

# Accreditation of Medical Schools Self-Study Guide 2017

# **Sudan Medical Council**

Sector Type: An Independent Governmental

Organization

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mittees or in any other roles.

# **List of Abbreviations**

AC Accreditation Committee
AS Accreditation Secretariat
FMoH Federal Ministry of Health

MOHE & SR Ministry of Higher Education and Scientific Research

SMC Sudan Medical Council
ToA Team of Assessors

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# 1. Definitions and Abbreviations

- 1.1. **Accreditation Committee** (AC): the committee constituted by the SMC to set the standards, regulations, procedures and monitor the activities of Accreditation of Medical, Dental and Pharmacy schools.
- 1.2. **Accreditation Secretariat** (AS): is the administrative arm of the Accreditation Committee, also named the Accreditation Department.
- 1.3. **School**: is the higher education institute recognised by the Ministry of Higher Education and Scientific Research (MoHER) to grant the Bachelor degree in Medicine and Surgery (e.g. MB BS). The names School, Faculty or College are used interchangeably according to the institutes they belong to.
- 1.4. **New Medical, Dental or Pharmacy school**: is a newly established school of Medicine, Dentistry or Pharmacy which has not yet graduated a batch of students at the time of assessment.
- 1.5. **Team of Assessors**: the team constituted by the SMC, will conduct the assessment of the medical, dental or pharmacy school. They work in accordance with the SMC standards, policies and guidelines for accreditation, and report to the SMC Accreditation Committee.
- 1.6. Self-Study: is the phase of the accreditation process in which the medical school collects and reviews data about the school and its educational programme, in order to identify strengths to be maintained and areas for improvement to be addressed effectively.
- 1.7. **Site Visit**: is the phase of the accreditation process during which the team of assessors visits the school under assessment, for inspection, surveillance and meeting with its staff and students, and documentation of findings.
- 1.8. **Final Report**: is the report about the school provided by the team of assessors, following completion of all the steps of accreditation process, to the SMC for decision on accreditation.

# Introduction

The Sudan Medical Council (SMC) protects the society through ensuring high standards of medical ethics, medical education, and medical practice.

It is mandated that the SMC should ensure that standards of basic medical education in Sudan are comparable to international and regional standards within the context of Sudan higher education, its health system and community.

The policy of accreditation requires medical schools to implement a process of institutional review and internal evaluation through conducting a self study and submitting a report to SMC to initiate the process of accreditation.

The self study is one of the main tools to involve all constituents of the faculty in critical appraisal of the quality aspects of their teaching and training and institutionalize the culture of regular monitoring and evaluation of the educational program.

This document is designed to guide the medical schools through the process and ensure critical appraisal of data collected, it will ensure consistency of the accreditation process at national level.

The document is based on WFME guide adapted to the national context.

# 2. Purpose of this Document

This document is designed to provide medical schools with guidance for conducting the institutional Self-Study for purposes of accreditation by the SMC.

# 3. Overview of the Self Study Process

#### 3.1. WHAT IS THE SELF STUDY?

Self-Study is the phase of the accreditation process in which the medical school collects and reviews data about the school and its educational programme, in order to identify strengths to be maintained and areas for improvement to be addressed effectively.

It is the third main phase in the accreditation process and aims to create a transparent constructive self-evaluation and improvement of the programme. The self-study is a mandatory step in the process of evaluation by the SMC to obtain the accreditation status, and guarantee the school's compliance with standards.

In the process of self-study, the school brings together representation from all its departments in order to collect and review data, identify strengths and areas for improvement, and develop future plans and strategies. These items will be included in the self-study report which provides an evaluation of the school and its programme. The self-study report will be reviewed by the SMC Team of Assessors and verified during the site visit.

### 3.2. STEPS FOR CONDUCTING THE SELF STUDY

The medical school is to follow these steps:

- 1. Establishment of the Self Study Committee;
- 2. Agreeing on the organisational structure and the time plan of the committee;
- 3. Advocacy for the self-study and involvement of staff, students and partners;
- 4. Collection and Analysis of data and supporting documents;
- 5. Development of the Self Study Report.

### 3.3. ROLE OF THE SUDAN MEDICAL COUNCIL

SMC provides orientation session (s) to medical schools on the self-study process and the governing regulations of it, as part of the accreditation procedures. Further support and assistance may be provided on demand. SMC welcomes medical schools to contact the accreditation secretariat

for further guidance on how to conduct a self-study. Particularly, SMC will be providing assistance in advocacy for the self-study among schools to encourage participation and further explain the methodology and contributions of staff, students and partners. SMC, as well, may provide orientation to medical schools on the methodology of the self-study process and the governing regulations of it as part of the accreditation procedures.

# 4. Steps for conducting the self study

It is important to regard the self-study as a comprehensive activity for self-evaluation and improvement. It requires time, effort and participation from the school's bodies and partners.

The main objective of the self-study is to show the school where it stands, and serves as a means for future planning and progress. The outcomes of the self-study will be of more use when conducted in a well organised way with broad participation, scientific approach and commitment for improvement. The documentation and archiving of the self-study data, analysis and final report is important for the school's upcoming actions and quality assurance activities.

The steps of the self-study process, detailed below, are not strictly consecutive, and some of their activities can go in parallel.

# 4.1. ESTABLISH THE SELF STUDY COMMITTEE

This committee is the team of faculty and staff designated by the Dean to conduct the self-study. The school must ensure that the membership of the committee includes staff with experience and knowledge about the programme and its management.

The self-study task force should be widely representative of the medical school. It should, therefore, include representation of:

- Medical school administrators (Academic/Managerial)
- Heads of Departments
- Faculty members
- Students
- School graduates
- Stakeholders

The school must ensure that the committee is equipped with the required administrative support, financial resources, access and time; in order to accomplish the responsibilities associated with this role.

# 4.2. AGREE ON THE ORGANISATIONAL STRUCTURE AND THE TIME PLAN OF THE COMMITTEE

An institutional self-study task force determines the overall objectives, agrees on the methodology, sets the timeframe, supervises and monitors the implementation and finally develops the self-study report. This necessitates that the taskforce sets a defined work plan with clear roles and responsibilities.

It is recommended that the Dean, Chair of the curriculum committee or a senior staff member chairs the taskforce. In addition, for effective implementation of the self-study, the taskforce should select a number of subcommittees to address the nine areas of evaluation, namely:

- 1. Mission and Outcomes
- 2. Educational Programme
- 3. Assessment of Students
- 4. Students
- 5. Academic Staff and Faculty
- Educational Resources
- 7. Programme Evaluation
- 8. Governance and Administration
- 9. Continuous Renewal

Each subcommittee will be responsible for an area, or a maximum of three areas. The subcommittee should study the standards and data, and develop the report for each area. This demands an appropriate membership in each subcommittee including administrators, faculty members, and students.

The school has up to sixteen weeks to complete the self-study (See Table 1). The committee agrees on a known plan for carrying out its activities in each of the five steps (See Table 2), including the distribution of tasks, required time and resources. It is advised that the plan is developed with consideration to the school's calendar, like the periods of exams, admissions and staff, to avoid staff work overload.

Show	Weeks															
Step		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Establishment of the Self Study Committee.																
2. Agreeing on the organisational structure and the time plan of the committee.																
3. Advocate and involve the staff, students and partners in the self-study.																
4. Collection and analysis of data and supporting documents.																
5. Development of the Self-Study Report.																

Table 1: Example for the outlines of a committee time plan

Task	Description/Details	Responsible members	Time of completion	Required resources		

Table 2: Sample planning format

# 4.3. ADVOCATE FOR THE SELF STUDY AND INVOLVE STAFF, STUDENTS AND PARTNERS

The school's constituency must be involved in the self-study process, and, therefore, advocacy should be carried out among the school's management, faculty, committees, students, graduates and stakeholders, and other associated bodies. This may be achieved through meetings, workshops and different sessions to bring knowledge about the objectives, process and outcomes of the self-study, and to promote for their participation. In addition, these sessions would raise awareness about the rationale and system for accreditation of medical schools. Representatives from the SMC are available to take part in these activities upon request.

Advocacy starts at this step and continues throughout the self-study process.

#### 4.4. COLLECTION AND ANALYSIS OF DATA AND SUPPORTING DOCUMENTS

Each of the nine areas of evaluation shall be addressed by a subcommittee. The subcommittees should review the standards of the specific area and use the questions and guidance, provided.

Provision of evidence is an important aspect of the process. This can be achieved by studying the school documents and generation of supporting evidence from specifically designed questionnaires collected from staff, students, alumni, community and other stakeholders.

The subcommittee is responsible of analysing all data and documents collected to generate statistical information. The committee and its subcommittees shall conduct a SWOT analysis, as appropriate, to identify the areas of strengths, weaknesses, opportunities and threats in different domains. The subcommittee submits its findings and report/s to the committee, once ready, to proceed to the next step.

#### 4.5. DEVELOPMENT OF THE SELF STUDY REPORT

The committee looks into the subcommittees' reports studying the quality level in each area, the elements where reports intersect, and generate the final report. The report should include a summary of strengths, weaknesses and future plans.

Furthermore, in this step, the committee finalises the report and attends to missing points, inaccuracies and inconsistencies. The contents of the report are described below and guidance is provided for each section. The report shall be written in a narrative form that is informative, analytical and evidence based.

The self-study report is then submitted to the accreditation secretariat as

described below. It is worth mentioning that the school may undertake corrective measures through the process of self-study and this has to be clearly described and documented.

Updates and changes resulting from actions, carried out after the submission of the self-study report and before the site visit, should be reported to the SMC to be considered as an annex to the original report.

# 5. Contents of the school's Self Study Report

The Self-Study Report is the final product of the process that provides comprehensive findings of the evaluation, outcomes and future plans for renewal and development.

The contents described below are tied with guidance for the execution of each item. The self-study committee must ensure that all the items of the self-study are addressed and consistently provided in the report. Information provided must be precise and up to date, with attention to terminology and abbreviations.

#### A. EXECUTIVE SUMMARY

This is an abstract and summary of the document contents and recommendations.

# The contents of the Self-Study Report:

- A. Executive Summary
- B. Introduction
- C. General Information
- D. Methodology
- E. Areas of Evaluation
  - 1. Mission and Outcomes
  - 2. Educational Programme
  - 3. Assessment of Students
  - 4. Students
  - 5. Academic Staff and Faculty
  - 6. Educational Resources
  - 7. Programme Evaluation
  - 8 . Governance and Administration
  - 9. Continuous Renewal
- F. Self-Study Summary Report.
- G. Annexes
  - Membership of the school's Self Study Committee
  - Time plan of the task force
  - Supporting Documents

### **B. INTRODUCTION**

The introduction should provide a brief about purpose of the selfstudy, how it was conducted, roles and contributions of staff, students and stakeholders.

### C. GENERAL INFORMATION

This section should include the following information about the medical school:

- Name of the School
- Name of the university
- · Date of establishment
- Number of batches graduated
- Full address
- Website
- Email & telephone numbers
- Name and telephone of Focal Person

# D. METHODOLOGY

This section should describe, in details, the methods used by the taskforce to carry out the self-study.

# E. THE AREAS OF EVALUATION

The self-study is directly linked to the standards for accreditation. For each area of assessment, a set of questions and/or guidance is provided (in the blue boxes). This shall assist the committee and subcommittees in understanding the standards, generating data and evidence.

Responses should be written in a narrative form, not as an answer to each specific item. The responses should be evidence-based and provide relevant explanations, cross-references to other parts of the report and clearly links to supporting documents provided, in order to, ultimately, identify the aspects of strength and weakness, and future strategies for each area.

\*Note: 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 school<sup>1</sup> must

- Define its mission<sup>2</sup> and make it known to its constituency<sup>3</sup> and the health sector<sup>4</sup> it serves. (B 1.1.1)
- In its mission statement, outline the aims and the educational strategy resulting in a medical doctor
  - o 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 learning<sup>8</sup>. (B 1.1.6)
- o Ensure that the mission encompasses the health needs of the community, the needs of the health care system and other aspects of social accountability<sup>10</sup>, taking into consideration the community beliefs, cultural and social context of Sudan. (B 1.1.7)

# The medical school should

- Ensure that the mission encompasses
  - o Medical research<sup>11</sup> attainment and its relevance to the country priority health needs. (Q 1.1.1)
  - o Aspects of global health<sup>12</sup>. (Q 1.1.2)

Does the school have a written mission and objectives? (attach a copy) How are the mission, outcomes and objectives made available to the staff, students, the health sector it serves and the community as a

What parts of the mission and objectives cover the needs of the community and health system?

What parts of the mission and objectives cover the aspects of research and global health?

### 1.2. PARTICIPATION IN FORMULATION OF MISSION

# **Basic standard:**

whole?

The medical school must

• Ensure that its principal stakeholders<sup>13</sup> 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 stakeholders<sup>14</sup>. (Q 1.2.1)

Do the principal and relevant stakeholders participate in the formulation of the mission, outcomes and objectives and how?

### 1.3. INSTITUTIONAL AUTONOMY AND ACADEMIC FREEDOM

# **Basic standard:**

The medical school must have institutional autonomy<sup>15</sup> 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 freedom<sup>16</sup> for its staff and students
  - o In addressing the actual curriculum<sup>17</sup>. (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)

Does the school have written policies to describe the staff roles and freedom of expression, enquiry and publication in design and implementation of the curriculum? (attach a copy)

Does the school have written policies to describe the staff roles and freedom of expression, enquiry and publication in design and implementation of the curriculum? (attach a copy)

### 1.4. EDUCATIONAL OUTCOMES

### Basic standard:

- Define the intended educational outcomes<sup>18</sup> 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)
  - Appropriate foundation for future career in any branch of medicine<sup>6</sup> (B 1.4.2)
  - o Their future roles in the health sector. (B 1.4.3)
  - o Their subsequent postgraduate training<sup>7</sup>. (B 1.4.4)
  - o Their commitment to and skills in lifelong learning8. (B 1.4.5)

- o The health needs of the community<sup>9</sup>, the needs of the health care system and other aspects of social accountability<sup>10</sup> within the socio-cultural context of Sudan. (B 1.4.6)
- Ensure appropriate student conduct<sup>19</sup> with respect to fellow students, faculty members, other health care personnel, patients and their relatives. (B 1.4.7)

# The medical school should

- Specify and co-ordinate the linkage of outcomes to be acquired by graduation with that to be acquired in postgraduate training<sup>7</sup>. (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).
- Draw attention to global health related outcomes. (Q 1.4.3)

Describe the intended educational outcomes and broad competencies (knowledge, skills and attitudes) required of students at graduation? (attach a copy of the document)

# 2. EDUCATIONAL PROGRAMME

### 2.1. CURRICULUM MODEL AND INSTRUCTIONAL METHODS

# **Basic standard:**

The medical school must

- Define the curriculum model<sup>20, 21</sup>. (B 2.1.1)
- State the instructional and learning methods<sup>22</sup> employed. (B 2.1.2)
- Ensure that the curriculum prepares the students for lifelong learning<sup>8</sup>. (B 2.1.3)
- Ensure that the curriculum is delivered in accordance with principles of equality<sup>24</sup>. (B 2.1.4)

# Quality development standard:

The medical school should

 Use a curriculum and instructional/learning methods<sup>23</sup> that stimulate, prepare and support students to take responsibility for their learning process. (Q 2.1.1)

Does the school have a curriculum document? (attach a copy)

Does the curriculum document describe the curriculum model used?

What are the principles guiding the design of the curriculum?

What are the types of teaching and learning methods actually used?

# 2.2. SCIENTIFIC METHOD

### Basic standard:

- Throughout the curriculum teach<sup>25</sup>
  - 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)

The medical school should

 Have a curriculum that introduces the students to the elements of original or advanced research<sup>26</sup>. (Q 2.2.1)

Which components of the curriculum address the principles of scientific method and evidence-based medicine and enable analytical and critical thinking?

# 2.3. BASIC BIOMEDICAL SCIENCES

# **Basic standard:**

The medical school must

- In the curriculum identify and incorporate
  - o The contributions of the basic biomedical sciences<sup>27</sup> 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:

The medical school should

- 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)

What is the weight of the basic sciences in the curriculum (in credit hours)?

Are basic sciences integrated with clinical sciences in different stages of the curriculum? Give examples

### 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<sup>28, 31</sup>. (B 2.4.2)
- o Social sciences<sup>28, 31</sup>. (B 2.4.3)
- o Communication skills. (B 2.4.4)
- o Medical ethics<sup>29, 31</sup> and professionalism. (B 2.4.5)
- o Medical jurisprudence<sup>30, 31</sup>. (B 2.4.6)

# 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)
  - Changing demographics and cultural contexts at the national, regional and international levels. (Q 2.4.3)

Which of the behavioural and social sciences and the disciplines of medical ethics and medical jurisprudence contribute to the medical programme? Give weight in credit hours.

### 2.5. CLINICAL SCIENCES AND SKILLS

# **Basic standard:**

- In the curriculum identify and incorporate the contributions of the clinical sciences<sup>32</sup> to ensure that students
  - o Acquire sufficient knowledge and clinical<sup>33</sup> and professional<sup>34</sup> skills to assume appropriate responsibility<sup>35</sup> after graduation. (B 2.5.1)
  - o Spend a reasonable part<sup>36</sup> of the programme in planned contact with patients<sup>37</sup> 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 training<sup>38</sup> in major clinical disciplines<sup>39</sup>. (B 2.5.4)
- Organise clinical training with appropriate attention to patient safety<sup>40</sup>, emergency care and working within a low resource health system. (B 2.5.5)

# The medical school should

- 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 contact<sup>41</sup> gradually including participation in patient care<sup>42</sup>. (Q 2.5.3)
- Structure the different components of clinical skills<sup>33</sup> training according to the stage of the study programme. (Q 2.5.4)

Describe the parts of the curriculum which is/are taught in community settings and their weight (in credit hours).

# 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 integration<sup>43</sup> of associated sciences disciplines and subjects. (Q 2.6.1)
- Ensure vertical integration<sup>44</sup> 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 content<sup>45</sup> as part of the educational programme. (Q 2.6.3)
- Define and explain concepts of relevant and acceptable aspects of the interface with complementary medicine<sup>46</sup>. (Q 2.6.4)

Describe the curriculum structure of the school.

Are basic sciences integrated with clinical sciences in different stages of the curriculum? Please give examples.

### 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 authority<sup>47</sup> 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:**

The medical school should

- Through its curriculum committee plan and implement innovations in the curriculum. (Q 2.7.1)
- In its curriculum committee include representatives of other relevant stakeholders<sup>48</sup>. (Q 2.7.2)

Is there a curriculum committee responsible for the curriculum management in the school? If yes, give the composition of the committee.

What are the terms of reference of the curriculum committee? Specifically, what authority does the committee have to resolve conflicts of educational planning and implementation?

# 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:

The medical school should

- Ensure that the curriculum committee
  - Seeks input from the environment in which graduates will be expected to work, and modify the programme accordingly. (Q2.8.1)
  - o Considers programme modification in response to feedback from external assessors, the community and society. (Q 2.8.2)

Describe the links of the school/programme with the national health system.

How does the school bring input from the stakeholders to modify the programme?

#### 3. ASSESSMENT OF STUDENTS

# 3.1. ASSESSMENT METHODS

# **Basic standard:**

- Define, state and publish the principles, methods and practices<sup>51</sup> 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 methods<sup>52</sup> and formats according to their "assessment utility"<sup>53</sup>. (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)

The medical school **should** 

- Document and evaluate the reliability and validity of assessment methods<sup>54</sup>, though, 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)

What are the principles, methods and practices of student's assessment used in the school, including scoring and grading schemes? How does your medical school monitor the reliability and validity of assessments?

# 3.2. RELATION BETWEEN ASSESSMENT AND LEARNING

# Basic standard:

The medical school **must** 

- Use assessment principles, methods and practices<sup>55</sup> 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 progress<sup>56</sup>. (B 3.2.4)

# **Quality development standard:**

The medical school should

- Adjust the number and nature of examinations<sup>57</sup> of curricular elements to encourage both acquisition of the knowledge base and integrated learning<sup>58</sup>. (Q 3.2.1)
- Ensure timely, specific, constructive and fair regular feedback to students on basis of assessment results. (Q 3.2.2)

How do the assessment methods used ensure acquisition of the intended outcomes on graduation?

Does the school monitor students' progress and provide feedback?

# 4. STUDENTS

# 4.1. ADMISSION POLICY AND SELECTION

### Basic standard:

The medical school must

- Formulate and implement an admission policy<sup>59</sup> based on principles of objectivity, including a clear statement on the process of selection of students<sup>60</sup>. (B 4.1.1)
- Have a policy and implement a practice for admission of disabled students<sup>61</sup>. (B 4.1.2)
- Have a policy and implement a practice for transfer of students<sup>62</sup> 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 society<sup>63</sup>. (Q 4.1.2)
- Use a system for appeal of admission decisions, according to the national context. (Q 4.1.3)

What are the additional requirements for admission of students? (Additional requirements may include interview, aptitude exam, medical exam, etc)

Is there a policy for admission of disabled students? (Attach a copy)
Is there a policy for transfer of students from other programmes and institutions? (Attach a copy)

# 4.2. STUDENT INTAKE

# **Basic standard:**

The medical school must

• Define the size of student intake<sup>64</sup> and relate it to its capacity at all stages of the programme. (B 4.2.1)

The medical school **should** 

 Periodically review the size and nature of student intake<sup>64</sup> in consultation with other relevant stakeholders<sup>65</sup> and regulate it to meet the health needs of the community and society<sup>66</sup>. (Q 4.2.1)

What is the number of students in each year/semester including the ratios of males and females?

### 4.3. STUDENT COUNSELLING AND SUPPORT

### Basic standard:

The medical school and/or the University must

- Have a system for academic counselling<sup>67</sup> of its student population. (B 4.3.1)
- Offer a programme of student support, addressing social, financial and personal needs<sup>68</sup>. (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)

Describe the implemented services for the students (academic/financial/social counselling and support) in the school.

#### 4.4. STUDENT REPRESENTATION

### **Basic standard:**

The medical school must

 Formulate and implement a policy that ensures participation of student representatives<sup>69</sup> 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 activities 70 and student organisations. (B 4.4.2)

# **Quality development standard:**

The medical school should

- 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)

What is the role of the students in curriculum design, management and evaluation?

What is the role of the medical school in supporting students' extracurricular activities?

What is the role of the medical school in supporting students' organisations?

#### 5. ACADEMIC STAFF AND FACULTY

### 5.1. RECRUITMENT AND SELECTION POLICY

### **Basic standard:**

- Formulate and implement a staff recruitment and selection policy<sup>71</sup> which
  - o Outlines the type, responsibilities and balance of the academic staff/faculty<sup>72</sup> 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 staff<sup>73</sup>, 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 merit<sup>74</sup>, including the balance between teaching, research and service<sup>75</sup> 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)

The medical school **should** 

- In its policy for staff recruitment and selection take into account criteria such as
  - o Relationship to its mission, including significant local issues<sup>76</sup>. (Q 5.1.1)
  - o Economic considerations<sup>77</sup>. (Q 5.1.2)

What is the number of the academic staff in the school?(attach a list of staff showing qualification and disciplines)

What is the school's policy for staff recruitment and selection? (attach a copy)

# 5.2. STAFF ACTIVITY AND DEVELOPMENT POLICY

#### **Basic standard:**

- Formulate and implement a staff activity and development policy which
  - o Allows a balance of capacity between teaching, research and service functions<sup>78</sup>. (B 5.2.1)
  - o Ensures recognition of meritorious academic activities<sup>79</sup>, 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 curriculum<sup>80</sup>. (B 5.2.4)
  - o Includes teacher training, development, support and appraisal<sup>81</sup>. (B 5.2.5)

# The medical school **should**

- 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)

What is the balance between full-time and part-time members of staff? What is the balance between medical and non-medical academic staff? What is the balance between academic and non-academic staff? Is there a policy for staff activity and development? If yes, please attach a copy

What are the criteria for academic staff promotion?

### 6. EDUCATIONAL RESOURCES

### 6.1. PHYSICAL FACILITIES

### Basic standard:

The medical school must

- Have sufficient physical facilities<sup>82</sup> 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 safe<sup>83</sup> for staff, students, patients and their careers. (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)

Provide a description of each of the physical facilities available for the delivery of the non-clinical components of the curriculum.

# 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 facilities<sup>84</sup>. (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 serves<sup>85</sup>. (Q 6.2.1)

Provide a description of the facilities available for clinical training at the medical school in hospitals, ambulatory services, community clinics, primary health care settings, skills laboratories, etc.

### 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 programme<sup>86</sup>. (B 6.3.1)

# Quality development standard:

The medical school should

- 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)

Does the medical school use the newer information technology in its teaching programme? (give examples)

# 6.4. MEDICAL RESEARCH AND SCHOLARSHIP

#### **Basic standard:**

- Use medical research and scholarship<sup>87</sup> 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)

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)

Describe the facilities and research programmes of the school

#### 6.5. EDUCATIONAL EXPERTISE

# **Basic standard:**

The medical school must

- Have access to educational expertise<sup>88</sup> 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 education<sup>89</sup>. (Q 6.5.2)
- Allow staff to pursue educational research interest. (Q 6.5.3)

Does the medical school have an access, where required, to an expert medical education unit or centres (e.g. EDC) or other educational expertise? Describe the use of such expertise

# 6.6. EDUCATIONAL EXCHANGES

# **Basic standard:**

The medical school must

- Formulate and implement a policy for
  - o National and international collaboration with other educational institutions<sup>90</sup>. (B 6.6.1)
  - o Transfer of educational credits<sup>91</sup>. (B 6.6.2)

# Quality development standard:

The medical school should

- Facilitate regional and international exchange of staff<sup>92</sup> 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)

Describe the existing collaborative links with other national and international educational institutions and describe the nature of those links, student exchanges, staff exchanges, and research.

# 7. PROGRAMME EVALUATION

# 7.1. MECHANISMS FOR PROGRAMME MONITORING AND EVALUATION

# **Basic standard:**

- Have a programme of routine curriculum monitoring<sup>93</sup> of processes and intended curriculum outcomes. (B 7.1.1)
- Establish and apply a mechanism for programme evaluation<sup>94</sup>
   that
  - o Addresses the curriculum and its main components<sup>95</sup>. (B 7.1.2)
  - o Addresses student progress. (B 7.1.3)
  - o Identifies and addresses concerns<sup>96</sup>. (B 7.1.4)
- Ensure that relevant results of evaluation influence the curriculum reform and corrective decisions. (B 7.1.5)

The medical school **should** 

- Periodically evaluate the programme by comprehensively addressing
  - o The context of the educational process<sup>97</sup>. (Q 7.1.1)
  - o The specific components of the curriculum<sup>98</sup>. (Q 7.1.2)
  - o The overall outcomes<sup>99</sup>. (Q 7.1.3)
  - o Its social accountability<sup>10</sup>. (Q 7.1.4)

How does the medical school monitor and evaluate its programme?

### 7.2. TEACHER AND STUDENT FEEDBACK

# Basic standard:

The medical school must

Systematically seek, analyse and respond to teacher and student feedback<sup>100</sup>. (B 7.2.1)

# Quality development standard:

The medical school should

Use feedback results for programme development. (Q 7.2.1)

Does the medical school sample, analyse and use the opinions of staff about its educational programme? (Give examples).

Does the medical school sample, analyse and use the opinions of students about its educational programme?

# 7.3. PERFORMANCE OF STUDENTS AND GRADUATES

### Basic standard:

- Analyse performance of cohorts of students<sup>101</sup> and graduates<sup>102</sup> 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)

# The medical school **should**

- Analyse performance of cohorts of students and graduates in relation to student
  - o Background and conditions<sup>103</sup>. (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)

How does the school analyse performance of cohorts of its students and graduates in relation to its mission, intended educational outcomes, curriculum and provision of resources?

#### 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:**

The medical school should

- for other relevant stakeholders<sup>104</sup>
  - 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)

Seek their feedback on the curriculum. (Q 7.4.3)

How are those concerned in the educational process (principal stakeholders) within the medical school involved in programme evaluation?

#### 8. GOVERNANCE AND ADMINISTRATION

#### 8.1. GOVERNANCE

#### **Basic standard:**

The medical school must

• Define its governance<sup>105</sup> structures and functions including their relationships within the University<sup>106</sup>. (B 8.1.1)

### Quality development standard:

The medical school should

- In its governance structures set out the committee structure<sup>107</sup>, and reflect representation from
  - o Academic staff. (Q 8.1.1)
  - o Students. (Q 8.1.2)
  - o Other relevant stakeholders<sup>108</sup> including fair representation of the community. (Q 8.1.3)
- Ensure transparency<sup>109</sup> of the work of governance and its decisions. (Q 8.1.4)

Describe the governance structure, its components and their functions.

#### 8.2. ACADEMIC LEADERSHIP

#### Basic standard:

The medical school **must** 

 Describe the responsibilities of its academic leadership<sup>110</sup> 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)

Describe the academic management structure of the medical school indicating the line of responsibility of the academic leadership for definition and management of the medical educational programme.

#### 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<sup>111</sup>, <sup>112</sup>. (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)

Describe the budgetary system, practice and responsibility of the medical school. Including description of the distribution of resources for curriculum implementation and educational needs.

#### 8.4. ADMINISTRATIVE STAFF AND MANAGEMENT

#### **Basic standard:**

The medical school must

- Have an administrative<sup>113</sup> and professional staff that is appropriate<sup>115</sup> to
  - o Support implementation of its educational programme and related activities, including community related activities. (B 8.4.1)
  - o Ensure good management<sup>114</sup> and resource deployment. (B 8.4.2)

## Quality development standard:

The medical school **should** 

Formulate and implement an internal programme for quality assurance<sup>116</sup> of the management including regular review. (Q 8.4.1)

Describe the administrative staff management of school, including filing and documentation processes and the use of IT.

#### 8.5. INTERACTION WITH HEALTH SECTOR

#### Basic standard:

The medical school must

• Have constructive interaction<sup>117</sup> with the health and health related sectors<sup>118, 119</sup> of society and government. (B 8.5.1)

## **Quality development standard:**

The medical school should

• Formalise its collaboration<sup>120</sup>, including engagement of staff and students, with partners in the health sector. (Q 8.5.1)

Describe the relationships between the medical school and the health services with which it interacts, regarding mission and objectives of the school, the educational programme, the provision of resources, teaching facilities and part-time staff.

#### 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:**

The medical school **should** 

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, socio-economic 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 document-ed 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)
  - o 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 devel-

- opment 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)

Does the medical school have regular reviewing and updating of its objectives, structures and activities?

Describe the resources allocated by the school for continuous renewal. How frequently does the medical school undertake partial or comprehensive programme reviews, reflecting on the impact of these reviews on the improvement of the programme?

#### F. SELF STUDY SUMMARY REPORT

A summary report should include a list of institutional strengths, issues of potential unsatisfactory performance related to elements or challenges that require attention, and the time plan for implementation of the school's future plans.

#### G. ANNEXES

- 1. Membership of the school's Self Study Committee
- 2. Time plan of the task force
- 3. Supporting Documents

# 6. Submission of the Self Study Report

The school has a time range of 12 to 16 weeks for conducting the self-study and submitting their final Self Study Report with the supporting documents. The report should be handed, in both soft and hard copies, enclosed with a formal letter from Dean of the school on the subject.

### 7. Further Reading

- SMC Policy for Accreditation of Medical Schools.
- SMC Standards of Accreditation of Medical Schools.
- SMC Procedures of Accreditation of Medical Schools.

## 8. Appendices

### **Appendix 1: Annotations**

- 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.
- 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.
- 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, 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 student's 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 behaviour 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, 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.
- 34. *Professional skills* would include patient management skills, teamwork/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 stag es of training would include postgraduate training (pre-registration training, vocational training, and 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: Members of the taskforce**

Professor Zein A. Karrar, *Chair*Professor Mohammed Yousif Sukkar

Professor Elsheikh Mahgoub Gaafar

Professor Elsheikh El-Obied

Dr. Ghada Omar Shouna

Dr. Sara Mohamed Osman

Dr. Wafaa Abdel Fatah Saeed

Dr. Abubaker Mergani