

Continuing Professional Development (CPD) of Medical Doctors

WFME Global Standards

for

Quality Improvement

WFME Executive Council

Chairman:

Dr. Hans Karle, President, WFME, Denmark

Members:

Mr. Orvill Adams, Director, WHO, Geneva, Switzerland

Professor Jasbir Bajaj, President, South East Asia Regional Association for Medical Education (SEARAME), India

Professor Margarita Baron-Maldonado, President, Association for Medical Education in Europe (AMEE), Spain

Professor Alejandro Cravioto, President, Panamerican Federation of Associations of Medical Schools (PAFAMS), Mexico

Dr. Mario Dal Poz, Coordinatior, Human Resources for Health, WHO, Geneva, Switzerland

Professor Laurie Geffen, President, Association for Medical Education in the Western Pacific Region (AMEWPR), Australia

Professor Sa´ad Hijazi, President, Association for Medical Education in the Eastern Mediterranean Region (AMEEMR), Jordan

Dr. Delon Human, Secretary General, World Medical Association (WMA), France

Özgür Onur, International Federation of Medical Students´ Association (IFMSA), Germany

Dr. Pablo A. Pulido, Executive Director, Panamerican Federation of Associations of Medical Schools (PAFAMS), Venezuela

Professor J.P. de V. van Niekerk, President, Association of Medical Schools in Africa (AMSA), South Africa

Professor Henry Walton, Past President, WFME, United Kingdom

Continuing Professional Development (CPD) of Medical Doctors

WFME Global Standards for

Quality Improvement

CONTENTS

PREFACE	
INTRODUCTION	5
History	
The WFME Project on CPD Standards	
Fundamentals of Continuing Professional Development	
Concept, purpose and rationale of Global Standards	
Use of Standards	
THE WFME GLOBAL STANDARDS	
Definitions	
1. Mission and Outcomes	
2. Learning Methods	
3. Planning and Documentation	
4. The Individual Doctor	
5. CPD-Providers	
6. Educational Context and Resources	
7. Evaluation of Methods and Competencies	
8. Organisation	
9. Continuous Renewal	
BIBLIOGRAPHY	23
APPENDIX	24
Members of Task Forces of the WFME Global Standard Project	

PREFACE

The Executive Council The World Federation for Medical Education

Preface to the Trilogy of WFME Documents

Global Standards in Medical Education

The improved health of all peoples is the main goal of medical education. This is also the overall mission of the World Federation for Medical Education (WFME). In keeping with its constitution, as the international body representing all medical teachers and medical teaching institutions, WFME undertakes to promote the highest scientific and ethical standards in medical education, initiating new learning methods, new instructional tools, and innovative management of medical education.

In accordance with this mandate, WFME in its 1998 position paper launched the programme on *International Standards in Medical Education*. The purpose was to provide a mechanism for quality improvement in medical education, in a global context, to be applied by institutions responsible for medical education, and in programmes throughout the continuum of medical education.

In the early stages of developing the initial document, *Standards in Basic Medical Education*, it became clear that specifying global standards in any restricted sense would exert insufficient impact on the medical schools and their curricula, and indeed would have the potential to lower the quality of medical education. The criticism has become commonplace that medical education has adjusted inadequately both to changing conditions in the health care delivery system, and to the needs and expectations of societies. Thus, a lever for change and reform had essentially to be incorporated into the standards. This led to the concept of the WFME standards to be framed to specify attainment at two different levels: (a) basic standards or minimum requirements; and (b) standards for quality development.

That the WFME *Standards* would have the status as an accreditation instrument was considered from the outset. After deliberation WFME has taken the position that only nationally appointed agencies can be directly responsible for accreditation procedures. However, WFME could have a role in assisting in an accreditation process were one to be introduced. Globally adopted standards can function as a template for the agencies designated to implement recognition/accreditation. It would also be appropriate for WFME to develop guidelines and procedures for the use of its standards for accreditation purposes.

In the quality improvement of medical education, indispensable components are institutional self-evaluation, external review, and consultation. Both the structure and the function of WFME are conducive to the Federation partaking in setting up consultation teams in the entire world Regions.

The medical workforce is in principle globally mobile and WFME *Standards* have a role in the safeguarding of an adequate educational grounding of migrating doctors. However, incentives for retaining locally trained doctors in post in their own Regions are equally essential. The WFME *Standards* should not be viewed as encouraging increasing medical mobility and spurring brain drain of doctors from the developing world. The world is characterised by increasing internationalisation, from which the medical workforce is not immune, and the *Standards* should serve as necessary quality-assuring credentials of medical doctors wherever they are based.

To ensure that competencies of medical doctors are globally applicable and transferable, readily accessible and transparent documentation of the levels of quality of educational institutions and their programmes is essential. The *World Directory of Medical Schools*, published by the World Health Organization, was never

intended for a purpose other than a listing and qualitative considerations were explicitly excluded. WFME suggested already in its position paper of 1998 that a *World Register of Medical Schools* be developed, aiming to constitute a roster of quality assurance in medical educational institutions, and indicating specifically that institutions included have attained globally accepted and approved standards for medical education programmes.

The WFME *Global Standards* presented in this trilogy covers all three phases of medical education: **basic medical education**; **postgraduate medical education**; and **continuing professional development**. The three documents will provide the essential background material of the World Conference in Medical Education: *Global Standards in Medical Education for Better Health Care*, Copenhagen, 15 – 19 March 2003.

In developing the *Standards*, WFME appointed three International Task Forces, each constituted by a Working Party meeting on a retreat basis, and by a broader Panel of Experts, the latter communicating mainly electronically. Members of the Task Forces were selected on basis of their expertise and with geographical coverage an important consideration. The drafts of the *Standards* documents have been discussed on many occasions and in numerous settings around the world, and the many responsive commentaries received have been collated and incorporated.

The three sets of *Global Standards* are in different stages of implementation, but the Executive Council of WFME has formally adopted all. The document on *Standards in Basic Medical Education* has been translated into more than ten languages, validated in pilot studies at a number of medical schools, and are already influencing national and regional systems of recognition and accreditation of medical schools.

WFME is profoundly indebted to all who have contributed to this very complex process of formulating global standards. The enthusiasm and readiness to assist encountered in all Regions has been overwhelming, thereby signalling that the *Standards* are both desirable and implementable.

On the threshold of the 2003 World Conference, the Federation urges the medical education constituency, together with all those responsible for providing doctors and health services in the countries of the world, to contribute to the work in progress for definition and utilisation of the content in this trilogy, thereby further validating and endorsing the WFME *Global Standards in Medical Education*.

INTRODUCTION

HISTORY

WFME, since 1984, has conducted an "International Collaborative Programme for the Reorientation of Medical Education". Cornerstones in this process were the *Edinburgh Declaration*, 1988 (1), which was adopted by the World Health Assembly, WHA Resolution 42.38, 1989 (2), and the *Recommendations of the World Summit on Medical Education*, 1993 (3), reflected in WHA Resolution 48.8, *Reorientation of Medical Education and Medical Practice for Health for All*, 1995 (4).

To further promote change and innovation in medical education, WFME decided to extend implementation of its educational policy to the institutional level as described in a WFME Position Paper (1998) (5). The initial focus was on Basic (Undergraduate) Medical Education in medical schools (6,7), followed by Postgraduate Medical Education (8).

The WFME project on *International Standards in Medical Education* (5), approved by the World Health Organization (WHO) and the World Medical Association (WMA), has three main intentions:

- to stimulate authorities, organisations and institutions responsible for medical education to formulate their own plans for change and for quality improvement in keeping with international recommendations;
- to establish a system of national and/or international evaluation and recognition of medical educational institutions and programmes to assure minimum quality standards for the programmes;
- to safeguard practice in medicine and medical manpower utilisation, under conditions of increasing internationalisation, by specifying welldefined international standards in medical education.

In the position paper WFME indicated that similar provisions could be made in the field of continuing medical education.

THE WFME PROJECT ON CPD STANDARDS

To further extend its project on *International Standards* in *Medical Education* to cover also the field of Continuing Medical Education (CME)/Continuing Professional Development (CPD), WFME in December 2001 decided to appoint an International Task Force consisting of a small Working Party and an International Panel of Advisors, charged with defin-

ing global standards for this phase of medical education. The term CPD was later chosen by the Task Force to be used in this document (see page 10: Definitions).

The Working Party met in Oslo in January 2002. The deliberations of the Working Party were based on material from a number of sources (9-14). In the *Report* of the Working Party a set of global standards in CPD were defined, designed to enable medical doctors, the medical profession and relevant medical training institutions with different educational, socioeconomic and cultural traditions and conditions to use the system of standards at a level appropriate to themselves. Emphasis is placed on standards functioning as a lever for change and reform.

The report from the Working Party was reviewed by the International Panel of Advisors meeting in Copenhagen October 2002. The various principles and definitions of CPD were debated, and extensive revision resulted in the present document.

The report from the Working Party had been adopted in principle by the WFME Executive Council at its meeting September 2002, and the final report was adopted December 2002.

In comparison with the two WFME documents on preceding stages of medical education, global standards in basic medical education and in postgraduate medical education, formulation of the document on CPD standards was strongly influenced by two characteristics of this phase of medical education: (a) When defining global standards in CPD, clear reference can not generally be made to specific institutions, such as medical schools in the case of basic medical education, and postgraduate institutes or other bodies responsible for postgraduate medical training; (b) The provision and utilization of CPD involves a number of agents, extending from the individual doctor to multinational CPD-providers. Their responsibilities and interactions are subject to great variation around the world, and their roles and competences are normally not well defined.

WFME has therefore identified the medical professional organisations as the bodies having main responsibility for the overall planning and coordination of CPD, including registration and documentation of CPD activities. The medical profession must have a strong influence on the organisation and implementation of CPD, which in no way denies the

clear interests and roles in ensuring the quality of CPD of other organisations, institutions and agencies, and of health authorities and society.

FUNDAMENTALS OF CONTINUING PROFES-SIONAL DEVELOPMENT

Definition

Continuing Professional Development (CPD) designates the period of education and training of doctors commencing after completion of basic medical education and postgraduate training, thereafter extending throughout each doctor's professional working life. However, CPD is a much more far-reaching activity throughout the continuum of medical education.

CPD, therefore, stands as a professional imperative of every doctor, and at the same time is also a prerequisite for enhancing the quality of health care. CPD differs in principle from the preceding two formal phases of medical education: basic medical education and systematic postgraduate medical training. Whereas the latter two are conducted according to specified rules and regulations, CPD mainly implies self-directed and practice-based learning activities rather than supervised training. As well as promoting personal professional development, CPD aims to maintain and develop competencies (knowledge, skills and attitudes) of the individual doctor, essential for meeting the changing needs of patients and the health care delivery system, responding to the new challenges from the scientific development in medicine, and meeting the evolving requirements of licensing bodies and society.

The former term Continuing Medical Education (CME) has been replaced by Continuing Professional Development (CPD). The new term reflects both the wider context in which this phase of medical education takes place, and signifies that the responsibility to conduct CPD rests with the profession and the individual doctor. Law and jurisdiction rarely regulate CPD. Where regulations do exist, these are flexible, even in countries demanding re-licensure or reregistration of doctors in practice.

Educational rationale

In order to practise appropriately throughout their professional life, doctors must remain up-to-date, which entails engaging in some form of continuing education. To deliver the highest quality of patient care, the content of CPD must be directed towards

enhancing roles and competencies (both clinical skills and theoretical knowledge), and organisation of work (team building and leadership), communication, medical ethics, teaching, research and administration.

Fundamental new knowledge in medicine transforms concepts and methods, and the medical profession must through adequate CPD incorporate new knowledge. Similarly, new ethical demands and socio-economic developments continually confront the medical profession, and challenge the individual doctor to assume new roles. The role of CPD in quality assurance and quality development of the health care delivery systems is increasingly significant.

Motivation for CPD, from the perspective of the individual doctor, derives from three main sources:

- The professional drive to provide optimal care for the individual patient;
- The obligation to honour the demands from employers and society;
- The need to preserve job satisfaction and prevent "burn out".

Motivation for life long learning should be a criterion for selecting students for admission to medical schools, and should be nurtured through all phases of medical education.

The best available evidence (15) suggests that effective CPD is characterised by the presence of three factors: a clear need or reason appears for the particular CPD to be undertaken; learning is based on such an identified need or reason; and follow-up provision is made for reinforcing the learning accomplished.

Needs assessment is therefore, in most cases, an integral component of successful CPD. Methods for identifying learning needs range from *formal assessments* (using tests of knowledge, skills and attitudes, peer review, systematic review of practice such as audit or significant event analysis), to the more common and equally effective ways that are part of *everyday clinical practice*: thinking about mistakes, reflecting on practice, receiving complaints and feedback, interacting with the team, etc.

Specifically identified needs should be the focus of CPD whenever possible; however, professional learning should also equip doctors to deal with unpredictable future clinical demands and thus relate to a broad base of knowledge and experience on which to draw, besides making up for deficiencies from past practice. Some CPD should be based on the general

professional need to explore, to develop and consider new areas of competence.

Whether the need identified is specific or general, the learning activities must be planned to be appropriate, and there must be a balance between general and specific CPD. The method of learning is less important than its relevance to the need, and could vary in different circumstances from reading, attending a lecture or a course, a peer-group meeting or a visit to an institution.

Following up on any learning undertaken reinforces such learning, and offers opportunities for disseminating and sharing such learning with others; beneficial alterations in methods of practice follow, and evaluation can be made of the extent of effectiveness of the CDP undertaken in relation to the original need or reason for it.

Although medical practice is sometimes depicted as routine and predictable, in actual fact doctors are required all the time to make judgements in complex and unpredictable situations, where high levels of uncertainty occur and where paradox is common. The unstated contract between doctors and the people they serve calls for a capacity to know what is "best" in any particular circumstance rather than what is "right" in some absolute sense. General oversight, improvisations and professional judgements are central to medical practice.

The various forms of knowledge which enable doctors to exercise their professional judgement include: formal or factual knowledge; procedural knowledge; and intuitive knowledge. Practical wisdom derives from a complicated amalgam of these various forms of knowledge. The link between doctors' knowledge and their practice is far from straightforward. New knowledge is not always directly applied to practice.

Generally doctors develop and change their practice through professional conversational exchanges and dialogue with colleagues rather than as a result of formal educational processes. Thus, the educational process necessary for effective clinical practice is one of continuous development rather than targeted, intermittent input. Doctors must learn about and from their practice through reflection and deliberation about their own and others' practice. It is through such an ongoing process that they identify and clarify their educational needs.

Much of this continuous development is informal and often unconscious. CPD is thus to some extent an integral part of the practice of doctors worldwide, even in the remotest location without access to information technology or planned CPD activities.

The importance of conversations, informal as well as in more formal settings (peer review, case conferences, audit meetings) should be reflected in the working conditions available to doctors, over and above the accessibility to them of formal CPD activities such as courses.

Emphasizing the importance of informal CPD in no way minimizes how essential systematic formalised elements, such as courses, conferences, etc. are in effective CPD. A multi-faceted CPD system best fulfils all needs of doctors, taking account of differences in professional roles, needs and learning priorities.

Organisation and methods

The organisation of CPD varies hugely from country to country. A basic assumption is that the profession itself bears a major responsibility for CPD, with medical associations and other professional organisations functioning as major initiators, providers and promoters of CPD in many countries.

There are also numerous providers of CPD not directly accountable to the medical profession, including for-profit healthcare companies, the pharmaceutical/medical technological industry, consumer organisations, and for-profit CPD providers.

Formal CPD activities, which traditionally are teacher-conducted, are generally provided and supported by institutions such as medical schools/universities or postgraduate institutes, professional organisations, national or international scientific organisations, local or national health authorities or the pharmaceutical/medico-technical industry.

In some countries major institutes for CPD exist; some are privately run on a commercial basis, illustrating that education marketed as a purchasable commodity is growing. Other institutes are government run, and often provide systematic specialist (postgraduate) training in addition to CPD courses. National medical councils or academies are yet another model for provision and development of CPD. In some countries, e.g. France, elements of the labour market legislation are used to secure access to CPD for large numbers of doctors.

Opportunities to benefit from CPD on a day-to-day basis depend to a large extent on the working environment. Extreme contrasts are present. Work in a thriving clinical research environment, affording stimulating contacts with colleagues, with ample resources to participate in international workshops, conferences etc. differs vastly from working in a rural area, in solo or in a small practice in the community. While information-technology can remedy some of the handicap of isolation, the stimulus from personal relations and communication with colleagues enhances participation in CPD.

Information technology and distance learning concepts are increasingly influencing the market of CPD.

The organisational variation in provision of CPD worldwide is also reflected in enormous differences in methods of funding CPD; the financial resources necessary for CPD are always to be perceived as part of the operational costs of the health care sector.

Evaluation and recognition

The educational outcomes of CPD are rarely tangible, let alone measurable. CPD does not always directly relate to current practice, but also extends the capacity of doctors to make wiser judgements in the situations of uncertainty they will certainly encounter in their professional future.

Differentiated systems have been developed which specify the level of acceptable CPD engagement. Medical professional organisations or licensing bodies have developed mechanisms of control, often legally applied, specifying *numbers of accredited CPD courses* or activities in which doctors are required to participate, the individual doctor obtaining CPD points.

The increasing concern that CPD of medical doctors should be adequate has led to demands for systematic *recertification* in some countries, entailing the development of systems for examination or other types of reassessment.

A new development in CPD focuses on monitoring individual daily learning activities. By use of personal *portfolio* or log-book for registration of CPD activities, and by comparison with similar results of colleagues, a tool is provided for planning an individual self-directed learning or for managing individual development. Doctors accountable to society must thus find means – such as realistic monitoring and documentation of CPD activities – to prove that they are capable of effective practice.

CONCEPT, PURPOSE AND RATIONALE OF GLOBAL STANDARDS

International standards for medical education, which have general applicability, can be defined (5). These definitions take account of the variations in content and process of medical education among countries, due to differences in teaching tradition, culture, socio-economic conditions, the health and disease spectrum, and the different forms of health care delivery systems. Similar differences can also occur within individual countries. Nevertheless, the scientific basis of medicine and the necessity to base clinical practice on evidence is universal; the task of medical education everywhere, throughout its continuum, is the provision of high quality health care. Notwithstanding variations, there is an increasing degree of equivalence of structure, process and product of medical education worldwide.

Global standards in CPD, as in other parts of medical education, of course must be modified or supplemented in accordance with regional, national and institutional needs and priorities. WFME has clearly emphasized that there can be no benefit in fostering uniformity of educational programmes and learning activities (5). Moreover, quality assurance of medical training programmes must give emphasis to *improvement*, and provide guidance for advancement, instead of advocating 'fulfilment of standards' as the ultimate goal.

A central part of the WFME strategy is to give priority to develop international standards and guidelines for medical education, that are supportive of the institutions concerned, their educational programmes, the medical profession, and the individual student and doctor. These international standards will constitute a new framework, serving as a yardstick against which those responsible for CPD can evaluate their own activities and organisations. Moreover, internationally accepted standards could be used as a basis for national and regional recognition and accreditation of educational programmes. At the individual level recognised global standards could guide and help medical doctors in planning their own CPD training programmes.

In drafting standards for CPD, the WFME Working Party applied the principles used in developing the international standards for basic medical education and for postgraduate medical education. Attention was given to the general application of guidelines in quality development of medical education. Therefore, for international standards in CPD to be generally accepted, the following premises were adopted:

- Only general aspects of CPD should be included.
- Standards should be concerned with broad categories of the content, process, educational environment and outcome of CPD.
- Standards should function as a lever for change and reform.
- Compliance with standards must be a matter for each community, country or region.
- Standards should be formulated in such a way as to acknowledge regional and national differences in the educational programme, and allow for different local, national and regional profiles and developments.
- Use of a common set of international standards does not imply or require complete equivalence of programme content and outcome of CPD.
- Standards should recognise the dynamic nature of programme development.
- Standards are formulated as a tool that the individual doctor, the medical profession and authorities, organisations and institutions responsible for CPD can use as a basis and a model for their own programme development.
- Standards should not be used in order to rank programmes.
- Although it is useful to define minimum requirements, the set of standards should emphasise the need for a dynamic approach involving a programme for continuous quality development.
- Standards should be further developed through broad international discussion and consensus.
- The value of the standards must be tested in evaluation studies in each Region.

Standards must be clearly defined, and be meaningful, appropriate, relevant, measurable, achievable and accepted by the users. They must have implications for practice, recognise diversity and foster adequate development.

Evaluation based on generally accepted standards is an important incentive for improvement and for raising the quality of medical education, both when reorientation and reform are pursued, and also to promote continuous improvement and development.

Shared global standards in medical education that are adhered to by the institutions and organisations concerned may facilitate mobility of medical doctors, and ease the acceptance of medical doctors in countries other than those in which they are trained.

Finally, substandard educational programmes can be substantially improved by the use of a system of evaluation and accreditation based on internationally accepted standards, thereby enhancing the quality of health care, nationally as well as internationally.

USE OF STANDARDS

WFME holds that the set of international standards presented can be used globally as a tool for quality assurance and development of CPD in the following ways:

• Participants in CPD

The standards provide a new framework against which individual doctors and the medical profession can assess themselves in a voluntary self-evaluation and self-improvement process.

Providers of CPD

The standards should form the basis for CPD providers in designing CPD activities.

Monitors of CPD

Depending on local needs and traditions, the standards can also be used by national or regional agencies engaged in monitoring, recognition, and accreditation of CPD.

THE WFME GLOBAL STANDARDS

DEFINITIONS

CPD includes all activities that doctors undertake, formally and informally, in order to maintain, update, develop and enhance their knowledge, skills, and attitudes in response to the needs of their patients. Doctors are autonomous and independent, i.e. they act in the best interest of the patient without undue external influence. Engaging in CPD is a professional obligation but also a prerequisite for enhancing the quality of health care. The strongest motivating factor for continuous professional life-long learning is the will and desire to maintain professional quality.

CME describes continuing education in the field of knowledge and skills of medical practice; CPD, a broader concept, refers to the continuing development of the multi-faceted competencies inherent in medical practice, covering wider domains of professionalism (e.g. medical, managerial, social and personal subjects) needed for high quality professional performance. Although CPD designates the period commencing after completion of postgraduate training, CPD has much further ramifications. CPD activities have a basis in the life-long continuing process, starting when the student is admitted to medical school and continuing as long as the doctor is engaged in professional activities. The shaping, reshaping and development of a doctor involves responding to changing societal and individual needs, in the context of evolving medical science and health care delivery. Independence also is implicated, CPD activities being characterized by self-directed learning, only rarely involving supervised training for any extended period of time.

In this document the more comprehensive term CPD, of which the traditional CME is one component, has been chosen in the formulation of standards.

WFME recommends the following set of international standards in CPD structured according to **9 areas** and **36 sub-areas**.

AREAS defined as broad components in the structure, process and outcome of CPD cover:

- 1. Mission and Outcomes
- 2. Learning Methods
- 3. Planning and Documentation
- 4. The Individual Doctor
- 5. CPD-Providers
- 6. Educational Context and Resources
- 7. Evaluation of Methods and Competencies
- 8. Organisation
- 9. Continuous Renewal

SUB-AREAS are defined as specific aspects of an area, corresponding to performance indicators.

STANDARDS are specified for each sub-area using two levels of attainment:

 Basic standard. This means that the standard must be met and fulfilment demonstrated during evaluation of CPD.

Basic standards are expressed by a "must".

Standard for quality development. The implication is that the standard is in accordance with international consensus about best practice of CPD. Fulfilment of - or initiatives to fulfil - some or all of such standards should be documented. Fulfilment of these standards will vary with the stage and development of CPD activities, their resources, the educational policy and other local conditions influencing learning priorities. Even the most advanced programmes might not comply with all standards.

Standards for quality development are expressed by a "should"

ANNOTATIONS are used to clarify, amplify or exemplify expressions in the standards.

¹ WFME is aware of the complex interactions and links between the various areas and sub-areas.

1. MISSION AND OUTCOMES

1.1 STATEMENTS OF MISSION AND OUTCOMES

Basic standard:

The medical profession, in consultation with relevant authorities and employers, **must** define the mission and intended outcomes of CPD and make them publicly known.

Quality development:

The mission **should** encourage and support doctors to improve their practice performance and **should** address the obligation of the medical profession to improve the conditions for effective CPD.

Annotations:

- Statements of mission and intended outcomes would include general and specific issues relevant to national and regional policy and would describe what is expected from doctors about their maintenance and development of competencies.
- With due regard to national traditions, the medical profession would in general act through their professional organisations such as the medical associations, scientific societies, medical colleges, medical academies, etc.
- Relevant authorities would include local and national bodies involved in regulation of the medical profession.

1.2 PARTICIPATION IN THE FORMU-LATION OF MISSION AND OUT-COMES

Basic standard:

The statement of mission and intended outcomes of CPD **must** be defined by its principal stakeholders.

Quality development:

Formulation of mission and outcome statements **should** be based on input from a wider range of stakeholders.

Annotations:

- Principal stakeholders would include individual doctors, professional associations or organisations, medical scientific societies, medical schools/universities, postgraduate institutes, employers, relevant CPD providers and governmental authorities.
- A wider range of stakeholders would include representation of supervisors, trainers, teachers, other health professionals, patients, the local community, voluntary health organisations, and health care authorities.

1.3 PROFESSIONALISM AND AUTONOMY

Basic standard:

CPD **must** serve the purpose of enhancing the professional and personal development of doctors.

Quality development:

The process of CPD **should** serve to strengthen professionalism of doctors and enable them to act autonomously in the best interests of their patients and society.

Annotations:

- Professionalism encompasses the knowledge, skills, attitudes, values and behaviours expected of individuals during the practice of their profession, and includes concepts such as maintenance of competence, information literacy, ethical behaviour, integrity, honesty, altruism, service to others, adherence to professional codes, justice, and respect for others.
- Autonomy in the patient-doctor relationship shall ensure that
 doctors at all times make informed decisions in the best
 interest of their patients, based on best available evidence,
 whereas autonomy related to doctors' learning implies that
 they have the final say in deciding what to learn and how to
 plan and carry out learning activities. Also, it implies access
 to the knowledge and skills training doctors need to keep
 abreast and meet the needs of their patients, and that the
 sources of knowledge are independent and unbiased.
- Personal development in this context is limited to what is relevant to practice and the profession.

1.4 OUTCOMES OF CPD

Basic standard:

Doctors **must** ensure that CPD activities undertaken are adequate to maintain and develop competencies necessary to meet the needs of their patients and society.

Quality development:

Doctors, in consultation with peers and professional organisations, **should** define the competencies or benefits to be achieved as a result of CPD. Learning from CPD-activities **should** be shared with peers.

Annotations:

- Competencies can be defined in broad professional terms or as specific knowledge, skills, attitudes and behaviours.
 Competencies relevant for CPD would, at a level dependant on the chosen field in medicine, include the following areas:
 - Patient care that is appropriate, effective and compassionate for dealing with health problems and health promotion
 - Medical knowledge in the basic biomedical, clinical, behavioural and social sciences and medical ethics and medical jurisprudence and application of such knowledge in patient care
 - Interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professions, the scientific community and the public
 - Appraisal and utilisation of new scientific knowledge to continuously update and improve clinical practice
 - Function as supervisor, trainer and teacher in relation to colleagues, medical students and other health professions
 - Scholarly capacity to contribute to development and research in the chosen field of medicine
 - · Professionalism
 - Interest and ability to act as an advocate for the patient
 - Knowledge of public health and health policy issues and awareness and responsiveness to the larger context of the health care system, including e.g. the organisation of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations
 - Ability to understand health care, and identify and carry out system-based improvement of care.
- Development of competencies would include broadening and deepening of existing knowledge and skills besides activities undertaken to meet broader learning needs or purposes.

2. LEARNING METHODS

2.1 APPROACHES TO CPD

Basic standard:

CPD **must** be tailored to the needs of the individual doctor and carried out on a continuous basis. The learning **must** encompass integrated practical and theoretical components in order to enhance medical practice.

Quality development:

CPD **should** take advantage of a variety of learning modalities. Doctors **should** engage with colleagues in learning networks to share experiences and benefit from collaborative learning.

Annotations:

- Integration of practice and theory can take place in didactic learning sessions and supervised patient care experiences as well as through self-directed and active learning.
- Learning modalities would include courses, lectures, seminars, participation in conferences and individual reading, self-assessment of knowledge base and practice performance, research projects as well as study visits and clinical experiences.
- Networks would include meetings with colleagues and net-based information exchange, discussions and counselling. They could also include other health care professionals and relevant other persons/groups.

2.2 SCIENTIFIC METHODS

Basic standard:

CPD content **must**, whenever possible, be based firmly on science and practice evidence.

Quality development:

Through CPD doctors **should** be able to improve their practice, drawing on data from emerging scientific evidence. Doctors **should** be able to access and receive updated evidence based on clinical knowledge, skills and attitudes. In the learning process doctors **should** acquire the knowledge of appropriate scientific methods to improve their critical appraisal skills.

2.3 CONTENT OF CPD

Basic standard:

CPD **must** be diverse and flexible in content to enable doctors to develop their practice.

Quality development:

Doctors **should** select CPD content based upon selfdirected plans for learning that are consistent with their various professional roles.

Annotations:

- Diverse CPD refers to broader or narrower needs of doctors, depending on the nature of their practice, and also allows for personal interests and development.
- Flexible implies meeting emergent needs as soon and as far as possible.
- · Content would include:
 - The basic biomedical sciences depending on local needs, interests and traditions - typically include anatomy, biochemistry, physiology, biophysics, molecular biology, cell biology, genetics, microbiology, immunology, pharmacology, pathology, etc.
 - Clinical sciences include the chosen clinical or laboratory disciplines and other relevant clinical/laboratory disciplines.
 - Behavioural and social sciences depending on local needs, interests and traditions - typically include medical psychology, medical sociology, biostatistics, epidemiology, hygiene and public health and community medicine, etc.
 - The behavioural and social sciences and medical ethics provide the knowledge, concepts, methods, skills and attitudes necessary for understanding socio-economic, demographic and cultural determinants of causes, distribution and consequences of health problems as well as the organisation of health care delivery systems.
- Various roles of doctors would include functions as medical expert, health advocate, communicator, collaborator and team-worker, scholar, administrator and manager.

2.4 THE PROCESS OF CPD

Basic standard:

The medical profession **must** describe, on a national basis and in consultation with other stakeholders, the expectations for CPD as a process of life-long learning, with informal self-directed learning being the cornerstone of CPD.

Quality development:

The medical profession **should** establish formal collaboration with other stakeholders in order to achieve a broad spectrum of learning possibilities.

2.5 RELATION BETWEEN CPD AND SERVICE

Basic standard:

CPD **must** be recognised as an integral part of medical practice reflected in budgets, resource allocations and time planning, and not be subordinate to service demands.

Quality development:

CPD **should** be tailored to fill gaps in knowledge, skills, attitudes and management, identified in appraisal of service or individual reflection on practice and personal interests. CPD **should** be used to implement scientific developments and improvements in the organisation and practise of the health care sector.

Annotations:

- Recognition as an integral part of medical practice refers to optimising the use of different clinical settings, patients and clinical problems for training purposes, seamlessly integrated in the service functions.
- To ensure that gaps in knowledge, skills, attitudes and management are identified and adequate action taken, needs assessment by peers and/or self-assessment is recommended.

2.6 MANAGEMENT OF CPD

Basic standard:

Doctors **must** have the ultimate responsibility for planning and implementing CPD for their individual needs.

Quality development:

The medical profession, in collaboration with relevant stakeholders, **should** organise CPD activities and establish systems to fund and sustain CPD in response to needs identified by their members.

Annotation:

 Relevant stakeholders would include other participants in the training process, representatives of other health professions and health authorities.

3. PLANNING AND DOCUMENTATION

3.1 DOCUMENTATION OF NEEDS FOR PLANNING CPD

Basic standard:

The main basis for the planning of CPD activities **must** be to address clinical practice and public health needs. The medical profession **must** determine the perceived needs of doctors and make these known for planning of CPD.

Quality development:

Systems **should** be developed that provide documented data for alerting medical doctors and stakeholders about practice quality, tracking outcome and comparison with peer groups.

3.2 DOCUMENTATION OF CPD ACTIVITIES

Basic standard:

Systems **must** be established to document recognised CPD activities in a systematic and transparent way. Documentation of CPD **must** be used as a formative learning tool as well as providing feedback on relevance and quality for planning of CPD.

Quality development:

The objective of any system of documentation of CPD **should** be to acknowledge actual learning and, where appropriate, enhanced competence, not mere participation in CPD activities. Doctors **should** create personal learning portfolios that can be shared with peers.

4. THE INDIVIDUAL DOCTOR

4.1 MOTIVATION

Basic standard:

Delivery of high quality care **must** be the driving force for doctors participating in CPD activities. Doctors choosing among CPD activities **must** judge their educational value and select activities of high quality and appropriate for their learning needs.

Quality development:

CPD activities **should** enhance motivation to learn and improve and be recognised as a meritorious professional activity.

Annotations:

- High quality care means health care delivery according to generally accepted principles, stated by e.g. medical scientific societies or national and international health boards.
- Motivation and skills for life-long learning are developed during basic medical education and enhanced as part of postgraduate medical training.
- Recognition of meritorious professional activity would be by improved personal satisfaction, rewards, promotion and/or remuneration.

4.2 LEARNING STRATEGIES

Basic standard:

Doctors, assisted by their professional organisations, must develop their ability systematically to plan, execute and document practice-based learning in response to defined learning needs. Tools for self-assessment must be developed to help doctors identify their learning needs.

Quality development:

CPD activities of doctors **should** be based on learning strategies, which lead to enhancement of the quality of care and include interdisciplinary team learning when appropriate.

Annotation:

 Practice-based learning implies a systematic use of data from one's own practice to stimulate learning and improvement, e.g. analyse practice experience and perform practice-based improvement activities using systematic methods, and locate, appraise, and assimilate evidence from scientific studies related to the patient population.

4.3 WORKING CONDITIONS

Basic standard:

Working conditions in the practice of medicine and employment of doctors **must** provide the time and other resources for CPD.

Quality development:

Systems of remuneration for doctors **should** allow for their participation in a broad range of CPD activities relevant to their needs.

4.4 INFLUENCE OF DOCTORS ON CPD

Basic standard:

Doctors **must** be given the opportunity to discuss their learning needs with CPD providers.

Quality development:

Systems **should** be developed to involve doctors in planning and implementation of their CPD activities.

Annotations:

- CPD providers would include primarily the professional associations and organisations, national and international medical scientific societies, medical schools/universities, postgraduate institutes, employers in the health care system and other providers such as health authorities, the pharmaceutical and medical device industry, companies in information technology, consumer associations, etc.
- Involvement with process of planning and implementation would include participation in groups or committees responsible for programme planning at the local or national level.

5. CPD-PROVIDERS

5.1 RECOGNITION POLICY

Basic standard:

There **must** be a system for recognition of CPD providers and/or the individual CPD activities.

Quality development:

All CPD providers **should** be able to describe the educational basis of their activities including access to educational expertise. Any conflicting interests of CPD providers **should** be declared.

Annotation:

Conflicting interests could include inappropriate promotional activities.

5.2 OBLIGATIONS OF PROVIDERS

Basic standard:

The providers of CPD activities **must** meet agreed educational quality requirements.

Quality development:

The providers, in planning and conducting their activities, **should** demonstrate use of appropriate educational methods and technology.

5.3 FEEDBACK TO PROVIDERS

Basic standard:

Constructive feedback to CPD providers on the performance and learning needs of doctors **must** be given on an ongoing basis.

Quality development:

Acceptable norms for the provision of CPD **should** be established and adhered to by all providers. Systems for systematic feedback to organisers of and responsible bodies for CPD **should** be developed.

Annotations:

- Feedback would include planned communication between trainees and trainers/supervisors with the purpose of ensuring remedies necessary to enhance competence development.
- Systems for systematic feedback could be data on planning, execution and outcome of CPD for a certain cohort of doctors.

5.4 ROLE OF MEDICAL SCHOOLS

Basic standard:

Medical schools **must** provide leadership in improving the quality of CPD. Medical schools **must** through the curriculum in basic medical education initiate motivation and ability to engage in CPD by preparing the students for life-long learning.

Quality development:

Medical schools **should**, when appropriate, provide CPD activities. Medical schools, in cooperation with other stakeholders, **should** undertake research on CPD activities.

6. EDUCATIONAL CONTEXT AND RESOURCES

6.1 STRUCTURE OF TRAINING

Basic standard:

CPD activities **must** be provided in settings and circumstances that are conducive to effective learning.

Quality development:

CPD **should** include periodic external review of the practice's learning environment based on internal self-evaluation.

Annotation:

Structure of training refers to the overall sequence of attachment to the training settings and charge of the doctor and not the details of the training experiences.

6.2 PHYSICAL FACILITIES AND EQUIPMENT

Basic standard:

In order to carry out CPD doctors **must** have protected time and opportunities for reflection on practice and for in-depth studies with access to adequate professional literature and opportunities for skills training.

Quality development:

Physical facilities, skills training equipment and work schedule **should** be evaluated and updated regularly for their appropriateness in providing adequate context and conditions for CPD.

6.3 INTERACTION WITH COLLEAGUES

Basic standard:

CPD **must** include experience in collaborating with colleagues and other health professionals.

Quality development:

To enhance CPD doctors **should** join educational networks. Doctors **should** engage in development of the competence of their colleagues, including doctors in training, students, allied health personnel, etc.

Annotation:

 Networks would include meetings with colleagues and netbased information exchange, discussions and counselling.

6.4 INFORMATION TECHNOLOGY

Basic standard:

Relevant use of information and communication technology **must** function as an integrated part of the CPD process.

Quality development:

Doctors **should** have access and be competent to use information and communication technology for self-directed learning, for communication with colleagues, information searching, and patient and practice management.

6.5 FORMALISED CPD ACTIVITIES

Basic standard:

The medical profession, in collaboration with other stakeholders, **must** develop systems that encourage and recognise participation in local, national, and international CPD courses, scientific meetings and other formalised activities. Doctors **must** have opportunities to attend such CPD activities.

Quality development:

Doctors **should** have opportunities to plan and execute CPD activities as in-depth studies when needed to reach a higher level of competence in an effective way.

6.6 EDUCATIONAL EXPERTISE

Basic standard:

The medical profession **must** formulate a policy on the use of educational expertise relevant to the planning, implementation and evaluation of CPD.

Quality development:

Access to educational expertise **should** be available and be used in CPD activities.

Annotations:

- Formulation of policy would include consultation with relevant stakeholders.
- Educational expertise would deal with problems, processes and practice of medical training and would include medical doctors with experience in medical education, educational psychologists and sociologists, etc.

6.7 EXPERIENCES IN OTHER SETTINGS AND ABROAD

Basic standard:

The medical profession **must** formulate a policy that ensures freedom of movement in order to promote the ability of doctors to obtain experience by visiting other settings within or outside the country.

Quality development:

The medical profession, in collaboration with other stakeholders, **should** facilitate national and international study visits for doctors. The relevant authorities **should** establish relations with corresponding national or international bodies with the purpose of facilitating provision and mutual recognition of CPD activities.

Annotation:

Formulation of policy would include consultation with relevant stakeholders.

7. EVALUATION OF METHODS AND COMPETENCIES

7.1 MECHANISMS FOR EVALUATION

Basic standard:

The medical profession **must** establish mechanisms for evaluation of CPD activities and appropriate assessment of the ensuing learning.

Quality development:

CPD evaluation **should** involve experts in medical education and address the context of the learning process, the structure and specific components of CPD and the learning outcomes.

Annotations:

- Mechanisms for evaluation would imply the use of valid and reliable methods and require that basic data are available. The evaluation would ensure that relevant concerns are identified and addressed by monitoring the resources available, the learning processes, outcomes and benefits.
- Assessment may include consideration of various tools for self-assessment, the use of normative and criterion referenced judgements, and the use of portfolio and special types of assessments, e.g. site visits by peers on an agreed protocol
- Involvement of experts in medical education would further broaden the base of evidence for quality. This must ensure monitoring the resources available, the learning outcome and the benefits derived by the individual doctor.
- The context of the learning process would include the organisation and resources as well as the learning environment.
- Specific components of CPD would include programme description and intended outcomes.

7.2 FEEDBACK FROM CPD ACTIVITIES

Basic standard:

Feedback from participants in CPD activities **must** be systematically sought, analysed and acted upon, and the information made available to stakeholders.

Quality development:

CPD participants **should** be involved actively in CPD evaluation and in using the results for planning.

7.3 ACTIVITIES BASED ON DOC-TORS PERFORMANCE

Basic standard:

Providers of CPD activities **must** seek information from the targeted doctor audience as the basis for planning.

Quality development:

The benefit from participation in CPD activities **should** be analysed in relation to doctors' needs and used to provide feedback to the professional organisations and CPD-providers.

7.4 MONITORING AND RECOGNI-TION OF CPD

Basic standard:

The formal structure of CPD activities **must** be authorised by the medical profession in consultation with relevant authorities based on agreed criteria.

Quality development:

Documentation of relevant CPD activities, as defined by the participant, **should** play a significant role in systems for competence assessment, irrespective of the system in use for recognition of the doctor in practice.

Annotations:

- Agreed criteria for authorisation of CPD activities deal with the educational value and would include consideration of number of participants, clinical data, equipment, library and IT facilities, training staff and programme.
- Recognition of the doctor in practice would dependent on national rules and regulations - include maintenance of licensure.

8. ORGANISATION

8.1 FRAMEWORKS

Basic standard:

CPD **must** be conducted in accordance with the policies of representative professional organisations, including the recognition of activities and their evaluation.

Quality development:

Collaboration and mutual recognition **should** be encouraged through appropriate frameworks both nationally and internationally.

8.2 PROFESSIONAL LEADERSHIP

Basic standard:

The medical professional organisations **must** take responsibility in terms of leadership and organisation for CPD activities.

Quality development:

The professional leadership **should** be evaluated regularly with respect to achievement of the mission and outcomes of CPD activities.

8.3 FUNDING AND RESOURCE ALLOCATION

Basic standard:

Funding of CPD activities **must** be part of the expenses of the health care system. Doctors working conditions **must** enable them to choose and participate in CPD activities.

Quality development:

Funding systems for CPD **should** ensure independence of doctors in their choices of CPD activities.

8.4 MANAGEMENT

Basic standard:

CPD activities **must** be appropriately managed and resourced.

Quality development:

The administrative structures for CPD **should** include quality assurance and improvement.

9 CONTINUOUS RENEWAL

Basic standard:

The medical profession **must** initiate procedures for regular review and updating of the structure, function and quality of the CPD activities and rectify deficiencies.

Quality development:

The process of renewal **should** be based on research. In so doing it **should** address the following issues:

- Adaptation of the mission and outcomes of CPD to the scientific, socio-economic and cultural development of the society.
- Re-examining and defining the competencies required to incorporate medical scientific progress and the changing needs of the people.
- Reviewing learning approaches and training methods to ensure that these are appropriate and relevant.
- Development of methods of (self)assessment and practice-based learning to facilitate doctors' life-long learning.
- Development of the organisational and managerial structures to help doctors to meet their patients emerging needs and to deliver high quality care.
- Reflection and continual improvement of CPD contents and methodology.

BIBLIOGRAPHY

- World Federation for Medical Education. Edinburgh Declaration. Lancet 1988, 8068, 464.
- World Health Assembly. WHA Resolution 42.38. WHO. Geneva.
- World Federation for Medical Education. Proceedings of the World Summit on Medical Education. Medical Education 1994, 28, (Suppl.1).
- World Health Assembly. Reorientation of Medical Education and Medical Practice for Health for All. WHA Resolution 48.8. WHO, Geneva, 1995.
- The Executive Council, The World Federation for Medical Education. International standards in medical education: assessment and accreditation of medical schools' educational programmes. A WFME position paper. Medical Education 1998, 32, 549-58.
- WFME Task Force on Defining International Standards in Basic Medical Education. Report of the Working Party, Copenhagen, 14-16 October 1999. Medical Education, 2000, 34, 665-675.
- World Federation for Medical Education. Basic Medical Education. WFME Global Standards for Quality Improvement. WFME, Copenhagen 2003. WFME website: http://www.wfme.org
- World Federation for Medical Education. Postgraduate Medical Education. WFME Global Standards for Quality Improvement. WFME, Copenhagen 2003. WFME website: http://www.wfme.org
- 9. Accreditation Council for Continuing Medical Education. Standards. ACCME, USA, 2002.
- European Union of Medical Specialists. Charter on Continuing Medical Education in the European Union. UEMS, 1994.
- Advisory Committee on Medical Training of European Commission. Report and Recommendations on Continuing Medical Education. ACMT Document XV/E/8414/94. Brussels, 1994.

- Standing Committee of European Doctors. Policy Statement on Continuing Medical Education (CME) and Continuing Professional Development (CPD). CP 2001/083.
- European Union of Medical Specialists. Basal Declaration. UEMS Policy on Continuing Professional Development. UEMS, 2001.
- Permanent Working Group of European Junior Doctors. PWG Policy Statement on Continuing Medical Education/Continuous Professional Development. PWG 99/083.
- Grant J, Chambers E & Jackson G The Good CPD Guide. Reed Healthcare Publishing, Sutton, 1999.

APPENDIX

MEMBERS OF TASK FORCES OF THE WFME GLOBAL STANDARD PROJECT

The members of the three WFME Task Forces dealing with Basic Medical Education, Postgraduate Medical Education and Continuing Professional Development of Medical Doctors respectively are presented in a common list. Some members participated in more than one of the Task Forces. Furthermore, the complete endeavour of developing the Trilogy of WFME Standards in Medical Education shall be seen as one dynamic process building on results from previous Task Forces.

It should be emphasized that the development of the Trilogy of documents also benefited from other important contributions. These consisted of a great number of verbal and written commentaries as well as discussions at national and international meetings and conferences.

Dr. Palitha Abeykoon

Regional Adviser Human Resources for Health World Health Organization Regional Office for South-East Asia New Delhi, India

Professor A. d'Almeida

Director Institut Régional de Santé Publique Université Nationale du Bénin Cotonou. Benin

Dr. George A.O. Alleyne

Regional Director World Health Organization Pan American Health Organization Washington, D.C., USA

Professor A. P. R. Aluwihare

University of Peradenyia Peradenyia, Sri Lanka

Dr. Wolfram Antepohl

Linköping University Hospital Linköping, Sweden

Judith S. Armbruster

Executive Director Accreditation Council for Graduate Medical Education (ACGME) Chicago, USA

Professor Raja Bandaranayake

Arabian Gulf University Manama, Bahrain

Ass. Professor Philip G. Bashook

University of Illinois at Chicago Chicago, USA

Professor Ralph Bloch

Universität Bern Bern, Switzerland

Professor Cheng Bo-Ji

Peking Medical University Beijing, P.R. China

Åse Brinchmann-Hansen

The Norwegian Medical Association Oslo, Norway

Professor J. D. Chiphangwi

College of Medicine Blantyre, Malawi

Leif Christensen MSc. Soc.

World Federation for Medical Education Copenhagen, Denmark

Professor Colin Coles

King Alfred's College Winchester, United Kingdom

Professor Alejandro Cravioto

President, Panamerican Federation of Associations of Medical Schools (PAFAMS) Universidad Nacional Autonoma de Mexico Mexico, D.F., Mexico

Dr. W. Dale Dauphinee

Executive Director Medical Council of Canada Ottawa, Canada

Professor Florian Eitel

Ludwig-Maximilians-Universität München Munich, Germany

Professor Charles E. Engel

Centre for Higher Education Studies University of London London, United Kingdom

Ms. Mette Fisker

Business Support Manager Pfizer Danmark Copenhagen, Denmark

Dr. Tsuguya Fukui

Kyoto University Kyoto City - Japan

Dr. Milagros Garcia-Barbero

World Health Organization European Center for Integrated Health Care Services Barcelona, Spain

Dr. Nancy Gary

Past President, Educational Commission for Foreign Medical Graduates (ECFMG) Washington, D.C., USA

Professor Laurie Geffen

President, Association for Medical Education in Western Pacific Region (AMEWPR) The University of Queensland Herston, Australia

Dr. Hussein A. Gezairy

Regional Director World Health Organization Regional Office for the Eastern Mediterranean Cairo, Egypt

Professor Ernst Goldschmidt

Copenhagen, Denmark

Professor Janet Grant

Open University Centre for Education in Medicine Milton Keynes, United Kingdom

Professor André Gouazé

Conference Internationale des Doyens des Faculté de Medicine d'Expression Française (CID-MEF) Cedex Françe

Professor Enrique Guntsche

Universidad Nacional de Cuyo Mendoza, Argentina

Dr. James A. Hallock

President, Educational Commission for Foreign Medical Graduates (ECFMG) Philadelphia. USA

Professor Hossam Hamdy

Arabian Gulf University Manama, Bahrain

Professor John D. Hamilton

University of Newcastle upon Tyne Newcastle, United Kingdom

Professor Ronald Harden

Association for Medical Education in Europe (AMEE) University of Dundee

Dundee, United Kingdom

Professor Ian R. Hart

University of Ottawa Ottawa. Canada

Dr. Hans Asbjørn Holm

Norwegian Medical Association Oslo, Norway

Dr Saichi Hosoda

Sakakibara Heart Institute Tokyo, Japan

Dr. Delon Human

Secretary General, World Medical Association (WMA)
Cedex, France

Professor Vincent Hunt

Brown University – School of Medicine Rhode Island. USA

Dr. Jens Winther Jensen

Permanent Working Group of European Junior Doctors (PWG) Copenhagen, Denmark

Dr. Moufid Jokhadar

Arab Board of Medical Specialisations Damascus University Damascus, Syria

Professor Abraham Joseph

Christian Medical College Vellore, India

Dr. Hans Karle

President, World Federation for Medical Education Copenhagen, Denmark

Dr. Donald G. Kassebaum

Past Vice President Association of American Medical Colleges Gleneden Beach, Oregon, USA

Dr. Shamsh Kassim-Lakha

President, The Aga Khan University Karachi, Pakistan

Mrs Lorraine Kerse

Regional Adviser Human Resources for Health World Health Organization Regional Office for the Western Pacific Manila, The Philippines

Professor Yong Il Kim

Past President, Association for Medical Education in Western Pacific Region (AMEWPR) National Teacher Training Center for Health Personnel Seoul. South Korea

Dr. Jana Krejcikova

Institute for Postgraduate Medical Education Prague, Czech Republic

Dr. David Leach

Executive Director Accreditation Council for Graduate Medical Education (ACGME) Chicago, USA

Professor J.C.K. Lee

Dean, The Faculty of Medicine The Chinese University of Hong Kong Hong Kong, P.R.China

Ass. Professor Stefan Lindgren

Lund University Lund, Sweden

Professor Zhao-feng Lu

Peking University Health Sciences Center Beijing, P.R. China

Professor Oleg S. Medvedev

Dean, Moscow State University Moscow, Russian Federation

Dr. Donald E. Melnick

President, National Board of Medical Examiners (NBME) Philadelphia. USA

Professor Jadwiga Mirecka

Jagiellonian University Medical School Krakow, Poland

Dr. Mora-Carrasco

Universidad Autónoma Xochimilco Mexico, D.F., Mexico

Professor J.P. de V. van Niekerk

President, Association of Medical Schools in Africa (AMSA) University of Cape Town Cape Town, South Africa

Dr. Jørgen Nystrup

Past President, Association for Medical Education in Europe (AMEE) World Federation for Medical Education (WFME) Copenhagen, Denmark

Professor Albert Oriol-Bosch

Institut d'ESTUDIS de la SALUT Barcelona, Spain

Dr. John Parboosingh

Royal College of Physicians and Surgeons of Canada Alberta, Canada

Dr. José Patino

Executive Director Panamerican Federation of Associations of Medical Schools (PAFAMS) Bogota, Colombia

Dr. Gregory Paulos

American Medical Association Chicago, USA

Professor Gönül O. Peker

Ege University School of Medicine Izmir, Turkey

Professor David Prigollini

University of Buenos Aires Buenos Aires, Argentina

Dr. Pablo A. Pulido

Executive Director

Panamerican Federation of Associations of Medical

Schools (PAFAMS)

Caracas, Venezuela

Dr. Ebrahim M. Samba

Regional Director

World Health Organization

Regional Office for Africa

Harare, Zimbabwe

Professor Iskender Sayek

Hacettepe University

Ankara, Turkey

Dr. Mette Siemsen

Danish Medical Association

Copenhagen, Denmark

Dr. Nilanthi de Silva

University of Kelaniya

Ragama, Sri Lanka

Dr. David P. Stevens

Vice President, Association of American Medical

Colleges (AAMC)

Washington, D.C., USA

Dr. Abu Bakar Suleiman

Director of Health

Ministry of Health

Kuala Lumpur, Malaysia

Dr. Jamsheer Talati

Associate Dean

The Aga Khan University

Karachi, Pakistan

Dr. Cillian Twomey

President, Union Européenne des Médecins

Spécialistes (UEMS)

Cork, Ireland

Professor Felix Vartanian

Vice Rector

The Russian Academy of Advanced Medical Studies

Moscow, Russian Federation

Theanne Walters

Deputy Executive Officer

Australian Medical Council

Canberra, Australia

Dr. Dennis K. Wentz

American Medical Association Chicago, USA

Ass. Professor Ole Winding

World Federation for Medical Education Copenhagen, Denmark

Dr. Gustaaf Wolvaardt

South African Medical Association

Pretoria. South Africa

SPONSORS

The development and implementation of the Trilogy of WFME Documents *Global Standards in Medical Education* has been sponsored by:

Danish Medical Association, Denmark

Educational Commission for Foreign Medical Graduates (ECFMG), USA

Institut d'ESTUDIS de la SALUT, Spain

Lund University, Sweden

Norwegian Medical Association, Norway

Open University Centre for Education in Medicine, United Kingdom

Pfizer Danmark Denmark

University of Copenhagen, Denmark

WHO European Center for Integrated Health Care Services, Spain

World Health Organization, EURO, Denmark

World Health Organization, WPRO, The Philippines

Print: Kandrups Bogtrykkeri, Copenhagen