Training Requirements for the Specialty of Paediatrics

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.

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. Therefore the UEMS committed itself 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.

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 20 years 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 aimed 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.

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. Sectorial Directives were adopted and one Directive addressed specifically the issue of medical Training at the European level. However, 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 Directive 2005/36/EC 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.

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".1 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 X". This document aims to provide the basic Training Requirements for each specialty and should be regularly updated by UEMS Specialist Sections and European Boards to reflect scientific and medical progress. 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.

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Introduction

General Policy Statement

The objectives of the European Board of Paediatrics (EBP) are to assess, set standards for and progressively harmonize the content and quality of training and continuing medical education in all fields of paediatrics within the member states of the European Union (EU) and the other European countries.

There is a trend towards increasing specialization within paediatrics which has progressed to different degrees in different parts of the EU and some of the fields of paediatrics encompassed by the EBP have become recognized in some countries as well-defined or even totally independent paediatric specialties.

The trend towards greater specialization is supported by the EBP whenever consistent with improved standards of clinical practice and training. However, in order to meet the needs of the many European hospitals which are not large enough to justify the same highly compartmentalized departments of paediatrics that have become the norm in most teaching centres it is essential to ensure that paediatricians are able to obtain broadly based training across all the various fields. This makes it essential for newly emerging paediatric specialties to continue to collaborate closely within the well-defined framework of the EBP.

In order to encourage beneficial specialization, while maintaining the integrity of paediatrics as a whole, it is the policy of the EBP to establish Paediatric Specialty Boards to accommodate the special requirements of well-defined areas of paediatric practice.

Paediatric specialty Boards have responsibility for establishing and monitoring standards of training within their specific field of paediatrics while the EBP functions as a "common house of paediatrics" to coordinate the interrelationship, recommendations and actions of the Paediatric Specialty Boards as they develop.

The EBP will require input from the Specialty Boards in common trunk training. It is empowered to issue European Board of Paediatrics Certificates of Quality of Training (EBPCQT) in the paediatric specialties on the recommendation of its Paediatric Specialty Boards.

The EBP cooperates with national professional authorities and especially with the scientific organisations in the process of standardisation and harmonisation of paediatric curricula.
The standardisation efforts are paralleled with the continuous development of paediatric qualification, validation, certification, recertification, professional development and CME processes and projects.

The EBP enhances strategies to see the Board qualification (Fellowship of the EBP) legally adopted in the countries aiming to a common European qualification process, that also respects national and regional peculiarities.

**Training Policy and requirements**

The EBP, composed of representatives of the national professional paediatric organisations, the national scientific paediatric organisations and the universities promotes the cooperation between these entities and the harmonisation of paediatric training programs in the EU.

It acts as a coordinating and monitoring body for the training in paediatrics in the EU and formulates standards, mentioned hereafter, for the training institutions, the teachers and the trainees within the specialty of paediatrics.

Teachers and training institutions select and appoint trainees who are suitable for paediatrics. In order to train the most suitable individuals for this specialty, a selection procedure on a national basis must be set up. This selection procedure must be transparent and application must be open to all persons who have completed basis medical training.

The duration of paediatric training should be five years, after having completed medical school.

A three-year basic training program should be incorporated in the full training during which the paediatric trainee shall acquire a central core of knowledge embracing physiology, development and growth, metabolism and nutrition, immunology and infectious diseases, pathology, neonatology, trauma and resuscitation, emergency and intensive care, safeguarding.

The common trunk training in general paediatrics sets the foundation for an additional 2 (to 3) years in one of the three options the discipline of paediatrics can encompass:

- Primary care or community paediatrics
- Secondary care or hospital-based general paediatrics
- Tertiary care or hospital-based paediatric subspecialities (see list in Annex 2).

Trainees must acquire experience in each of the areas of responsibility as given under the syllabus of general paediatrics, in a structured and approved training program. Skill experience should be documented in adequate log-books. Credit as paediatrician can only be claimed when the trainee has actively participated in all phases of
treatment; has made or confirmed the diagnosis, participated in the selection of the appropriate procedure, has either performed or been responsibly involved in performing procedures and has been a responsible participant in both acute and chronic care.

The National Training Authorities (NTA) and/or the EBP, together with the teachers and training institutions shall implement a policy of quality assurance of the training. This includes visits to training institutions, assessment during training, monitoring of the log-books or other means. Visitation of training institutions by the NTA and/or the EBP shall be conducted in a structured manner.

Each country should train only enough paediatricians to meet its own requirements. A European quorum, suggested by the EBP, should be established on an annual basis between member states of the EU. Trainees should have the opportunity to be partly trained in recognized training institutions both in other member states of the EU as well as outside the EU. These training periods have to be approved by the NTA. The EBP shall maintain a list of training centres in the EU willing to exchange trainees. The EBP strongly recommends a period of basic or clinical research within the training program.

Training institutions need be recognized by their proper NTA.

Training must take place in an institution or group of institutions which together offer the trainee practice in the full range of the specialty as defined in the syllabus. Consultations and procedures should be sufficiently varied, quantitatively and qualitatively sufficient, and include training in inpatient care, day care and ambulatory care.

Neighbouring specialties must be present to a sufficient extent to provide the trainees the opportunity of developing their skills in a team approach to patient care. Specialised institutions may be recognized by the NTA for periods of training.

The training institution must have an internal system of paediatric audit/quality assurance including features such as mortality and morbidity conferences and structured incident-reporting procedures. Furthermore, various hospital activities in the field of quality control such as infection control and drugs and therapeutic committees should exist. Visitation of training centres by the NTA or the EBP shall be conducted in a structured manner.

In the training centre the trainee should have space and opportunities for practical and theoretical study. Access to adequate national and international professional literature should be provided (library) as well as space and equipment for practical training of techniques in a laboratory setting.
The chief of training should have been practicing paediatrics for at least 5 years after specialist accreditation and must have been recognized by his NTA. The Chief of training and his associate training staff should be actively practicing paediatrics.

The training program should be structured in accordance with national rules and EU/EBP recommendations. The ratio between the number of specialists on the teaching staff and the number of trainees at any given moment should be tailored so as to provide close personal monitoring of the trainees as well as adequate exposure of the trainees to sufficient practical work.

To build up their experience the trainees should be involved in the management of a sufficient number of inpatients, day care patients and ambulatory patients. They must perform a minimum number of practical procedures. The amount and diversity of these procedures is set by the NTA and agreed by the EBP.

The trainees must have sufficient linguistic ability to be able to communicate with patients, to study international literature and to communicate with foreign colleagues. The trainees shall keep up their personal log-books according to national rules and EU/EBP recommendations.

TRAINING REQUIREMENTS FOR TRAINEES

1. Content of training and learning outcome

Paediatrics is an independent medical specialty based on the knowledge and skills required for the prevention, diagnosis and management of all aspects of illness and injury affecting children of all age groups from birth to the end of adolescence, up to the age of 18 years.\(^2\) Eighteen years of age has also been retained by the Global Pediatric Education Consortium to define the field of paediatrics.\(^3\)

Paediatrics is not just about the recognition and treatment of illness in babies and children. It also encompasses child health, which covers all aspects of growth and development and the prevention of disease.

The practice of Paediatrics encompasses several aspects including preventive paediatrics, social and community paediatrics as the influence of the family and other environmental factors play a large role in the development of the child, and acute and specialised paediatrics. These specialised areas include many


\(^3\) http://www.globalpediatrics.org/globalkurriculum/curriculumdownloadpdf.html
conditions that require life-long management and follow-up before a smooth transition of care to adult services.

The paediatrician must have acquired and must maintain “Theoretical knowledge” in basic sciences required in the practice of paediatrics, namely genetics, physiology of organ development, growth and nutrition, immunology and infectious diseases, pharmacology and metabolism, and “Practical and clinical skills” relating to diagnosis and therapy. He/she must also acquire good knowledge and attitudes in relation to communication and interpersonal skills, ethics and professionalism, patient safety and quality improvement.

The Common Trunk Curriculum comprehensively describes “Theoretical knowledge” and “Practical and Clinical Skills” (basis for an individual “Log-book”) mandatory for the qualification as General Paediatrician. The syllabus which is part of the Common Trunk should not be viewed as static, but will be continuously revised and updated by the members of the EBP. It is noted that research and changes in medicine may lead to significant changes. It is noted, that research and changes in medicine may lead to significant changes in theory and clinical practice and by that will influence the content of the syllabus. New topics will be introduced and obsolete topics may be deleted.

a. Theoretical knowledge

The specialty of general Paediatrics requires documented and assessed knowledge (see appendix 1) in:
1) Adolescent pathology
2) Allergy
3) Cardiology
4) Community medicine
5) Dermatology
6) Diseases of the Orbita and Eyes
7) ENT Disorders
8) Endocrinology & Diabetes
9) Emergency medicine
10) Gastrointestinal & Hepatic diseases
11) Genetics & Dysmorphology
12) Haematological & Oncological Disorders
13) Infectious and Immune deficiencies
14) Mental health & Behavioural Disorders
15) Metabolic Diseases
16) Neonatology
17) Nephro-Urology Disorders
18) Neurology & Neuromuscular Disorders
19) Pre-, Peri-, and Post-surgical Care
b. Practical and Clinical Skills

The speciality of general Paediatrics requires assessed and documented numbers for “Practical Skills”:

<table>
<thead>
<tr>
<th>TRAINEE WILL BE ABLE TO PERFORM INDEPENDENTLY</th>
<th>Common Trunk General Paeds.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capillary or peripheral blood samplings</td>
<td>✔</td>
</tr>
<tr>
<td>Electrocardiogram</td>
<td>✔</td>
</tr>
<tr>
<td>Lumbar puncture</td>
<td>✔</td>
</tr>
<tr>
<td>Urethral catheterization, supra-pubic aspiration of urine</td>
<td>✔</td>
</tr>
<tr>
<td>Collection of blood from central lines</td>
<td>✔</td>
</tr>
<tr>
<td>Umbilical venous and artery cannulation and sampling</td>
<td>✔</td>
</tr>
<tr>
<td>Bag, valve and mask ventilation</td>
<td>✔</td>
</tr>
<tr>
<td>External chest compression</td>
<td>✔</td>
</tr>
<tr>
<td>Tracheal intubation of term newborn babies</td>
<td>✔</td>
</tr>
<tr>
<td>Tracheal intubation of preterm babies and older children</td>
<td>✔</td>
</tr>
<tr>
<td>Administration of exogenous surfactant</td>
<td>✔</td>
</tr>
<tr>
<td>Safeguarding</td>
<td>✔</td>
</tr>
<tr>
<td>Administer intradermal, subcutaneous, intramuscular &amp; intravenous drugs</td>
<td>✔</td>
</tr>
<tr>
<td>Needle thoracocentesis for pleural effusion or pneumothorax</td>
<td>*</td>
</tr>
<tr>
<td>Insertion of intraosseous needle</td>
<td>*</td>
</tr>
<tr>
<td>Percutaneous long line insertion</td>
<td>*</td>
</tr>
<tr>
<td>Abdominal paracentesis</td>
<td>*</td>
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</tbody>
</table>

* May need supervision

Candidates for the qualification must demonstrate skills in each of the above areas of responsibility and be able to present a complete and signed log-book. The candidates’ individual log-books have to fulfil the UEMS criteria. In the logbook for each item patient's initials (or hospital admission number), type of procedure, date of procedure and approval with signature by independent expert have to be provided.

Candidates for the qualification in general paediatrics should have followed the ERC resuscitation course and being certified in Cardio-Pulmonary Resuscitation in both neonates and children.

c. Practical and Clinical Skills

The EBP has established a formal process for assessing training and qualifications in general Paediatrics. The details are provided in Appendix 1.

II. TRAINING REQUIREMENTS FOR TRAINERS

Process for recognition as trainer
The Section of Paediatrics of the UEMS and the EBP offer the opportunity to senior paediatricians to obtain the qualification of ‘Fellow of the European Board of Paediatrics’ as Honorary Fellows; award of an Honorary European Diploma in Paediatrics.

Experienced and practicing specialized paediatricians with at least 10 years of continuous service in formally recognized posts can apply for an Honorary Diploma and be exempted form the examination process.

Applications should be submitted to the Secretariat of the European Academy of Paediatrics/Paediatric Section of the UEMS (secretariat@eapaediatrics.eu).

A complete application should include (all documents in English):

1) A letter from the applicant highlighting the reasons he is worthy of an Honorary Diploma. Emphasis should be given to clinical experience as well as research and educational achievements.

2) Four letters from peers in support of the application, specifically highlighting the reasons for which the applicant is worthy of an Honorary Diploma. Two letters have to be provided by peers who know the applicant personally and have worked with him/her for at least 5 years and two from independent referees with a sound international reputation. The letters must analyse the overall achievements of the applicant and give emphasis to his/her suitability as a trainer in paediatrics; this needs to be measured against the well established criteria of the country where the applicant is practicing.

3) A copy of the applicant's complete CV, and a passport size photo.

4) Payment of the application fees (amount to be determined on yearly basis) to the account of the EAP/UEMS section of paediatrics:

A subcommittee appointed by the President of the EBP made of members from the EAP Executive as well as National Representatives evaluate the applications and give a recommendation to the EAP that finally decides regarding the acceptance or not of the application (majority of at least 2/3 of the members). A successful applicant is awarded the title of Honorary Fellow of the European Board of Paediatrics. Unsuccessful applicants are encouraged to apply for the exam in order to get the Fellowship of the EBP qualification.

The robust process of applications for Honorary Diplomas and the fact that it is mandatory that applicants have to provide evidence and relevant references...
III. TRAINING REQUIREMENTS FOR TRAINING INSTITUTIONS

Process for accreditation of centres for training in general paediatrics

The EAP/UEMS section of paediatrics considers the accreditation of centres in Europe for training in General Paediatrics to be of paramount importance.

The process of application and evaluation prior to accreditation for training is based on the well established relevant practice of the UEMS; the steps are as follows:

1. Initially, the Centre has to submit an application to the EBP including:

   a) A formal letter by the Chairman stating the wish of the Centre to apply and highlighting the history of the centre, its major achievements and providing evidence of recognition of its status at a national and international level.

   b) A report regarding the Centre and the Training Programme. The information must cover the following domains:

      ▪ Brief history of the Centre and general description of paediatric activity
      ▪ Brief description of the training setting
      ▪ Trainee paediatricians (Residents, Clinical Fellows, PhD Students, Visiting Fellows) who worked and were trained in the Centre for minimum time of one year in the last 10 years
      ▪ Faculty (junior and senior)
      ▪ Number of children cared at the Centre per year over the last 5 years
      ▪ Facilities available (clinical, research, educational)
      ▪ Library facilities
      ▪ Best 20 papers in the last 5 years including at least one of the trainee
      ▪ Grants for scientific projects in the last 5 years
      ▪ Courses, lectures and other teaching initiatives in the last 5 years
      ▪ Graphs, tables, reports or any other material that describe the work of Centre and especially its training programme can be included.

   c) A fee (determined on a yearly basis) has to be paid to the account of the EAP UEMS Section of Paediatrics of the along with the initial application.

2. The application will be forwarded via e-mail to the EBP Chairman (cc. to the EAP Secretariat) and will be reviewed by a subcommittee of the EBP prior to its review by the EAP General Assembly at the next business meeting for approval.
or return to the applicants requesting more information. The application has to be submitted to the EAP at least 4 weeks prior to the business meeting.

3. If the initial application is approved, then the next step is to organize a visit to the Centre of a Committee of 3 members: two from the EBP and one external reviewer. The Committee will visit the Centre on site and meet with the Chairman, the Faculty and the Trainees and review on site the work of the Centre in all the domains of the original application. The visit will last one day and it will be strictly professional with no social programme. The Centre applying for accreditation needs to cover the travel and accommodation expenses of the members of the Committee. An effort is made so that the members are from countries close to the applying Centre to minimize the expenses.

4. Following the visit, the Committee will produce a report and scoring of the Centre in the same domains of the initial application.

Each domain will be scored from 0-3:

- 0: insufficient/ absent
- 1: sufficient
- 2: good
- 3: excellent

A minimum score of 36 (75%) is required for the Committee to give a positive recommendation to the EBP. This will be presented at the next business meeting of the EAP where a vote will be taken by all members regarding the approval of the application; a 2/3 majority is needed for approval.

5. If approved the Centre will be awarded the Accreditation for Training Certificate of the EAP/UEMS section of Paediatrics.
Annex 1 – The European Curriculum for Common Trunk in Paediatrics
Cf. Attached document.

Appendix 2 – The approved syllabi for paediatric subspecialty training

<table>
<thead>
<tr>
<th>Paediatric specialties</th>
<th>European Paediatric Societies</th>
<th>Specialty delegates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergology (2005, revised 2011)</td>
<td>EAACI</td>
<td>Jose Lopes Santos (P)</td>
</tr>
<tr>
<td>Cardiology (2005)</td>
<td>AEPC</td>
<td></td>
</tr>
<tr>
<td>Dermatology (pending)</td>
<td>?</td>
<td>Arnold Oranje (NL)</td>
</tr>
<tr>
<td>Endocrinology &amp; Diabetes (1998)</td>
<td>ESPE</td>
<td>Feyza Darendelider (TU)</td>
</tr>
<tr>
<td>Emergency Medicine (2011)</td>
<td>EuSEM</td>
<td>Jean-Christophe Mercier (F)</td>
</tr>
<tr>
<td>Gastroenterology &amp; Hepatology (1998, revised 2009)</td>
<td>ESPGHAN</td>
<td>Alan Philips (UK)</td>
</tr>
<tr>
<td>Hemato-Oncology (2001, revision just received 2013)</td>
<td>ESPHI/SIOPÉ</td>
<td>Ricardo Ricardi (I)</td>
</tr>
<tr>
<td>Immunology (1998)</td>
<td>?</td>
<td>Maria Xanthou (GR)</td>
</tr>
<tr>
<td>Infectious Diseases (2003)</td>
<td>ESPID</td>
<td>Andrew Cant (UK)</td>
</tr>
<tr>
<td>Intensive Care Medicine (pending)</td>
<td>ESPNIC</td>
<td>Jan Hazelzet (NL)</td>
</tr>
<tr>
<td>Metabolic Diseases (2001)</td>
<td>SSIEM</td>
<td>John Walter (UK)</td>
</tr>
<tr>
<td>Nephrology (1999, revision in progress)</td>
<td>ESPN</td>
<td>Pierre Cochat (F)</td>
</tr>
<tr>
<td>Neurology (2002, revised 2010)</td>
<td>EPSN</td>
<td>Colin Kennedy (UK)</td>
</tr>
<tr>
<td>Rheumatology (1998, revised 2008)</td>
<td>ESPR</td>
<td>Traudel Saurenmann (CH)</td>
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