

Standards of Accreditation of Medical Schools

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Sudan Medical Council

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INTRODUCTION

In 2004 the amended Sudan Medical Council (SMC) bylaw mandated the SMC to set standards of undergraduate medical education for medical, pharmacy and dental schools and ascertain that the standards are comparable to regional and international standards as well as accrediting those schools.

A national policy for accreditation was formulated and adopted. Standards based on WFME and national standards of Ministry of Higher Education and Research (MOHE&R), and adapted to the local context were formulated and adopted. Standard procedures for accreditation were identified and implemented.

The first round of accreditation of medical schools was conducted using the basic standards in the period 2008-2012. In 2012-2013 SMC held a series of consultative meetings and conducted. A national workshop to update the standards based on acquired local and regional experiences, the national and international directions in medical education and the international guidance provided by the WFME. Medical education experts from WFME and UK were invited to attend the national workshop as resource persons.

The updated standards are based on the updated WFME standards (2012) and are compatible with the updated national standards of MOHE&R (The model college of Medicine). These references were used and modified to suit the local context of medical education and practice in the Sudan.

SMC is grateful to the accreditation committee and the technical committee for this excellent effort.

THE STANDARDS

DEFINITIONS

- Areas: are defined as broad components in the structure, process and outcome of medical education institutes, and cover:
 - 1. Mission and Outcomes
 - 2. Educational Programme
 - 3. Assessment of Students
 - 4. Students
 - 5. Academic Staff/Faculty
 - 6. Educational Resources
 - 7. Programme Evaluation
 - 8. Governance and Administration
 - 9. Continuous Renewal
- **Sub-Areas:** are defined as specific aspects of an area, corresponding to performance indicators.
- Standards: (one or more) are specified for each sub-area using two levels of attainment and each standard is given a specific number:

Basic standard

This means that the standard must be met by every medical school and fulfilment demonstrated during evaluation of the school. Basic standards are expressed by a *must*.

Standard for quality development

This means that the standard is in accordance with international consensus about best practice for medical schools and basic medical education. Fulfilment of - or initiatives to fulfil - some or all of such standards should be documented by medical schools. Fulfilment of these standards will vary with the stage of development of the medical schools, their resources and educational policy. Even the most advanced schools 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. (Appendix 1).

Guide:

The superscript numbers found, in the text of the standards, refer to the number of the annotation (in Appendix 1), which clarifies the term or the expression used. For example, "The medical school must define its mission and …", the superscript numbers (1) and (2) refer to the definitions and explanations provided for (medical school) and (mission), respectively, in the annotations (Appendix 1).

1. MISSION AND OUTCOMES

1.1 STATEMENTS OF MISSION AND OBJECTIVES:

Basic standard:

The medical school¹ must

- Define its mission² and make it known to its constituency³ and the health sector⁴ it serves. (B 1.1.1)
- in its mission statement outline the aims and the educational strategy resulting in a medical doctor
 - Competent at a basic level with emphasis on priority health problems of Sudan. (B 1.1.2)
 - o With an appropriate foundation for a future career in any branch of medicine. (B 1.1.3)
 - o Capable of undertaking the roles of doctors as defined by the health sector in Sudan, and the SMC. (B 1.1.4)
 - o prepared and ready for postgraduate medical training locally and internationally. (B 1.1.5)
 - o committed to lifelong learning⁸. (B 1.1.6)
- ensure that the mission encompasses the health needs of the community, the needs of the health care system and other aspects of social accountability¹⁰, taking into consideration the community beliefs, cultural and social context of Sudan. (B 1.1.7)

Quality development standard:

The medical school should

- ensure that the mission encompasses
 - o medical research¹¹ attainment, and its relevance to country priority health needs. (Q 1.1.1)
 - o aspects of global health¹². (Q 1.1.2)

1.2 PARTICIPATION IN FORMULATION OF MISSION

Basic standard:

The medical school must

• ensure that its principal stakeholders¹³ participate in formulating the mission. (B 1.2.1)

Quality development standard:

The medical school should

• ensure that the formulation of its mission is based also on input from other relevant stakeholders¹⁴. (Q 1.2.1)

1.3 INSTITUTIONAL AUTONOMY AND ACADEMIC FREEDOM

Basic standard:

The medical school **must** have institutional autonomy¹⁵ to

- formulate and implement policies for which its faculty/academic staff and administration are responsible, especially regarding
 - o design of the curriculum. (B 1.3.1)
 - o use of the allocated resources necessary for implementation of the curriculum. (B 1.3.2)

Quality development standard:

- The medical school **should** ensure academic freedom¹⁶ for its staff and students
 - o in addressing the actual curriculum¹⁷. (Q 1.3.1)
 - o in exploring the use of new research results to illustrate specific subjects without expanding the curriculum. (Q 1.3.2)

1.4 EDUCATIONAL OUTCOMES

Basic standard:

The medical school must

- define the intended educational outcomes¹⁸ that students should exhibit upon graduation in relation to
 - o their achievements at a basic level⁵ regarding knowledge, skills, and attitudes and their application in addressing priority health problems in Sudan (B 1.4.1)
 - o appropriate foundation for future career in any branch of medicine⁶ (B 1.4.2)
 - o their future roles in the health sector. (B 1.4.3)
 - o their subsequent postgraduate training⁷. (B 1.4.4)
 - o their commitment to and skills in lifelong learning⁸. (B 1.4.5)
 - o the health needs of the community⁹, the needs of the health care system and other aspects of social accountability¹⁰ within the socio-cultural context of Sudan. (B 1.4.6)
- ensure appropriate student conduct¹⁹ with respect to fellow students, faculty members, other health care personnel, patients and their relatives. (B 1.4.7)

Quality development standard:

- specify and co-ordinate the linkage of outcomes to be acquired by graduation with that to be acquired in postgraduate training⁷. (Q 1.4.1)
- specify outcomes of student engagement in medical research and its relevance to community health problems in Sudan (Q 1.4.2). (Q 1.4.2)
- draw attention to global health related outcomes. (Q 1.4.3)

2. EDUCATIONAL PROGRAMME

2.1 CURRICULUM MODEL AND INSTRUCTIONAL METHODS

Basic standard:

The medical school must

- define the curriculum model^{20,21}. (B 2.1.1)
- state the instructional and learning methods²² employed. (B 2.1.2)
- ensure that the curriculum prepares the students for lifelong learning⁸. (B 2.1.3)
- ensure that the curriculum is delivered in accordance with principles of equality²⁴.
 (B 2.1.4)

Quality development standard:

The medical school should

• use a curriculum and instructional/learning methods²³ that stimulate, prepare and support students to take responsibility for their learning process. (Q 2.1.1)

2.2 SCIENTIFIC METHOD

Basic standard:

The medical school must

- throughout the curriculum teach²⁵
 - o the principles of scientific method, including analytical and critical thinking. (B 2.2.1)
 - o medical research methods. (B 2.2.2)
 - o evidence-based medicine. (B 2.2.3)

Quality development standard:

The medical school should

 have a curriculum that introduces the students to the elements of original or advanced research²⁶. (Q 2.2.1)

2.3 BASIC BIOMEDICAL SCIENCES

Basic standard:

The medical school must

- in the curriculum identify and incorporate
 - o the contributions of the basic biomedical sciences²⁷ to create understanding of scientific knowledge. (B 2.3.1)
 - o concepts and methods fundamental to acquiring and applying the clinical sciences. (B 2.3.2)

Quality development standard:

- in the curriculum update the contributions of the biomedical sciences to the
 - o scientific, technological and clinical developments. (Q 2.3.1)

o current and anticipated needs of the society and the national and regional health care systems. (Q 2.3.2)

2.4 BEHAVIOURAL AND SOCIAL SCIENCES AND MEDICAL ETHICS

Basic standard:

The medical school **must**

- in the curriculum identify and incorporate the concepts and contributions of:
 - o human psychology. (B 2.4.1)
 - o behavioural sciences^{28, 31}. (B 2.4.2)
 - o social sciences^{28,31}. (B 2.4.3)
 - o communication skills. (B 2.4.4)
 - o medical ethics^{29, 31} and professionalism. (B 2.4.5)
 - o medical jurisprudence^{30, 31}. (B 2.4.6)

Quality development standard:

The medical school should

- in the curriculum update the contributions of the behavioural and social sciences as well as medical ethics to
 - o scientific, technological and clinical developments. (Q 2.4.1)
 - o current and anticipated needs of the society and the health care system. (Q 2.4.2)
 - o changing demographic and cultural contexts at the national, regional and international levels. (Q 2.4.3)

2.5 CLINICAL SCIENCES AND SKILLS

Basic standard:

The medical school **must**

- in the curriculum identify and incorporate the contributions of the clinical sciences³² to ensure that students
 - o acquire sufficient knowledge and clinical³³ and professional³⁴ skills to assume appropriate responsibility³⁵ after graduation. (B 2.5.1)
 - o spend a reasonable part³⁶ of the programme in planned contact with patients³⁷ in outpatient, inpatient and community clinical settings. (B 2.5.2)
 - o experience health promotion and preventive medicine. (B 2.5.3)
- specify the amount of time spent in training³⁸ in major clinical disciplines³⁹. (B 2.5.4)
- organise clinical training with appropriate attention to patient safety⁴⁰, emergency care and working within a low resource health system. (B 2.5.5)

Quality development standard:

- in the curriculum adjust and modify the contributions of the clinical sciences to evidence based
 - o scientific, technological and clinical developments. (Q 2.5.1)
 - o current and anticipated needs of the society and the health care systems at the national, regional and global levels. (Q 2.5.2)
- ensure that every student has early patient contact⁴¹ gradually including participation in patient care⁴². (Q 2.5.3)
- structure the different components of clinical skills³³ training according to the stage of the study programme. (Q 2.5.4)

2.6 CURRICULUM STRUCTURE, COMPOSITION AND DURATION

Basic standard:

The medical school must

• describe the content, extent and sequencing of courses and other curricular elements to ensure appropriate coordination between basic biomedical, behavioural and social and clinical subjects. (B 2.6.1)

Quality development standard:

The medical school **should** in the curriculum

- ensure horizontal integration⁴³ of associated sciences, disciplines and subjects. (Q 2.6.1)
- ensure vertical integration⁴⁴ of the clinical sciences with the basic biomedical, behavioural and social sciences. (Q 2.6.2)
- allow optional (elective) content and define the balance between the core and optional content⁴⁵ as part of the educational programme. (Q 2.6.3)
- define and explain concepts of relevant and acceptable aspects of the interface with complementary medicine⁴⁶. (Q 2.6.4)

2.7 PROGRAMME MANAGEMENT

Basic standard:

The medical school must

- have a curriculum committee, which, under the governance of the academic leadership (the dean) has the responsibility and authority⁴⁷ for planning and implementing the curriculum to achieve its intended educational outcomes. (B 2.7.1)
- in its curriculum committee ensure representation of staff and students. (B 2.7.2)

Quality development standard:

- through its curriculum committee plan and implement innovations in the curriculum. (Q 2.7.1)
- in its curriculum committee include representatives of other relevant stakeholders⁴⁸. (Q 2.7.2)

2.8 LINKAGE WITH MEDICAL PRACTICE AND THE HEALTH SECTOR

Basic standard:

The medical school **must**

• ensure operational links⁴⁹ between the educational programme and the subsequent stages of training⁵⁰ or practice after graduation. (B 2.8.1)

Quality development standard:

- ensure that the curriculum committee
 - o seeks input from the environment in which graduates will be expected to work, and modify the programme accordingly. (Q 2.8.1)
 - o considers programme modification in response to feedback from external assessors, the community and society. (Q 2.8.2)

3. ASSESSMENT OF STUDENTS

3.1 ASSESSMENT METHODS

Basic standard:

The medical school must

- define, state and publish the principles, methods and practices⁵¹ used for assessment of its students, including the criteria for setting pass marks, grade boundaries and number of allowed retakes. (B 3.1.1)
- ensure that assessments cover knowledge, skills and attitudes. (B 3.1.2)
- use a wide range of assessment methods⁵² and formats according to their "assessment utility"⁵³. (B 3.1.3)
- ensure that methods and results of assessments avoid conflicts of interest. (B 3.1.4)
- ensure that assessments are open to scrutiny by external expertise. (B 3.1.5)

Quality development standard:

The medical school should

- document and evaluate the reliability and validity of assessment methods⁵⁴, through, for example, the Educational Development Unit or the curriculum committee. (Q 3.1.1)
- incorporate newer and more objective assessment methods where appropriate. (Q 3.1.2)
- use a system for appeal of assessment results. (Q 3.1.3)

3.2 RELATION BETWEEN ASSESSMENT AND LEARNING

Basic standard:

The medical school **must**

- use assessment principles, methods and practices⁵⁵ that
 - o are clearly compatible with intended educational outcomes and instructional methods. (B 3.2.1)
 - o ensure that the intended educational outcomes are met by the students. (B 3.2.2)
 - o promote student learning. (B 3.2.3)
 - o provide an appropriate balance of formative and summative assessment to guide both learning and decisions about academic progress⁵⁶. (B 3.2.4)

Quality development standard:

- adjust the number and nature of examinations⁵⁷ of curricular elements to encourage both acquisition of the knowledge base and integrated learning⁵⁸. (Q 3.2.1)
- ensure timely, specific, constructive and fair regular feedback to students on basis of assessment results. (Q 3.2.2)

4. STUDENTS

4.1 ADMISSION POLICY AND SELECTION

Basic standard:

The medical school must

- formulate and implement an admission policy⁵⁹ based on principles of objectivity, including a clear statement on the process of selection of students⁶⁰. (B 4.1.1)
- have a policy and implement a practice for admission of disabled students⁶¹. (B 4.1.2)
- have a policy and implement a practice for transfer of students⁶² from other programmes and institutions. (B 4.1.3)

Quality development standard:

The medical school should

- state the relationship between students selection and the mission of the school, the educational programme and desired qualities of graduates. (Q 4.1.1)
- periodically review the admission policy, based on relevant societal and professional data, to comply with the health needs of the community and society⁶³. (Q 4.1.2)
- use a system for appeal of admission decisions, according to the national context. (Q 4.1.3)

4.2 STUDENT INTAKE

Basic standard:

The medical school must

• define the size of student intake⁶⁴ and relate it to its capacity at all stages of the programme. (B 4.2.1)

Quality development standard:

The medical school should

• periodically review the size and nature of student intake⁶⁴ in consultation with other relevant stakeholders⁶⁵ and regulate it to meet the health needs of the community and society⁶⁶. (Q 4.2.1)

4.3 STUDENT COUNSELLING AND SUPPORT

Basic standard:

The medical school and/or the University must

- have a system for academic counselling ⁶⁷ of its student population. (B 4.3.1)
- offer a programme of student support, addressing social, financial and personal needs⁶⁸. (B 4.3.2)
- allocate resources for student support. (B 4.3.3)
- ensure confidentiality in relation to counselling and support. (B 4.3.4)

Quality development standard:

The medical school should

- provide academic counselling that
 - o is based on monitoring of student progress. (Q 4.3.1)
 - o includes career guidance and planning. (Q 4.3.2)

4.4 STUDENT REPRESENTATION

Basic standard:

The medical school must

- formulate and implement a policy, that ensures participation of student representatives⁶⁹ and appropriate participation in the design, management and evaluation of the curriculum, and in other matters relevant to students. (B 4.4.1)
- encourage and facilitate student activities⁷⁰ and student organisations. (B 4.4.2)

Quality development standard:

- provide logistic support for students organisations. (Q 4.4.1)
- provide financial and logistic support for students exchange programmes and international relations. (Q 4.4.2)

5. ACADEMIC STAFF/FACULTY

5.1 RECRUITMENT AND SELECTION POLICY

Basic standard:

The medical school must

- formulate and implement a staff recruitment and selection policy⁷¹ which
 - o outlines the type, responsibilities and balance of the academic staff/faculty⁷² of the basic biomedical sciences, the behavioural and social sciences and the clinical sciences required to deliver the curriculum adequately, including the balance between medical and non-medical academic staff⁷³, the balance between full-time and part-time academic staff, and the balance between academic and non-academic staff. (B 5.1.1)
 - o addresses criteria for scientific, educational and clinical merit⁷⁴, including the balance between teaching, research and service⁷⁵ qualifications. (B 5.1.2)
 - o specifies and monitors the responsibilities of its academic staff/faculty of the basic biomedical sciences, the behavioural and social sciences and the clinical sciences. (B 5.1.3)

Quality development standard:

The medical school should

- in its policy for staff recruitment and selection take into account criteria such as
 - \circ relationship to its mission, including significant local issues⁷⁶. (Q 5.1.1)
 - o economic considerations⁷⁷. (O 5.1.2)

5.2 STAFF ACTIVITY AND DEVELOPMENT POLICY

Basic standard:

The medical school **must**

- formulate and implement a staff activity and development policy which
 - o allows a balance of capacity between teaching, research and service functions⁷⁸. (B 5.2.1)
 - o ensures recognition of meritorious academic activities⁷⁹, with appropriate emphasis on teaching, research and service qualifications. (B 5.2.2)
 - o ensures that clinical service functions and research are used in teaching and learning. (B 5.2.3)
 - o ensures sufficient knowledge by individual staff members of the total curriculum⁸⁰. (B 5.2.4)
 - o includes teacher training, development, support and appraisal⁸¹. (B 5.2.5)

Quality development standard:

- take into account teacher-student ratios relevant to the various curricular components. (Q 5.2.1)
- design and implement a staff promotion policy. (Q 5.2.2)

6. EDUCATIONAL RESOURCES

6.1 PHYSICAL FACILITIES

Basic standard:

The medical school must

- have sufficient physical facilities⁸² for staff and students to ensure that the curriculum can be delivered adequately. (B 6.1.1)
- ensure a learning environment, which is comfortable, clean and safe⁸³ for staff, students, patients and their carers. (B 6.1.2)

Quality development standard:

The medical school should

• improve the learning environment by regularly updating, developing and modifying or extending the physical facilities to match developments in educational practices. (Q 6.1.1)

6.2 CLINICAL TRAINING RESOURCES

Basic standard:

The medical school **must**

- ensure necessary resources for giving the students adequate clinical experience, including sufficient
 - o number and categories of patients. (B 6.2.1)
 - o clinical training facilities⁸⁴. (B 6.2.2)
 - o supervision of their clinical practice. (B 6.2.3)

Quality development standard:

The medical school should

• evaluate, adapt and improve the facilities for clinical training to meet the needs of the population it serves⁸⁵. (Q 6.2.1)

6.3 INFORMATION TECHNOLOGY

Basic standard:

The medical school **must**

• formulate and implement a policy which addresses effective use and evaluation of appropriate information and communication technology in the educational programme⁸⁶. (B 6.3.1)

Quality development standard:

- enable teachers and students to use existing and exploit appropriate new information and communication technology for
 - o independent learning. (Q 6.3.1)
 - o accessing information. (Q 6.3.2)
 - o managing patients. (Q 6.3.3)

- o working in health care delivery systems. (Q 6.3.4)
- optimise student access to relevant patient data and health care information systems. (Q 6.3.5)

6.4 MEDICAL RESEARCH AND SCHOLARSHIP

Basic standard:

The medical school **must**

- use medical research and scholarship 87 as a basis for the educational curriculum. (B 6.4.1)
- formulate and implement a policy that fosters the relationship between medical research and education. (B 6.4.2)
- describe the research facilities and priorities at the institution. (B 6.4.3)

Quality development standard:

The medical school should

- ensure that interaction between medical research and education
 - o influences current teaching. (Q 6.4.1)
 - o encourages and prepares students to engage in medical research and development. (Q 6.4.2)

6.5 EDUCATIONAL EXPERTISE

Basic standard:

The medical school **must**

- have access to educational expertise⁸⁸ where required. (B 6.5.1)
- formulate and implement a policy on the use of educational expertise
 - o in curriculum development. (B 6.5.2)
 - o in development of teaching and assessment methods. (B 6.5.3)

Quality development standard:

The medical school should

- demonstrate evidence of the use of in-house or external educational expertise in staff development. (Q 6.5.1)
- pay attention to the development of expertise in educational evaluation and in research in the discipline of medical education⁸⁹. (Q 6.5.2)
- allow staff to pursue educational research interest. (Q 6.5.3)

6.6 EDUCATIONAL EXCHANGES

Basic standard:

The medical school must

- formulate and implement a policy for
 - o national and international collaboration with other educational institutions⁹⁰. (B 6.6.1)
 - o transfer of educational credits⁹¹. (B 6.6.2)

Quality development standard:

- facilitate regional and international exchange of staff⁹² and students by providing appropriate resources. (Q 6.6.1)
- ensure that exchange is purposefully organised, taking into account the needs of staff and students, and respecting ethical principles. (Q 6.6.1)

7. PROGRAMME EVALUATION

7.1 MECHANISMS FOR PROGRAMME MONITORING AND EVALUATION

Basic standard:

The medical school must

- have a programme of routine curriculum monitoring ⁹³ of processes and intended curriculum outcomes. (B 7.1.1)
- establish and apply a mechanism for programme evaluation⁹⁴ that
 - o addresses the curriculum and its main components⁹⁵. (B 7.1.2)
 - o addresses student progress. (B 7.1.3)
 - o identifies and addresses concerns⁹⁶. (B 7.1.4)
- ensure that relevant results of evaluation influence the curriculum reform and corrective decisions. (B 7.1.5)

Quality development standard:

The medical school should

- periodically evaluate the programme by comprehensively addressing
 - o the context of the educational process 97 . (Q 7.1.1)
 - o the specific components of the curriculum 98 . (Q 7.1.2)
 - o the overall outcomes 99 . (Q 7.1.3)
 - o its social accountability¹⁰. (Q 7.1.4)

7.2 TEACHER AND STUDENT FEEDBACK

Basic standard:

The medical school **must**

• systematically seek, analyse and respond to teacher and student feedback¹⁰⁰. (B 7.2.1)

Quality development standard:

The medical school should

• use feedback results for programme development. (Q 7.2.1)

7.3 PERFORMANCE OF STUDENTS AND GRADUATES

Basic standard:

The medical school must

- analyse performance of cohorts of students¹⁰¹ and graduates¹⁰² in relation to its
 - o mission and intended educational outcomes. (B 7.3.1)
 - o curriculum. (B 7.3.2)
 - o provision of resources. (B 7.3.3)

Quality development standard:

- analyse performance of cohorts of students and graduates in relation to student
 - o background and conditions ¹⁰³. (Q 7.3.1)

- o entrance qualifications. (Q 7.3.2)
- use the analysis of student performance to provide feedback to the committees responsible for
 - o student selection. (Q 7.3.3)
 - o curriculum planning. (Q 7.3.4)
 - o student counselling. (Q 7.3.5)

7.4 INVOLVEMENT OF STAKEHOLDERS

Basic standard:

The medical school must

- in its programme monitoring and evaluation activities involve
 - o its academic staff and students. (B 7.4.1)
 - o its governance and management. (B 7.4.2)

Quality development standard:

- for other relevant stakeholders ¹⁰⁴
 - o allow access to results of course and programme evaluation. (Q 7.4.1)
 - o seek their feedback on the performance of graduates. (Q 7.4.2)
 - o seek their feedback on the curriculum. (Q 7.4.3)

8. GOVERNANCE AND ADMINISTRATION

8.1 GOVERNANCE

Basic standard:

The medical school must

• define its governance¹⁰⁵ structures and functions including their relationships within the University¹⁰⁶. (B 8.1.1)

Quality development standard:

The medical school should

- in its governance structures set out the committee structure ¹⁰⁷, and reflect representation from
 - o academic staff. (Q 8.1.1)
 - o students. (Q 8.1.2)
 - o other relevant stakeholders¹⁰⁸ including fair representation of the community. (Q 8.1.3)
- ensure transparency of the work of governance and its decisions. (Q 8.1.4)

8.2 ACADEMIC LEADERSHIP

Basic standard:

The medical school must

• describe the responsibilities of its academic leadership¹¹⁰ for definition and management of the medical educational programme. (B 8.2.1)

Quality development standard:

The medical school should

• regularly evaluate its academic leadership in relation to achievement of its mission and intended educational outcomes and school contribution to the health system and community. (Q 8.2.1)

8.3 EDUCATIONAL BUDGET AND RESOURCE ALLOCATION

Basic standard:

The medical school **must**

- have a clear line of responsibility and authority for resourcing the curriculum, including a dedicated educational budget 111, 112. (B 8.3.1)
- allocate the resources necessary for the implementation of the curriculum and distribute the educational resources in relation to educational needs. (B 8.3.2)

Quality development standard:

The medical school should

have autonomy to direct resources, including teaching staff remuneration, in an appropriate manner in order to achieve its intended educational outcomes. (Q 8.3.1)

• in distribution of resources take into account the developments in medical sciences and the health needs of the society. (Q 8.3.2)

8.4 ADMINISTRATIVE STAFF AND MANAGEMENT

Basic standard:

The medical school **must**

- have an administrative 113 and professional staff that is appropriate 115 to
 - o support implementation of its educational programme and related activities, including community related activities. (B 8.4.1)
 - o ensure good management¹¹⁴ and resource deployment. (B 8.4.2)

Quality development standard:

The medical school should

• formulate and implement an internal programme for quality assurance¹¹⁶ of the management including regular review. (Q 8.4.1)

8.5 INTERACTION WITH HEALTH SECTOR

Basic standard:

The medical school **must**

• have constructive interaction¹¹⁷ with the health and health related sectors^{118, 119} of society and government. (B 8.5.1)

Quality development standard:

The medical school should

• formalise its collaboration¹²⁰, including engagement of staff and students, with partners in the health sector. (Q 8.5.1)

9. CONTINUOUS RENEWAL

Basic standard:

The medical school **must** as a dynamic and socially accountable institution

- initiate procedures for regularly reviewing and updating its structure and functions. (B 9.0.1)
- rectify documented deficiencies. (B 9.0.2)
- allocate resources for continuous renewal. (B 9.0.3)

Quality development standard:

- base the process of renewal on prospective studies and analyses and on results of local evaluation and the medical education literature to meet international standards. (Q 9.0.1)
- ensure that the process of renewal and restructuring leads to the revision of its policies and practices in accordance with past experience, present activities and future perspectives. (Q 9.0.2)
- address the following issues in its process of renewal:
 - o Adaptation of mission statement and outcomes to the scientific, socioeconomic and cultural development of the society. (Q 9.0.3) (see 1.1)
 - o Modification of the intended educational outcomes of the graduating students in accordance with documented needs of the environment they will enter. The modification might include clinical skills, public health training and involvement in patient care appropriate to responsibilities encountered upon graduation. (Q 9.0.4) (see 1.4)
 - O Adaptation of the curriculum model and instructional methods to ensure that these are appropriate and relevant to the intended educational outcomes. (Q 9.0.5) (see 2.1)
 - o Adjustment of curricular elements and their relationships in keeping with developments in the basic biomedical, clinical, behavioural and social sciences, changes in the demographic profile and health/disease pattern of the population, and socioeconomic and cultural conditions. The adjustment would ensure that new relevant knowledge, concepts and methods are included and outdated ones discarded. (Q 9.0.6) (see 2.2 2.6)
 - Development of assessment principles, and the methods and the number of examinations according to changes in intended educational outcomes and instructional methods. (Q 9.0.7) (see 3.1 & 3.2)
 - O Adaptation of student recruitment policy, selection methods and student intake to changing expectations of the community and circumstances, human resource needs, changes in the premedical education system and the requirements of the educational programme. (Q 9.0.8) (see 4.1 & 4.2)

- o Adaptation of academic staff recruitment and development policy according to changing needs of the programme. (Q 9.0.9) (see 5.1 & 5.2)
- O Updating of educational resources according to changing needs, i.e. the student intake, size and profile of academic staff, and the educational programme. (Q 9.0.10) (see 6.1 6.3)
- o Refinement of the process of programme monitoring and evaluation. (Q 9.0.11) (see 7.1 7.3)
- O Development of the organisational structure and of governance and management to cope with changing circumstances and needs and, over time, accommodating the interests of the different groups of stakeholders. $(Q\ 9.0.12)$ (see 8.1-8.5)

APPENDICES

Appendix 1: ANNOTATIONS

- 1. Medical school in this document is the educational organisation providing a basic (undergraduate) programme in medicine and is synonymous with medical faculty, medical college or medical academy. The medical school can be an independent institution or part of or affiliated to a university. It normally also encompasses research and clinical service functions, and would also provide educational programmes for other phases of medical education and for other health professions. Medical schools would include university hospitals and other affiliated clinical facilities.
- 2. *Mission* provides the overarching framework to which all other aspects of the educational institution and its programme have to be related. Mission statement would include general and specific issues relevant to institutional, national, regional and global policy and need. Mission is in this document supposed to include the institutions' vision.
- 3. Constituency would include the leadership, staff and students of the medical school as well as other relevant stakeholders (see annotations 13 and 14).
- 4. *Health sector* would include the health care delivery system, whether public or private, and medical research institutions.
- 5. Basic level of medical education is in most countries identical to undergraduate medical education starting on the basis of completed secondary school education. In other countries or schools it starts after completion of a non-medical undergraduate degree.
- 6. Any branch of medicine refers to all types of medical practice, administrative medicine and medical research.
- 7. *Postgraduate medical training* would include preregistration training, vocational training and specialist training.
- 8. Lifelong learning is the professional responsibility to keep up to date in knowledge and skills through appraisal, audit, reflection or recognised continuing professional development (CPD)/continuing medical education (CME) activities. CPD includes all activities that doctors undertake, formally and informally, to maintain, update, develop and enhance their knowledge, skills and attitudes in response to the needs of their

- patients. CPD is a broader concept than CME, which describes continuing education in the knowledge and skills of medical practice.
- 9. Encompassing the health needs of the *community* would imply interaction with the local community, especially the health and health related sectors, and adjustment of the curriculum to demonstrate attention to and knowledge about health problems of the community.
- 10. Social accountability would include willingness and ability to respond to the needs of society, of patients and the health and health related sectors and to contribute to the national and international developments of medicine by fostering competencies in health care, medical education and medical research. This would be based on the school's own principles and in respect of the autonomy of universities. Social accountability is sometimes used synonymously with social responsibility and social responsiveness. In matters outside its control, the medical school would still demonstrate social accountability through advocacy and by explaining relationships and drawing attention to consequences of the policy.
- 11. Medical research encompasses scientific research in basic biomedical, clinical, behavioural and social sciences and is described in 6.4.
- 12. Aspects of global health would include awareness of major international health problems, also of health consequences of inequality and injustice.
- 13. Principal stakeholders would include the dean, the faculty board/council, the curriculum committee, representatives of staff and students, the university leadership and administration, relevant governmental authorities and regulatory bodies.
- 14. Other relevant stakeholders would include other representatives of academic and administrative staff, representatives of the community and public (e.g. users of the health care delivery system, including patient organisations), education and health care authorities, professional organisations, medical scientific bodies and postgraduate educators.
- 15. Institutional autonomy would include appropriate independence from government and other counterparts (regional and local authorities, religious communities, private co-operations, the professions, unions and other interest groups) to be able to make decisions about key areas such as design of curriculum (see 2.1 and 2.6), assessments

- (see 3.1), students admission (see 4.1 and 4.2), staff recruitment/selection (see 5.1) and employment conditions, research (see 6.4) and resource allocation (see 8.3).
- 16. Academic freedom would include appropriate freedom of expression, freedom of inquiry and publication for staff and students.
- 17. Acting in keeping with the *actual curriculum*, staff and students would be allowed to draw upon different perspectives in description and analysis of medical issues.
- 18. Educational outcomes, learning outcomes or competencies refer to statements of knowledge, skills and attitude that students are expected to demonstrate at the end of a period of learning. Educational/learning objectives are often described in these terms.
- Outcomes within medicine and medical practice to be specified by the medical school-would include documented knowledge and understanding of (a) the basic biomedical sciences, (b) the behavioural and social sciences, including public health and population medicine, (c) medical ethics, human rights and medical jurisprudence relevant to the practice of medicine, (d) the clinical sciences, including clinical skills with respect to diagnostic procedures, practical procedures, communication skills, treatment and prevention of disease, health promotion, rehabilitation, clinical reasoning and problem solving; and (e) the ability to undertake lifelong learning and demonstrate professionalism in connection with the different roles of the doctor, also in relation to the medical profession. The characteristics and achievements the students display upon graduation can e.g. be categorised in terms of the doctor as (a) scholar and scientist, (b) practitioner, (c) communicator, (d) teacher, (e) manager and as (f) a professional.
- 19. Appropriate student conduct would presuppose a written code of conduct.
- 20. Curriculum in this document refers to the educational programme and includes a statement of the intended educational outcomes, the content/syllabus, experiences and processes of the programme, including a description of the structure of the planned instructional and learning methods and assessment methods. The curriculum should set out what knowledge, skills, and attitudes the student will achieve.
- 21. Curriculum models would include models based on disciplines, organ systems, clinical problems/tasks or disease patterns as well as models based on modular or spiral design.

- 22. *Instructional and learning methods* encompass lectures, small-group teaching, problem-based or case-based learning, peer assisted learning, practicals, laboratory exercises, bed-side teaching, clinical demonstrations, clinical skills laboratory training, field exercises in the community and web-based instruction.
- 23. The *curriculum and instructional methods* would be based on contemporary learning principles.
- 24. Principles of equality mean equal treatment of staff and students irrespective of gender, ethnicity, religion, sexual orientation, socio-economic status, and taking into account physical capabilities.
- 25. To teach the principles of scientific method, medical research methods and evidence-based medicine requires scientific competencies of teachers. This training would be a compulsory part of the curriculum and would include that medical students conduct or participate in minor research projects.
- 26. Elements of original or advanced research would include obligatory or elective analytic and experimental studies, thereby fostering the ability to participate in the scientific development of medicine as professionals and colleagues.
- 27. The basic biomedical sciences would -depending on local needs, interests and traditions include anatomy, biochemistry, biophysics, cell biology, genetics, immunology, microbiology (including bacteriology, parasitology and virology), molecular biology, pathology, pharmacology and physiology.
- 28. Behavioural and social sciences would -depending on local needs, interests and traditions include biostatistics, community medicine, epidemiology, global health, hygiene, medical anthropology, medical psychology, medical sociology, public health and social medicine.
- 29. *Medical ethics* deals with moral issues in medical practice such as values, rights and responsibilities related to physician behavior and decision making.
- 30. Medical jurisprudence deals with the laws and other regulations of the health care delivery system, of the profession and medical practice, including the regulations of production and use of pharmaceuticals and medical technologies (devices, instruments, etc.).
- 31. The identification and incorporation of the behavioural and social sciences, medical ethics and medical jurisprudence would 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 knowledge about the national health care system and patients' rights. This would enable analysis of health needs of the community and society, effective communication, clinical decision making and ethical practices.
- 32. The clinical sciences would depending on local needs, interests and traditions include anaesthetics, dermatology, diagnostic radiology, emergency medicine, general practice/family medicine, geriatrics, gynaecology & obstetrics, internal medicine (with subspecialties), laboratory medicine, medical technology, neurology, neurosurgery, oncology & radiotherapy, ophthalmology, orthopaedic surgery, oto-rhino-laryngology, paediatrics, palliative care, physiotherapy, rehabilitation medicine, psychiatry, surgery (with subspecialties) and venereology (sexually transmitted diseases). Clinical sciences would also include a final module preparing for pre-registration-training/internship.
- 33. Clinical skills include history taking, physical examination, communication skills, procedures and investigations, emergency practices, and prescription and treatment practices.
- *Professional skills* would include patient management skills, team-work/team leadership skills and inter-professional training.
- 35. Appropriate clinical responsibility would include activities related to health promotion, disease prevention and patient care.
- 36. A reasonable part would mean about one third of the programme.
- 37. Planned contact with patients would imply consideration of purpose and frequency sufficient to put their learning into context.
- 38. Time spent in training includes clinical rotations and clerkships.
- 39. *Major clinical disciplines* would include internal medicine (with subspecialties), surgery (with subspecialties), psychiatry, general practice/family medicine, gynaecology & obstetrics and paediatrics.
- 40. Patient safety would require supervision of clinical activities conducted by students.
- 41. Early patient contact would partly take place in primary care settings and would primarily include history taking, physical examination and communication.

- 42. Participation in patient care would include responsibility under supervision for parts of investigations and/or treatment to patients, which could take place in relevant community settings.
- 43. Examples of *horizontal* (concurrent) *integration* would be integrating basic sciences such as anatomy, biochemistry and physiology or integrating disciplines of medicine and surgery such as medical and surgical gastroenterology or nephrology and urology.
- 44. Examples of *vertical* (sequential) integration would be integrating metabolic disorders and biochemistry or cardiology and cardio-vascular physiology.
- 45. Core and optional (elective) content refers to a curriculum model with a combination of compulsory elements and electives or special options.
- 46. Complementary medicine would include unorthodox, traditional or alternative practices.
- 47. The authority of the curriculum committee would include authority over specific departmental and subject interests, and the control of the curriculum within existing rules and regulations as defined by the governance structure of the institution and governmental authorities. The curriculum committee would allocate the granted resources for planning and implementing methods of teaching and learning, assessment of students and course evaluation (see area 8.3).
- 48. Other relevant stakeholders would include other participants in the educational process, representation of teaching hospitals and other clinical facilities, representatives of graduates of the medical school, other health professions, who are involved in the educational process, or other faculties in the University. Other relevant stakeholders might also include representation of the community and public (e.g. users of the health care delivery system, including patient organisations).
- 49. The *operational linkage* implies identifying health problems and defining required educational outcomes. This requires clear definition and description of the elements of the educational programmes and their interrelations in the various stages of training and practice, paying attention to the local, national, regional and global context. It would include mutual feedback to and from the health sector and participation of teachers and students in activities of the health team. Operational linkage also implies

- constructive dialogue with potential employers of the graduates as basis for career guidance.
- 50. Subsequent stages of training would include postgraduate training (pre-registration training, vocational training, specialist training) and continuing professional development (CPD)/continuing medical education (CME).
- 51. Assessment principles, methods and practices would include consideration of number of examinations and other tests, balance between written and oral examinations, use of normative and criterion referenced judgements, and use of special types of examinations, e.g. objective structured clinical examinations (OSCE) or mini clinical evaluation exercise (MiniCEX).
- 52. Assessment methods would include the use of external examiners with the purpose of increasing fairness, quality and transparency of assessments.
- 53. "Assessment utility" is a combination of validity, reliability, educational impact, acceptability and efficiency of the assessment methods and formats.
- 54. Documentation and evaluation of reliability and validity of assessment methods would require an appropriate quality assurance process of assessment practices.
- 55. Assessment principles, methods and practices refer to assessment of student achievement and would include assessment in all domains: knowledge, skills and attitudes.
- 56. Decision about academic progress would require rules of progression and their relationship to the assessment process.
- 57. Adjustment of number and nature of examinations would include consideration of avoiding negative effects on learning. This would also imply avoiding the need for students to learn and recall excessive amounts of information, in favour of problem solving.
- 58. Encouragement of integrated learning would include consideration of using integrated assessment, while ensuring reasonable tests of knowledge of individual disciplines or subject areas.
- 59. Admission policy would imply adherence to possible national regulation as well as adjustments to local circumstances. If the medical school does not control admission policy, it would demonstrate responsibility by explaining relationships and drawing attention to consequences, e.g. imbalance between intake and teaching capacity.

- 60. The *statement on process of selection of students* would include both rationale and methods of selection such as secondary school results, other relevant academic or educational experiences, entrance examinations and interviews, including evaluation of motivation to become doctors. Selection would also take into account the need for variations related to diversity of medical practice.
- 61. Policy and practice for admission of disabled students will have to be in accordance with national law and regulations.
- 62. Transfer of students would include medical students from other medical schools and students from other study programmes.
- 63. The health needs of the community and society would include consideration of intake according to gender, ethnicity and other social requirements (socio-cultural and linguistic characteristics of the population), including the potential need of a special recruitment, admission and induction policy for underprivileged students and minorities.
- 64. Decisions on *student intake* would imply necessary adjustment to national requirements for medical workforce. If the medical school does not control student intake, it would demonstrate responsibility by explaining relationships and drawing attention to consequences, e.g. imbalance between intake and teaching capacity.
- 65. Other relevant stakeholders would include authorities responsible for planning and development of human resources in the national health sector as well as experts and organisations concerned with global aspects of human resources for health, e.g. shortage and mal-distribution of doctors, establishment of new medical schools and migration of doctors.
- 66. The health needs of the community and society would include consideration of intake according to gender, ethnicity and other social requirements (socio-cultural and linguistic characteristics of the population), including the potential need of a special recruitment, admission and induction policy for underprivileged students and minorities.
- 67. Academic counselling would include questions related to choice of electives, residence preparation and career guidance. Organisation of the counselling would include appointing academic mentors for individual students or small groups of students.

- 68. Addressing *social*, *financial* and *personal* needs would mean support in relation to social and personal problems and events, health problems and financial matters, and would include access to health clinics, immunisation programmes and health/disability insurance as well as financial aid services in forms of bursaries, scholarships and loans.
- 69. Participation of student representatives would include student self governance and representation on the curriculum committee, other educational committees, scientific and other relevant bodies as well as social activities and local health care projects (see B 2.7.2).
- 70. To *facilitate student activities* would include consideration of providing technical and financial support to student organisations.
- 71. The *staff recruitment and selection policy* would include consideration of ensuring a sufficient number of highly qualified basic biomedical scientists, behavioural and social scientists and clinicians to deliver the curriculum and a sufficient number of high quality researchers in relevant disciplines or subjects.
- 72. Balance of academic staff/faculty would include staff with joint responsibilities in the basic biomedical, the behavioural and social and clinical sciences in the university and health care facilities, and teachers with dual appointments.
- 73. Balance between medical and non-medical staff would imply consideration of sufficient medical orientation of the qualifications of non-medically educated staff.
- 74. *Merit* would be measured by formal qualifications, professional experience, research output, teaching awards and peer recognition.
- 75. Service functions would include clinical duties in the health care delivery system, as well as participation in governance and management.
- 76. Significant local issues would include gender, ethnicity, religion, language and other items of relevance to the school and the curriculum.
- 77. *Economic consideration* would include taking into account institutional conditions for staff funding and efficient use of resources.
- 78. The *balance of capacity between teaching, research and service functions* would include provision of protected time for each function, taking into account the needs of the medical school and professional qualifications of the teachers.
- 79. Recognition of meritorious academic activities would be through rewards, promotion and/or remuneration.

- 80. Sufficient knowledge of the total curriculum would include knowledge about instructional/learning methods and overall curriculum content in other disciplines and subject areas with the purpose of fostering cooperation and integration.
- 81. Teacher training, support and development would involve all teachers, not only new teachers, and also include teachers employed by hospitals and clinics.
- 82. Physical facilities would include lecture halls, class, group and tutorial rooms, teaching and research laboratories, clinical skills laboratories, offices, libraries, information technology facilities and student amenities such as adequate study space, lounges, transportation facilities, catering, student housing, on-call accommodation, personal storage lockers, sports and recreational facilities.
- 83. A safe learning environment would include provision of necessary information and protection from harmful substances, specimens and organisms, laboratory safety regulations and safety equipment.
- 84. Clinical training facilities would include hospitals (adequate mix of primary, secondary and tertiary), ambulatory services (including primary care), clinics, primary health care settings, health care centres and other community health care settings as well as skills laboratories, allowing clinical training to be organised using an appropriate mix of clinical settings and rotations throughout all main disciplines.
- 85. Evaluation of facilities for clinical training would include appropriateness and quality for medical training programmes in terms of settings, equipment and number and categories of patients, as well as health practices, supervision and administration.
- 86. A policy regarding effective use of information and communication technology would include consideration of the use of computers, internal and external networks and other means. This would include coordination with library resources and IT services of the institution. The policy would include common access to all educational items through a learning management system. Information and communication technology would be useful for preparing students for evidence-based medicine and life-long learning through continuing professional development (CPD)/ continuing medical education (CME).
- 87. *Medical research and scholarship* encompasses scientific research in basic biomedical, clinical, behavioural and social sciences. Medical scholarship means the academic attainment of advanced medical knowledge and inquiry. The medical

- research basis of the curriculum would be ensured by research activities within the medical school itself or its affiliated institutions and/or by the scholarship and scientific competencies of the teaching staff. Influences on current teaching would facilitate teaching of scientific methods and evidence-based medicine (see B 2.2).
- 88. Educational expertise would deal with, processes, practice and problems of medical education and would include medical doctors with research experience in medical education, educational psychologists and sociologists. It can be provided by an education development unit or a team of interested and experienced teachers at the institution or be acquired from another national or international institution.
- 89. Research in the discipline of medical education investigates theoretical, practical and social issues in medical education.
- 90. Other educational institutions would include other medical schools as well as other faculties and institutions for health education, such as schools for public health, dentistry, pharmacy and veterinary medicine.
- 91. A policy for transfer of educational credits would imply consideration of limits to the proportion of the study programme which can be transferred from other institutions. Transfer of educational credits would be facilitated by establishing agreements on mutual recognition of educational elements and through active programme coordination between medical schools. It would also be facilitated by use of a transparent system of credit units and by flexible interpretation of course requirements.
- 92. Staff would include academic, administrative and technical staff.
- 93. Programme monitoring would imply the routine collection of data about key aspects of the curriculum for the purpose of ensuring that the educational process is on track and for identifying any areas in need of intervention. The collection of data is often part of the administrative procedures in connection with admission of students, assessment and graduation.
- 94. Programme evaluation is the process of systematic gathering of information to judge the effectiveness and adequacy of the institution and its programme. It would imply the use of reliable and valid methods of data collection and analysis for the purpose of demonstrating the qualities of the educational programme or core aspects of the programme in relation to the mission and the curriculum, including the intended

- educational outcomes. Involvement of experts in medical education would further broaden the base of experience for quality improvement of medical education at the institution.
- 95. Main components of the curriculum would include the curriculum model (see B 2.1.1), curriculum structure, composition and duration (see 2.6) and the use of core and optional parts (see B 2.6.3).
- 96. Identified concerns would include insufficient fulfilment of intended educational outcomes. It would use measures of and information about educational outcomes, including identified weaknesses and problems, as feedback to conduction of interventions and plans for corrective action, programme development and curricular improvements.
- 97. The context of the educational process would include the organisation and resources as well as the learning environment and culture of the medical school.
- 98. Specific components of the curriculum would include course description, teaching and learning methods, clinical rotations and assessment methods.
- 99. Overall outcomes would be measured e.g. by results at national license examinations, benchmarking procedures, international examinations, career choice and postgraduate performance, and would, while avoiding the risk of programme uniformity, provide a basis for curriculum improvement.
- 100. Feedback would include information about the processes and products of the educational programmes. It would also include information about malpractice or inappropriate conduct by teachers or students with or without legal consequences.
- 101. Measures and analysis of *performance of cohorts of students* would include information about actual study duration, examination scores, pass and failure rates, success and dropout rates and reasons, student reports about conditions in their courses, as well as time spent by them on areas of special interest, including optional components. It would also include interviews of students frequently repeating courses, and exit interviews with students who leave the programme.
- 102. Measures of *performance of cohorts of graduates* would include information about career choice, performance in clinical practice after graduation and promotion.
- 103. Student background and conditions would include social, economic and cultural circumstances.

- 104. Other relevant stakeholders would include other representatives of academic and administrative staff, representatives of the community and public (e.g. users of the health care system), education and health care authorities, professional organisations, medical scientific bodies and postgraduate educators.
- 105. Governance means the act and/or the structure of governing the medical school. Governance is primarily concerned with policy making, the processes of establishing general institutional and programme policies and also with control of the implementation of the policies. The institutional and programme policies would normally encompass decisions on the mission of the medical school, the curriculum, admission policy, staff recruitment and selection policy and decisions on interaction and linkage with medical practice and the health sector as well as other external relations.
- 106. Relationships within the University of its governance structures would be specified, if the medical school is part of or affiliated to a University.
- 107. The committee structure would define lines of responsibility and includes a curriculum committee (see B 2.7.1).
- 108. Other relevant stakeholders would include representatives of ministries of higher education and health, the health sector, the health care delivery system and the public (e.g. users of the health care system).
- 109. Transparency would be obtained by newsletters, web-information or disclosure of minutes.
- 110. Academic leadership refers to the positions and persons within the governance and management structures being responsible for decisions on academic matters in teaching, research and service and would include dean, deputy dean, vice deans, provost, heads of departments, course leaders, directors of research institutes and centres as well as chairs of standing committees (e.g. for student selection, curriculum planning and student counselling).
- 111. The educational budget would depend on the budgetary practice in each institution and country and would be linked to a transparent budgetary plan for the medical school.
- 112. Regarding *educational budget and resource allocation* for student support and student organisations (see B 4.3.3 and 4.4, annotations 68 and 70).

- 113. Administrative staff in this document refers to the positions and persons within the governance and management structures being responsible for the administrative support to policy making and implementation of policies and plans and would depending on the organisational structure of the administration include head and staff in the dean's office or secretariat, heads of financial administration, staff of the budget and accounting offices, officers and staff in the admissions office and heads and staff of the departments for planning, personnel and IT.
- 114. Management means the act and/or the structure concerned primarily with the implementation of the institutional and programme policies including the economic and organisational implications i.e. the actual allocation and use of resources within the medical school. Implementation of the institutional and programme policies would involve carrying into effect the policies and plans regarding mission, the curriculum, admission, staff recruitment and external relations.
- 115. Appropriateness of the administrative staff means size and composition according to qualifications.
- 116. Internal programme of quality assurance would include consideration of the need for improvements and review of the management.
- 117. Constructive interaction would imply exchange of information, collaboration, and organisational initiatives. This would facilitate provision of medical doctors with the qualifications needed by society.
- 118. The health sector would include the health care delivery system, whether public or private, and medical research institutions.
- 119. The health-related sector would -depending on issues and local organisation include institutions and regulating bodies with implications for health promotion and disease prevention (e.g. with environmental, nutritional and social responsibilities).
- 120. To formalise collaboration would mean entering into formal agreements, stating content and forms of collaboration, and/or establishing joint contact and coordination committees as well as joint projects.

Appendix 2: THE WORKING GROUP

MEMBERS OF THE COMMITTEE

Professor Zein A. Karrar, President

Professor M Y Sukkar

Professor Alsheikh Mahgoub Gaafar

Mr. Elneel Ahmed Mohamed

Professor Elsheikh El-Obied

Dr. Ghada Shouna

Dr. Sara M. Osman

Dr. Wafaa Saeed

Dr. Abubaker Mergani