

Internal Medicine in Europe

Core competencies of the European internist: A discussion paper

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Abstract

In an attempt to enhance the quality of internal medicine practice and to reform the education of internists across Europe, the European Board of Internal Medicine (formed by the European Federation of Internal Medicine and the European Union of Medical Specialists Section of Internal Medicine) has launched a project aimed at defining core competencies that are common to all internists. The compilation of six core competencies presented in this paper consists of patient care; medical knowledge; communication skills; professionalism, ethical, and legal issues; organizational planning and service management skills; and academic activities. These core competencies are the foundation required for the provision of high-quality medical care everywhere, regardless of the professional traditions and organization of health care in different countries. The authors hope this paper will stimulate constructive discussion and thoughtful debate, and that it will be followed by a collaborative effort to develop and endorse a European consensus.

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1. Preamble

The European Board of Internal Medicine (EBIM) was formed by the European Federation of Internal Medicine (EFIM) and the Section of Internal Medicine of the European Union of Medical Specialists in 2002. In 2004, the EBIM formed a working group to define the competencies of the internist in order to enhance the quality of internal medicine practice and to reform the education of internists across Europe. Although some variations in the practice of

internists may be present in different countries, this paper will focus on the general competencies that are common to all internists in Europe.

Internists have a fundamental role in the health care systems of modern societies. This is largely due to the high prevalence of chronic and complex diseases that are associated with the lifestyle of Western societies, most of which are managed by internists or physicians who practice in a subspecialty of internal medicine. The practice of the internist ranges from medical consultation to the care of patients with multiple chronic diseases. In addition to office practice, many internists care for acutely ill patients in the hospital setting. The European Union of Medical Specialists has defined an internist as follows. "An internist is a physician trained in the scientific basis of medicine, who

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specialises in the assessment, diagnosis and management of general medical problems, atypical presentations, multiple problems or system disorders. 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 psychological as well as medical factors for enhancing quality of life. The physician values the continuing care of all patients irrespective of the nature of the patient's complaint, and is committed to lifelong continued professional development. The physician practices clinical audit and evidence-based medicine. The physician functions in a number of roles, including clinical counselling, educating, leading and managing." Although the practice of internists varies to some extent between European countries, provision of comprehensive medical care is the common theme. Many internists provide subspecialised care, frequently based on specific areas of interest. Which disorders are usually managed by internists or by subspecialists or by both internists and subspecialists together will, of course, vary from country to country.

In recent years, it has become recognized that knowledge and clinical skills alone do not ensure a physician's competence or performance. Concerns over reports of frequent medical errors have led to demands that physicians demonstrate adequate clinical competence and practice performance throughout their career. To meet these new challenges, organizations of physicians have placed greater emphasis on proficiency in alternative areas of professional medical practice such as communication skills, professionalism, and systems-based practice. Efforts to redesign medical education and training are already being made, shifting the focus from assessment of knowledge to multi-dimensional evaluation of clinical competence. Several professional organizations have defined the essential competencies of physicians. In 1999, the Accreditation Council for Graduate Medical Education in the United States defined a set of six general competencies that all residents in postgraduate specialty training programs should master [1]. These competencies have since been adopted by the American Board of Internal Medicine [2]. Similarly, the Royal College of Physicians and Surgeons of Canada has accepted a generic competency framework that originated from the CanMEDS 2000 project [3]. The development in Europe has been slower, although substantial work has already been done in some countries, like the Netherlands, where the Royal Medical Association has developed guidelines for postgraduate specialty training programs that include the definition of seven competency fields [4].

The explicit definition of the core competencies of physicians has been relatively simple in North America, where training and work practices are more or less similar. In Europe, however, the task is not as simple, especially in internal medicine, in which training and practice have traditionally varied considerably from country to country. Whilst this variation might have been acceptable in the past,

this is no longer the case, as medical graduates increasingly move from country to country to both train and practice. We believe it has become urgent for European internists to define the core competencies of their specialty. These core competencies must be based on the internist's roles and the nature of the clinical problems that he or she commonly encounters. They should also reflect how the internist approaches the patient's problem.

2. The roles and abilities of the internist

The principal role of internists is to provide medical care for adults. Certain professional attributes are required for the internist to be successful in a rapidly evolving world of medicine. As a member of a health care team, the internist has to effectively coordinate the care provided by other professionals for the benefit of the patient. Internists should also facilitate and support the participation of patients in their own care and aid them in making decisions regarding health issues. The internist needs to be an advocate on health issues for both individual patients and the community at large. He or she must be able to communicate clearly with both patients and colleagues alike. Furthermore, the internist will, in certain situations, require managerial and business skills. Finally, internists should be proficient in both teaching and scientific enquiry.

A major task of internists is the diagnosis and management of multiple medical problems that may be complex and are frequently of chronic nature. These disorders may be managed in an outpatient and/or inpatient setting, with or without the contribution of a subspecialist colleague. The internist must be able to recognize and evaluate the symptoms and signs of common diseases. The internist may also be faced with obscure symptoms or features of multisystem disease that require expert diagnostic evaluation. However, most internists will spend the majority of their time managing a relatively limited number of common medical problems.

3. Core competencies of the internist

1. Patient care
2. Medical knowledge
3. Communication skills
4. Professionalism, ethical, and legal issues
5. Organizational planning and service management skills
6. Academic activities — education and research

3.1. Patient care

Internists need to be capable of providing effective and compassionate patient care that focuses on maintaining health, preventing disease, and diagnosing and treating established illness. Internists should practice evidence-based medicine supported by sound clinical judgment. The following are essential tasks involved in the care of patients.

3.1.1. *The medical history*

The medical interview is the initial step in the diagnostic process. Despite the ever-increasing technology available to physicians for the evaluation of patients, the medical history remains the most important and cost-effective tool. The internist needs to listen carefully to the patient and to use open-ended questions. He or she must be capable of recognizing the constellation of symptoms associated with different diseases and be familiar with symptoms suggestive of life-threatening or serious illness. Finally, the internist has to respect confidentiality and be sensitive to personal, cultural, and religious issues.

3.1.2. *Physical examination*

Internists need to have the ability to perform a thorough and skillful physical examination. Usually, this will be a focused examination guided by the patient's history. When examining patients, the internist should be empathetic and treat the patient with dignity.

3.1.3. *Selecting tests in the diagnostic work-up*

In the evaluation of patients, internists need to make rational use of available diagnostic tests. In the selection of tests, they need to weigh the benefits, potential adverse effects, and cost of each test.

3.1.4. *Establishing a diagnosis*

Forming and testing hypotheses is a pivotal component of the diagnostic evaluation carried out by internists. In order to establish a diagnosis, the internist has to put together a limited number of unifying hypotheses based on the clinical findings in the case. The internist attempts to either confirm or reject each hypothesis and thereby narrow the list of differential diagnoses. The internist should be familiar with fundamental aspects of clinical decision-making.

3.1.5. *Designing a therapeutic plan*

Depending on the diagnosis, the internist needs to consider a short-term or long-term management plan based on scientific evidence, clinical judgment, and patient preference. He or she should attempt to ensure that the selected treatment is cost-effective. All medical treatment must be founded on compassion and the best interests of the patient. Whenever possible, the internist should discuss the treatment options with the patient (and family members, when appropriate) and respect their preferences. He or she should emphasize strategies to improve compliance with therapy and encourage self-care. The internist should discuss the prognosis with the patient and consider limitation of therapy when appropriate, including 'do not resuscitate' (DNR) orders. Internists should also be capable of providing palliative care at the end of life. It is important that they recognize the need of acutely and chronically ill patients for nutritional support and physical therapy. Internists should always strive to avoid inflicting injury on patients — 'primum non nocere'.

3.1.6. *Documentation of clinical findings*

Internists must be able to record the history, physical examination, laboratory studies, problem list, and differential diagnoses in a legible and comprehensive manner. In addition, a well-reasoned treatment plan should be documented in the record. The format of the case record, quality of information entered, accuracy of the assessment, and the reasoning behind the therapeutic plan are all important issues in clinical documentation.

3.1.7. *Management of medical emergencies*

Internists need to be able to handle common medical emergencies. They should be familiar with the triage of acutely ill patients based on the severity of illness and should acquire and maintain skills in basic and advanced life support. Internists should possess the ability to take on the role of the team leader in the emergency setting with the primary responsibility of integrating the care provided by the health care team.

3.1.8. *Performing procedures*

Internists must have the ability to perform the diagnostic and therapeutic procedures considered essential for the practice of internal medicine. They should be aware of the utility, indications and contraindications, complications, and cost of commonly applied procedures. The types of procedures performed by internists may vary between individual physicians, institutions, or countries. Examples of procedures usually performed by internists throughout Europe include phlebotomy, collection of arterial blood specimens and analysis of blood gases, urine analysis, electrocardiography, lumbar puncture, and thoracentesis. However, with evolving technology, internists in some countries have begun to perform procedures that have belonged to subspecialties of internal medicine, such as cardiac ultrasound and endoscopy.

3.1.9. *Prevention*

Prevention of illness is an important task that is central to internal medicine practice. Internists need to master the principles of primary and secondary prevention. They should be aware of the benefits and disadvantages of screening and surveillance programs, and they should encourage lifestyle changes and other practices aimed at preventing disease.

3.2. *Medical knowledge*

Internists need to develop a broad knowledge base in internal medicine, information technology, medical management and team leadership, and social sciences. Internists should understand the relevant scientific background and pathophysiology of the diseases they commonly manage and be capable of applying these in clinical practice. They should also be familiar with the key principles of clinical epidemiology and biostatistics. Internists need to know the principles of evidence-based medicine and the use of clinical guidelines in the management of patients. They should be familiar with benefits and problems associated with

guidelines and how their use relates to the care of individual patients. Internists should be able to read the medical literature in a critical manner.

3.3. *Communication skills*

In addition to the communication skills required for obtaining a medical history, internists should be capable of explaining carefully to patients and their families the results of the diagnostic process and the treatment required. Particularly important is a clear description of the appropriate therapeutic measures, including the explanation of the effects of medications, their efficacy, side effects, and interactions. Internists should be able to involve patients in the decision-making process and to offer them rational choices when possible. Internists should also be able to communicate effectively with other physicians and health care professionals using verbal, written, and electronic media.

3.4. *Professionalism, ethical, and legal issues*

Internists should be familiar with the principles of professional behavior as outlined by the Charter on Medical Professionalism published jointly by the European Federation of Internal Medicine, the American College of Physicians, and the American Board of Internal Medicine [5,6]. They should honor the principles of confidentiality, altruism, autonomy, and social justice in the practice of medicine. Internists should put patients' well-being first and exhibit responsible attitudes toward society. They should respect the views of patients and act with honesty, empathy, and sensitivity. They should promptly inform patients (or their relatives) if a medical error occurs. Internists should display sensitivity to diversity in the community with respect to religion, culture, and socioeconomic status. They should practice medicine according to methods of best practice guidelines. They should be conscientious and recognize the importance of attention to detail. Internists need to understand the importance of lifelong learning. They should recognize their personal limitations and be open to constructive criticism. They should respect colleagues and be willing to consult them when needed. Internists should maintain comprehensive, timely, and legible medical records.

3.5. *Organizational planning and service management skills*

Internists should apply evidence-based and cost-effective strategies to the prevention, diagnosis, and treatment of disease. They should be capable of utilizing the resources, providers, and systems necessary to provide optimal patient care. Internists should be familiar with the essence of collaboration and teamwork in medicine. They need to know how a team works effectively and how to be a team leader. In addition, internists should be familiar with the relevance and benefit of clinical governance and be willing to accept professional regulations and assessment of performance. Inter-

nists should be aware of time-management strategies. They should make effective use of available resources and search for ways to cope with bureaucracy. Internists should facilitate the implementation of quality programs in the clinical practice setting.

3.6. *Academic activities — education and research*

3.6.1. *Graduate and postgraduate teaching*

Teaching medical students and postgraduate trainees in internal medicine is a fundamental task of internists. They have to be familiar with advances in education, including problem-based learning as well as assessment and feedback. Internists need to serve as mentors and role models for students and physicians in training. They should also possess skills to deliver an effective presentation when teaching in a lecture format.

3.6.2. *Continuing education*

Internists should demonstrate commitment to continuous professional development. The internist should always recognize personal errors and attempt to learn from them. He or she should become familiar with the use of information technology to access information and facilitate educational activities. The internist should identify areas for improvement and implement strategies, based on scientific evidence, to enhance patient care.

3.6.3. *Clinical and basic research*

Internists must be familiar with the scientific basis of medicine and the use of scientific method in medical research. They should understand the fundamental aspects of biomedical science and its application in research. They should also be able to critically review the results of research studies. Internists should have the ability to report clinical findings or results of research studies.

4. **Conclusions**

This paper is a discussion document that has made an attempt to capture the essence of internal medicine in the 21st century. Despite all of the advances in science and technology, the patient–physician interaction remains the cornerstone of the practice of internal medicine. However, as a result of these advances and a rapidly evolving health care environment, we believe that the time has come for European internists to take stock of the current core competencies of their specialty and how they are likely to develop in the future. These core competencies are the foundation required for the provision of high-quality medical care everywhere, regardless of the professional traditions and organizations in different countries. In order to meet the health care needs of individual patients and society at large throughout Europe, it is important that these competencies become part of medical school and postgraduate training curricula, as well as of continuing professional development programs in all

European countries. The EBIM Working Group hopes this paper will stimulate constructive discussion and thoughtful debate, and that it will be followed by a collaborative effort to develop and endorse a European consensus.

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