The European
Internal Medicine Curriculum

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The European Board of Internal Medicine Curriculum Project

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The Internal Medicine Curriculum

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Original article

The practice of internal medicine in Europe: organisation, clinical conditions and procedures

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ABSTRACT

Background: Current information on the role of internists in the European countries is scarce. Th
describes the results of a survey of the practice of internists in Europe.
Methods: Two online questionnaire-based surveys were carried out by the European Board of Internal
one on the practice of internists and the other on postgraduate training in internal medicine. The natio
nal medicine societies of all 30 member countries of the European Federation of Internal Medicine were
participate. The responses were reviewed by internal medicine trainees from the respective coun
summaries of the data were sent to the national societies for approval. Descriptive analysis of the da
practice of internists was carried out.
Results: Twenty-seven countries (90%) completed the questionnaire and approved their datasets. In 8
countries, most internists practised internal medicine alone and in 7 countries at least half of physicians
internal medicine together with a subspecialty. Internal medicine was considered a hospital-based sp
most countries. The majority of selected presenting problems and diagnoses were rated as c
encountered in all countries. More variability between countries was observed in the performance of d
and therapeutic procedures.
Conclusion: Many similarities exist in the practice of internal medicine between the European countr
some differences are present that likely reflect the variable impact of subspecialisation. The results oft
should prove valuable for the definition of specific competencies and development of a common curri
internal medicine at the European level.

1. Introduction

Despite major changes in the organization of health service delivery in Western countries in recent decades, internal medicine remains the backbone of adult medical care. Increasing prosperity and longevity have been associated with a rising prevalence of many chronic and increasing complexity of patient care, particularly among th growing ageing population. In parallel, advances in medical sci technology have led to an augmented role of medical specia subspecialties which has influenced the practice of internists European countries [1,2]. Although the emergence of specialised services has revolutionized the treatment and outcome of m disorders, it is not without drawbacks, including fragmentatio and increasing costs [1,3]. A physician with a broad range of co cies is considered by many to be most suitable for the manag individuals with multiple chronic conditions. Accordingly, medicine organizations have emphasized the important rol specialty in the contemporary health care system [4] and rec that all subspecialty trainees complete a common trunk of inter icine before entering the subspecialty [5,6]. However, this req

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Original article

Postgraduate education in internal medicine in Europe

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ABSTRACT

Background: Limited information exists on the framework and content of postgraduate education in internal medicine in Europe. This report describes the results of a survey of postgraduate training in internal medicine in the European countries.
Methods: Two online questionnaire-based surveys were carried out by the European Board of Internal Medicine, one on the practice of internists and the other on postgraduate training in internal medicine. The national internal medicine societies of all 30 member countries of the European Federation of Internal Medicine were invited to participate. The responses were reviewed by internal medicine residents from the respective countries and summaries of the data were sent to the national societies for approval. Descriptive analysis of the data on postgraduate training in internal medicine was performed.
Results: Twenty-seven countries (90%) completed the questionnaire and approved their datasets. The length of training ranged from four to six years and was commonly five years. The majority of countries offered training in internal medicine and a subspecialty. A common trunk of internal medicine was frequently a component of subspecialty training programmes. Hospital inpatient service was the predominant setting used for training. A final certifying examination was in place in 14 countries.
Conclusion: Although some similarities exists, there appear to be significant differences in the organisation, content and governance of postgraduate training in internal medicine between the European countries. Our findings will prove invaluable for harmonisation of training and qualification in internal medicine in Europe.

1. Introduction

Internal medicine has been referred to as the cornerstone of the health care system in Western societies [1]. Internists play a major role in the diagnosis and management of acute and chronic medical disorders of adults. A wide spectrum of knowledge and skills equips the internist with the necessary tools to provide comprehensive care to patients with multiple chronic conditions, which are so frequently observed in the elderly population. However, in many countries in Europe the fundamental role of internists has been supplanted by physicians practicing a subspecialty of internal medicine. The medical care provided by subspecialists has been criticised for being fragmented [2,3]. In recent years, the migration of physicians has become more common with the growing influence of the European Union [4]. European regulations and directives have been created to facilitate this development with mutual recognition of diplomas and specialist examinations between member nations (Directive 2005/36/EC of the European Parliament and of the Council, 7 September 2005, on the recognition of professional qualifications). The requirements for qualification and certification differs among countries and information on these differences is not readily available. This could potentially cause problems when certified internists move to a new country within the European Union and are expected to be competent in a number of

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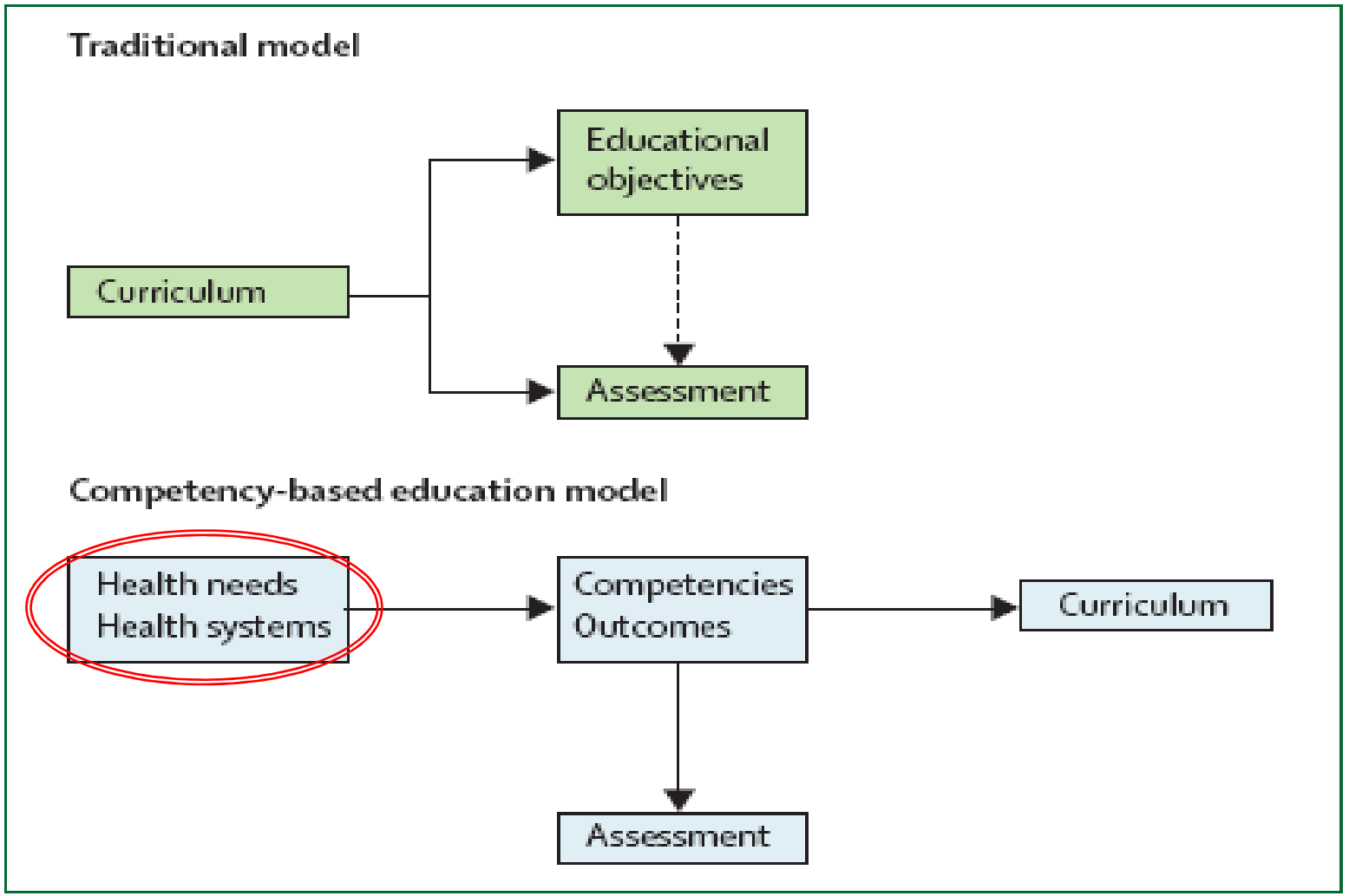
Competency-based curriculum



Frenk, Lancet 2010;376:1923–58

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Training Requirements for the Specialty of Internal Medicine

European Standards of Postgraduate Medical Specialist Training

The structure and contents of the curriculum

1. Training requirements for trainees
2. Training requirements for trainers
3. Training requirements for training institutions

Training requirements for trainees

1. Content of training and learning outcomes
   - 1.1 General competencies
   - 1.2 Key competencies of the CanMEDS roles
   - 1.3 Specific areas of expertise
   - 1.4 Clinical presentations and diseases
   - 1.5 Procedures
   - 1.6 Assessment (milestones and EPA's)
2. Organisation of training
   - 2.1 Schedule of training
   - 2.2 Programme
   - 2.3 The assessment system and the entrustment process
   - 2.4 Governance

Appendices

- Members of Curriculum Working Group **Appendix A1**
- List of Countries affiliated to UEMS or EFIM **Appendix A2**
- CanMEDS competencies **Appendix B**
- Clinical presentations **Appendix C**
- Milestones **Appendix D**
- Entrustable Professional Activities (EPA) **Appendix E**
- EPA template **Appendix F**

Training requirements for trainers

- Levels of trainers
  - Director of the training programme
  - Educational supervisor
  - All physicians practising in a teaching hospital
- Process for recognition as trainer
  - Requested qualification and experience
  - Core competencies for trainers
- Quality management for trainers

Training requirements for training institutions

- Process for recognition as training center
  - Requirements for staff and clinical activities
  - Requirements for facilities and equipment
- Quality management within training institutions
  - Accreditation
  - Clinical governance
  - Manpower planning
  - Regular report
  - External auditing
  - Transparency of training programmes
  - Structure for coordination of training
  - Framework of approval

Comments were received from national societies

- Belgian Society of Internal Medicine
- Cyprus Society of Internal Medicine
- Czech Society of Internal Medicine
- Internal Medicine Society of Northern Greece
- Icelandic Society of Internal Medicine
- Israeli Society of Internal Medicine
- Italian Society of Internal Medicine
- Joint Royal Colleges of Physicians Training Board, UK
- Lithuanian Society of Internal Medicine
- Portuguese Society of Internal Medicine
- Spanish Society of Internal Medicine
- Turkish Society of Internal Medicine
- UEMS Section of Geriatric Medicine

Important comments and criticism

- Northern European concept of internal medicine predominates over the Mediterranian model (Spain)
- Need to preserve the profile the traditional internist (Portugal)
- What are the legal implications of the curriculum? (UK)
  - The EU operates through the principle of subsidiarity.
  - How far will the new curriculum be legally binding on member states, for example the 7 years minimum duration for dual certification?
- What does the curriculum mean for non-EU countries? (Israel)

Important comments and criticism

- Reconsider the definition of internal medicine and mission statment; and the definition of an internist (Israel)
  - Separate definition from mission.
  - …the authors refer to physician from "specialties stemming from internal medicine" as specialists. This may imply that internists are not specialists.
- Entry criteria and selection of trainees (Greece, Iceland, UK)
  - The curriculum should state how trainees are to be selected.
- Transfer to a training programme in another country (Iceland)
  - Will previous training be recognized?

Important comments and criticism

- Duration of training
  - Cyprus, Czech Republic, Italy, Portugal, Spain and Turkey are against increasing the duration of internal medicine training to 6 years.
- Dual certification
  - Portugal and Spain are firmly opposed to this option.
- Common trunk
  - Portugal is against this concept.

Important comments and criticism

- Competencies, milestones and EPA's (Iceland, UK)
  - Too many EPA's; too bureauocratic; tick box exercise.
- Assessment (Iceland, UK)
  - The use of different assessment tools should be better clarified.
  - Clinical examination should be included in the assessment system.
  - Grades of supervision should be included.
- Collaboration with geriatricians should be emphasized in the item on multimorbidity and aging (UEMS Section of Geriatric Medicine)

Important comments and criticism

- Presentations, diseases and procedures listed may imply that this is all an internist should be able to do (Portugal)
- A number of diseases traditionally managed by the internist are missing (Greece, Spain)
- The list of procedural competencies can be only general and depends also on local peculiarities (Italy)
  - Some concern exists about "mandatory" lumbar puncture, and this is raising the problem of legal aspects which are specific to each European country (e.g. malpractice, defensive medicine, error in medicine etc.).
  - Abdominal ultrasonography could be included as optional competencies.
- Percutaneous needle biopsies are missing from the procedure lists (Portugal)

Amendments

Background

There is at present no standardised accreditation of postgraduate training periods completed in another European country towards qualification as an internist. Individual recognition of retrospective training will be decided at the national level according to each national authority rules. This curriculum may help this process of accreditation of previous internal medicine training in another country as this curriculum aims to standardise training in internal medicine across Europe.

Several countries are not members of the European Community or European Economic Area, but are affiliated to either UEMS or EFIM (appendix A.2); they are invited to adopt this curriculum.

Appendix A2

Nations not full member of both EFIM and UEMS:

	EFIM	UEMS	EFIM assoc. member	UEMS assoc member	UEMS observer
Bulgaria		+			
Armenia				+	
Croatia				+	
Luxembourg		+			
Denmark		+			
Ukraine				+	
Serbia	+				+
Russia	+				+
Albania	-	-	-	-	-
Israel	+			+	
Turkey	+			+	
Algeria			+		
Morocco			+		+
Tunisia			+		+

Definition of the internist

The UEMS defines an internist as follows. “An internist is a physician trained in the scientific basis of medicine, who specialises in the assessment, diagnosis and management of general medical problems, atypical presentations, multiple problems and *consequential complex health issues*, and system disorders (professional). The physician is skilled in the management of acute unselected medical emergencies and the management of patients in a holistic and ethical way, considering all *psychosocial* as well as medical factors for enhancing quality of life…”

1.3 Specific areas of expertise

a. Multi-morbidity and ageing:

In an ageing European population, the number of patients with chronic disease and complex medical needs is steadily increasing... This requires a generalist rather than a specialist approach and places the internist in a prominent and vital coordinating role. *Older complex frail patients with significant co-morbidity may also benefit from close collaboration with and contribution from geriatric medicine services*.

1.6 Assessment

b. Entrustable Professional Activities (EPAs):

How many EPAs should there be in the curriculum?

EPAs are broad responsibilities that may, however, include smaller ones. For a broad specialty such as internal medicine, this could mean hundreds of EPAs over the course of training. Therefore a list of 40 comprehensive EPAs is provided… (appendix E). EPAs should be identified in each (local) training programme … *The total number or sets of EPAs to be used in a training programme should be decided at a national level*.

2.1 Schedule of training

a. Common trunk in internal medicine:

As already mentioned, internal medicine is a core medical specialty that forms the foundation for many *other medical* specialities, … At least 2 years of continuous common trunk training in internal medicine - in the first two years of a postgraduate training programme - is essential to give the necessary breadth of experience for physicians proceeding to train in any medical specialty *that stems from internal medicine*... The first two years of training in internal medicine and the common trunk *for other specialties arising from internal medicine* are essentially the same and preferably, do not involve training in the chosen (final) specialty, if applicable.

2.1 Schedule of training

b. Dual certification in internal medicine and another *specialty related to internal medicine*:

In order to attain certification in both internal medicine and *another internal medicine related* specialty (known as dual certification) a minimum duration of 7 years postgraduate medical training is required. This should encompass a minimum of 4 years in internal medicine, which includes the two years common trunk.

2.2 Programme

Here is an outline of how a typical 24 month common-trunk programme in internal medicine may look (the order and *the programme* of the rotations is neither prescriptive, *nor exhaustive*):

- 6 months in an emergency ward or an acute medical unit
- 4 months in an intensive care unit or high-dependency care unit
- 6 months in ambulatory care (outpatients and/or day care)
- 8 months in an inpatient internal medicine service (which may include, if necessary, rotations in different specialties, preferably excluding the specialty of final choice, if applicable)

2.3. The assessment system and the entrustment process

Conversely, entrustment concerns are reflected by "increased oversight"… *Supervision levels other than the above mentioned are admissible, if they are comparable and their compatibility is defined*.

Clinical Examinations

The assessments of clinical skills at 2 and 6 years should be covered by the EPAs, but each national authority decides if a formal clinical examination should be part of the qualification process.

Recertification

At present, recertification follows the rules set by each national authority. In due course general rules applicable to all European countries should be agreed.

2.4 Governance

Each national competent authority should:

…

Consider previous training in internal medicine (or other medical speciality) in another European country in the evaluation of the total duration of training in internal medicine. Ensure that a formal assessment by the current training institution is part of this process.

Ensure this selection procedure to be transparent and open to all persons who have *at least* completed medical undergraduate education.

Decide when an applicant meets the entry criteria for specialty training in internal medicine.

Ensure that assessment and certification during training is transparent, that both trainee and trainer have agreed responsibility and accountability, and that there is a possibility of appeal by a defined procedure.

Appendix C: Clinical presentations, diseases and procedures

Procedural competencies:

Appropriate use and performance of diagnostic and therapeutic procedures

There are some procedures in which all internists should be proficient by the completion of internal medicine training…

For all procedures carried out before an trainee has established proficiency, it is essential that appropriate supervision (different levels are listed on page 18 of the curriculum) be provided by a physician (usually a higher-level medical specialist) already experienced and competent in performing the procedure. The certification process is determined by each national authority.

Thank you!

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