Achieving compliance with the European Working Time Directive in a large teaching hospital: a strategic approach

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ABSTRACT – This paper describes the strategy which achieved European Working Time Directive (EWTD) compliance at the Royal Free Hampstead NHS Trust in medicine and surgery. Compliance with EWTD regulations was assessed by diary card exercise, clinical care assessed through critical incident reports, electronic handover documents and nursing reports, training opportunities assessed by unit training directors, cost controls assessed by finance department analysis, and workload assessed by staff attendance on wards, in casualty and in theatres. There was a change in focus of care to a consultant-led, specialist registrar- (SpR-)driven service extending into evenings and on weekends, coupled with a move to a multi-skilled team for night cover, and to a move from traditional on-call shifts to a full shift system across both medicine and surgery. Compliance with the EWTD was achieved whilst maintaining good standards of clinical care, ensuring training opportunities for doctors in training, controlling payroll costs, removing the need for locums, and reducing workload for both junior doctors and consultants.

KEY WORDS: compliance, European Working Time Directive, EWTD, medicine, surgery, training

From August 2004, junior doctors working within the NHS are no longer exempt from the provisions of the EWTD. From this point, working hours are limited to a shift of no more than 13 hours, followed by at least 11 hours break.[1] In addition, the average weekly hours worked must be reduced to 56 to meet the requirements of the New Deal.[2] The need to implement the EWTD requires the end of traditional on-call shifts as a way of providing round-the-clock cover in hospitals[3] and the introduction of patterns of working which ensure that these obligations are met, without diluting patient care or training opportunities for junior doctors.

In this Trust, steps taken to try to achieve compliance with the New Deal by the deadline of August 2003 had been unsuccessful. Despite preserving the existing on-call arrangements in all specialties and the recruitment of 61 additional doctors into non-training grade posts (making the Trust the seventh largest in terms of junior doctors[4]), New Deal compliance had only risen from 47% in March 2002[5] to 70% by September 2002.[6] This specialty-driven service meant that the hospital could, in theory, call on up to 40 junior doctors at night. Diary monitoring showed that this was far in excess of what was actually needed and this was supported by an audit carried out by nursing staff early in 2003. After looking at the night team concept being modelled at Great Ormond Street,[7] a more wide-ranging model was proposed that would cover all of the medical and surgical specialties, keep sufficient resources free to provide daytime, evening and weekend cover, and ensure that clinical care and training opportunities were preserved without incurring additional financial costs.

Strategy

An assessment of the various rota models made available through the Regional Action Team[8] showed that a minimum of eight doctors was essential for any full shift system with prospective cover, although recently the Royal College of Physicians has recommended that ten doctors is optimal.[9] A full shift pattern based on a week of nights, followed by a week off duty and then six or more weeks of daytime activity was proposed. Medicine was condensed into a single, cross-covering night-team across all specialties, with the skillmix of the team chosen to ensure that all patients would be adequately cared for at night. The same principle was applied to the surgical services. This significantly reduced the number of doctors available at night, but it was felt that they would be able to manage any surgical or medical issues that arose. This draft was issued across the Trust for consultation, with the views of consultants, junior doctors, nursing staff and others being sought to ensure that the finished model came as close as possible to meeting all requirements. Discussions were also held with the various colleges, the London Deanery, the

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Workforce Development Confederation and the British Medical Association to ensure that the proposal met with full approval as a trial.

Implementation of night team

The proposal generated considerable anxiety on the part of many of the specialties involved, and to arrive at an acceptable solution, several models were required, with the most senior levels of the Trust's clinical and general management involved. After various modifications made as a result of this consultation exercise, the final plan was drawn up and the night team was implemented on 28 July 2003. This reduced the total number of junior doctors covering all medical and surgical specialties to 18, of whom 14 were on a full shift.

The Resident Medical Officer (RMO) and Resident Surgical Officer (RSO) roles rotated among 16 medical SpRs (drawn from general medicine, health services for elderly people (HSEP), and infectious diseases) and 12 general surgical SpRs, thus minimising the loss of daytime activity for each specialty. The RMO and RSO were responsible for taking charge of night activity and ensuring that the most appropriate member of the team cared for patients. All members of the team provided cross-cover for other specialties. In surgery, where the night is less busy, a number of non-residential on-call rotas for the more specialist services remained. A Clinical Nurse Night Support Team, who managed the existing in-patients and took the first call from wards under a new bleep management policy, supported the medical and surgical night teams.

Handover to night team

A 'twilight' shift was created, providing SpR cover in every specialty during the evening between 1800 and 2200 and at weekends between 0900 and 2200. The aim was for every patient to be reviewed by an SpR prior to the handover to the night team. All patients were graded A, B or C (depending on the level of care needed), and the grading was entered onto an electronic database, specifically designed by the Trust IT team to support this shift system. The data list is used as the basis for a properly structured handover to the night team. The principles of handover included a fixed time and place for medicine and surgery with adequate overlap between shifts, notification from peer to peer (ie SpR to SpR) and links with the intenstive therapy unit (ITU) and Clinical Nurse Night Support Team. A list of all A-grade patients is printed and handed to the RMO or RSO, thus ensuring that all seriously ill patients are highlighted and that appropriate treatment can be delivered throughout the night. This electronic patient review has also provided us with an excellent tool for auditing workload, with the Medical Director getting a daily report of nighttime and weekend activity.

In 2001–2002 61 non-training posts had already been created in an effort to achieve New Deal compliance. A further 24 posts were created for implementation of the night team and EWTD compliance. The demand for extra staff arose from the need to build contributing units up to the eight-doctor minimum. In some areas, we were unable to reach the desired number and these specialties were therefore left outside the night team concept.

Results

Table 1 summarises the positive, mixed and negative outcomes of this change. A full monitoring exercise was carried out in September 2003, which showed that all posts involved were now New Deal compliant and that the majority were either EWTD compliant or 'close' to compliance, requiring only slight modifications to the pattern of daytime work. The Trust's compliance with the New Deal rose from 62% to 90%, with 84% of doctors either compliant or 'close' to compliance with the EWTD.[10] A survey of consultant staff out-of-hours calls did not show any significant increase in out-of-hours work.

Reports from nursing staff and consultants in A&E indicate

Table 1. Summary of results.

Positives
- Improved, SpR-led care for patients at night and weekends
- Decrease in number of 'full arrest' calls
- Night handover working well with electronic patient lists / care plans widely used
- New Deal compliance increased from 62% to 90%
- 84% of posts compliant or 'close' to compliance with EWTD
- Junior doctor feedback broadly supportive of night team work
- Low numbers of recorded calls to consultants, suggesting team balance is correct
- Recognition by DH, RCP, Deanery, WDC and BMA of Royal Free approach to EWTD
- Major reduction in Band 3 payments to junior staff

Mixed
- Switchboard, A&E and nursing report initial difficulties in knowing whom to call, especially during twilight shifts. There has been a tendency to want to call a PRHO rather than an SpR
- Discontent among night nurses at having to call night support team rather than a doctor
- Lack of PRHO at night results in RMO/RSO fielding calls on routine tasks
- Loss of on-call rooms has upset some junior doctors
- Hot meal facilities not available for initial launch of night team

Negatives
- Twilight zone team not fully up and running – not all patients reviewed and inappropriate duties need to be performed by the night team
- Lack of ownership of clinical problems by junior staff
- Requires high quality SpRs with leadership skills – training is likely to be needed
- High cost of lost outpatient activity in specialties contributing an SpR to the night team
- Continuity of care in post-take ward rounds devolved to consultants

BMA = British Medical Association; WDC = Workforce Development Conferderation

that patients are better cared for at night under the new system, doctors are able to respond to calls quicker than in the past and the achievement of the four-hour target for emergency care and consistent performance greater than 90%. There has been no observed reduction in specialty activity. Preliminary in-patient resuscitation audit data have shown an increase in survival rates. There have been no clinical incident reports attributable to the new system.

Discussion

A team of 10 doctors was shown to be too large for the needs of medical patients in a large teaching hospital at night and, from August 2004, the medical night team has been reduced to six doctors led by the RMO and including the medical senior house officer (SHO), cardiology SpR, nephrology SpR, hepatology/gastroenterology SpR and haematology/oncology SHO. The surgical night team will be enhanced by the inclusion of plastic surgery and neurosurgery into the team, leaving only the less intense specialties of ear, nose and throat and ophthalmology outside the team.

The change to a shift system highlighted deficiencies in the way in which this Trust organised medical 'take' and focused attention on the organisation of daytime activity. This resulted in the expansion of the Medical and Surgical Admissions Unit, which has accommodated an increase of 15% in emergency activity through A&E in 2003–2004.

Feedback from trainees is mixed, with some reporting the greater exposure to acute problems at night and the development of teambuilding and leadership skills as being beneficial, while others express concern at the perceived loss in daytime training opportunities. Specialties have needed to reorganise their daytime commitments to support the change in junior doctors' work patterns. Some of the SpRs report dissatisfaction at having to do the work of SHOs during the night. Some members of the night team report appreciation of the exposure to areas otherwise outside the scope of their training, but others are unhappy at the loss of dedicated time in their own specialty. The change has highlighted difficulties with communication with junior medical staff in a large NHS Trust and resulted in the establishment of a junior doctors' forum. The plan has highlighted the need to proactively manage and coordinate medical staff absence, with dedicated time available to undertake the complex task of organising rotas and leave.

The switch to a night team marks a huge cultural change in the way in which hospitals of this size have traditionally been run. To support the change, a number of extra training programs have been designed, both to provide additional skills to those doctors involved in cross-cover arrangements and to help develop leadership skills for those SpRs undertaking the RMO and RSO roles.

The current model was initially applied to medicine and surgery. There were still 36% of junior doctors who are not compliant with the EWTD, most notably in the areas of paediatrics, obstetrics and gynaecology, anaesthetics, radiology and some of the smaller surgical subspecialties. Each of these has been assessed to determine how they might be integrated into the night team.

The night team model worked in this hospital because the resources were largely already in place. The Royal Free Hampstead NHS Trust is well staffed and has few difficulties in recruiting to non-training posts. This model could not have been implemented without the contributions of the 85 extra doctors. Our belief is that this strategy is compatible with models from the Department of Health's 'Hospital at night' project and could be adapted by other teaching hospitals of a comparable size to suit their own needs. Although smaller hospitals do not have the staffing resources of a large teaching hospital, there are lessons from the Royal Free experience that will apply equally to their situation.

A change of this significance could not have occurred without clinicians driving it. They required support from those with technical expertise on the EWTD, the senior management of the trust, and the active participation of those external bodies responsible for training and professional regulation.

Key Points

- **A 'Hospital at Night' approach can deliver compliance with the European Working Time Directive**
- **Cross-cover arrangements can work effectively in a large teaching hospital**
- **Effective evening and weekend working is essential to support the night team**
- **Leadership skills need to be developed to support team working**

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Contributors

Gareth Jones oversaw the project, took responsibility for designing the new rotas, helped to coordinate the night team concept, drew up the detailed plans for the surgical night team and wrote the first draft of the paper. Mark Vanderpump helped

to draw up and implement the detailed plans for the medical night team, coordinated the medical handover and conceived the electronic handover system. Mark Easton headed the Local Implementation Group. Daryll Baker coordinated the surgical handover and night team consultation. Carol Ball conducted the preliminary audit of work at night and provided liaison with the Clinical Nurse Night Support Team. Michael Leenane designed the electronic handover system and Heather O'Brien supervised the IT support for the implementation. Nigel Turner supervised the Human Resource implications of the project. Martin Else had overall leadership for the implementation of the project. Wendy Reid initiated the concept of the night team, consulted with external agencies and had leadership for training concerns in medicine and surgery. Margaret Johnson had overall leadership and responsibility for clinical governance.

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