



Occupational Medicine Specialty Training

Curriculum Assessment Strategy

Implemented August 2022

This document outlines the assessment strategy that accompanies the Occupational Medicine Specialty Training (OMST) 2022 Curriculum.

This is Version 1.0. As the document is updated the version numbers will be changed, and the content changes noted in the table below.

Version number	Summary of changes	Date issued

Contents

1. Executive summary	4
2. Introduction to the 2022 Curriculum Assessment Strategy	5
3. Purpose of the programme of assessment	7
4. The role of assessors and examiners	9
5. Critical progression points	10
6. How to use the programme of assessment	10
7. Programme of assessment	11
7.1 Less Than Full Time	14
8. Workplace-based assessments	15
8.1 Mini-Clinical Evaluation Exercise (Mini-CEX).....	16
8.2 Case-Based Discussion (CBD)	16
8.3 Directly Observed Practical Skills (DOPS)	16
8.4 Sheffield assessing instrument for letters (SAIL).....	16
8.5 Multi-Source Feedback (MSF)	17
8.6 Evaluation of Supervised Learning Events.....	18
9. Reflection and feedback	19
9.1 Giving feedback	19
9.2 Reflective practice.....	20
10. FOM Membership (MFOM) examinations	21
11. Validity of assessments	27
11.1 Design.....	27
11.2 Delivery.....	28
11.3 Reliability	30
11.4 Validity of 'Best Fit' MCQs.....	30
11.5 Validity of MEQs.....	31
11.6 Validity of the photo hygiene paper.....	33
11.7 Validity of OSPEs	33
12. Overarching assessment blueprint	35
13. ARCP guidance	36
14. Equality, diversity and fairness in assessments	38
15. Quality improvement	40
16. Sources of further information	41

1. Executive summary

This **OMST 2022 Curriculum Assessment Strategy** accompanies the **OMST 2022 Curriculum**¹ and sets out the content of the programme of assessment and its rationale.

The OMST 2022 Curriculum focuses on the achievement of high level Learning Outcomes, underpinned by Professional Capabilities. Examples of evidence to meet the Learning Outcomes are provided in the **OMST 2022 Curriculum Guidance**². However, the trainee is encouraged to consider for themselves how best to provide evidence that is most relevant to their own workplace experience and future interests, and the assessment approaches used are designed to support ongoing **formative assessments** and **reflection**, as well as providing robust **summative assessments**.

Assessments used in the 2017 Curriculum are based on well-established and tested methodologies widely used in postgraduate medical assessment. These methodologies will remain unchanged in the OMST 2022 Curriculum. However, Research Methods (Learning Outcome 11) was assessed in the 2017 Curriculum usually by the submission of a dissertation to the FOM. In the OMST 2022 Curriculum, Learning Outcome 11 will be assessed, as all other Learning Outcomes are, by educational supervisors, and outcomes considered by the Annual Review of Competency Progression (ARCP) panel in determining suitability for progression. This change was made in response to multi-source feedback following extensive consultation, and addresses two commonly reported concerns:

1. Although other options were available, most trainees following the 2017 Curriculum submit dissertations, which can prove overly time-consuming and expensive; and
2. A more modern assessment approach could provide greater flexibility for trainees to provide contextualised evidence of their understanding of Research Methods that aligns better with the type of work that may undertake when working as a specialist in occupational medicine.

¹ Faculty of Occupational Medicine, *OMST 2022 Curriculum v1.0*, (Jan. 2022)

² Faculty of Occupational Medicine, *OMST 2022 Curriculum Guidance v1.0*, (Jan. 2022)

The GMC **General Professional Capabilities** (GPCs)³ are explicit throughout the 2022 Curriculum and therefore all assessments align to these. **Critical progression points** are identified in this Assessment Strategy and are outlined in the OMST 2022 Curriculum itself.

As part of the **transition arrangements**⁴ the **ePortfolio** will be adapted to support the OMST 2022 Curriculum structure, making the purpose of each assessment and its relation to the curriculum more explicit, and actively encouraging reflection and identification of development needs. Forms and guidance for trainees and trainers will be redesigned to match the review of evidence against each Learning Outcome (and thus the GPCs) in the OMST 2022 Curriculum. This will include a re-designed Educational Supervisor's Structured Report (ESSR) to assist the ARCP panel to make a decision on progression based on a range of evidence that clearly maps to the OMST 2022 Curriculum.

2. Introduction to the 2022 Curriculum Assessment Strategy

The Faculty of Occupational Medicine (the 'Faculty') is responsible for setting and maintaining the standards of training and assessment in occupational medicine, in accordance with the requirements set by the GMC. The GMC defines the term 'Assessment' as:

'all activity aimed at judging a learner's attainment of curriculum outcomes, whether for summative (determining satisfactory progression for completion of training), or formative (developmental) purposes.'

and the purpose of assessment is defined as:

*'assessments assure the profession, patients and the public that doctors are safe.'*⁵

A review of the occupational medicine curriculum, resulting in the development of new Higher Learning Outcomes, occurred over the period 2019-2021 and, subject to GMC approval, will be implemented from the 2022 training year.

The Occupational Medicine Specialty Training (OMST) 2022 Curriculum Assessment Strategy outlines the overall formative and summative assessment aims and structure, the purpose

³ General Medical Council, *Generic Professional Capabilities Framework*, (2017)

⁴ Faculty of Occupational Medicine, *OMST 2022 Curriculum Transition v1.0*, (Jan. 2022)

⁵ General Medical Council, *Designing and maintaining postgraduate assessment programmes*, (2017) p.3-4

of each assessment, the mechanisms by which assessment validity is ensured, alignment of assessments to the curriculum, and the importance of reflective learning and regular feedback.

The Learning Outcomes are assessed using a range of **workplace-based assessments**, alongside Membership (MFOM) **examinations**. Both mechanisms of assessment are valuable, but evidence is triangulated through the third process of external review and critique at the **Annual Review of Competency Progression (ARCP)**.

The OMST 2022 Curriculum was designed to incorporate feedback from trainees and trainers, as well as other stakeholders. The engagement of trainees and trainers with the review process ensures that the 2022 Curriculum is easy to engage with, flexible, and meets the needs of the modern occupational medicine workforce. The 2022 Curriculum has also been designed to meet the requirements of the GMC standards for the design of postgraduate medical curricula.⁶

Educational Supervisors are required to make a professional judgement as to whether the trainee has achieved each Learning Outcome, considering evidence provided in the training portfolio which is mapped to the Learning Outcomes. For each Learning Outcome there are Professional Capabilities, which must be demonstrated to achieve the Learning Outcome. The primary onus is on the trainee, with support from their trainer(s), to demonstrate how they meet the Learning Outcome satisfactorily.

This 2022 Curriculum Assessment Strategy reflects the changes to the curriculum, both structurally (with assessments clearly linked to Learning Outcomes and Professional Capabilities), and by supporting the underpinning principles of flexibility and tailoring to the specific learning needs of each trainee.

The Faculty is committed to continuous improvement in assessment, and monitoring the **validity** and **reliability** of assessments used to support the curriculum. The programme of assessment will be kept under review and will evolve in response to new evidence, testing and further integration of assessments, in line with the **2022 Curriculum Quality** processes⁷ and enhanced **governance** structure⁸.

⁶ General Medical Council, *Excellence by design: standards for postgraduate curricula*, (2017)

⁷ Faculty of Occupational Medicine, *OMST 2022 Curriculum Quality Assurance*, (Jan. 2022)

⁸ Faculty of Occupational Medicine, *OMST 2022 Curriculum Governance*, (Jan. 2022)

3. Purpose of the programme of assessment

The General Medical Council (GMC) defines the purpose of the programme of assessment as being:

'to robustly evidence, ensure and clearly communicate the expected levels of performance at critical progression points, and to demonstrate satisfactory completion of training as required by the approved curriculum'⁹

The programme of assessment must reassure the individual, the profession and the public, as well as employers and regulatory bodies, that a doctor working as a specialist in occupational medicine is fit to practise. In order to achieve this, all areas of the training curriculum need to be sampled and assessed in different ways, using assessment tools which are appropriate for the purpose.

As with the 2017 Curriculum assessment strategy, the aim continues to be the provision of a comprehensive programme of assessment that:

- ensures that trainees can **chart the full range of knowledge, understanding, skills, attitudes and behaviours that are required** of a specialist occupational medicine physician, and map their acquisition of the capabilities;
- provides **robust evidence for decisions** that are made about a trainee's readiness to progress to the next stage of training, while supporting trainers and assessors so that they feel confident and empowered to make **consistent, transparent, fair** and **evidence-based** decisions;
- supports trainees in their learning by providing **feedback** at all stages of their progression, and encourages **reflection**, thereby ensuring the process is both **formative** and **summative**;
- more easily **identifies trainees who are struggling** to achieve, or are in difficulty in any other way, and enable appropriate, structured and targeted support;
- contributes to the continuing emphasis on evidence-based **quality management** in all areas of educational activity, including the assessment processes; and

⁹General Medical Council, *Designing and maintaining postgraduate assessment programmes*, (2017), p.5

- encourages the development of the trainee's **professionalism** and self-managed **continuing professional development**, through the experience of reflective practice and presenting **a portfolio of evidence**, in preparation for **future revalidation** processes and engagement with quality management systems.

To achieve these aims the underpinning rationale of the 2022 Curriculum Assessment Strategy reflects:

- assessments that support both **practical** and **theoretical** models of assessment methodologies, and include formative and summative assessment;
- assessment criteria that are **clear and explicit**, and an assessment process that trainees are confident in;
- the **support** required for trainees, including challenging and inspiring them as part of the overall learning experience, to encourage the development of capable clinicians skilled in occupational medicine, and who strive for excellence;
- the promotion of **equality, diversity and respect**, ensuring that assessments are fair and equitable for all trainees and that the **safeguarding** of both workers who the trainee has responsibility for and colleagues is paramount;
- an engagement in **reflective practice**, actively encouraging independent and trainee-led learning;
- that all assessments will be carried out by **assessors with the relevant skills, knowledge, training and support** to do so effectively, making fair and consistent judgements.

The type of assessment to be used in all cases must be appropriate to the purpose. Assessment can be formative or summative. **Formative assessment** will help to guide learning, reassuring the trainee about knowledge and skills gained, prompting reflection, and nurturing appropriate attitudinal responses. **Summative assessment** provides an overall judgement regarding capability, or qualification for progression to higher levels of responsibility (Epstein, 2007).¹⁰

¹⁰ R.M. Epstein, *Assessment in Medical Education*, (New England Journal of Medicine, 2017)

Within the programme of assessment, sufficient guidance as to when and how to use each assessment is given, whilst allowing the trainee and their supervisor the freedom to make an informed judgement as to which combination of methods is the most appropriate in any given situation.

As Van der Vleuten and Schuwirth (2005)¹¹ noted, choosing one assessment method over another inevitably means some compromises, with the type of compromise varying for each specific assessment context. Good assessment involves a mindful choice.

Workplace-based formative assessments test what a trainee does and act as a means of driving learning. Other assessment methods employed in the programme of assessment explore different tiers of Miller's pyramid (1990)¹² – for example, multiple choice questions (MCQs) in the MFOM Part 1 examination, as a test of knowledge (“knows”) and structured short questions (“knows how”), and Objective Structured Practical Examinations (OSPEs) in the MFOM Part 2 examination (“shows how”).

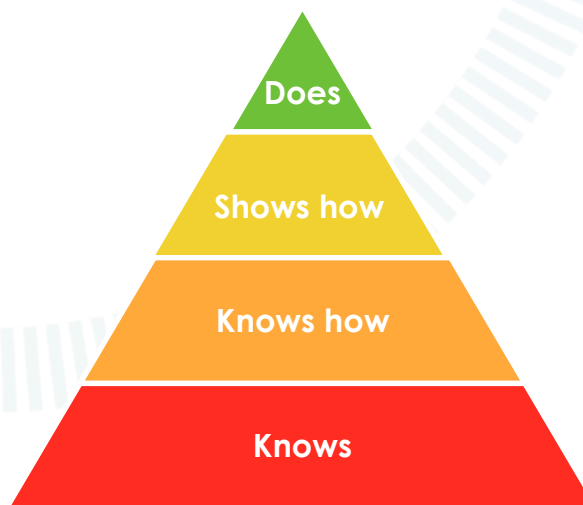


Figure 1: Miller's Pyramid: a framework for learner assessment in medicine (1990)

4. The role of assessors and examiners

FOM aligns its requirements for assessors and examiners with those published by the Academy of Medical Royal Colleges (AoMRC). These standards cover: examiner selection,

¹¹ C.P. Van Der Vleuten, L.W. Schuwirth, *Assessing professional competence: from methods to programmes*. (Medical Education, 2005)

¹² G.E. Miller, *The assessment of clinical skills/competence/performance*. (Acad Med. 1990; 65:S63–7)

training, performance management, duration of appointment, and the collection of equality and diversity data.

[www.aomrc.org.uk/wp-content/uploads/2016/05/Requirements for Examiners and Assessors 1014.pdf](http://www.aomrc.org.uk/wp-content/uploads/2016/05/Requirements_for_Examiners_and_Assessors_1014.pdf)

5. Critical progression points

Critical progression points are gateways to progression. It is a requirement of trainees to successfully pass through these gateways in order to progress to a higher level of training or to complete training. For trainees in occupational medicine training, the critical progression points are:

CPP1: To progress to ST4

Trainees are required to have passed the MFOM Part 1 examination (or have achieved the Diploma in Occupational Medicine).

CCP2: To achieve the Certificate of Completion of Training (CTT)

Trainees are required to have achieved the required capabilities in all the Learning Outcomes AND have passed the MFOM Part 2 examination.

It should be noted that candidates who enter specialty training with a pass in the Diploma in Occupational Medicine (DOccMed) achieved within the last 5 years are exempt from MFOM Part 1 (taken in ST3), but those entering with a core examination in a different specialty are not.

6. How to use the programme of assessment

The GMC defines a programme of assessment as:

'the integrated framework of exams, assessments in the workplace and judgements made about a learner during their approved programme of training.'¹³

The programme of assessment must be used in conjunction with the **2022 Curriculum** and **2022 Curriculum Guidance**.

¹³General Medical Council, *Designing and maintaining postgraduate assessment programmes*, (2017), p.5

The key aspect of the programme of assessment is the **assessment blueprint**. This is a grid indicating the assessment requirements at each level, which assessments must be completed satisfactorily at key waypoints and, where appropriate, the minimum number of assessments required.

The programme of assessment comprises a wide range of assessments, which must be used in conjunction with the blueprint to develop skills and assess capability. The assessments are a blend of formative and summative; centrally and locally set and administered; and knowledge, skills and capability-based assessments capture a wide range of evidence which can be integrated to reach judgements as to the trainee's suitability for progression. The assessments also provide trainees with the opportunity to obtain developmental feedback.

7. Programme of assessment

The assessments deployed within occupational medicine specialty training are a mix of formative and summative and fall within four categories:

- a) Workplace-based assessments:** a variety of Supervised Learning Events (SLEs) and other assessments carried out in real working situations. These can be both formative and summative. The ePortfolio should contain additional evidence related to the trainee's development, including reflection and courses completed by the trainee, as well as annual summary reports from trainers and the educational supervisor.
- b) MFOM examinations:** MFOM Part 1 (one theory examination) and MFOM Part 2 (three theory examinations and one clinical high-stakes examination).
- c) ARCP panel decision:** a holistic review takes place annually whereby the ARCP panel considers all evidence presented and determines whether or not a trainee can progress to a higher level of training, or be recommended for Certificate of Completion of Training (CCT).

Further detail about each type of Supervised Learning Event (SLE), and the rationale for its selection, can be found in Section 7 of this Assessment Strategy.

Information about the MFOM examinations, their component parts, and the process of ensuring that they deliver a robust and valid summative assessments can be found in Sections 9 and 10 of this document.

It should be noted that, at each of the four stages of training (ST3, ST4, ST5 and ST6), the complexity of workplace-based assessments is expected to increase. Trainees and educational supervisors should develop an educational plan, and update it at the start of each training year, which demonstrates increasing complexity in planned workplace-based assessments. Trainees are strongly advised to always meet with their supervisors to review evidence before their ARCP.

In order to show appropriate curricular breadth and increasing complexity in case-based discussions (CBDs), the following content should be covered by the end of each stage of training. The number of CBDs are indicative.

Stage of training	CBDs
End of ST3	1 complex CBD 1 legal CBD 1 work-related CBD 5 additional CBDs
End of ST4	2 complex CBDs 1 legal CBD 1 pre-employment CBD 1 work-related CBD 3 additional CBDs
End of ST5	3 complex CBDs 1 disclosure CBD 1 legal CBD 1 work-related CBD 2 additional CBDs
End of ST6	4 complex CBDs 1 legal CBD 1 ill-health retirement CBD 1 safeguarding CBD 1 work-related CBD

Table 1: Coverage and indicative numbers of CBDs

The **programme of assessment** for the 2022 Curriculum is outlined below. The number of SLEs is indicative.

	ST3	ST4	ST5	ST6
Supervised Learning Events (SLEs)				
Mini CEX	4	4	4	4
DOPS (must include spirometry and audiometry)	4	4	4	4
CBDs	8	8	8	8
SAIL OH 1	2	2	2	2
SAIL OH 2	2	2	2	2
FOM Membership (MFOM) examinations				
MFOM Part 1 or Diploma in Occupational Medicine (DOccMed)	1			
MFOM Part 2 (may be taken in ST5 or ST6)			1 OR 1	
Additional evidence required for ARCP				
Workplace risk assessment	2	2		
First aid assessments	1	1		
Health surveillance programme	1	1		
Environmental impact assessment		1		1
Health promotion programme				1
Audit cycle		1		1
MSF	1	1	1	1
Teaching	0	0	2	2
Management and clinical governance		1	1	2
Research methods				1
Educational Supervisor's Structured Report (ESSR)	1	1	1	1
GMC Trainee Survey completed	1	1	1	1
Form R (A & B) with reflection on practice if needed	1	1	1	1
CCT calculator	1	1	1	1

Table 2: 2022 Curriculum programme of assessment

The number of SLEs indicated in the programme of assessment (Table 2, above) are the indicative number needed to achieve a pass at each stage of training, as determined by

expert committees. However, it is highly recommended that trainees submit more than the number of SLEs indicated in the table. It is also recommended that trainees consider providing additional evidence to assist their progress. The evidence in Table 3 (below) is suggested.

	ST3	ST4	ST5	ST6
Recommended additional evidence				
Educational plan, with SMART learning objectives	1	1	1	1
Reflection on events attended and other CPD	1	1	1	1

Table 3: Recommended additional evidence

7.1 Less Than Full Time

For Less Than Full Time (LTFT) trainees, workplace-based evidence is pro rata and rounded up as follows:

	50%	60%	80%	Full Time
Mini CEX	2	2	3	4
DOPS	2	2	3	4
CBD	4	5	6	8
SAIL OH1	1	1	2	2
SAIL OH2	1	1	2	2
MSF	1	1	1	1

Table 4: LTFT pro rata indicative workplace-based assessments

8. Workplace-based assessments

Workplace-based assessments were ideologically incepted as a result of Modernising Medical Careers (2005), and began first use in foundation training (Norcini & Burch, 2007)¹⁴. The Faculty of Occupational Medicine embraced the ideology of workplace assessment. In 2013, the GMC relaunched formative WPBAs as Supervised Learning Events (SLEs), emphasising their primary formative intention to distinguish them from summative assessments of performance.

Trainees should use Supervised Learning Events (SLEs) to demonstrate that they have engaged in formative feedback. They should record any learning objectives that arise in their Personal Development Plan (PDP) and show evidence that these objectives have subsequently been achieved.

Trainees and supervisors should aim for quality over quantity. A useful SLE will stretch the trainee, act as a stimulus and mechanism for reflection, uncover learning needs, and provide an opportunity for the trainee to receive developmental feedback.

The SLE tools used for these events are:

- **Mini-CEX (Clinical Evaluation Exercise):** sitting in on, and formally scoring, a trainee consultation with a patient.
- **MSF (Multi-Source Feedback):** a form of questionnaire-based 360 degrees appraisal.
- **CBD (Case-Based Discussion):** trainees and supervisors discuss a selection of cases, with supervisors scoring performance against a pre-specified range of capabilities.
- **DOPS (Direct Observation of Procedural Skills):** assessment of a trainee's ability to perform commonly required procedures. Spirometry and audiometry are mandatory DOPs.
- **SAIL (Sheffield Assessment Instrument for Letters):** a tool for assessing the quality of a trainee's written correspondence to managers and health professionals.
- The **ePortfolio** skills log should be used to demonstrate development and continued capability.

¹⁴ J. Norcini & V Burch, *Workplace-based assessment as an educational tool: AMEE Guide No 31*, (2007)

8.1 Mini-Clinical Evaluation Exercise (Mini-CEX)

The purpose of the Mini-CEX is to provide feedback on skills essential to the provision of good clinical care in an occupational medicine setting.

This assessment was developed for use in the foundation years as part of Modernising Medical Careers (2005), and has been modified to map to occupational medicine assessment standards. It comprises a supervisor sitting in on, and formally scoring, a trainee consultation with a worker (patient). This enables trainees to be assessed in real practice situations.

8.2 Case-Based Discussion (CBD)

The purpose of the CBD is to assess clinical reasoning and decision making, and the application or use of medical knowledge in relation to worker (patient) care. This is a formative assessment, and cases should be chosen that have created challenge, doubt or difficulty in order to maximise the learning opportunity. Trainees and supervisors discuss a selection of cases with supervisors scoring performance against a pre-specified range of capabilities.

8.3 Directly Observed Practical Skills (DOPS)

The purpose of the DOPS is to assess the trainee's performance of specific procedures or clinical skills without supervision. DOPS are both formative, as trainees should be given feedback after each assessment, and summative, as all procedures must be demonstrated to a satisfactory level i.e. capable of performing without supervision. This must include spirometry and audiometry.

8.4 Sheffield assessing instrument for letters (SAIL)

This is a tool for assessing the quality of a trainee's written correspondence to managers and health professionals. The purpose is to provide a structured assessment and opportunity for learning development across a variety of types of written communication e.g. correspondence and clinical notes.

8.5 Multi-Source Feedback (MSF)

The purpose of MSF is for the trainee to receive and reflect on feedback from a wide range of individuals from their professional sphere. MSF has evolved from the Sheffield Peer Review Assessment Tool (SPRAT). This assessment is invaluable for assessing a trainee's performance over time, in everyday practice. It is a form of questionnaire, based upon the 360 degrees appraisal.

Throughout training there should be engagement with Good Medical Practice¹⁵ and the learning process (curriculum, formative and summative assessment) by regular participation in SLEs and utilising the ePortfolio to demonstrate that the requirements of the GMC's approved curriculum and associated assessment system have been met. Examples of evidence are listed below, but it should be noted that this is not an exhaustive list:

- Supervision documentation of meetings and outcomes
- Documentation from meetings between the trainee and the educational supervisor
- Regular participation in SLEs that sample the curriculum
- Examination outcomes
- An educational plan
- SLE reports and ESSR reports
- Reflective entries
- Record of training events
- Teaching resources, developed by the trainee, which contribute to evidence of attaining the teaching Learning Outcome.
- Clinical governance/quality improvement activities
- Presentations/research/publications
- Form R
- Compliments and complaints

The educational supervisor should utilise much of this evidence when completing the educational supervisor's report, as this will be used to inform the ARCP panel.

All the above will be relevant to the trainee's stage of training.

¹⁵ General Medical Council, *Good Medical Practice*, (2019)

Trainees should consider carefully which Learning Outcomes are being assessed when recording and reflecting on each assessment, and link evidence in the ePortfolio to aspects of the curriculum for which the evidence is valid.

8.6 Evaluation of Supervised Learning Events

Educational supervisors and ARCP panels consider the extent to which trainees have effectively used the SLEs to support and evidence their training and development, using the following guidance:

Poor/unacceptable	<ul style="list-style-type: none"> • Only minimum compulsory SLEs undertaken • Poor quality evidence • No evidence of reflection • No evidence of how feedback informed practice
Good/acceptable	<ul style="list-style-type: none"> • SLEs have been carried out in a variety of clinical situations, with a range of assessors • Evidence of reflection and/or feedback informing practice
Excellent	<p>In addition to the good/acceptable criteria:</p> <ul style="list-style-type: none"> • Using SLEs in a novel and innovative manner • Evidence of self-challenge, using SLEs to gain insight into, or to challenge, weaker areas of practice • Mature reflection, with consideration of how future practice has been informed • Evidence of completion of action plans/learning objectives, arising as a result of the SLE feedback

Table 5: Guidance for evaluating SLEs

9. Reflection and feedback

9.1 Giving feedback

Feedback to any learner (trainee) is sometimes seen as merely providing a commentary on what the learner has achieved, or what corrections need to be made. Providing the learner with feedback should be much more than that. Feedback can be formative or summative.

Formative feedback is that which supports the trainee with learning and development, and as it is not assessed or graded, it therefore carries no summative judgement.

Summative feedback is that which provides a summative judgment about the trainee's performance.

(Irons, 2007)¹⁶

Feedback, when performed well, has the potential to:

- improve the trainee's self awareness, helping them to identify their strengths and areas for development;
- boost the trainee's confidence, self-esteem and motivation, thereby leading to greater progress; and
- be used for developmental activity, developing generic skills and a greater dialogue between the trainee and supervisor/assessor.

To provide high-quality feedback requires the supervisor/assessor to devote professional time, and in busy clinical environments this can sometimes be lacking. Negative views can also be a result of perceptions, and while the supervisor/assessor may believe they have provided copious and high-quality feedback, the trainee can feel the opposite, as sometimes feedback is not recognised as such.

What makes feedback more effective?

Effective feedback places the trainee at the centre of the experience. Trainees value feedback that comes across 'loud and clear'. Effective feedback can be said to have the following characteristics:

¹⁶ A. Irons, *Enhancing Learning Through Formative Assessment and Feedback*, (Routledge, 2007)

- Feedback is timely and provided as near as possible to the activity or assessment.
- Feedback needs to be clear and comprehensive, supporting understanding by the trainee.
- Feedback must be constructive.
- Feedback should be encouraging and supportive, building on strengths but also identifying areas for development and supporting the trainee to produce clear action plans to address these.
- Feedback is not about the person but focused on the behaviour/capability.
- Feedback should not be 'done' merely to experience it, but a natural dialogue should commence between trainee/assessor/peers, and be conducted in a manner that encourages open communication and honesty.

9.2 Reflective practice

Reflective practice should be undertaken for both positive and negative experiences. At all stages of training in medicine, and in many other professions, those in training are asked to keep a learning portfolio, which usually includes some reflective writing. A simple definition of reflection can be consciously thinking about and analysing what you are doing and what you have done, and thinking about what you could do differently and how you might do this.

Reflection is a developmental thinking process that is contextualised into past experiences, thus it is unique to each individual and not merely a description of the events themselves. Reflection is a form of personal response to experiences, situations, events or new information. It is a 'processing' phase where interpretation, 'sense-checking', creation of meaning and planning for future takes place. This all amounts to a change that takes place in the individual, which can be summarised as a development or learning process. There is neither a right nor a wrong way of reflective thinking; there are just questions to explore.

It is important to take time to reflect systematically on learning, as this is more likely to embed the learning within subsequent practice. A reflective note for each learning activity should contain the following four elements:

1. The title and a description of the activity.
2. The learning need or objective that was addressed.

3. The outcome of the activity.
4. Further learning needs identified.

Reflective thinking demands that you recognise and define the valuable knowledge you bring to every new experience. The learning process fundamentally relies on the important connections between what you already know and how you place that in the context of new events. In this way, you become an active, aware and critical learner.

10. FOM Membership (MFOM) examinations

Two specialist examinations are set by the Faculty: MFOM Part 1 taken in the first year of training, and MFOM Part 2 taken as an exit exam.

MFOM Part 1 consists of one Multiple Choice Questions (MCQ) paper. This is a 'Best Fit MCQ' exam to test basic knowledge and principles. From FOM's previous experience and regular audits, the current assessment tool seems to do this well. However, there are some areas that cannot be tested well with this format, such as ethical issues and communications, so these aspects are assessed through other means during training. No changes are proposed to the MFOM Part 1 examination in the OMST 2022 Curriculum.

MFOM Part 2 consists of one MCQ paper; plus one Modified Essay Questions (MEQ) paper; a Photographic and Occupational Hygiene paper; plus an Observed Structured Clinical Examination, consisting of two long cases and four short cases.

The assessment methodologies have worked well over time. With the implementation of the 2022 Curriculum, candidates will be able to pass each examination paper separately, rather than having to take some papers together, as has been the case historically. This will align better with arrangements in other specialties, and better support flexibility and the modern working practices.

MFOM Part 1 and MFOM Part 2 examinations have either a **pass** or **fail** outcome.

Trainees achieving a pass will be notified of this and a certificate issued that the trainee can upload to their ePortfolio.

Trainees who do not achieve a pass receive a personalized letter from the Chief Examiner or the Deputy Chief Examiner. The roles of Chief Examiner and Deputy Chief Examiner

require significant relevant experience of postgraduate medical assessment, training (and ongoing refresher training) and there is a competitive recruitment process for these roles with appropriate job descriptions, person specifications, peer review, mentoring and induction.

Letters to trainees who have not passed MFOM examinations provide feedback on the areas in which the trainees need to improve their skills, and/or knowledge, and/or understanding and application of knowledge, and/or behaviours.

The feedback letters provide a helpful framework for trainees to discuss with their educational supervisors, who are aware that such letters are issued to examinees who do not achieve a pass. The personalized feedback letter from the Chief Examiner or Deputy Chief Examiner helps to inform discussions between the educational supervisor and their trainee in order to agree a plan to address areas of weakness.

10.1 Standard setting for MFOM examinations

FOM has not changed its approach to standard setting in the OMST 2022 Curriculum, and continues to be guided by the Academy of Medical Royal College's guidance for standard setting¹⁷.

Although the OMST curriculum has moved from competencies-based (2017) to outcomes-based (2022), the principles used to differentiate between candidates who pass MFOM examinations from those who do not remain valid. This process is referred to as 'standard setting' and requires comparison of each examinee's performance to a minimum standard.

MFOM examinations are high stake, so it is essential that a system is in place that ensures consistency and fairness.

The standard-setting method initially used for MCQ and MEQ papers was a test centre method (Angoff) to estimate how a group likely to achieve a minimal pass would be expected to perform in each question. After this, a statistical method (linear equating) was introduced and this method continues to be used. This approach has worked well for many years and is well suited to the number of questions asked and the small number of candidates sitting the examination.

¹⁷ Academy of Medical Royal Colleges, *Guidance for standard setting: a framework for high stakes postgraduate competency based examinations*, 2014

10.1.1 Multiple Choice Question (MCQ) papers

In the MFOM Part 1 MCQ examination, all questions are compulsory. The examination paper consists of single statements or stems with up to five statements. The minimum number of responses that will be required is fifty. Twenty pilot questions, distributed at random for trialling and/or standard setting purposes, appear in the paper. Responses to them do not count towards a candidate's final score. This process forms part of a range of quality assurance measures that FOM has instituted across its examinations.

The marking system for the MCQ examination is as follows:

- One mark (+1) is awarded for each correct answer.
- No mark is deducted for an incorrect answer (a negative marking scheme is not used).
- No mark is awarded or deducted if a question is left unanswered.
- No mark is awarded for any answer that is partially erased, smudged, or a double response to a question.

Candidates are advised that the pass mark in the MCQ examination will be assessed relative to an external standard set by the examiners, and that raw marks may be adjusted (scaled) to preserve a common standard between examinations.

The MFOM Part 2 consists of one MCQ paper (120 questions), one MEQ paper, an Observed Structured Clinical Examination (OPSE) consisting of six stations, and a Photo Hygiene paper. All papers must be passed to achieve MFOM Part 2, but all papers do not have to be taken at the same sitting.

The standard setting approach to the MFOM Part 2 MCQ paper mirrors that of the MFOM Part 1 MCQ paper.

10.1.2 Multiple Essay Questions (MEQ) paper

The MEQ paper lasts for 3 hours and consists of 10 MEQ-style questions, completed at a single sitting. Questions are given equal weighting. Most of the questions will be highly structured and divided into sub-sections, each of which will carry no more than 4 marks. Some questions, however, will be designed to assess the candidate's ability to analyse,

appraise, and write occupational health reports, so these may not be so highly structured. The question sheet clearly indicates the number of available marks for each subsection.

The purpose of the MEQ examination is to test ability to apply knowledge to clinical practice, to the standard appropriate to a specialist in occupational medicine.

The pass mark in the MEQ paper will be assessed relative to an external standard set by the examiners. This was originally based on an Angoff approach, but due to the small number of examinees, linear equating was introduced and continues to be used. Raw marks may be adjusted (scaled) to preserve a common standard between examinations.

10.1.3 Objective Structured Clinical Examination (OPSE)

Long and short clinical stations are run/observed by pairs of examiners. Faculty staff members are present to enforce time limits. At times, an auditor (who assesses the performance of the examiners, not the candidate), or a trainee examiner, may be present but will take no part in the examination.

The stations are run on a circuit and candidates may commence the circuit at any of the long or short clinical stations. Depending on the number of candidates, it may be necessary to run two circuits simultaneously. If so, to standardise the assessments as far as practicable, each station in the two circuits will have broadly similar cases with similar tasks and questions.

The focus at the long stations is on testing the ability of candidates to take a clinical and occupational history; to discuss the relevance of the clinical findings to occupation; to make an assessment of the occupational health and vocational aspects of the case; and to formulate a suitable action plan. Candidates may be expected to discuss differential diagnoses and be generally aware of the most common treatments and any relevant occupational implications, but detailed knowledge of treatment regimens is not required.

The focus at the short stations will normally be on the ability to elicit physical signs, correctly interpret them, and discuss their occupational health and clinical consequences.

Role players may be used for the mental health and disability patients. Specific written instructions are provided to the candidate prior to commencing the station. Candidates are expected to spend twenty minutes taking an appropriate clinical and occupational history, and developing a management plan for the patient.

For the mental health stations there will also be an expectation, normally, that candidates make a diagnosis. However, such information may be provided for the disability case.

A pair of examiners observes the candidate's ability to communicate with the worker (patient) and assesses the content of the consultation. During the final ten minutes the examiners question the candidate with regard to clinical, ethical and employment issues pertinent to the case in question.

Short case stations comprise one short case of ten minutes. Two examiners are present at the station. The candidate is given clear verbal instructions prior to commencing the case. Workers (patients) are drawn from the typical spectrum that an occupational physician could reasonably expect to see in daily practice e.g. a musculoskeletal, abdominal, neurological, respiratory, cardiac, or dermatological case. Typically, the candidate is asked to examine the worker (patient) and is expected to elicit and correctly interpret the relevant clinical signs. Six minutes is permitted for the physical examination. The candidate is then asked some questions about the case, focusing particularly on the occupational relevance of the findings to case management. The examiner or pair of examiners will ask all candidates the same or similar questions, and will use a pre-designed marking scheme for each case.

Candidates are not required to pass every station or any particular station. However, they are required to reach a bare minimum pass standard in certain areas which are not directly tested elsewhere in the MFOM Part 1 and MFOM Part 2 examinations. These include: the candidate's approach to, and communication with, the patient; their capacity to manage the patient's concerns; and their ability to take a detailed history, conduct a suitable clinical examination, elicit clinical signs and reach an appropriate diagnosis.

This approach is in line with recommended practice in favour of compensatory standards, given the measurement error associated with individual items or stations. Appropriately qualified and experienced standard setters established a level at which candidates should be expected to pass the OSPE. This is reviewed and calibrated each year, based on historical performance data.

The Photo Hygiene paper focuses on two aspects:

- a) practical aspects of occupational hygiene, and may include photographs of various pieces of equipment relevant to exposure assessment and/or personal protection; and
- b) a diverse range of illustrative materials relevant to occupational medical practice.

In the photographic section, the candidate is presented with approximately five illustrations and, where relevant, a short scenario. The candidate is asked a number of pre-scripted questions by the examiners. The illustrations relate to the diagnosis, management, and prevention of occupationally-related disease or ill-health.

In the occupational hygiene section of the paper, candidates are tested on occupational hygiene, and are presented with scenario(s) in the form of photograph(s) and or diagram(s) showing work processes. Candidates are presented with approximately five illustrations and asked a number of pre-scripted questions covering such topics as: knowledge of common work processes/activities and their associated hazards and risks; approaches to conducting workplace risk assessments; interpretation of non-clinical workplace data; and the effectiveness of control measures used (in practice) to minimise or prevent exposure.

The questions typically are based on a specific workplace process/activity. Candidates may also be required to interpret occupational hygiene and toxicological data, such as may be found in workplace risk assessment reports, or to identify and discuss typical occupational hygiene tools and items of personal protective equipment. Questions may be illustrated by photographs or actual pieces of equipment e.g. pictures of individuals exposed to physical, chemical, biological or ergonomic hazards; sampling instruments; face masks.

Of the total 250 OSPE marks, 80 are available for the short cases, 80 are available for the long cases and 90 are available for the photographic/occupational hygiene paper. The pass mark in the OSPE will be assessed relative to an external standard set by the examiners.

Raw marks may be adjusted (scaled) to preserve a common standard between examinations. Candidates' total marks across all stations, adjusted/scaled as necessary, will be compared with the overall pass mark.

11. Validity of assessments

Any programme of assessment must be supported by a comprehensive approach to ensure validity in the development, implementation and ongoing review of the overarching programme and the individual assessments embedded within it.

Validity as a concept is both nebulous and potentially infinite¹⁸ alone identify over 150 different 'types' of validity to be considered, and so to adequately judge and ensure the validity of the FOM assessments it is crucial to define what this means in the context of occupational medicine assessment. The following core principles are therefore adopted, all of which are well established in the medical and broader educational literature:

- All validity is construct validity, in line with the work of Messick¹⁹ and continued in later editions of the *Standards for Educational and Psychological Testing*.
- Validity is not a property of an individual test, and refers instead to the interpretations and uses of a test or test score for a specified purpose (Cronbach, 1971²⁰ and Kane, 2006²¹).
- Validation must take into consideration not only the evidence to support the interpretation of the test use ('the interpretive argument'), but also an evaluation of whether the interpretive argument is sound ('the validity argument') (Kane, 2006).
- Validation is never finished, and is an ongoing process relying on multiple evidence sources (Cronbach, 1988²² Sireci). Therefore, it must be approached in a manner that is proportionate, measured, structured and feasible.

11.1 Design

Workplace-based assessments have now been in routine practice for over 10 years, and the fact they are now embedded would support their value in day-to-day supervision across training for trainees and trainers. Following the publication of the GMC's *Learning and*

¹⁸ P. Newton & S. Shaw, *Validity in Educational and Psychological Assessment*, (Sage, 2014), p.8

¹⁹ S. Messick, *Test Validity: A Matter of Consequence*. (Social Indicators Research 45, 1998) p.37

²⁰ L.J. Cronbach, *Test validation (1971)*. In: R. L.Thorndike (Ed.), *Educational measurement (2nd ed.)*, 443–507. Washington, DC: American Council on Education.

²¹ M.T. Kane, *Validation*, (2006) In: R. L. Brennan (Ed.), *Educational Measurement*. (4th ed.).

²² L.J. Cronbach, *Five perspectives on the validity argument*, (1988)

assessment in the clinical environment: the way forward (2011), the FOM has developed, piloted and rolled out the SLE suite of workplace-based assessments.

To date there has been limited published evidence in the literature supporting the validity and reliability of workplace-based assessments, reflecting the challenge of studying such a heterogenous collection of assessments, undertaken by a diverse cohort of trainees, and identifying a meaningful measure of their change in behaviour as training progresses²³. Therefore, this Assessment Strategy commits to the intention to monitor and evaluate the performance of the approved SLEs, seeking opportunities to refine either the assessment or the guidance.

11.2 Delivery

The assessments are now embedded, and so have become a part of the fabric of the day-to-day work for occupational medicine trainees who have become proactive in ensuring their ePortfolio evidences their educational achievements in sufficient quality and quantity as they progress through training.

Workplace-based assessments are recorded through the ePortfolio, meaning they are available to be completed as necessary, either in real time, on the job or at a pre-arranged time with the trainee and educational supervisor.

The MFOM Part 1 examination is offered twice per annum, in May and November, and the MFOM Part 2 examination is held every 8 months. Since 2021 MFOM examinations have been delivered online using remote invigilation via a partner organisation, experienced at delivering postgraduate medical assessments online. Examination candidates are contractually obliged to adhere to stringent regulations, and guidance is published on the Faculty's website. Candidates are required to carry out IT checks at least 3 days prior to the examination and must complete an online tutorial before sitting the examination. Trainees are advised clearly of the validation protocol and processes, the process for authentication, the monitoring protocol and are provided with examples of both minor and major infringements. Should misconduct during an examination be suspected, the Faculty has a policy and procedure for investigating the incident, guidelines for sanctions if required, and

²³ A. Miller, *Impact of workplace based assessment on doctors' education and performance: a systematic review*, (BMJ, 2010)

a route of appeal for candidates. Further information about the Faculty of Occupational Medicine's examination regulations, policies, procedures and guidance can be found on the Faculty's website at www.fom.ac.uk.

The **appointment, development and evaluation of examiners** takes place through a robust eight-stage process:

1	Desk-based verification of the suitability of the applicant.
2	If considered potentially suitable, the applicant will attend a panel interview.
3	If successful, induction takes place which includes signing an examiner conduct and confidentiality agreement.
4	The new examiner must undertake mandatory training in equality and diversity, and the principles of good assessment, including fairness, reliability, validity, feasibility and acceptability.
5	A mentor is assigned to the new examiner who will shadow more experienced examiners.
6	The new examiner's marking standard is verified and, if assessing an OSPE, an auditor will be present during the assessment.
7	The new examiner will join a team of examiners, led by the Chief Examiner and their deputy/deputies, and will participate in the relevant examination committee meetings.
8	Feedback from and to new examiners is encouraged, regular evaluation of examiner performance takes place, and attendance at periodic refresher training is mandatory.

Once an examiner has gained significant experience and skills, they may apply for a Deputy Chief Examiner role. Similarly, most Chief Examiners have usually already gained experience as a Deputy Chief Examiner. All Chief Examiners and Deputy Chief Examiners are appointed by the Board, who will consider the comments and recommendations of the appointment panel.

All educational supervisors, who will be involved in assessing workplace-based assessments and other ePortfolio evidence, must have completed GMC training, and be registered as an accredited trainer. Support, ongoing development and guidance for supervisors is provided by the National School of Occupational Medicine (NSOH) established by Health Education England, and through equivalent bodies: NHS Education for Scotland (NES), Health Education and Improvement Wales (HEIW) and the Northern Ireland Medical and Dental Training Agency (NIMDTA). The Defence Deanery provides support and development for military supervisors.

11.3 Reliability

Reliability is a fundamental requirement of validity (Isaacs, Zara & Herbert, 2013, p.128), but also can pose a threat to validity if pursued to the furthest extreme. The FOM incorporates a range of techniques through its assessments, such as test blueprints and post-examination statistical analyses, to ensure reliability, but is also clear that one should 'never switch to a less valid measure simply because it is more reliable' (Nunnally & Bernstein, 1994, p.265).

11.4 Validity of 'Best Fit' MCQs

The standard for MCQ papers was set originally using Angoff's methodology, and is maintained by linear equating. The number of candidates sitting MFOM examination is small. Questions are selected from the Faculty's question bank which allocates each question to a specific training domain. Using a random number generator, questions are selected and then balanced to cover all key learning outcomes. If a domain is over-represented, questions are deselected in favour of under-represented domains. This is done by going to the next random-generated question in the preferred domain. Immediate past questions are excluded before the random number generator is used. Questions are set by the Chief Examiner/Deputy Chief Examiner, ensuring appropriate spread across key competencies and learning outcomes.

One hundred scoring questions are set, and up to twenty new questions are piloted. The scoring questions have been piloted previously or used in past examinations, and each question has a relative measure of difficulty based on past performance.

The questions are then scrutinised by the MFOM2 Panel to confirm balance and suitability.

Metrics on performance are analysed post examination by a statistician. Inconsistently answered questions are discussed with expert panels and some are suppressed from the database and scoring. Piloted reasonably discriminatory questions are confirmed as additions to the database.

11.4.1 Fitness for purpose of MCQs

The MCQ paper is a tried and tested methodology to test specialist knowledge as well as general medical knowledge that is expected of a consultant in occupational medicine. This is achieved by its broad scope covering all training domains. Capabilities that relate to attitudes and skills are less well tested in this aspect of the exam but are tested in the OSPEs.

11.4.2 Quality assurance of MCQs

Each question in the database is mapped to relevant capabilities/training domains (Learning Outcomes). For each examination there is a distribution map for these to ensure adequate representation. The balance is checked by the MFOM P2 Advisory Group. Questions used in the examination have gone through 3 stages of quality checks:

- Previously scrutinised by the MFOM P2 Advisory Group after setting; and
- Piloted in a previous exam; and
- Reviewed post examination by the Statistician and Standard Setting Committee.

11.5 Validity of MEQs

Ten questions covering the scope of occupational medicine practice are selected from the question bank or newly sourced. At least one question or part thereof is from the topics listed below, and elements of these topics are often combined within one question providing a synthesised approach to the testing of higher level learning:

- Epidemiology/statistics
- Chemical hazards
- Biological hazards
- Physical hazards
- Occupational hygiene methods
- Fitness for work

- Report writing
- Audit, law, and clinical governance

Questions are selected from a bank that is securely stored by Faculty staff. The question banks are periodically reviewed and older questions are updated or modified. New questions are invited from examiners/resource specialists.

11.5.1 Fitness for purpose of MEQs

The above convention ensures good distribution in terms of covering the scope of the required knowledge, and is effective at testing knowledge the specific training domains of occupational medicine. However, there is a risk that some capabilities are missed out from overall testing, such as environmental medicine and special topics. Also, clinical governance, law, audit and ethical issues may have variable representation from one exam to the next.

The MEQ is partially effective in testing an aspect of the key occupational medicine skill of report writing.

Although the MEQ methodology will remain in the 2022 Curriculum as a well-established assessment method, the Faculty will consider whether this methodology should be changed as part of the annual cycle of quality improvement and may run a pilot using an alternative assessment approach.

The Faculty will carry out an evaluation of the 2022 Curriculum one year after implementation, and the opportunity to seek views from trainees, trainers, the national school, the Lead Dean and other key stakeholders on the 2022 Curriculum will include seeking views on the MEQ assessment approach.

11.5.2 Quality assurance of MEQs

In question setting and selection, the ten questions chosen for the exam are reviewed by the MFOM Part 2 Advisory Committee for appropriateness, balance and accuracy. Each question is double marked (i.e. marked by two examiners), which is a standard Faculty quality assurance (QA) process. Where examiners differ significantly in marks, the QA process allows for re-marking and a third party arbitrator (usually the Chief Examiner). The

questions are updated based on feedback from examiners, and sometimes trainees, in readiness for the next examination sitting.

11.6 Validity of the photo hygiene paper

Between three and five photographs of workplace scenarios, and between three and five hygiene questions, with photograph prompts, are selected from the question bank by the Chief Examiner or are newly sourced. Older questions are reviewed and updated, or may be removed, if no longer valid. New questions are invited from examiners/resource specialists. Photo questions are used to illustrate the spread of occupational clinical/practical settings and occupational hygiene aspects, and to illustrate a range of hazards and hygiene techniques.

Once selected, the questions are then scrutinised by the MFOM2 Advisory Group to confirm appropriate balance and suitability.

11.6.1 Fitness for purpose of the photo hygiene paper

This section of the examination does what is intended very well. It assesses the key skills of hazard recognition, evaluation and control as well as the management of occupational disease.

11.6.2 Quality assurance of the photo hygiene paper

This is same as for MEQ, above. The MFOM Part 2 Advisory group includes occupational hygienists and thus ensures some external specialist scrutiny.

11.7 Validity of OSPEs

Short cases are structured to demonstrate examination of cardiac, respiratory, neurological, musculoskeletal and other long-term conditions. A request is made for suitable cases and on receipt of clinical history, structured questions are prepared based on the scoring template. The questions assess the candidate with regards to their approach to the patient; physical examination technique; correct elicitation of signs; differential diagnosis; and occupational health implications and management.

Long cases cover mental health and disability. Actors are used for these, playing out case scenarios from a bank of scenarios for long cases. New scenarios are reviewed by the MFOM2 Advisory Group. The long case questions assess the candidate with regards to their

approach to the worker; general history taking; occupational history taking; exploration of problems at work; managing patient concerns; assessment of functional capacity; occupational implications; management plan and communication.

11.7.1 Fitness for purpose of the OSPE

The OSPE provides the key opportunity to assess skills and attitudes; clinical skills can also be assessed. Attitude to the patient and aspects of communication are also scored. From previous experience and audits, the Faculty considers this assessment tool fit for purpose.

11.7.2 Quality assurance of the OSPE

Where possible, patients are selected from a bank of patients who are familiar with taking part in such examinations. Where such patients are not available, experienced actors are used who are also familiar with the process. The scenarios are standardised for each station. Specific patient/actor standardisation occurs before the examination to ensure a uniform benchmark for candidate performance. Each station has two examiners, and double marking takes place. There is additional oversight and audit examiners oversee the integrity of the examination and examiner performance. Patients' and actors' feedback, particularly on candidates' attitudes, behaviours **and** communication, is also sought.

12. Overarching assessment blueprint

The blueprint shows how each assessment relates to the 2022 Curriculum and the eleven Learning Outcomes within it.

	Mini CEX	DOPS	CBD	SAIL OH1	SAIL OH2	MSF	ESSR	MFOM1	MFOM2
LO1: professional values & behaviours	●	●	●			●	●	●	
LO2: professional skills & knowledge: communication	●	●	●	●	●	●	●		
LO3: professional skills & knowledge: clinical practice	●	●	●	●	●	●	●	●	●
LO4: workplace risk	●		●	●	●		●	●	
LO5: health promotion & illness prevention	●	●	●	●	●		●	●	
LO6: leadership & team working			●			●	●		
LO7: patient (worker) safety	●	●	●	●	●		●	●	
LO8: quality improvement							●		
LO9: safeguarding	●		●			●	●		
LO10: education & training						●	●		
LO11: research							●		

13. ARCP guidance

Evidence required for the Annual Review of Competency Progression (ARCP) is outlined on pages 11-14 of this document. It should be noted that, unlike many other specialties, training in occupational medicine may not involve daily contact between trainees and their educational supervisors. The minimum number of supervised learning events (SLEs) has been carefully considered, and a consensus view taken by a panel of experts, following engagement with trainees to ensure that the range of events and minimum numbers of SLEs are truly representative of trainee experience. Trainees should meet regularly with their clinical and educational supervisors and are encouraged to adopt a reflective learning style.

In addition to evidence detailed on pages 11-14, trainees are required to upload supporting evidence in their ePortfolio, for review by trainers and sample checking by the ARCP panel. This supporting evidence must include:

Supporting evidence	ST3	ST4	ST5	ST6
Workplace risk assessment	2	2		
First aid assessment	1	1		
Health surveillance programme	1	1		
Environmental impact assessments		1		
Health promotion programme				1
Clinical audits		1		1
Teaching			2	2
Management and clinical governance			1	2
Research methods				1
Educational Supervisor's Structured Report	1	1	1	1
Completion of GMC's Trainee Survey	1	1	1	1
Form R (A & B), and reflection on practice if needed	1	1	1	1
CCT calculator	1	1	1	1

Table 6: Supporting evidence required for ARCP

Workplace risk assessment

Workplace risk assessment reports should follow the principles suggested by the HSE at <https://www.hse.gov.uk/risk/faq.htm#q1>

Health surveillance and health promotion

Health surveillance and health promotion programmes should be critically assessed, including a description of the programme, uptake, impact/evaluation where possible, strengths, weaknesses and recommendations.

First aid

First aid arrangements should be assessed for two separate organisations.

Environmental impact

Environmental impact should be assessed for two separate organisations.

Research methods

Examples of evidence that may be suitable to upload to the ePortfolio to demonstrate achievement of the Research Learning Outcome 11, are given in the 2022 Curriculum Guidance. Trainees are strongly encouraged to consult with their clinical and educational supervisors for guidance.

Evidence of passing MFOM examinations

Trainees are required to provide evidence of passing MFOM examinations in the form of an official letter from the Faculty of Occupational Medicine confirming a pass.

Serious Untoward Incidents

For every complaint or Serious Untoward Incident (SUI) declared on Form R, a reflection on practice must be submitted.

Form R

Form R must cover the full scope of medical practice. This includes paid, unpaid, and voluntary work within or outside occupational medicine. 'Full scope' means any medical practice including any advisory role, attachment /observer role etc. For any work declared on Form R, a statement should be submitted from a person with clinical responsibility for that role to confirm that there are no concerns or complaints about the trainee. Evidence of appraisal in the role is an acceptable alternative.

The Faculty ensures that the examinations are in line with GMC expectations, and proactively seeks to identify possible instances of differential attainment and address these.

Satisfactory completion of training requirements

Trainees are required to have achieved the required Learning Outcomes AND have passed the MFOM Part 2 examination AND have been awarded outcome 6 in the ARCP.

14. Equality, diversity and fairness in assessments

As part of the development of the 2022 Curriculum and accompanying 2022 Curriculum Assessment Strategy, the Faculty undertook a **2022 Curriculum Equality and Diversity Impact Assessment**, considering any actual or potential adverse effects of implementation on those with protected characteristics (as defined in the Equality Act, 2010).

Given that the range of assessments comprising the programme of assessment have not been altered in this updated strategy, the impact assessment considered evidence related to the equality and fairness of the existing assessments, taking in similar evidence to the validity evidence contained within this document. In addition to considering the evidence currently held for these assessments, the impact assessment also identified further actions required to better confirm the equality and fairness of the assessments.

The Faculty seeks to address issues of equality, diversity and fairness in a range of ways, including:

- Examination and assessment content are authored, implemented and reviewed by a diverse range of individuals.
- Training for examiners and assessors includes consideration of potential adverse effects and how to ensure these are removed or mitigated when designing, authoring and administering examinations and assessments.
- Feedback is gathered from candidates following centrally administered examinations and assessments, and from the entire trainee cohort through the National Training Survey.

- The Faculty of Occupational Medicine (FOM) and the National School of Occupational Health (NSOH) provide a range of Reasonable Adjustments where appropriate evidence is provided to support requests.
- Outcomes for examinations and assessments are monitored to identify any trends that may post a concern with regards to equality, diversity or fairness. Concerns are escalated appropriately.
- Procedures which are mandatory within the 2022 Curriculum have been carefully reviewed to ensure nothing is included that is not critical, and therefore there are no unnecessary barriers to progression through and completion of training.
- Beyond these mandatory requirements, the assessments can be deployed in a flexible and tailored manner, meeting the requirements of the individual trainee.
- The use of online examination and assessment systems helps to remove barriers caused by geography and the need to travel and access a particular building.
- Online examination technology can be more easily adjusted, such as font size and text colour, to meet specific access needs.

The Faculty is committed to the following actions to enhance its existing work in relation to ensuring equality, diversity and fairness in assessment:

- To continue to review the nomination and appointment process to Faculty positions responsible for examinations and assessments, ensuring equality of opportunity and access.
- To increase the number of characteristics for which examination data is routinely reviewed.
- To implement a range of measure to improve the quality and quantity of the data set that the Faculty holds related to protected characteristics for all those involved in training and assessment, enabling more comprehensive analysis and reporting.
- To continue to deliver training and refresher training related to equality and diversity for all specialist occupational physicians with a role in the examinations and assessments.
- To implement improvements to the review of the complaints log, ensuring that any issues and/or trends are identified promptly and acted on accordingly.

15. Quality improvement

All curricula need to be supported by a robust quality assurance and improvement framework to improve the quality of the trainee learning experience, and to ensure that the curriculum content, delivery, assessment and implementation are monitored and reviewed in a planned, systematic and appropriate manner.

The Faculty quality infrastructure for training and assessment is based on the Plan, Do, Check, Act (PDCA) cycle, introduced by Deming. In the context of the programme of assessment, this means planning for effective assessment processes; executing those processes; review and evaluation including data analysis and multi-source feedback; and implementing any required changes.

This quality framework is already in place, but continually evolves to meet changing standards and in response to the outcome of monitoring and review activity, ensuring resources are developed for the area of most need and/or risk.

Further details can be found in the [2022 Curriculum Quality Assurance](#) report.

16. Sources of further information

AoMRC, COPMed and GMC guidance and standards

[AoMRC, Improving feedback and reflection to improve learning: a practical guide for trainees and trainers](#)

[COPMed, The Gold Guide](#)

[GMC, Excellence by design: standards for postgraduate curricula](#)

[GMC, Equality and diversity guidance for curricula and assessment systems](#)

[GMC, Designing and maintaining postgraduate assessment programmes](#)

[GMC, Generic Professional Capabilities Framework](#)

[GMC, Promoting excellence: standards for medical education and training](#)

Faculty of Occupational Medicine

[ePortfolio information and support](#)

[WBA and SLE guidance for trainers and trainees](#)

[MFOM Part 1 regulations, guidance and recommended reading](#)

[MFOM Part 2 regulations, guidance and recommended reading](#)

[Examinations and appeals – general regulations](#)

[Reasonable adjustments \(F4\)](#)

[Information for prospective trainees](#)

[CESR entry to the specialist register](#)

[Person Specification for training in occupational medicine](#)

[National School of Occupational Medicine](#)

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