

Recommendations for safe trainee changeover

Introduction

Doctors in training in the UK have historically started new six-monthly rotations in February and August, with the majority of junior doctors rotating to new training programmes during the first week of August. There is an increasing body of evidence to suggest that simultaneous trainee changeover is associated with higher mortality, reduced efficiency and lower satisfaction. The Academy of Medical Royal Colleges (AoMRC) and NHS Employers have worked with partner organisations to develop simple, practical recommendations that can help mitigate these problems.

The four key recommendations are recognised as best practice and could be implemented within the current arrangements:

1. Consultants must be appropriately available
2. Flexible and intelligent rota design
3. High quality clinical induction at all units
4. Reduction of elective work at changeover times

The UK Medical Education Scrutiny Group has asked the AoMRC and Conference of Postgraduate Medical Deans (CoPMeD) to explore the wider issue of moving to a staggered transition by grade. The Safe Trainee Changeover Working Group has been established to examine options for long-term solutions to the problems for the UK Medical Education Scrutiny Group and relevant authorities in the four countries to consider.

The group comprises representatives from all major stakeholders across the UK, and aims to report in July 2013.

The AoMRC and NHS Employers believe these recommendations are applicable for use across the UK, whilst recognising that there will be local variation in how they might operate and be implemented.

Background

The majority of UK doctors in training will change their clinical posts on the first Wednesday in August. A UK study has highlighted a 6 per cent increase in mortality for patients admitted on this day¹. This is in line with international evidence showing increased mortality of between 4.3-12 per cent and 0.3-7.2 per cent longer lengths of stay around changeover dates².

To be able to practise safely, trainees must have access to adequate senior support³. This includes more senior trainees, who have the clinical skills and familiarity with local practice, as well as other members of the permanent medical team.

The additional stress placed on more junior trainees by simultaneous changeover may also contribute to their lower satisfaction ratings. Foundation, core medical and core surgical trainees reported 7-14 per cent lower satisfaction ratings than higher specialist trainees⁴.

The first attempt at compulsory induction dates back to 1994, when the new Pre-Registration House Officer overlapped with the previous outgoing post holder by one day⁵.

Following evidence from pilot studies, action has already been taken to ensure that medical graduates receive a paid shadowing period prior to starting work as a Foundation Year 1 (FY1) doctor. Mandatory periods have been introduced in Wales, Northern Ireland and Scotland. This was introduced as a four-day period in England in August of 2012 by a letter from Sir Bruce Keogh⁶. Shadowing ensures that those entering FY1 posts benefit from experience of the job that they will be taking over while the previous incumbent is still in post. This is usually funded by the employing organisation on a bursary basis. The purpose of the shadowing period is to support the inexperienced incoming doctor to gain practical familiarity with the specific clinical environment they will be working in, while also providing for corporate and Foundation School induction. This will enable them to better perform their duties from the first day of the job. The expectation is that such experience directly improves patient safety and will also benefit the wider functioning of the team, allowing other staff to be inducted, while ensuring adequate staffing of wards and clinics.

Soundings taken from employers and trainees suggest the shadowing went smoothly in 2012 and formal evaluation is being undertaken through the next General Medical Council (GMC) survey. It is expected that the four day shadowing period will continue in future years. This guidance does not specifically address the shadowing period of FY1 Doctors and further guidance for the 2013 scheme in England will be available on the Health Education England website: www.hee.nhs.uk.

¹ Jen MH, Bottle A, Majeed A, Bell D, Aylin P. Early in-hospital mortality following trainee doctors' first day at work. *PLoS One* 2009;4:e7103.

² Young JQ, Ranji SRR, Wachter RM, et al. 'July Effect': Impact of the Academic Year-End Changeover on Patient Outcomes. A Systematic Review. *Ann Intern Med*. 2011;155:309-315.

³ General Medical Council (GMC): The Trainee Doctor, 2011. Available online at: http://www.gmc-uk.org/Trainee_Doctor.pdf_39274940.pdf

⁴ Vaughan L, Bell D. The August Transition: The Case for Change. Discussion paper, January 2012.

⁵ NHS Management Executive. Introduction of compulsory induction courses and changing the starting day for hospital medical and dental staff. Leeds: NHSME, 1994. (EL(94).1)

⁶ Keogh B. Shadowing for Foundation Year 1 Doctors, 2012. Available online at: http://www.dh.gov.uk/en/Publicationsandstatistics/Lettersandcirculars/Dearcolleagueletters/DH_132942

Recommendations

The following recommendations outline the agreed best practice for minimising detrimental effects on patient care during changeover periods; ensuring trainees are well supported to perform their duties and can benefit from available learning opportunities.

The GMC's standards for postgraduate training, set out in *The Trainee Doctor*⁷ and monitored through the GMC's Quality Improvement Framework, place the highest priority on patient safety where training is being provided. GMC mandatory requirements that apply to all doctors in training include the need for appropriate support or supervision at all times, organised handover arrangements, shift/rota patterns that minimise the adverse effects of sleep deprivation and arrangements for induction. More specific requirements in these and other areas apply to Foundation doctors. The recommendations below take account of GMC requirements.

1. Consultants should be appropriately available

Consultants should be available during transition dates to ensure that the delivery of high quality patient care remains consistent. The consultant, as the clinical leader of the team, needs to be actively involved in welcoming, inducting and supporting their new trainees in the critical period when they are acclimatising to their new job role and environment. The consultant is also responsible for ensuring that their team value the incoming doctors and are primed to provide them with the relevant assistance to enable them to work safely.

It should be possible to secure the desired consultant presence through highlighting the importance of ensuring consistent patient care and agreeing a system of annual, study and professional leave with their doctors that guarantees appropriate presence in the workplace. In this way it should be possible to avoid restricting the leave that doctors are able to take around periods of transition. Other than essential induction, medical directors should ensure that training days, meetings and other professional or management activities requiring consultant presence are not arranged around times of transition.

2. Flexible and intelligent rota design

During daytime shifts between Monday and Friday, trainees have ready access to clinical and educational supervision. This is not always the case when working out of hours shifts or being available on an 'on-call' basis. At such times trainees can often face situations or procedures that they are unfamiliar with. It is all the more important to have a practical familiarity with the particular clinical environment if the trainee is to practise safely and effectively in the out of hours environment. Before a trainee does a shift out of hours for the first time, their educational supervisor needs to be satisfied that they will have access to the right level of support and supervision and they should have completed an appropriate period of induction. Trainee doctors' confidence has been shown to increase with additional training⁸. So, it may be helpful to provide opportunities for trainees to gain experience during daytime working hours, when clinical supervision is frequently better, of the type of activity they will be expected to engage in while working out of hours. For example, this could take the form of supervised daytime admissions work in the Accident and Emergency Department for trainees who will be working in that department out of hours.

⁷ General Medical Council (GMC): *The Trainee Doctor*, 2011. Available online at: http://www.gmc-uk.org/Trainee_Doctor.pdf_39274940.pdf

⁸ Hamilton-Fairley D, Hendron A, Okunuga C. Creating teams for acute clinical care. *Nursing Management*. June 2009; 16/3. pp26-29.

At the time of changeover it is vital that very careful consideration is given to the staffing of rotas. The fundamental pattern of a rota does not need to change, as this could cause confusion, but the way that it is populated may need to be adjusted. Trainees should not be expected to work out of hours without appropriate support until they have completed all the relevant induction, have acquired the relevant competencies and have had the opportunity to familiarise themselves with the procedures and practical considerations necessary to practise safely. As a result it may be necessary to populate the rota with other doctors, such as specialty doctors or those graded on the consultant contract, working within the employing organisation and use them to cover what would otherwise be gaps in service provision. This may mean annual leave being less available at the relevant time.

It is important that doctors are able to move between rotations, which can be geographically distant, as easily as possible. Alternative arrangements to cover out of hours duties may be necessary to ensure that doctors have adequate time to travel between rotations and attend induction at their new place of employment.

When trainees do commence on the out of hours rota or have on-call responsibilities, it is vital that they are adequately supported in discharging their duties and are able to take advantage of appropriate learning opportunities. There must be suitable access to senior advice and, where relevant, direct senior review when the trainee has concerns about a patient. Taking care that other parts of the rota are adequately staffed, and ensuring appropriate qualified doctor presence, will ensure that the new trainees have appropriate workloads in line with their capacity and competence and can deliver care to patients at the right time and to the right quality. It is also necessary to have available the right numbers and skill mix of other healthcare workers, for example nurse practitioners, site managers and physician's assistants.

3. High quality induction on all units

To help ensure delivery of excellent standards of patient care, it is important that doctors have practical knowledge of their new location and work setting. Induction is a fundamental prerequisite for this. Induction is multifaceted and includes expounding statutory regulations, imparting essential safety information, occupational health input and orientation to the clinical environment. It is also an important way to ensure that new starters feel valued as a member of the organisation from the beginning.

It is very important that the newly arrived doctor gets a comprehensive introduction to the clinical environment they will be working in. This vital component should not be overshadowed by the need to impart large quantities of corporate information, such as fire evacuation procedures or human resources protocols. While this is important, clinical effectiveness and patient safety rely on familiarity with the clinical environment. Delivering corporate induction need not be resource intensive, for example it could be delivered by electronically and in streamlined ways. This can free more time for face-to-face clinical orientation. Induction activities will normally be undertaken within work hours during the first week of employment. Where the employer, in the interests of the service or the quality of the training, requires the employee to undertake specified induction activities before taking up post, then the time spent on these activities should qualify for some form of recompense; either time off in lieu or payment. Employers should agree local policies to clarify the level of recompense⁹. Innovative programmes exist that use technology to

⁹British Medical Association. Student assistantship, shadowing and induction. Available online at: <http://bma.org.uk/practical-support-at-work/contracts/juniors-contracts/assistantships-shadowing-and-induction>

customise induction, to avoid unnecessary repetition of components previously covered elsewhere.

The clinical induction should be individually tailored to the new doctor's needs and experience. It should focus on providing them with the practical information that they need to care for their patients safely and effectively. This should include:

- an introduction to all relevant staff, with a description of their roles
- familiarisation with the layout of the hospital and relevant clinical areas
- discussion of the local unit protocols and how to access them
- demonstration of how to operate any unfamiliar equipment
- an explanation of how to order investigations and prescribe pharmaceuticals.

New starters will also need to be supplied with the practical tools that they need to carry out their functions. This includes the timely provision of identification badges, swipe cards and security passes. It is also important that doctors know where they are able to access food and drink, study areas and communal areas, such as the junior doctors mess, which provide essential sustenance and peer support.

As well as acquiring pertinent information, induction provides an opportunity to incorporate the new doctor as a valued member of the team from the outset. Studies have shown that well-functioning teams provide better patient care⁹. It is imperative that this integration occurs as soon as possible, as trainees rotate frequently and usually only spend a few months with each team. Personal input from consultants will help to increase confidence and ensure that a new doctor does not hesitate to ask for help when needed.

Induction must be sensibly timetabled, so that all essential practical information is imparted and resources highlighted before the new doctor has need of them.

4. Reduction of elective work at changeover

At times of transition it is important that staff members who are not rotating are available to deliver essential clinical services to patients and provide effective induction to new doctors. As detailed above, provision of a meaningful clinical induction requires the physical presence of senior clinicians, especially consultants. To facilitate this it is often necessary to reduce non-emergency workload around these times, enabling staff to perform these induction functions. This includes postponing strategic meetings, audit activity and non-essential paperwork. It may also require an overall reduction in routine outpatient clinics and elective procedures, with the potential release of some key consultant grade doctors from those duties.

Elective activity during transition times should not be planned at a level that could be detrimental to patient care or effective induction. Best practice reductions in activity are already happening in a number of organisations across a range of specialties, with excellent results reported.

Conclusions

1. Consultants must be appropriately available
2. Flexible and intelligent rota design
3. High quality clinical induction at all units
4. Reduction of elective work at changeover times

There is an increasing body of evidence to suggest that simultaneous trainee changeover is associated with higher mortality, reduced efficiency and lower satisfaction. These four recommendations are simple measures that can help mitigate these problems.

Over the longer term it may be desirable to stagger the start dates of trainees by grade, which would complement these four recommended measures. The AoMRC/CoPMeD Safe Trainee Changeover Group is exploring options for this and aims to report its findings in summer 2013 for the UK Medical Education Scrutiny Group and relevant authorities in the four countries to consider.

NHS Employers

NHS Employers represents trusts in England on workforce issues and helps employers to ensure the NHS is a place where people want to work. The NHS workforce is at the heart of quality patient care and we believe that employers must drive the workforce agenda. We work with employers to reflect their views and act on their behalf in four priority areas:

- pay and negotiations
- recruitment and planning the workforce
- healthy and productive workplaces
- employment policy and practice.

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For more information on how to become involved in our work, email getinvolved@nhsemployers.org

www.nhsemployers.org
enquiries@nhsemployers.org

 [@nhsemployers](https://twitter.com/nhsemployers)
 NHS Employers

 www.youtube.com/nhsemployers

NHS Employers
4th Floor, 50 Broadway
London
SW1H 0DB

2 Brewery Wharf
Kendell Street
Leeds LS10 1JR

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