In Autumn 2000 the Academic Board of the British Orthopaedic Association (BOA) established a working party to assess the education and training needs of senior house officers (SHOs) and to investigate the tensions which exist between service and training. We sought to examine the tasks which these doctors are required to undertake and how they complied with the requirements laid out in the *Manual of basic training of the Royal College of Surgeons of England*. These stipulate that each trainee must be part of a clinical team supervised by an approved consultant. The post must provide the trainee with experience of the initial assessment, investigation and treatment of a wide range of surgical conditions and their continuing care. The workload must include the diagnosis and treatment of elective and emergency admissions, attendance at outpatient clinics, preoperative assessment, operative surgery and postoperative and intensive care. The weekly timetable should include two to three operating sessions, one of which should be a designated teaching list, two outpatient clinics, two to three sessions of ward work, administration and teaching.

We used the data available from the British Orthopaedic Association and the Royal College of Surgeons of England to identify 1141 SHOs employed in departments of trauma and orthopaedic surgery across the UK. Each was sent a questionnaire which examined all aspects of their post and a response was received from 658.

Although most trainees had well-constructed job plans, one-quarter did not regularly attend clinics and, although most were frequently present at theatre sessions, only two-thirds were taught to operate. Most of the SHOs had a named educational supervisor. One-third had not met their supervisor to set an educational agenda in the previous six months and only half had subsequent meetings to monitor their progress. Access to weekly educational meetings was available for most of the respondents and the majority of these seminars usually took place. However, two-thirds of trainees were not released from their clinical duties to attend and only one-fifth had been to more than half of these meetings.

There is a marked difference in the populations served per consultant across the regions, varying from 35 000 to 48 000. When analysed against the grouped responses of the SHOs it was clear that in overstretched units in which a consultant served a greater population the supervision of the training of SHOs and its educational content were seriously impaired.

Since SHOs are the consultant specialists of the future they deserve the best possible training which meets their individual aspirations and personal needs in order to equip and motivate them to provide proper care for their patients. Time spent in trauma and orthopaedics should offer newly-qualified doctors an opportunity to learn professional competence, good relationships with patients and colleagues and observance of the obligations of professional ethics. In particular, they should regularly make an assessment of the patients’ condition based on the taking of a history and the eliciting of clinical signs, and thereafter arrange investigations and treatment.

All SHOs should move through defined educational programmes as opposed to fulfilling posts created solely to meet service demands. The different aspirations, expectations and career needs of the trainee should be recognised while meeting service requirements. Standards of clinical performance need to be set with regular monitoring and appraisal. The *Manual of basic surgical training* prescribes the requirements for basic surgical trainees working in the major surgical sub-specialties. There is an unambiguous insistence that their education demands exposure to a range of elective and emergency conditions presenting in outpatient clinics, wards and operating theatres. Trainees should be under the supervision of an approved consultant, ‘learning’ at the elbow of a consultant surgeon.

It is expected that modern strategies of adult learning will be adopted in the form of the guidance of a named educational supervisor or trainer who must set an agenda.
with the trainee and monitor progress during the attachment. Supplementary formal education should be organised within departments and within hospitals to augment learning and to assist in the preparation for the MRCS examinations. Different specialties and different units vary in their compliance with these requirements.

We have attempted to clarify the extent to which the training of SHOs in orthopaedics across the UK meets the requirements of the Royal Colleges. It is clear that an appreciable number are still working within units in which outpatient and theatre exposure is limited and in particular where operative teaching is absent. Compounding these limitations is the disappointing observation that although the vast majority of trainees have an identified educational supervisor a significant proportion is not experiencing the benefit of the setting of educational agendas or continued educational appraisal. Although most trainees were working in institutions in which formal educational meetings were taking place a worrying minority was not able to attend on a regular basis because of service commitments.

The Government has recognised that consultant expansion is a prerequisite to the delivery of the NHS Plan.5 Our observations confirm that such an expansion is also vital in order to improve the education of surgeons in training and in particular for basic surgical trainees. We anticipate that for the foreseeable future training commitments and patient throughput will continue to compete for consultant time. If we are to deliver training of high quality, calculations of manpower should be cognisant of such competing pressures. The training of future surgeons requires an investment in time and resources which is more important to the long-term health of the NHS than the achievement of shorter waiting lists.6 The tension which exists between current service needs, the training of the next generation of consultants and hence the quality of patient care in the next two to three decades, must be addressed. Our study shows that the greater the service demands the poorer is the training for consultants of the future. Changes in training now and the need to meet current service pressures, without the necessary expansion in consultant trainers, is likely to affect patient care adversely for decades to come.

References