JCST Discussion Document

The ISCP Evaluation Report by Professor Michael Eraut

The Eraut report\(^1\) was commissioned primarily to evaluate the implementation of the ISCP. However, what it has also produced is a disturbing insight into the current condition of surgical training in the UK. Many factors are identified as being responsible for this unwelcome state, not all of them obviously remediable. The purpose of this paper is to promote a discussion about practical methods to restore high quality surgical training.

Areas for discussion and some key questions - comments are sought on these and any other questions:

- **Curriculum for surgical training** –
  - Allowing for the environmental factors identified in the Eraut Report, is the ISCP ‘fit for purpose’ as a curriculum for surgical training?
  - What is good?
  - What needs development?

- **Quality of surgical training**
  - What steps should be taken to ensure surgical trainers are ‘engaged’ with ISCP?
  - Are surgical trainers equipped to deliver the ISCP?
  - Is there a need for a new programme of faculty development, and if so who should deliver it?
  - Should trainers be formally accredited? How and by whom?

- **Culture of surgical training**
  - Does the modern NHS provide a suitable training environment?
  - How can a training culture be developed within a target driven service?

- **Standards for delivery of surgical training**
  - Is there a requirement for a more robust and explicit set of standards for surgical training?
  - What form should these standards take?
  - How could they be enforced?

- **Time for surgical training**
  - Is there enough time to deliver the training?
  - Can the time frame be extended?
  - What strategies could be employed to deliver training in the shortened time frame?

- **What is the purpose of surgical training**
  - Is every trainee on a CCT programme expected to achieve a consultant post?
  - Is it necessary to review the future of the surgical workforce?

Chris Munsch, Chair, JCST

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\(^1\) The executive summary of the Eraut report is appended to this paper. The full version, which is very long, is available on request by e-mail from the JCST secretariat.
Evaluation of the Introduction of the Intercollegiate Surgical Curriculum Programme

Professor Michael Eraut, University of Sussex

Summary

1. External factors affecting the introduction of ISCP (pp9-15)

The biggest challenge for this evaluation was that the changes introduced by ISCP were almost swamped by other changes already in progress.

The European Working Time Directive (EWTD) will reach its final figure of 48 hours a week in 2009, and this has significantly reduced the time that trainees can spend in both formal and informal learning environments. This situation has been further exacerbated by the growth of Sub-specialties, which limit the range of consultants’ domain of expertise. The combination of both these factors has led to the dissolution of the “firm” structure and the introduction of shift working for both trainers and trainees in several branches of medicine. In surgery, the overall work patterns of trainers and trainees in a shift system cannot be matched; so the time they can be in the same place together has been significantly reduced.

Modernising Medical Careers (MMC) was intended to reduce the time taken to become a consultant by 2 years, which might have been possible if other factors had stayed the same. However, the understandable focus on reducing waiting lists for elective surgery has led to the disappearance of “training lists” from many hospitals to improve their productivity. Moreover, the recruitment of the first cohort of the new MMC surgical trainees through MTAS coincided with the introduction of ISCP and created a very negative mood among surgical educators, which did not help evaluators seeking data on the progress of ISCP.

Although ISCP was able to negotiate the restoration of the two lost years, the effect of all the other changes was a steady reduction of access to training at all levels before the introduction of ISCP. For example, an increasing number of surgical registrars feel unready to take CCST, because they have had insufficient access to practice during their postgraduate training.

2. The Evidence Base for this report (pp7-8)

- Data collected by the ISCP website, the centre for formal communications between trainers and trainees.
- Three surveys from different agencies: a JCST Quality Assurance survey in November 2007, a PMETB survey at the beginning of 2008, and a small survey of a group of London trainees doing Anatomy courses at RCS.
• Four research studies commissioned by ISCP from different deaneries:

1. **Warwick** focussed on continuity of care and factors impacting on surgical training and patient outcomes. Their evidence was collected from 12 focus groups between October 2007 and May 2008.

2. **Kent, Surrey, & Sussex (KSS)** focussed on the nature and value of the support for trainers, especially the role of Trust-based faculty groups from January 2007 to March 2008.


4. **Southampton** focussed on the most critical features for a good placement between October 2006 and October 2007.

• Six elite interviews with senior surgeons.

3. Early Implementation of the ISCP (pp16-26)

ISCP brought in three new features to improve the focus and management of the learning support system. The first change was a new role, that of an **Assigned Education Supervisor (AES)**, whose first job was to negotiate the second new feature, that of a **Learning Agreements (LAs)** between the AES and their assigned trainees. The third innovation was the development of a learner led **Website**, which held the curriculum and through which communications were expected to be conducted. The website design was being improved throughout the year, and trainees were more able to use it than some trainers.

Although most trainers and nearly all trainees appreciated the goals of ISCP, its implementation was challenging. In May 2008 78% of validated trainees had an AES and 51% had a Learning Agreements; and there were large variations across both deaneries and specialties. This makes it very difficult to interpret the data. The evidence reported by the PMETB survey in February 2008 suggested that AES and LA functions were being pursued off the website by a substantial number of trainees. 95% of general surgeons said they had an educational supervisor, who was being responsible for their appraisal, and 78% said they had a learning agreement. This was confirmed by the Wales study; but the actual use of the LA may have been more limited, because two questions in Table 2 (page 17) showed that formal meetings with a supervisor to discuss their progress and formal assessments of their performance in their current post had not yet occurred for almost half the sample.

The evidence on issues relevant to supervision appears to be reasonable, but our small survey of London trainees in May 2008 discovered a huge variation in the hours spent working with more senior colleagues. Their estimates for an average week were that 31% spent from 0 to 12 hours, 31% spent from 13 to 24 hours and 38% spent 25 hours or more. With this type of distribution the
use of averages can be profoundly misleading, and the JCST use of dissatisfaction indicators becomes very important.

Table 7 summarises data from the same London survey, which looks at the main sources of support that trainees recognise and their relative frequencies. SpRs come first, followed by other consultant surgeons, then educational supervisors. However all seven categories make significant contributions to a significant number of trainees.

**Table 7: From whom do trainees get their support, and how much?**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>A lot</th>
<th>Quite a bit</th>
<th>A little</th>
<th>None</th>
<th>No reply</th>
</tr>
</thead>
<tbody>
<tr>
<td>AES</td>
<td>16</td>
<td>32</td>
<td>42</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Other consultant surgeons</td>
<td>14</td>
<td>47</td>
<td>32</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Staff grade surgeons</td>
<td>14</td>
<td>20</td>
<td>32</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>SpRs</td>
<td>38</td>
<td>40</td>
<td>17</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Surgeon peers</td>
<td>14</td>
<td>27</td>
<td>44</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Other consultants</td>
<td>6</td>
<td>17</td>
<td>39</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>Other health professionals</td>
<td>4</td>
<td>22</td>
<td>36</td>
<td>25</td>
<td>13</td>
</tr>
</tbody>
</table>

The Quality Assurance survey in November 2007 suggests that the issues causing trainees the greatest concern at that time were as follows:

No induction to Training Programme  
Scheduling meetings with their AES  
Their Supervisor’s familiarity with ISCP curriculum  
Guidance on Personal Development Planning  
Deanery response to their concerns  
Trust response to their concerns  
Rota/shift patterns  
Service demands of their post

4. Learning Contexts and Access to Learning (pp 27-40)

**Table 11: Distribution of trainee time across patient contexts**

<table>
<thead>
<tr>
<th>ST1/FTSTA1</th>
<th>Ward %</th>
<th>Clinic %</th>
<th>Theatre %</th>
<th>Other %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>47.1</td>
<td>15.7</td>
<td>26.7</td>
<td>10.5</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>30.3</td>
<td>14.0</td>
<td>10.5</td>
<td>11.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ST1/FTSTA2</th>
<th>Ward %</th>
<th>Clinic %</th>
<th>Theatre %</th>
<th>Other %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>47.1</td>
<td>14.5</td>
<td>30.1</td>
<td>8.3</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>27.5</td>
<td>13.7</td>
<td>16.8</td>
<td>16.5</td>
</tr>
</tbody>
</table>
This table from the London survey illustrates both the distribution of junior trainees’ time and the very large variations in those distributions in May 2008. Another question revealed that, in their view, only ward work was allocated too much time, and theatre and clinics received too little. 5% spent no time in theatre and 18% no time in clinics. In addition to time spent and the balance between different settings, the qualitative data brings out other important factors: the quality of relationships in any particular setting, the appropriateness of the work allocated, the quality and timing of advice and feedback (undermining feedback is still quite common), opportunities for enhancing their understanding of surgery and sustaining a sense of purpose and progression.

Experienced surgical trainers, both in interviews and informally, also refer to the main problems in these settings. Elective surgery gets most attention from ST3 onwards, but is retarded by the lack of trainee access to operational experience and the loss of training lists to meet urgent targets. Even under the old system trainees are increasingly unready to become consultants at the usual time. Emergency Surgery and Trauma are allocated considerable time from higher level trainees, but without the support they need to learn how best to handle the complex and time critical cases they receive. This is a much neglected problem in need of urgent attention. Clinics no longer allow time for trainers and trainees to see patients together, although they can consult with each other about patients examined by the trainee. One consequence is that FRCS examiners are finding that trainees are becoming increasingly weak diagnosticians. Although ward work take up a great deal of the time of junior trainees, the approach to their learning is surprisingly laissez faire. The answer to the current difference of opinion between trainers and trainees over the value of ward work must surely be that some of it is acknowledged as valuable by both groups, some of it would probably be acknowledged as having little learning value by both groups and some of it could be made valuable by giving appropriate advice and support. This needs to be explored on a wider scale, rather than leave it to every individual trainer to work it out for themselves. Hence the chapter concludes with sub-sections on “When is Service Work a Learning Opportunity?” and “Apprenticeship and Coaching”.

5. Competence and Assessment (pp 41-45)

The current assessment advice is both impractical and confused. It neglects the time required and the difficulty in finding assessors; and it assumes that trainees will suddenly treat what looks like a test as being formative rather than summative, even when they have been reared in a culture of competition. Given the great variation in posts and circumstances and the ISCP claim to be competence based, it makes no sense for the three main assessment instruments for junior trainees to be normative rather than criterion based like the PBA. Nor will most of the available assessors have sufficient experience to make normative judgements in rapidly changing contexts, a new MMC trajectory and a new surgical curriculum. Trust-backed processes are required that integrate assessments with the individual trainee’s ongoing learning and supervision.
6. Teamwork and Relationships (pp 46-50)

There is an increasing recognition of the importance of teamwork both within and across professions, just as the shift systems are making it more difficult. The key issues are continuity of patient care and reduction of risk, and improved modes of communication need to be turned into communicative practices. It is now very clear that the same issue is affecting trainees; it is not only patient handovers that need regular attention, but also trainee handovers for one trainer to another. While there are many positive accounts of teamwork, these often involve either additional effort which cannot last for long or limitations caused by rapid changes in team membership (and exacerbated by the shorter 4 month placements). This raises the question of whether more attention should be given to developing different organisational practices rather than expecting individuals to continuously adjust to frantic changes within the status quo.

7. Training and Support for Trainers (pp51-54)

Much work has been done in the last decade on provision of training and support for trainers, but the role of trainers has become increasingly difficult; and there are endless comments about the lack of time in job plans for teaching. Generally, it seems that consultants are expected to teach during the time allocated for non-clinical work, but consultants who take a major role in teaching often have no more time allocated than those who take little or no role. Some key individuals in Trusts have started to discuss the idea of withdrawing funding from those not teaching. Whilst many felt that everyone should be involved, they also recognised that some of those who did not wish to make a significant educational contribution might be poor teachers. Generally, there was much cynicism from surgeons about getting any support from trust management for the new educational roles, and this was acknowledged as a problem in the ISCP Pilot workshops. There was no evidence of any financial audit of the manpower gain received by Trusts through the work done by surgical trainees or indeed of the clinical governance implications for the Trust of not taking the quality of training seriously.

8. Distributed Apprenticeship and the Organisational Dimension (pp55-58)

There appear to be four possible areas of response to this challenging range of problems, and all of them are important:

1) A risk analysis of the current situation to increase the collective understanding of all the stakeholders of the impact on training and service
2) Piloting new approaches to the organisation of surgical training within hospitals, with appropriate backing from the NHS
3) Training of individual surgical trainers
4) Training of surgical teams in all the settings discussed above
The main conclusion arising from the evidence collected for this evaluation is that surgical education cannot achieve its current goals without significant changes in its current state. There has been a major reduction in the training time per annum of both trainers and trainees, and opportunities for trainees and their main trainers to meet together have been drastically reduced by the new shift systems. The results are that:

1) Trainees for elective surgery will remain safe but fail to reach CCT at the expected time
2) Training in clinics has become problematic, because joint outpatient lists have completely disappeared in most Trusts
3) Training in trauma has been virtually non-existent, and is far from meeting an acceptable standard.

Unless the organisation and funding of training is properly planned, surgical education will decline in quantity faster than any conceivable improvements in quality.

The example of The Royal London Trust’s reorganisation of their Trauma service shows that it is both possible and extremely important to conduct ongoing risk analyses of surgical activities, and to use them for learning by all those involved; because this provides a crucial direct link between patient outcomes and educational provision. When connected with the concerns about surgical education revealed by the evidence gathered for this report, a second conclusion also emerges: that if the current organisational practices affecting surgical education cannot implement the changes required for improving patient safety and other patient outcomes, then the structure of surgical education will have to be reorganised.

The other major issue is the training of surgical trainers and surgical teams. In addition to the problem of continuity between team members from different professions, there is a rapidly increasing problem of continuity between surgical trainees and their trainers. The key question to be addressed is that of how far it is possible for surgical trainers to develop continuity of training for their trainees. Not only are trainers meeting their trainees less often, but they know very little about what their trainees may have done with other consultant colleagues between their own meetings. The first problem is to decide when communication between trainees and their consultant trainees is needed for sustaining trainees’ continuity of learning; and the second problem is that of developing a meaningful discourse for the mutual understanding of those communications.

This ambitious but very important endeavour could be supported by mediating artefacts such as recordings or still pictures around which meaningful discussions could take place. For example, still pictures taken at intervals would enable those present at an operation (not necessarily only surgeons) to add separate short commentaries on each picture about what they were thinking about at the time they were taken and their later, more reflective, thoughts. These commentaries do not have to be ‘accurate representations of on-the-spot thinking’, that would be impossible; but subsequent discussions of
these commentaries should help to improve communication and mutual understanding between those concerned about their respective views of surgical events.

The trust engendered by these initial joint activities should create the interpersonal relationships needed for addressing the development of teams who can begin to collectively improve the quality of their service to patients and trainees. Over time this should help to develop the common discourse, which will be needed if surgical training is to progress from its original apprenticeship system to a more transparent and reflective system of distributed apprenticeship, in which a group of trainers supports one or two trainees and offers them the continuity of training that now appears to be essential for making progress in the next few years.
**Recommendations**

1. The level of concern about trainees’ progress is very high. A significant number of trainees, now due to become consultants, have received less practical experience than their predecessors and feel less confident as a result. This group began their specialist training before the introduction of EWTD and the government’s Waiting List Targets initiative. So we can now reasonably predict that both the practical experience and the training experience of each successive cohort will decline every year for the next six to eight years. The impact of this process needs to be modelled, so that the risks for the quantity and quality of future surgical consultants can be better predicted and contingency plans can be developed for plugging the major gaps in their expertise.

2. The risks associated with the current use of surgical trainees in Emergency and Trauma surgery need particularly urgent attention.

3. The training that does occur is less effective than previously because of the limited continuity of trainers. When trainers and trainees meet less often and trainees have several trainers, there may be little or no communication between the trainers involved with the same trainee. This important problem is far from simple, but needs to be urgently addressed. Developing a parsimonious but effective mode of discourse between trainers, and between trainers and trainees, could be enhanced by initiatives such as using still pictures and short audio commentaries by trainee and trainer.

4. Trainees describe service work as devoid of learning, while trainers argue that most aspects of service work provide good learning opportunities. This issue could be addressed by giving methodological attention to groups of cases of the same condition, focussing on (a) their similarities and differences, and (b) patient pathways from clinic to aftercare and audit. The latter could be usefully enhanced by contributions from nurses, physiotherapists, specialists in imaging and pathology, etc.

5. There must be provision for more occasions where trainer and trainee see the same patients in clinics and follow some cases through from there.

6. The organisation of surgical work depends on the particular circumstances of individual Hospital Trusts. However, more attention to the training dimension of Training Posts is urgently needed. Examples of successful “trainee-friendly” organisational arrangements need to be developed and evaluated, so as to give a range of effective choices to Trusts.