27
14	2100-1000	2100-1000		OFF	2100-1000	2100-1000	2100-1000	65
15			0900-1800	OFF	OFF			9
16	0900-1800	0900-1800	0900-1800	OFF	OFF			27

Average	**27.125**
Rounded average	**27.25**

Rota contains: 28 normal days (70% of full-time)
7 long days (50% of full-time)
7 nights (50% of full-time)
Weekend frequency 1:8 (50% of full-time)
Percentage of full-time trained: 60% (could be raised if the extra days contributed to training)
Percentage of full-time worked: 27.25/45.25 x100 = 60%

Doctor B

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	OFF	OFF	0900-1800	0900-1800	0900-1800			27
2	OFF	OFF		0900-1800	0900-2200			22
3	OFF	OFF	0900-1800	0900-1800	0900-1800			27
4	OFF	OFF		0900-2200				13
5	OFF	OFF	0900-1800	0900-1800	0900-1800			27
6	OFF	OFF			2100-1000	2100-1000	2100-1000	39
7	OFF	OFF	0900-1800	0900-1800	0900-1800			27
8	OFF	OFF	2100-1000	2100-1000				26
9	OFF	OFF	0900-1800	0900-1800	0900-1800			27
10	OFF	OFF			0900-2200	0900-2200	0900-2200	39
11	OFF	OFF	0900-1800	0900-1800	0900-1800			27
12	OFF	OFF	0900-2200	0900-2200				26
13	OFF	OFF	0900-1800	0900-1800	0900-1800			27
14	OFF	OFF	0900-1800	0900-1800	0900-1800			27
15	OFF	OFF	0900-1800	0900-1800	0900-1800			27
16	OFF	OFF	2100-1000	2100-1000				26

Average	**27.125**
Rounded average	**27.25**

Rota contains: 28 normal days (70% of full-time)
7 long days (50% of full-time)
7 nights (50% of full-time)
Weekend frequency 1:8 (50% of full-time)

Percentage of full-time trained: 60% (could be raised if the extra days contributed to training)
Percentage of full-time worked: 27.25/45.25 x100 = 60%

Example 2 – 60%/60%/80% slot share

Designing a 60%/60%/80% slot share works best when those involved in the design of the rota work to reach a sensible and fair pattern. This will often require compromise between flexibility, consistency and out of hours frequency in order to generate good working patterns.

Full time (over 24 weeks)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	0900-1700	0900-1700	0900-1700		2045-0915	2045-0915	2045-0915	61.5
2			0900-1700	0900-2115	0900-1700			28.25
3	0900-1700	0900-1700	0900-2115	0900-1700	0900-1700			44.25
4	0900-1700	0900-2115	0900-1700	0900-1700	0900-1700			44.25
5	0900-2115	0900-1700	0900-1700		0900-2115	0900-2115	0900-2115	65
6	0900-1700	0900-1700	0900-1700	0900-1700	0900-1700			40
7	0900-1700	0900-1700	0900-1700	0900-1700	0900-1700			40
8	2045-0915	2045-0915	2045-0915	2045-0915				50
9	0900-1700	0900-1700	0900-1700		2045-0915	2045-0915	2045-0915	61.5
10			0900-1700	0900-2115	0900-1700			28.25
11	0900-1700	0900-1700	0900-2115	0900-1700	0900-1700			44.25
12	0900-1700	0900-2115	0900-1700	0900-1700	0900-1700			44.25
13	0900-2115	0900-1700	0900-1700		0900-2115	0900-2115	0900-2115	65
14	0900-1700	0900-1700	0900-1700	0900-1700	0900-1700			40
15	0900-1700	0900-1700	0900-1700	0900-1700	0900-1700			40
16	2045-0915	2045-0915	2045-0915	2045-0915				50
17	0900-1700	0900-1700	0900-1700		2045-0915	2045-0915	2045-0915	61.5
18			0900-1700	0900-2115	0900-1700			28.25
19	0900-1700	0900-1700	0900-2115	0900-1700	0900-1700			44.25
20	0900-1700	0900-2115	0900-1700	0900-1700	0900-1700			44.25
21	0900-2115	0900-1700	0900-1700		0900-2115	0900-2115	0900-2115	65
22	0900-1700	0900-1700	0900-1700	0900-1700	0900-1700			40
23	0900-1700	0900-1700	0900-1700	0900-1700	0900-1700			40
24	2045-0915	2045-0915	2045-0915	2045-0915				50

Average	46.656
Rounded average	46.75

Rota contains: 75 normal days
21 long days
21 nights
Weekend frequency 1:4

Three doctors share two training slots at 60%, 60% and 80%

They work 60%, 60% and 80% of normal days and share two sets of out-of-hours duties between them.

Doctor A (60%) – starts on line 1 of the full-time rota

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	0900-1700	0900-1700	0900-1700	OFF	OFF			24
2			0900-1700	OFF	OFF			8
3	0900-1700	0900-1700	0900-2115	OFF	OFF			28.25
4	0900-1700	0900-2115	0900-1700	OFF	OFF			28.25
5	0900-2115	0900-1700	0900-1700	OFF	OFF	0900-2115	0900-2115	52.75
6	0900-1700	0900-1700	0900-1700	OFF	OFF			24
7	0900-1700	0900-1700	0900-1700	OFF	OFF			24
8	2045-0915	2045-0915	2045-0915	2045-0915	OFF			50
9	0900-1700	0900-1700	0900-1700	OFF	OFF			24
10			0900-1700	OFF	OFF			8
11	0900-1700	0900-1700	0900-2115	OFF	OFF			28.25
12	0900-1700	0900-2115	0900-1700	OFF	OFF			28.25
13	0900-2115	0900-1700	0900-1700	OFF	OFF	0900-2115	0900-2115	52.75
14	0900-1700	0900-1700	0900-1700	OFF	OFF			24
15	0900-1700	0900-1700	0900-1700	OFF	OFF			24
16	2045-0915	2045-0915	2045-0915	2045-0915	OFF			50
17	0900-1700	0900-1700	0900-1700	OFF	OFF			24
18			0900-1700	OFF	OFF			8
19	0900-1700	0900-1700	0900-2115	OFF	OFF			28.25
20	0900-1700	0900-2115	0900-1700	OFF	OFF			28.25
21	0900-2115	0900-1700	0900-1700	OFF	OFF	0900-2115	0900-2115	52.75
22	0900-1700	0900-1700	0900-1700	OFF	OFF			24
23	0900-1700	0900-1700	0900-1700	OFF	OFF			24
24	2045-0915	2045-0915	2045-0915	2045-0915	OFF			50

Average	**29.906**
Rounded average	**30**

Rota contains: 48 normal days (62% of full-time)
15 long days (71% of full-time)
12 nights (57% of full-time)
Weekend frequency 1:8 (50% of full-time)

Percentage of full-time trained: 60%
Percentage of full-time worked: 30/46.75 x100 = 64%

Doctor A compromises with Doctor B by working slightly more hours and long days, but works fewer weekends in return.

Doctor B (60%) – starts on line 1 of the full-time rota

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	0900-1700	OFF	OFF		2045-0915	2045-0915	2045-0915	45.5
2	2045-0915	OFF	OFF	0900-2115	0900-1700			32.75
3	0900-1700	OFF	OFF	0900-1700	0900-1700			24
4	0900-1700	OFF	OFF	0900-1700	0900-1700			24
5	0900-1700	OFF	OFF	0900-1700	0900-2115			28.25
6	0900-1700	OFF	OFF	0900-1700	0900-1700			24
7	0900-2115	OFF	OFF	0900-1700	0900-1700			28.25
8	0900-1700	OFF	OFF					8
9	0900-1700	OFF	OFF		2045-0915	2045-0915	2045-0915	45.5
10	2045-0915	OFF	OFF	0900-2115	0900-1700			32.75
11	0900-1700	OFF	OFF	0900-1700	0900-1700			24
12	0900-1700	OFF	OFF	0900-1700	0900-1700			24
13	0900-1700	OFF	OFF	0900-1700	0900-2115			28.25
14	0900-1700	OFF	OFF	0900-1700	0900-1700			24
15	0900-2115	OFF	OFF	0900-1700	0900-1700			28.25
16	0900-1700	OFF	OFF					8
17	0900-1700	OFF	OFF		2045-0915	2045-0915	2045-0915	45.5
18	2045-0915	OFF	OFF	0900-2115	0900-1700			32.75
19	0900-1700	OFF	OFF	0900-1700	0900-1700			24
20	0900-1700	OFF	OFF	0900-1700	0900-1700			24
21	0900-1700	OFF	OFF	0900-1700	0900-2115			28.25
22	0900-1700	OFF	OFF	0900-1700	0900-1700			24
23	0900-2115	OFF	OFF	0900-1700	0900-1700	0900-2115	0900-2115	52.75
24	0900-1700	OFF	OFF					8

Average	**27.864**
Rounded average	**28**

Rota contains: 48 normal days (62% of full-time)
11 long days (52% of full-time)
12 nights (57% of full-time)
Weekend frequency 1:6 (67% of full-time)

Percentage of full-time trained: 60%
Percentage of full-time worked: 28/46.75 x100 = 60%

Doctor B compromises with Doctor A by working a slightly higher weekend frequency with more weekend nights, but in exchange better protects their fixed non-working days.

Doctor C (80%) – starts on line 7 of the full-time rota (Monday out-of-hours shifts picked up by doctors A & B)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
2	OFF	2045-0915	2045-0915	2045-0915				37.5
3	OFF	0900-1700	0900-1700		2045-0915	2045-0915	2045-0915	53.5
4	OFF		0900-1700	0900-2115	0900-1700			28.25
5	OFF	0900-1700	0900-2115	0900-1700	0900-1700			36.25
6	OFF	0900-2115	0900-1700	0900-1700	0900-1700			36.25
7	OFF	0900-1700	0900-1700		0900-2115	0900-2115	0900-2115	52.75
8	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
9	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
10	OFF	2045-0915	2045-0915	2045-0915				37.5
11	OFF	0900-1700	0900-1700		2045-0915	2045-0915	2045-0915	53.5
12	OFF		0900-1700	0900-2115	0900-1700			28.25
13	OFF	0900-1700	0900-2115	0900-1700	0900-1700			36.25
14	OFF	0900-2115	0900-1700	0900-1700	0900-1700			36.25
15	OFF	0900-1700	0900-1700		0900-2115	0900-2115	0900-2115	52.75
16	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
17	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
18	OFF	2045-0915	2045-0915	2045-0915				37.5
19	OFF	0900-1700	0900-1700		2045-0915	2045-0915	2045-0915	53.5
20	OFF		0900-1700	0900-2115	0900-1700			28.25
21	OFF	0900-1700	0900-2115	0900-1700	0900-1700			36.25
22	OFF	0900-2115	0900-1700	0900-1700	0900-1700			36.25
23	OFF	0900-1700	0900-1700		0900-2115			28.25
24	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32

Average	37.541
Rounded average	37.75

Rota contains: 60 normal days (80% of full-time)
16 long days (77% of full-time)
18 nights (86% of full-time)
Weekend frequency 1:4.8 (83% of full-time)

Percentage of full-time trained: 80%
Percentage of full-time worked: 37.75/46.75 x100 = 81%

Example 3 – Reduced sessions in a full-time post

There are a number of options available when putting together a reduced sessions rota. It is important to note that there may not be a clear one-size fits all model to the process, and those involved in the design of the rota should work collaboratively to agree a suitable pattern.

Full time (over six weeks)

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	0900-1700	0900-2130	0900-1700	0900-1700	0900-1700			44.5
2	0900-2130	0900-1700	0900-2130	0900-1700	0900-1700			49
3	0900-1700	0900-1700	0900-1700	0900-1700	0900-1700			40
4	0900-1700	0900-1700	0900-1700	0900-1700	0900-1700			40
5	0900-1700	0900-1700	0900-1700		0900-2130	0900-2130	0900-2130	61.5
6		0900-1700	0900-1700	0900-2130	0900-1700			36.5
							Average	**45.25**

Rota contains: 23 normal days
7 long days
Weekend frequency 1:6

Doctor on reduced sessions at 80%

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	OFF	0900-2130	0900-1700	0900-1700	0900-1700			36.5
2	OFF	0900-1700	0900-2130	0900-1700	0900-1700			36.5
3	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
4	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
5	OFF	0900-1700	0900-1700		0900-2130	0900-2130	0900-2130	53.5
6	OFF	0900-1700	0900-1700	0900-2130	0900-1700			36.5
							Average	**37.333**
							Rounded average	**37.5**

Rota contains: 19 normal days (83% of full-time)
6 long days (86% of full-time)
Weekend frequency 1:6 (100% of full-time)

Percentage of full-time trained: 80%
Percentage of full-time worked: 37.5/45.25 x100 = 83%

Alternatively, the doctor could work:

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	OFF	0900-2130	0900-1700	0900-1700	0900-1700			36.5
2	OFF	0900-1700	0900-2130	0900-1700	0900-1700			36.5
3	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
4	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
5	OFF	0900-1700	0900-1700		0900-2130	0900-2130	0900-2130	53.5
6	OFF	0900-1700	0900-1700	0900-2130	0900-1700			36.5
7	OFF	0900-2130	0900-1700	0900-1700	0900-1700			36.5
8	OFF	0900-1700	0900-2130	0900-1700	0900-1700			36.5
9	OFF	0900-1700	0900-1700	0900-1700				24
10	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
11	OFF	0900-1700	0900-1700		0900-1700			24
12	OFF	0900-1700	0900-1700	0900-2130	0900-1700			36.5
13	OFF	0900-2130	0900-1700	0900-1700	0900-1700			36.5
14	OFF	0900-1700	0900-2130	0900-1700	0900-1700			36.5
15	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
16	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
17	OFF	0900-1700	0900-1700		0900-2130	0900-2130	0900-2130	53.5
18	OFF	0900-1700	0900-1700	0900-2130	0900-1700			36.5
							Average	**45.25**

Rota contains: 57 normal days (83% of full-time)
15 long days (71% of full-time)
Weekend frequency 1:9 (67% of full-time)

Percentage of full-time trained: 80%
Percentage of full-time worked: 35.75/45.25 x100 = 79%

Alternatively, the doctor could elect to do 100% of out-of-hours commitments:

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Hours
1	OFF	0900-2130	0900-1700	0900-1700	0900-1700			36.5
2	OFF	0900-1700	0900-2130	0900-1700	0900-1700			36.5
3	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
4	OFF	0900-1700	0900-1700	0900-1700	0900-1700			32
5	OFF	0900-2130	0900-1700		0900-2130	0900-2130	0900-2130	58
6	OFF	0900-1700	0900-1700	0900-2130	0900-1700			36.5
							Average	**38.58**
							Rounded average	**38.75**

Rota contains: 18 normal days (78% of full-time)
7 long days (100% of full-time)
Weekend frequency 1:6 (100% of full-time)

Percentage of full-time trained: 80%
Percentage of full-time worked: 38.75/45.25 x100 = 86%


NHS

NHS Employers

NHS Employers is the authoritative voice of workforce leaders in the English NHS. By regularly collecting and analysing the views of employers we seek to influence workforce policy at a national and European level.
We use our expertise to support employers in delivering their mandates and priorities. We keep them up to date with the latest workforce thinking and expert opinion, provide practical advice and information, and generate opportunities to network and share knowledge and best practice.

BMA

The BMA is a professional association and trade union representing and negotiating on behalf of all doctors and medical students in the UK. It is a leading voice advocating for outstanding health care and a healthy population.
It is an association providing members with excellent individual services and support throughout their lives.