THE CCST IN INTENSIVE CARE MEDICINE

Competency-Based Training and Assessment

PART V

ASSESSMENT OF COMPETENCE AT SPECIALIST REGISTRAR ADVANCED LEVEL

CONTENTS

Terminology and scope of these documents:
The term 'intensive care' in this document is synonymous with 'critical care' or 'intensive therapy'. 'Intensive care unit (ICU)' is synonymous with critical care unit or 'intensive therapy unit (ITU)'. High dependency, step-down care, and outreach care are also considered in these documents.

Revisions and comments:

This version of the training programme is valid for 2001. It will be reviewed annually. Comments on the training programme are welcome, and should be directed to the chair of the ICBTICM.

1. INTRODUCTION

This document contains the forms that must be completed for assessment of competence of trainees in intensive care medicine, at specialist registrar (SpR) advanced level. It replaces all previous training documents published by the Intercollegiate Board for Training in Intensive care Medicine (ICBTICM). Its content applies to all trainees at SpR level taking up a post on or after 1st February 2001. It will be revised annually, and any changes that are required will come into force six months following their publication. The ICBTICM wishes to receive comments on the Training Programme from both trainers and trainees. These should be addressed to the Chairman of the Board.

Advanced level (SpR) training requirements

Training in ICM to advanced level includes satisfactory completion of basic (SHO) level training in ICM and the complementary specialities, followed by six months of intermediate training in ICM at SpR level, and then a further year of ICM to advanced level. Total minimum mandatory exposure to intensive care medicine is thus 21 months, with additional training in anaesthesia and medicine, and training in a base speciality. A certificate of completion of specialist training (CCST) in ICM will be awarded if the trainee underwent competitive entry to the ICM training programme, has completed all competency elements satisfactorily, and has also satisfied the requirements for completion of training in a base speciality resulting in the award of a CCST in that speciality (dual certification).

2. GENERAL PRINCIPLES OF WORKPLACE ASSESSMENTS

Competency-based training provides the means for assessing trainees in a standardised manner in their place of work and while delivering care to patients. This common framework for assessment allows the ICBTICM and the Royal Colleges to enhance the high quality of training already provided, within the framework of existing methods for teaching and assessment. It also makes explicit the minimum standards that must be achieved for the purposes of equivalence of training, and for recognising training obtained in other countries.

Trainers must be as honest and objective as possible when assessing trainees: otherwise not only does the process become fundamentally flawed, but patients may be put at risk. The first point of contact for all trainees in ICM is their Local Educational Supervisor (LES), who is the equivalent of a base speciality College Tutor. The LES will need to maintain good communication with the trainee's base speciality College Tutor, as well as with the Regional Advisor in ICM, who in turn will communicate both with the corresponding base speciality RA and with the ICBTICM. Assessments should be performed by the LES or other designated consultants who meet the criteria to be trainers.

All trainees when they start a training module in ICM should complete an educational contract or equivalent method for assessing training needs, should undergo regular in-service training assessments (RITA) to document their progress, and should maintain a portfolio of educational activities within their educational training record. LESs will be expected to communicate closely with the relevant college tutor for the trainee's base speciality. There should be an initial assessment at the start of training (within the first few days) at which an outline educational contract is established between trainer and trainee. This should be reviewed regularly. Progress should be assessed at least every three months, and should be based on the educational contract and the Assessments of Competence.

Workplace assessments should be conducted in a manner which best allows trainees to demonstrate their competence in knowledge, skills and attitudes. This will involve a combination of continuous assessment, informal assessment during routine clinical work, and more formal assessment of certain aspects of practice. For example, if a trainer has observed during routine practice that a trainee communicates effectively with patients and relatives, or can perform a given practical procedure safely, he or she could be identified as competent in those aspects without requiring formal further examination. Indeed, the purpose of workplace assessments of competence is that they depend for their validity on using real-life situations, and avoid the artificiality of formal examination. Detailed guidance is given in the preamble to each assessment form.

General principles which must be observed, and which are common to all assessments are as follows:

- Trainers must be able to justify the basis on which they identify trainees as either competent or not competent in a given skill or attitude. This will usually be on the basis of direct observation, or observations made by other trainers.

- Each group of competency assessments must be signed by two trainers. This does not mean that both need to have been present at the same time to witness each item, but it does mean that two trainers must have agreed the final outcome.

- Trainees must be informed if there is any doubt about their competence. It would not be acceptable to give an adverse assessment at the end of training without prior discussion and remedial teaching.

- Competency-based training replaces time-based training, in that some trainees may require longer than others to achieve a given level of competence. Thus, a trainee who has for whatever reason been unable to acquire satisfactory competence in a given practical procedure during a particular training module, could acquire that competence subsequently, and then would have completed the assessment satisfactorily.

3. NOTES ON THE CORE CURRICULUM FOR ICM

The core curriculum for training in adult ICM is presented in Part II of the competency training documents as part of the Educational Training Record. The content of each domain is presented as *Knowledge, Skills, Attitudes and behaviour,* and *Workplace training objectives*, in addition to basic sciences. This format inevitably results in repetition and some redundancy, with the same topic appearing in more than one domain or area. Similarly there is inevitably some crossover between the knowledge and skills lists. The *Workplace training objectives* are intended to assist the trainees' self-directed learning and to indicate key aspects of clinical practice that they could be expected to demonstrate in order to satisfy their workplace assessments. The curriculum refers only to adult practice except for those items listed in the paediatric section.

The domains are presented as tables, which allow trainees to track the progression of their learning from basic, through intermediate, to advanced level by entering a mark in the appropriate box. It is not intended that these lists and tables be used for the assessment of competence, but simply to facilitate self-directed learning, and to help trainers identify any deficiencies in clinical experience. No trainee can be expected to have a comprehensive knowledge of every single aspect of the curriculum, and it is not expected that every box at each level will be filled in. Trainees can use the 'definitions of level of competence' which precedes the competency domains as a guide.

4.0 ASSESSMENT OF COMPETENCY IN ICM AT ADVANCED SPECIALIST REGISTRAR LEVEL (CCST)

This section contains the forms which must be completed by trainers and trainee to confirm that the trainee has satisfactorily met the minimum standards required for achieving competence in ICM at SpR advanced level, and has completed the prior elements of the entire training programme satisfactorily. Trainees who successfully complete advanced level training will, on completion of SpR training in their base speciality, receive a joint CCST in ICM and in their base speciality.

Assessments should be performed by the LES or relevant College Tutor, or other designated consultants who meet the criteria to be trainers[1]. The precise way in which the assessments are conducted will depend on circumstances and local practice. It will often be possible for assessments to take place during routine clinical work, and for different elements to have been assessed by different assessors at different times. However, the assessments must include all the items listed in the following forms, and each competency grouping must have been assessed by two consultants, who confirm that the trainee has achieved those competencies. The assessments must be signed by both assessors and by the trainee. When individual topics within each grouping are assessed by different assessors at different times, the assessor should indicate that a specific topic has been assessed by entering his or her initials in the relevant box.

Copies of the outcome of these assessments must be held by the trainee, the LES-ICM, and the base speciality College Tutor. They will need to be produced at the time that the trainee undergoes the formal intensive care RITA, together with the educational training record and other relevant documentation (e.g.: educational contracts, personal portfolio).

The trainee will be assessed in the following areas:

a) Team management
b) Teaching, supervision, audit and organisation
c) Admission, discharge, follow-up and end-of-life care
d) Special circumstances
e) Assessment of Cardiopulmonary resuscitation
f) Communication skills, attitudes and behaviour

[1] A trainer is defined in *The CCST in Intensive Care Medicine Part I: A reference manual for trainees and trainers*

Notes and guidance on Assessments 4.a), 4.b), 4.c) and 4.d)

Clinical Skills and Knowledge:

In these assessments, the trainee will be expected to support the demonstration of clinical skills with knowledge of the relevant areas as described in the core curriculum.

A trainee nearing completion of specialist training should be able to lead a ward round, evaluating clinical problems and establishing management plans. This involves a wide range of 'people skills' as well as clinical and diagnostic ability. The trainee should be able to develop clinical management plans for up to ten patients in the ICU for the day, and to modify those plans according to changes in the patient's condition. The trainee will be able to support junior or less experienced colleagues, and to teach and supervise them in the delivery of patient care. The trainee will have an understanding of competing demands within a clinical service, and how to manage them. The trainee will be able to monitor and evaluate his or her own performance, as well as that of others.

Setting:

Patients: Patients receiving or requiring intensive and high dependency care

Location: Intensive or high dependency care unit, and other clinical areas caring for acutely ill patients; and non-clinical areas as appropriate for the assessment.

Situations: Supervised delivery of patient care, and departmental presentations.

Guidance:

The trainee should be observed leading a ward round, delivering patient care, and interacting with relatives and other clinical colleagues. The assessor should let the trainee proceed as far as possible without interference, while noting strengths and weaknesses of technique. This should be combined with a concurrent or subsequent discussion of understanding that assesses the underlying comprehension of the trainee. Communication skills, information transfer and integration, and personal responsibility for standards of care are all important elements. The process should follow routine practice as far as possible, starting (for example) with a hand-over from the on-call staff, marshalling the team, and then proceeding with the round and the day's work. Different elements can be assessed at different times.

The trainee should be observed teaching and supervising a junior colleague in three practical procedures (central venous catheter insertion, tracheal intubation, and one other procedure to include the ability of the trainee to assess another's performance. Percutaneous dilatational tracheostomy can either be described, or performed, as appropriate for the circumstances. The purpose is to ensure that the trainee can teach a skill to a junior colleague, can assess the ability of that colleague to perform the procedure safely and competently, and can organise the clinical environment to achieve these ends.

Managing critical incidents and adverse events, as well as difficult colleagues, are skills required of specialists, as is the ability to teach in a formal setting, and evaluate one's own practice as well as that of others. The trainee should demonstrate evidence of ability to evaluate research, and to present information in a public forum in a coherent and effective manner.

Specialist areas of practice will be assessed during those modules, or subsequently as appropriate. Evidently, different elements will be assessed at different times.

4.a) Team management: ward round and clinical care of patients

This assessment will be conducted in the ICU and related clinical environments. If individual items are assessed by different assessors at different times, the assessor should indicate that a specific topic has been assessed by entering his or her initials in the relevant box

Name of trainee:_____

The Trainee:

	Yes	No	Assessor
Establishes satisfactory communication with nursing & medical staff	☐	☐	☐
Obtains relevant clinical information from medical & nursing staff	☐	☐	☐
Reviews case notes, charts, investigations	☐	☐	☐
Makes appropriate contact with patients, relatives at bedside	☐	☐	☐
Conducts a structured clinical examination	☐	☐	☐
Identifies and describes main clinical findings	☐	☐	☐
Integrates history with clinical examination to develop diagnoses	☐	☐	☐
Requests appropriate investigations	☐	☐	☐
Establishes treatment plans and main communication tasks	☐	☐	☐
Shares and delegates tasks responsibly, supports junior colleagues	☐	☐	☐
Reviews results of investigations and modifies treatment plans	☐	☐	☐
Communicates courteously with relatives, admitting clinical teams	☐	☐	☐
Ensures effective information transfer between shifts/on call staff	☐	☐	☐
This assessment was completed satisfactorily IF NO, GIVE REASONS:	☐	☐	

Signed …….. Print name…….. Date ……..

Signed: …….. Print name …….. Date……

Signed by trainee: ……

4.b) Teaching, supervision, audit and organisation

This assessment will be conducted in clinical and non-clinical environments. If individual items are assessed by different assessors at different times, the assessor should indicate that a specific topic has been assessed by entering his or her initials in the relevant box.

Name of trainee:_____

The Trainee:

	Yes	No	Assessor
Supervises a junior colleague inserting a central venous catheter	☐	☐	☐
Supervises a junior colleague performing tracheal intubation	☐	☐	☐
Teaches & assesses a junior performing one other practical procedure	☐	☐	☐
Describes a safe procedure for percutaneous dilatational tracheostomy	☐	☐	☐
Describes how to manage a critical incident involving a junior colleague	☐	☐	☐
Discusses how to manage refusal to attend unit by a senior colleague	☐	☐	☐
Presents a topic of general interest at a departmental meeting	☐	☐	☐
Initiates, performs and presents an audit project	☐	☐	☐
Participates in ICU data collection (e.g.: severity scoring, coding)	☐	☐	☐
	☐	☐	☐
This assessment was completed satisfactorily IF NO, GIVE REASONS:	☐	☐	

Signed …….. Print name…….. Date ……..

Signed: …….. Print name …….. Date……

Signed by trainee: ……

4.c) Admission, discharge, follow-up and end-of-life care

This assessment will be conducted in the ICU and other acute care clinical environments. If individual items are assessed by different assessors at different times, the assessor should indicate that a specific topic has been assessed by entering his or her initials in the relevant box.

Name of trainee:_____

The Trainee:

	Yes	No	Assessor
Describes factors which influence appropriateness of admission to ICU			
Supports ward staff in ensuring a safe environment for patient care			
Assesses factors influencing ICU discharge decisions			
Ensures effective information transfer before patient discharge from ICU			
Follows up patients in the wards after ICU discharge			
Discusses factors determining treatment intensity decisions			
Demonstrates sensitivity in discussions with patient or family			
Supports colleagues in implementing treatment limitation/withdrawal			
Supports family during treatment limitation/withdrawal			
Describes methods for minimising patient distress			
Describes/performs brain stem death tests, preconditions & exclusions			
Describes principles of obtaining consent to donation			
Manages the organ donor, including liaison with transplant co-ordinator			
This assessment was completed satisfactorily IF NO, GIVE REASONS:			

Signed …….. Print name…….. Date ……..

Signed: …….. Print name …….. Date……

Signed by trainee: ……

4.d) Special circumstances

This assessment will be conducted in the ICU and other acute care clinical environments, usually toward the end of specialist modules. As individual items will be assessed by different assessors at different times, the assessor should indicate that a specific topic has been assessed by entering his or her initials in the relevant box.

Name of trainee:_____

The Trainee:

	Yes	No	Assessor
Demonstrates ventilatory management of acute lung injury & ARDS			
Demonstrates cardiovascular management of sepsis/septic shock			
Discusses principles of infection control in intensive care			
Stabilises a patient in the ICU following elective cardiopulmonary bypass			
Discusses main complications occurring within 24 hrs of cardiac surgery			
Stabilises a patient in the ICU following elective craniotomy			
Discusses clinical management of acute intracranial hypertension			
Performs the primary and secondary survey of a trauma patient			
Discusses stabilisation & transfer of patient with fulminant hepatic failure			
Discusses general principles of managing immunocompromised patients			
Performs tracheal intubation in a child			
Stabilises a critically ill child on a ventilator			
These assessments were completed satisfactorily IF NO, GIVE REASONS:			

Signed …….. Print name…….. Date ……..

Signed: …….. Print name …….. Date…….

Signed by trainee: …….

4.e) Cardiopulmonary resuscitation (CPR).

Clinical skills

1. Able to recognise cardiac and respiratory arrest
2. Able to perform cardiac compression.
3. Able to manage the airway during cardiopulmonary resuscitation (CPR): using expired air breathing, bag and mask, laryngeal mask and endotracheal intubation.
4. Able to perform CPR either single-handed or as a member of a team.
5. Able to use the defibrillator.
6. Able to interpret arrhythmias causing and associated with cardiac arrest
7. To perform resuscitation sequences for ventricular tachycardia, VF, asystole, EMD.
8. Able to move a patient into the recovery position

Knowledge:

1. Resuscitation guidelines of Resuscitation Council (UK)
2. The factors relating to brain injury at cardiac arrest.
3. Factors influencing the effectiveness of cardiac compression.
4. Drugs used during CPR (adrenaline (epinephrine), atropine, lignocaine, calcium, magnesium, sodium bicarbonate).
5. The ethics of CPR: who might benefit.
6. Record keeping at CPR.

Setting:

Simulated scenario of collapse requiring cardiopulmonary resuscitation during a practical teaching session

Role: Initiate and maintain CPR when necessary. Undertake the role of team leader if no more senior doctor is present, continuing CPR as appropriate, administering necessary drugs and defibrillating if needed. If a more experienced resuscitator is available will adopt an appropriate role in the resuscitation team.

Locations: Wherever necessary.

Assessments:

- Manikin based practical assessment of CPR skills
- Arrhythmia recognition session using monitor and simulator
- Oral assessment of knowledge of resuscitation.

If a trainee has a valid ALS provider certificate, the assessment of CPR competency can be assumed and signed with a comment made to that effect under the signature(s) overleaf.

4.e) Assessment of Cardiopulmonary resuscitation

This assessment may be undertaken at any time and may be combined with a practical teaching session.

Name of trainee……

The Trainee:

	Yes	No
Ensures personal safety and that of the staff	☐	☐
Calls for help	☐	☐
Demonstrates the diagnostic method	☐	☐
Demonstrates mask to mouth rescue breathing.	☐	☐
Demonstrates ventilation with mask and bag	☐	☐
Demonstrates satisfactory insertion of and ventilation with ET tube	☐	☐
Demonstrates satisfactory cardiac compression.	☐	☐
Satisfactorily interprets common arrhythmias on ECG monitor.	☐	☐
Explains the indications for defibrillation.	☐	☐
Demonstrates correct use of defibrillator	☐	☐
Explains the use of appropriate drugs during resuscitation	☐	☐
Can undertake the lead role in directing CPR.	☐	☐
Demonstrates moving a patient into the recovery position	☐	☐
This assessment was completed satisfactorily IF NO, GIVE REASONS	☐	☐

Signed…… Print name…….. Date …….

Signed ……. Print name ……. Date……..

If a trainee has a valid ALS provider certificate, the assessment of CPR competency can be assumed and signed with a comment made to that effect under the signature(s).

4.f) ASSESSMENT OF COMMUNICATION SKILLS, ATTITUDES & BEHAVIOUR

This assessment will be conducted using the examples below, which are provided for guidance only, and not as prescriptive or exclusive standards. Suboptimal performance must be recognised and discussed with the trainee as early as possible and appropriate remedial action taken. Trainees must not be presented with an adverse assessment at the end of their ICM module without extensive prior warning and attempts to resolve the problem(s) in a supportive and confidential manner.

Attitude or behaviour	Example of minor problem	Example of serious problem
Communication skills (with patients and relatives)	Occasional communication difficulties with patients or relatives have been noticed	Repeated communication difficulties with patients and relatives have been noticed. Others have commented on them.
Communication skills (with staff)	Occasional communication difficulties have been noticed; unsatisfactory transmission of clinical information, e.g.: handovers, ward-round	Repeated communication difficulties with staff have been noticed. Others have commented on them. Fails to pass on important clinical information
Communication skills (sensitivity to needs of others)	On occasions fails to listen to patients or relatives or to respect their wishes. Lacks sensitivity in handling patients occasionally	Appears oblivious to what patients and relatives say, or insensitive to their likely feelings. Fails to understand or respect different cultural and ethical perspectives
Reliability and time-keeping	Isolated episodes of lateness, sometimes fails to warn of problems, tends to need reminding to get things done.	Repeated episodes of lateness, often fails to warn of problems, usually needs reminding to get things done
Control of moods and emotions	Occasionally shows irritability or bad temper with no apparent cause. Although other staff are aware of it, work continues normally.	Is well known for being moody, irritable and bad-tempered. Other staff modify their behaviour to accommodate them. The pattern of work is adversely affected
Personal presentation	When seeing patients, occasionally dresses in an unprofessional way.	Frequently dresses in an unprofessional way when seeing patients who may find this distasteful or upsetting. Other aspects of personal hygiene sometimes cause offence
Social behaviour	Social life occasionally impinges on professional life causing lateness, tiredness at work, and difficulty with studies.	Social life repeatedly affects professional performance is likely to be causing problems with self-directed learning and affects patient care.
Conscientiousness in safe practice	Usually satisfactory but has occasional lapses (e.g. doesn't sign for drugs ordered, forgets to tidy up own sharps).	More frequent or serious errors, such as failing to check donor blood against transfusion form, errors in prescription, relaxed approach to errors. Doesn't record critical incidents
Initiative	Rather passive. Tends to need pushing when things have to be done. Slower than he/she should be to take responsibility.	Actively avoids taking up challenges and very slow in adopting responsibility as and when problems arise
Over or under assertiveness	(I) May undertake inappropriate procedures because of pressure from others. (II) On occasions insists on a course of action in the face of reasonable advice to the detriment of patients and/or colleagues	(I) Fails to be assertive even when necessary for the patient's well-being. Unable to control any situation. (II) Frequently causes problems and offends patients and/or colleagues by insisting on a course of action in the face of reasoned argument.
Over-confidence	Occasionally takes on cases that are beyond level of competence. Occasional clinical crises occur because of lack of proper planning and assessment.	Frequently exhibits lack of care in planning and execution of tasks. Works without concern beyond his/her level of training, knowledge or experience.
Under-confidence	Reluctant to extend clinical experience. Anxious when working alone on clinical cases that should be within his/her competence.	Frequently demonstrates and transmits anxiety to the theatre environment. Is sufficiently stressed by work that symptoms of stress become an issue and affect performance.
Departmental involvement	Participation below the usual expected. Tends not to attend meetings unless he/she has to.	Rarely participates in any departmental activity. Rather isolated socially from other members of the department.
Team working	Doesn't always consider the needs of others. Tends to press ahead with his/her own plan and expects others to adapt around it.	Careless of the needs of others. Often arrogant and thoughtless. Sufficient lack of insight that his/her behaviour frequently causes problems.
Personal organisation	Can be unprepared for the task in hand: sometimes forgets to bring essential items to meetings etc. Can be slow to implement agreed policy changes.	Frequently poorly prepared and disorganised. Unreliable to the extent that other staff are affected. Appears unaware of the impact their behaviour has on the working environment.
Honesty and trustworthiness	Has been found to manipulate the truth to prevent criticism; blames others for own errors and shortcomings	Deliberately misleads staff, patients or trainers by miss-information e.g. fills in logbook with non-existent cases; does not report serious adverse event; alters records after a problem has occurred. Fails to answer patient's / relative's queries honestly
Enthusiasm	Usual response to new opportunities is rather flat. Gives the appearance that work is an onerous duty rather than something to give satisfaction	Negative response to new opportunities. Always places personal convenience before that of patients or colleagues. Never volunteers and is unco-operative in solving departmental problems
Record keeping	Occasionally fails to keep a good record or is rather economical with basic information. Needs reminding to retrieve and document laboratory investigations.	Case notes review demonstrates frequent poor record keeping; key items of information missing, or incorrectly documented. Training record poorly maintained, possibility of falsification of entries

ASSESSMENT OF COMMUNICATION SKILLS, ATTITUDES AND BEHAVIOUR

Please put a tick in the appropriate box. Any 'cause for concern' must be qualified with information. This form should be completed annually or whenever a trainee leaves a hospital or module. If difficulties arise, it can be used more frequently.

Attitude or behaviour	Satisfactory	Cause for concern	Please give examples of cause for concern, noting date. Expand on a separate sheet if necessary	Initials of assessors (with dates)
Communication Skills (with patients & relatives)				
Communication Skills (with staff)				
Communication Skills (sensitivity to another's needs)				
Reliability and time-keeping				
Control of moods and emotions				
Personal presentation				
Social behaviour				
Conscientiousness in checking				
Initiative				
Over or under assertiveness				
Over-confidence				
Under-confidence				
Departmental involvement				
Team working				

Personal organisation				
Honesty and trustworthiness				
Enthusiasm				
Record keeping (training record, case notes)				

I confirm that any 'causes for concern' have been discussed with the trainee. The outcome of these discussions was as follows:

……
……
……
……

Signed…… Name (print)……
Date……