Guidance for using Surgical DOPS
(Direct Observation of Procedural Skills in Surgery)

Direct Observation of Procedural Skills in Surgery (Surgical DOPS) is one of a number of assessments used in the clinical setting to help the teaching and assessment of a clinical skill in the workplace. In common with the other workplace-based assessments, its primary purpose is to provide structured teaching and feedback in a particular area of clinical practice. Surgical DOPS is applicable to short, diagnostic and interventional procedures, or part procedures, that comprise relatively few steps. It will be found most useful during the early years of surgical training.

Surgical DOPS method is an updated version of an assessment tool originally developed and evaluated by the UK Royal Colleges of Physicians and used in the Foundation Programme. The counterpart of surgical DOPS for use with more substantial, operative procedures is the Procedure Based Assessment (PBA).

The assessment involves an assessor observing the trainee performing a practical procedure within the workplace. The assessor's evaluation is recorded on a structured form which is used by the assessor to provide the trainee with structured feedback.

Surgical DOPS can be used routinely every time a trainee performs one of the procedures listed in the Cardiothoracic SET DOPS requirements table, under supervision. The aim should be to make the exercise part of routine surgical training practice.

Each Surgical DOPS assessment forms part of the trainee's logbook, which helps inform the report of the Supervisor at the completion of each placement.

Surgical DOPS in the context of workplace-based assessment
Surgical DOPS should stimulate the assessor to observe all the aspects of the practice of the trainee and in so doing to gain adequate insights into the specific training needs of each trainee. Therefore, these workplace-based assessments are assessments for learning and attaining competence.

Towards the end of each rotation the Supervisor of Training will use his/her knowledge of the trainee, the views of fellow assessor(s) and the logbook (of which the accumulated assessments are a part) to form a judgement as to the overall progress achieved by the trainee. The Board will use the evidence in the logbook, and DOPS assessments to inform their decisions on a trainee's rotation status.

Who should Assess Surgical DOPS?
Assessors should be known to, and approved by the Board of Cardiothoracic Surgery in that they must have completed the SAT SET course. The Supervisor of Training should be one of the assessors during each placement.

Assessors should know how to use the Surgical DOPS and be expert in the clinical problem/task. Assessors need not have prior knowledge of the trainee and in some instances it may be important that they do not. Each DOPS must be assessed by a separate assessor to the prescribed number for that procedure, but consideration may be given in an institution where there are less than 3 surgeons.

When and how often should Surgical DOPS be carried out?
DOPS can be used to assess the competence of a trainee to perform a procedure, and to provide feedback when learning a new procedure. Demonstration of progression towards competence should normally precede achievement of competence.

Given the great variation in the rate of progress between individuals, absolute numbers of assessments are not limited to those prescribed in the table. In clinical practice a number of observed performances, even if completed to a satisfactory level, are insufficient if not underpinned by adequate experience. Therefore the numbers and SET levels indicated in the DOPS requirements table are minimum total requirements and opportunities should be taken to complete a DOPS when they arise and are not limited to the SET levels or numbers as outlined in the table. It is possible for a trainee to successfully complete DOPS prior to what is prescribed in the table. It will be a matter of judgement for assigned supervisors or assessors together with the Board to determine whether the experience element is sufficient when signing off their reports.
Ideally, trainees and assessors should use the assessment instruments during every training exercise at every possible opportunity. The great benefit of the Surgical DOPS is that by obliging the trainer to review the performance of the trainee across the full range of components involved in a procedure, a comprehensive picture of the trainee's strengths and weaknesses can be obtained and kept under review during the whole placement.

**Using the Surgical DOPS**

The Cardiothoracic SET DOPS requirements table indicates which Surgical DOPS are required. These figures are a guideline to the minimum suggested number of procedures, but barriers for progression have been allocated to SETs 2, 4 and 6. Numbers indicated on the table must have been completed by the ends of these SET levels in order to progress to the next SET level.

Patient safety and well-being remains paramount throughout. The assessor supervising the procedure should ensure that the patient is informed, has provided consent for the exercise and suffers no increased risk or discomfort as per sections I, II and III on the forms. The assessor retains responsibility for patient care throughout and will intervene as the situation requires.

The assessment may be initiated by the trainee or the assessor, but since there will usually be a number of trainers and assessors involved during each placement, it remains the responsibility of the trainee to take a proactive approach and to ensure that sufficient exercises are completed. The encounter should be representative of the trainee's workload.

Trainees and assessors may find it most convenient to use a printed version of the assessment form. The assessor should observe the trainee under taking the procedure and doing what they would normally do in that situation. Assessors should record a rating for each competency on the assessment form.

It is the trainee's responsibility to keep a copy of their DOPS assessment forms before submitting to the Executive Officer.

**Completing the Surgical DOPS form**

These notes may be helpful when using the Surgical DOPS form:

- **Trainee Details**
  The trainee or assessor can complete the trainee's details.

- **Name of the procedure**
  The assessor should complete the name of the procedure.

- **Number of times procedure performed by trainee**
  The assessor should ask the trainee for his/her estimation/logbook.

- **Difficulty of procedure**
  The assessor should score the difficulty of the procedure according to the stage of the trainee.

Definition of *Easier than Usual*: uneventful procedure without any of the commonly encountered problems or variations.

Definition of *More difficult than usual*: unexpected problems, unrelated to the expertise of the trainee.

- **Using the Scale**
  Each item should be scored, N (not observed or not appropriate), D (development required or needs improvement or satisfactory only after help or advice), or S (satisfactory standard for completion of early years/core surgical training (initial stage), with no prompts required).

- **Item 6 (performs the technical aspects in line with the guidance notes)**
  One overall score is given for the technical aspects of the procedure (not for each of the technical steps). The Trainee/Trainer Guidance Points should to be used to inform the rating given for item 6.
• **Global summary**
If the trainee was observed by the assessor to have completed the entire procedure, a global statement should be chosen from the four levels shown.

The four statements relate to the extent of supervision the trainee was seen to require in that procedure on that occasion. In order to achieve a global level 4 for an entire procedure, most (but not necessarily all) competencies should have been rated as satisfactory. Achieving a level 4 on one occasion does not confirm that the trainee is competent to perform that procedure unsupervised. This judgement will require repeated assessments by more than one assessor.

Each assessment is not a pass or fail event, nor does it award a 'licence' to practise without assistance or direct supervision: that remains the prerogative of the supervisor who has responsibility for patient care. The decision to permit a trainee to perform a procedure without supervision will depend on evidence from a number of Surgical DOPS of a sufficient standard (level 4). The number required to inform that decision will depend upon many factors, including the complexity of the procedure and the experience of the trainee. The evidence provided by the trainee's logbook complements the process.

• **Assessor Training**
Assessors must read the entire assessment form and guidance notes. The training methods undertaken should be indicated on the form and the assessor should be known to and approved by the Board of Cardiothoracic Surgery, in that they have completed the SAT SET course.

• **Satisfaction with Surgical DOPS**
Both the trainee and assessor should indicate their satisfaction with the Surgical DOPS as a method of assessing performance on that occasion (this is not about satisfaction with how the trainee has performed on this occasion).

• **Assessor details**
The assessor should complete all his/her details indicated which may be used as a means of validation.

**The standards to be applied to Surgical DOPS assessments**
The assessment should be judged against the standard expected at completion of surgical training indicating the trainee is competent to perform that task independently to a safe standard.

Trainees should record all assessments in their logbook including those regarded as unsatisfactory. At the start of a stage it would be normal for trainees to have some assessments which are less than satisfactory because their performance is not yet at the standard for the completion of that stage. In cases when assessments are less than satisfactory, trainees should repeat assessments as often as required to show progress.

One of the purposes of the assessment is to demonstrate to trainees and their Supervisors that they are maintaining progress during the placement and that they are on course to reach the standard required by the syllabus and their learning agreements for successful completion of the SET level.

The completion standards are as follows:

1. **Describes indications, relevant anatomy, & details of procedure:**
   Clearly explains to the assessor the indication for the procedure, the relevant anatomy and essential steps of the procedure.

2. **Obtains informed consent, after explaining procedure & comp:**
   Conveys Information that is complete, relevant, clear and jargon-free; is sensitive to patient's concerns, respects confidentiality, actively listens, answers questions correctly and checks patient's understanding before obtaining consent; establishes trust.

3. **Prepares for procedure according to an agreed protocol:**
   Demonstrates clear pre-operative plan, identifies any special equipment required, makes all relevant safety checks, and briefs other staff appropriately.
4. **Demonstrates good asepsis and safe use of instruments/sharps:**
Supervises and follows high standards of aseptic operative technique; handles instruments and sharps safely.

5. **Performs the technical aspects in line with the guidance notes:**
Follows the protocol for the procedure, demonstrates good technique; uses instruments appropriately, handles tissue gently, controls bleeding appropriately, sutures skin neatly and a traumatically. See Trainer/Trainer Guidance Points for the procedure.

6. **Deals with any unexpected event or seeks help when appropriate:**
Anticipates and responds calmly and appropriately, communicates dearly and consistently with patients and staff, uses assistants to best advantage, has awareness of own limitations.

7. **Completes required documentation (written or dictated):**
Makes clear and legible notes which enables effective care by other practitioners.

8. **Issues clear post-procedure instructions to patients and/or staff:**
Makes a post-operative assessment; conveys relevant Information orally and in writing; retains responsibility for the patient's ongoing care.

10. **Communicates with patients and staff in a professional manner:**
Demonstrates respect, and understanding of the patient's needs for comfort, respect, and confidentiality; demonstrates an ethical approach, and awareness of any relevant legal frameworks.

**Feedback**

It must be emphasised that the most important purpose of the assessment exercise is to provide the trainee with formative feedback (i.e. information that forms and develops the trainee’s practice), offering a significant impact on learning. Scores are used only for the purpose of identifying strengths and weaknesses and providing accurate feedback on that performance.

Feedback should take about 5-10 minutes. It should be conducted in a suitable, quiet environment immediately after the assessment and should be constructive. Assessors should expand on the reasons for any ratings of Development required and make practical suggestions for any remedial steps if it is felt that the rate of progress is insufficient.

It should be borne in mind that the Supervisor has the facility to make substantial changes to the clinical timetable and sessional exposure that a trainee has during the placement, if it is deemed in the best interests of the trainee. It is expected that the trainers in any one placement work as a team and if an assessor, trainer or trainee feels that any such change might be indicated then this should be brought to the notice of the Supervisor at the earliest opportunity.

It is essential that trainees reflect on feedback and take a proactive approach to improving their practice.

**Key Points**

**Summary of the method**
- Formative method designed to provide adequate insights into the specific training needs of the trainee
- Observed short, diagnostic and interventional procedures during routine surgical practice.
- Covers patient safety, preparation, operative technique, communication and documentation.
- Available for a comprehensive range of index procedures relevant to each specialty.
- As training progresses and operative procedures become more relevant.

**Number of assessments per year**
- Each procedure has a prescribed minimum number of DOPS per SET level as outlined in the DOPS table. These numbers are a guideline for the minimum number of procedures. Totals at the end of SETs 2 and 4 must be completed before progression to the next SET level, and cumulative totals must be completed by the end of SET 6 before eligibility for application to Fellowship.
Who should assess Surgical DOPS?
- The current Supervisor must be one of the assessors.
- Other surgeons who are expert in the clinical problem/task and who have completed the SAT SET Course and been trained in objective assessment and giving feedback.
- Assessors do not need to have prior knowledge of the trainee.

Time Needed
- Observation will be as long as the procedure itself plus about 15-20 minutes to complete the form.
- 5-10 minutes for debriefing and feedback.

Appropriate assessment settings
- A&E
- Theatre

Adapted from: Intercollegiate Surgical Curriculum Program’s Guidelines for Using Surgical DOPS
https://www.iscp.ac.uk/static/public/sdops_guidance.pdf