European Training Requirements 
for the Specialty of 
Emergency Medicine

*European Standards of Postgraduate Medical Specialist Training*  
*(old chapter 6)*

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 43 Specialist Sections and European Boards, the UEMS is committed to promote the free movement of medical specialists across Europe while ensuring the highest level of 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.

UEMS believes that the quality of medical care and expertise is directly linked to the quality of training provided to the medical professionals. Therefore the UEMS is committed to contribute to the improvement of medical training at the European level through the development of European Standards in the different medical disciplines. No matter where doctors are trained, they should have at least the same core competencies.

The legal mechanism for ensuring the free movement of doctors within Europe through the recognition of their qualifications was established in the 1970s by the European Union. However, in 2005, the European Commission suggested to the European Parliament and Council that there should be a single legal framework for the recognition of professional qualifications to facilitate and improve the movement of all workers throughout Europe. This directive (Directive 2005/36/EC) established the mechanism for automatic mutual recognition of qualifications for doctors according to the training requirements within the individual member states; this is based on the length of training in the specialty and the type of qualification.

In 1994, the UEMS adopted its Charter on postgraduate medical training aimed at providing the recommendations to be applied within Europe. The six chapters of this charter set out the basis for a European approach to postgraduate medical training. Chapters 1-5 would be common to all specialties. “Chapter 6” would be completed by each Specialist Section.
More than a decade after the introduction of this Charter, the UEMS Specialist Sections and European Boards have continued working on developing these European Standards in Medical training that reflects modern medical practice and current scientific findings. In doing so, the UEMS Specialist Sections and European Boards did not aim to supersede the National Authorities' competence in defining the content of postgraduate training in their own State but rather to complement these and ensure that high quality training is provided across Europe.

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 uniquely in position to provide specialty-based recommendations.

The UEMS values professional competence 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”.

While professional activity is regulated by national law in EU Member States, it is the UEMS understanding that it has to comply with International treaties and UN declarations on Human Rights as well as the WMA 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 the sake of transparency and coherence, it has been renamed as “Training Requirements for the Specialty of Emergency Medicine”.

**Background**

This document aims to provide the basic Training Requirements for the specialty and has been updated by the UEMS Section and Board for Emergency Medicine to reflect scientific and medical progress and to reflect changes in the European Curriculum for Emergency Medicine. The three-part structure of this document reflects the UEMS approach to have a coherent pragmatic document not only for medical specialists but also for decision-makers at the National and European level interested in knowing more about medical specialist training.

The objectives of the UEMS Section and Board for Emergency Medicine include:

- **Supporting the delivery of the highest level of training for current and future medical specialists in Emergency Medicine;**
- **Enabling and promoting the free movement of specialist medical doctors within the European Union and beyond in Europe;**
- Representing the profession within the member states of the EU and its associated countries, to EU authorities and any other authority dealing with questions directly or indirectly concerning the Emergency Medicine profession and by influence to support the development of the specialty in countries where the specialty does not exist;
- Promoting the professional interests of European Emergency Medicine specialists including support for the development of an appropriate workforce.

The European curriculum in Emergency Medicine represents the description of the competence and skills of the Emergency Physician and is a document jointly endorsed by the UEMS Section and Board for Emergency Medicine and the European Society for Emergency Medicine (EUSEM). The curriculum is being updated in 2018 - incorporating the opinions of representatives of all individual national Emergency Medicine societies and professional organisations represented in the UEMS.

The UEMS Section and Board recognises the need for a unifying document for Emergency Medicine based on minimum training requirements and recognition of professional competences and qualifications. These training requirements are reflected in the curriculum. National authorities may supplement the recommendations in the European curriculum for Emergency Medicine with additional training and assessments that are relevant to their own training programme.

There is at present no standardised accreditation of training sites across Europe for Emergency Medicine or accreditation of qualifications attained in individual European countries. Individual recognition of training and qualifications is decided at the national level according to each national authority rules.

This current document has a basis in the previously mentioned Chapter 6 of the Charter on Postgraduate Medical Specialty Training and provides definitions of specialist competencies and procedures as well as how to document and assess them.

Devising a European curriculum for the speciality of Emergency Medicine is more difficult than some other specialties. This is due to the role of the Emergency Physician and the structure of emergency care being highly variable across Europe. For example in some countries, the work of the Emergency Physician is predominately based in the pre-hospital environment; in other countries, an Emergency Physician will work only in the critical care area. However in the majority of European countries, the Emergency Physician works in a dedicated Emergency Department. The presentations and conditions cared for by Emergency Physicians may vary between countries; the national training curricula are likely to reflect these differences. This emphasises the need for common standards for training across Europe, which also defines the specialty and harmonises patient care.
Definition of Emergency Medicine

Emergency Medicine is a medical specialty based on the knowledge and skills required for the prevention, diagnosis and management of the acute and urgent aspects of illness and injury affecting patients of all age groups with a full spectrum of undifferentiated physical and behavioural disorders [3]. It is a specialty in which time is critical. The practice of Emergency Medicine encompasses the pre-hospital and in-hospital reception, resuscitation and management of undifferentiated urgent and emergency cases until discharge from the Emergency Department or transfer to the care of another physician. It also includes involvement in the development of pre-hospital and in-hospital emergency medical systems.

Definition of the Emergency Physician

Emergency Physicians care for patients with a wide range of pathology from the life threatening to the self-limiting, and in all age groups. The attendance and number of these patients is unpredictable and they mostly present with symptoms rather than diagnoses. Patient care includes physical, mental and social aspects. It focuses on initial care until discharge or referral to other health professionals. Patient education and public health aspects must be considered in all cases. Emergency Physicians have a fundamental role in modern healthcare systems. Emergency Medicine addresses the comprehensive medical needs of all patients in the emergency setting and prioritises interventions, coordinating and directing care for multiple patients at any one time. Emergency Physicians must possess not only the essential knowledge and skills necessary for patients requiring acute care but also the organisational insights and capabilities needed to work efficiently in the pre-hospital environment, the emergency department (ED) and short stay wards and ambulatory care.
I. TRAINING REQUIREMENTS FOR TRAINEES

1. Content of training and learning outcome

Competencies required of the trainee

An Emergency Medicine trainee is a doctor who has completed his/her general professional training as a physician having graduated as a doctor and completed an initial general training (equivalent of the Foundation programme in the UK). The trainee is in an accredited training programme to become a recognised Emergency Medicine specialist. The trainee is variably known in different countries as an intern, resident, fellow or registrar.

The trainee will be gaining experience and receiving feedback on the following competences as they progress through their training programme.

Core competences

The Emergency Physician must possess core competences reflecting clinical skills and a professional attitude when providing high-quality, safe patient-centred care.

The core competences of the European Emergency Physician are:

1. Provision of patient centred care
2. Medical knowledge and clinical skills
3. Communication, collaboration and interpersonal skills with the ability to work in interdisciplinary teams
4. Professionalism, ethical and legal issues
5. Organisational planning and service management skills
6. Education and training of other healthcare practitioners
7. Basic academic skills including critical appraisal of research evidence and primary research skills
8. Leadership and administrative/management skills
9. Application of evidence based practice and quality improvement methodology
10. Utilisation of information and other technologies

Common presenting symptoms

The Emergency Physician must be able to determine the cause of common presenting symptoms and determine the appropriate investigations and treatment required. These symptoms may arise in all age groups including children and the elderly and awareness of the differences in these age groups is essential:

Acute Abdominal Pain/ distension
Behaviour and Agitation
Altered Level of Consciousness
Back Pain
Bleeding (Non Traumatic)
Cardiac Arrest
Chest pain
Crying Baby
Diarrhoea
Dyspnoea
Fever and Endogenous Increase in Body Temperature
Headache
Jaundice
Pain in Arms
Pain in Legs
Palpitations
Seizures
Shock
Skin Manifestations
Syncope
Urinary Symptoms (Dysuria, Oligo/Anuria, Polyuria)
Vertigo and Dizziness
Vomiting

**System based core knowledge**

The Emergency Physician must have expertise in managing the acute presentations and conditions affecting all systems and in all age groups including children:

Cardiovascular Emergencies
Dermatological Emergencies
Endocrine and Metabolic Emergencies
Fluid and Electrolyte Disturbances
Ear, Nose, Throat, Oral and Neck Emergencies
Gastrointestinal Emergencies
Gynaecological and Obstetric Emergencies
Haematology and Oncology Emergencies
Immunological Emergencies
Infectious Diseases and Sepsis
Musculo-Skeletal Emergencies
Neurological Emergencies
Ophthalmic Emergencies
Pulmonary Emergencies
Psychiatric and Behaviour Disorders
Renal and genito-urological Emergencies
Trauma in Adults and Children
Complications of medical care

**Specific aspects of Emergency Medicine**

In addition to the above described competences, there are specific areas of expertise where Emergency Physicians have to take the lead to address current and future health needs.
These are areas where the specific expertise of the EP will support better healthcare and provide leadership for the collaborative work of multispecialty input.

Abuse and Assault
Analgesia and Sedation
Disaster Medicine
Environmental Accidents
Forensic Issues
Global health
Injury Prevention and Health Promotion
Patient Management Issues in Emergency Medicine
Prehospital care and dispatch
Problems in the Elderly
Toxicology

*Core clinical procedures and skills*

The Emergency Physician must be able to demonstrate and undertake procedures in patients with varied complexity and when under pressure. Whilst many other specialties share these procedural skills, it is the ability to operate under pressure and in complex multi-patient environments (both in the ED and outside of the hospital including austere environments) that is specific to the Emergency Physician. These skills should be demonstrated in all age groups including children – it should be noted that for children some procedures may be different.

- Cardiopulmonary resuscitation Skills
- Airway Management Skills
- Analgesia and Sedation Skills
- Breathing and Ventilation Management Skills
- Circulatory Support and Cardiac Skills and Procedures
- Diagnostic Procedures and Skills
- ENT Skills and Procedures
- Gastrointestinal Procedures
- Genitourinary Procedures
- Hygiene Skills and Procedures
- Musculoskeletal Techniques
- Neurological Skills and Procedures
- Obstetric and Gynaecological Skills and Procedures
- Ophthalmic Skills and Procedures
- Temperature Control Procedures
- Transportation of the Patient
- Wound Management
- Oral and maxillofacial procedures
- Point of care Ultrasound (POCUS)
Level of competence expected:
The Emergency Physician will progress in competence from a novice to expert and in being able to recognise a clinical condition or problem to being able to independently provide definitive treatment. There will also be progression in skills in managing time, multi-tasking, supervision, leadership and other core professional skills. In this regard 5 levels of competence are recognised:

1: The physician is able to recognise that the patient potentially suffers from the condition or diagnosis. The physician manages single patients and requires supervision.

2. The physician is able to estimate the likelihood that the patient suffers from a specific condition on the basis of bedside information (history, physical examination, bedside tests e.g. ultrasound, ECG, initial blood tests, urinalysis) and using clinical decision tools. The physician may manage simple conditions independently.

3: The physician knows how and acts to further evaluate the patient to rule-in or rule-out the diagnosis and may manage more than one patient at a time.

4: The physician knows how to initially manage the majority of patients in the ED and is able to undertake much of the initial work independently. The physician will manage more than one patient at a time and provide limited supervision and support to others.

5: The physician knows how to arrange further care either in-hospital or out-of-hospital and can coordinate the care as required or completes the care themselves where appropriate. The physician can provide leadership to others and supervise a department during a shift.

2. Organisation of training
a. Schedule of training
According to the EU-directive 2005/36/EC the minimum requirement of training to be recognised as an Emergency Physician as a primary specialty is 5 years of full time training. A minimum of three of these years should be in an emergency department accredited for training by the NTA, where the workload is between 30-35,000 attendances a year and where the full range of emergency cases is received and which includes the care of adults and children (see below).
Within the training programme it is recommended that the trainee will spend time developing skills in anaesthetics and critical care and this may be best achieved by a period of time working in those specialties. A possible programme may include 6 months in critical care, 6 months in anaesthetics and 6 months in paediatrics as well as a range of placements in other specialties as required by the National programme. Other local arrangements may be required to acquire the necessary skills and knowledge required of an Emergency
Medicine specialist. Countries will vary in the precise allocation of time within the programme for specialty experience. Within the programme a trainee should be evaluated at the end of each year and a personal learning programme devised that allows the trainee to acquire skills and competences not yet achieved.

b. Curriculum of training
The European Curriculum for Emergency Medicine is the standard curriculum for Europe. Many countries in Europe will have modified the European curriculum for the purposes of the specialty training in that country, which must then be approved by the National Training Authority (NTA).

c. Assessment and evaluation
A portfolio based on the core curriculum must be used for assessment. The purpose of the portfolio is to demonstrate progression against agreed educational objectives and coverage of the curriculum.

The portfolio should be electronic and include a logbook of experience, documentation of workplace based assessments, personal reflection, personal development plans and the record of review of progression by the supervisor. The progress should be monitored at least annually, by review of the portfolio and documentation of the discussion of progression should be included in the portfolio.

Formative assessment and Documentation
Formative assessment is used as part of an ongoing learning or developmental process in giving feedback and advice. It must provide benchmarks to orientate the trainee. These benchmarks must include evaluation of the non-technical skills defined in the curriculum as much as technical expertise.

It must evaluate the trainee’s progress and identify the strengths and weaknesses of that individual. The evaluation and any recommendations must be fully shared with the trainee.

The following should be part of formative assessment:
• Formal Documentation of trainee’s development and progress after review of evidence collected. The evidence may comprise:
• Workplace based Assessment
  ⇒ Observed clinical care of unselected patients during working time including team behaviours, communication, and non-technical skills.
  ⇒ Video or observed behaviour of the trainee within a team.
\textit{Mini Clinical Examination (or Direct Observation of Procedural Skills)}, to assess the knowledge, procedural and practical skills and attitudes of the trainee’s interaction with a patient.

\textit{Case-Based Discussion}, to explore clinical reasoning on a recent case.

- **Non-workplace based Assessment**
  - Record of participation in simulation
  - Record of courses
  - Personal reflection of cases and development
  - Record of elearning completed
  - Record of teaching received
  - Record of teaching delivered with feedback
  - Multisource feedback from multiprofessional team members
  - Patient experience feedback
  - Academic activity including critical appraisal, original research, editorial activity
  - Quality improvement activity including audit
  - Serious incident review and other governance activity

**Summative assessment**

Summative assessment is usually a formal assessment that takes place after a specified training period with the purpose of deciding whether the trainee has reached a standard to proceed to the next level of training or to be awarded a certificate of Completion of Training. The methods of summative assessment should include:

- **Written examinations** (multiple choice questions, short answered questions, essays).
- **Oral and practical examinations** (clinical vivas and objective structured clinical examinations or OSCEs i.e. stations to assess medical knowledge, clinical, communication and ethical skills in short predetermined scenarios).
- **Evaluation of trainee’s Portfolio and confirmation of appropriate progression**

The Section and Board recommend that the European Board examination in Emergency Medicine is adopted by all European countries as the final assessment of competence to promote freedom of movement of specialists in Europe.

**Evaluation**

The NTA and the appropriate professional bodies must establish a mechanism for evaluation of the training process that monitors each of the following areas

**Evaluation of training centres**

Accredited Training Centres must be evaluated in accordance with national rules and EU legislation as well as UEMS recommendations. Evaluation must also take into account the spectrum of services within the hospital. Repeated negative evaluations (where relevant) may result in the withdrawal of accreditation of a Training Centre. Engagement with
relevant UEMS bodies (NASCE, CESMA) may be supportive where there are no national rules.

**Evaluation of training programmes**

Regular internal and external evaluation of the Training Programme must be assured in a systematic manner both as regards adherence to the curriculum and the attainment of educational goals. Both trainees and trainers must have the opportunity to evaluate the programme confidentially and in writing at least annually. External evaluation must be made by visiting representatives of the NTA. The TPD must use the results of all evaluations to improve the Training Programme.

**Evaluation of trainers**

The Training Program Director must evaluate trainer performance at least annually. This appraisal should include evaluation of clinical teaching ability, clinical knowledge, professional attitude and academic activities. Trainers should be supported in developing their supervisory skills.

**Evaluation of trainees**

Specialist education and training must include continuous assessment which tests whether the trainee has acquired the requisite knowledge, skills, attitudes and professional qualities to practise in the specialty of Emergency Medicine. This must include formal annual and final evaluations.

The annual evaluation must formalise the assessment of a trainee’s competence to promote the trainee’s improvement.

Upon completion of the Training Programme the trainee must submit his/her portfolio. The TPD must provide an overall judgment about the trainee’s competence and fitness to practice as an independent specialist in Emergency Medicine. The individual assessment should include a final formal examination (written, oral and practical).
II. TRAINING REQUIREMENTS FOR TRAINERS

1. Process for recognition as trainer

a. Requested qualification and experience

The faculty is defined as all senior physicians and healthcare professionals who contribute to the training of the trainee. Faculty are made up of:

- Training programme directors (TPD) who supervise a training programme, ensure quality of trainers and training placements and coordinate placements to ensure trainees achieve the correct experience.
- Educational supervisors who provide ongoing individual professional development advice, monitor progression, provide placement reports on an annual basis and who are responsible for a limited number of trainees. Educational supervision activity usually occurs outside of clinical time in the emergency department and the majority of educational supervision does not include patient contact. Each trainee should have a named educational supervisor who provides advice and support over an extended period in one or more placements.
- Clinical supervisors who provide support in patient contact activity – giving clinical advice and maintaining standards of care for patients. Clinical supervisor supervise multiple trainees at one time, and the activity is usually within their clinical time. Clinical supervisors may undertake workplace based assessment as part of the clinical supervision.

All physicians should participate in practice-based training as emphasised. Trainers should receive training for their educational activity and demonstrate ongoing regular professional development in educational matters.

The faculty for Emergency Medicine must include a TPD and an appropriate number of trainers. Trainers should devote a large proportion of their professional efforts to training and should be given sufficient time to meet the educational requirements of the programme.

This is likely to be at least 1 hour per week for the educational supervisor for each individual trainee in addition to the contact time in clinical working.

Training programme director

The Training Programme Director must be a full time physician in the Emergency Department and must be either a specialist in Emergency Medicine (in countries where the speciality has been recognised for at least 5 years) or a specialist who has been practising Emergency Medicine for at least 5 years. The Director must be approved by the National Training Authority and fully direct the Training Programme.

Trainers must be either accredited by the NTA or selected by the TPD and accept responsibility for the day-to-day supervision and management of trainees as delegated by the TPD.
Clinical and educational supervisors
Clinical and educational supervisors must be Emergency Physicians and either a specialist in Emergency Medicine or a specialist who has been practising Emergency Medicine for a minimum of 3 years. There must be a sufficient number of trainers in the Emergency Department to ensure adequate educational and clinical supervision of trainees as well as efficient, high quality clinical care.

2. Quality management for trainers
III. TRAINING REQUIREMENTS FOR TRAINING INSTITUTIONS
(if not covered by EU Directive on Professional Qualifications)
1. Process for recognition as training centre

a. Requirement on staff and clinical activities
There must be a minimum number of undifferentiated new attendances of between 30,000-35,000 per annum for a training department. This number should include a minimum of 25% children under 16 years of age. A significant number of these patients must be ambulance conveyed.

The case mix in a training department should reflect the presentations and conditions in the syllabus. If a centre does not see an appropriate case mix, a programme of rotational posts between relevant centres or an alternative method for gaining practical experience must be in place.

The ratio of trainers to the number of trainees must be sufficient to allow training to proceed without difficulty and to ensure close personal interaction and monitoring of the trainee during their training [1]. The recommended optimal trainer/ Emergency Medicine trainee ratio is 1 to 2 within a department.

A trainer should be present for a minimum of 75% of the clinical working hours of the trainee and that there should be a trainer available for immediate advice at all times. Indirect clinical supervision (trainer immediately available for advice) is recommended for senior trainees only. Junior trainees may be clinically supervised by appropriately experienced senior trainees as part of the senior trainee development providing there is adequate indirect clinical supervision available.

Departments should consider the working environment and conditions and the impact of this on learning opportunities. Emergency Medicine imposes an intense workload on the staff and appropriate time between shifts, rest breaks within a shift and annual leave arrangements must be provided to ensure trainees are able to learn and develop their personal skills. Appropriate rest areas within a department and access to refreshments are part of the training environment.
A department is expected to undertake quality improvement activity such as audit, mortality and morbidity meetings, performance monitoring and serious adverse incident investigation. In addition there should be a named trainer responsible for training in scientific methodology including critical appraisal and statistical analysis.

b. Requirement on equipment, accommodation and facilities

The department must provide accommodation for trainees which includes access to:

- Sufficient formal training space with projection facilities, access to the internet and audio-visual equipment
- Access to simulation facilities for team based and critical skills training
- Office space for trainees to carry out quality improvement and scientific activity sufficient computers to allow for private study
- Internet access for clinical decision support in the clinical area
- Access to academic library
- Sufficient clinical equipment to allow trainees to deliver safe patient care
- Rest facilities providing food and hot drinks 24/7 and separate quiet space

2. Quality Management within Training institutions

Accreditation – there is no current European accreditation process for Emergency Medicine training departments but the World Federation for Medical Education has generic standards that are in place if there are no National Training Authority standards

Training should generally be carried out in university hospitals or affiliated teaching hospitals although some training can take place on rotations in general hospitals or the community/prehospital environment providing case-mix and supervision is adequate (as above).

Each training institution should have an internal system of medical audit or quality assurance, including a mortality review process for reporting adverse events.

The curriculum should be delivered through a variety of learning experiences. The foundation of postgraduate education in Emergency Medicine is predominately experiential training in conjunction with formal teaching sessions with the aim of integrating theory and clinical activities.

The trainees should be given opportunities for self-directed learning and professional development with agreed learning objectives and goals for the learning period.

The structure of rotas should reflect the needs of the service, the educational needs of the trainee and the safety of all.

Clinical supervision should be sufficient and balanced according to the experience of the trainee with increasing clinical independence and corresponding acceptance of responsibility.

At the national level a standardised process of assessments should be in place.

In Europe, a training centre would be recognised by the UEMS Section and Board for Emergency Medicine if the centre complies with the following:
Union Européenne des Médecins Spécialistes
European Union of Medical Specialists
Association internationale sans but lucratif – International non-profit organisation

- it is recognised by the national competent authority as a formal training centre in Emergency Medicine in that country
  AND
- has a training programme that is in accordance with the European curriculum of Emergency Medicine
  AND
- submits a 5-yearly self-evaluation of the training programme according to certification guidelines (to be developed)
  AND
- submits the training programme and its assessment system for approval by the Section and Board

Manpower planning
It is expected that national societies work with the competent authorities in the country to determine the manpower required for the specialty. This will include consideration of the utilisation of a multiprofessional workforce and take into account the requirements of prehospital Emergency Medicine as well as the in hospital provision of care. The development of training programmes and the training placements is expected to be matched to the likely demand for specialists to ensure appropriate supply of trained specialists in Emergency Medicine for the future delivery of care.

Structure for coordination of training
Countries will coordinate the training programme within the specialty. The UEMS Section and Board will receive reports on national training programmes on a yearly basis including the number of accredited training places, training placements, trainees enrolled on programmes, expected progression, attrition rate and appointment to specialist positions. The success rate at the EBEEM and national examinations will be compared.

Glossary of terms

EM = Emergency Medicine-

EP = Emergency Physician

TPD = Training programme director

CS = Clinical supervisor

ES = Educational Supervisor
EBEEM = European Board Examination in Emergency Medicine

EUSEM = European Society for Emergency Medicine

WFME = World Federation for Medical Education

NTA = National training authority

References

European Curriculum:

European Board Examination in Emergency Medicine https://www.ebeem.eu/