



British Orthopaedic Trainees Association

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BOTA POSITION STATEMENT ON THE EUROPEAN WORKING TIME DIRECTIVE AND TRAINING IN TRAUMA & ORTHOPAEDIC SURGERY – JANUARY 2009

Background

Trauma and Orthopaedic Surgery is currently the largest individual surgical specialty, accounting for almost 40% of all surgical trainees in the UK. The term 'surgical trainee' refers to a middle-grade, specialist doctor who has completed basic surgical training, appointed to a 6-year specialised post-graduate training programme, consisting of participation in clinical, surgical and educational activities, thus leading to the acquisition of the Certificate of Completion of Training (CCT). This corresponds to the Specialty training years ST3-8 as defined in Modernising Medical Careers¹. The CCT allows entry onto the General Medical Council Specialist Register, conferring eligibility of application to a Consultant post in Trauma and Orthopaedic Surgery.

The British Orthopaedic Trainees Association (BOTA) represents Trainees in Specialist Training in Trauma and Orthopaedic Surgery. We have 1333 members (over 95% of UK trainees), with a twelve-person committee elected annually via due democratic process in which all members are entitled to vote. As an organisation, BOTA represents the largest group of single specialty trainees.

Like all surgical disciplines, orthopaedics is a 'craft' specialty, with training historically best described as an apprenticeship model. This philosophy was well incorporated in the Department of Health publication, 'Hospital doctors: training for the future²', brought out by the Working Group on Specialist Medical Training, set up in 1992 by the then Chief Medical Officer, Kenneth Calman. This led to the so-called 'Calman reforms', providing more formally structured training. A key aim was to ensure that all trainees acquired the experience required by the specialist curriculum, placing more emphasis on structured teaching and supervised learning

Two years after the implementation of these reforms, trainee ratings of the educational elements of their posts had improved; educational objective setting, consultant feedback and clinical

supervision were all more likely to have occurred and been satisfactory³. This still holds true today and is the yardstick by which all the new changes in training are to be measured.

The Problem

1.1 The European Working Time Directive (EWTD) became law for Junior Doctors in August 2004. It reduced the working week to a maximum of 58 hours. In 2007 the working week was further reduced to 56 hours. As of August 2009 there will be a further, final reduction to 48 hours per week. There are also strict stipulations regarding rest requirements, including particularly the need for 11 hours continuous rest in every 24-hour period.

A report published in 2006 by the Association of Surgeons in Training (ASiT) found that the reduction to 56 hours **resulted in a 20% decrease in exposure to operative cases**⁴.

1.2 In 2008 a Consensus Statement by the Association of Surgeons of Great Britain and Ireland on 'The Impact Of EWTD On Delivery Of Surgical Services' concluded that the further reduction in of the working hours to 48 per week; "...**will reduce current elective training opportunities by 25%** for trainees working a full shift system with night cover⁵".

1.3 Trusts are struggling to meet the EWTD requirements within current working patterns. By May 2008, fewer than 20% of surgical training rotas were even 56 hour compliant⁶. Increasing numbers of Trusts are moving towards partial-shift and full-shift rotas.

This means that the surgical trainee will spend approximately one week in every seven working a week of night shifts, during which time there will be no participation in the daytime activities of the department, resulting in the loss of both continuity of patient care and access to supervised training opportunities. Further time must be taken as days off before and after the night-shifts, resulting in a loss of up to 30% of day-time clinical experience.

1.4 The regulations drawn up subsequent to the National Confidential Enquiry into Perioperative Deaths state that surgery should only be undertaken at night for life or limb threatening conditions. As this applies only to a very small proportion of emergency orthopaedic surgical cases, **a trainee orthopaedic surgeon will gain minimal surgical experience at night.**

However, at present, even if the trainee is asleep in an on-call room at night, following the European Court ruling in *SiMAP*⁷ (upheld by a European Parliament vote in December 2008) this time must still be counted as work, and the trainee must therefore leave the hospital at the start of the next working day, **missing out on that entire day's opportunity both to treat patients and to gain valuable operative and clinical training experience.**

1.5 Surgical training numbers have reflected service needs rather than training needs. The Workforce Review Team⁶ has forecast in November 2007 that, by 2012, both General Surgery and Trauma & Orthopaedics will be overproducing trainees. Until there is a clear indication that

funding is available to increase the number of substantive Consultant posts, the number of trainees appointed must therefore be restricted to avoid a massive oversupply. This reduction in trainee numbers, at a time when existing trainees are spending increasingly little time in hospital, leaves a large service provision shortfall. In addition to dilution of experience due to a finite number of cases, this poses two separate problems, outlined in 1.6 and 1.7.

1.6 When trainees *are* present they are under increasing pressure to undertake non-training service provision tasks to 'fill the gap', such as running follow-up clinics rather than spending time either seeing new out-patient referrals or acquiring surgical skills in the operating theatre.

1.7 In order to provide adequate on-call rota staffing levels, departments are required to appoint non-trainee 'middle-grade' doctors. This is both financially costly to Trusts (a larger number of doctors working shorter hours is significantly more expensive than a smaller number working longer), as well as being detrimental to continuity of patient care due to more frequent shift changes in the medical team. Throughout the NHS, this has been achieved largely by such employment of numerous extra non-trainee middle-grade doctors.

1.8 The shift system will result in the majority of surgical trainees being unable to be supervised by a given consultant throughout a given post, instead having to switch constantly between trainers, depending on which part of the week they are in the hospital during 'normal' working hours. The mutual build up of trust through the trainee-trainer relationship is at the very core of surgical training, where the learning of the craft must necessarily be undertaken by the experience gained by exposure to a wide variety and a large number of cases. This will suffer significantly if trainee surgeons have no team structure from which to gain this experience.

1.9 BOTA and ASiT have both recently run on-line surveys, to which there were 633 orthopaedic trainee responses. Over 90% of respondents said that the EWTD had had an adverse effect on both their training and their personal lives. Surgical training is a vocation – trainees do not wish their working hours to be limited to 48 a week; they wish to be trained to be safe and competent surgeons. Additionally, the surveys have found that **by forcing doctors into full shift work, EWTD restrictions have caused home and family life to suffer, despite an overall reduction in the proportion of the week spent at work.** Thus at both professional and personal levels the impact of each subsequent hours reduction has been overwhelmingly negative.

1.10 As outlined in 1.1 and 1.2, August 2009 will see an envisaged loss of nearly 40% of training opportunities when compared to the pre-2004 (Calman) trainee, due directly to the reduction in working hours in accordance with the EWTD. Both the amount and the intensity of operative exposure impact on the acquisition of surgical skills. As the operative experience increases, so too do operative decision-making skills, and communication with colleagues, patients, and families improve.

The works of Ericsson⁸, and Dreyfus and Dreyfus⁹ have demonstrated that the same amount of practice in an extended timeframe will never amount to equivalent expertise, as the experience is not gained at a high enough intensity or as deliberate practice. Therefore, the proposal that a shortening of working hours (decreasing exposure and intensity of workload) be compensated by a lengthening of training will not yield the desired endpoint of surgical expertise. The time in training needs to be concentrated, so as to focus on the acquisition of the final phase of skill acquisition (expertise), whereby intuition and experience allow the expert consistently to perform at the highest level.

Discussion

2.1 It has previously been agreed by the Specialty Advisory Committee in T&O, in conjunction with the British Orthopaedic Association & BOTA, that the average working week for a trainee would comprise at least 2 elective operating sessions, 1 trauma list, 2 orthopaedic clinics, 1 (no more than 2) fracture clinics, 1 session for ward work/administration, 1 session for audit/research & 1 session for protected teaching; i.e. 9 half-day sessions plus on-call. In departments undertaking specialist tertiary referral work there should be a Multidisciplinary Meeting and in units undertaking trauma work there should be a daily consultant-led Trauma Meeting.

2.2 In order for this to be achieved without impacting on the provision of patient-safe out-of-hours cover, an **average working week of at least 65 hours** is necessary. As already shown^{4,5} any less than this is inconsistent with the recommendations in 2.1. This is based on a 1 in 7 on-call rota to provide out-of-hours cover at night and weekends, with prospective cover.

2.3 BOTA's view is that shift patterns of work lead to a significant loss of daytime training opportunities. We wholly support the continuation of full 24-hour on-call rotas. This enables the trainee to attend all daytime commitments, thus minimising lost training opportunities, as well as allowing for continuity of care for patients.

2.4 Both postgraduate training and surgical service provision face an immense crisis if the restriction to 48 hours a week is imposed in August 2009. From the surgical trainee perspective there will be two chief components of this:

- **Large numbers of extra doctors will be required to support on-call and daytime service** provision rotas at huge financial cost (the initial promised £50m to cover this has already been extrapolated to £110m for the following year); the unavoidable alternative will be extensive falls in the productivity of all departments which succeed in meeting the EWTD restrictions.
- The level of expertise of future consultant orthopaedic (and other) surgeons will undoubtedly be significantly inferior to that currently taken as the minimum standard.

This will lead to inevitable widespread falls in the standard of patient care provided, with serious patient safety issues resulting from the unavoidable increase in clinical errors.

Recommendations

3.1 Previous discussions between government and representatives of the medical profession – the British Medical Association (BMA) in particular – have invariably centred around the notion of delaying the introduction of the 48-hour restriction. **The views represented by the BMA are, however, wholly inconsistent with those of the surgical specialties**, who do *not* view such a delay as a solution, but merely a temporising measure.

3.2 The impending reduction in weekly hours worked by trainee surgeons is a threat to the safety of patients, and in the shorter term the throughput of departments; if this reduction is introduced, the grave crisis alluded to above (2.4) is a nationwide inevitability that will sorely harm the entire Health Service. We would welcome the opportunity to be involved in further debate on this subject.

3.3 As the future of the orthopaedic surgical profession, **BOTA strongly call upon the government to pass urgent legislation to allow a profession-wide opt-out of EWTD restrictions, such that the average weekly contracted number of hours may be increased to 65.**

References

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