

# Surgical training for the next millennium

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**The Calman reforms in training have meant that surgical training now consists of a 2-year basic training period followed by a 6-year period of higher surgical training. This article addresses the problems faced by the new Calman surgical trainees and proposes some new measures which could be introduced for surgical training in the next millennium.**

The Calman reforms in training have proved popular with junior doctors. However, concern has been expressed, particularly by surgeons in training, that the 6-year higher surgical training (HST), together with the limitation of hours of work as required by the New Deal, may prove to be inadequate. Therefore more productive ways of surgical training will need to be considered. This article will recommend a number of measures to facilitate this.

### A UNIFIED POSTGRADUATE TRAINING GRADE

One such measure would be the introduction of a unified postgraduate training grade (Dinsdale and Wilson, 1998). This would abolish the bottleneck that surgical senior house officers (SHOs) face as they wait for a national training number (NTN) in order to become a specialist registrar (Dinsdale and Wilson, 1998) by regulating the number of training posts to the actual or expected number of consultant posts.

While awaiting this grade, attempts could be made to facilitate its introduction with, for example, a 'speciality' SHO (SpS) in the interim. This would be an SHO who has chosen general surgery or one of its subspe-

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cialties as his/her preferred career path. A SpS should be spared from certain routine clinical work that has little or no training value. This would include tasks such as the clerking-in of preoperative patients, which could be delegated to a dedicated nurse-led preassessment clinic together with anaesthetic supervision. The SpS training programme should be on a par with that currently enjoyed by registrars whose responsibilities revolve around theatre, outpatient clinics and the day-to-day care of inpatients under adequate consultant supervision.

### EARLY SPECIALIZATION

We believe that the current mandatory clinical training as recommended by the Royal College of Surgeons needs to be reviewed. It has been estimated that in the bad old days a general surgeon underwent 80 000 hours of clinical work, compared with the modern Calman student who will become a consultant after only 25 000 hours (McDonald, 1998). What is needed now is to make more productive use of less time.

Over 2000 years ago Hippocrates recognized the value of specialist skills:

**'I shall not cut for stone but leave it to those who are specialist in the art (Harrison, 1998).'**

This would be possible by direct entry leading to earlier specialization. Over 50 years ago the British Association of Urological Surgeons was formed and today the speciality's separation from general surgery is complete (Harrison, 1998). Other asso-

ciations exist for other specialities. We would recommend that a variety of specialities such as plastic surgery, ear, nose and throat (ENT), orthopaedics and neurosurgery would benefit from setting up direct entry without trainees having to do the presently recommended mandatory basic surgical training (BST).

As radical as it may initially sound, it is time that we moved away from the concept that general surgery, orthopaedics and accident and emergency (A&E) are the foundations of all surgical training. There is no need and no additional benefit for all surgical trainees to experience all these specialities. The 18 months spent working in these specialities could be more profitably spent by direct apprenticeship in the trainee's chosen field. For example, a SHO who wants to specialize in ENT need not learn how to do an appendicectomy, let alone any of the more complex bowel procedures. Similar examples can be found in other specialities.

Orthopaedics with general musculoskeletal trauma continues to be a mandatory requirement. This would seem to be an unnecessary burden on the general basic surgical trainee who essentially clerks in the patient, assesses the severity of the injury and prepares him/her for the trauma list the next day which he/she does not even do.

The Royal College of Surgeons no longer considers A&E as mandatory for surgical training, but it continues to be recommended and is included in many BST schemes. Furthermore, some authors call for its reintroduction

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as compulsory despite the fact that only 2% of cases (D Varghese, unpublished data, 1998) seen in A&E are surgical in nature, and that in every modern institution trauma patients are dealt with by a dedicated multidisciplinary trauma team and no longer by a lone A&E SHO.

In the current system, higher surgical trainees in urology do not participate in the general surgical rota and deal solely with urological emergencies. Thus why does an SHO who has decided early on to pursue a career in urology need to participate in the general surgical rota? Each speciality lays its own foundations, which are built upon with time. Principles from other fields will be repeated if relevant and forgotten if not used. The skills learnt while doing general surgery by the future urologist that apply only to general surgery will soon be forgotten, whereas those skills that apply to both will be developed as training progresses.

### INTEGRATING TRAINING

We suggest that the present BST and HST schemes should be integrated and progression through the scheme should be subject to 6-monthly reviews. While the use of logbooks to record operative experience is to be commended as an essential tool in this process, what is often overlooked is the role of the trainee during these procedures. Much greater emphasis should be placed on those occasions where the trainee performed these procedures under supervision rather than simply holding a retractor. Quantity must not be equated with quality (Riordan, 1998).

To improve a junior surgical trainee's operative technique, theatre sessions will need to have a greater teaching commitment. Every operation should be divided into a series of graded steps, which the trainee can be taken through initially and then start to perform each step with increasing confidence. By doing this, over a course of time the trainee's requirements and deficits will have been met.

An objective assessment of the trainee's progress could then be moni-

tored by means of an objective structured assessment of technical skill (Faulkner et al, 1996). This has funding implications and the postgraduate deans should ensure that such sessions become as common and frequent as is the situation with the present educational half-day.

Worthing NHS trust is prepared to fund the development of nurse practitioners to be trained to do endoscopies; however, no surgical SHO, including those that have expressed a strong interest in general surgery or cardiothoracic surgery, has been offered this opportunity. This is a shortsighted policy. This leads to a dangerous situation a few years down the line when, as a newly appointed specialist registrar, he/she will need to do them electively and in an emergency situation with little or no prior experience and certainly no formal training. The postgraduate deans should have powers to curb such short sightedness of NHS trusts more interested in service rather than training commitments.

More sub-specialization even within general surgery will also be required. It has been shown that surgeons with a special interest in breast surgery achieve better results than their colleagues. It is already recommended that all colorectal emergencies be dealt with by colorectal specialists (Parker, 1998).

While such superspecialization has always been viewed in a negative light in the past we would argue that a trainee who, for example, chooses to specialize in colorectal surgery would perhaps have gained more relevant experience in their chosen field had he/she utilized more of their 25 000 hours doing colorectal operations than orthopaedic operations and vice versa. This is doubly beneficial. The trainee optimizes his/her operative efficiency while concurrently minimizing their own and a colleague's inefficiency.

### CONCLUSIONS

With the combination of the Calman reforms and the reduction of junior doctors hours as required by the New Deal, we propose that the above measures would lead to more focused surgical training producing more competent trainees and future consultants. **HM**

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### KEY POINTS

- With the implementation of the Calman reforms, surgical training now consists of 2 years basic surgical training followed by 6 years higher surgical training.
- The introduction of a unified postgraduate training grade would integrate the present basic surgical training and higher surgical training and abolish the bottleneck faced by surgical senior house officers.
- Surgical trainees would benefit from earlier specialization into their chosen field, thereby gaining more experience that is relevant.