



## OVERVIEW OF WORKPLACE-BASED ASSESSMENT IN MEDICAL MICROBIOLOGY FOR ASSESSORS AND TRAINEES

### 1. INTRODUCTION

The Royal College of Pathologists considers that workplace-based assessment (WPBA) forms an important part of assessing the competency of trainees, and ensuring that they are making satisfactory progress. The principle is that trainees are assessed on work that they are actually doing and that, as far as possible, the assessment is integrated into their day-to-day work. All assessments have been blueprinted to the curriculum.

Workplace-based assessments are mandatory for all StRs appointed to one of the following from August 2007:

- a. A specialty training programme with a National Training Number (NTN)
- b. Fixed Term Specialty Training Appointment (FTSTA)
- c. Locum Appointment for Training (LAT).

[Workplace-based assessment tools](#) used in medical microbiology are:

- case-based discussion (CbD)
- direct observation of practical skills (DOPS)
- evaluation of clinical Events (ECE)
- [Link](#) to multi-source feedback (MSF)

Workplace-based assessments should be recorded in the [Learning Environment for Pathology Trainees \(LEPT\) system](#). The LEPT is a web-based system for workplace-based assessment and multi-source feedback (MSF) which also includes an e-Portfolio to support the ARCP process. However, the printable workplace-based assessment forms on the College website are available, for instances when trainees/assessors do not have direct access to a PC/internet when the assessment is being conducted. In such cases, it is expected that the forms will be used to record the assessment with the intention of transferring the contents to the LEPT system either by the trainee or assessor.

The process of conducting workplace-based assessment is initiated by the trainee. The trainee should identify suitable opportunities i.e. choosing the assessment tool, procedure and the assessor. Assessments should be undertaken by a range of assessors and, since the assessments are short, it should be possible to cover a broad range of activities and scenarios. Trainees should not repeat an assessment for the same procedure or scenario unless an unsatisfactory outcome was recorded the first time.

Further guidance and assessment forms for each tool are available online at: [Workplace-based assessment](#)

Medical microbiology trainees will undertake the following workplace-based assessments during a year's training (please note that MSF assessments are carried out three times during the training period):

Specialty	Case-based Discussion (CbD)	Direct Observation of Practical Skills (DOPS)	Evaluation of Clinical Events (ECE)	Multi-source feedback (MSF)
Medical Microbiology  <b>(Trainees on the 2007-08 curriculum)</b>	Minimum 6 per year  3 by end of month 6 for mid-year review (MYR)	Minimum 6 per year  3 by end of month 6 for mid-year review (MYR)	-	3 during training  Month 7 for ST1 medical microbiology/ ST3 medical microbiology and infectious diseases trainees  * Year 3 and 5 trainees
Medical Microbiology  <b>(Trainees on the 2010 curriculum)</b>	Minimum 6 per year  3 by end of month 6 for mid-year review (MYR)	Minimum 6 per year (for ST1/ST2 trainees) 3 by end of month 6 for MYR  Minimum 4 per year (for ST3/4/5 trainees) 2 by end of month 6 for MYR	Minimum 4 per year (for ST1/ST2 trainees) 2 by end of month 6 for MYR  Minimum 6 per year (for ST3/4/5 trainees) 3 by end of month 6 for MYR	3 during training  Month 7 for ST1 medical microbiology/ ST3 medical microbiology and infectious diseases trainees  * Year 3 and 5 trainees

**This table also applies to trainees undertaking joint training with infectious diseases.**

\* The MSF assessment for year 3/5 trainees will be centrally co-ordinated by the College and trainees will be contacted with further details when the MSF is due to begin.

Only trainees who started their training from August 2010 will be required to undertake the ECE assessment. The requirements are 6 DOPS and 4 ECE assessments for the first and second year of medical microbiology training for joint medical microbiology and infectious diseases trainees. The requirements for the remaining years of training are 4 DOPS and 6 ECE assessments.

Medical microbiology trainees on the 2007-2008 Medical Microbiology & Virology curriculum can do the ECE assessment if they want to but it is not a mandatory requirement.

The reliability of workplace-based assessments depends on the cumulative assessment by a number of different assessors. The above minimum satisfactory assessments gives a reliable indication of the progress of the trainee. All assessments, whether satisfactory or unsatisfactory must be included in the training portfolio. Satisfactory completion of the minimum number of workplace-based assessments is one of the requirements necessary for consideration of progression in training at the Annual Review of Competence Progression (ARCP). The workplace-based assessments submitted to the ARCP do not have to include any deemed unsatisfactory ones (see [http://www.mmc.nhs.uk/specialty\\_training\\_2010/gold\\_guide.aspx](http://www.mmc.nhs.uk/specialty_training_2010/gold_guide.aspx), Gold Guide, June 2009, para 7.42).

### **Level of complexity**

The trainee should undertake workplace-based assessments for a wide variety of procedures, cases, specimen and sample types, and with a range of complexity levels which must be related to

the stage of training. The assessment should be representative of the trainee's current practice. The assessor must decide the level of complexity for the assessment.

Definition of *Low* complexity

Uneventful and straight-forward, with few demands made on the trainee.

Definition of *Average* complexity

Routine with manageable complications, that most likely occurs on a regular basis.

Definition of *High* complexity

Difficult or unusual, due to demanding encounters or unusual findings.

## **2. OUTLINE OF THE WORKPLACE-BASED ASSESSMENT TOOLS**

### **2.1 Case-based discussion (CbD)**

Case-based discussion (CbD) is a way for trainees to present and discuss their cases with more experienced colleagues throughout their training and obtain systematic and structured feedback from the assessor. It is designed to assess decision-making and the application or use of medical knowledge in relation to the care of patients where the trainee has been involved either clinically or through their laboratory involvement. It also enables the discussion of the ethical and legal framework of practice and in all instances, it allows trainees to discuss why they acted as they did. The trainee selects two cases which they have recently been involved with. One of these will be chosen by the assessor for the case-based discussion which will be centred on the trainee's documented involvement either in the medical notes or laboratory records and reports. The trainee chooses the timing, the cases and the assessor. The discussion should take no longer than 15-20 minutes. The assessor will then spend 5-10 minutes providing immediate feedback. The assessor will complete the assessment form with the trainee present; it must be as soon as possible after the discussion takes place.

### **2.2 Direct observation of practical skills (DOPS)**

Direct observation of practical skills (DOPS) is used for assessing competence in the practical procedures that trainees undertake. The assessments should be made by different assessors and cover a wide range of procedures (please refer to the curriculum for topics). The observation takes place whilst the trainee undertakes the activity. The procedure being observed should last no more than 10-15 minutes before the assessment takes place. The assessor will then spend 5-10 minutes providing immediate feedback and completing the assessment form with the trainee present.

### **2.3 Evaluation of clinical/management events (ECE)**

Evaluation of clinical/management events (ECE) is a tool used for assessing the trainee in the performance of their duties in complex tasks, often involving teamworking or interacting with other professional staff. Examples include presentation of cases at a multidisciplinary team (MDT) meeting, or contributing to quality assurance and audit processes in clinical and laboratory settings. The assessment takes place whilst the trainee undertakes the activity then the assessor will then spend 5-10 minutes providing immediate feedback. The assessor will complete the assessment form as soon as possible after the assessment takes place with the trainee present. The assessment is performed against the standard expected at the end of the trainee's current stage of training (A to D). Please see the section below for more information on the standards for assessment. The ECE tool is for ST1 and ST2 trainees who should complete a minimum of 6 DOPs and 4 ECEs and for ST3, ST4 and ST5 trainees who should complete 4 DOPs and 6 ECEs.

### **2.4 Multi-source feedback**

The Royal College of Pathologists has developed a multi-source feedback (MSF) tool for Year 1 pathology trainees. The tool was initially developed in Sheffield for obtaining multi-source feedback for trainees in paediatrics. SPRAT (Sheffield Peer Review Assessment Tool) is a 360° or multi-source feedback tool and was developed for use in consultant appraisal, to inform annual assessment for doctors in training and to fulfil revalidation requirements.

The Royal College of Pathologists has developed a universal pathology focussed multi-source feedback (MSF) tool to be completed by colleagues that is appropriate to all pathology specialties and all grades (from year 3 and 5 trainees to consultant grade).

Multi-source feedback is a process whereby the recipient is rated on their performance by people who are familiar with their work. As part of the development and implementation process, its reliability and validity have been evaluated and it is shown to be a robust assessment tool. Importantly, the generation of structured feedback can be used to inform personal development planning.

▶ [Link to multi-source feedback \(MSF\)](#)

Also see: [Purpose of assessment tools](#)

### 3. WHO CAN BE AN ASSESSOR?

All departments should cultivate an environment where training staff are encouraged to assess and give feedback to trainees. The training departments need to identify staff competent to assess trainees and ensure that they are trained to do so. The College will provide a number of training opportunities for assessors but cannot provide training for all who might undertake this task. Training departments should ensure that appropriate training such as provided by the College is cascaded to relevant staff.

Assessors can be consultants (medical or clinical scientist), staff grade and associated specialists (SAS), senior biomedical scientists (BMS), clinical scientists, a more senior trainee or other healthcare professionals competent in the area being assessed (e.g. nurses). Assessors do not need prior approval from the College or prior knowledge of the trainee but should be briefed about the standard required of the stage of training (see curriculum). For optimum reliability, assessments should be undertaken by as many different assessors as possible. Trainees are encouraged to include assessments from a broad range of consultants and senior staff.

▶ [Curriculum](#)

### 4. STANDARDS FOR ASSESSMENT

Trainees must be assessed against the standard expected of a trainee at the end of the stage of training that they are in. Stages of training are normally defined as:

**Stage A** – ST1 (full outline of competency is available in curriculum). The trainee will be developing a comprehensive understanding of the principles and practices of the specialty under direct supervision.

**Stage B** – ST2 and ST3 leading to the Part 1 examination. The trainee will have acquired a good general knowledge and understanding of most principles and practices under indirect supervision.

**Stage C** – ST3 onwards leading to the Part 2 examination. The trainee will be undertaking further specialised general training.

**Stage D** – Meets the requirements of the CCT programme. The trainee will have an in-depth knowledge and understanding of the principles of the specialty.

The following grading scale must be applied to the assessment criteria for each workplace-based assessment tool. If a criterion is not applicable, the assessors should tick 'unable to comment'.

## **Grading scale**

The form offers a grading scale from 1-6:

1-2	Below expectations
3	Borderline
4	Meets expectations
5-6	Above expectations

## **Definition of borderline**

In the context of workplace-based assessment, borderline trainees have not demonstrated that they have convincingly met expectations during the assessment but there are no major causes for concern.

Definitions for the grading scales are provided at:

▶ [Standards for assessment tools](#)

## **Outcome of assessment**

The outcome of the assessment is a global professional judgement of the assessor that the trainee has completed the task to the standard expected of a trainee at that stage.

Satisfactory - The trainee meets the standard overall

Unsatisfactory - The trainee needs to repeat the assessment

## **5. RECORD KEEPING**

An assessment should not be approached as if it was an examination. After completing the assessment, the assessor should provide immediate feedback to the trainee. If the paper-based assessment form was completed in the first instance for entering into the LEPT system at a later date, then it should be duly signed and dated by the trainee and the assessor. Trainees are asked to check with their local arrangements whether they are required to give a photocopied version of the form to their educational supervisor/assessor and/or retain the original copy of the form in their portfolio for possible presentation to the ARCP panel.

## **6. EXAMPLES OF SCENARIOS FOR USE IN WORKPLACE BASED ASSESSMENT**

The following are examples only and are not intended to be exclusive; nor will every trainee have an opportunity to be assessed in every scenario.

### **6.1 Case-based discussion (CbD)**

Examples of areas suitable for CbD are:

- blood stream
- cardiac/vascular
- respiratory
- Bone or joint
- wound/soft tissue
- enteric
- CNS
- serological diagnosis
- intra-abdominal
- urinary tract
- burn/plastics
- sexually transmitted infections.

## **6.2 Direct observation of practical skills (DOPS)**

Examples of procedures suitable for DOPS assessment are:

- sample handling and preparation (including safe laboratory practice)
- safe disposal
- microscopy and staining
- identification: presumptive or definitive
- use of selective media
- ability to distinguish between significant and non-significant pathogens and normal commensal flora
- ability to spot and separate mixtures of organisms, obtaining pure culture
- antimicrobial sensitivity testing: setting up, reading and interpretation
- practical aspects of therapeutic drug monitoring
- serology
- molecular methodologies
- other.

## **6.3 Evaluation of clinical/management events (ECE)**

- clinical governance/quality
- audit
- managerial
- teaching/presentation
- laboratory practice
- clinical care
- infection control
- written exercise
- other.

These procedures should be carried out for a wide variety of specimen types, refer to topics in the curriculum.

**ASSESSMENT DEPARTMENT  
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