

Quality standards of OH specialists' training

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EU Requirements for Qualification for Occupational Physicians (OP)

- Directive 93/16/EEC on mutual recognition of diplomas in medicine within the EU (repealed by Directive [2005/36/EC](#))
 - requires at least 4 years of post-graduate studies for the profession of occupational physician (or for any other doctor....)
 - This requirement transposed across Member states with some additional requirements (requiring 4-8 years of training after basic training)
 - 6 years training on the pre-graduate level (The Charter on CME)
- Not unified across EU

Training of Occupational Medicine, Europe Duration (years)

	Common Trunk	Specialist training	Total
Ireland	4	4	8
United Kingdom	3	4	7
Norway	1,5	5	6,5
Denmark	3,5	3	6,5
Finland	2	4	6
Germany	2	3	6
Slovenia	1	4	5
Croatia	1	4	5
Portugal	1	4	5
Switzerland	3	2	5
Spain (from 2005)	0	4	4
Italy	0	4	4
Belgium	0	4	4
The Netherlands	0	4	4

Adapted from: Carstensen O. UEMS OM Section. Survey 2002. 14 members. Cathman C, Shevak A. Occupational Medicine, 2005

Reijula, Leino 2015

Documents for EU requirements for Qualification for Occupational Physicians

1. European Training Requirements for the Specialty of Occupational Medicine.
 - In 1994, the **European Union of Medical Specialists' (UEMS)** adopted the "**Charter on Training of Medical Specialists**" with an aim to set the basis for **high quality medical training**.
 - This charter outlines the guiding principles for high level Medical Training and **provides the essential criteria for medical training programmes**.
 - The **Chapter 6 of this Charter is a specific part written by each Specialist Sections according to which the essential requirements for adequate training** in their particular discipline are detailed.
 - The "Chapter 6" is regularly updated so as to meet **the continuing development of the medical practice and scientific knowledge**.
2. Practical and System specific guidance in Occupational Medicine
3. Assessment Tool for Occupational Medicine. **Portfolio of Performance-Based Assessments**.

The objectives of European Union of Medical Specialists (UEMS)

- The promotion of quality patient care through the harmonisation and improvement in the quality of specialists' medical care throughout the EU.
- The encouragement and facilitation of Charter on **Continuing Medical Education (CME)** for European specialists.

Among the corner stones in this field are:

- **The Charter on CME of Medical Specialists in the European Union, 1994,**
- **The Criteria for International Accreditation of CME from 1999,**
- **The Basel Declaration on CPD from 2001,**
- **The Declaration on Promoting Good Medical Care from 2004**
- **The Budapest Declaration on Ensuring the Quality of Medical Care, 2006.**
- The key message of all these documents is that CME-CPD is a moral and ethical obligation to doctors.

The Charter on CME

- A major concern of the UEMS has been **the structure and facilitation of accreditation of CME-CPD activities** with the awarding of **appropriate credits (hours) to individual medical specialists** in Europe.
- The UEMS established the European Accreditation Council for CME (EACCME®) in order to give Europe a co-ordinated system to facilitate such activity, without encroaching on the responsibility of national organisations where they exist.
- The Criteria for International Accreditation of CME from 1999, Directive 93/16 specifies:
- **Each Member State must accept only diplomas with 6-years pregraduate training in medicine; full course, including theoretical and practical studies, supervised by competent authorities and trained in the university centres and hospitals.**

The Charter on CME

- Chapter 1 - National Authority
- Chapter 2 - General Aspects of Training of Medical Specialists
- Chapter 3 - Requirements for Training Institutions
- Chapter 4 - Requirements for Chief of Training
- Chapter 5 - Requirements for Trainees
- Chapter 6 - Requirements for Specialty

The Criteria for International Accreditation of CME from 1999

- Quality assurance of Continuing Medical Education (CME) in the European countries is **the responsibility of the National Authorities in CME**
 - Continuing Medical Education (CME) is part of the broader concept of Continuous Professional Development (CPD)
 - **The National Authority** is the national professional or equivalent authority that is in charge of accreditation of CME providers and **the awarding of credits to individual medical specialists** in the countries of Europe.
- European consensus on quality assurance requirements is embodied in the UEMS CME Charter with its Annexes and the guidelines implicit in the data to be submitted.

The Basel Declaration on CPD, 2001

- **CPD – continuing professional development**
- **Life long learning**, support for adult learning
- Peer-review and formative assessment by the doctors themselves, the societies are taking care over reviewing;
- Continuous „**learn-work-learn**“ principle;
- CPD involve **time, money and continuing peer support**;
- The nature of the healthcare system **the continuous learning culture in medicine** must be developed.

The Basel Declaration on Promoting Good Medical Care , 2001

- Agenda of ensuring that systems for assuring the **good quality of medical care** are appropriately **monitored, supported and funded**;
- Working together to achieve continuing improvement in the quality of care;
- Achieving the **implementation of a QA system** that considers **all relevant components: the individual doctor, the team(s) within which they practise, and their work environment**;
- The system should be based on the **QA cycle: monitoring medical care** against standards accepted as medically valid, **introducing improvements** that are appropriately resourced, **reviewing these changes**, and ensuring that **the system itself is adequately quality assured**.

Budapest Declaration, 2006

- A) Medical regulation – the means by which the safety and quality of care provided for patients by doctors is ensured – requires **the setting, assuring and controlling of the standards of care** (4)
- B) **The structures of a modern medical regulatory system** comprise five tiers: **personal; peer and team-based; workplace; national; international regulation** (6)
- C) **The functions of a modern medical regulatory system - standards & ethics; education; certification & registration; ensuring fitness to practise** (7)
- D) Combining these structural and functional regulatory elements allows for **the development of an effective model, applicable in all EU countries** (6-8)
- E) Responsibility of every doctor to practise medicine according to the **ethics of their profession**, and in accordance with regulatory requirements (11-17)
- F) **All members of the healthcare team share responsibility** for ensuring that safe, good-quality care is provided by that team, and by each of its members (18-23)

Budapest Declaration, 2006

- G) Also, the employed OPs have **regulatory responsibilities to their employer** (24-29)
- H) **Regulatory bodies must develop standards** expected of practising OPs: how they should practise, and how they must not (30-31)
- I) The **continuum of medical education** provides the means, at all stages of a **doctor's career**, of imparting high standards of medical practice (13, 25, 33)
- J) **A reliable register** must be held of **doctors (incl OPs)** who are permitted to practise (34)
- K) When **significant problems occur with a doctor's performance**, **regulatory mechanisms** must be able to intervene appropriately and reliably (36-37)
- L) The UEMS recommends that greater efforts be made to ensure more **effective international medical regulation** (38-41)
- M) In a modern context, **medical regulation requires the co-operative working of representatives of society**, and of the medical profession (42-44)
- The UEMS considers regulation to be an essential component of an agenda focused on high standards of medical practice. Its policy papers that address the other parts of that agenda are: "The Basel Declaration" (2001) – that deals with continuing professional development as a form of quality improvement, and; "Promoting Good Medical Care" (2004) – on quality assurance.

Assessment Tool for Occupational Medicine Portfolio of Performance-Based Assessments

- The Bologna Declaration 1999 confirmed the critical requirement for **harmonisation of all post-graduate study in support of the EU directive on professional qualifications (EHEA, 2005)**.
- This declaration started the Bologna Process that aims to create a **European Higher Education Area (EHEA)** and includes 47 countries.
- **Assists the mobility of students, graduates and teaching staff within Europe**, and support their personal development requirements through the standardisation of the minimum training requirements for each profession (EHEA, 2005).
- The associated quality assurance guidance confirms the requirement for consistent **methods in assessment of post-graduate training** against published criteria and competency frameworks (EAQAHE, 2005).

Assessment Tool for Occupational Medicine Portfolio of Performance-Based Assessments

- The European Directive (2005/36/EC) underpinning the Bologna Process was amended in December 2011.
- The most important change with regard to training and assessment is the requirement for a common training framework outlining the training principles rather than a common platform for training. It also sets out a framework of qualifications for the EHEA outlining three cycles of education.
- The updated Directive confirmed the importance specifically in the medical profession to have good communication skills and transparency of continuous professional development.
- It is therefore important that any post-graduate assessment within the medical profession should include these competencies as requirements to be attained by the end of training.

II European Training Requirements for the Specialty of Occupational Medicine

Content of training and learning outcome

- **Ten domains required for OH-doctors:** Theoretical knowledge and practical skills
 - *Clinical practice*
 - *Framework for practice*
 - *Fitness for work, rehabilitation and disability assessment*
 - *Hazard recognition, evaluation and control of risk*
 - *Business continuity, disaster preparedness and emergency management*
 - *Service delivery and quality improvement*
 - *Leadership, policy development and professionalism*
 - *Epidemiology and preventive health*
 - *Research methods*
 - *Effective teaching and educational supervision*

Clinical knowledge and diagnostics of ODs

1. Accidents, Emergency Medicine and Surgery
2. Cardiovascular Disease
3. Ear, Nose and Throat
4. Dermatology
5. Infectious Diseases and Travel Medicine
6. Haematology/Oncology
7. Mental Health
8. Musculo-skeletal disorders
9. Neurology
10. Ophthalmology
11. Reproductive disorders (*Pregnant Workers' Directive* and in the specific context of known hazards to pregnancy outcome)
12. Respiratory medicine
13. Toxicology
14. Assessment of Disability and Fitness for Work

Clinical competency of occupational physicians *Glasgow Conference on Core Competencies, 1997*

- advise on patient care with an understanding of workplace hazards and exposures;
- *provide high quality medical diagnosis* and advise on treatment of ODs and occupational injuries;
- *provide best practice advice for the best patient's functional recovery*, the clinical aim;
- a comprehensive *occupation history and exposure*;
- perform complete or focussed physical examinations as required and select appropriate diagnostic studies;
- identify the relationship between the complaint and occupational exposure;
- identify non-occupational/environmental factors contributing to the ODs;
- refer or follow up patients with occupational injuries or ODs;
- elicit patients' concerns about exposures and establishes a therapeutic relationship incorporating risk communication;
- report all findings to affected individuals.

General knowledge and skills of OHPs *Glasgow Conference on Core Competencies, 1997*

- ⊙ Occupational hazards to health
- ⊙ Promotion of work ability, including ageing workers
- ⊙ Environmental medicine
- ⊙ Work place health promotion and education
- ⊙ Management of OH service

New knowledge and skills of OHPs

- New occupational hazards, emergency risks and catastrophe risks
- Promotion of work ability among employees
- Protection of young and aging workers
- Environmental medicine
- Work place health education
- Prevention and intervention projects

The multidisciplinary approach in occupational health service

1. **Medical/health care professionals** - OH physicians, OH nurses, -physiotherapists
2. **Safety and technical prevention professionals** - factory inspectors, occupational hygienists, chemists, toxicologists, engineers, pharmacists
3. **Ergonomics professionals** - ergonomists, physiotherapists, occupational therapists, architects, designers
4. **Organization and psychology professionals** - organisational psychologists, OH psychologists, applied/technical sociologists
5. **Epidemiologists**
 - multifactor analysis of problems using the multidisciplinary team
 - organization and planning of multidisciplinary teamwork
 - multidisciplinary intervention strategies

Need for research on OHP competencies

The rapid evolution of OH practice, training and competencies require regular review and update.

Earlier studies have **identified common core competencies for OPs** in Europe and have **examined the professional development** of key OH professionals around the world.

The studies have established the priorities among specialist OPs internationally of the common competencies required for OH practice.

1. The development of local training curricula and common core competencies /qualifications within specific geographical regions or internationally.
2. General principles of assessment and management of occupational hazards to health and good clinical care were jointly considered most important in ranking.
3. To develop global policy on the delivery of OH services and, importantly, quality standards.

Need for research on OHP competencies

- **The role of occupational physicians (OPs) historically has varied among countries** depending on national legislation, employer, employee and workforce needs.
- **There are differences in models of delivery with increasing use of a multidisciplinary healthcare approach** in some countries.
- Although similar in some aspects, **OH differs from other medical practice settings** in that it is framed by additional legal, ethical and regulatory requirements.
- The modern specialist **OP is faced with** the challenge of incorporating the **evidence base, the recommended best practice, ethical guidance and legislative requirements** into day-to-day clinical practice, and often within time constraints.

International perspective on common core competencies for occupational physicians: a modified Delphi study 2014 and 2015

Lalloo, D., Demou, E., Kiran, S., Cloeren, M., Mendes, R., Macdonald, E.B.

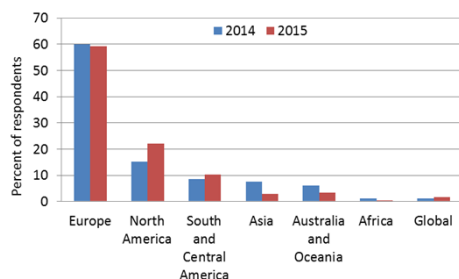
Healthy Working Lives Group, Institute of Health and Wellbeing, College of Medical, Veterinary and Life Sciences, University of Glasgow, Glasgow, UK

Occup Environ Med 2016;73:452-458 doi:10.1136/oemed-2015-103285

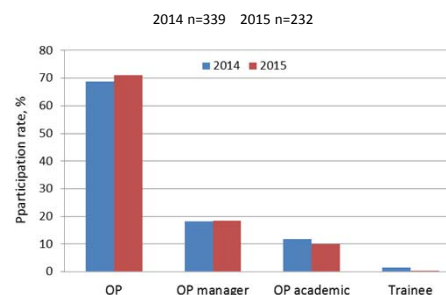
Methods

- Two rounds e-questionnaire study:
 - I - June and August 2014
 - II - January 2015 and April 2015
- Approximately 1 month after sending both questionnaires, two reminder emails were sent to increase the response rate.
- The data were analysed using SPSS Statistics V.21 at CI 95%.
- I - 339 responses and II - 232 responses were received from 51 different countries around the world.
- The continents: Europe, North and Central and South America, Australia and Oceania, Africa, Asia.

Delphy study participants



Participants by the profession



The competencies required of occupational medical practitioners

Rating scores of principal domains (n=339) **Yes (%)**

1. General principles of assessment and management of occupational hazards to health - 98.8%
2. Communication skills - 98.5%
3. Ethical and legal issues - 97.9%
4. Team working and leadership skills - 97.1%
5. Assessment of disability and fitness for work - 96.5%
6. Health promotion - 95%
7. Good clinical care - 94.7%
8. Clinical governance/clinical improvement - 94.1%
9. Environmental issues related to work practice - 92.9%
10. Management skills - 92.6%
11. Teaching and educational supervision - 90.6%
12. Research methods - 90.3%

Priorities in principal domains

Ranking—round 2 results with top scoring subsections within each domain

Overall rank Ranked principal domains; Highest ranked subsection within each domain; **Mean rank±SD; Mean rank of the 75% percentile of respondents**; Weighted rank for subdomain

1.* Good clinical care 2.8±2.1 3.3 /3,3

Take and analyse a clinical and occupational history including an exposure history in a relevant, succinct and systematic manner 2.1±1.6 2.3 /2,3

1.* General principles of assessment and management of occupational hazards to Health 2.8±2.7 /3,5

Understand and apply the principles of risk assessment, that is, recognition of potential hazards in the work environment, evaluating risks and providing advice and information on control measures 2.3±2.1 /2.2

3. Assessment of disability and fitness for work 4.0±2.2 /4.3

Assessing and advising on impairment, disability and fitness for work 1.5±1.3 /3.0

Priorities in principal domains

Ranking—round 2 results with top scoring subsections within each domain

4. Communication skills 5.8±2.7 /6.7

Be able to communicate effectively orally and in writing with patients and other stakeholders in a manner that they understand 1.7±1.4/5.3

5. Ethical and legal issues 6.0±2.4 /6.7

Be well informed about acts, regulations, codes of practice and guidance relevant to the workplace setting 2.0±1.3 /11.2

6. Team working and leadership skills 6.8±2.4 /7.5

Understand how a team works effectively 2.2±1.4 /15.7

7. Environmental issues related to work practice 6.9±3.1 /8.4

Recognise and advise on health risks in the general environment arising from industrial activities 2.1±1.4 18.0

8. Health promotion 7.0±3.2 /8.4

Assessing needs for health promotion in a workforce 1.4±0.6 /20.6

9. Clinical governance/clinical improvement 7.3±2.3 /7.5

Practice evidence-based medicine 1.8±1.3 /19.8

Priorities in principal domains

Ranking—round 2 results with top scoring subsections within each domain

10. Management skills 8.5±3.2 /10.0

Be able to strategically plan and set objectives for delivering an occupational health service 2.3±1.3 24.5

11. Teaching and educational supervision 2.6±2.1 /27.9

Identify learning outcomes and construct educational objectives 9.3±2.1 /9.2

12. Research methods 10.7±2.0 /10.0

Be able to define a problem in terms of needs for an evidence base 2.1±1.5 /26.2

What new did this study add?

- An increasing **focus on health promotion** is evident as compared to the historical emphasis on reduction of occupational disease.
- **Sickness absence management, vocational rehabilitation and management of ageing worker** have emerged as newer areas of practice.
- **Clinical leadership and management skills are becoming important**, even for OPs not in formal management roles, with the expanding multidisciplinary nature of the specialty.
- **Research methods and teaching and educational supervision** were considered least important.
- General principles of **assessment and management of occupational hazards to health and good clinical care** were jointly considered most important in ranking.

What new did this study add?

- **These priorities can serve as a platform for the development of local training curricula and common core competencies within specific geographical regions or internationally.**
- They can also **help to inform global health policy** on the delivery of OH services and their quality standards.
- **Regular review and update** of common core competencies for OPs in Europe and in the world.
- The agreement gained **to participate and disseminate the questionnaire within their respective societies and networks.**

Core competencies for UK occupational health nurses: a Delphi study

D. Laloo, E. Demou, S. Kiran, M. Gaffney, M. Stevenson, E. B. Macdonald
Occup Med (Lond) (2016) 66 (8): 649-655.

Results

'Good clinical care' was the principal domain ranked most important, followed by 'general principles of assessment & management of occupational hazards to health'. 'Research methods' and 'teaching & educational supervision' were considered least important.

Conclusions

This study has established UK OHNs' current priorities on the competencies required for OH practice. The timing of this paper is opportune with the formal launch of the Faculty of Occupational Health Nursing planned in 2018 and should inform the development of competency requirements as part of the Faculty's goals for standard setting in OHN education and training.

Required competencies of occupational physicians: a Delphi survey of UK customers

Reetoo, K.N., Harrington, J.M., Macdonald, E.B.

Occup Environ Med 2005;62:406-413. doi: 10.1136/oem.2004.017061

- Need for regular and systematic evaluation of OHP teaching curricula.
- The role, responsibilities, and ethical obligations of occupational physicians should be more widely communicate to their customers.
- There are substantial differences in the rating and ranking of the relative importance of these competencies between the physicians and their customers.

A Delphi survey of employers and employees from public and private organisations of varying business sizes, and health and safety specialists as well as trade union – by a combination of computer assisted telephone interview (CATI) and postal survey, using a questionnaire based on the list of competencies described by European medical training bodies.

Required competencies of occupational physicians: a Delphi survey of UK customers

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- Occupational physicians can contribute to good management in healthy enterprises.
- The requirement to take into account the needs of the customers when planning occupational health services is well established.

Aims of the article

- to establish the priorities of employers, employees, and their representatives regarding the competencies they require from occupational physicians;
- to explore the reasons for variations of the priorities in different groups;
- to make recommendations for occupational medicine training curricula in consideration of these findings.

Eight areas of specific OM knowledge and OPs should be competent

1. **Hazards:** identification and assessment of occupational hazards to health
2. **Fitness:** assessment of disability and fitness for work
3. **Communication:** communication with patients, managers, and other healthcare professionals
4. **Exposures:** advising on impact of environmental exposures
5. **Promotion:** promotion of general health in the workplace
6. **Research:** using research methods
7. **Management:** managing an occupational health service
8. **Law:** advising on OH law and ethics.

Training area Competency Mean scores

- **Communication** Reading, writing, and speaking clearly in English 4.63
- **Hazards: Assessing health problems, liaising with other doctors and nurses, and providing advice** 4.41
- **Organising and monitoring programmes to check the health of people exposed to hazards at work** 4.19
- **Assessing the work environment and evaluating risks** 4.11
- **Providing advice and information on measures to control risks** 4.10
- **Fitness: Assessing injury, disability, and handicap in relation to work** 4.46
- **Assessing fitness for the job** 4.36
- **Law: Be well informed about acts, regulations, codes of practice, guidance** 4.36
- **Evaluate compliance with new legislation** 4.17
- **Advise managers, safety representatives, and employees of their legal obligations under health and safety law** 4.10
- **Assessing and advising on early retirement due to ill health** 4.23
- **Helping people to get back to work (rehabilitation)** 4.22
- **Advising on drug and alcohol problems** 3.92
- **Evaluating absence from work due to sickness** 3.84
- **Assessing and advising on first aid facilities** 3.66
- **Advising on legal issues including the Disability Discrimination Act** 3.63

Training area Competency Mean scores

- **Applying legal and other ethical requirements for confidentiality** 4.48
- **Exposures: Understanding and explaining the difference between work related and environment related disease** 4.11
- **Assessing and advising on the control of environmental exposures from the workplace** 4.02
- **Recognising and advising on hazards in the general environment** 3.82
- **Research: Use other professional experts when appropriate** 4.34
- **Report on an investigation orally and in writing** 4.26
- **Recognise and initiate the investigation of clusters of disease, e.g. cancer in a workforce** 4.10
- **Be able to analyse and interpret data** 3.91
- **Interpret scientific data in journals and from own research** 3.74
- **Search published literature** 3.71
- **Plan data collection for simple surveys** 3.54
- **Convert a workplace health problem into a researchable question** 3.54

Training area Competency Mean scores

- **Management: Identifying the occupational health needs of an organisation** 4.25
- **Encouraging the use of OH services** 4.10
- **Defining the goals and objectives of an occupational health service** 4.04
- **Use a computer for the storage and analysis of data** 3.78
- **Promotion: Assessing needs for health promotion** 3.86
- **Organising, providing, and evaluating work related health promotion activities** 3.66
- **Evaluating the quality of an OH service and carrying out clinical audit** 3.85
- **Managing an occupational health department** 3.80
- **Evaluating the service provided** 3.79
- **Designing a training programme for occupational health staff** 3.66
- **Organising record keeping using computers if appropriate** 3.65
- **Defining the roles of occupational health staff and formulating job descriptions** 3.64
- **Selecting, appointing, supervising, and appraising staff performance** 3.62
- **Negotiating and managing a budget** 3.51
- **Lead a team of multidisciplinary service providers** 3.43
- **Plan the efficient use of multidisciplinary resources** 3.42

International Occupational Medicine Society Collaborative (IOMSC)



The International Occupational Medicine Society Collaborative (IOMSC) was established in 2013.

Aim: to explore topics impacting workplace health globally, and identify issues of concern and common goals that unite practitioners of occupational and environmental medicine (OEM) worldwide.

Contacts with key members from national societies of OM

- ▶ The European Association of Schools of Occupational Medicine (EASOM)
- ▶ The American College of Occupational & Environmental Medicine members (ACOEM)
- ▶ The Argentinian Federation of Occupational Medicine (FAMETRA)
- ▶ The Australasian Faculty of Occupational and Environmental Medicine (AFOEM)
- ▶ The Brazilian National Association of Occupational Medicine (ANAMT)
- ▶ The Colombian Society of Occupational Medicine (SCMT)
- ▶ The Faculty of Occupational Medicine, Ireland
- ▶ The Mexican National Federation of Occupational Health (FENASTAC)
- ▶ The Peruvian Society of Occupational Health (SOPESO)
- ▶ The UK Faculty of Occupational Medicine
- ▶ The UK Society of Occupational Medicine
- ▶ Occupational Medicine Section of the European Union of Medical Specialists (UEMS)