##

## **MEDICAL AND DENTAL PRACTITIONERS COUNCIL OF ZIMBABWE**

**GUIDELINES ON ACCREDITATION OF MEDICAL AND DENTAL SCHOOLS**

**BACKGROUND**

The importance of the Medical and Dental Practitioners Council of Zimbabwe (MDPCZ) constantly reviewing medical training institutions to ensure compliance with minimum training standards expected which has a multiplier effect on the ultimate product cannot be overemphasised. The MDPCZ is a member of the Association of Medical Councils of Africa (AMCOA). On 30 June 2011 MDPCZ signed the Protocols on Medical Regulation which require the Council to constantly accredit the Schools of Medicine/Dentistry to ensure quality training that will have a positive impact on the health of the population particularly in the spirit of the Millennium Development Goals No 4 and 5 (reduction of mortality rates and improvement in maternal health). The globalization has also made it necessary for the MDPCZ to accredit both newly established medical schools as well as the traditional medical/dental schools. MDPCZ is a member of the International Association of Medical Regulatory Authorities (IAMRA) which also emphasises on continuous reviewing of medical training standards and have the medical/dental training schools listed on the World Directorate of the accredited Medical/Dental Training Institutions. As a progressive organization this task could not have come at an opportune time.

**INTRODUCTION**

One of the fundamental statutory functions of the MDPCZ is to regulate, control and supervise all matters affecting the training of the medical and dental profession. **(section 30 (1)(b) Cap:27:19 Health Professions No.6/2000) refers.** The Education and Liaison Committee (ELC) established in terms of **section 71 (2) of the said Act**  whose membership is composed of representatives of professional associations and College of Health Sciences members and the Deans of medical and dental training schools has the responsibility of supervising the education and training of the medical and dental practitioners, advise the Council on any matter concerning the education of and training of medical and dental practitioners, satisfy itself and the Council that the education and training given and the facilities provided to enable the trainees to train and gain experience is appropriate and adequate. ELC is also mandated in terms of subsection 3 of section 71 to visit any university, hospital or other institution or premise where medical and dental instruction is given or examination conducted and observe and monitor the instructions or examinations. The training institutions in terms of section 71(3)(d) are obliged to submit full written reports to the Council on the courses and curricula followed, examinations by the respective students. The development of the Guidelines on Accreditation of Medical and Dental Schools had been long overdue. These guidelines which have been adopted and adapted with the permission of the WFME and WHO have taken cognizant of the local environmental factors.

THE WFME GLOBAL STANDARDS

**DEFINITIONS**

The WFME recommends the following set of global standards in basic medical education. The standards are structured according to 9 areas with a total of 36 sub-areas.

**AREAS** are defined as broad components in the structure, process and outcome of medical education and cover:

1. Mission and Objectives

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

**Basic standard.** This means that the standard must be met by every medical school and fulfillment 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 bya **»should«.**

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

1. **VISION, MISSION AND OBJECTIVES**
	1. **STATEMENTS OF VISION, MISSION AND OBJECTIVES**

 **Basic standard:**

The Medical and Dental School **must** define its vision, mission and objectives and make them known to its constituency. The vision, mission statements andobjectives **must** describe the educational processes resulting in a Medical/Dental practitioner competent at a basic level, with an appropriate foundation for further training in any branch of Medicine and Dentistry and in keeping with the roles of practitioners in the healthcare system. **(to produce a practitioner with competency in rural and urban healthcare settings)**

 **Quality Development:**

The vision, mission and objectives **should** encompass social responsibility, research attainment, and address readiness for postgraduate medical training.

***Annotations:***

* **Statements of vision, mission and objectives** would include general and specific issues relevant to institutional, national and regional policy.
* Any branch of medicine refers to all types of medical practice and medical research.
* **Postgraduate medical training** would include preregistration training, vocational training, specialist training and continuing medical education/professional development.
	1. **PARTICIPATION IN FORMULATION OF MISSION AND OBJECTIVES**

**Basic Standard:**

The vision, mission statement and objectives of a Medical and Dental School **must** be defined by its principal stakeholders**.** **(Stakeholders being the University, Ministry of Health and Child Welfare, Ministry of Higher and Tertiary Education, Medical and Dental Practitioners Council of Zimbabwe, Civil Society groups, Health Institutions, Churches and Student groups)**

**Quality development**

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

**Annotations:**

* ***Principal stakeholders*** would include, the university, governmental authorities, the profession, students, the community, education and health care authorities, professional organizations etc.
	1. **ACADEMIC AUTONOMY**

**Basic Standard:**

There **must** be a policy for which the administration and faculty/academic staff of the Medical and Dental School are responsible, within which they have freedom to design the curriculum and allocate the resources necessary for its implementation.

**Quality Development:**

The contributions of all academic staff **should** address the actual curriculum and theeducational resources **should** be distributed in relation to the educational needs.

* 1. **EDUCATIONAL OUTCOME**

**Basic Standard:**

The Medical and Dental School **must** define the competencies that students **should** exhibit on graduation in relation to their subsequent training and future roles in thehealth system. **(educational outcome would be defined in terms of competencies the students must acquire before graduation. Competencies within medicine and medical practice would include behavioural and social sciences, including community medicine, and ethics relevant to the practice of medicine; attitudes and skills(with respect of establishment of a diagnoses, practical procedures, communication skills, treatment and prevention of disease, health promotion, rehabilitation, clinical reasoning and problem solving); and the ability to undertake lifelong learning and professional development.)**

 **Quality Development:**

The linkage of competencies to be acquired by graduation with that to beacquired inpostgraduate training **should** be specified. Measures of, and information about,competencies of the graduates **should** be used as feedback to programme development.

***Annotations:***

* ***Educational outcome***would be defined in terms of the competencies the students must acquire before graduation.

• ***Competencies***within medicine and medical practice would include knowledge and understanding of the basic, clinical, behavioural and social sciences, including public health and population medicine, and medical ethics relevant to the practice of medicine; attitudes and clinical skills (with respect to establishment of diagnoses, practical procedures, communication skills, treatment and prevention of disease, health promotion, rehabilitation, clinical reasoning and problem solving); and the ability to undertake lifelong learning and professional development.

**2. EDUCATIONAL PROGRAMME**

**2.1 CURRICULUM MODELS AND INSTRUCTIONAL METHODS**

 **Basic standard:**

The Medical and Dental School **must** define the curriculum models and instructional methods employed.

 **Quality development:**

The curriculum and instructional methods **should** ensure that students haveresponsibilityfor their learning process and **should** prepare them for lifelong, self-directed learning.

 ***Annotations:***

• ***Curriculum models***would include models based on discipline, system, problem and community, etc.

* ***Instructional methods***encompass teaching and learning methods.
* The ***curriculum and instructional methods***should be based on sound learning principles and should foster the ability to participate in the scientific development of medicine as professionals and future colleagues.

**2.2 SCIENTIFIC METHOD**

 **Basic standard:**

The Medical and Dental School **must** teach the principles of scientific method and evidence-based medicine, including analytical and critical thinking, throughout the curriculum.

 **Quality development:**

The curriculum **should** include elements for training students in scientific thinking and research methods.

***Annotation*:**

• ***Training* in *scientific thinking and research methods***may include the use of elective research projects to be conducted by medical students.

**2.3 BASIC BIOMEDICAL SCIENCES**

 **Basic standard:**

The Medical and Dental School **must** identify and incorporate in the curriculum the contributions of the basic biomedical sciences to create understanding of the scientific knowledge, concepts and methods fundamental to acquiring and applying clinical science.

 **Quality development:**

The contributions in the curriculum of the biomedical sciences **should** be adapted to the scientific, technological and clinical developments as well as to the health needs of society.

 ***Annotation:***

•  ***The basic biomedical sciences***would - depending on local needs, interests and traditions - typically include anatomy, biochemistry, physiology, biophysics, molecular biology, cell biology, genetics, microbiology, immunology, pharmacology, pathology, etc.

**2.4 BEHAVIOURAL AND SOCIAL SCIENCES AND MEDICAL ETHICS**

 **Basic standard:**

The Medical and Dental School **must** identify and incorporate in the curriculum the contributions of the behavioural sciences, social sciences, medical ethics and medical jurisprudence that enable effective communication, clinical decision making and ethical practices.

 **Quality development:**

The contributions of the behavioural and social sciences and medical ethics **should** be adapted to scientific developments in medicine, to changing demographic and cultural contexts and to health needs of society.

 ***Annotations:***

• ***Behavioural and social sciences***would - depending on local needs, interests and traditions - typically include medical psychology, medical sociology, biostatistics, epidemiology, hygiene and public health and community medicine etc.

• ***The behavioural and social sciences and medical ethics***should 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.

**2.5 CLINICAL SCIENCES AND SKILLS**

 **Basic standard:**

The Medical and Dental School **must** ensure that students have patient contact and acquire sufficient clinical knowledge and skills to assume appropriate clinical responsibility upon graduation.

 **Quality development**:

Every student **should** have early patient contact leading to participation in patientcare**.** The different components of clinical skills training **should** be structured according to the stage of the study programme.

 ***Annotations:***

• ***The clinical sciences***would - depending on local needs, interests and traditions - typically include internal medicine (with subspecialties), surgery (with subspecialties), anaesthesiology, dermatology & venereology, diagnostic radiology, emergency medicine, general practice/family medicine,geriatrics, gynecology & obstetrics, laboratory medicine, neurology, neurosurgery, oncology & radiotherapy, ophthalmology, orthopaedic surgery, oto-rhino-laryngology, paediatrics, pathological anatomy, physiotherapy & rehabilitation medicine and psychiatry, etc.

• ***Clinical skills*** include history taking, physical examination, procedures and investigations, emergency practices and communication and team leadership skills.

• ***Appropriate clinical responsibility*** would include health promotion, disease prevention and patient care.

• ***Participation in patient care***would include relevant community experience and teamwork with other health professions.

**2.6 CURRICULUM STRUCTURE, COMPOSITION AND DURATION**

 **Basic standard:**

The Medical and Dental School **must** describe the content, extent and sequencing of courses and other curricular elements, including the balance between the core and optional content, and the role of health promotion, preventive medicine and rehabilitation in the curriculum, as well as the interface with unorthodox, traditional or alternative practices.

 **Quality development:**

Basic sciences and clinical sciences **should** be integrated in the curriculum.

 ***Annotations:***

• ***Core and optional content***refers to a curriculum model with a combination of compulsory elements and electives or special options. The ratio between the two components can vary.

•  ***Integration of******disciplines*** would include both horizontal (concurrent) and vertical (sequential) integration of curricular components.

**2.7 PROGRAMME MANAGEMENT**

 **Basic standard:**

A curriculum committee **must** be given the responsibility and authority for planning and implementing the curriculum to secure the objectives of the Medical and Dental School.

 **Quality development:**

The curriculum committee **should** be provided with resources for planning and implementing methods of teaching and learning, student assessment, course evaluation, and for innovations in the curriculum. There **should** be representation on the curriculum committee of staff and other stakeholders.

***Annotations:***

• ***The authority***of the Curriculum Committee would include supremacy 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.

• ***Other stakeholders***would include other participants in the educational process, representatives of other health professions or other faculties in the University.

* ***The Curriculum Committee*** is going to be subject to approval by the Academic Board of the University Senate.

**2.8 LINKAGE WITH MEDICAL PRACTICE AND THE HEALTH CARE SYSTEM**

 **Basic standard:**

Operational linkage **must** be assured between the educational programme and the subsequent stage of training or practice that the student will enter after graduation.

 **Quality development:**

The curriculum committee **should** seek input from the environment in which graduates will be expected to work and **should** undertake programme modification in response to feedback from the community and society.

***Annotations:***

* ***Subsequent stages of training***would include pre-registration training, and specialist training.
* ***Operational linkage***would imply clear definition and description of the elements and their interrelations in the various stages of training and practice, and should pay attention to the local, national, regional and global context.

**3. ASSESSMENT OF STUDENTS**

**3.1 ASSESSMENT METHODS**

 **Basic Standard:**

The Medical and Dental School **must** define and state the methods used forassessment of its students, including the criteria for passing examinations. The reliability and validity of assessment methods **must** be documented.

 Methods of Assessment **must** include:

1. Assessment of knows and knows how (knowledge and application) using:

i. Oral exam/ Viva

ii. Short answer questions

iii. MCQ

iv. Extended matching items

 b. Assessment of shows how:

 i. Long case

 ii. Short case

 iii. Objective Structural Clinical Exam (OSCE)

 c. Assessment of Skills and Documentation:

 i. Mini clinical evaluation exercise

 ii. Direct observation of procedural skills, including tutorial participation

 iii. Logbook

 iv. Portfolio

 d. Continuous assessment.

 Participation of an external examiner at all stages is required.

 **Quality Development:**

The Medical and Dental School **should** review the outcome of the evaluation and develop new assessment methods.

**3.2 RELATIONSHIP BETWEEN ASSESSMENT AND LEARNING**

 **Basic standard:**

Assessment principles, methods and practices **must** be clearly compatible with educational objectives and must promote learning.

 **Quality development:**

 The number and nature of examinations should be adjusted to the curriculum.

 ***Annotations:***

• **The *definition of methods used for assessment***may include consideration of the balance between formative and summative assessment, the number of examinations and other tests, the balance between written and oral examinations, the use of normative and criterion referenced judgements, and the use of special types of examinations, e.g. objective structured clinical examinations (OSCE).

• ***Evaluation of assessment methods***may include an evaluation of how they promote learning.

• ***New assessment methods***may include the use of external examiners.

**4. STUDENTS**

**4.1 ADMISSION POLICY AND SELECTION**

 **Basic standard:**

The Medical and Dental School **must** have an admission policy including a clear statement on the process of selection of students.

Each Medical and Dental School **must** have an admissions policy that consists of the following:

1. Introduction- to introduce the policy

2. Aims- should be clearly stated

3. Equal Opportunities Statement- this statement should encourage diversity, be merit- based, should encompass persons with disabilities and it should also encourage gender equality

4. Programmes- a list of programmes should be included. The duration and intake capacity per programme should be clearly mentioned

5. Entry Requirements- minimum academic requirements at high school level should be clearly stated (A level passes in any 3 of the following: Biology, Chemistry, Mathematics and Physics). Specific requirements for mature applicant: Must have a relevant Science undergraduate degree with First/Upper Second Class pass.

6. The Admissions Process

 Each medical school must have an admissions subcommittee. Competition for places must be clearly spelled out by tallying the number of applications received against the places available.

Method of Application

 -How to apply e.g. online application, written document

 -Where to submit application e.g. email address, postal/ physical address,

 -Closing dates i.e. application deadlines

 Selection Process

 Selection stages should be clearly stated by the admissions subcommittee

 Criteria for selection

 a. Minimum academic requirements

 b. Non-academic requirements

 c. Contextual data- to help assess candidates from disadvantaged backgrounds

 d. Interviews-time period for interviews should be stated

Final Selection-is done by admissions subcommittee

7. Other Entry Conditions-criminal record checks and health checks of successful applicants should be conducted.

8. Confirmation of Place-Dates of notification by school-to-applicant and applicant-to-school should be stated. Mode of notification should be stated.

9. Transfers-Each medical school should clearly spell out its transfer policy

10. Communications with Admissions Office-admissions office contact details should be accessible e.g. postal address, email address etc.

11. Complaints-the channel for complaints regarding selection should be clearly defined.

12. Open Days- Dates for official campus visits should be stated

13. Further enquiries

 **Quality development:**

 The admission policy **should** be reviewed from time to time to meet social responsibilities and health needs of the institution and society.

***Annotations:***

• ***The statement on process of selection of students***would include both rationale and methods of selection and may include description of a mechanism for appeal.

• ***The review of admission policies***and the recruitment of students would include improvement of selection criteria, to reflect the capability of students to become doctors and to cover the variations in required competencies related to diversity of medicine.

**4.2 Student intake**

 **Basic standard**

The size of student intake **must** be defined and related to the capacity of the Medical and Dental School at all stages of education and training. A ratio of students to the number of lecturers available laboratory facilities and teaching units **must** be clearly stated.

 **Quality development**

The size of student intake **should** be periodically reviewed with relevant stakeholders.

 ***Annotations:***

• ***The needs of community and society***may include consideration of balanced intake according to gender, ethnicity and other social requirements, including the potential need of a special admission policy for underprivileged students.

• ***Stakeholders***would include those responsible for planning and development of human resources in the national health sector.

**4.3 Student Support and Counselling**

 **Basic Standard:**

A programme of student support, including counselling **must** be offered by the Medical and Dental School.

 **Quality Development**

Counselling **should** be provided based on monitoring of student progress and **should** address social and personal needs of students.

Each medical school **should** provide the following forms of support for its students:

* Academic Support
* Health Services
* Student’s Centre

***Annotation:***

* ***Social and personal******needs***would include academic support, career guidance, health problems and financial matters.

**4.4 Student Representation**

 **Basic Standard:**

 There **must** be student participation in the evaluation of the Curriculum.

**Quality development:**

Student activities and student organisations **should** be encouraged and facilitated.

***Annotation:***

* ***Student activities and organisations***would include student self government and representation on educational committees and other relevant bodies as well as social activities.

**5. ACADEMIC STAFF/FACULTY**

**5.1 RECRUITMENT POLICY**

 **Basic standard:**

The Medical and Dental School **must** have a staff recruitment policy which outlines the type, responsibilities and balance of academic staff required to deliver the curriculum adequately, including the balance between medical and non-medical academic staff, and between full-time and part-time staff, the responsibilities of which **must** be explicitly specified and monitored.

 **BASIC STAFF REQUIREMENTS FOR A MEDICAL TRAINING INSTITUTION**

**a. DEAN OF FACULTY OF MEDICINE**

The individual should be a registered clinical practitioner with the MDPCZ, with a high academic repute and registrable post-graduate training. In the event that the Dean does not fulfill these criteria, the institution must appoint to the Administration office such a suitably qualified person to assist the Dean.

**b. MANPOWER RESOURCES**

 These are determined by the different milestones in medical training.

**bi. Preclinical stage**

After “A” levels a medical student goes through a five year course, most of which is vocational training. The first 2 years are spent in the preclinical stage learning basic medical science of human physiology, anatomy and biochemistry. This is the foundation to understanding normal body functions and disease process. The preclinical stage can be taught in the old traditional didactic method. Because of the importance of laying down the correctfoundation the minimal preclinical staffing requirement is shown in the table below.

**Minimal Preclinical Staff Requirement for a Medical Training Institution**

The full time member in each department must hold a post graduate qualification in the area being taught.

Fulltime Part-time Assistants/demonstrator

Physiology 1 and 2 2

Anatomy 1 and 2 2

Biochemistry 1 and 2 2

Behavioural Sciences 1 and 2 2

Communication skills & Team Leadership 1 and 2

**CORE REQUIREMENTS**

**Embryology lecturer is necessary but not mandatory**

**Genetics lecturer necessary but not mandatory**

Part time lecturers in any department must spend at least four half days of teaching each week in order to be eligible. The number of teaching assistants and demonstrators is directly proportional to the student intake.

**Resources:**

The training institution has to have physiology and biochemistry laboratories and anatomy dissections theatre.

**bii. Middle Stage: (Second and third year)**

The full time member in each department must hold a post graduate qualification in the area being taught.

Introduction to clinical training starts with pathology. This is the basis of understanding the consequences of disease process on the human body. No student can proceed with training unless they pass all the areas of the pathology examination.

**Staffing Requirement for Pathology.**

 **Full time**

1. Pathologist 1 and 2 Assistants
2. Clinical Biochemist 1 and 1 part time
3. Microbiologist 1 and 1 part time
4. Haematologist 1 and 1 part time
5. Immunologist 1 and 1 part time
6. Health Social Science 1 and part time

**NOTE:** The number of hours required for each course taught by part-timers should be pre-

defined. These hours should be covered in the course. Outside or visiting lecturers can be invited to give a concentrated course in an area e.g. Haematology over a week or so to cover the required number of hours.

A full time pathologist is required to double up in performing postmortem demonstrations and teach histopathology.

The departments of microbiology, clinical biochemistry, immunology and haematology are vital and essential but may be staffed by part time lecturers if supported by a team of appropriately qualified medical technologist who act as demonstrators and teaching assistants.

**biii. Clinical Training (3rd year to 5th years)**

Clinical training in medicine is a continuam starting at the end of second year with barrier examination in Pathology end of the third year and the final examination in the firth year. It then continues through housemanship up to specialist level. This is a bedside teaching on both outpatients and inpatients. All the teaching is based around a training unit or sometimes referred to as a “firm”. This is lead by a consultant clinician with a team of Doctors at different levels of their professional development.

**Teaching Unit/firm**

 Consultant

 (Registrar)

Students JRMO SHO/SMO GMO

 GP

The teaching unit is composed of a clinical Consultant (Specialist) with a middle grade doctor (Registrar or Senior House Officer (SHO) with one or two Junior Resident Medical Officer (JRMO). To this team is attached a group of 5-8 students. The students understudy the JRMO while the JRMO understudy the next level (SHO or Registrar). The Registrar is training to become the future Consultant. The SHO may take an exist route to become a GMO or go into general practice. The Consultant is the teacher and responsible for patient care and training of all levels below him. Each grade assists in teaching the level below.

**Minimum Staff Requirement for the Clinical Stage**

**Discipline Consultant/Lecturer**

Medicine 1

Surgery 1

Paediatrics 1

Obstetrics & Gynaecology 1

The number of lecturers required per discipline is determined by a need to maintain a teacher student ratio of no more than 8 students per lecturer /consultant. As the student intake increases, the number of teaching firms or units per specialty have to increase using the above ratio.

E.g. if the student intake is 40 the minimum number of teaching units/firms led by a Consultant would be five units per specialty.

The head of a firm/unit need not be a full time University employee as long as the firm has a minimum of one outpatient clinic a week, one admission day per week, an admission, a post admission and a business round per week. Co-ordination however per specialty should be headed by a full time University clinician for the specialty.

**Sub-specialties**

Neuro-surgery, ENT, Ophthalmology, Dermatology, Orthopaedics, Urology etc are established along the same lines and normal teaching units described above as the institution expands in its training and service activities.

**biv. Internship**

The training of a junior doctor does not end with passing of the final professional examinations. The years of internship that immediately follow are considered an integral and important part of medical training the world over. There is a current shortage of suitable internship training posts around the country. The Medical and Dental School should seek the assistance of Ministry of Health & Child Welfare and MDPCZ in planning for their requirements.

 **Quality development:**

A policy **should** be developed for staff selection criteria, including scientific, educational and clinical merit, relationship to the mission of the institution, economic considerations and issues of local significance.

***Annotations:***

* ***Balance of academic staff/faculty***would include staff with joint responsibilities in the basic and clinical sciences, in the university and health care facilities, and teachers with dual appointments.
* ***Issues of local significance***may include gender, ethnicity, religion, language and others of relevance to the school.
* ***Merit***can be measured by formal qualifications, professional experience, research output, teaching experience, peer recognition, etc.

**5.2 STAFF POLICY AND DEVELOPMENT**

 **Basic standard:**

The Medical and Dental School **must** have a staff policy which addresses a balance of capacity for teaching, research and service functions, and ensures recognition of meritorious academic activities, with appropriate emphasis on both research attainment and teaching qualifications.

 **Quality development:**

The staff policy **should** include teacher training and development and teacher appraisal. Teacher-student ratios relevant to the various curricular components and teacher representationon relevant bodies **should** be taken into account.

 ***Annotations:***

• ***Service functions*** would include clinical duties in the health care system, administrative and leadership functions etc.

• ***Recognition of meritorious academic activities***would be by rewards, promotion and/or remuneration.

* ***For pre-clinical departments***, the teacher student ratio should be double the Clinical.
* Dual appointments in clinical and preclinical departments should be encouraged.
* Dual appointments in public and private practice should be encouraged.

**6. EDUCATIONAL RESOURCES**

**6.1 PHYSICAL FACILITIES**

 **Basic standard:**

The Medical and Dental School **must** have sufficient physical facilities for the staff and the student population to ensure that the curriculum can be delivered adequately.

 **Quality development:**

The learning environment for the students **should** be improved by regular updating and extension of the facilities to match developments in educational practices.

 ***Annotation:***

• ***Physical facilities***would include lecture halls, tutorial rooms, laboratories, libraries, information technology facilities, recreational facilities, etc.

**6.2 CLINICAL TRAINING RESOURCES**

 **Basic standard:**

The Medical and Dental School **must** ensure adequate clinical experience and the necessary resources, including sufficient patients and clinical training facilities.

 **Quality development:**

The facilities for clinical training **should be** developed to ensure clinical training which is adequate to the needs of the population in the geographically relevant area.

***Annotations:***

• ***Clinical training******facilities***would include hospitals (adequate mix of primary, secondary and tertiary), ambulatory services, clinics, primary health care settings, health care centresand other community health care settings as well as skills laboratories.

• ***Facilities for clinical training***should be evaluated regularly for their appropriateness and quality regarding medical training programmes.

**6.3 INFORMATION TECHNOLOGY**

 **Basic standard:**

The Medical and Dental School **must** have a policy which addresses the evaluation and effective use of information and communication technology in the educational programme.

 **Quality development:**

Teachers and students **should** be enabled to use information and communication technology for self learning, accessing information, managing patients and working in health care systems. Institutions **should** strive towards achieving video/teleconferencing facilities.

 ***Annotations:***

• A policy regarding the use of computers, internal and external networks and other means of ***information and communication technology***would include coordination with the library services of the institution.

• The use of ***information and communication technology***may be part of education for evidence-based medicine and in preparing the students for continuing medical education and professional development.

**6.4 RESEARCH**

 **Basic standard:**

The Medical and Dental School **must** have a policy that fosters the relationship between research and education and **must** describe the research facilities and areas of research priorities at the institution.

 **Quality development:**

The interaction between research and education activities **should** be reflected in the curriculum and influence current teaching and **should** encourage and prepare students to engagement in medical research and development while ensuring research time protection.

**6.5 EDUCATIONAL EXPERTISE**

 **Basic standard:**

The Medical and Dental School **must** have a policy on the use of educational expertise in planning medical education and in development of teaching methods. Use of train the Trainer facilities.

 **Quality development:**

There **should** be access to educational experts and evidence demonstrated of the use of such expertise for staff development and for research in the discipline of medical education.

 ***Annotations:***

 ***Educational expertise*** would deal with problems, processes and practice of medical education and would include medical doctors with research experience in medical education, educational psychologists and sociologists, etc. It can be provided by an education unit at the institution or be acquired from another national or international institution.

 ***Medical education research*** investigates the effectiveness of teaching and learning methods, and the wider institutional.

**6.6 EDUCATIONAL EXCHANGES**

 **Basic standard:**

The Medical and Dental School **must** have a policy for collaboration with other educational institutions and for the transfer of educational credits (within and outside the country).

 **Quality development:**

Regional and international exchange of academic staff and students **should** be facilitated by the provision of appropriate resources.

 ***Annotations:***

• Transfer of ***educational credits***can be facilitated through active programme coordination between medical schools.

• ***Other educational institutions***would include other medical schools or public health schools, other faculties, and institutions for education of other health and health-related professions

**7. PROGRAMME EVALUATION**

**7.1 MECHANISMS FOR PROGRAMME EVALUATION**

 **Basic standard:**

The Medical and Dental School **must** establish a mechanism for programme evaluation that monitors the curriculum and student progress, and ensures that concerns are identified and addressed.

 **Quality development:**

Programme evaluation **should** address the context of the educational process, the specific components of the curriculum and the general outcome.

***Annotations:***

• ***Mechanisms for programme evaluation***would imply the use of valid and reliable methods and require that basic data about the medical curriculum are available. Involvement of experts in medical education would further broaden the base of evidence for quality of medical education at the institution.

• ***Identified concerns***would include problems presented to the curriculum committee.

• ***The context of the educational process***would include the organization and resources as well as the learning environment and culture of the medical school.

• ***Specific components of programme evaluation***would include course description and student performance.

• ***General outcomes***would be measured e.g. by career choice and postgraduate performance.

**7.2 TEACHER AND STUDENT FEEDBACK**

 **Basic standard:**

Both teacher and student feedback **must** be systematically sought, analysed and responded to and the process **must** extend into Housemanship.

 **Quality development:**

Teachers and students **should** be actively involved in programme evaluation and in using its results for programme development.

**7.3 STUDENT PERFORMANCE**

 **Basic standard:**

Student performance **must** be analysed in relation to the curriculum and the mission and objectives of the Medical and Dental School.

 **Quality development:**

Student performance **should** be analysed in relation to student background, conditions and entrance qualifications, and **should** be used to provide feedback to the committees responsible for student selection, curriculum planning and student counselling.

***Annotation:***

• Measures of ***student performance***would include information about average study duration, scores, pass and failure rates at examinations, success and dropout rates, student reports about conditions in their courses, as well as time spent by the students on areas of special interest.

**7.4 INVOLVEMENT OF STAKEHOLDERS**

 **Basic standard:**

Programme evaluation **must** involve the governance and administration of the Medical and Dental school, the academic staff and the students plus external examiners and Medical and Dental Council.

 **Quality development:**

A wider range of stakeholders **should** have access to results of course and programme evaluation, and their views on the relevance and development of the curriculum should be considered**.**

 ***Annotation:***

• ***A wider range of stakeholders***would include educational and health care authorities, representatives of the community, professional organisations and those responsible for postgraduate education.

**8. GOVERNANCE AND ADMINISTRATION**

**8.1 GOVERNANCE:**

 **Basic standard:**

Governance structures and functions of the medical school must be defined, including their relationships within the university. ***(Departments which are discipline specific e.g. Anatomy, Biochemistry, Physiology, Pathology, Surgery, Medicine, Ophthalmology, Paediatrics etc should be setup. Some institutions may have preclinical, para-clinical and clinical units instead of departments)***

 **Organogram to show hierarchy in administrative structures.**

 **Quality Development:**

 The governance structures **should** set out the committee structure, and reflect representation from academic staff, students and other stakeholders.

***Annotations:***

• ***The committee structure***would include a curriculum committee with the authority to design and manage the medical curriculum.

• ***Relationships within the University***and its governance structures should be specified, if the medical school is part of or affiliated to a University.

• ***Other stakeholders*** would include ministries of higher education and health, other representatives of the health care sector and the public.

**8.2 ACADEMIC LEADERSHIP:**

 **Basic standard:**

 The responsibilities of the academic leadership of the Medical and Dental School for the medical educational programme **must** be clearly stated and recognised by relevant stakeholders**.**

 **Quality development:**

 The academic leadership **should** be evaluated at defined intervals with respect to achievement of the vision, mission and objectives of the Medical and Dental School.

**8.3 EDUCATIONAL BUDGET AND RESOURCE ALLOCATION:**

 **Basic standard:**

The Medical and Dental School **must** have a clear line of responsibility and authority for the curriculum and its resourcing, including a dedicated educational budget. Financing **should** come direct from Ministry of Finance through the two major stakeholders (MOHCW and MOHTE). The Medical and Dental School **should** have a business approach to running its finances.

 **Quality development:**

There **should** be sufficient autonomy to direct resources, including remuneration of teaching staff in an appropriate manner in order to achieve the overall objectives of the Medical and Dental School. Teaching staff **should** be dually appointed by the MOHTE and MOHCW because of the nature of their duties. ***(Clinical duties and training of clinicians are inseparable)***

***Annotation:***

• ***The educational budget***would depend on the budgetary practice in each institution and country.

**8.4 ADMINISTRATIVE STAFF AND MANAGEMENT:**

 **Basic standard:**

The administrative staff of the Medical and Dental School **must** be appropriate to support the implementation of the Medical and Dental School’s educational programme and other activities and to ensure good management and deployment of its resources.

 **Quality development:**

 Management should include a programme of quality assurance and submit itself to regular reviews. ***(Reviews must be both internal and external)***

**8.5 INTERACTION WITH HEALTH SECTOR:**

 **Basic standard:**

The Medical and Dental School **must** have a constructive interaction with the health and health-related sectors of the society and government.

 **Quality development:**

Collaboration with partners of the health sector should be formalised*.* ***(Health sector is inclusive of public and private health institutions and medical research institutions. Health related sectors include regulatory bodies, institutions with implications for health promotion e.g. environmental, nutritional and social responsibilities)***

 ***Annotations:***

• ***The health sector*** would include the health care delivery system, whether public or private, medical research institutions, etc.

• ***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).

**9. CONTINUOUS RENEWAL**

 **Basic standard:**

The Medical and Dental School **must** as a dynamic institution initiate procedures for regular reviewing and updating of its structure and functions and **must** rectify documented deficiencies.

 **Quality development:**

The process of renewal **should** be based on prospective studies and analyses and **should**  lead to the revisions of the policies and practices of the medical school in accordance with past experience, present activities and future perspectives. In so doing, it **should** address the following issues:

* *Adaptation of the vision, mission and objectives of the medical school to the scientific, socio-economic and cultural development of the society.*

*• Modification of the required competencies of the graduating students in accordance with documented needs of the environment graduates will enter. The modification shall include the clinical skills and public health training and involvement in patient care appropriate to responsibilities encountered upon graduation.*

*• Adaptation of the curricular model and instructional methods to ensure that these are appropriate and relevant.*

*• Adjustment of curricular elements and their relationships in keeping with developments in the biomedical sciences, the behavioural sciences, the social sciences, the clinical sciences, changes in the demographic profile and health/disease pattern of the population, and socioeconomic and cultural conditions. The adjustment shall assure that new relevant knowledge, concepts and methods are included and outdated ones discarded.*

*• Development of assessment principles, and the methods and the number of examinations according to changes in educational objectives and learning goals and methods****.***

*• Adaptation of student recruitment policy and selection methods to changing expectations and circumstances, human resource needs, changes in the premedical education system and the requirements of the educational programme****.***

*• Adaptation of recruitment and staffing policy regarding the academic staff according to changing needs of the medical school.*

*• Updating of educational resources according to changing needs of the medical school, i.e. the student intake, size and profile of academic staff, the educational programme and contemporary educational principles.*

*• Refinement of the process of programme monitoring and evaluation.*

*• Development of the organizational structure and management principles in order to cope with changing circumstances and needs of the medical school and, overtime, accommodating to the interests of the different groups of stakeholders.*