The Faculty of Intensive Care Medicine

Guidance for Incorporating Prior Learning & Experience from CORE TRAINING PROGRAMMES into the new ICM Curriculum and LLP

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Change log

This document outlines the guidance for incorporating prior learning & experience from Core Training Programmes into the new ICM Curriculum and Lifelong Learning Platform for doctors completing postgraduate training in Intensive Care Medicine in the UK.

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
1.1	07/06/2021	Clarified the requirements for doctors entering the ICM CCT Programme without having completed a core programme in full.

Contents

1. Purpose

The purpose of this document is to offer guidance for further learning that may be required on entering the Intensive Care Medicine Training programme from different core training programmes.

2. Background

The Intensive Care Medicine (ICM) curriculum is based on the concept that learning outcomes are repeated, expanded and further elucidated as training progresses. This applies to the acquisition of knowledge, skills, attitudes and behaviours. The Faculty supports a broad entry point into the ICM training programme; outcomes achieved in the different core training programmes need to be assimilated into the ICM eportfolio, once appointed into the programme.

With such a broad entry, some of the learning outcomes will be similar but not identical and the level of capabilities may differ between each training programme. This has been the case for the 2010 curriculum.

The new curriculum outcome terminology has changed from competencies to capabilities to achieve High Level Learning Outcomes (HiLLOs). There are 14 specific HiLLOs in the ICM curriculum, with 4 generic outcomes and 10 outcomes specific for ICM training, BUT even within the ICM specific outcomes, ICM capabilities overlap with capabilities achieved in other acute specialties.

It is worth remembering, not all of the capabilities underlying each HiLLO have to be individually fulfilled to allow the trainer to sign off a HiLLO. The key (descriptor) capabilities underpinning each HiLLO help guide the overall judgement of whether the HiLLO is met.

Following recruitment to the ICM CCT programme, capabilities achieved in core entry training programmes wil need to be assimilated into the Lifelong Learning Platform (LLP). There is no need to repeat previously attained capabilities. The process of linking these capabilities to the LLP should be straightforward and not burdensome. From this, the trainer and the Specialty Registrar (StR) will then assess what still needs to be achieved to ensure the complete sign-off of the HiLLOs and completion of Stage 1 ICM training.

Importantly, there is no mandatory requirement for the uploading of multiple individual pieces of evidence from core programmes. This may be achieved by selected items of evidence/ARCP reports/ePortfolio downloads or an ARCP Outcome 6 form from that programme, in discussion with the Educational Supervisor.

3. Issues to consider

- **THIS IS A GUIDE ONLY. It is not prescriptive or mandated.**
- Doctors entering from core programmes will have differing learning needs, as is the case now. The training needs of the individual doctor will need careful consideration and so will the ongoing capabilities that need attaining.
- Curricula are assessed at a HiLLO level or equivalent eg Learning Outcomes (LOs) in ACCS, HLOs in Core Anaesthetic Training and Capabilities in Practice (CiPs) in Internal Medicine Training. These differ between all entry programmes, but there are underpinning similarities for the generic professional capabilities required by the GMC together with some similarities for specific clinical outcomes across a number of curricula.
- Each HiLLO in the ICM curriculum has a number of key capabilities associated with them to act as a GUIDE to aid sign off by the Educational Supervisor. It is **not** an exhaustive list and the StR does not have to achieve every single capability. This allows some flexibility in linking broadly similar learning outcomes from other core curricula for Stage 1 ICM without having to match the underlying capabilities exactly.

- It is expected that, on entry to the ICM training programme, the StR will continue to develop in areas as the training stage progresses. All capabilities are 'spiral' in learning, meaning they are added to and developed throughout training.
- Stage 1 training in ICM is still an indicative 4 years with 1 year of Anaesthetics, Medicine and ICM plus 1 year more. Entry to the ICM programme at ST3 is possible after two years of a core programme, ***but only if the required exam has been passed and the StR is intending to train for a Single CCT in ICM, and an Outcome 1 is achieved at CT2 ARCP.*** The required outcomes are defined as being those required on **completion** of the core training programme so some may not have been achieved.
- Not only are there three possible entry curricula to the ICM training programme, but there is also a variance in the ACCS curricula. The first two years of the ACCS programme are generic six month blocks of Anaesthetics, Internal Medicine, Emergency Medicine and ICM. There then follows an additional two years of training in either Medicine or Anaesthetics, or 1 year in Emergency Medicine, all with the attainment of additional but potentially different capabilities.
- It is mandatory for evidence of an Outcome 6 in all previously completed training curricula to be uploaded to the StR's ICM LLP. This will be acknowledged and approved by the Educational Supervisor, as evidence of compatible previous learning. This Outcome 6 will only be achieved on completion of a core programme.
- To dual accredit the doctor MUST have completed, in full, the core programme. See below for details.
- Where a doctor enters the ICM programme when they may not have completed the core training programme in full (eg possible after the first 2 years of CAT and IMT and 3 years of the new ACCS programme from August 2021), confirmation of satisfactory completion of this should be uploaded to the LLP as a Personal Activity selecting the 'Core Training Accreditation (ICM) as the 'Activity Type' (including within an ESSR). All of the supporting documentation should be uploaded and added to the Personal Activity. This can then be linked to the relevant ICM HiLLOs for sign off by the Educational Supervisor.

  The transition guidance given below for those from ACCS and IMT core training programmes take account of this 3y and 2y time point.

  For the scenario where a doctor chooses to enter ICM training following 2 years of Core Medical Training, an Outcome 6 will have been issued and can be uploaded to the LLP. These doctors should be considered in the same way that is advised for those having completed 2y of an IMT programme. They will have a further indicative 2y in Stage 1 (12 months anaesthesia, 12 months ICM) to complete the identified gaps in capabilities to achieve the HiLLO levels for Stage 1.

  For the scenario where a doctor chooses to enter ICM training following 2y of Core Anaesthetic Training as a single CCT in ICM, the mapping suggestion below can still be utilised in large part. Confirmation of satisfactory completion of this should be uploaded to the LLP (including within an ESSR). There will remain an indicative 2y (15 months ICM, 12 months medicine) in Stage 1 of the ICM programme to ensure any major gaps identified can be worked on to achieve the capability level for each ICM HiLLO.

4. Guidance for mapping core training programmes to the ICM Curriculum & LLP

4.1. Doctors from ACCS and Emergency Medicine

All doctors from this programme will, by the end of year 2, have completed as a minimum: 6/12 of Emergency Medicine, Anaesthetics, Internal Medicine and ICM. Doctors who choose ACCS core training will be eligible to apply for ICM recruitment after three years of the ACCS programme, as long as they have the respective route's postgraduate College exam by the time of appointment.

Not all of the HiLLO capabilities will have been achieved through the capabilities of the ACCS learning outcomes, especially if doctors are entering the ICM CCT Programme after year 3. However, as stated above, the process of attaining the deficient capabilities occurs over the remaining time left in Stage 1 of the ICM CCT Programme.

Although appointable to the ICM single CCT programme after 3 years ACCS training and the respective exam, if the doctor would like to dual accredit, they must complete the core programme in full - for ACCS Anaesthesia and ACCS Internal Medicine this is 4 years; 3 years if Emergency Medicine. During this time, doctors will continue to train as detailed for the relevant level of training as defined in the curriculum of the respective Royal College - be that the Royal College of Anaesthetists, Royal College of Emergency Medicine or Royal College Physicians.

4.1.1. Learning Outcomes (LOs) from the ACCS Training Programme

A doctor completing ACCS will be able to:		
	ACCS Learning Outcome Title:	**GPCs**
1	Care for physiologically stable adult patients presenting to acute care across the full range of complexity	1,2,3,4,5,6,7
2	Make safe clinical decisions, appropriate to level of experience, knowing when and how to seek effective support	1,2,3,4,6,7
3	Identify sick adult patients, be able to resuscitate and stabilise and know when it is appropriate to stop	1,2,3,4,5,6,7,8,9
4	Care for acutely injured patients across the full range of complexity	1,2,3,4,6,7
5	Deliver key ACCS procedural skills	1,2,3,4,5,6,7,8,9
6	Deal with complex and challenging situations in the workplace	1,2,3,4,5,6,7,8
7	Provide safe basic anaesthetic care including sedation	1,2,3,5,6,7
8	Manage patients with organ dysfunction and failure	1,2,3,5,6,7
9	Support, supervise and educate	8
10	Participate in research and manage data appropriately	9
11	Participate in and promote activity to improve the quality and safety of patient care	6

4.1.2. Mapping the ACCS LOs to the ICM HiLLOs

The table below matches the ACCS Learning Outcomes to the ICM HiLLOs

	Intensive Care Medicine Curriculum High-Level Learning Outcomes	ACCS LOs
1	The doctor will be able to function successfully within NHS organisational and management systems whilst adhering to the appropriate legal and ethical framework.	1,2,6
2	The doctor will be focused on patient safety and will deliver effective quality improvement, whilst practising within established legal and ethical frameworks.	1,6,10,11
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.	10
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.	9
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.	2,3,4,5,6,7,8
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.	2,3,4,5,6,7,8
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.	2,3,4,7
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.	2,3,8
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.	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.	7
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.	1,2,3,6
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.	1,2,3,4,5,6,7,8
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.	1,2,3,4,5,6,7,8
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.	1,2,3,4,5,6,7,8

4.1.3. Areas of focus for Stage 1 of the ICM Curriculum if entering from ACCS / Emergency Medicine Core Training

HiLLO 1
- Understands, incorporates and implements national legislation into practice
- Understands ethical principles and their application to everyday practice
- Appreciates the legal aspects of healthcare-including consent
- The role of the coroner
- Safeguarding adults and children

HiLLO 2
- Barriers to communication
- Understands standards for ICU, such as GIRFT and GPICS
- Understands the role of ICNARC
- Appreciate the role of evidence-based medicine

HiLLO 4
- Able to deliver a variety of teaching methods to all groups and receive and reflect on feedback
- Knows how to keep up to date with medical practice
- Understand the patients' role in education

HiLLO 5-7
- Develop more experience commensurate with the later stage 1 level of training of critically ill patients in a variety of settings from perioperatively, trauma, post op complications
- Advanced organ support in specialist areas
- Able to interpret point of care testing and radiology
- Able to interpret advanced monitoring

HiLLO 8
- Rehabilitation and outcomes from critical illness,
- End of life care/ organ donation and BSDT/non heart beating donation in all cultural groups

HiLLO 9
- Develop role in multidisciplinary team,
- Understand the role of governance and QIP
- Manage multiple critically ill patients

HiLLO 10
- Develop anaesthetic practice in ASA 3 patients
- Appreciate the importance of anaesthesia/sedation outside the theatre environment

HiLLOs 12, 13 & 14
These are specific for neuro, paediatric and cardiothoracic ICM and depending on the exposure at ACCS level these areas may require further attention, but it is appreciated aspects of the capabilities may have been achieved across the curriculum.

4.2. Learning Outcomes in the Core Anaesthetic Training (CAT) Programme

After 3 years of Core Anaesthetic Training, there will be a requirement for an indicative year of Medicine and 6/12 of ICM for these doctors, to fulfil the requirements of Stage1 in the ICM curriculum.

Although a large amount of material may have been touched upon, the depth of knowledge in some areas may not be as complete as required. Also, most doctors in core training will be working under very close supervision and the ability to perform with more distant supervision may be required.

Below are the HLOs expected at the end of the CT3 year in CAT. The HLOs in the Anaesthetic CCT curriculum are not numbered. We have added numbers to the HLOs for ease of reference for the mapping exercise to the ICM Curriculum below.

Anaesthetic HLO No.	Domain	High-level Learning Outcome
1	Professional behaviours and communication	Demonstrates the professional values and behaviours that patients expect from their doctors
2	Management and professional/regulatory requirements	Undertakes managerial, administrative and organisational roles
3	Team Working	Contributes to teams to enhance patient care
4	Safety & Quality Improvement (QI)	Improves the quality and safety of patient care
5	Safeguarding	Identifies vulnerable people and takes appropriate action
6	Education and Training	Helps others to develop their professional practice
7	Research and managing data	Expands the understanding of anaesthetic practice
8	Perioperative medicine and healthcare promotion	Facilitates safe multi-disciplinary peri-operative care and promotes the principles of public health interventions and efficient use of healthcare resources
9	General anaesthesia	Provides safe and effective general anaesthesia
10	Regional anaesthesia	Provides safe and effective regional anaesthesia
11	Resuscitation & Transfer	Resuscitates, stabilises and transfers critically ill patients safely
12	Procedural Sedation	Provides safe & effective sedation
13	Pain	Manages pain
14	Intensive Care	Manages critical illness

4.2.1. Mapping the CAT HLOs to the ICM HiLLOs

The table below matches the CAT HLOs to the ICM HiLLOs

	Intensive Care Medicine Curriculum High-Level Learning Outcomes	Anaesthetic HLOs:
1	The doctor will be able to function successfully within NHS organisational and management systems whilst adhering to the appropriate legal and ethical framework.	1,2,3,4,5
2	The doctor will be focused on patient safety and will deliver effective quality improvement, whilst practising within established legal and ethical frameworks.	1,2,3,4,5
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.	7
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.	6
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.	1,11,14
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.	11,14
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.	8,11,13,14
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.	14
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.	3,14
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.	9,10,11,12,13,14
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.	8
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.	9,10,11,12,13,14
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.	9,10,11,12,13,14
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.	9,10,11,12,13,14

4.2.2. Areas of focus for Stage 1 of the ICM Curriculum if entering from CAT

HiLLOs 1-4
These may require more evidence and expansion of knowledge. Doctors during CAT are required only to have a knowledge of the principles involved and not of direct application. Some examples are given below:

HiLLO 1
- The role of legislation in ICU care-i.e Health and Social Care Act, Equality
- The role of the coroner

HiLLO 2
- Safe prescribing and medicine safety
- Role of mortality meetings in learning
- Understands standards for ICU, such as GIRFT and GPICS
- Understands the role of ICNARC and data acquisition

HiLLO 3
- Ensure a knowledge and understanding of Good clinical practice in research
- Understands the role of national research projects in local ICU

HiLLO 4
- Able to deliver teaching in a variety of formats
- Able to reflect on teaching and receive feedback
- Understands the role of patient feedback in everyday practice and to reflect on this

HiLLOs 5-9
The further development of skills will be required to manage and stabilise the critically ill patient. Core anaesthetists will have spent 3-6/12 in ICM. Some areas mentioned below MAY have been achieved but not all to the appropriate level.

HiLLO 5
- Assessment and escalation of patients deteriorating outside ICU
- Differential diagnosis and investigation of patients
- History taking and examination of patients
- Focus on practical skills- i.e chest drains, ascitic taps
- Develop anaesthetic skills in critically ill patients- i.e intubation and initiation of ventilation
- Communication with families and relatives

HiLLO 6
- Appreciates the role of point of care testing and imaging
- Interpretation of investigations especially radiology
- Ability to reconsider management with changing patient condition
- The use and implementation of advanced monitoring and therapies
- Safe prescribing and the role of the pharmacist and other members of multidisciplinary team

HiLLO 7
- Understands the role of chronic medical problems in surgical patients
- Understand new medical problems in surgical patients
- Explore understanding of post-operative complications and their management beyond 24 hours

HiLLO 8
- Understand the consequences of critical illness acutely, for example delirium
- Understand the role of ongoing effective communication with family and relatives
- Limitations of care, withdrawal of care and end of life care in the patient journey
- Understands the role of organ donation
- Understands BSDT/non heart beating donation in all cultural groups

HiLLO 9

- Understands the finite resources of critical care
- The role of ICU in mass causalities events

HiLLO 11

- Will require an indicative 12 months of Medicine if from a purely core anaesthetic programme,
- Able to safely manage in all aspects a deteriorating ward based patients or a patient presenting acutely to the hospital

HiLLOs 12, 13 &14

These are specific for neuro, paediatric and cardiothoracic ICM and depending on the exposure at core level, these areas may require further attention, but it is appreciated aspects of the capabilities may have been achieved across the curriculum.

4.3. Learning Outcomes in the Internal Medicine Training (IMT) Programme

Internal Medical Training Stage 1 (IMTS1) will usually be completed after 3 years. Applicants can enter Intensive Care Medicine training at the end of this time or earlier at the end of year 2 of Internal Medicine Training if they have completed MRCP PACES. There is a critical progression point at the end of year 2 that allows the doctor to function as a medical registrar in year 3 on the acute medical take if IMT 3 is completed.

It is mandated in the IMT Programme that the doctor spends time in ICM, care of the elderly medicine and out-patient clinics/ambulatory care.

IMT doctors will have different levels of capabilities in practical procedures. Some skills are only required to be demonstrated in a skills lab.

Most IMT doctors will require an indicative year of Anaesthesia and 9/12 of ICM to fulfil the requirements of Stage1 in the ICM curriculum.

Below are the Capabilities in Practice (CiPs) (Generic and Clinical) expected by the end of year 2 IMT. The capabilities may be achieved at different levels.

Internal Medicine Generic CiPs

G1. Able to function successfully within NHS organisational and management systems
G2. Able to deal with ethical and legal issues related to clinical practice
G3. Communicates effectively and is able to share decision making, while maintaining appropriate situational awareness, professional behaviour and professional judgement
G4. Is focused on patient safety and delivers effective quality improvement in patient care
G5. Carrying out research and managing data appropriately
G6. Acting as a clinical teacher and clinical supervisor to be assessed by DOPS

Internal Medicine Clinical CiPs

Levels to be achieved by the end of each training year and at critical progression points for Internal Medicine Clinical CiPs.

		Internal Medicine Stage 1			
Number	**Specialty CiP**	**IM1**	**IM2**		**IM3**
C1	Managing an acute unselected take		**3**	**CRITICAL PROGRESSION POINT**	**3**
C2	Managing an acute specialty-related take		**2**		**2**
C3	Providing continuity of care to medical in-patients		**3**		**3**
C4	Managing outpatients with long term conditions		**2**		**3**
C5	Managing medical problems in patients in other specialties and special cases		**2**		**3**
C6	Managing an MDT including discharge planning		**2**		**3**
C7	Delivering effective resuscitation and managing the deteriorating patient		**3**		**4**
C8	Managing end of life and applying palliative care skills		**2**		**3**

Level descriptors

Level 1: Entrusted to observe only – no provision of clinical care; Level 2: Entrusted to act with direct supervision; Level 3: Entrusted to act with indirect supervision; Level 4: Entrusted to act unsupervised.

4.3.1. Mapping the IMT CiPs to the ICM HiLLOs

The table below matches the IMT CiPs to the ICM HiLLOs

	Intensive Care Medicine Curriculum High-Level Learning Outcomes	IMT CiPs:
1	The doctor will be able to function successfully within NHS organisational and management systems whilst adhering to the appropriate legal and ethical framework.	G1,G2
2	The doctor will be focused on patient safety and will deliver effective quality improvement, whilst practising within established legal and ethical frameworks.	G4
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.	G5
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.	G6
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.	All G/CIPs potentially
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.	C2,C7
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.	C4,C5 C7
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.	C3,C4,C5, C6,C8 G3
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.	C6
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.	C7
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.	All
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.	Potentially All G/CiPs
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.	Potentially All G/CiPs
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.	Potentially All G/CiPs

4.3.2. Areas of focus for Stage 1 of the ICM Curriculum if entering from IMT

HiLLO 1
- Understand the role of the coroner

HiLLO 2
- Safeguarding for children
- Understands standards for ICU, such as GIRFT and GPICS
- Understands the role of ICNARC

HiLLO 3
- Understands the role of local ICU in national research

HiLLO 5
- Increased exposure to critically ill patient with variety of pathologies
- Recognise and manage the deteriorating patient
- Expand knowledge and experience in advanced monitoring and therapies
- Develop intra and interhospital transfer skills

HiLLO 6
- Understand advanced monitoring and the interpretation of the results
- Focus on practical skills on patients of varying acuity
- Appreciates the role of point of care testing and imaging

HiLLO 7
- Understands the impact of chronic medical problems in surgical patients
- Understand new medical problems in surgical patients
- Understand complications of surgery
- The role of the intensive care in pre-operative work
- Demonstrates ability to resuscitate and stabilise a patient pre surgery
- Understands the role, risks and benefits of multimodal analgesia

HiLLO 8
- Understand the role of withdrawal of life support and organ donation and BSDT/non heart beating donation in all cultural groups

HiLLO 9
- Understands patient safety and systems in place for critically ill patients
- Understands role of MDT in acute care
- Understands shared care
- The role of mass causalities scenarios in trauma
- To recognise the limited resource of critical care and gain an understanding of how admission to critical care should be prioritised

HiLLO 10
- This entire HiLLO will need developing during an indicative year of Anaesthesia - assume very basic knowledge

HiLLO12
- Exposure to neuro Intensive Care Medicine may be part of IMT. Involvement of surgical aspects may be limited

HiLLO 13
- Limited exposure to paediatrics. This HiLLO will require more clinical exposure

HiLLO 14
- Exposure to cardiac medicine may be part of IMT. Involvement of surgical aspects may be limited

5. Glossary

ACCS	Acute Care Common Stem
BSDT	Brain Stem Death Testing
CAT	Core Anaesthetic Training
CiPs	Capabilities in Practice
GIRFT	Getting it Right First Time
GPICS	Guidelines for the Provision of Intensive Care Services
HiLLO	High Level Learning Outcomes
ICM	Intensvie Care Medicine
ICNARC	Intensive Care National Audit and Research Centre
IMT	Internal Medicine Training
LLP	Lifelong Learning Platform
LO	Learning Outcomes
MDT	Multi Disciplinary Team
StR	Specialty Registrar