



UNION EUROPÉENNE DES MÉDECINS SPÉCIALISTES EUROPEAN UNION OF MEDICAL SPECIALISTS

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European Training Requirements

Pain Medicine

Training Requirements for the Core Curriculum of Multidisciplinary Pain Medicine

European Standards of Postgraduate Medical Specialist Training

Introduction

Patients with Acute and Chronic Pain

Within Europe and across the medical world there are patients with acute and chronic pain who deserve to be treated by doctors who are trained in the diagnosis, management, monitoring and treatment of their painful condition. This might include further investigations and referral to other specialists both for diagnosis and treatment. The care given to these patients should be based on sound medical evidence and treatment should be delivered in a holistic manner. Certain types of painful conditions, if not recognised and treated early may lead to very challenging forms of chronic pain and late referral at this stage to the Pain Clinic is often already too late.

The Multidisciplinary Joint Committee for Pain Medicine (MJCPM) within the UEMS understands the challenges presented to all specialists dealing with patients suffering from pain and is offering these “European Training Requirements” in an attempt to improve the quality of care for these patients. In addition there is the need of recognised and accredited specialist training (in whichever form is acceptable within the political structures of the EU and UEMS – see below) that is recognised by all as a minimum standard before any doctor can claim the title of having a special interest in pain medicine or practicing any aspect of pain medicine.

Background information on UEMS

- UEMS is the representative organisation of the National Associations of Medical Specialists in the European Union and its associated countries.
- With its current membership of 37 countries it represents over 1.6 million medical specialists in Europe



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- It operates through 43 Specialist Sections and their European Boards, 11 multidisciplinary joint committees, and 3 thematic federations, addressing training in their respective Specialty and incorporating representatives from academia (Societies, Colleges and Universities).
- It has strong links and relations with European Institutions (Commission and Parliament), the other independent European Medical Organisations and the European Medical / Scientific Societies.
- UEMS sets standards for high quality healthcare practice that are transmitted to the Authorities and Institutions of the EU and the National Medical Associations stimulating and encouraging them to implement its recommendations.
- The UEMS areas of expertise notably encompass Continuing Medical Education, Post Graduate Training and Quality Assurance.

Charter on Postgraduate Training 1994

- This provided the recommendations at European level for good medical training, and 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 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 intend 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.

European Legislation - EU Directive 2005/36/EC

- At the European level, the legal mechanism ensuring the free movement of doctors through the recognition of their qualifications was established back in the 1970s by the European Union.
- In 2005, the European Commission proposed to the European Parliament and Council to have a unique legal framework for the recognition of the Professional Qualifications to facilitate and improve the mobility of all workers throughout Europe.
- This established the mechanism of automatic mutual recognition of 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.

Pain medicine is not a recognised specialty in EU

- Directive 2005/36/CE does not identify pain medicine as a primary medical speciality.



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- It is not included in the Annex V of the European Directive, as Member States have not included Pain Medicine as an independent medical specialty
- The European Union requires that, for a specialty to be included in the annex V of the Directive, it must be recognized in at least 2/5th of the Member States (article 25) and at the same time, by a particular majority (a weighted vote that is determined by the population of each country and other factors and giving what is called a “qualified majority”) in a committee on qualification of the European Commission.
- These requirements for a primary specialty have not yet been fulfilled for Pain Medicine and therefore the aim should be the incorporation of Pain 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.

Pain medicine within the structures of UEMS (Specialist Section vs Multidisciplinary Joint Committee)

- To create a Specialist Section for PM within the UEMS, Pain Medicine 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 criteria have not yet been met for Pain Medicine and hence it cannot exist as a Specialist Section.
- However, UEMS Council can on the request of a Section or on its own initiative, ask one or more Sections to create a Multidisciplinary Joint Committee (MJC) for competences or spheres of activity belonging to several disciplines.
- Such a joint committee must be open to members of any Section wishing to participate.
- The daily management will be entrusted either to one of the Sections or to representatives of several Sections working in a collegiate way. Although not a Section in its own right, such MJC must follow the same UEMS rules of procedure as though they were a Section and refer all decisions to the Council.
- Hence the Multidisciplinary Joint Committee on Pain Medicine has been given the task by the UEMS Council to develop the “European Training Requirements (ETRs)” for Pain Medicine.
- These ETRs for Pain Medicine are not meant to create a separate speciality but to define the competencies required to be fulfilled by specialists coming from various relevant specialties to practice Acute and Chronic Pain Medicine.
- These competencies as defines in this document can be partially achieved during specialist training and partly achieved after completion of training of the primary specialty.



I. TRAINING REQUIREMENTS FOR TRAINEES

1. Content of training and learning outcome

The UEMS Multidisciplinary Joint Committee in Pain Medicine (MJCPM) is striving for the improvement of competence of medical specialists in Pain Medicine to achieve the highest quality of care for European Patients. It aims to have PM 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 MJCPM believes that it should be possible to train in PM in tandem with a primary specialty, either as a dual specialty, as a supra specialty or as a competence based training on top of the base training program. It will be left to each specialty Section to identify overlap and gaps of the ETR in relation to the respective Training Requirements to ensure that the necessary competences are acquired. To ensure that requirements are met, the duration of training will in most cases have to be adjusted. Many specialties will want to add components to their training programmes in order to achieve supra-specialty competency levels, and in fact these additional modules will together with the ETR constitute what we designate Multidisciplinary Pain Medicine.

These levels of acquisition/expertise required are defined as follows:

A: Has knowledge of and is able to describe

B: Performs, manages and demonstrates under supervision

C: Performs, manages and demonstrates independently

D: Teaches or supervises others in performing, managing or demonstrating

a. Competences required from Trainees:

These have been divided into three parts, those relating to:

- 1. Basics or Core Topics**
- 2. Special Pain Conditions**
- 3. Special Circumstances**



1. Competences relating to Basics or Core Topics

1.1. Multidimensional Nature of Pain: What is pain?

This domain focuses on the fundamental concepts of pain including the nomenclature, and experience of pain, and pain's impact on the individual and society.

- 1.1.1. Explains the complex, multidimensional, and individual-specific nature of pain.
- 1.1.2. Defines terminology for describing pain and associated conditions.
- 1.1.3. Describes the impact of pain on society.
- 1.1.4. Explains how cultural, institutional, societal, and regulatory influences affect assessment and management of pain.

1.2. Neurobiology and Pharmacology of Pain: What are the pain mechanisms?

This domain focuses on scientific basis of pain including the anatomical, neurophysiological, pathophysiological and pharmacological aspects of pain.

- 1.2.1. Explains the anatomic and physiologic basis of pain transmission.
- 1.2.2. Explains pain neurochemistry, inflammatory mediators and mechanisms of pain modulation.
- 1.2.3. Understands the cellular and molecular basis of pain and analgesia. Animal models of pain.
- 1.2.4. Understands the link between genetics and pain.
- 1.2.5. Has expertise in the site/s and mechanisms of action of the analgesic drugs:
 - Opioid analgesics. Mechanisms of action and clinical use
 - Non-Opioid Analgesics. Basic aspects and clinical use
 - Pharmacology and clinical use of antidepressants and antiepileptic drugs as analgesic medicines
 - Pharmacology and clinical use of ketamine and other co-analgesics
 - Local anaesthetics: Mechanisms and therapeutic use
 - Alpha-2 adrenergic agonists and cannabinoids in pain management

1.3. Pain assessment and measurement: How is pain assessed and measured?

This domain relates to how pain is assessed, quantified, and communicated, in addition to how the individual, the health system, and society affect these activities.

- 1.3.1. Can elicit a clinical history in pain patients (first visit): can use a Pain Questionnaire (Brief Pain Inventory, McGill test, Pain Disability Index, Multidimensional Pain Questionnaire, DN4, etc.); and understands the relevance and usefulness of the evaluated components.
- 1.3.2. Has knowledge of Pain Assessment Tools including Quantitative Sensory Testing (QST).
- 1.3.3. Demonstrates understanding of the Psychological Assessment of pain patients.



- 1.3.4. Uses valid and reliable tools for measuring pain and associated symptoms to assess and reassess related outcomes as appropriate for the clinical context and population.
- 1.3.5. Describes patient, provider, and system factors that can facilitate or interfere with effective pain assessment and management.
- 1.3.6. Assesses patient preferences and values to determine pain-related goals and priorities.
- 1.3.7. Demonstrates empathic and compassionate communication during pain assessment.
- 1.3.8. Has knowledge of daily evaluation of pain (electronic pain diaries, other), evaluation of the efficacy and safety of the treatments.

1.4. Pain investigation: How is pain investigated?

This domain relates to how pain is investigated in the clinic in order to help make a proper diagnosis and identify potentially treated conditions.

- 1.4.1. Can perform a thorough physical examination of the pain patient: Mapping of the painful areas; Motor and sensitive neurologic exploration; Functional Tests; Complementary tests, their usefulness and cost-benefit (blood tests, simple radiography, other).
- 1.4.2. Diagnoses by image: Simple X-Ray, CT, and MR for the study of the patients with pain.
- 1.4.3. Understands pain functional imaging. Usefulness and cost-benefit.
- 1.4.4. Has knowledge of other diagnostic tests: thermography, PET, scintigraphy, pharmacological tests, electromyography and electroneurography in pain diagnosis.
- 1.4.5. Describes the role and value of diagnostic nerve blocks.

1.5. Management of Pain: How is pain relieved?

This domain covers the various modalities of treatment of pain and how these can be integrated together in multidisciplinary treatment plans.

- 1.5.1. Integrates rehabilitation and physical medicine in the treatment and functional recovery of patients with chronic pain. Understands the utility and value of other physical methods used in pain management (osteopathy, manual therapy, massage, hydrotherapy, workful hardening, trigger points, neural therapy, etc.). Can discuss the efficacy of the different treatments.
- 1.5.2. Can identify psychological factors that modify the response to pain. Understands the role and value of cognitive methods and behaviour modification in the management of acute and chronic pains.
- 1.5.3. Understands the mechanisms, indications and therapeutic efficacy of acupuncture in the treatment of pain.
- 1.5.4. Has profound knowledge and expertise in the multimodal pharmacological management of Pain – WHO analgesic ladder, anti-neuropathic drug algorithms, herbal and non-conventional medications, and alternative routes for drug administration.
- 1.5.5. Has knowledge of the anatomy and principles involved in performing regional anaesthetic techniques, sensory nerve blocks, and sympathetic blocks. Knows the indications, risks and benefits. Can perform some of these procedures.



- 1.5.6. Knowledgeable of the science of radiofrequency lesions. Can describe the procedures as well as their indications, and efficacy.
- 1.5.7. Knows the indications and clinical efficacy of spinal, radicular and peripheral neurostimulation.
- 1.5.8. Can describe the role of deep and cortical brain neurostimulation and other neurosurgical treatments.

1.6. Organisational aspects of Multidisciplinary Pain Medicine: How is Pain Medicine practiced?

This domain covers the organization aspects of pain medicine in the context of how a multidisciplinary pain is delivered and maintaining high professional standards in practice.

- 1.6.1. Can describe in detail how to organise a Multidisciplinary Pain Unit along internationally recognised standards (e.g. IASP Standards).
- 1.6.2. Knows how to discuss the more important Randomised clinical trials (RCT) in pain medicine. Can demonstrate sound clinical judgement based on the concept of good clinical practice.
- 1.6.3. Understands the usefulness and limitations of Evidence-based medicine in pain management.
- 1.6.4. Formulates clinical decisions with respect to ethical and legal principles.
- 1.6.5. Communicates effectively with patients and relatives; involves them in clinical decision-making.
- 1.6.6. Maintains accurate and legible records, and documentation of clinical activity.
- 1.6.7. Involves fellow colleagues from other different specialities in decision-making about care and treatment, in a respectful manner.
- 1.6.8. Communicates well with other members of the multidisciplinary team.

2. *Competences relating to Specific Pain Conditions*

2.1. Acute Pain

This domain covers acute postoperative pain as well as pain in the Emergency Department and in acute clinical practice.

- 2.1.1. Can assess and manage post-operative pain using a multimodal analgesia model with full knowledge of the possible risks and management of possible complications. Has knowledge of prophylaxis and management of chronic post-surgical pain syndromes.
- 2.1.2. Demonstrates knowledge and competence in Pain management in the emergency department including the following scenarios :
 - abdominal pain
 - pain of cardiac and thoracic origin
 - the polytraumatized patient
- 2.1.3. Can perform simple peripheral nerve blocks in post-operative pain management.
- 2.1.4. Has knowledge of the physiology and pharmacology of analgesia for delivery. Can discuss the risk-benefit of the different analgesic modalities.



- 2.1.5. Can diagnose and treat non-operative acute pain (e.g. disc herniation, headache, neuropathic pain like acute herpetic neuralgia, inflammation, osteoarthritis, ischemia, etc.).
- 2.1.6. Has knowledge of the safety aspects of acute pain during pregnancy and lactation.

2.2. Neuropathic and related pains

This domain focuses on the diagnosis and management of the various neuropathic painful conditions.

- 2.2.1. Demonstrates a deep understanding of Neuropathic pain including the definition, epidemiology, aetiology and pathophysiology.
- 2.2.2. Can recognise the clinical characteristic of neuropathic pain from the clinical history, and eliciting the salient physical signs and be able to perform a differential diagnosis.
- 2.2.3. Discusses the neurophysiological exploration in the diagnosis of neuropathic pain including the advantages and limitations of the conventional neurophysiological studies.
- 2.2.4. Shows competence in the use of anti-neuropathic pain drugs including routes and modes of administration.
- 2.2.5. Discusses the efficacy of central and peripheral stimulation in the treatment of neuropathic pain.
- 2.2.6. Has knowledge of the following conditions and treatment options;
 - diabetic neuropathy
 - infectious neuropathies: Post-herpetic and HIV
 - various mono-neuropathies (toxic, metabolic, autoimmune, ischemic, hereditary)
 - cranial neuralgias: trigeminal, glossopharyngeal, occipital
 - traumatic and post-surgical neuropathies: post-amputation, plexopathies , post-spinal injury
 - central neuropathic pain syndromes (cerebrovascular accident, multiple sclerosis, thalamic lesion, other).

2.3. Spinal and musculoskeletal Pain

This domain covers the multidisciplinary aspects of spinal and musculoskeletal pain, including its diagnosis and all the various modalities of treatment.

- 2.3.1. Understands the epidemiology of musculoskeletal pain.
- 2.3.2. Describes the biology of joints, bones and its vasculature and inflammation as a source of pain.
- 2.3.3. Understands the bio-mechanics of the locomotor system.
- 2.3.4. Performs physical examination and clinical assessment of patients with musculoskeletal pain.
- 2.3.5. Recognises the psycho-social aspects that may be associated with chronic musculoskeletal pain.



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- 2.3.6. Proficient in clinical testing in the diagnosis of musculoskeletal pain. Understands the cost-benefit of imaging techniques and the use of ultrasound in the diagnosis of musculoskeletal pain.
- 2.3.7. Has deep knowledge of the pharmacological management of musculoskeletal pains: Local anaesthetics, NSAIDs, opioids, disease modifying agents, gene therapy, other. Describes the risk-benefit and efficacy of the different treatments.
- 2.3.8. Understands the role of central and peripheral nerve blocks and infiltrations in the management of musculoskeletal pain, including the risk-benefit of the various treatments.
- 2.3.9. Describes invasive therapies and surgery in musculoskeletal pain.
- 2.3.10. Describes the epidemiology, diagnosis and management of:
- Spinal pain: cervical and lumbar
 - Shoulder and elbow pain
 - Wrist and hand pain
 - Hip and knee pain
 - Ankle and foot pain
 - Emergencies in musculoskeletal pain
 - The myofascial pain syndrome
 - Fibromyalgia – classification, diagnosis, treatment

2.4. Headache and facial pain

This domain focuses on the diagnosis and treatment of patients presenting with headache and facial pain.

- 2.4.1. Understand the classification and mechanisms of various types of headaches and facial pain.
- 2.4.2. Knowledgeable in the investigation and differential diagnosis of various headaches and facial pain.
- 2.4.3. Understands the principles of diagnosis, prevention and treatment of :
- Migraine headache
 - Tensional headache: and other primary headaches
 - Cluster headaches, atypical pain, hemicranial pain
 - Neuropathic facial pain – Trigeminal neuralgias, post herpetic neuralgias.
 - Drug-induced headaches

2.5. Visceral Pain

This domain focuses on the diagnosis and treatment of visceral pain, including chronic pelvic pain syndromes.

- 2.5.1. Understands the available knowledge on the pathophysiology of chronic visceral pain including: visceral hyperalgesia, "the CNS-intestine axis", peripheral pain signalling in the gastrointestinal tract, mechanisms of chronic pelvic pain, refractory angina.



- 2.5.2. Has clinical skills in the assessment and differential diagnosis of patients with visceral pain and referred pain.
- 2.5.3. Describes the classification, diagnosis and management of chronic pelvic pain.
- 2.5.4. Describes interventional techniques in the management visceral pain. Diagnostic blocks.
- 2.5.5. Understands the risk - benefit of plexus and nerve blocks in the management of visceral pain: sympathetic and somatic-nerve blocks. Stellate ganglia blocks, and celiac plexus blocks.
- 2.5.6. Has knowledge of neuromodulation and neurostimulation for visceral pain: epidural and intrathecal catheters, implantable pumps or ports.

2.6. Complex regional Pain Syndromes (CRPS)

This domain focuses on the various clinical presentations and importance of early recognition and treatment of CRPS.

- 2.6.1. Describes the classification of CRPS – diagnostic criteria, types, severity
- 2.6.2. Understands the pathophysiology of CRPS
- 2.6.3. Demonstrates knowledge of clinical testing and cost benefit of imaging techniques
- 2.6.4. Knowledgeable of the early recognition and treatment of CRPS with a multidisciplinary approach: physical, pharmacological, psychological, interventional, mirror therapy, etc.

2.7. Cancer Pain

This domain focuses on the pain management aspects of patients suffering from various forms of cancer.

- 2.7.1. Describes the epidemiology and evaluation of cancer pain.
- 2.7.2. Understands the mechanisms involved in cancer-induced pain.
- 2.7.3. Describes and manages the various cancer related painful syndromes:
 - bone pain (cranium, vertebrae, long bones, chronic bone pain).
 - neuropathic pain (spinal cord compression, plexopathies, meningeal carcinomatosis).
 - visceral pain (pancreatic, hepatic, intestinal obstruction).
- 2.7.4. Experienced in the pharmacological treatment of oncologic pain including the use of opioids: The WHO analgesic scale, opioid tolerance, management of break-through pain
- 2.7.5. Describes interventional therapies for cancer pain management: spinal administration of Analgesics and neurolytic neural blockade.
- 2.7.6. Describes indications for specialised interventions including vertebroplasty, analgesic radiotherapy, and use of radioisotopes. Understands the principles of managing terminal patients within a multidisciplinary palliative care team.

3. Competences relating to Special Circumstances



3.1. Addiction and substance abuse

This domain focuses on problems of opioid addiction and other substance abuse in the context of managing patients suffering from acute and chronic pain.

- 3.1.1. Understands the management of opioid addiction and tolerance
- 3.1.2. Manages acute pain in the drug abuser
- 3.1.3. Describes methods of avoiding and managing opioid addiction in chronic pain sufferers

3.2. Pain management in Paediatrics

This domain is intended to cover those aspects of acute and chronic pain management that are unique or different in paediatrics.

- 3.2.1. Has knowledge of:
 - The relevance of paediatric pain.
 - Nociceptive development in humans.
 - Pain evaluation in children and neonates.
 - Postoperative pain management in neonates and children.
 - Pharmacokinetic / pharmacodynamic differences between paediatric and adult populations
- 3.2.2. Describes principles of management of the paediatric patient with chronic pain, including psychological care.
- 3.2.3. Understands the principles of pain management using:
 - analgesics, co-analgesics and adjuvants in chronic paediatric pain patients.
 - invasive techniques and regional analgesia for pain management in paediatric patients.
 - physical rehabilitation in children with chronic pain.
 - paediatric palliative care units

3.3. Geriatric Pain Medicine

This domain focuses on the fundamental concepts of acute and chronic pain management in the geriatric population.

- 3.3.1. Understands the neurophysiology of pain in the elderly.
- 3.3.2. Demonstrates skills in the rational use of drugs in the elderly. Opioids and non-opioids.
- 3.3.3. Has knowledge of drug interactions in pain management in the elderly.
- 3.3.4. Understands the specific differences in the treatment of pain in the elderly:
 - Post-operative pain in the elderly.
 - Non oncologic pains in geriatric patients.
 - Cancer pain in the elderly.
- 3.3.5. Coordinates the physical rehabilitation and psychological techniques in the management of chronic pain in the elderly.



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 knowledge
- ii. Practical and clinical skills (case management)
- iii. Attitudes and Professionalism

These learning objectives have been broken down accordingly into “Knowledge, Skills, Attitudes and specific aspects of Professionalism” that are deemed necessary to achieve the required level of for each competency.

The “learning objectives” are realistic endpoints that should be attained by the end of the residency period. They also represent measurable endpoints that should serve as a basis for the development of future evaluation modalities in order to objectively and reliably measure the acquisition of competencies throughout the curriculum. As far as Ethical commitment and principles, Quality & Safety Management, Non-Technical Skills and Multidisciplinary aspects are concerned; these aspects of training are considered mandatory and have been described with proper learning objectives.

2. Organisation of training

a. Schedule of training

Since the knowledge and skills of Pain Medicine are universal to many medical and surgical specialities, the MJCPM supports the view that training in Pain Medicine should continue to be possible after training and certification in a primary specialty. Thus training should be accessible in tandem with any relevant primary specialty or, as in UK and Ireland, as a dual accreditation (dual CCT)

If Pain Medicine is studied within a primary speciality, trainees should be recognised as being qualified in Pain Medicine after a minimum of five years of specialty-based training, to which extra time (usually one extra year) can be added for the acquisition of all relevant competences. 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.

b. Curriculum of training

Particular qualifications and Subspecialisation in certain areas or domains in Pain Medicine: further acquisition of expert status in certain domains will require extra training years. Though guidelines for



training in these domains often exist, these are not considered as formal or recognized sub-specialty domains, isolated from the primary specialty and the pain medicine qualification.

c. Assessment and evaluation

In this document the following definitions proposed by UEMS are being used:

Assessment: Process by which information is obtained relative to some known objective or goal. (A broad term that includes testing).

Assessment modalities should include both formative and summative assessments. Formative assessments should take place throughout the training period, and include different modalities such as resident evaluation tools based on the Mini-CEx or direct observations (of clinical encounters or of procedures), and simulation-based training/evaluation. Further in-training evaluations of knowledge with MCQs or vivas are also recommended.

Evaluation: Inherent in the idea of evaluation is "value." Process designed to provide information that will help us make a judgment about a given situation.

Evaluation and Certification should occur through in-training assessments and summative end-of-training examinations, ideally by participating in European examinations if available. The existence of supra-national examinations provides an incentive for the development and improvement of departmental, university, national and European training programs. The aim of the examination is to achieve a uniformly high standard of knowledge within Pain Medicine throughout Europe as judged by an independent Board of Examiners.

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 against all the required competencies made up of performance based assessments. Additional objective measures of competency delivered nationally may include written and/or clinical examinations tailored to examine expected performance mapped to the expected performance described in the competency framework.

An annual interview by a competent authority based on objective review of the evidence against the competency framework providing a summative assessment of progress is required. Written feedback summarizing the competencies achieved and any gaps to be met in the next training year is 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 interview 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



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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 consultants and tutors to have regular meetings with the trainee in order to document progress and provide guidance on the acquisition of specific competencies, particularly those related to non-technical skills.

d. Governance

It should be stressed that these guidelines and training requirements are non-exhaustive and represent only the actual state of medical practice in the specialty; the present document is thus a living document that will see many amendments and changes reflecting future changes in our medical specialty practice.

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 Pain Medicine have acquired the appropriate knowledge, skills and competence expected in that country. At a European level, the UEMS MJCPM has a mandate to address the training agenda. The MJCPM is responsible for establishing and updating the required competencies. It is also actively engaged in developing tools for assessment of competence within European Pain Medicine.



II. TRAINING REQUIREMENTS FOR TRAINERS

1. Process for recognition as trainer

There are very different and non-harmonized levels in the different European countries in terms of professional development and educational training support, promotion of skills development, and encouragement of educational innovations among faculty. It is assumed that the integration of pedagogies and teaching technologies can enhance learning, and any training institution must be committed to make proposals to prepare faculty to take on the academic challenges of instruction, along with the challenges of information delivery.

a. Requested qualification and experience

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

b. Core competencies for trainers

Educational tutors must be practicing PM clinicians who have received appropriate training for the additional educational roles. They should possess the competences listed in both the general and specific pain conditions as defined in the present curriculum 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.

2. Quality management for trainers

It is recommended that existing programs throughout Europe should use learning models which are focused on conceptual learning and behavioral 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” programs should ideally include training of these important aspects; likewise, tools for measuring teaching performance should be made available.



III. TRAINING REQUIREMENTS FOR TRAINING INSTITUTIONS

1. Process for recognition as training centre

European Hospital Visiting and Training Accreditation was instituted to evaluate training programme in terms of facilities, design of education, standard and involvement of faculty, balance between clinical training and didactic teaching and the possibility for research. These visits might be to single hospitals or to a group of hospitals, which are regarded as a training unit with a complete teaching programme. The accreditation process will also include interviews, review of records, logbooks, audits, guidelines and local protocols.

The inspection focuses on structure as well as process. Structure addresses resources such as medical staff, facilities, library, technical equipment, access to medical service and opportunities for research and development. Process refers 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. Good educational resources may not be used to their full potential because of inadequate involvement, and conversely, a positive educational and academic climate may compensate for material deficiencies.

Once accredited and certified these training units will, as *Centres of Excellence*, serve as references for national visiting programmes, and hopefully also take on a mentoring role for other European departments seeking accreditation. This will also promote rotation of trainers and trainees which will further contribute to future safety in acute and perioperative health care in line with the intentions of existing Declarations on patient safety.

a. Requirement on staff and clinical activities

Minimal number of patients cared for as inpatients and as out patients

Even if minimum numbers may apply nationally, the intention of the MJCPM training guidelines is that the training should be Competency Based Training and that a portfolio model can be used to continuously assess the progress of training.

Range of clinical specialties

All relevant specialties and subspecialties should be represented in the specialist training rotation.

Composition and availability of faculty; training programme defined; guidelines applied; trainee/trainer ratio



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There must be an appointed specialist tutor or consultant in charge of training and this person must have sufficient time allocated for the assignment. There must be a written document describing the teaching programme, and departmental guidelines for intensive care practice should be in place. The trainer/trainee ratio will be assessed and so the qualifications of training faculty (clinical, teaching and academic competence). Equally important is it that a positive attitude towards training and teaching is verified and supported by both trainees and teachers within the institution, and that there is a clear commitment to theoretical teaching and practical instruction of trainees within the full range of clinical practice.

Minimal scientific activity

The faculty publication record, lecturing and other academic activity will be assessed during accreditation. An accredited department responsible for Pain Medicine is also expected to organise and run programmes of educational activities (lectures on relevant topics, meetings and seminars on matters such as mortality and morbidity, critical incident reporting, clinical audit and research) as well to support opportunities for attending educational courses and scientific meetings.

b. Requirement on equipment, accommodation

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

Accredited/certified centres will provide research opportunities for trainees (resources, facilities, guidance and supervision). Hence, there should be sufficient resources on areas such as Library, IT, Statistics and other learning aid facilities. Adequacy of departmental accommodation/facilities for trainees is expected for both regular hours and when on-duty. Standard and availability of medical-technical equipment must be adequate for teaching.

2. Quality Management within Training institutions

Clinical Governance

Organisation, management, leadership, communication and team work are all topics that should be inherent to modern training programmes, but these also form a 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 and systematic approach to Medical Audit.

Manpower planning

Working hours and adequacy of service workload should be reviewed and also if there are any



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negative effects of service pressures on the training. Roster planning and hours on-call must be compliant with the European Working Time Directive, and any impact on training of such issues should be noted. Physical working conditions (changing rooms, on-call accommodation, secure lockers, access to reference books and work space, etc.) must be of adequate standard to allow good training conditions.

Transparency of training programmes

All relevant activities should be recorded in logbooks. The quality and availability of clinical instructions and formal teaching by consultants should also be noted as well as self-reflections on the management of cases.

Structure for coordination of training

Bed-side teaching should be practised both day time and during on-call. Sufficient supervised time with tutors/consultants should be scheduled and help/advice/appropriate assistance from consultants must be available when requested both during office hours and on duty.

Framework of approval

It will be assessed whether trainees undergo a process of continuous assessment, appraisal and guidance (conducted by consultant staff/led by programme director/tutor) to ensure that they are making good progress, and that appropriate amount of time is allocated for this. Ideally there is a continuous assessment of trainees' progress (formative assessment) and/or a competency based evaluation system (e.g. training portfolio) in place.