EDITORIAL

Competency-based training for internal medicine

J.C.C. Borleffs^{1,2*}, Th.J. ten Cate²

¹Department of Internal Medicine and ²School of Medical Sciences, University Medical Centre Utrecht, the Netherlands, *corresponding author, e-mail: j.c.c.borleffs@azu.nl

ABSTRACT

The Central College of Medical Specialities has presented guidelines for modernisation of all postgraduate speciality training programmes. These guidelines include the definition of seven general competency fields, each of them described in more detail with four key competencies. By 2006, all postgraduate speciality training programmes will be based on these competency fields. Furthermore, by then assessment of residents will be focused on the achievement of competence, rather than only on fulfilment of length of specified rotations, numbers of clinical experiences and numbers of performed skills. The application of this competency model emphasises the fact that the education of medical doctors entails more than providing them with the required theoretical and clinical knowledge and skills.

In this issue of the Netherlands Journal of Medicine, Jacobs and colleagues describe their experiences with the objective structured clinical examination (OSCE) as an assessment of medical competence. This is an extremely important issue, not only for undergraduate education but also for postgraduate speciality training. Recently, the Central College of Medical Specialities (CCMS) of the Royal Dutch Medical Association (Koninklijke Maatschappij ter Bevordering van de Geneeskunst, KNMG) presented guidelines for modernisation of all postgraduate speciality training programmes.2 These guidelines include the definition of general competency fields for all specialities, which should help professionals to develop their training programmes. The competencies are derived from Canada's Royal College of Physicians and Surgeons' 'Canadian Medical Education Directives for Specialists' (CanMEDS)

2000 model, with adjustments to adapt them to the specific requirements of the Dutch situation.³ These adjustments are partly derived from the 2001 Dutch Blueprint of Objectives for Undergraduate Medical Training.⁴ CCMS requires all postgraduate speciality training programmes to be based on these competency fields by 2006. Further, by then assessment of residents is to be focused on achieving competence, rather than only fulfilling the length of specified rotations, numbers of clinical experiences and numbers of performed skills. Outcome will be more important than input.

The CCMS has defined seven competency fields: medical performance, communication, collaboration, knowledge and science, community performance, management and professionalism. Each field is specified in four key competencies, to provide a concrete starting point for the content of training programmes and assessment (table 1). Some of these key competencies need no further specification; others can be specified for different specialities. CCMS demands that all societies of medical specialities formulate objectives for their speciality within this competency framework. Naturally, the formulation of many discipline-related competencies can only be done by the individual societies. However, it would be inefficient and somewhat unclear if each society would also generate competencies that are non-discipline-specific objectives, such as in the field of communication or management. At a national level, by collaborating with each other and with their surrounding regional hospitals (Onderwijs en Opleidingsregio, OOR) the eight university medical centres can very well stimulate coherence in this process, and

Table 1

Competency fields and key competencies of specialist physicians²

MEDICAL PERFORMANCE

The medical specialist has adequate knowledge and skills according to the profession's current standards.

The medical specialist adequately applies the diagnostic, therapeutic and preventive possibilities of the discipline, in an evidence-based way wherever possible.

The medical specialist delivers effective and ethical patient care.

The medical specialist quickly finds necessary information and applies it adequately.

COMMUNICATION

The medical specialist establishes adequate therapeutic relationships with patients.

The medical specialist listens carefully and obtains relevant patient information effectively.

The medical specialist adequately discusses medical information with patients and their family.

The medical specialist reports adequately on patient cases in oral and written ways.

COLLABORATION

The medical specialist consults effectively with other physicians and health care providers.

The medical specialist refers adequately to other health care professionals.

The medical specialist delivers adequate collegial advice.

The medical specialist supports effective interdisciplinary collaboration and chain care.

KNOWLEDGE AND SCIENCE

The medical specialist receives medical information critically.

The medical specialist contributes to the development of professional, scientific knowledge.

The medical specialist develops and maintains a personal continuing education plan.

The medical specialist contributes to the education of students, residents, colleagues, patients and others involved in health care.

COMMUNITY PERFORMANCE

The medical specialist knows and identifies the determinants of illness.

The medical specialist contributes to the health of patients and the community.

The medical specialist acts according to relevant legislation.

The medical specialist acts adequately in case of incidents in health care.

MANAGEMENT

The medical specialist finds an adequate balance between professional patient care and personal development.

The medical specialist works effectively and efficiently in a health care organisation.

The medical specialist allocates available health care resources wisely.

The medical specialist uses information technology to optimise patient care and life-long learning.

PROFESSIONALISM

The medical specialist delivers high-quality patient care with integrity, honesty and compassion.

The medical specialist exhibits appropriate personal and interpersonal professional behaviour.

The medical specialist is conscious of the limits of his/her personal knowledge and acts within these limits.

The medical specialist practises medicine consistent with ethical standards of the profession.

also make a necessary link with undergraduate educational objectives. In several regions such initiatives have already been taken.

What are the consequences of these developments for the Netherlands Association of Internal Medicine (Nederlandsche Internisten Vereeniging, NIV)? In 2002 the NIV published the updated Internal Medicine Blueprint.⁵ This Blueprint can be used as the starting point to fulfil

the CCMS requirements. Naturally, the transformation of the Blueprint objectives into discipline-specific competencies will require time and commitment from the NIV members. However, the Blueprint of the NIV reflects well-considered preparatory work for the determination of qualities a resident should have gained at the end of his/her period of training. Consequently, the Blueprint can be applied as a suitable basis for the formulation of key competencies of an internist.

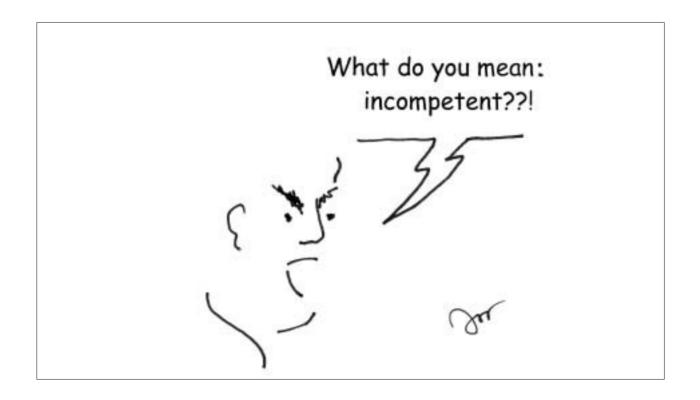
But the transformation of the Blueprint objectives to the competencies model also has an important added value. When applying the new model, many general competencies, important for specialists, will become explicitly part of training programmes. Both the public and leaders in medical education increasingly recognise that not only the field of medical expertise and performance, but also the other six competency fields are essential to the success of a physician. Further, it strengthens the opinion that education of medical doctors entails more than providing them with the required theoretical and clinical knowledge and skills. In this respect, we should even consider that subjects from domains outside medicine can make an important contribution to future internists' professional performance. In various higher education training programmes in the United States, such as engineering, such subjects have proved to be a highly valued addition.⁶

With the transformation of the current training programme into a competency-based programme, it is equally important that parallel strategies will be chosen to assess these competencies. Several traditional methods of evaluation can be applied for this purpose, but also the implementation of additional methods for the testing of residents' clinical competency in new competency fields will become necessary.³ Examples can be found from several sources.^{7,8}

In conclusion, the CCMS has asked the NIV to reformulate the objectives of the training programme for internal medicine and, consequently, to develop suitable methods for the residents' assessment. This will be a time-consuming activity, but we feel that the objectives of this modernisation of postgraduate speciality training will be worth the time and effort spent and will lead to a further improvement in the training of future internists.

REFERENCES

- Jacobs JCG, Denessen E, Postma CT. The structure of medical competence and results of an OSCE. Neth J Med 2004;62(10):397-403.
- Bleker OP, Cate ThJ ten, Holdrinet RSG. General competencies of the future medical specialist [in Dutch]. Dutch J Med Educ 2004;23:4-14.
- CanMEDS project. Skills for the new millennium: report of the societal needs working group. Ottawa, September 1996. http://rcpsc.medical.org/english/publication/canmed_e.html.
- Metz JCM, Verbeek-Weel AMM, Huisjes HJ. Raamplan 2001
 Artsopleiding: bijgestelde eindtermen van de artsopleiding. Nijmegen:
 Mediagroep, 2001.
- Nederlandsche Internisten Vereeniging. Raamplan Interne Geneeskunde.
 Alphen aan den Rijn: Van Zuiden Communications B.V., 2002.
- Derkse W. Fruitful 'irrelevance': the value of unrelated academic subjects in university courses for vocational training [in Dutch]. Dutch J Med Educ 2004;23:57-63.
- Accreditation Council for Graduate Medical Education, Outcome project: http://www.acgme.org/outcome/assess/assHome.asp.
- Cate ThJ ten, Bleker OP, Büller HA, Scherpbier AJJA. Opleiden van medisch specialisten – achtergronden en praktijk. Houten: Bohn Stafleu Van Loghum, 2003.



Borleffs, et al. Competency-based training for internal medicine.