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# Introduction

This training record is to be used in conjunction with 'CCT in Anaesthetics – Intensive Care Medicine (Annex F) [version 1.6]'. It is for Specialty Trainees in anaesthesia in years 3, 4 and 5 who are completing their intermediate intensive care medicine training. Completion of this training record book provides supporting evidence that the trainee has completed the clinical aspects of the intermediate level intensive care medicine described in the curriculum.

#### Minimum requirements for Annual Review of Competence Progression (ARCP)

The ARCP is an annual assessment which ensures that trainees are meeting the competencies required in the curriculum. A satisfactory outcome is required in the ARCP to progress to the next stage of training.

#### How to sign off a unit as complete

To complete a training unit the trainee should submit:

- An appropriate number of WPBAs
   I-CEX, ACAT, DOPS, CBD, x 1 for each 3 month block
   CBD = Case Based Discussion; I-CEX = Intensive Care Clinical Evaluation exercise; DOPS = Direct Observation of Procedural Skill; ACAT = Acute Care Assessment Tool
- An MSF should be completed for each block of ICM training. An appropriate mix of respondents should be identified to provide feedback.
- Evidence of number of procedures performed
- Evidence to demonstrate that the unit can provide and trainee has been exposed to a suitable variety of experience including:
   Details of patients trainee has played a significant part in managing (similar to anaesthetic logbook)
   Information from unit data (eg ICNARC)
   Evidence of attendance at at least 1 Morbidity and Mortality meeting and 1 journal club.
   A satisfactory educational supervisor/faculty tutors report

When trainees feel that they have completed a training unit and have the evidence in their training record and logbook, it is up to them to review this with their Unit lead or educational supervisor, who will sign this as complete or suggest ways of completing the unit if more training is required.

### Instructions to trainers

- It is the trainee's responsibility to ask you to assess them
- Any appropriate consultant can sign off individual elements of a unit of training
- Some elements are topics for discussion and others are competencies to be observed

If the Unit Lead or Educational Supervisor cannot sign off a unit of training / module as expected, they should contact the College Tutor as soon as possible for advice.

# Intensive Care Medicine

Intermediate level intensive care training is mandatory for all trainees and is completed as one 3 month blocks. A further 3 months of training is completed in higher training at ST 5/6.

#### **Training Objectives:**

During Intermediate training the trainee is gaining a more in depth knowledge of and skill set for intensive care, this acquisition is a continual process. It is not appropriate to attempt to complete intermediate level competencies immediately after Basic training; greater experience, time in training and maturity as a doctor are necessary to be able to take advantage of training at this level.

Both trainees and trainers need to ensure that training is both comprehensive and that progression of training is occurring at a satisfactory rate. Unlike the other units of training in anaesthesia, in ICM, the broad domain competencies are identified with an attainment level for basic [B], intermediate [I], higher [H] and advanced [A] based on the level of supervision. The table on the following page identifies the minimum level of attainment for intermediate training, this level is shaded and is in bold. If there is no level identified then this task, knowledge or management competence is not expected at intermediate level.

The syllabus for each of the domains is broken down into knowledge, skills and attitudes for the basic, intermediate/higher and advanced levels. A great deal of knowledge must be acquired during basic training to enable the trainee to understand and function within a critical care unit. During intermediate, higher and advanced training the competencies gained in basic training will be developed and reassessed so trainees can demonstrate their achievement of the required levels of attainment. For a CCT in Anaesthetics, trainees only need to successfully complete basic, intermediate and higher levels in ICM. Completion of advanced is optional. The levels of competence defined below are the minimum that must be achieved by the end of an attachment and reflect the spiral nature of development of competence. Acquisition of competence in ICM occurs not only during attachments to ICUs but also many areas of anaesthesia competence are transferable to ICM. Whilst trainees should not view ICM attachments as the only place to acquire and demonstrate ICM competence, certification that a trainee has reached the required level must be by a Faculty of Intensive Care Medicine tutor.

Anaesthesia trainees already undertaking Dual CCTs with ICM training should use the ICM curriculum Stage 2 training record rather than this booklet to demonstrate continued competency development.

The composite competencies for Intermediate level ICM are outlined here by Domain. The components that make up each competence are listed in the full syllabus in Annex F - <u>http://www.rcoa.ac.uk/CCT/AnnexF</u>

#### **Requirements for completion of unit:**

- Three-month (whole time equivalent) ICM block
- Appropriate number of WPBAs minimum DOP x 1, I-CEX ×1, ACAT ×1, CBD ×1, MSFx1 (per 3 month block)
- Achievement of sufficient breadth and progression of training using Training Progression Grid:
- By the end of the Intermediate 3m ICM block the trainee should have reached the level of competence outlined in BOLD & SHADED

The descriptors for each level of competence in the Training Progression Grid are as follows:

Level	Task oriented competence	Knowledge oriented 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.

Specialty Training Year 3/4

# Summary of Completed Intermediate ICM Competencies

Trainee name: ..... GMC no: .....

Trainer to sign and date when each competency is completed and signed off.

Intermediate ICM competencies	Trainer's signature	Date
Resuscitation and initial management of the acutely ill patient		
Diagnosis, Assessment, Investigation, Monitoring, and Data Interpretation		
Disease Management		
Therapeutic interventions, organ system support in single or multiple organ failure		
Practical procedures		
Perioperative care		
Comfort and recovery		
End of life care		
Paediatric care		
Transport		
Patient safety and health systems management		
Professionalism		

# Intensive care medicine – Intermediate Level

These competencies must be mandatorily assessed during a 3 month block of ICM during intermediate training. The competencies should be signed off by a FICM trainer.

Training Progression Grid – Domain and Competencies	Circle level achieved at end of block: Intermediate – aim for bold/shaded level at least			Trainee Evidence	Trainer initial	Date	
Domain 1: Resuscitation and management of the acutely ill patier	nt						
1.1 Adopts a structured and timely approach to the recognition, assessment and stabilisation of the acutely ill patient with disordered physiology	1	2	3	4			
1.4 Triages and prioritises patients appropriately, including timely admission to ICU	1	2	3	4			
1.5 Assesses and provides initial management of the trauma patient	1	2	3	4			
Domain 2: Diagnosis, Assessment, Investigation, Monitoring and I	Data Inter	pretation					
2.1 Obtains a history and performs an accurate clinical examination	1	2	3	4			
2.2 Undertakes timely and appropriate investigations	1	2	3	4			
2.4 Obtains appropriate microbiological samples and interprets results	1	2	3	4			
2.6 Interprets imaging studies	1	2	3	4			
2.8 Integrates clinical findings with laboratory investigations to form a differential diagnosis	1	2	3	4			
Domain 3: Disease Management							
3.1 Manages the care of the critically ill patient with specific acute medical conditions	1	2	3	4			
3.2 Identifies the implications of chronic and co-morbid disease in the acutely ill patient	1	2	3	4			
3.3 Recognises & manages the patient with circulatory failure	1	2	3	4			
3.4 Recognises & manages the patient with, or at risk of, acute renal failure	1	2	3	4			
3.6 Recognises & manages the patient with neurological impairment	1	2	3	4			
3.8 Recognises & manages the patient with severe acute respiratory failure/acute lung injury syndromes (ALI / ARDS)	1	2	3	4			
3.9 Recognises and manages the septic patient	1	2	3	4			

Training Progression Grid – Domain and Competencies	Circle level achieved at end of block: Intermediate – aim for bold/shaded level at least				Trainee Evidence	Trainer initial	Date
Training Progression Grid – Domain and Competencies	Circle level achieved at end of block: Intermediate – aim for bold/shaded level at least				Trainee Evidence	Trainer initial	Date
Domain 4: Therapeutic interventions / Organ support in single or	multiple o	organ failu	re				
4.2 Manages antimicrobial drug therapy	1	2	3	4			
4.6 Initiates, manages, and weans patients from invasive and non-invasive ventilatory support	1	2	3	4			
4.7 Initiates, manages and weans patients from renal replacement therapy	1	2	3	4			
Domain 5: Practical procedures							
5.5 Performs fibreoptic bronchoscopy and BAL in the intubated patient	1	2	3	4			
Domain 6: Perioperative care							
6.1 Manages the pre-and post-operative care of the high risk surgical patient	1	2	3	4			
6.5 Manages the pre-and post-operative care of the trauma patient	1	2	3	4			
Domain 7: Comfort and Recovery							
7.1 Identifies and attempts to minimise the physical and psychosocial consequences of critical illness for patients and families	1	2	3	4			
7.2 Manages the assessment, prevention and treatment of pain and delirium	1	2	3	4			
7.3 Manages sedation and neuromuscular blockade	1	2	3	4			
7.4 Communicates the continuing care requirements, including rehabilitation, of patients at ICU discharge to health care professionals, patients and relatives	1	2	3	4			
7.5 Manages the safe and timely discharge of patients from the ICU	1	2	3	4			
Domain 8: End of life care							
8.1 Manages the process of withholding or withdrawing treatment with the multi-disciplinary team	1	2	3	4			
8.2 Discusses end of life care with patients and their families / surrogates	1	2	3	4			
8.3 Manages palliative care of the critically ill patient	1	2	3	4			
8.4 Performs brain-stem death testing	1	2	3	4			

Training Progression Grid – Domain and Competencies	Circle level achieved at end of block: Intermediate – aim for bold/shaded level at least				Trainee Evidence	Trainer initial	Date
8.5 Manages the physiological support of the organ donor	1	2	3	4			
8.6 Manages donation following cardiac death	1						
Domain 9: Paediatric care							
Domain 9 competences can be covered elsewhere in Anaesthesia or entered below if achieved within an ICM module							
Domain 10: Transport							
10.1 Undertakes transport of the mechanically ventilated critically ill patient outside the ICU	1	2	3	4			
Domain 11: Patient safety and health systems management							
11.1 Leads a daily multidisciplinary ward round	1	2	3	4			
11.2 Complies with local infection control measures	1	2	3	4			
11.7 Describes commonly used scoring systems for assessment of severity of illness, case mix and workload	1	2	3	4			
11.8 Demonstrates an understanding of & managerial & administrative responsibilities of the ICM specialist	1	2	3	4			
Domain 12: Professionalism							
12.8 Ensures continuity of care through effective hand-over of clinical information	1	2	3	4			

## Intensive Care Medicine – Intermediate Level

Trainee name: .....

GMC no: .....

Assessments (WPBA forms should be completed on the e-portfolio) Has the trainee completed successfully an appropriate number of WPBA?	Yes	No
Log book Review Are the case mix, complexity and numbers appropriate for the level of training?	Yes	No
Multi-source Feedback Has a MSF been completed? (Only for units of training requiring MSF)	Yes	No
<b>Core Training Objectives</b> Has the trainee demonstrated achievement of the core training objectives?	Yes	No

Comments

Signed:	Name (Print):	Date:
(College Tutor, Unit Lead, Education	nal Supervisor)	
When unit is complete please also si	ign summary page at front of interme	diate training record book

Signed:	Name (Print):	Date:
(Trainee)		

These competencies are not mandatory for assessment within the 3 month ICM block in Intermediate Level Anaesthesia. However, trainees may acquire them during their Intermediate ICM Unit or via the cross-mapped Anaesthetic CCT competencies detailed below – this table provides the opportunity to demonstrate this competency acquisition. Due to the competency-sampling nature of *The CCT in Anaesthetics*, trainees may not be exposed to all of the areas of practice detailed below; therefore trainees are not expected to record evidence against every competency listed below, only those competencies which they have acquired.

	ate – aim fo	r bold/shad		Trainee Evidence	Trainer initial	Date
l nt	lea	ast				
1	2	3	4			
1	2	3	4			
1	2	3	4			
1	2	3	4			
Data Inter	pretation					
1	2	3	4			
1	2	3	4			
1	2	3	4			
1	2	3	4			
1	2	3	4			
1	2	3	4			
1	2	3	4			
multiple o	organ failu	re				
1	2	3	4			
	Intermedi nt  1  1  1  1  Data Inter  1  1  1  1  1  1  1  1  1  1  1  1  1	Intermediate - aim folles       nt       1     2	Intermediate - aim for bold/shad least         nt         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         Data Interpretation       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3         1       2       3	1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4	Trainee Evidence         Trainee Evidence         nt       Image: Colspan="4">Trainee Evidence         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         Data Interpretation       Image: Colspan="4">Image: Colspan="4">Image: Colspan="4">Image: Colspan="4">Trainee Evidence         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4         1       2       3       4      <	Intermediate - aim for bold/shaded level at least         Trainee Evidence         Trainer initial           nt         1         2         3         4           1         2         3         4

Trainees are encouraged to record cross specialty competencies to remain pluri-potential for Dual CCTs ICM recruitment at ST 3.

Training Progression Grid – Domain and Competencies		Circle level achieved at end of block: Intermediate – aim for bold/shaded level at least			Trainee Evidence	Trainer initial	Date
4.3 Administers blood and blood products safely	1	2	3	4			
4.4 Uses fluids and vasoactive / inotropic drugs to support the circulation	1	2	3	4			
4.8 Recognises and manages electrolyte, glucose and acid-base disturbances	1	2	3	4			
4.9 Co-ordinates and provides nutritional assessment and support	1	2	3	4			
Domain 5: Practical procedures							
5.1 Administers oxygen using a variety of administration devices	1	2	3	4			
5.2 Performs emergency airway management	1	2	3	4			
5.3 Performs difficult and failed airway management according to local protocols	1	2	3	4			
5.4 Performs endotracheal suction	1	2	3	4			
5.7 Performs chest drain insertion	1	2	3	4			
5.8 Performs arterial catheterisation	1	2	3	4			
5.9 Performs ultrasound techniques for vascular localisation	1	2	3	4			
5.10 Performs central venous catheterisation	1	2	3	4			
5.11 Performs defibrillation and cardioversion	1	2	3	4			
5.12 Performs transthoracic cardiac pacing, describes transvenous	1	2	3	4			
5.13 Describes how to perform pericardiocentesis	1	2	3	4			
5.14 Demonstrates a method for measuring cardiac output and derived haemodynamic variables	1	2	3	4			
5.15 Performs lumbar puncture (intradural / spinal) under supervision	1	2	3	4			
5.16 Manages the administration of analgesia via an epidural catheter	1	2	3	4			
5.18 Describes Sengstaken tube (or equivalent) placement	1	2	3	4			
5.19 Performs nasogastric tube placement	1	2	3	4			
5.20 Performs urinary catheterisation	1	2	3	4			
Domain 6: Perioperative care							
6.2 Manages the care of the patient following cardiac surgery	1	2	3	4			
6.3 Manages the care of the patient following craniotomy	1	2	3	4			

Training Progression Grid – Domain and Competencies	Circle level achieved at end of block: Intermediate – aim for bold/shaded level at least				Trainee Evidence	Trainer initial	Date
Domain 7: Comfort and recovery							
Competencies assessed mandatorily within ICM module							
Domain 8: End of life care		L					
Competencies assessed mandatorily within ICM module							
Domain 9: Paediatric care							
9.1 Describes the recognition of the acutely ill child and initial management of paediatric emergencies	1	2	3	4			
9.2 Describes national legislation & guidelines relating to child protection and their relevance to critical care	1	2	3	4			
Domain 10: Transport							
Competencies assessed mandatorily within ICM module							
Domain 11: Patient safety and health systems management							
11.3 Identifies environmental hazards and promotes safety for patients and staff	1	2	3	4			
11.4 Identifies & minimises risk of critical incidents & adverse events, incl complications of critical illness	1	2	3	4			
11.6 Critically appraises and applies guidelines, protocols and care bundles	1	2	3	4			
Domain 12: Professionalism							
12.1 Communicates effectively with patients and relatives	1	2	3	4			
12.2 Communicates effectively with members of the health care team	1	2	3	4			
12.3 Maintains accurate and legible records / documentation	1	2	3	4			
12.4 Involves patients (or their surrogates if applicable) in decisions about care and treatment	1	2	3	4			
12.5 Demonstrates respect of cultural & religious beliefs and awareness of their impact on decision making	1	2	3	4			
12.6 Respects privacy, dignity, confidentiality and legal constraints on the use of patient data	1	2	3	4			
12.7 Collaborates and consults; promotes team-working	1	2	3	4			
12.9 Supports clinical staff outside the ICU to enable the delivery of effective care	1	2	3	4			

Training Progression Grid – Domain and Competencies	Circle level achieved at end of block: Intermediate – aim for bold/shaded level at least				Trainee Evidence	Trainer initial	Date
12.10 Appropriately supervises, and delegates to others, the delivery of patient care	1	2	3	4			
12.11 Takes responsibility for safe patient care	1	2	3	4			
12.12 Formulates clinical decisions with respect for ethical and legal principles	1	2	3	4			
12.13 Seeks learning opportunities and integrates new knowledge into clinical practice	1	2	3	4			
12.14 Participates in multidisciplinary teaching	1	2	3	4			
12.15 Participates in research or audit under supervision	1	2	3	4			