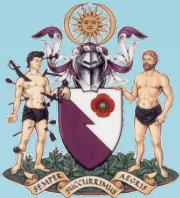




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The CCT in
Intensive Care Medicine

Assessment System

The Faculty of
Intensive Care Medicine

Contents

1. Competency level descriptors	3
2. Training Progression Grid	4
3. ARCP decision aids	8
3.1 Core Training.....	8
3.2 ICM Higher Specialist Training	8
3.2.1. Stage 1 training.....	8
3.2.2. Stage 2 training.....	9
3.2.3. Stage 3 training.....	10
4. Top 30 cases.....	11
5. Blueprint of Workplace-based Assessments mapped against curriculum competencies.....	15
6. Blueprint of Primary FFICM examination mapped against curriculum competencies.....	19
7. Blueprint of Final FFICM examination mapped against curriculum competencies	22

1. Competency level descriptors

Both trainees and trainers need to ensure that training is both comprehensive and that progression of training is occurring at a satisfactory rate. The curriculum uses a Training Progression Grid, which includes the CoBaTrICE domains, to both define and measure progress. This is combined with a simple and intuitive measure of level of competence which uses the intensity of supervision required to identify achievement.

The level descriptors are as follows:

Level	Task orientated competence	Knowledge orientated competence	Patient management competence
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.

By the completion of the ICM training programme all trainees will be expected to have achieved level 4 competency in the majority of the CoBaTrICE competences, as detailed on the grid. In order to provide both a measure of progress to trainees and trainers and also to provide an indication of where in the training programme individual competencies are best achieved we have produced an ARCP decision aid. This provides ARCP panels with guidance about the progress and evidence of progress expected for individual trainees.

2. Training Progression Grid

The following grid demonstrates the progression of competency expected of trainees in each curriculum domain throughout the Stages of ICM training. The grid acknowledges that trainees will reach Level 4 in some fundamental competencies earlier in their training (e.g. infection control, aspects of professionalism), and will not reach Level 4 in some highly specialised areas of intensive care (e.g. Paediatric Intensive Care Medicine, burns).

Domain and Competencies	Stage of Training					
	Stage 1				Stage 2	Stage 3
Domain 1: Resuscitation and management of the acutely ill patient	ACCS	CAT	CMT	ST		
1.1 Adopts a structured and timely approach to the recognition, assessment and stabilisation of the acutely ill patient with disordered physiology	2	2	2	3	4	4
1.2 Manages cardiopulmonary resuscitation - ALS recommended	3	3	3	3	4	4
1.3 Manages the patient post resuscitation	1	1	1	2	4	4
1.4 Triage and prioritises patients appropriately, including timely admission to ICU	1	1	1	2	3	4
1.5 Assesses and provides initial management of the trauma patient	1	1	0	2	3	4
1.6 Assesses and provides initial management of the patient with burns	0	0	0	1	2	3
1.7 Describes the management of mass casualties	1	0	0	1	2	3
Domain 2: Diagnosis, Assessment, Investigation, Monitoring and Data Interpretation	ACCS	CAT	CMT	ST	Stage 2	Stage 3
2.1 Obtains a history and performs an accurate clinical examination	2	2	2	3	4	4
2.2 Undertakes timely and appropriate investigations	2	2	2	3	3	4
2.3 Performs electrocardiography (ECG / EKG) and interprets the results	2	2	2	3	4	4
2.4 Obtains appropriate microbiological samples and interprets results	2	1	2	3	4	4
2.5 Obtains and interprets the results from blood gas samples	2	2	2	3	4	4
2.6 Interprets imaging studies	2	1	2	3	4	4
2.7 Monitors and responds to trends in physiological variables	2	2	1	3	4	4
2.8 Integrates clinical findings with laboratory investigations to form a differential diagnosis	1	1	2	2	3	4
Domain 3: Disease Management	ACCS	CAT	CMT	ST	Stage 2	Stage 3
3.1 Manages the care of the critically ill patient with specific acute medical conditions	1	1	1	2	3	4
3.2 Identifies the implications of chronic and co-morbid disease in the acutely ill patient	1	1	2	2	3	4
3.3 Recognises and manages the patient with circulatory failure	1	1	1	2	3	4
3.4 Recognises and manages the patient with, or at risk of, acute renal failure	1	0	1	2	3	4
3.5 Recognises and manages the patient with, or at risk of, acute liver failure	1	1	1	2	3	4
3.6 Recognises and manages the patient with neurological impairment	1	1	1	2	3	4

3.7 Recognises and manages the patient with acute gastrointestinal failure	1	1	1	2	3	4
3.8 Recognises and manages the patient with severe acute respiratory failure / acute lung injury syndromes (ALI / ARDS)	0	0	0	2	3	4
3.9 Recognises and manages the septic patient	1	1	1	2	3	4
3.10 Recognises and manages the patient following intoxication with drugs or environmental toxins	1	1	1	2	3	4
3.11 Recognises life-threatening maternal peripartum complications and manages care	1	1	1	2	3	4
Domain 4: Therapeutic interventions / Organ support in single or multiple organ failure	ACCS	CAT	CMT	ST	Stage 2	Stage3
4.1 Prescribes drugs and therapies safely	2	2	2	3	3	4
4.2 Manages antimicrobial drug therapy	2	2	2	3	3	4
4.3 Administers blood and blood products safely	2	2	1	3	4	4
4.4 Uses fluids and vasoactive / inotropic drugs to support the circulation	2	2	1	3	4	4
4.5 Describes the use of mechanical assist devices to support the circulation	0	0	0	1	2	3
4.6 Initiates, manages, and weans patients from invasive and non-invasive ventilatory support	1	1	0	2	4	4
4.7 Initiates, manages and weans patients from renal replacement therapy	0	0	0	2	3	4
4.8 Recognises and manages electrolyte, glucose and acid-base disturbances	1	1	1	3	4	4
4.9 Co-ordinates and provides nutritional assessment and support	2	2	2	3	4	4
Domain 5: Practical procedures	ACCS	CAT	CMT	ST	Stage 2	Stage 3
5.1 Administers oxygen using a variety of administration devices	2	2	2	3	4	4
5.2 Performs emergency airway management	1	2	0	2	3	4
5.3 Performs difficult and failed airway management according to local protocols	0	2	0	2	2	3
5.4 Performs endotracheal suction	2	2	0	3	4	4
5.5 Performs fiberoptic bronchoscopy and BAL in the intubated patient	0	0	0	2	3	4
5.6 Performs percutaneous tracheostomy	0	0	0	1	3	4
5.7 Performs chest drain insertion	2	1	2	2	3	4
5.8 Performs arterial catheterisation	1	1	0	3	4	4
5.9 Performs ultrasound techniques for vascular localisation	1	1	0	2	4	4
5.10 Performs central venous catheterisation	1	1	0	2	4	4
5.11 Performs defibrillation and cardioversion	2	2	2	3	4	4
5.12 Performs transthoracic cardiac pacing, describes transvenous	0	0	0	2	3	4
5.13 Describes how to perform pericardiocentesis	1	1	1	1	2	3
5.14 Demonstrates a method for measuring cardiac output and derived haemodynamic variables	1	1	2	3	4	4
5.15 Performs lumbar puncture (intradural / 'spinal') under supervision	2	2	1	3	4	4

5.16	Manages the administration of analgesia via an epidural catheter	1	1	0	3	4	4
5.17	Performs abdominal paracentesis	0	0	0	1	2	3
5.18	Describes Sengstaken tube (or equivalent) placement	1	1	1	2	2	3
5.19	Performs nasogastric tube placement	3	3	3	4	4	4
5.20	Performs urinary catheterisation	3	3	3	4	4	4
Domain 6: Perioperative care		ACCS	CAT	CMT	ST	Stage2	Stage3
6.1	Manages the pre- and post-operative care of the high risk surgical patient	0	1	0	2	4	4
6.2	Manages the care of the patient following cardiac surgery	0	0	0	1	3	3
6.3	Manages the care of the patient following craniotomy	0	0	0	1	3	3
6.4	Manages the care of the patient following solid organ transplantation	0	0	0	1	3	3
6.5	Manages the pre- and post-operative care of the trauma patient	1	1	0	2	3	4
Domain 7: Comfort and recovery		ACCS	CAT	CMT	ST	Stage 2	Stage 3
7.1	Identifies and attempts to minimise the physical and psychosocial consequences of critical illness for patients and families	1	1	1	3	4	4
7.2	Manages the assessment, prevention and treatment of pain and delirium	2	2	2	3	4	4
7.3	Manages sedation and neuromuscular blockade	2	2	0	2	4	4
7.4	Communicates the continuing care requirements, including rehabilitation, of patients at ICU discharge to health care professionals, patients and relatives	1	1	0	3	4	4
7.5	Manages the safe and timely discharge of patients from the ICU	1	1	1	2	3	4
7.6	Co-ordinates patient follow up in hospital	1	1	1	2	3	4
7.7	Co-ordinates patient follow up and rehabilitation after hospital discharge	1	1	1	2	3	4
Domain 8: End of life care		ACCS	CAT	CMT	ST	Stage 2	Stage 3
8.1	Manages the process of withholding or withdrawing treatment with the multi-disciplinary team	1	1	1	2	3	4
8.2	Discusses end of life care with patients and their families / surrogates	1	1	1	2	3	4
8.3	Manages palliative care of the critically ill patient	0	0	0	2	4	4
8.4	Performs brain-stem death testing	0	0	0	1	4	4
8.5	Manages the physiological support of the organ donor	0	0	0	1	3	4
8.6	Manages donation following cardiac death	0	0	0	1	3	4
Domain 9: Paediatric care		ACCS	CAT	CMT	ST	Stage 2	Stage 3
9.1	Describes the recognition of the acutely ill child and initial management of paediatric emergencies	0	0	0	1	3	3
9.2	Describes national legislation and guidelines relating to child protection and their relevance to critical care	1	1	1	3	3	3

Domain 10: Transport	ACCS	CAT	CMT	ST	Stage 2	Stage 3
10.1 Undertakes transport of the mechanically ventilated critically ill patient outside the ICU	1	1	0	2	4	4
Domain 11: Patient safety and health systems management	ACCS	CAT	CMT	ST	Stage 2	Stage 3
11.1 Leads a daily multidisciplinary ward round	1	0	2	2	3	4
11.2 Complies with local infection control measures	3	3	3	3	4	4
11.3 Identifies environmental hazards and promotes safety for patients and staff	2	2	2	3	4	4
11.4 Identifies and minimises risk of critical incidents and adverse events, including complications of critical illness	1	1	1	2	3	4
11.5 Organises a case conference	0	0	0	2	3	4
11.6 Critically appraises and applies guidelines, protocols and care bundles	2	2	2	2	3	4
11.7 Describes commonly used scoring systems for assessment of severity of illness, case mix and workload	1	1	1	3	4	4
11.8 Demonstrates an understanding of the managerial and administrative responsibilities of the ICM specialist	0	0	0	2	3	4
Domain 12: Professionalism	ACCS	CAT	CMT	ST	Stage 2	Stage 3
12.1 Communicates effectively with patients and relatives	2	2	2	3	4	4
12.2 Communicates effectively with members of the health care team	2	2	2	3	4	4
12.3 Maintains accurate and legible records / documentation	2	2	2	4	4	4
12.4 Involves patients (or their surrogates if applicable) in decisions about care and treatment	1	1	1	3	4	4
12.5 Demonstrates respect of cultural and religious beliefs and an awareness of their impact on decision making	2	2	2	4	4	4
12.6 Respects privacy, dignity, confidentiality and legal constraints on the use of patient data	2	2	2	4	4	4
12.7 Collaborates and consults; promotes team-working	2	2	2	3	4	4
12.8 Ensures continuity of care through effective hand-over of clinical information	2	2	2	4	4	4
12.9 Supports clinical staff outside the ICU to enable the delivery of effective care	2	2	2	3	4	4
12.10 Appropriately supervises, and delegates to others, the delivery of patient care	1	1	1	2	3	4
12.11 Takes responsibility for safe patient care	2	2	2	4	4	4
12.12 Formulates clinical decisions with respect for ethical and legal principles	1	1	1	2	3	4
12.13 Seeks learning opportunities and integrates new knowledge into clinical practice	2	2	2	4	4	4
12.14 Participates in multidisciplinary teaching	3	3	3	4	4	4
12.15 Participates in research or audit under supervision	2	2	2	3	4	4

3. ARCP decision aids

3.1 Core Training

ICM trainees will enter higher ICM training by one of three CT routes. Each of these CT programmes already has GMC approval which includes a comprehensive assessment and ARCP process. The ICM CCT will therefore use and accept the appropriate ARCP process in its assessment system for CT1 and 2. A prerequisite for entry to higher ICM training (ST3) is the successful completion of the relevant CT programme and ARCP assessment.

Before the start date of ST3 ICM training the ICM trainee must meet with the ICM RA or their Deputy so a pre-ST3 training progression discussion can occur. This is not an assessment process but the trainee should bring with them their training portfolio and evidence to allow the RA to determine their training needs in ST3 and ST4. The trainee and RA should map their existing training onto the required ST4 competency outcomes using the principle learning outcomes Table (see *Part I*, section 3.4) and Training Progression Grid. This will not be a complex process as in broad terms the training needs will be mostly defined by the content of the trainee's core training scheme (i.e. whether Anaesthesia, Medicine or ACCS).

3.2 ICM Higher Specialist Training

The following grid identifies the type and quantity of evidence that ICM trainees need to acquire during their training in order to satisfy the ARCP process and therefore progress to the next training level. Trainers should note that the content of training years is interchangeable within Stage 1 (ST3-4) and Stage 2 (ST5-6).

3.2.1. Stage 1 training

Assessments	ST3	ST4
Log book procedures	A total of more than 15 to reflect choice of DOPS. Evidence of progression of skill.	A total of more than 15 to reflect choice of DOPS. Evidence of progression/successful completion.
Log book cases	Unit Admission data allows yearly learning outcomes to be fulfilled Individual cases provide suitable case mix to achieve yearly learning outcome.	Unit Admission data allows yearly learning outcomes to be fulfilled Individual cases provide suitable case mix to achieve yearly learning outcome.
Log book Airway skills	A total of more than 15 cases with evidence of progression of skill.	A total of more than 15 cases with evidence of progression of skill.
Exam	Possession of one of the designated core exams is needed for entry to ST3.	N/A
ES report	Satisfactory report.	Satisfactory report.
Audit	At least 1 audit completed during each stage of training.	
Expanded Case summaries	2 cases (at least Level 2 standard).	2 cases (at least Level 2 standard).
WPBA	At least 5 general 'Top 30' cases as CBDs, CEX or both. Up to 5 CoBaTrICE competencies can be covered in each assessment.	At least 5 general 'Top 30' cases as CBDs, CEX or both. Up to 5 CoBaTrICE competencies can be covered in each assessment.
	DOPS: chosen to reflect agreed CoBaTrICE competency assessments.	DOPS: chosen to reflect agreed CoBaTrICE competency assessments.
	MSF: 1 per year.	MSF: 1 per year.

Morbidity and Mortality meetings	Attend at least 4 and evidence of reflection from 1 meeting.	Attend at least 4 and evidence of reflection from 1 meeting.
Journal clubs	Present at least once.	Present at least once.
External meetings as approved in PDP	Reflection on content.	Reflection on content.
Management meetings	No mandatory requirement but attendance encouraged.	No mandatory requirement but attendance encouraged.

3.2.2. Stage 2 training

Assessments	ST5	ST6
Log book procedures	A total of more than 15 to reflect choice of DOPS. Evidence of progression of successful completion.	A logbook should be maintained but no target numbers are required during the special skills modules.
Log book cases	Unit Admission data allows yearly learning outcomes to be fulfilled Individual cases provide suitable case mix to achieve yearly learning outcome.	A case logbook should be maintained during the special skills modules.
Log book Airway skills	A total of more than 15 cases with evidence of progression of skill.	A total of more than 15 cases with evidence of progression of skill.
Exam	Final FFICM must be obtained before progressing to Stage 3.	
ES report	Satisfactory report.	Satisfactory report.
Audit	At least 1 audit completed during each stage of training.	
Expanded Case summaries	2 cases (at least Level 3 standard).	2 cases (at least Level 3 standard).
WPBA	At least 4 'Top 30' Cases as CBDs, CEX or both demonstrating at least 5 competencies each.	At least 6 'Top 30' Cases from the special modules list (at least 2 from the paediatric, cardiac and neurology list) as CBDs, CEX or both. Up to 5 CoBaTrICE competencies can be covered in each assessment.
	DOPS: chosen to reflect agreed CoBaTrICE competency assessments.	DOPS: chosen to reflect agreed CoBaTrICE competency assessments.
	MSF: 1 per year.	MSF: 1 per year.
Morbidity and Mortality meetings	Attend at least 4 and evidence of reflection from 1 meeting.	Attend at least 4 and evidence of reflection from 1 meeting.
Journal clubs	Present at least once.	Present at least once.
External meetings as approved in PDP	Reflection on content.	Reflection on content.
Management meetings	No mandatory requirement but attendance encouraged.	No mandatory requirement but attendance encouraged.

3.2.3. Stage 3 training

Assessments	ST7
Log book procedures	A total of more than 15 to reflect choice of DOPS. Evidence of progression / successful completion.
Log book cases	Unit Admission data allows yearly learning outcomes to be fulfilled Individual cases provide suitable case mix to achieve yearly learning outcome.
Log book Airway skills	A total of more than 15 cases with evidence of progression of skill.
Exam	N/A
ES report	Satisfactory report.
Audit	At least 1 audit completed during each stage of training
Expanded Case summaries	2 cases (to Level 4 standard).
WPBA	At least 5 'Top 30' Cases as CBDs , CEX or both, demonstrating at least 5 competencies each.
	DOPS: chosen to reflect agreed CoBaTrICE competency assessments
	MSF: 1 per year
Morbidity and Mortality meetings	Attend at least 4 and evidence of reflection from 1 meeting.
Journal clubs	Present at least once.
External meetings as approved in PDP	Reflection on content.
Management meetings	Attend at least 2.

4. Top 30 cases

The trainee and assessor should agree on the CoBaTrICE competences that will be covered by a WPBA before the assessment. This should be a trainee driven process. The FICM have prepared 30 illustrative cases, with CoBaTrICE mapping, to assist in this process. Over the course of training at least 25 of these 30 cases should be covered as WPBA of various types to further ensure a comprehensive coverage of the curriculum.

The cases are chosen because they are both important and common. The exact clinical details will vary and trainees do not have to exactly match the cases. In addition the CoBaTrICE mapping is only a suggestion and other mapping can be performed as appropriate for the assessment of progress.

Paediatric ICM, Cardiac ICM and Neuro ICM cases are best undertaken during those designated training modules.

Area of Practice		Competencies
General Approach		
1.	Recognition, assessment and management of the acutely ill adult presenting with respiratory failure.	1.1 2.1 2.2 2.4 2.5 2.6 2.7
Respiratory Failure		
2.	Acute exacerbation of COPD with type 2 respiratory failure. Requires ventilation: NIV or intubation and ventilation.	3.1 3.2 4.6
3.	ARDS: titration of optimal ventilator strategies.	2.5 3.8 5.1 5.2 7.3
Shock / CVS		
4.	Shock due to acute severe haemorrhage e.g. upper GI bleed incorporating major haemorrhage management and definitive diagnosis and treatment.	1.1 3.1 3.3 4.3 4.4 11.2
5.	Low flow shock due to pulmonary embolism or acute MI: thrombolysis and /or PCI.	1.1 2.3 3.3 4.1 4.4 5.13 7.4
6.	Acute left ventricular failure: emergency department presentation or post-op surgical patient with fluid excess and recently stopped epidural. Could be in GI, vascular, cardiac surgical context.	1.1 1.4 5.1 5.14 11.3

7.	Post cardiac arrest, cooling and cardiorespiratory support.	1.3 2.3 2.8 4.4 7.1 7.3 11.4
8.	New atrial fibrillation in the ICU patient: assessment and management.	2.3 3.1 4.1 4.8 11.6
Sepsis and GI		
9.	Septic shock presenting de novo. Assessment, management, diagnostic work up.	3.4 2.8 3.9 4.2 5.4
10.	Acute GI perforation/sepsis including use of TPN.	2.4 2.6 2.8 3.7 3.9 4.9 6.1 7.2
11.	Acute pancreatitis with pre-renal AKI.	3.4 3.7 4.9 5.19
12.	Acute liver failure following paracetamol overdose.	3.5 3.10 4.8 7.1 10.1
Reduced conscious level / Neuro		
13.	Acute meningitis/encephalitis.	1.1 2.1 2.2 2.8 3.1 3.6 4.2
14.	Traumatic brain injury in ED, low GCS needs intubated, ventilated, transfer to scan, acute SDH: evacuated and now in ICU, post-op management.	3.6 5.2 6.3 6.5 7.3
15.	Subarachnoid haemorrhage, coning, organ donation (BSD or following cardiac death).	8.1-8.6

16.	Acute onset peripheral muscle weakness with respiratory failure: Guillain Barre Syndrome, myasthenia gravis, botulism, tetanus.	3.6 4.6 5.15 7.1 7.2
17.	Status epilepticus following self poisoning.	3.6 3.10 5.2
Paediatric ICM		
18.	One week old baby collapse at home. Diagnosis, immediate management and stabilisation.	9.1 3.9 2.8 3.1 4.1
19.	10 year with severe cerebral palsy, severe kyphoscoliosis. Respiratory deterioration despite maximal oxygen by facemask. Further management, including discussion with paediatricians/parents about appropriate management.	3.2 9.1 12.1 4.6 4.9
20.	Collapse of 18 month old ex-prem (24 weeks). Diagnosis and further management.	9.1 3.6 5.1 10.1
Cardiac ICM		
21.	Patient post cardiac surgery on balloon assist with renal failure.	3.3 3.4 4.4 4.5 5.12 5.14 6.2
22.	Aortic dissection.	2.6 4.4 6.1 6.2
23.	Acute rhythm disturbance requiring pacemaker.	2.2 2.7 3.3 4.1 5.14
24.	Post operative patient following lung resection surgery.	2.5 3.2 4.6 6.1
25.	Cardiothoracic trauma case.	1.5 2.6 3.3 3.8 5.7 5.13

Specialist		
26.	HELLP syndrome.	3.5 3.11 4.4 6.1 7.1
27.	Acquired immune deficiency.	2.8 3.2 4.2 4.9 7.1 11.2 11.3
28.	Diabetic patient with ketoacidosis precipitating cause.	2.8 3.1 2.5 2.7 4.4 4.8
29.	Trauma to leg with compartment syndrome, rhabdomyolysis, hyperkalaemia and AKI requiring renal replacement therapy and surgery.	1.5 3.4 4.7 4.8 6.1
30.	Neutropenic sepsis in patient with haematological malignancy.	2.4 2.7 3.9 4.4 11.2

5. Blueprint of Workplace-based Assessments mapped against curriculum competencies

Domain 1: Resuscitation and initial management of the acutely ill patient							
Competence	Description	ACAT	CBD	DOPS	I-CEX	MSF	SIM
1.1	Adopts a structured and timely approach to the recognition, assessment and stabilisation of the acutely ill patient with disordered physiology	√	√		√	√	√
1.2	Manages cardiopulmonary resuscitation	√			√	√	√
1.3	Manages the patient post resuscitation	√			√	√	√
1.4	Triages and prioritises patients appropriately, including timely admission to ICU	√	√			√	
1.5	Assesses and provides initial management of the trauma patient	√	√	√	√	√	√
1.6	Assesses and provides initial management of the patient with burns	√	√	√	√	√	
1.7	Describes the management of mass casualties		√				
Domain 2: Diagnosis, Assessment, Investigation, Monitoring and Data Interpretation							
Competence	Description	ACAT	CBD	DOPS	I-CEX	MSF	SIM
2.1	Obtains a history and performs and accurate clinical examination				√	√	
2.2	Undertakes timely and appropriate investigations		√		√	√	
2.3	Performs electrocardiography (ECG / EKG) and interprets the results		√	√	√		
2.4	Obtains appropriate microbiological samples and interprets results		√	√			
2.5	Obtains and interprets the results from blood gas samples		√	√			
2.6	Interprets imaging studies		√		√		
2.7	Monitors and responds to trends in physiological variables	√			√		√
2.8	Integrates clinical findings with laboratory investigations to form a differential diagnosis	√	√		√		√
Domain 3: Disease Management							
Competence	Description	ACAT	CBD	DOPS	I-CEX	MSF	SIM
3.1	Manages the care of the critically ill patient with specific acute mental conditions	√	√	√	√	√	√
3.2	Identifies the implications of chronic and co-morbid disease in the acutely ill patient		√				
3.3	Recognises and manages the patient with circulatory failure	√	√		√		√
3.4	Recognises and manages the patient with, or at risk of, acute kidney injury	√	√		√		
3.5	Recognises and manages the patient with, or at risk of, acute liver failure	√	√		√		
3.6	Recognises and manages the patient with neurological impairment	√	√		√		√
3.7	Recognises and manages the patient with acute gastrointestinal failure	√	√		√		
3.8	Recognises and manages the patient with acute lung injury syndromes (ALI / ARDS)	√	√		√		
3.9	Recognises and manages the septic patient	√	√		√		

3.10	Recognises and manages the patient following intoxication with drugs or environmental toxins		√		√		√
3.11	Recognises life-threatening maternal peripartum complications and manages care under		√		√		√
Domain 4: Therapeutic interventions / Organ support in single or multiple organ failure							
<i>Competence</i>	<i>Description</i>	ACAT	CBD	DOPS	I-CEX	MSF	SIM
4.1	Prescribes drugs and therapies safely		√	√		√	
4.2	Manages antimicrobial drug therapy		√		√	√	
4.3	Administers blood and blood products safely		√	√		√	
4.4	Uses fluids and vasoactive / inotropic drugs to support the circulation		√		√		
4.5	Describes the uses of mechanical assist devices to support the circulation		√				
4.6	Initiates, manages, and weans patients from invasive and non-invasive ventilatory support	√	√	√			
4.7	Initiates, manages and weans patients from renal replacement therapy	√	√	√	√		
4.8	Recognises and manages electrolyte, glucose and acid-base disturbances	√	√		√		√
4.9	Co-ordinates and provides nutritional assessment and support	√	√		√		
Domain 5: Procedures							
<i>Competence</i>	<i>Description</i>	ACAT	CBD	DOPS	I-CEX	MSF	SIM
5.1	Administers oxygen using a variety of administration devices			√			√
5.2	Performs emergency airway management			√			√
5.3	Performs difficult and failed airway management according to local protocols			√			√
5.4	Performs endotracheal suction			√			
5.5	Performs fiberoptic bronchoscopy and BAL in the intubated patient under supervision			√		√	
5.6	Performs percutaneous tracheostomy			√		√	√
5.7	Performs chest drain insertion			√			
5.8	Performs arterial catheterisation		√	√			
5.9	Performs ultrasound techniques for vascular localisation		√				
5.10	Performs central venous catheterisation		√	√			
5.11	Performs defibrillation and cardioversion		√	√			√
5.12	Performs transthoracic cardiac pacing describes transvenous		√	√			
5.13	Describes how to perform pericardiocentesis		√				
5.14	Demonstrates a method for measuring cardiac output and derived haemodynamic variables		√	√			
5.15	Performs lumbar puncture (intradural / 'spinal') under supervision			√			√
5.16	Manages the administration of analgesia via an epidural catheter				√		
5.17	Performs abdominal paracentesis			√			
5.18	Describes Sengstaken tube (or equivalent) placement		√				
5.19	Performs nasogastric tube placement in the intubated patient			√			
5.20	Performs urinary catheterisation			√			

Domain 6: Perioperative Care							
Competence	Description	ACAT	CBD	DOPS	I-CEX	MSF	SIM
6.1	Manages the pre- and post-operative care of the high risk surgical patient	√	√			√	
6.2	Manages the care of the patient following cardiac surgery under supervision		√				
6.3	Manages the care of the patient following craniotomy under supervision	√	√				
6.4	Manages the care of the patient following solid organ transplantation under supervision		√				
6.5	Manages the pre- and post-operative care of the trauma patient under supervision	√	√				
Domain 7: Comfort and Recovery							
Competence	Description	ACAT	CBD	DOPS	I-CEX	MSF	SIM
7.1	Identifies and attempts to minimise the physical and psychosocial consequences of critical illness for patients and families		√			√	
7.2	Manages the assessment, prevention and treatment of pain and delirium	√	√	√	√	√	
7.3	Manages sedation and neuromuscular blockade	√	√	√	√	√	
7.4	Communicates the continuing care requirements, including rehabilitation, of patients at ICU discharge to health care professionals, patients and relatives	√				√	√
7.5	Manages the safe and timely discharge of patients from the ICU	√				√	
Domain 8: End of life care							
Competence	Description	ACAT	CBD	DOPS	I-CEX	MSF	SIM
8.1	Manages the process of withholding or withdrawing treatment with the multidisciplinary team		√			√	
8.2	Discusses end of life care with patients and their families / surrogates		√	√		√	
8.3	Manages palliative care of the critically ill patient	√	√			√	
8.4	Performs brain-stem death testing			√			√
8.5	Manages the physiological support of the organ donor		√		√		
8.6	Manages donation following cardiac death	√	√				√
Domain 9: Paediatric care							
Competence	Description	ACAT	CBD	DOPS	I-CEX	MSF	SIM
9.1	Describes the recognition of the acutely ill child and initial management of paediatric emergencies		√		√		√
9.2	Describes national legislation and guidelines relating to child protection and their relevance to critical care		√				
Domain 10: Transport							
Competence	Description	ACAT	CBD	DOPS	I-CEX	MSF	SIM
10.1	Undertakes transport of the mechanically ventilated critically ill patient outside the ICU		√	√	√	√	√
Domain 11: Patient safety and health systems management							
Competence	Description	ACAT	CBD	DOPS	I-CEX	MSF	SIM
11.1	Leads a daily multidisciplinary ward round					√	
11.2	Complies with local infection control measures		√			√	
11.3	Identifies environmental hazards and promotes safety for patients and staff		√			√	

11.4	Identifies and minimises risk of critical incidents and adverse events, including complications of critical illness		√			√	
11.5	Organises a case conference		√			√	
11.6	Critically appraises and applies guidelines, protocols and care bundles		√				
11.7	Describes commonly used scoring systems for assessment of severity of illness, case mix and workload		√				
11.8	Demonstrates an understanding of the managerial and administrative responsibilities of the ICM specialist		√			√	
Domain 12: Professionalism							
<i>Competence</i>	<i>Description</i>	ACAT	CBD	DOPS	I-CEX	MSF	SIM
12.1	Communicates effectively with patients and relatives	√		√		√	√
12.2	Communicates effectively with members of the health care team			√		√	√
12.3	Maintains accurate and legible records / documentation	√		√		√	
12.4	Involves patients (or their surrogates if applicable) in decisions about care and treatment	√	√			√	
12.5	Demonstrates respect of cultural and religious beliefs and an awareness of their impact on decision making	√	√			√	
12.6	Respects privacy, dignity, confidentiality and legal constraints on the use of patient data		√			√	
12.7	Collaborates and consults; promotes team-working					√	√
12.8	Ensures continuity of care through effective hand-over of clinical information	√	√			√	
12.9	Supports clinical staff outside the ICU to enable the delivery of effective care	√	√			√	
12.10	Appropriately supervises	√	√			√	
12.11	Takes responsibility for safe patient care	√	√	√		√	
12.12	Formulates clinical decisions with respect for ethical and legal principles	√	√			√	
12.13	Seeks learning opportunities and integrates new knowledge into clinical practice					√	
12.14	Participates in multidisciplinary teaching					√	
12.15	Participates in research or audit under supervision					√	

6. Blueprint of Primary FFICM examination mapped against curriculum competencies

Domain 1: Resuscitation and initial management of the acutely ill patient		
<i>Competence</i>	<i>Description</i>	MCQ
1.1	Adopts a structured and timely approach to the recognition, assessment and stabilisation of the acutely ill patient with disordered physiology	√
1.2	Manages cardiopulmonary resuscitation	√
1.3	Manages the patient post resuscitation	
1.4	Triages and prioritises patients appropriately, including timely admission to ICU	
1.5	Assesses and provides initial management of the trauma patient	
1.6	Assesses and provides initial management of the patient with burns	
1.7	Describes the management of mass casualties	
Domain 2: Diagnosis, Assessment, Investigation, Monitoring and Data Interpretation		
<i>Competence</i>	<i>Description</i>	MCQ
2.1	Obtains a history and performs an accurate clinical examination	
2.2	Undertakes timely and appropriate investigations	
2.3	Performs electrocardiography (ECG / EKG) and interprets the results	√
2.4	Obtains appropriate microbiological samples and interprets results	√
2.5	Obtains and interprets the results from blood gas samples	√
2.6	Interprets imaging studies	
2.7	Monitors and responds to trends in physiological variables	√
2.8	Integrates clinical findings with laboratory investigations to form a differential diagnosis	√
Domain 3: Disease Management		
<i>Competence</i>	<i>Description</i>	MCQ
3.1	Manages the care of the critically ill patient with specific acute mental conditions	
3.2	Identifies the implications of chronic and co-morbid disease in the acutely ill patient	
3.3	Recognises and manages the patient with circulatory failure	√
3.4	Recognises and manages the patient with, or at risk of, acute kidney injury	√
3.5	Recognises and manages the patient with, or at risk of, acute liver failure	√
3.6	Recognises and manages the patient with neurological impairment	√
3.7	Recognises and manages the patient with acute gastrointestinal failure	√
3.8	Recognises and manages the patient with acute lung injury syndromes (ALI / ARDS)	√
3.9	Recognises and manages the septic patient	√
3.10	Recognises and manages the patient following intoxication with drugs or environmental toxins	√
3.11	Recognises life-threatening maternal peripartum complications and manages care under	
Domain 4: Therapeutic interventions / Organ support in single or multiple organ failure		
<i>Competence</i>	<i>Description</i>	MCQ
4.1	Prescribes drugs and therapies safely	√
4.2	Manages antimicrobial drug therapy	√
4.3	Administers blood and blood products safely	
4.4	Uses fluids and vasoactive / inotropic drugs to support the circulation	√
4.5	Describes the uses of mechanical assist devices to support the circulation	
4.6	Initiates, manages, and weans patients from invasive and non-invasive ventilatory support	
4.7	Initiates, manages and weans patients from renal replacement therapy	
4.8	Recognises and manages electrolyte, glucose and acid-base disturbances	√
4.9	Co-ordinates and provides nutritional assessment and support	√

Domain 5: Procedures		
<i>Competence</i>	<i>Description</i>	MCQ
5.1	Administers oxygen using a variety of administration devices	√
5.2	Performs emergency airway management	
5.3	Performs difficult and failed airway management according to local protocols	
5.4	Performs endotracheal suction	
5.5	Performs fiberoptic bronchoscopy and BAL in the intubated supervision	
5.6	Performs percutaneous tracheostomy	
5.7	Performs chest drain insertion	
5.8	Performs arterial catheterisation	
5.9	Performs ultrasound techniques for vascular localisation	
5.10	Performs central venous catheterisation	
5.11	Performs defibrillation and cardioversion	√
5.12	Performs transthoracic cardiac pacing describes transvenous	
5.13	Describes how to perform pericardiocentesis	
5.14	Demonstrates a method for measuring cardiac output and derived haemodynamic variables	
5.15	Performs lumbar puncture (intradural / 'spinal') under supervision	
5.16	Manages the administration of analgesia via an epidural catheter	
5.17	Performs abdominal paracentesis	
5.18	Describes Sengstaken tube (or equivalent) placement	
5.19	Performs nasogastric tube placement in the intubated patient	
5.20	Performs urinary catheterisation	
Domain 6: Perioperative Care		
<i>Competence</i>	<i>Description</i>	MCQ
6.1	Manages the pre- and post-operative care of the high risk surgical patient	
6.2	Manages the care of the patient following cardiac surgery under supervision	
6.3	Manages the care of the patient following craniotomy under supervision	
6.4	Manages the care of the patient following solid organ transplantation under supervision	
6.5	Manages the pre- and post-operative care of the trauma patient under supervision	
Domain 7: Comfort and Recovery		
<i>Competence</i>	<i>Description</i>	MCQ
7.1	Identifies and attempts to minimise the physical and psychosocial consequences of critical illness for patients and families	
7.2	Manages the assessment, prevention and treatment of pain and delirium	√
7.3	Manages sedation and neuromuscular blockade	√
7.4	Communicates the continuing care requirements, including rehabilitation, of patients at ICU discharge to health care professionals, patients and relatives	
7.5	Manages the safe and timely discharge of patients from the ICU	
Domain 8: End of life care		
<i>Competence</i>	<i>Description</i>	MCQ
8.1	Manages the process of withholding or withdrawing treatment with the multidisciplinary team	
8.2	Discusses end of life care with patients and their families / surrogates	
8.3	Manages palliative care of the critically ill patient	√
8.4	Performs brain-stem death testing	√
8.5	Manages the physiological support of the organ donor	
8.6	Manages donation following cardiac death	
Domain 9: Paediatric care		
<i>Competence</i>	<i>Description</i>	MCQ
9.1	Describes the recognition of the acutely ill child and initial management of paediatric emergencies	
9.2	Describes national legislation and guidelines relating to child protection and their relevance to critical care	

Domain 10: Transport		
<i>Competence</i>	<i>Description</i>	MCQ
10.1	Undertakes transport of the mechanically ventilated critically ill patient outside the ICU	
Domain 11: Patient safety and health systems management		
<i>Competence</i>	<i>Description</i>	MCQ
11.1	Leads a daily multidisciplinary ward round	
11.2	Complies with local infection control measures	
11.3	Identifies environmental hazards and promotes safety for patients and staff	√
11.4	Identifies and minimises risk of critical incidents and adverse events, including complications of critical illness	√
11.5	Organises a case conference	
11.6	Critically appraises and applies guidelines, protocols and care bundles	√
11.7	Describes commonly used scoring systems for assessment of severity of illness, case mix and workload	
11.8	Demonstrates an understanding of the managerial and administrative responsibilities of the ICM specialist	
Domain 12: Professionalism		
<i>Competence</i>	<i>Description</i>	MCQ
12.1	Communicates effectively with patients and relatives	
12.2	Communicates effectively with members of the health care team	
12.3	Maintains accurate and legible records / documentation	
12.4	Involves patients (or their surrogates if applicable) in decisions about care and treatment	
12.5	Demonstrates respect of cultural and religious beliefs and an awareness of their impact on decision making	
12.6	Respects privacy, dignity, confidentiality and legal constraints on the use of patient data	
12.7	Collaborates and consults; promotes team-working	
12.8	Ensures continuity of care through effective hand-over of clinical information	
12.9	Supports clinical staff outside the ICU to enable the delivery of effective care	
12.10	Appropriately supervises	
12.11	Takes responsibility for safe patient care	
12.12	Formulates clinical decisions with respect for ethical and legal principles	
12.13	Seeks learning opportunities and integrates new knowledge into clinical practice	
12.14	Participates in multidisciplinary teaching	
12.15	Participates in research or audit under supervision	

7. Blueprint of Final FFICM examination mapped against curriculum competencies

Domain 1: Resuscitation and initial management of the acutely ill patient				
Competence	Description	MCQ	OSCE	SOE
1.1	Adopts a structured and timely approach to the recognition, assessment and stabilisation of the acutely ill patient with disordered physiology			√
1.2	Manages cardiopulmonary resuscitation		√	√
1.3	Manages the patient post resuscitation			√
1.4	Triages and prioritises patients appropriately, including timely admission to ICU			√
1.5	Assesses and provides initial management of the trauma patient			√
1.6	Assesses and provides initial management of the patient with burns			√
1.7	Describes the management of mass casualties			√
Domain 2: Diagnosis, Assessment, Investigation, Monitoring and Data Interpretation				
Competence	Description	MCQ	OSCE	SOE
2.1	Obtains a history and performs and accurate clinical examination		√	
2.2	Undertakes timely and appropriate investigations			√
2.3	Performs electrocardiography (ECG / EKG) and interprets the results	√	√	√
2.4	Obtains appropriate microbiological samples and interprets results	√	√	√
2.5	Obtains and interprets the results from blood gas samples	√	√	√
2.6	Interprets imaging studies		√	√
2.7	Monitors and responds to trends in physiological variables	√	√	√
2.8	Integrates clinical findings with laboratory investigations to form a differential diagnosis	√	√	√
Domain 3: Disease Management				
Competence	Description	MCQ	OSCE	SOE
3.1	Manages the care of the critically ill patient with specific acute mental conditions	√	√	√
3.2	Identifies the implications of chronic and co-morbid disease in the acutely ill patient	√	√	√
3.3	Recognises and manages the patient with circulatory failure	√	√	√
3.4	Recognises and manages the patient with, or at risk of, acute kidney injury	√	√	√
3.5	Recognises and manages the patient with, or at risk of, acute liver failure	√	√	√
3.6	Recognises and manages the patient with neurological impairment	√	√	√
3.7	Recognises and manages the patient with acute gastrointestinal failure	√	√	√
3.8	Recognises and manages the patient with acute lung injury syndromes (ALI / ARDS)	√	√	√
3.9	Recognises and manages the septic patient	√	√	√
3.10	Recognises and manages the patient following intoxication with drugs or environmental toxins	√	√	√
3.11	Recognises life-threatening maternal peripartum complications and manages care under	√	√	√
Domain 4: Therapeutic interventions / Organ support in single or multiple organ failure				
Competence	Description	MCQ	OSCE	SOE
4.1	Prescribes drugs and therapies safely	√	√	√
4.2	Manages antimicrobial drug therapy	√	√	√
4.3	Administers blood and blood products safely	√	√	√
4.4	Uses fluids and vasoactive / inotropic drugs to support the circulation	√	√	√
4.5	Describes the uses of mechanical assist devices to support the circulation			√

4.6	Initiates, manages, and weans patients from invasive and non-invasive ventilatory support	√		√
4.7	Initiates, manages and weans patients from renal replacement therapy	√		√
4.8	Recognises and manages electrolyte, glucose and acid-base disturbances	√	√	√
4.9	Co-ordinates and provides nutritional assessment and support	√	√	√
Domain 5: Procedures				
<i>Competence</i>	<i>Description</i>	MCQ	OSCE	SOE
5.1	Administers oxygen using a variety of administration devices		√	
5.2	Performs emergency airway management		√	
5.3	Performs difficult and failed airway management according to local protocols		√	
5.4	Performs endotracheal suction		√	
5.5	Performs fiberoptic bronchoscopy and BAL in the intubated patient under supervision		√	
5.6	Performs percutaneous tracheostomy		√	
5.7	Performs chest drain insertion		√	
5.8	Performs arterial catheterisation		√	
5.9	Performs ultrasound techniques for vascular localisation		√	
5.10	Performs central venous catheterisation		√	
5.11	Performs defibrillation and cardioversion		√	
5.12	Performs transthoracic cardiac pacing describes transvenous		√	
5.13	Describes how to perform pericardiocentesis		√	
5.14	Demonstrates a method for measuring cardiac output and derived haemodynamic variables		√	
5.15	Performs lumbar puncture (intradural / 'spinal') under supervision		√	
5.16	Manages the administration of analgesia via an epidural catheter		√	
5.17	Performs abdominal paracentesis		√	
5.18	Describes Sengstaken tube (or equivalent) placement		√	
5.19	Performs nasogastric tube placement in the intubated patient		√	
5.20	Performs urinary catheterisation		√	
Domain 6: Perioperative Care				
<i>Competence</i>	<i>Description</i>	MCQ	OSCE	SOE
6.1	Manages the pre- and post-operative care of the high risk surgical patient			√
6.2	Manages the care of the patient following cardiac surgery under supervision			√
6.3	Manages the care of the patient following craniotomy under supervision			√
6.4	Manages the care of the patient following solid organ transplantation under supervision			√
6.5	Manages the pre- and post-operative care of the trauma patient under supervision			√
Domain 7: Comfort and Recovery				
<i>Competence</i>	<i>Description</i>	MCQ	OSCE	SOE
7.1	Identifies and attempts to minimise the physical and psychosocial consequences of critical illness for patients and families		√	√
7.2	Manages the assessment, prevention and treatment of pain and delirium	√	√	√
7.3	Manages sedation and neuromuscular blockade	√	√	√
7.4	Communicates the continuing care requirements, including rehabilitation, of patients at ICU discharge to health care professionals, patients and relatives		√	
7.5	Manages the safe and timely discharge of patients from the ICU			√
Domain 8: End of life care				
<i>Competence</i>	<i>Description</i>	MCQ	OSCE	SOE
8.1	Manages the process of withholding or withdrawing treatment with the multidisciplinary team		√	√

8.2	Discusses end of life care with patients and their families / surrogates		√	√
8.3	Manages palliative care of the critically ill patient	√		√
8.4	Performs brain-stem death testing	√	√	√
8.5	Manages the physiological support of the organ donor	√	√	√
8.6	Manages donation following cardiac death		√	√
Domain 9: Paediatric care				
<i>Competence</i>	<i>Description</i>	MCQ	OSCE	SOE
9.1	Describes the recognition of the acutely ill child and initial management of paediatric emergencies		√	√
9.2	Describes national legislation and guidelines relating to child protection and their relevance to critical care			√
Domain 10: Transport				
<i>Competence</i>	<i>Description</i>	MCQ	OSCE	SOE
10.1	Undertakes transport of the mechanically ventilated critically ill patient outside the ICU		√	√
Domain 11: Patient safety and health systems management				
<i>Competence</i>	<i>Description</i>	MCQ	OSCE	SOE
11.1	Leads a daily multidisciplinary ward round			
11.2	Complies with local infection control measures			√
11.3	Identifies environmental hazards and promotes safety for patients and staff	√	√	√
11.4	Identifies and minimises risk of critical incidents and adverse events, including complications of critical illness	√	√	√
11.5	Organises a case conference			√
11.6	Critically appraises and applies guidelines, protocols and care bundles		√	√
11.7	Describes commonly used scoring systems for assessment of severity of illness, case mix and workload		√	√
11.8	Demonstrates an understanding of the managerial and administrative responsibilities of the ICM specialist			√
Domain 12: Professionalism				
<i>Competence</i>	<i>Description</i>	MCQ	OSCE	SOE
12.1	Communicates effectively with patients and relatives		√	
12.2	Communicates effectively with members of the health care team		√	
12.3	Maintains accurate and legible records / documentation		√	
12.4	Involves patients (or their surrogates if applicable) in decisions about care and treatment		√	√
12.5	Demonstrates respect of cultural and religious beliefs and an awareness of their impact on decision making		√	√
12.6	Respects privacy, dignity, confidentiality and legal constraints on the use of patient data		√	√
12.7	Collaborates and consults; promotes team-working		√	√
12.8	Ensures continuity of care through effective hand-over of clinical information		√	√
12.9	Supports clinical staff outside the ICU to enable the delivery of effective care			√
12.10	Appropriately supervises		√	√
12.11	Takes responsibility for safe patient care		√	√
12.12	Formulates clinical decisions with respect for ethical and legal principles		√	√
12.13	Seeks learning opportunities and integrates new knowledge into clinical practice			√
12.14	Participates in multidisciplinary teaching			√
12.15	Participates in research or audit under supervision			√