Training Requirements for the Specialty of Public Health

*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 34 national associations and operating through 39 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 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 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.

Introduction.

The European Commission defines public health “as the science and art of preventing disease, prolonging life and promoting mental and physical health and efficiency through organized community effort. Public health may be considered as structures and processes by which the Health of the population is understood, safeguarded and promoted through the organized efforts of society.”

The UEMS section for Public health is continuously involved in the development and harmonization of the medical specialty in Public Health in the EU countries. In this European Training Requirements, the present outcome of this work is documented.

Public Health is a medical speciality recognised in all European countries. The medical specialist in Public Health uses his theoretical knowledge from basic medical education and
specialist training in Public Health Medicine. The medical specialist in public health, thus, has the theoretical knowledge needed to integrate medical sciences and public health.

Public health as a medical speciality focuses on the relationship between societal conditions and the health of the population. In its broadest sense, public health includes all measures taken in a society that aim to improve the population’s health. The doctor who has specialised in Public Health Medicine uses his skills and competencies to contribute to this. Working fields of Public Health Specialists are scientific research in public health, public health planning and evaluation or advisory tasks and policymaking in public health in general, or a specific public health field, for instance infectious disease control, non-communicable diseases, mental public health, environmental health, child public health and the health of other vulnerable groups.

I. TRAINING REQUIREMENTS FOR TRAINEES

Content of training and learning outcome

Competencies required of the trainee

a. Theoretical knowledge

As a medical speciality, Public Health has a range of knowledge that differentiates Public Health from other medical specialties and from other health and health-related professions. Fields of theoretical knowledge included are:

- Epidemiology
- Prevention
b. **Practical and clinical skills**

*Key skills to possess in this specialty*

*Number of procedures required*

There is a common thread in the work and skills of the Public Health Specialist, which has been identified in the UEMS work with the harmonisation of the speciality. One basic field is the surveillance and evaluation of the health of the population. For this purpose, the specialist is trained in epidemiology, i.e. the study of health in the population. Studies of the distribution of health and diseases among different population groups as well as analyses of determinants of health are regularly performed. This kind of information is often used in the
planning and evaluation of health services. Epidemiological surveillance is also important for public health control of, for instance, communicable diseases and health problems in the environment.

The Public Health Specialist is also skilled in further analysing the health of the population. This includes studies of different mechanisms behind trends and differences in the health of the population. The determinants of health are analysed on different levels, such as the community level, the small group level or the individual level, as part of a public health strategy. For instance, analyses on the community level include the role of globalisation, urbanisation or changes in the labour market. Studies on the small group level can focus on the role of family, school or other social networks. The objectives of the individual level analyses are to understand how different people cope with their circumstances in life and how health related behaviours, such as smoking, alcohol and eating habits, are established. The medical skills of a Public Health Specialist are used to analyse these determinants on individual and community levels and to identify what implications they have for health.

Another main skill of the Public Health Specialist is to plan, participate in or evaluate preventive and control programmes. The programmes may have different focuses, such as community and/or organization oriented interventions, or programmes for individuals with high level of risk for disease. The objective differs between promoting health (health promotion), preventing the occurrence of disease (primary prevention), detecting and managing early phases of a disease (secondary prevention) or minimising the complications of a disease (tertiary prevention). Furthermore, Public Health Specialists are involved in health impact assessments.

The Public Health Specialist uses his skills to participate in the multidisciplinary health impact assessment by analyzing and estimating potential health impacts of projects, programmes and policies on the whole population, with a particular reference to how the proposal will
affect vulnerable people (vulnerable, that is, in terms of age, gender, ethnic background and socio-economic status). For this purpose the Specialist must be able to inform decision-makers about those potential impacts and to identify appropriate and sustainable actions to manage those effects. His/her skills should also include the study of environmental determinants of health.

The specialist in public health is also skilled in organizational issues in health care. This may include participating in policy and strategic development in health care, planning and allocation of health care delivery, and assessments of the needs, utilisation and outcome of health care, promotion of quality and establishing safety standards. Quality and safety management, infection prevention and antimicrobial resistance management, prevention of non-communicable diseases and health economic analyses are also important fields.

The Public Health Specialist should acquire the competence to generate and share new evidence on the ways in which social determinants influence population health and health equity and on the effectiveness of measures to reduce health inequities through action on social determinants.

The trainee should have sufficient linguistic ability to communicate with his/her public health colleagues and all others who he/she is in contact with at work in the member country, including the ability to interact with media. As the training continues, the trainee should develop oral and written skills to enable effective communication and leadership in public health issues.

With increasing experience, the trainee should acquire greater skills and autonomy to perform these activities.

The trainees should develop high professional ethical standard, including respect towards human rights, participants in public health programs, colleges and other professionals in the team. They should provide public health services according to need and without
discrimination due to personal characteristics such as age, gender, race, disability, religion, social or financial status etc. They should also maintain and develop professional competencies during their whole careers.

c. Competences

Public Health Physicians are competent, with a high level of professionalism: to:

1. Establish the expertise role as a Public Health Physician

1a) Function as public health leaders and consultants to health services and other organizations and institutions in order to provide safe, appropriate, cost effective and equal health care to groups, communities and populations.

1b) Establish and maintain medical knowledge, skills and attitudes appropriate to their practice, including the organization and financing of health care, public health control and public health law.

2. Perform expertise analyses of the health of the population

2a) Apply and combine medical and epidemiological competencies for the surveillance and evaluation of the health of the population.

2b) Identify the determinants of health of populations and risks for public health, and implications for interventions and policy.

2c) Evaluate health problems, biopsychosocial mechanisms and/or health care issues for different population groups, and their implications for the community.

2d) Critically evaluate epidemiological, demographic, health statistical and environmental pollution data and their sources, and apply them appropriately to public health issues.
2e) Identify community health needs and advise about their implications for public health and medical care services.

3. Lead and supervise public health interventions

3a) Select, develop, implement and monitor public health surveillance and interventions, namely in the areas of human behaviour, social and physical environment, food safety and nutrition, health care associated risks and working life related health.

3b) Promote the health of individuals, communities and populations through health programming.

3c) Contribute to the organization and evaluation of societal and health care programs aiming to promote health and social functioning among individuals with long-term diseases and disabilities.

3d) Contribute to the planning, organization, supervision of and evaluation of societal and health care programs promoting the health of specific target groups, such as children, elderly, and vulnerable and underserved groups in society.

3e) Contribute to the organization of and evaluate primary and secondary medical prevention programs.

3f) Contribute to strengthening regulatory frameworks for protecting and improving health.

4. Function as expertise in planning and evaluation of Public Health and Medical Care

4a) Evaluate Public Health and other service programmes concerning processes and outputs from the different perspectives of care seekers, professional health care workers, and health managers.
4b) Analyse and differentiate between need, demand and supply, and assess the health of a defined population and identify areas for improvement, including the allocation of health care resources delivery.

4c) Evaluate the outcome, quality and safety of care and promote quality development systems based on evidence and public health principles.

4d) Apply health economic principles and methods such as cost-effectiveness, cost-utility, and cost-benefits considering the strengths and weaknesses of different methods.

4e) Use methods to determine priorities and their strengths and weaknesses and promote awareness of the competing and conflicting influences on public and political perceptions of the need for health care and the resulting constraints on action.

4f) Promote and evaluate collaboration between health services and other welfare organizations in society.

4g) Evaluate and contribute to the policy and strategic development in health care planning.

4h) Contribute to the planning and evaluation of different sectors of society by health impact assessments and public health medical reports and consultations.

5. Communicate and develop public health medical expertise

5a) Lead, supervise and participate in an interprofessional health care team.

5b) Consult other (health) professionals and policymakers, and recognise the advantages and limits of their expertise.

5c) Effectively convey oral and written information about public health issues, including adequate public health reporting and effective interaction with media.
5d) Stimulate and motivate others so that they recognise the importance of the public health population perspective.

5e) Maintain and enhance professional activities through ongoing learning and research and contribute appropriately to the generation, dissemination, application and translation of new public health knowledge and practices.

2. **Organization of training**

   a. **Schedule of training**

   Training time in the specialty should be at least four years that may include structured academic training. There should be a sufficient balance between working and training hours in order to promote the development of the competencies listed in this document. The selection criteria for access to training in the specialty of Public Health should be clearly defined and the process of recruiting trainees should be competitive and transparent.

   b. **Curriculum of training**

   The issue of a training programme with specific contents and a training logbook is widely supported. The challenge is to achieve a consistency across the members of the Section so that standards of training can be high. It is desirable that a list of the contents of programmes is produced, for example, epidemiology, health statistics, demography, health planning, health administration/management, prevention and health promotion, social sciences, health economics, environmental health, health and health services research, food and nutrition, hygiene, and public health laboratories. Time periods spent in general
and specific public health fields training should be defined. A common training logbook that could be used for all member countries would also be desirable.

The trainee in public health must gain experience of activities that reflect the diversity of the specialty. These activities could include the analysis of: health statistics; planning and performing epidemiological studies; planning and monitoring the organization of services, including screening, vaccination, health control programmes, environmental surveillance and evaluation of health impact; evaluation of population health states and of demands, needs and inequalities; planning and monitoring quality and safety of health care organizations; the performance of food and nutrition hygiene control, and the work of public health laboratories.

Most member countries do not have sub-specialties in Public Health. However, if sub-specialties are planned to be developed, it will then be necessary to define the contents of the sub-specialty training.

c. Assessment and evaluation

There should be continuous, formative evaluation and summative evaluation of knowledge, competencies and performance in all the activities of the trainee by the trainer.

The trainee should keep his/her logbook, or similar personal record, up to date in line with the requirements of the National Authority*, considering as well the UEMS Specialist Section's recommendations. There should be continuous, formative evaluation and summative evaluation of knowledge, competencies and performance in all the activities of the trainee by the trainer. Oral and written work should be included in the evaluations.
d. Governance

The training is governed by the chief trainer facilitator in accordance with regulations from the National Authorities and the steering documents of the UEMS section for public health.

II. TRAINING REQUIREMENTS FOR TRAINERS

1. Process for recognition as trainer

Necessary qualification and experience

General standards should be established for the recognition of trainers in the specialty of Public Health. Member countries have National Authorities or equivalent bodies* that should establish these general standards in accordance with the European Training requirements of the UEMS, in order to enable consistency of recognition across the member countries.

The chief training facilitator should have practised the specialty for a minimum of five years after specialist accreditation or she/he should have completed a specific training programme that confers recognition as "chief training facilitator". Other public health trainers will have either general experience in the specialty or sub-specialty expertise. There will also be teachers with accreditation from other fields of medicine, for example primary care, or from science, for example, social sciences, or the law. A specific trainer for a trainee should be an accredited Public Health Specialist with at least three years' experience after accreditation.
2. **Quality management for trainers**

The chief training facilitator is recognised by the National Authority* and the responsibilities must be clearly stated. A clear structure for the coordination of training should be defined. A specific trainer for a trainee should spend at least 50% of his/her time in the training institution. The ratio between the number of trainers in the teaching staff and the number of trainees should be flexible. The aim is to provide close, individualised support and appropriate exposure to training experiences. A plan for the quality management provisions for the trainers should be defined.

III. **TRAINING REQUIREMENTS FOR TRAINING INSTITUTIONS**

1. **Process for recognition as training center**

   a. **Requirement for staff and clinical activities**

   Training institutions should be recognised by the National Authorities*, which set up published general standards for the training institutions and teachers in the specialty of Public Health, and also perform regular assessments of the quality of the training centre.

   The academic bases for training should be mainly based in Departments, Institutes or Schools of Public Health/Preventive Medicine/Hygiene/Social Medicine in Faculties of Medicine of Universities or in other public health institutions that are officially recognised by the state.
Training centres should also collaborate with schools and university departments and national agencies of public health in order to secure the scientific basis of the training. Appropriate concepts for the experiences of training could include, for example, primary health care services, specialist services inside or outside hospitals, public health surveillance, public health laboratory activity, governmental level activities and others.

The Section believes that it is important for trainees to have the opportunity to apply for training experience in other countries that have similarly high training standards. National Authorities* can recognise training in other countries, and it will be easy to validate the training if the countries meet the standards in this chapter. A clear structure for the coordination of training should be defined.

b. Requirement on equipment, accommodation

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

The equipment and educational facilities, including library and computer access, should be appropriate for public health services.

2. Quality Management within Training Institutions

A programme for the recognition of quality and for quality assurance should be structured by the National Authorities* of the member countries for training institutions, trainers and
curricula. General standards should be laid down for the accreditation of individual training posts.

The National Authority* is responsible for organizing quality assurance evaluations of training institutions, e.g. by site visits. The evaluations should include the accomplishment of the training objectives, the clarity of the inputs from trainers, technologies and the syllabus, the work of the trainee, his/her experience and progressive autonomy, and the training environment. The evaluation reports of quality should include information for the trainers and for the funding organizations.

The trainee should provide a feedback report on the quality of training. The report should be sent to the National Authority* or to an external evaluator and may need to be anonymised.

To facilitate communication, professional exchange and quality assurance, the organization of medical specialists in Public Health should be easily recognised in the different EU countries. Clearly defined public health organizations should be responsible for public health medical work. These agencies should be led by an experienced Medical Specialist in Public Health in order to facilitate the implementation of public health medical skills in the health care organization and to assure the quality of specialist training.

The public health agencies should be responsible for the public health medical expertise functions in health care. They should be given the authority to supervise all population based health promotion and preventive activities in health care, in accordance with the UEMS definition of Medical Act. There must be a sufficient number of medical specialists in public health to fulfil this task.
The public health agencies that exist should be given the opportunity to and take the responsibility for working in networks with scientific and developmental institutions in the field of public health. The scientific base of work in public health work should be acknowledged, and new evidence should be implemented in public health practice. Public health agencies should be involved in continuous quality improvement of public health activities.

The national organizations in each country should keep a list of all certified medical specialists in public health in order to facilitate professional communication and evaluation of the distribution of specialists. These specialists should be given the opportunity to and take responsibility for participating in continuous medical education and continuous professional development.

Workforce planning should be monitored by the National Authorities*, and these data should be shared with the Specialist Section. The workforce planning by the National Authority* should be flexible so that it can accommodate other medically qualified graduates who should be able to train in the specialty.

The monitoring authority at the European level for this specialty should be the Specialist Section of Public Health of the UEMS.

[*: The National Authority is the body responsible for the qualification of medical specialists in each member state of the EU. It can be a combination of competent professional or university organizations, a national board or a national governmental authority advised by a professional authority. It sets standards in accordance with national rules and EU legislation, considering as
well UEMS recommendations. In some countries, the National Authority is organized regionally within the country with national coordination.)