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ORIGINAL ARTICLE

# Hysteroscopy training in the UK: the trainees' perspective

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**Abstract** The advanced hysteroscopy special skills module has been developed by the Royal College of Obstetricians and Gynaecologists (RCOG) in association with the British Society of Gynaecologic Endoscopists (BSGE). It is mainly aimed at senior specialist registrars in obstetrics and gynaecology in their final two years of training, but it can also be undertaken by non-training posts in the same field. By completion of the module, ideally within a year, trainees are expected to have reached independent competence in performing both diagnostic, as well as operative hysteroscopy. A survey was done on trainees attending the mandatory course at the RCOG (intermediate/advanced hysteroscopic surgery course in 2006), which is part of the requirement for obtaining the Advanced hysteroscopy special skills module. Feedback was obtained from 44 trainees who were either already registered for the special skills module in advanced hysteroscopy or were planning on registering. Overall, 50% of candidates found the one-year target difficult to achieve. The majority attended at least one hysteroscopy outpatient clinic per week (85%) and/or one hysteroscopy theatre list per week (87%). This suggested the adequate attendance of hysteroscopy sessions; however, the problem was with operative hysteroscopy, which comprised 0–20% of training for the majority of trainees (59%). The conclusion was that the one-year target for obtaining the special skills module was difficult to achieve, with the most evident cause being the inability to acquire the expected operative hysteroscopy standard within the intended time.

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## Background

All trainees in obstetrics and gynaecology are expected to achieve a level of independent competence in diagnostic hysteroscopy, regardless of whether or not they decide to pursue more advanced training in hysteroscopic surgery as their special interest. They are provided with this training whilst attending main theatres and day case surgery. Before trainees can progress to the final two years of advanced training, they are expected to have passed the MRCOG examination (Membership of the Royal College of Obstetricians and Gynaecologists). Part of the curriculum for this examination is to have a firm theoretical knowledge in the indications, methods and complications of both operative and diagnostic hysteroscopy.

The advanced trainees with a special interest in hysteroscopic surgery undertake a module in hysteroscopic surgery. This is either the special skills module in advanced hysteroscopic surgery (prior to August 2007) or the new advanced training skills module (ATSM) in hysteroscopic surgery (after August 2007). Trainees enrolled in this module are taught more advanced operative hysteroscopy in main theatres and day case surgery, in addition to having the opportunity to attend outpatient hysteroscopy clinics.

### Hysteroscopy training prior to August 2007

Prior to August 2007, obstetrics and gynaecology trainees were ideally expected to undertake 2 years of senior house officer training, known as basic training, followed by 5 years of specialist registrar training. The first 3 years of specialist registrar training were regarded as the inter-

mediate level of training, were trainees were expected to have completed the core log book of training. The core log book contains a wide range of competency levels in obstetrics and gynaecology required by trainees to demonstrate the completion of basic specialist training and progression to advanced specialist training. Trainees are expected to have reached independent competence in diagnostic hysteroscopy and to perform therapeutic hysteroscopy under direct supervision to be signed off in the relevant areas in the core log book. The fourth and fifth years of specialist registrar training were the advanced training years, where trainees were expected to perform an average of one special skills module per year in their field of interest. A CCT (certificate of completion of specialist training) would be granted after the successful completion of the fifth registrar year. A trainee can only apply for consultant posts after they have obtained a CCT.

Special skills training has been defined by the 1999 Royal College of Obstetricians and Gynaecologists (RCOG) working party report as "specific skills that are beyond those required for the acquisition of a CCT in clinical, teaching and managerial aspects of obstetrics and gynaecology" [1]. The RCOG have developed the different special skills modules in conjunction with the specialist societies.

The British Society of Gynaecologic Endoscopists (BSGE), in association with the RCOG, have developed a special skills module for advanced hysteroscopic surgery. This is the module assessed in this survey. The criteria for entering this module are having a RITA (record of in-training assessment) C, having passed the MRCOG examination (Membership of the Royal College of Obstetricians and Gynaecologists), having completed the core log book and being a member of the BSGE. A RITA C is the a satisfactory assessment given by the deanery training committee, indicating that trainees are eligible to progress to the fourth year of registrar training.

The special skills module should ideally be completed in one year. To complete it, the candidate has to have attended ten outpatient hysteroscopy sessions, attended 30 hysteroscopy sessions overall, carried out an audit on hysteroscopy and attended a mandatory course at the RCOG. The trainee should have a mentor assigned, who will monitor his progress, and, finally, sign the trainee off for completing the module.

Special skills training is also a part of continuing professional development for consultants, staff grades and associate specialists. Again, the entry criteria for these non-training posts are to have passed Part 2 MRCOG, to be functioning at least at the level of an SpR (specialist registrar) year 4 or 5 in the department and to have completed a satisfactory appraisal with agreement to proceed to special skills training.

## Hysteroscopy training after August 2007

Following August 2007, the training system has been changed. The years of training are, however, more or less the same. Instead of senior house officer and specialist registrar, it has been changed to ST1 to ST7. ST1 to ST2 corresponds to what was previously the first two senior house officer years. ST3 to ST7 corresponds to what was previously the five years of specialist registrar training. At ST6 and ST7, which previously corresponded to years 4 and 5 of specialist registrar training, trainees are expected to complete ATSMs (advanced training skills modules) instead of special skills modules (Fig. 1).

An ATSM of hysteroscopic surgery has been developed to replace the special skills module in advanced hysteroscopic surgery. The ATSM in hysteroscopic surgery is very similar to the previous special skills module in advanced hysteroscopy. The main difference is that the new ATSM has set out a minimum number of procedures that a trainee should perform before being signed off as competent (Fig. 2).

Prior to ST 6, trainees are expected to have reached independent competence in performing diagnostic hysteroscopy and polypectomy. It is, therefore, no longer a requirement to perform therapeutic hysteroscopies under direct supervision prior to progressing to advanced training. It can be argued that "polypectomy" is a form of therapeutic hysteroscopy; however, it is the simplest form because it can be performed blindly with polypectomy forceps, without the need of an operative hysteroscope. Therefore, the new training system following August 2007 no longer requires trainees to be trained in operative hysteroscopy prior to progressing to advanced training, hence, the overall criteria for hysteroscopic competence prior to advanced training have become less stringent, meaning that trainees choosing to pursue advanced training in hysteroscopic

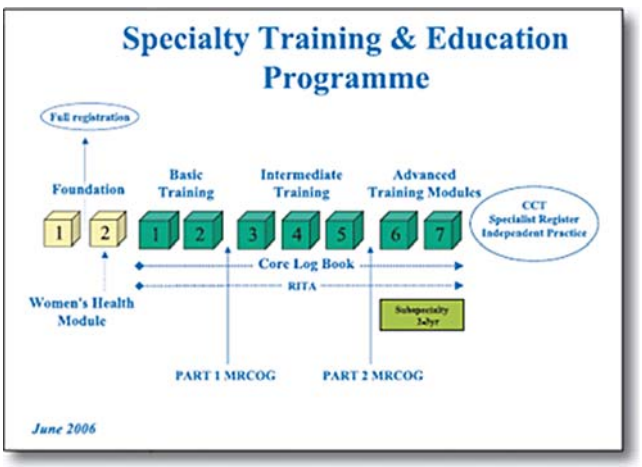


**Fig. 1** A pictorial representation of specialist training in obstetrics and gynaecology following August 2007 (RCOG 2006)

**Fig. 2** Expectations of the new ATSM (advanced training skills module) in hysteroscopic surgery (RCOG 2007)

| Skill | Competence level | | | | | |
|---|---|---|---|---|---|---|
| | Observation | | Direct supervision | | Independent practice | |
| | Date | Signature | Date | Signature | Date | Signature |
| Diagnostic outpatient (op) hysteroscopy >50 | | | | | | |
| Hysteroscopic polypectomy<br><br>Other hysteroscopic procedures (op), e.g.:<br>-Removal of lost IUDs<br>-Treating adhesions<br>-Treating septums (Each > 20) | | | | | | |
| OP ablation (observation) | | | | | | |
| 1st generation ablation >10 | | | | | | |
| 2nd generation ablation >10 | | | | | | |
| Resect submucous fibroids grade 0 - 2 >15 | | | | | | |
| Resect uterine septum | | | | | | |
| Resect intrauterine adhesions | | | | | | |
| Hysteroscopic sterilisation (observation, e.g. CD Rom) | | | | | | |

surgery will potentially be less trained at the onset compared to previous trainees.

## Aim

The aim of this paper is to assess the satisfaction level of trainees and identify the percentage of trainees who felt that they could complete the module in one year.

## Materials and methods

A cross-sectional survey was undertaken on trainees who had attended the mandatory course for the special skills module in advanced hysteroscopy. This was the intermediate/advanced hysteroscopic surgery course that was held on 18 and 19 October 2006 at the RCOG. Twenty-eight of these trainees were already registered for the special skills module and 16 were planning to register. A questionnaire was given to doctors attending the course who were either registered for the advanced hysteroscopy special skills module or planning to register for the special skills module. Trainers or others attending the course who did not meet the above criteria were excluded from the survey. At that point in time, the total number of nationally registered trainees in the UK for the advanced hysteroscopy special skills module was 60.

## Results

The majority of trainees undertaking the module were year 4 or 5 specialist registrars (68%), which are the trainees that this module is specifically aimed at. In addition, there were a few staff grades, research fellows and registrars in the grace period who had completed their training and were awaiting consultant posts (Fig. 3).

Of the trainees completing this survey, 64% were registered for the special skills module and 36% had not registered yet but were planning on registering. The registration period was as follows: 24% had been registered for less than one month, 16% for one to three months, 33% for four to six months, 12% for eight to 10 months, 12% for one and a half years and 3% for two years.

The analysis of the frequency of clinic attendance showed that the majority attended once weekly outpatient hysteroscopy clinic plus a session of day case surgery and/

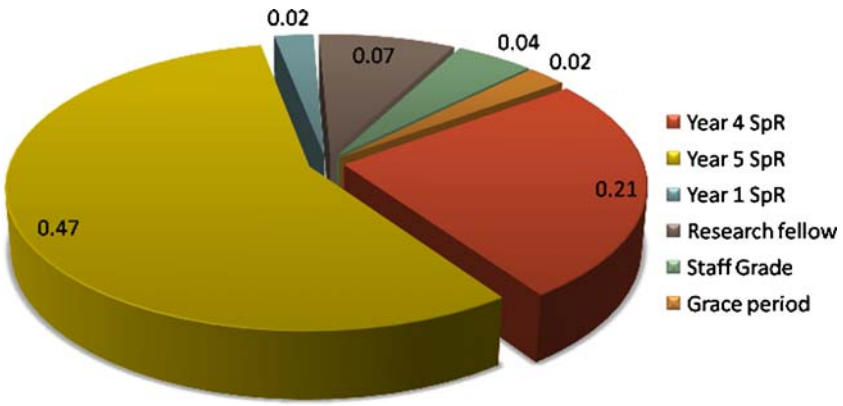


**Fig. 3** Special skills module trainees according to grade

or main theatre. The least were those who attended only twice monthly (Fig. 4). The data shows that the majority of trainees managed to attend at least one hysteroscopy outpatient clinic per week (85%) and/or one hysteroscopy theatre list per week (87%).

The majority of trainees were receiving adequate training of diagnostic hysterocopy. The avarege trainee has their training divided into 72.2% diagnostic hysteroscopy in comparison to 27.8% operative hysteroscopy, with a standard deviation of 20.4 (Fig. 5). The details of these figures are as follows: 7% performed no operative hysteroscopies, 25% said that 10% of their cases were operative hysteroscopies, 27% said that 20% of their cases were operative hysteroscopies, 7% that said that 30% of their cases were operative hysteroscopies, 12% said that 40% of their cases were operative hysteroscopies, 12% said that 50% of their cases were operative hysteroscopies, 5% said that 60% of their cases were operative hysteroscopies and 5% said that 80% of their cases were operative hysteroscopies.

In the outpatient setting, 72% used the rigid hysteroscope as part of their training, 39% used the flexible hysteroscope, 48% used VersaPoint, 7% used microwave endometrial ablation, 23% used balloon endometrial ablation, 9% used endometrial resection, 49% performed outpatient polypectomies and 25% performed submucous fibroids resection.

As with regards to the day case and/or the inpatient hysteroscopy setting, 86% used the rigid hysteroscope, 16% used the flexible hysteroscope, 39% used VersaPoint, 35% used microwave endometrial ablation, 53% used balloon endometrial ablation, 65% performed endometrial resection, 77% performed polypectomies and 58% performed submucous fibroids resection.

As with regards to the distension media, 18% used carbon dioxide distension media, 95% used saline distension media, 56% used glycine distension media and 5% used sorbitol distension media.

The majority (63%) carried out regular clinic follow-up for their patients following hysteroscopy; 78% routinely captured images and 22% did not; 60% were satisfied overall with their level of training and 40% were not satisfied; 65% thought that they could complete the module in one year and 35% thought that they could not (Fig. 6).

## Discussion

The special skills modules are primarily aimed at year 4 and 5 specialist registrars. However, they can still be undertaken by non-trainee posts, such as staff grades or consultants. Seventy percent of the trainees in the survey were year 4 and 5 specialist registrars; however, about 30% were consultant, staff grade, year 1–3 specialist registrar or research fellows (Fig. 3).

Although this module is intended to be completed in one year, 12% of the trainees had been registered for over a year and a half and 3% had been registered for 3 years. Thirty-

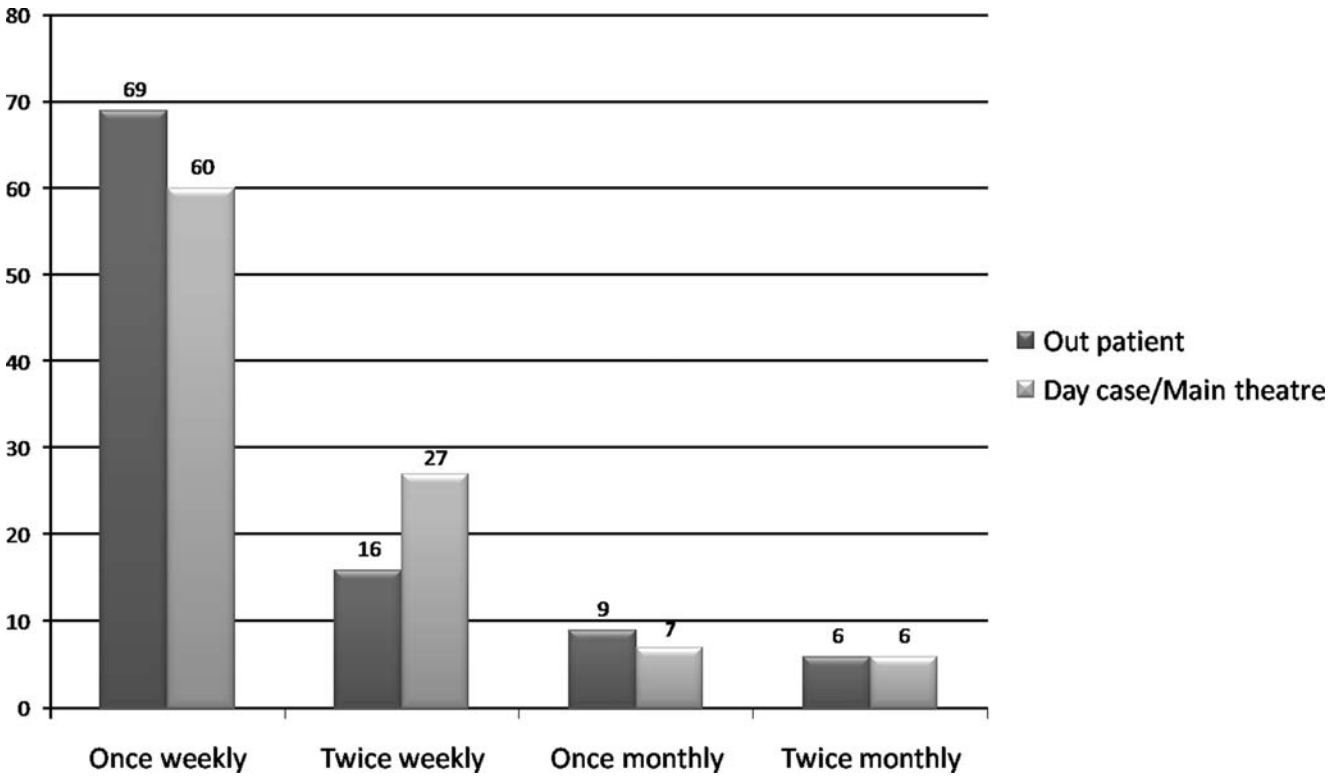


**Fig. 4** Frequency of attendance of outpatient hysteroscopy versus day case surgery/theatre

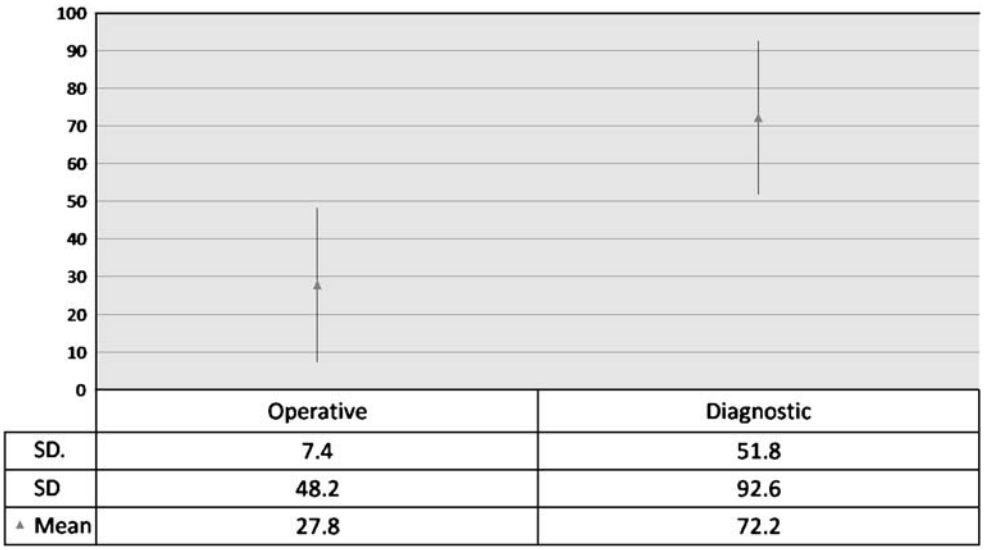


**Fig. 5** Comparison of the percentage of operative hysteroscopies to diagnostic hysteroscopies performed by trainees

five percent of the rest of the trainees thought that they would not be able to complete the module in a year. So, overall, 15% of trainees at this point in time had not completed the module in a year and another 35% did not think that they would. This suggests that an overall of 50% of the candidates would find the one-year target difficult to achieve. Overall, 40% of the trainees were not satisfied with the level of training.

Ironically the majority of trainees attended at least one hysteroscopy outpatient clinic per week (85%) and/or at least one hysteroscopy theatre list per week (87%). Only 30 sessions are needed to complete the module and one session a week should clearly be enough in a year. So, it is not the quantity of hysteroscopy training sessions which constitutes the major setback, but possibly the quality. This is suggested by the fact that about 59% of candidates mentioned that operative hysteroscopy comprised between 0–20% of the hysteroscopies they performed. Seven percent of the trainees mentioned that they performed no operative hysteroscopy at all. The avarege trainee has their training divided into 72.2% diagnostic hysteroscopy in comparison to 27.8% operative hysteroscopy (Fig. 5). Overall, although the trainees are receiving adequate hysteroscopy sessions, the main problem seems to be the diminished number of operative hysteroscopy cases in comparison to diagnostic hysteroscopies.

The new special skills module beginning in August 2007 specifies the minimum number of cases that should ideally be performed in each procedure for a trainee to be signed as competent (Fig. 2). Ideally, a person should perform over 20 polypectomies, over 10 transcervical endometrial resection of endometrium (TCRE) first-generation procedures, over 10 second-generation TCRE procedures and over 15 submucous fibroid resections, giving an overall of over 50 operative hysteroscopy procedures. As with regards to diagnostic hysteroscopy procedures, the minimum number of cases that a trainee needs to carry out in order to be signed off as competent is 50. So, assuming that a trainee performs the minimum number of operative and diagnostic hysteroscopy cases necessary to pass the module, he would need to carry out over 55 operative hysteroscopy cases and over 50 diagnostic hysteroscopy cases, i.e. the ratio of

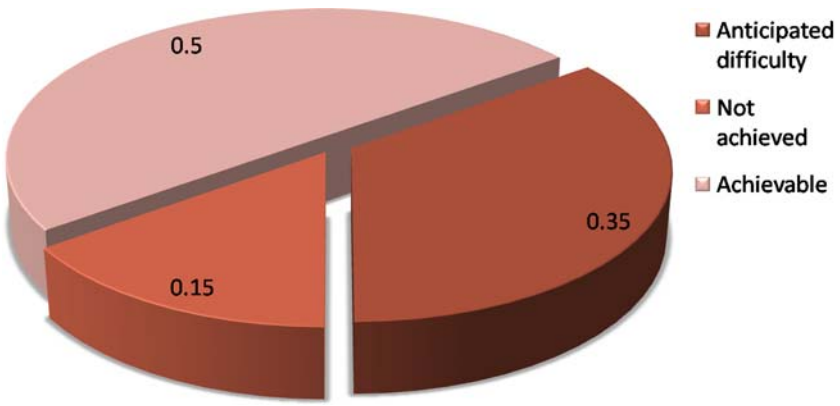


**Fig. 6** Trainees' feedback on the possibility of completion of the advanced hysteroscopy skills module in one year

operative to diagnostic hysteroscopies would be 55 to 50, which is equivalent to 53% operative and 47% diagnostic. The results of the survey suggest that the average trainee performs 72.2% diagnostic hysteroscopy in comparison to only 27.8% operative hysteroscopy. This would suggest that, although the trainees may find it easy to be signed off as competent in diagnostic hysteroscopy, they would struggle in getting signed off as being competent in operative hysteroscopy in one year.

The comments in the survey include the need for more operative hysteroscopy, and the need for one further year to adequately finish the training. The difficulty of obtaining training equipment in some district general hospitals was expressed as a concern hampering the training process. Trainee-focussed lists at least once a week was another suggestion, as well as the need for regular theatre sessions for all trainees enrolled in the SSM (special skills module). Not all district general hospitals provide facilities for this SSM enrolment, which constituted another concern. One suggestion was training on operative hysteroscopy training models.

There were a number of comments made on the trainers. It was advised that the preceptors be made more aware of the rules and regulations of the SSM. This included producing more specific guidelines for preceptors. More obligations on trainers was also suggested, including stricter criteria for choosing preceptors. More universal rules, as well as a more structured approach to training, was another suggestion. Incorporating multiple trainers for one candidate was another issue raised, because not all consultants use all of the modalities. It is, however, difficult to see how this is practically possible, given the time and resources.

As with regards to the other criteria necessary for completing the module, one trainee mentioned the need for a course more than once a year because waiting for the next available course delayed his certificate. Another questioned the necessity of auditing for completing the special skills module because he felt that it did not contribute to the improvement of surgical skills. However, it must be argued that trainees should get into the habit of auditing their practice so that they may improve their practice and benchmark it against national standards.

Finally, there was a suggestion to develop an outpatient hysteroscopy special skills module separately because some trainees did not want to pursue performing endometrial resection and other surgical techniques. Obviously, this would be much easier to complete as well, given that the main difficulty of completing the module is acquiring the operative hysteroscopy skills.

Difficulties in acquiring skills in advanced endoscopic surgery have also been highlighted in the USA and the Netherlands [2, 3]. It is a general result of less training hours and less highly skilled trainers. After all, today's trainees are tomorrow's trainers, so if they are inadequately trained, then they will not provide adequate training. The question is how can training be improved with limited time and resources.

The problem is that, ideally, specialist registrars are expected to have accomplished at least two special skills modules before completing their training. This restricts the time available to complete the modules, given that they can only register to complete a special skills module before their final two years of training. Maybe the answer would be to allow trainees to register for special skills modules before their final two years of training. However, this would raise concerns as to whether they will be ready to undertake those modules at such a junior stage, and whether this may impact on their intermediate core training.

Maybe the answer would be to selectively choose trainees for special skills modules according to their fundamental abilities. By decreasing trainees, the resources and training opportunities available to each trainee are increased. This can be achieved by a selection process in the final years of training assessing which trainees are more suitable for endoscopic surgery training. A study carried out in Dundee on ten specialist registrars was performed using the ADEPT system, which identifies aspects of performance that do not improve with practice (innate abilities) and, thus, could be used to predict the ultimate level of operative skill. If this can be confirmed by larger studies, ADEPT could be used as an aptitude tester to select which trainees are suitable for minimal access surgery [4]. However, at this stage in time, the accuracy of such methods is still questionable.

Another suggestion would be to increase resources while maintaining the same number of trainees. This, however, would incur greater costs by the incorporation of hysteroscopy simulators in the training program. Surgical simulators for hysteroscopy and other gynaecologic procedures offer the promise of improving training in a low-risk environment. While this simulator is a good first step in the production of enabling technology, its real utility depends on its proper integration into the training process [5]. HysteroTrainer was developed to provide in vitro simulation training for diagnostic and operative hysteroscopy, including laser and high-frequency electrosurgery [6]. The Lahystotrain, a computer-assisted simulator for training and quality control in laparoscopy and hysteroscopy, was developed using virtual reality, multimedia technology and intelligent tutoring systems [7].

This survey has assessed the past system of hysteroscopy training prior to August 2007, which has now been replaced by the new ATSM in hysteroscopic surgery. However, the new ATSM is very similar to the previous special skills module in advanced hysteroscopic surgery. It is anticipated that trainees may find more difficulty in completing the new ATSM module because of a lower hysteroscopy competence level required prior to starting the module. Also, the new ATSM module

requires the trainee to have performed a specified quantity of each procedure before being signed off as competent, as opposed to the previous special skills module, where competence assessment was at the discretion of the mentor.

It is a difficult task to implement a specific training standard nationally because resources and training conditions differ between local hospitals. It is hoped that the Royal College, in association with the specialist societies, will continuously update the standards of training in light of the current training conditions to provide better training for today's trainees, who are tomorrow's trainers.

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