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#### **Common Training Framework**

# Training Requirements for the Core Curriculum of Multidisciplinary Intensive Care Medicine

European Standards of Postgraduate Medical Specialist Training

#### **Preamble**

The UEMS is a non-governmental organisation representing national associations of medical specialists at the European Level. With a current membership of 37 national associations and operating through 42 Specialist Sections and European Boards UEMS is committed to promote the free movement of medical specialists across Europe while ensuring the highest level of medical training which will pave the way to the improvement of quality of care for the benefit of all European citizens. The UEMS areas of expertise notably encompass Continuing Medical Education, Post Graduate Training and Quality Assurance.

It is the UEMS' conviction that the quality of medical care and expertise is directly linked to the quality of training provided to the medical professionals and has committed itself to the improvement of medical training at the European level through the development of European Standards in the different medical disciplines. The result would mean that no matter in which medical institution doctors are trained, the core competencies would be the same.

In 1994, the UEMS adopted its Charter on Post Graduate Training aiming at providing the recommendations at the European level for good medical training. Made up of six chapters, this Charter set the basis for the European approach in the field of Post Graduate Training. With five chapters being common to all specialties, this Charter provided a sixth chapter, known as "Chapter 6", that each Specialist Section was to complete according to the specific needs of their discipline.

More than a decade after the introduction of this Charter, the UEMS Specialist Sections and European Boards have continued working on the development of these European Standards to produce Medical training that reflects modern medical practice and current scientific findings. In doing so, the UEMS Specialist Sections and European Boards have not intended to undermine the National Authorities' competence in defining the content of postgraduate training in their own State, but rather to complement these and ensure that a high quality of training is provided across the whole of Europe, regardless of borders.



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In the European Union, the legal principles which outlining the free movement of doctors, by medical qualification, was established back in the 1970s.

Sectorial Directives were adopted and specifically one Directive addressed the issue of medical training at the European level. In 2005, the European Commission proposed to the European Parliament and Council, a unique legal framework, for the recognition of the Professional Qualifications to facilitate and improve the mobility of all workers throughout Europe. This Directive, 2005/36/EC, established the mechanism of automatic mutual recognition of the qualifications for medical doctors according to training requirements within all Member States; this is based on the length of training in the Specialty and the title of qualification.

Given the long-standing experience of UEMS Specialist Sections and European Boards on the one hand and the European legal framework enabling Medical Specialists and Trainees to move from one country to another on the other hand, the UEMS is in the unique position to provide specialty-based recommendations. The UEMS values professional competence and reflects on it as "the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served". Currently the medical professional activity of individual EU Member States is regulated by national laws and whilst acknowledging this, UEMS understands that this activity still has to comply with International treaties and UN declarations on Human Rights as well as the World Medical Association International Code of Medical Ethics.`

This document derives from the previous Chapter 6 of the Training Charter and provides definitions of specialist competencies and procedures as well as how to document and assess them. For transparency and coherence, it has been renamed as "Training Requirements". This document needs to be regularly updated by UEMS Specialist Sections, their Multidisciplinary Joint Committees and European Boards to reflect scientific and medical progress. The three-part structure of this documents reflects the UEMS determination to produce a clear and pragmatic document not only for medical specialists but also for decision-makers at the National and European level interested who will need to know more about medical specialist training.

#### **Background:**

Until recently, Intensive Care Medicine (ICM) was only recognised in just two European Countries, (Switzerland and Spain) as an independent speciality with the possibility of direct access to training and accreditation. In most European countries however, ICM is considered a sub-specialty and competency can only be obtained via qualification from either single or from multiple primary specialities. In these countries ICM competence is considered an area of expertise in addition to a primary speciality and thus competency can only be obtained by developing additional skills outside the domain of a specific primary speciality This has meant a common training programme for specialists with board certification in a variety of relevant and acute core primary specialties such as anaesthesiology, surgical disciplines, internal medicine and subspecialties, paediatrics and

<sup>&</sup>lt;sup>1</sup> Defining and Assessing Professional Competence, Dr Ronald M. Epstein and Dr Edward M. Houndert, Journal of American Medical Association, January 9, 2002, Vol 287 No 2



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subspecialties, emergency medicine or otorhinolaryngology. There have been developments for instance in June 2010, direct access to training and accreditation in ICM became possible in the U.K. and Ireland and other European countries including France, the Netherlands and Portugal are following the same roadmap.

In spite of this progression for ICM accreditation as a primary speciality, physicians that specialise in ICM cannot benefit from automatic recognition. This is because the European Directive on the recognition of professional qualifications (Directive 2005/36/CE of the European Parliament and the European Council) still does not identify ICM as a primary medical speciality and as such is yet to include ICM in its Annex V

The process required for the European Union to include ICM as a specialty in the annex V of requires firstly recognition in at least 2/5th of the Member States (article 25), by a 'qualified' majority in by submission to the committee on qualifications of the European Commission (where a 'qualified' majority represents a weighted vote that is determined by the population of each country. Secondly, to create a Specialist Section for ICM within the UEMS, ICM has to be recognized as an independent speciality by more than one third of the E.U. Member States and must also be registered in the Official Journal of the European Commission (Directive 205/36/EC).

These requirements for a primary speciality have not yet been fulfilled for Intensive Care Medicine and therefore our initial aim should be to incorporate Intensive Care Medicine as a Particular Competence in the European Directives 2005/36/EC. This terminology was consistent with all forms of training based on the acquisition of competencies, however, in the current revision of this Directive is not yet attained.

There is an alternative mechanism for ICM recognition that could be used to ensure mobility within the European Union under the revised version of the Directive (2013/55/EU) where the European Commission proposed recognition of qualifications based on a Common Training Framework (CTF) and which does not require Automatic Recognition of qualifications where the diploma would have to be listed in Annex V.). According to the revised Directive (statement 25), "Common training principles should take the form of common training frameworks based on a common set of knowledge, skills and competences or common training tests. It should be possible for common training frameworks also to cover specialties that currently do not benefit from automatic recognition provisions under Directive 2005/36/EC and that relate to professions encompassed by Chapter III of Title III and that have clearly defined specific activities reserved to them. Common training frameworks on such specialties, in particular medical specialties, should offer a high level of public health and patient safety. Professional qualifications obtained under common training frameworks should automatically be recognised by Member States. Professional organisations which are representative at Union level and, under certain circumstances, national professional organisations or competent authorities should be able to submit suggestions for common training principles to the Commission, in order to allow for an assessment with the national coordinators of the possible consequences of such principles for the national education and training systems, as well as for the national rules governing access to regulated professions".



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#### I. TRAINING REQUIREMENTS FOR TRAINEES

The final aim of training must be ensure that the best quality of care is delivered, using harmonised educational standards, that meet the challenge of multiple European where major differences in critical care delivery, including training infrastructures and certification standards, exists.

#### 1. <u>Content of training and learning outcome</u>

The UEMS Multidisciplinary Joint Committee and the European Board in Intensive Care Medicine (MJCICM and EBICM) is passionate to improve the competence of medical specialists in Intensive Care Medicine to achieve the highest quality of care for European patients. It aims to have ICM as a multidisciplinary field accessible from several medical specialties and focuses on the competence required to provide high quality care whatever the primary specialty is. The MJCICM believes that it should be possible to train in ICM in tandem with a primary specialty. Each of the UEMS specialist sections will have to identify overlap and gaps of the CTF in relation to the respective Training Requirements and ensure that the necessary competences are acquired. This will mean that specialties will have to add components to their training programmes in order to achieve competency levels in ICM and ensure that requirements are met. It will also mean that the total duration of training will in many cases have to be adjusted. One of the key roles of the UEMS Multidisciplinary Joint Committee and the European Board in Intensive Care Medicine will be to advise and assist specialties in identifying these gaps, and suggest mechanisms and the resources to required to fulfil competencies in ICM.

The set of competencies for medical specialists in Intensive Care Medicine (ICM) has been defined by an EU-funded project entitled Competence-Based Training in Intensive Care in Europe (CoBaTrICE). The outcome of this project was a robust and cogent definition of the competencies required to be an Intensivist, a title that would correspond to the specialist practitioner in a Member State where ICM is a specialty of its own. This document has already been endorsed by the UEMS Council in 2008 and serves as the reference document for the definition of competence in ICM at the European level as outlined in this document. This Common Training Framework has also been influenced by the Training Requirements for the Specialty of Anaesthesiology, Pain and Intensive Care Medicine submitted in a revised version by the Section of Anaesthesiology to the UEMS Council for adoption in April 2013. Another important source has been the European curriculum recommendations for training in respiratory critical care medicine (HERMES), a report representing a Task Force's work to produce European recommendations in respiratory critical care. The curriculum operationalises the syllabus and includes consideration of educational processes - mainly teaching, learning and assessment. This document has also been influenced by the European syllabus for paediatric intensive care medicine, formulated following a report from a committee tasked to produce European recommendations in paediatric critical care. There is of course, in addition to the sources cited above, the specialty input of all UEMS Sections whose input has been merged with, or

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integrated in the text.2

The fundamental role of a European Specialist is as a Medical Expert, a Leader, a Scholar and a Professional. These roles are underpinned by the generic and specific competencies embedded into a framework, which allows an individual to achieve specialist status. To achieve this these competencies have to be translated into measurable learning objectives. The MJC ICM and the EBICM have identified the following core competencies required at the European level for medical specialists practicing in ICM. The detailed knowledge, skills and behaviour for each item can be found in the Syllabus based on CoBaTrICE and other sources. The requirements are not only influenced by the selection of competencies, but also by the level of acquisition/expertise required (see b. Learning objectives).

#### a. Competences required from the trainee at the end of post-graduate training (PGT)

Physicians possess a defined set of knowledge, skills, and attitudes, which aim to enable high quality of care to patient. They apply these competencies to collect and interpret information, make appropriate clinical decisions, and undertake diagnostic and therapeutic interventions. In doing so, they bear in mind the boundaries of their discipline, their personal expertise, the healthcare setting and the patient's needs and context. The care provided to patients is driven by up-to-date, ethical, and resource-efficient clinical practice as well as with effective communication in partnership with patients, other health care professionals. As a result, Medical Specialist practicing ICM should be proficient and appropriately assessed in the following domains:

- (a) Communication
- (b) Problem solving
- (c) Applying knowledge and science
- (d) Patient examination
- (e) Patient management/treatment
- (f) Using the social and community context of healthcare
- (g) Self reflection

For each item listed below, a set of knowledge, skills and attitude has been elaborated. The details for each item are to be found in COBATRICE.

#### 1. RESUSCITATION & INITIAL MANAGEMENT OF THE ACUTELY ILL PATIENT

1.1 Adopts a structured and timely approach to the recognition, assessment and stabilisation of the acutely ill patient with disordered physiology

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- 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

<sup>&</sup>lt;sup>2</sup> REFERENCES



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#### 2. DIAGNOSIS: ASSESSMENT, INVESTIGATION, MONITORING AND DATA INTERPRETATION

- 2.1 Obtains a history and performs an accurate clinical examination
- 2.2 Undertakes timely and appropriate investigations
- 2.3 Describes the indication for echocardiography, abdominal ultrasound and other imaging modalities [1]
- 2.4 Performs and interprets focused transthoracic echocardiography
- 2.5 Performs and interprets general critical care ultrasonography, (thoracic, abdominal and vascular)
- 2.6 Performs electrocardiography and interprets the results
- 2.7 Obtains appropriate microbiological samples and interprets results
- 2.8 Obtains and interprets the results from blood gas samples
- 2.9 Interprets chest x-rays
- 2.10 Liaises with radiologists to organise and interpret clinical imaging
- 2.11 Monitors and responds to trends in physiological variables
- 2.12 Integrates clinical findings with laboratory investigations to form a differential diagnosis

#### 3. DISEASE MANAGEMENT

- 3.1 Manages the care of the critically ill patient with acute medical conditions
- 3.2 Identifies the implications of relevant 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 renal failure
- 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 respiratory failure and ARDS
- 3.9 Recognises and manages the patient with infection and sepsis
- 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

### 4. THERAPEUTIC INTERVENTIONS/ORGAN SYSTEM SUPPORT IN SINGLE OR MULTIPLE ORGAN FAILURE

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- 4.1 Prescribes relevant 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 Initiates and manages patients on invasive and non-invasive ventilatory support
- 4.6 Initiates and manages patients on renal replacement therapy
- 4.7 Recognises and manages electrolyte, glucose and acid-base disturbances
- 4.8 Provides nutritional assessment and support
- 4.9 Describes indications for circulatory and respiratory assist devices

#### **5. PRACTICAL PROCEDURES**

5.1 Administers oxygen using a variety of administration devices



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- 5.2 Performs emergency airway management
- 5.3 Performs difficult and failed airway management according to evidence-based protocols
- 5.4 Performs endotracheal suction
- 5.5 Performs thoracocentesis to relieve tension pneumothorax or pleural effusion
- 5.6 Performs peripheral venous catheterisation
- 5.7 Performs arterial catheterisation
- 5.8 Performs central venous catheterisation
- 5.9 Describes and performs ultrasound techniques for vascular localisation
- 5.10 Performs defibrillation and cardioversion
- 5.11 Performs cardiac pacing (transvenous or transthoracic)
- 5.12 Demonstrates a method for estimating cardiac output and derived haemodynamic variables
- 5.13 Describes how to perform pericardiocentesis
- 5.14 Performs diagnostic lumbar puncture
- 5.15 Manages the administration of analgesia via an epidural or peripheral catheter
- 5.16 Performs gastric tube placement
- 5.17 Performs abdominal paracentesis
- 5.18 Describes indications for, and safe conduct of gastroscopy
- 5.19 Performs urinary catheterisation

#### 6. PERI-OPERATIVE CARE

- 6.1 Manages the post-operative care of the elective surgical patients under general intensive care
- 6.2 Manages the pre- and post-operative care of the emergency surgical patients
- 6.3 Manages the pre- and post-operative care of the trauma patient

#### 7. COMFORT & RECOVERY

- 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 other distress.
- 7.3 Manages sedation and neuromuscular blockade
- 7.4 Communicates the continuing care requirements 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

#### 8. END OF LIFE CARE

- 8.1 Manages end of life care and the process of withholding 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 Recognizes criteria of brain-death
- 8.5 Manages the physiological support of the organ donor

#### 9. PAEDIATRIC CARE

9.1 Recognises the acutely ill child and initiates management of paediatric emergencies



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- 9.2 Recognizes critically ill children that need to be transferred to a specialized centre
- 9.3 Knows about national legislation and guidelines relating to child protection and their relevance to critical care.

#### 10. TRANSPORT

10.1 Able to undertake transport of the critically ill patient outside the ICU

#### 11. PATIENT SAFETY AND HEALTH SYSTEMS MANAGEMENT

- 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 & staff
- 11.4 Identifies and minimises risks of critical incidents, adverse events and complications
- 11.5 Critically applies guidelines, protocols and care bundles
- 11.6 Applies commonly used scoring systems for assessment of severity of illness

#### 12. PROFESSIONALISM

- 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 and take into pay attention to vulnerable patients
- 12.6 Respects autonomy, 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 Takes responsibility for safe patient care
- 12.10 Formulates clinical decisions with respect for ethical and legal principles
- 12.11 Seeks learning opportunities and integrates new knowledge into clinical practice

#### b. Learning objectives

For each domain of competence identified above, a detailed list of "learning objectives" has been identified, that constitute the syllabus covering aspects such as:

- i. Theoretical and practical knowledge
- ii. Practical and clinical skills (case management)
- iii. Attitudes, behaviours and professionalism

These learning objectives have been broken down accordingly into specific aspects that are deemed necessary to achieve the required level of each competency. These levels of acquisition/expertise required are defined as follows:

- A: Has knowledge of and is able to describe
- B: Performs and manages independently
- C: Understands, seeks multidisciplinary advice, discusses with or refers to expert



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The "learning objectives" are the realistic endpoints that should be attained by the end of the training period. They also represent measurable milestones that should serve as a basis for the development of future evaluations which would be used to objectively measure the acquisition of competencies throughout the curriculum. Ethical principles and commitment, Quality & Safety Management, and Non-Technical Skills are all aspects of training that are considered mandatory and thus require a proper description of the learning objectives required.

#### 2. Organisation of training

#### a. Schedule of training

Since the knowledge and skills of ICM are universal to many medical and surgical specialities, the MJCICM and the EBICM support the view that training in ICM should continue to be possible after training and certification in a primary specialty. As previously stated it is possible to receive ICM training in Spain and Switzerland as a primary specialty and it is important that training should therefore still be accessible in tandem with any relevant primary specialty or, as in UK and Ireland, as a dual accreditation (dual CCT)

If ICM is studied as a primary speciality, trainees should be recognised as being qualified in Intensive Care Medicine after a minimum of five years of competency-based training. If accessed in tandem with another, relevant, acute core primary speciality, training for ICM is usually a minimum of three years and should give recognition for qualification in Intensive Care Medicine. Depending on the primary speciality, training can usually be integrated, but it is important that all training is competency-based and no recognition will be given until requirements are met. Up to two years can be accepted from relevant acute core primary specialty training provided that at least one of those years is undertaken in a recognised multidisciplinary intensive care unit.

#### b. Curriculum of training

The curriculum for training medical specialists in Intensive Care Medicine is detailed in CoBaTrICE which is the aggregate of all the knowledge, skills, behaviours and attitudes required for each of the competencies listed in this document. As previously discussed this CTF is based mainly on CoBaTrICE but several other sources have been utilised (as described above) (I.1.).

#### c. Assessment and evaluation

Assessment modules should include both formative and summative assessments. Formative assessments should take place throughout the training period, and include different modalities such as trainee evaluation tools based on the Mini-CEx or direct observations of clinical procedures, simulation-based training/evaluation, and in-training evaluations of knowledge with MCQs or viva voce assessments.

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Evaluation and the resultant certification should occur through in-training assessments and/or summative end-of-training examinations, ideally by participating in European examinations. The existence of 'supra-national' examinations provides an incentive for the development and improvement of departmental, university, national and European training programmes, especially given the aim of the examination, which is to achieve a uniform standard of knowledge within Intensive Care Medicine throughout Europe.

The trainee should provide evidence of expected performance as outlined in the competency framework above. As a minimum, this should be provided as a portfolio of evidence, measured against all the required competencies made up of performance based assessments. Additional objective measures of competence delivered nationally may include written and/or clinical examinations.

Additionally documentation providing evidence for progress in training according to the competency framework is required annually. Written feedback summarising the competencies achieved and any gaps to be met in the next training year also need to be provided to the educational supervisor. This report should then be discussed with the trainee and any adjustments to the training program should be agreed with the trainee and clinical supervisor. The report should also confirm the ownership of the assessed submitted work and standard of assessments conducted.

Trainees are also encouraged to keep a logbook of procedures performed, as well as, or in conjunction, with a portfolio documenting all teaching modalities used to reach the competencies defined. They should obtain from their training institution all regulations, protocols and written procedures for good quality practice. The training institutions should propose a "tutor" or "mentor" for appropriate follow-up and feed-back to the trainee. It is the responsibility of the head of department and/or his /her consultants and tutors to have regular meetings with the trainee in order to document progress and provide guidance on the acquisition of specific competencies, including those related to non-technical skills.

#### d. Framework of approval

Trainees need to undergo a process of continuous assessment, appraisal and guidance. This will be conducted by consultant staff and assessed and documented by programme director/tutor to ensure that they are making adequate progress, and also that an appropriate amount of time has been allocated to achieve this. The programme director role is to ensure that there is a suitable training programme, which recognises the trainee's requirements based on the CTF. Additionally the ratio of trainers allocated to trainees needs to reflect the appropriate level of supervision for that trainee and this ratio needs to reflect the competency achieved in his/her training.

#### e. Governance



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Medical training in each member state is governed by a National Competent Authority who is responsible for ensuring the adequacy of medical training. This ensures at a national level that medical trainees in ICM have acquired the appropriate knowledge, skills and competence expected in that country.

At a European level, the European Board of Intensive Care Medicine and the UEMS MJCICM have a mandate to address both training and scientific agendas. They are responsible for establishing and updating the required competencies. They are also actively engaged in developing tools for assessment of competence within European Intensive Care Medicine.

The EBICM and the MJCICM are also responsible for making recommendations to the National Societies represented in the Section and Board about the system of incentives for teaching effort, support for faculty who teach, and other support requirements needed to make the curriculum operational. They will also propose educational objectives, specify teaching methods, and propose means to evaluate educational outcomes.

It should be stressed that these guidelines and training requirements are not exhaustive and only represents the current state of medical practice in ICM. The present document can therefore be considered a 'living document' that will see many amendments and changes reflecting future changes in the practice of intensive care medicine.

#### II. TRAINING REQUIREMENTS FOR TRAINERS

The concepts of professional development, educational training support, promotion of skills development, and encouragement of educational innovations among faculty has been approached from different viewpoints across the European Union which not unsurprisingly has limited both the synchronisation and harmonisation of ICM education. It becomes evident therefore that the proposed integration of the curriculum and relevant teaching technologies will enhance learning across Europe thereby creating a consistent standard of high quality ICM delivery. On this basis it is the responsibility of any training institution that is committed to make proposals to prepare the teaching faculty to take on the different academic challenges and roles, and to adopt the new optimised techniques of information delivery.

#### 1. Requirements for programme directors, tutors and supervisors

Programme directors responsible for educational supervision/training must be qualified practitioners in ICM. They should have been practicing ICM for a sufficient number of years to be experienced and have the credibility to be recognised within the ICM community as meeting the competencies at a level corresponding to the CoBaTrICE curriculum.

Educational tutors must be practicing ICM clinicians who have received appropriate training for the additional educational roles. They should possess the competencies in the 12 domains listed in

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CobaTrICE or equivalent. Clinical supervisors should have additionally received training in providing close clinical supervision and should work with tutors and the program supervisor to improve their competencies in teaching and supervision. The EBICM and the MJC ICM can propose performance standards for tutors, means for faculty development efforts and evaluation of tutor performance.

#### 2. Quality management for trainers

It is recommended that existing programmes throughout Europe should use learning models which are focused on conceptual learning and behavioural practice to increase faculty members' teaching knowledge, provide instructional training, and promote the implementation of active learning across all curricular phases.

Studies have evaluated tools for assessing teaching performance. These have identified a set of teaching qualities that optimally define teaching performance;

- 1) Possessing the ability to create a positive learning climate,
- 2) Showing a professional attitude towards trainees,
- 3) Effective communication of learning goals
- 4) Frequent evaluation of trainees
- 5) Regular feedback.

In the future, "train the trainer" programmes should ideally include training of these important aspects by introducing systems such as SETQ - System for Evaluation of Teaching Qualities with tools to measure and enhance teaching performance of clinical teachers. Validated questionnaires are available for measuring teaching performance, with one being trainee-completed and the other being a faculty-completed questionnaire. They are currently part of a European-wide research project with a view to early implementation.

#### III. TRAINING REQUIREMENTS FOR TRAINING INSTITUTIONS

#### 1. Requirements for recognition as training centre

Training requirements and standards for training institutions vary in the different European countries. The conditions for accreditation of training centre depend on the national regulatory bodies.

UEMS in 1997 issued guidelines in the form of a Charter on the visiting of Training Institutions and forms the basis for the development of an accreditation programmes in all medical specialties. These Training Centres should be then recognised as accredited training institutions by the relevant

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national competent authorities. To enable this process, UEMS proposes a 'European Hospital Visiting and Training Accreditation Team' to evaluate either single, or groups of hospitals, with respect to the ICM training programmes, facilities, design of education process, engagement of the local faculty in this process and the balance between clinical training and didactic teaching. This group could also report on the possibility for research. The accreditation process should include interviews, review of records, logbooks, audits, guidelines and local protocols.

The accreditation process will need to focus on the available resources to deliver ICM teaching such as number of medical staff, facilities, library, technical equipment, access to medical service and opportunities for research and development. Additional thought has to be given to the "educational climate" and to how existing educational resources are used, whether there is a director of studies, whether training programmes are formulated and guidelines applied, how professional guidance is organised, and whether senior doctors take an active interest in the training of their younger colleagues.

#### a. Clinical Requirements and educational activities

#### Range of clinical activities

Clinical activities should reflect the multidisciplinary nature of ICM. All the relevant specialties and subspecialties should be represented in a multidisciplinary ICM training rotation.

#### Range of scientific activities

An accredited department who is responsible for teaching ICM, is also expected to organise and run programmes of educational activities (lectures on relevant topics, mortality and morbidity meetings, critical incident reporting, clinical audit and research and journal club meetings). There is also an expectation that support will be given to provide opportunities to attending educational courses and scientific meetings for both trainee and faculty. This should made available as part of the accreditation process as a readily assessable record of faculty involvement in academic activities such as lecturing and publications.

#### b. Equipment requirements, accommodation and working conditions

#### Medical-technical equipment, library, opportunities for R&D

Accredited/certified centres will provide trainees access to the necessary resources to train. There needs to be easy access to information technology, library services and research advice.

There should be an expectation that departmental accommodation and facilities for trainees should be of a standard that encourages professional care during both regular hours and when on-duty. There needs to be ready availability of medical-technical equipment including adequate teaching and support.

Working hours and level of service workload should be reviewed to ensure a safe balance of training and service delivery. Roster planning and hours on-call should be compliant with the European Working Time Directive, and any impact on training of such issues should be noted.

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#### 2. Quality Management within Training institutions

#### Clinical Governance

Organisation, management, leadership, communication and team work are all topics that should be implicit in modern training programmes as they form the platform for Clinical Governance.

Medico-legal aspects and work environment hazards must be part of the training, and risk management policies should be in place. An adequate standard of clinical care and patient safety is a pre-requisite for training and there should be a structured, systematic approach to Medical Audit.

#### <u>Transparency of training programmes</u>

All relevant activities should be recorded. The quality and availability of clinical instructions and formal teaching by members of the multidisciplinary team should be documented as should regular self-reflections on case management.

#### Structure for coordination of training

Sufficient supervised time with tutors/consultants should be scheduled and willing help/advice or appropriate assistance from consultants must be available when requested at anytime.



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#### **GLOSSARY**

ARDS - Acute respiratory distress syndrome

CCT - Certificate of Completion of Training

CEx - Clinical Evaluation Exercise

CoBaTrICE - Competence based Training in Intensive Care in Europe

CTF – Common Training Framework

E.U – European Union

EBICM – European Board in Intensive Care Medicine

ICM - Intensive Care Medicine

ICU - Intensive Care Unit

MCQ - Multiple Choice Questions

MJC ICM - Multidisciplinary Joint Committee in Intensive Care Medicine

PGT - Postgraduate Medical Specialist Traing

R&D -Research & Development

SETQ - System for Evaluation of Teaching Qualities

UEMS – Union Européenne des Médecins Spécialistes

**UN – United Nations**