The Faculty of Intensive Care Medicine

ICM Curriculum: *Supporting Excellence* Assessment Guidance

Change log

This document outlines the curriculum to be used by doctors completing postgraduate training in Intensive Care Medicine in the UK. It is accompanied by the ICM Curriculum: Supporting Excellence v1.0.

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

Version number	Date issued	Summary of changes

Contents

1. Introduction 4

2. Philosophy of Assessment 4

3. The Programme of Assessment 5

3.1. Target capability levels for stage of training 5

3.2. Capability Level Descriptors 7

4. The Role of Trainers: explaining the process of assessment 7

4.1. Aims of the Assessment Strategy 7

4.2. Shared Capabilities & Curriculum Cross-References 8

5. Supervised Learning Events 9

5.1. Numbers of assessments required and further guidance 9

6. Multiple Consultant Reports 10

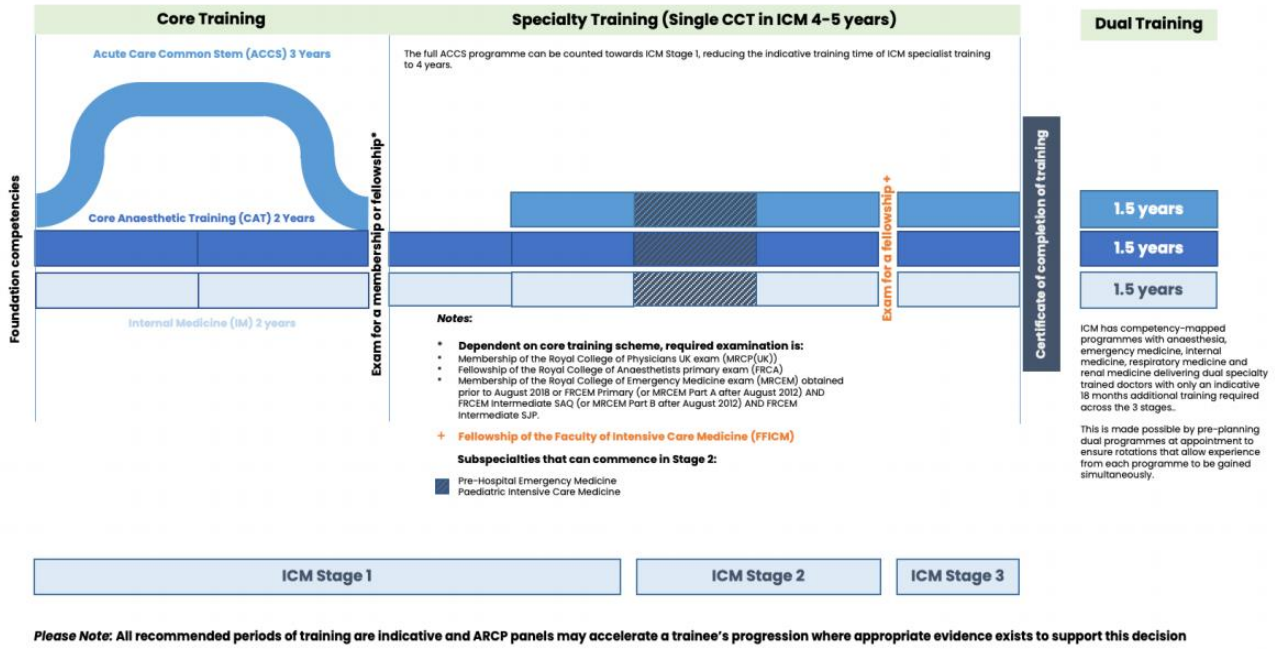
7. Glossary 10

1. Introduction

This Assessment Guidance describes the overarching programme of assessment for the 2021 ICM Curriculum: Supporting Excellence. The programme of assessment defines both formative and summative elements of the new approach to assessment.

This Assessment Guidance also includes a number of High Level Learning Outcome (HiLLO) Guides that contain additional information for intensivists in training and trainers on specific components of the programme of assessment for each stage of training.

Figure 1 – The ICM Training Pathway



Please Note: **All recommended periods of training are indicative and ARCP panels may accelerate a trainee's progression where appropriate evidence exists to support this decision**

2. Philosophy of Assessment

The key aim for assessment is to improve practice by concentrating on the educational potential of assessment through reflection and analysis, and de-emphasising the collection of evidence of achievement. Assessment within the 2021 Curriculum is therefore intentionally weighted towards formative development where we give an account of practice to enable improvement rather than accounting for practice or quantifying achievement. The learner is expected, and should feel confident, to demonstrate a journey of progression, in which the process of improvement towards the goal of CCT and independent practice is appreciated.

The FICM Programme of Assessment should allow learners to demonstrate they have met the outcomes from the curriculum in a way that is fair and reproducible using methods that both intensivists in training and trainers find useful and practical. The programme laid out considers the available educational evidence base, as is more fully detailed in FICM's Assessment Strategy. It should prioritise patient safety whilst at the same time encourage excellence in training and professional performance; assessment is a useful tool for learning not just for proof of learning.

ICM practice is complex and uncertain: expertise is developed by immersion in a 'community of practice' with intensivists actively engaged in their own learning, moving from peripheral participation in the delivery of critical care towards expertise. The developmental process is necessarily a journey where acquiring knowledge, practicing skills, and perfecting professional

artistry are opportunistic. It follows that every experience that an aspiring expert Intensivist encounters should be an opportunity for learning.

The process that underpins that learning is an experiential cycle of building up concrete experiences, reflective observations and abstract conceptualisation – also known as spiral learning.

It is hoped that by refocusing attention on participation in developmental conversations and moving away from SLEs being viewed as summative assessments, these conversations become a normal part of everyday practice in which teaching, learning, and assessment happen simultaneously. The intention is that training moves away from performing SLEs for the purpose of demonstrating ability, towards a more open culture where frequent, informal, formative analysis of performance is both expected and achievable, and where those powerful conversations, guided by the standards within the curriculum, serve as the scaffold to the achievement of excellence.

3. The Programme of Assessment

The 2021 Curriculum describes **14 HiLLOs** for each stage of training, these are divided into 10 specialty specific and 4 generic professional HiLLOs.

Each HiLLO describes the overarching learning outcome in the relevant area of practice expected at each stage. Under each HiLLO, several **Key Capabilities** are described which guide the individual towards achievement of the HiLLO for that domain.

Evidence of completion of all of the 14 HiLLOs for a stage of training is required before proceeding to the next stage. Such points in the curriculum are referred to as **Critical Progression Points**.

Intensivists in training can draw on a broad range of evidence including Supervised Learning Events (SLEs), personal activities, and personal reflections to demonstrate attainment of the Key Capabilities within each of the HiLLOs. Documentation from prior learning within previous Core or Higher Specialist training can (and should) also be used (for examples, see transition guidance documents). Such activities may provide evidence of the attainment of more than one of the Key Capabilities across more than one of the HiLLOs. See the Assessment Blueprint and Special Skills Modules Assessment Blueprint in the ICM Curriculum for further details.

The following tables indicate the level of capability required for each HiLLO for completion of each Stage of training.

3.1. Target capability levels for stage of training

HiLLO Number	High-Level Learning Outcomes (HiLLOs) - Intensive Care Medicine	Expected capability level by end of:		
		Stage 1	Stage 2	Stage 3
1	The doctor will be able to function successfully within NHS organisational and management systems whilst adhering to the appropriate legal and ethical framework.	2	3	4
2	The doctor will be focused on patient safety and will deliver effective quality improvement, whilst practising within established legal and ethical frameworks.	2	4	4
3	An Intensive Care Medicine specialist will know how to undertake medical research including the ethical considerations, methodology and how to manage and interpret data appropriately.	2	3	4
4	To ensure development of the future medical workforce, a doctor working as a specialist in Intensive Care Medicine will be an effective clinical teacher and will be able to provide educational and clinical supervision.	2	3	4

HiLLO Number	High-Level Learning Outcomes (HiLLOs) - Intensive Care Medicine	Expected capability level by end of:		
		Stage 1	Stage 2	Stage 3
5	Doctors specialising in Intensive Care Medicine can identify, resuscitate and stabilise a critically ill patient, as well as undertake their safe intra-hospital or inter-hospital transfer to an appropriately staffed and equipped facility.	2	3	4
6	Intensive Care Medicine specialists will have the knowledge and skills to initiate, request and interpret appropriate investigations and advanced monitoring techniques, to aid the diagnosis and management of patients with organ systems failure. They will be able to provide and manage the subsequent advanced organ system support therapies. This will include both pharmacological and mechanical interventions.	2	3	4
7	Specialists in Intensive Care Medicine can provide pre-operative resuscitation and optimisation of patients, deliver post-operative clinical care including optimising their physiological status, provide advanced organ system support and manage their pain relief.	2	3	4
8	Doctors specialising in Intensive Care Medicine will understand and manage the physical and psychosocial consequences of critical illness for patients and their families, including providing pain relief, treating delirium and arranging ongoing care and rehabilitation. They will also manage the withholding or withdrawal of life-sustaining treatment, discussing end of life care with patients and their families and facilitating organ donation where appropriate.	2	3	4
9	Intensive Care Medicine specialists will have the skillset and competence to lead and manage a critical care service, including the multidisciplinary clinical team and providing contemporaneous care to a number of critically ill patients.	2	3	4
10	Intensive Care Medicine specialists will have developed the necessary skills of induction of anaesthesia, airway control, care of the unconscious patient and understanding of surgery and its physiological impact on the patient.	2	3	3
11	In order to manage acutely ill patients outside the Intensive Care Unit, an Intensive Care Medicine specialist will have the diagnostic, investigational and patient management skills required to care for ward-based patients whose condition commonly requires admission to the intensive care unit.	3	3	3
12	Doctors specialising in Intensive Care Medicine understand the special needs of, and are competent to manage patients with neurological diseases, both medical and those requiring surgery, which will include the management of raised intracranial pressure, central nervous system infections and neuromuscular disorders.	1	3	3
13	A specialist in adult Intensive Care Medicine is competent to recognise, provide initial stabilisation and manage common paediatric emergencies until expert advice or specialist assistance is available. They are familiar with legislation regarding safeguarding children in the context of Intensive Care Medicine practice.	1	3	3
14	Intensive Care Medicine specialists recognise the special needs of, and are competent to provide the perioperative care to patients who have undergone cardiothoracic surgery, including providing pain relief and advanced organ system support utilising specialised techniques available to support the cardiovascular system.	1	3	3

3.2. Capability Level Descriptors

Level	Task orientated capability	Knowledge orientated capability	Patient management capability
1	Performs task under direct supervision.	Very limited knowledge; requires considerable guidance to solve a problem within the area.	Can take history, examine and arrange investigations for straight forward case (limited differential diagnosis). Can initiate emergency management and continue a management plan, recognising acute divergences from the plan. Will need help to deal with these.
2	Performs task in straightforward circumstances, requires help for more difficult situations. Understands indications and complications of task.	Sound basic knowledge; requires some guidance to solve a problem within the area. Will have knowledge of appropriate guidelines and protocols.	Can take history, examine and arrange investigations in a more complicated case. Can initiate emergency management. In a straightforward case, can plan management and manage any divergences in short term. Will need help with more complicated cases.
3	Performs task in most circumstances, will need some guidance in complex situations. Can manage most complications, has a good understanding of contraindications and alternatives.	Advanced knowledge and understanding; only requires occasional advice and assistance to solve a problem. Will be able to assess evidence critically.	Can take history, examine and arrange investigations in a more complex case in a focused manner. Can initiate emergency management. In a most cases, can plan management and manage any divergences. May need specialist help for some cases.
4	Independent (consultant) practice.	Expert level of knowledge.	Specialist.

4. The Role of Trainers: explaining the process of assessment

4.1. Aims of the Assessment Strategy

- **Formative assessments** will be used as a tool to promote learning and encourage excellence.

Formative SLE assessments can be performed and documented by appropriately senior, experienced supervising clinicians to whom the doctor in training is responsible, or working with. The SLE should document the key points of the developmental discussion held.

SLEs provide evidence of development, often for several areas of practice (key capabilities). The SLE will be linked to these on the LLP.

- **Summative assessments** and judgements will make clear the scope of performance and capabilities doctors in training have. This will ensure their skills reflect their level of clinical responsibility and maintain patient safety.

The summative assessments in the ICM curriculum are:
- The Final FFICM Examination
- Confirmation of attainment of each HiLLO via a Learning Outcome Completion Form in the LLP for each Stage of training and successful sign off of the respective Stage Certificates.

The ARCP panel will determine whether the doctor in training is at the point of being able to progress to the next stage of training. The panel's decision will be informed by the Educational Supervisor's Structured Report (ESSR) and all the HiLLOs having been achieved at the required level. Please refer to the ARCP checklist for details.

Role of the Educational Supervisor in assessment:

- To make an overarching judgement on whether the doctor is practicing at the level expected in each of the HiLLOs for that stage of training (eg see the tables 3.1 ***Target capability levels for stage of training*** and 3.2 ***Capability Level Descriptors*** for further details). This is a professional judgement made as an expert in ICM, who is familiar with the curriculum and its expected standards.
    - The judgement is indicated by the Learning Outcome Completion form being signed by the ES, to which a narrative commentary should be appended.
    - In order to judge that a HiLLO is met, it is not mandated that all underpinning key capabilities have to be evidenced.
    - This judgement will be informed by the ES's own experience working with the doctor, together with triangulating information taken from SLEs, personal activities undertaken by the doctor in training, an MSF, colleague feedback and multi-consultant reports.

- Whilst it must be clear how each HiLLO has been assessed, there should be no unnecessary repetition of assessments with the overall burden of assessment being reduced whilst maintaining proportionality.

- Where there are key progression points in training, for example between stages of training, judgements based on triangulation of evidence from a number of sources should be used to show that doctors have demonstrated suitable capability for their level of training. This protects patients and ensures doctors are assessed fairly. Intensivists in training should know what is expected of them at these key progression points.

- If a doctor is not judged to be at the level expected for a specific HiLLO, the ES should identify which key capabilities need to be worked on. If further specific granular detail is required, the underpinning mapped CoBaTRICE competencies that need addressing should be explicitly highlighted to the doctor and in the ESSR. Please refer to the HiLLO competency mapping document from the 2010 curriculum here.

Educational supervisors should review the progress of intensivists in training at regular intervals throughout their training programme, to assess progress towards attainment of the Key Capabilities and the spread of evidence associated with different capabilities.

4.2. Shared Capabilities & Curriculum Cross-References

The 2021 ICM Curriculum contains a number of shared themes that span multiple Key Capabilities across both the specialty specific and general professional HiLLOs. Intensivists in training should consider cross referencing evidence across HiLLOs when recording SLEs and other educational activities.

Faculty Tutors (FTs) will have an important role in working with and coordinating the ESs within departments and signposting intensivists in training to different learning opportunities.

The ES will seek information from the clinical supervisors during units of training undertaken in medicine, anaesthetics and sub-specialty ICUs as to the doctor's progress and engagement to inform judgements on the relevant HiLLOs. This should be in the form of an end of placement report.

Assessment of HiLLOs for generic professional capabilities:
Generic professional capabilities (GPCs) have been mapped throughout the entire curriculum and all of the ICM HiLLOs, but especially HiLLOs 1-4. These are skills and attributes that are

considered to be intrinsic to the activities of all professional doctors. Continuing and regular engagement with these relevant activities (eg quality improvement, CPD, governance activities, M&M review meetings, and reflections on plaudits, serious events and complaints) are key to every doctor's revalidation cycle.

5. Supervised Learning Events

SLEs should be used by intensivists in training and trainers to promote professional educational discussions and guide future learning, with the emphasis on feedback. Developmental conversations that enhance the improvement in performance that comes with repeated cycles of experience, reflection, conceptualisation, and application. Feedback should include both the specialty specific and generic professional aspects of performance.

Key to making SLEs effective is that the conversation happens soon after the observed activity, that this dialogue is aided by a credible facilitator, and that the conversation is seen as part of a continual process of development, rather than an assessment of performance at a single point in time.

It is important to note that one SLE can provide evidence for more than one of the Key Capabilities and there is no minimum number of SLE requirement for any of the HiLLOs.

Intensivists in training and trainers will be familiar with the tools such as CEX, DOPS, CBD and ACAT, however these have been updated to emphasise the importance of feedback and include an opportunity to guide where the doctor's practice level is at the time of the SLE. To help facilitate learning and development, the doctor should enter notes and reflections on the SLE.

5.1. Numbers of assessments required and further guidance

It is recognised that trainers and intensivists in training value guidance in terms of numbers of assessments required. However, the total number of assessments completed is less important than the quality of the assessments and breadth of cases covered. This allows Educational Supervisors to form reliable judgements of performance. Therefore, there is no 'target' number, instead the Faculty suggest the following guidance:

- Each HiLLO must have appropriate evidence for the ES to sign off at the appropriate level for training. The Assessment Blueprint highlights which forms of assessment are most appropriate for each HiLLO. This may be supplemented by other evidence such as (amongst others) development courses, teaching sessions, simulation and self-directed learning. However, where demonstration of performance in practice is required, SLEs and the MSF are likely to form the highest quality of evidence upon which an ES can base their judgement.
- One assessment may be used to evidence multiple capabilities. However, it must be clear to anyone reviewing such evidence that all capabilities linked were assessed and commented upon during the assessment, and that the assessment tool used was appropriate to assess the capabilities linked.
- The ES/CS will provide guidance to individual doctors at supervisor meetings regarding the quality and breadth of assessments completed. Doctors performing well will use assessments in a creative way to demonstrate and improve their practice.
- The numbers of different types of SLE used may change as doctors progress through training. For example, doctors in stage 3 of the training programme may choose to use the ACAT or CBD more than the DOPS or mini-CEX reflecting that evidence of complex decision making and leadership skills may be more useful for learning than observed clinical procedures by this stage of training.

- It will be necessary to complete multiple SLEs within the same capabilities over a period of time. For example, several DOPS for complex procedures e.g. tracheostomy or emergency airway management would be expected to be completed by different assessors over a period of time to demonstrate progression, and be complemented by a procedures log. For more simple procedures this may not be required.
- The procedures log is required to evidence maintenance of complex practical skills as described above. However, there is insufficient evidence to support a required number of procedures. Instead, numbers required will depend on the training level and the circumstances of the individual doctor. For example, the ES/CS is more likely to require evidence of maintenance of advanced airway skills from doctors that are undertaking part of their training in areas where these skills are not used regularly.

6. Multiple Consultant Reports

The FICM's assessment strategy approved by the GMC in November 2020 did not stipulate a MCR. As the responsibility for assessing whether a doctor meets the expected level for each HiLLO at any given stage of training falls largely to the ES, it is important that as much triangulating information is available to the ES as possible to inform their judgements. SLEs and an annual MSF will help this process, as will seeking information from experienced consultant trainer colleagues.

FICM TAQ are developing a MCR tool. This will be piloted across the UK. Subject to subsequent submission to the GMC, FICM expect this refined tool to become an additional formal tool available on the LLP.

7. Glossary

Abbreviation	Term
ACAT	Acute Care Assessment Tool for Intensive Care Medicine
ARCP	Annual Review of Competency Progression
CCT	Certificate of Completion of Training
CBD	Case-based Discussion
CoBaTrICE	Competency Based Training programme in Intensive Care Medicine for Europe
CS	Clinical Supervisor
DOPS	Direct Observation of Procedural Skills
ES	Educational Supervisor
ESSR	Educational Supervisor's Structured Report
FFICM	Fellowship of the Faculty of Intensive Care Medicine
FICM	Faculty of Intensive Care Medicine
FT	ICM Faculty Tutor
GMC	General Medical Council
GPCs	Generic Professional Capabilities
HiLLO	High-Level Learning Outcome
ICM	Intensive Care Medicine
ICU	Intensive Care Unit
LLP	Lifelong Learning Platform (new ICM ePortfolio)
MCR	Multiple Consultant Report
Mini-CEX	Mini-Clinical Evaluation Exercise
RA	ICM Regional Advisor
SLE	Supervised Learning Event
SSY	Special Skills Year
TAQ	FICM Training, Assessment & Quality Committee
TPD	Training Programme Director