

IAAR Standards for Specialised Accreditation of Basic Medical and Pharmaceutical Education (Based on WFME/AMSE)

INDEPENDENT AGENCY FOR ACCREDITATION AND RATING



IAAR Standards for Specialised Accreditation of Basic Medical and Pharmaceutical Education (Based on WFME/AMSE)

(the Republic of Kazakhstan)

Foreword

- **1. DEVELOPED AND INTRODUCED** by the Non-Profit Institution "Independent Agency for Accreditation and Rating".
- **2. APPROVED AND PUT INTO EFFECT** by the order of the Director of the Non-Profit Institution "Independent Agency for Accreditation and Rating" as of May 25, 2018 No. 68-18/1-OD.
- **3.** These standards implement provisions of the Law of the Republic of Kazakhstan "On Education" as of July 27, 2007 No. 319-III.
- **4. ORIGINAL HOLDER** Independent Agency for Accreditation and Rating: 010000, Astana, st. B. Momyshuly, 2, VP-4G
 - 5. SECOND EDITION

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Standards are developed taking into consideration the recommendations of the Ministry of Health and Ministry of Education and Sciences of the Republic of Kazakhstan.

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STANDARDS FOR SPECIALISED ACCREDITATION

Basic Provisions

I Scope of Application

- 1.1 These standards are developed in accordance with the Law of the Republic of Kazakhstan "On Education", international accreditation standards for quality improvement in medical education (WFME / AMSE) and establish requirements for medical educational institutions and specialised accreditation of educational programme.
- 1.2 These standards determine the requirements for the specialised accreditation of education programme.
- 1.3 This standard is used during the specialised accreditation procedure of educational programme of medical educational institution regardless of its status, legal corporate form, departmental subordination and form of ownership.
- 1.4 These standards can also be used by a medical educational institution for internal evaluation of activities and development of appropriate internal regulatory documentation.

II Normative References

The following reference documents are required for the application of these standards:

- 2.1 The Law of the Republic of Kazakhstan "On Education" dated June 27, 2007 No. 319-III.
- 2.2 The Law of the Republic of Kazakhstan "On Technical Regulation" dated November 9, 2004 No. 603.
- 2.3 The Law of the Republic of Kazakhstan "On Introducing Amendments and Addenda to Some Legislative Acts of the Republic of Kazakhstan on the Expansion of Academic and Managerial Independence of Higher Educational Institutions" dated July 4, 2018 No. 171-VI.
- 2.4 The Law of the Republic of Kazakhstan "On Accreditation of the Conformity Assessment" dated July 5, 2008 No. 61-IV.
- 2.5 Message of the President of the Republic of Kazakhstan N.Nazarbayev to the people of Kazakhstan "Five Social Initiatives of the President" dated March 5, 2018.
- 2.6 Order of the Minister of Education and Science of the Republic of Kazakhstan "On Approval of the Rules for the Recognition of Accreditation Bodies,

Including Foreign Ones, and the Formation of a Register of Recognised Accreditation Bodies, Accredited Educational Organisations and Educational Programmes" dated November 1, 2016 No. 629.

- 2.7 Order of the Minister of Education and Science of the Republic of Kazakhstan "On Approval of State Compulsory Educational Standards for All Levels of Education" dated October 31, 2018 № 604.
- 2.8 Order of the Minister of Education and Science of the Republic of Kazakhstan "On Approval of the Standard Rules for the Activities of Educational Organisations of the Respective Types" dated October 30, 2018 No. 595.
- 2.9 Order of the Minister of Education and Science of the Republic of Kazakhstan " "On Approval of Rules for Organisation of the Educational Process Using Credit Education Technology" dated April 20, 2011 No. 152.
- 2.10 WFME Global Standards for Quality Improvement: Basic Medical Education (WFME, University of Copenhagen, 2017).
- 2.11 Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree (Accreditation Council for Pharmacy Education, Chicago, Illinois, Adopted: January 23, 2011, Effective: February 14, 2011).

III Terms and Definitions

This standard applies the terms and definitions in accordance with the regulatory documentation as specified in paragraph No. 2.

In addition these standards establish the following definitions:

Academic Mobility: transfer of students or lecturers-researchers for training or research for a certain academic period (semester or academic year) to another organisation of higher education and (or) postgraduate education (domestically or abroad) with mandatory re-crediting of completed curricula, disciplines in the form of academic credits in their organisation of higher education and (or) postgraduate education or to continue studies in another organisation of higher and (or) postgraduate education.

Accreditation Of Educational Programs: the procedure of recognition by the accreditation body of compliance of educational programmes (specialty) with the established standards (regulations) of accreditation in order to provide objective information on their quality and confirm the existence of effective mechanisms for its increase.

Analysis: a research method characterised by the identification and/or study of individual parts of the object of accreditation, the process of determining, collecting data to assess the quality of educational services.

Site Visit of the External Expert Panel: a generally accepted component of the holistic accreditation process, which provides for verification of reality

compliance with a previously submitted self-assessment report of the higher education institution, assessing the quality and effectiveness of educational services provided, interviewing and questioning stakeholders, as well as developing recommendations for improving the quality.

Distance Education Technologies: an education, carrying out with application of information and telecommunication means upon mediate (in the distance) or incompletely mediate interaction of student and teaching staff.

European Credit Transferand Accumulation System (ECTS): a student-centered method of planning, describing educational programmes, recording and recognising learning outcomes, as well as monitoring the dynamics of a student's progress along an individual educational trajectory, by determining the laboriousness (labor intensity) of disciplines for all its components.

Quality of Educational Programme: compliance of the level of competencies of students and graduates with the requirements of professional standards and additional requirements established by the organisation implementing educational programmes.

Credit Technology of Training: learning based on choice and selfplanning for the students of the sequence of studying disciplines with the accumulation of academic credits

Educational Programme: the uniform complex of the main characteristics of education including the purposes, results and content of training, the organisation of educational process, ways and methods of their realisation, criteria for evaluation of results of training.

Educational Monitoring: systematic observation, analysis, assessment and prediction of the state and dynamics of changes of the results and conditions of implementation of educational processes, student body, network, as well as rating indicators of achievement of activity of organisations of education.

Organisation of Higher and (or) Postgraduate Education: higher education institution implementing educational programmes of higher and (or) postgraduate education and carrying out research activities.

Assessment: a method for determining the degree of achievement of the planned results of educational services, educational goals of the programme for decision-making and determining further directions for improving quality. Interpretation of data and evidence collected during the analysis.

Self-assessment report: a document developed by the higher education institution based on the results of self-assessment and submitted for consideration and decision by the accrediting body.

Quality Assurance Policy: the main directions that characterise the key priorities and value orientations of quality assurance development, determined on the basis of collective discussion and approved by the leadership of the higher educational institution.

Reaccreditation: re-accreditation of the educational programme by a previously accredited accreditation body upon the expiration of the certificate of specialised accreditation.

Learning Outcomes: the volume of knowledge, skills and abilities confirmed by the assessment, acquired and demonstrated by students on mastering the educational programme, and the formed values and attitudes.

Effectiveness: the degree of implementation of the planned activities and achievement of the planned learning outcomes.

Self-Assessment: a procedure for self-assessment of a higher educational institution based on standards and criteria for institutional and (or) specialised accreditation.

Quality System: a set of procedures, units and officials in an organisation that perform certain quality management functions in accordance with the established rules and accepted practices and ensure compliance of all graduates of the educational programme with the requirements established in accordance with professional standards.

Stakeholder: an individual, a group of people or an organisation interested in and / or involved in activities, decision-making in a certain area.

Higher Education Strategy: a long-term qualitatively defined direction of the development of higher education, concerning the structure, content, means and form of its activity, the system of internal and external interaction.

Student-Centered Learning: The fundamental principle of the Bologna reforms in higher education, implying a shift of the emphasis in the educational process from teaching (as the main role of the teaching staff in the "translation" of knowledge) to learning (as an active educational activity of the student).

Academic Programme: a programme that defines for each subject, each discipline and (or) module the content and scope of knowledge, skills, abilities and competencies to be mastered.

Curriculum: a document regulating the list, sequence, volume (labour intensity) of academic subjects, disciplines and/or modules, professional practice, other types of educational activities of students of an appropriate level of education and forms of control.

Expert Assessment: a procedure for obtaining an assessment based on the analysis of the problem under consideration, the opinions of specialists with the aim of subsequent decision-making.

Efficiency: the relationship between the result achieved and the resources used.

IV. Abbreviations and Acronyms

These standards use abbreviations in accordance with the regulatory documents specified in section 2, in addition to them, the following acronyms and abbreviations are used:

RK - the Republic of Kazakhstan;

MoH - Ministry of Health of the Republic of Kazakhstan;

MES - Ministry of Education and Science of the Republic of Kazakhstan;

HEI - Higher Educational Institution;

EEP – External Expert Panel;

SCES - State Compulsory Educational Standards;

SPDE – State Program for the Development of Education;

CPD - Continuous Professional Development;

CME - Continuous Medical Education;

OSCE – Objective Structured Clinical Examinations;

TS - Teaching Staff;

NQF - National Qualifications Framework;

NSQ - National System of Qualifications;

EP - Educational Programme;

MM - Mass-media:

SWOT-analysis - analysis of strengths and weaknesses, challenges and opportunities of organisation, the abbreviation of the English words: S - strengths, W - weaknesses, O - opportunities, T - threats.

V. General Provisions

Specialised accreditation is carried out on the basis of the standard. The General Provisions; Standard "Mission and Outcomes"; Standard "Educational Programme"; Standard "Programme Evaluation"; Standard "Students"; Standard "Assessment of Students"; Standard "Academic Staff/Faculty"; Standard "Educational Resources"; Standard "Governance and Administration"; Standard "Continuous Renewal".

Standards for specialised accreditation of medical education institutions are developed on the basis of the World Federation for Medical Education Global Standards for Quality Improvement of Basic Medical Education with the introduction of national features of the health care system and medical education and developed in accordance with the recommendations of international consultants of the Canadian Society of International Health (CSIH) within the Component C "Reform of Medical Education and Medical Science" of the "The Kazakhstan Health Sector Technology Transfer and Institutional Reform" Project and with amendments of the World Federation for Medical

Education Global Standards for Quality Improvement of Basic Medical Education (Copenhagen, 2012), North American model of accreditation of professional programmes in pharmacy with the introduction of national characteristics of the health care system of the Republic of Kazakhstan, the Standards of the Commission on Collegiate Nursing Education for the Nursing Programmes (CCNE, USA, 2009).

VI. The Main Objectives of the Implementation of Specialised Accreditation Standards

Quality assessment in education programmes is a basis of accreditation standards and incorporates the objectives:

- 6.1 The main objectives of the implementation of specialised accreditation standards are:
- 6.1.1 introduction of an accreditation model harmonised with international practice of quality assurance in education;
- 6.1.2 assessment of the quality of professional and educational programmes to improve the competitiveness of the national higher education system;
- 6.1.3 encouraging the development of a quality culture in higher education institutions:
- 6.1.4 assistance to improvement and continuous upgrading of educational programmes of medical educational organisations in compliance with the requirements of rapidly changing environment;
- 6.1.5 consideration and protection of public interests and consumer rights by provision of authentic information on the quality of education programmes;
 - 6.1.6 the use of innovation and research:
- 6.1.7 public announcement and dissemination of information on the results of accreditation of the educational programme of medical educational institutions.
- 6.1.8 In addition to above mentioned the accreditation standards for medical educational programmes are designed for accomplishment of the following goals:
 - ✓ Protection of public welfare and public health;
- ✓ Promoting an educational environment that promotes innovation and continuous improvement;
- \checkmark Providing institutional support and guidance for the development of educational programmes;
- \checkmark Providing students with confidence that the educational programme will achieve its goals.

VII. Principles for the Formation of Specialised Accreditation Standards

- 7.1 Presented standards for quality assurance of educational programmes of higher professional education are based on the following principles:
- 7.1.1 voluntariness accreditation procedure of educational programme is carried out on a voluntary basis;
- 7.1.2 honesty and transparency internal and external assessment is conducted with the utmost honesty and transparency, ensuring that information is available to all participants in the accreditation process;
- 7.1.3 objectivity and independence internal and external assessment is carried out objectively, independently of third parties (government agencies, HEI administration and public opinion) and the results obtained;
- 7.1.4 responsibility of medical educational organisations primary responsibility for the quality of higher education rests with medical educational organisations;
- 7.1.5 confidentiality information submitted by HEIs is used by the accreditation body confidentially;
- 7.2 External assessment is performed independently from the third parties (government agencies, medical educational organisations and public organisations).
- 7.3 Public information countrywide and abroad on accredited educational programmes is carried out in mass media, including the presentation of information on the web-site of accreditation body.

VIII. The Procedure for Conducting Specialised Accreditation of an Educational Programme

- 8.1 Submission by HEI of the application for the specialised accreditation with copies of the title and permit (authorisation) documentation.
 - 8.2 Consideration of the application of the HEI by the IAAR.
- 8.3 IAAR decision to start the procedure for the specialised accreditation of an educational programme. Conclusion of the contract between the IAAR and the HEI on specialised accreditation.
- 8.4 At the request of the educational organisation, the IAAR organises a training seminar for the working group of the educational organisation on the preparation of a self-assessment report in accordance with the criteria of standards and guidelines for specialised accreditation. This training seminar is a voluntary procedure.
- 8.5 Educational organisation conducts self-assessment according to the requirements established by IAAR. The final report signed by the first head (in

Kazakh, Russian and English) of the educational organisation is sent to the IAAR in electronic form and in the amount of 1 (one) copy on paper.

- 8.6 IAAR carries out an analysis of the self-assessment report of the educational programme. Based on the results of the analysis of the self-assessment report, the IAAR makes one of the following decisions:
- «to develop recommendations on the need to improve self-assessment report»;
 - «to conduct an external peer review»;
- «postpone the accreditation period due to the impossibility of carrying out the specialised accreditation procedure due to the non-compliance of the self-assessment report with the criteria of these standards».
- 8.7 In case of continuation of accreditation, the IAAR forms an EEP, which is approved by the IAAR General Director to assess the EP of the HEI. The quantitative composition of the panel is formed depending on the volume of the external review. It includes representatives of the academic community, stakeholders of Kazakhstan, including employers, students, foreign expert (s).
- 8.8 In case the decision on continuation of accrediting procedure is taken, the IAAR will agree with the organisation of education the dates of accreditation and schedule of the EEP work plan.
- 8.9 The duration of the site visit of the panel is usually 3-5 days. During the site visit, the educational organisation creates conditions for the work of the EEP in accordance with the Contract for the Provision of Services:
- provides an office for the work of the EEP with a workplace for each member of the EEP;
- provides for each member of the Panel an electronic and paper version of the self-assessment report;
- provides the necessary modern electronic office equipment in agreement with the representative of the IAAR and the number of EEP members;
- organises a visual inspection of infrastructure and resources, meetings, questionnaires, interviews and other forms of EEP's work in accordance with the EEP's program of the visit;
 - provides the requested information;
 - organises photography of EEP work.
- 8.10 At the end of the visit EEP prepares a report on external assessment of HEI's educational programme.
- 8.11. The report contains a description of the EEP's visit, an assessment of the EP's compliance with the IAAR standards, recommendations to the HEI to improve the quality of the educational programme, recommendations to the Accreditation Council. The proposals to the Accreditation Council contain a recommendation for making a decision (accredit / not accredit) and the recommended accreditation period for each educational programme.

- 8.12 The EEP's report, including recommendations is prepared by members of the EEP collectively. If one of the members of the EEP makes a different decision that does not coincide with the majority of the EEP members, this is recorded in the text of the report.
- 8.13 The EEP's report on the assessment of EP and the HEI's self-assessment report of EP serve as the basis for the Accreditation Council's decision on specialised accreditation.
- 8.14 The Chairman of the EEP presents to the Accreditation Council outcomes of the EEP's visit. If there are objective reasons IAAR General Director appoints a member of the EEP to attend a meeting of Accreditation Council and present a report. Replacement of the Chairman of EEP is made by the order of IAAR General Director.
- 8.15 The exclusive competence of the IAAR Accreditation Council includes decision-making on accreditation or refusal of accreditation of education programme of the medical education organisation. The composition of the Accreditation Council is determined in accordance with the Regulation on the Accreditation Council. The meeting is held if a quorum is present. Accreditation Council shall have the right to make a grounded decision not corresponding with the EEP recommendations.

The Accreditation Council makes one of the following decisions:

- «to accredit»:

- 1 year if the criteria are met in general, but there are some shortcomings and opportunities for improvement (in assessing criteria that require improvement in the range of more than 20%, the absence of strong criteria);
- 3 years with positive results in general, but with some minor shortcomings and opportunities for improvement (in assessing criteria that require improvement in the range from 10 to 20%, the presence of strong criteria); 5 years with positive results in general (in assessing criteria that require improvement in the range of no more than 10%, the presence of strong criteria); 7 years if standards criteria are met in general and best practice examples are available (in assessing the strong criteria at least 10%, and criteria requiring improvement no more than 5%).
- denial of accreditation (in assessing at least one criterion as "unsatisfactory", the absence of strong points).
- 8.16 In the event of positive decision on accreditation the Accreditation Council of IAAR sends an official letter to the education organisation with the results of the accreditation and a certificate of specialised accreditation of an EP, signed by the Chairman of the Accreditation Council and IAAR General Director. Further, the decision on accreditation of the EP is sent to the Ministry of Education and Science of the Republic of Kazakhstan for inclusion in the Register of Accredited Education Programmes (Register 3) and posted on the IAAR website. The EEP report is also published on the website.

After receiving a certificate of accreditation, the educational organisation publishes on its website a self-assessment report of the EP. By agreement with

the IAAR, the educational organisation has the right not to post confidential information specified in the self-assessment report.

- 8.17 In the event of the Accreditation Council's negative decision on accreditation the IAAR sends a letter to the organisation of education indicating the adopted decision.
- 8.18. The organisation of education in accordance with the Contract for the Provision of Services and the Regulations on the Commission on Appeals and Complaints Consideration may send to IAAR an appeal against the decision of the Accreditation Council. In case of doubts in the competence of the EEP and representatives of the IAAR, or gross violations committed by members of the EEP, the organisation of education may file a complaint to IAAR.
- 8.19 If the educational organisation decides to undergo specialised reaccreditation (re-accreditation in the IAAR), then the application for reaccreditation the educational organisation must submit at least 6 (six) months before the end of the EP accreditation period, provided that the post-accreditation monitoring procedure was successfully completed by the educational organisation in accordance with the Regulation on Post-Accreditation Monitoring of the Educational Institutions and (or) Educational Programmes.
- 8.20 An educational organisation has the right to submit an application no earlier than 1 (one) year after it is denied specialised accreditation or its specialised accreditation is revoked.

IX. Follow-Up Procedures

- 9.1 In the event of positive accreditation decision of the IAAR Accreditation Council, the educational organisation submits to IAAR an Action Plan on the quality improvement under the external expert panel's recommendations (hereinafter the Plan), which is signed and sealed by the chief executive officer, and also an organisation concludes the Contract for the Provision of Services with the IAAR. The Contract and the Plan are the basis for the post accreditation monitoring.
- 9.2 In accordance with the Regulation on Post-Accreditation Monitoring of the Educational Institutions and (or) Educational Programmes, accredited education institutions should prepare interim reports according to the Plan. Interim reports are sent to the IAAR before the expected date of post accreditation monitoring.
- 9.3. Post-accreditation monitoring of the educational program is carried out in accordance with the Regulation on Post-Accreditation Monitoring of the Educational Institutions and (or) Educational Programmes.

- 9.4. In the event of failure to implement the Plan and the requirements put forward by the IAAR in relation to the post-accreditation monitoring, as well as lack of awareness of the changes carried out in the educational organisation the Accreditation Council shall have the right to adopt one of the following decisions:
- «to temporarily suspend the effectiveness of the EP's accreditation status»;
- «to revoke accreditation of EP by excluding it from the National Register 3, which may result in the cancellation of all previously achieved results of accreditation».
- 9.5 If the educational organisation refuses to conclude a Contract with the IAAR on post-accreditation monitoring, the IAAR Accreditation Council has the right to make a decision to revoke the certificate of accreditation.

X Procedure for Introduction of Amendments and Additions to Accreditation Standards

- 10.1 Amendments and additions are introduced to the current accreditation standard for the purpose of further improvement thereof.
- 10.2 Introduction of amendments and additions to the standard is performed by the IAAR.
- 10.3 In case of initiating of amendments and additions to current standard by educational organisations and other interested organisations the suggestions and remarks are to be sent by them to the IAAR.
- 10.4 The IAAR carries out examination of suggestions and remarks obtained from initiators for their validity and appropriateness in the prescribed manner.
- 10.5 Changes and additions are made to the current accreditation standards after their approval.

XI. ACCREDITATION STANDARDS

1 STANDARDS «MISSION AND OUTCOMES»

1.1 Mission Statement

- 1.1.1. Medical education institution **must** state its *mission* and make it known to its stakeholders and the health sector it serves.
- 1.1.2. The mission statement **must** contain the aims and educational strategy to prepare a competent medical doctor / pharmacist at the level of undergraduate medical education:

- 1.1.3 with an appropriate foundation for future career in any branch of medicine / pharmacy, including all types of medical practice / pharmaceutical services, pharmaceutical production, administration and research in medicine;
- 1.1.4 capable of undertaking the roles and functions of a medical doctor / pharmacist as defined by the health and pharmaceutical sector;
- 1.1.5 prepared for postgraduate medical education, including internship, residency, specialisation;
- 1.1.6 committed to life-long learning, including professional responsibility to support the level of knowledge and skills through performance evaluation, audit, study of their own practice and recognised activities in CPD/CME.
- 1.1.7 The medical education institution **should** ensure that the mission encompasses the *health problems of society*, aspects of global health, the needs of the health care system and other aspects of *social accountability* reflecting the main international health problems.
- 1.1.8 The medical education institution **should** ensure that the strategic development plan is consistent with the stated mission, goals of the medical education institution and approved by the advisory council of the medical education institution / HEI.
- 1.1.9 The medical education institution **must** systematically gather and analyse the information about its own activity, assess the strengths and weaknesses of the HEI (SWOT-analysis) on the basis of which the administration together with the advisory council of the HEI should determine the policy and develop strategic and tactical plans.
- 1.1.10 The mission and objectives of medical education institution **must** comply with available resources, the capabilities of the medical education organisation, market requirements and ways of their support must be determined and access to information about the mission, objectives of the medical education organisation for the public must be provided (the availability of the information in mass media, on the web-site of HEI), the mission and objectives of medical education institution are approved by the advisory council of the medical education organisation / HEI.
- 1.1.11 The medical education institution **should** ensure that the mission encompasses medical research attainment in the field of biomedical, clinical, behavioral and social sciences.

1.2 Participation in Formulation of Mission

- 1.2.1 The medical education institution **must** ensure that its principal stakeholders participate in formulating the mission of the educational programme.
- 1.2.2 The medical education institution **should** ensure that the stated mission is based also on opinions / suggestions from other stakeholders.

1.2.3 The medical education institution **must** establish regular mechanisms for monitoring, evaluation and documentation of progress in achieving the goals and objectives of the strategic plan, in general, and in particular with regard to pharmaceutical education.

1.3 Institutional Autonomy and Academic Freedom

The medical education institution **must** have institutional autonomy to develop and implement policies for which its faculty/academic staff and administration are responsible, especially regarding:

- 1.3.1 design of the curriculum;
- 1.3.2 use of the allocated resources necessary for implementation of the curriculum.

The medical education institution **should** ensure academic freedom for its staff and students:

- 1.3.3 in addressing the actual curriculum where it would be allowed to draw upon different perspectives in description and analysis of medical issues;
- 1.3.4 in exploring the use of new research results to improve the study of specific disciplines / issues without expanding the curriculum.

1.4 Educational Outcomes

The medical education institution **must** define the intended educational outcomes that students should exhibit upon graduation in relation to:

- 1.4.1 their achievements at a basic level regarding knowledge, skills, and attitudes;
- 1.4.2 appropriate foundation for future career in any branch of medicine and pharmacy;
 - 1.4.3 their future roles in the health care and pharmaceutical;
 - 1.4.4 their subsequent postgraduate training;
 - 1.4.5 their commitment to life-long learning;
- 1.4.6 the health needs of the community, the needs of the health care delivery system and other aspects of social accountability.
- 1.4.7 The medical education institution **must** ensure appropriate student conduct with respect to fellow students, faculty members, other health care personnel, patients and their relatives according to the Code of Conduct.

The medical education institution **should**:

- 1.4.8 specify and co-ordinate the linkage of acquired outcomes by graduation with acquired outcomes in postgraduate training.
- 1.4.9 specify intended outcomes of student engagement in medical research;
 - 1.4.10 draw attention to global health related intended outcomes.

2. STANDARDS «EDUCATIONAL PROGRAMME»

2.1 Curriculum Model and Learning Methods

- 2.1.1 The medical education institution **must** define the curriculum model including integrated model based on disciplines, organ systems, clinical problems and disease patterns as well as models based on modular or spiral design.
- 2.1.2 The medical education institution **must** define the teaching and learning methods employed that stimulate, prepare and support students to take responsibility for their learning process.
- 2.1.3 The medical education institution **must** ensure that the curriculum prepares the students for life-long learning.
- 2.1.4 The medical education institution **must** ensure that the curriculum is delivered in accordance with principles of equality.
- 2.1.5 The medical education institution **must** ensure that the curriculum allow optional (elective) content and define the balance between the core and optional content as part of the educational programme, including a combination of mandatory elements and electives or special components for choice.

2.2 Scientific Method

The medical education institution **must** throughout the curriculum teach students:

- 2.2.1 the principles of scientific method, including analytical and critical thinking;
 - 2.2.2 medical research methods;
- 2.2.3 evidence-based medicine that requires scientific competencies of teachers and would be a compulsory part of the curriculum and would include that medical students conduct or participate in minor research projects.
- 2.2.4 The medical education institution **should** in the curriculum include elements of original or advanced research including obligatory or elective analytic and experimental studies, thereby fostering the ability to participate in the scientific development of medicine as professionals and colleagues.

2.3 Basic Biomedical Sciences

The medical education institution **must** in the curriculum identify and incorporate:

- 2.3.1 the contributions of the basic biomedical sciences to create students' understanding of scientific knowledge;
- 2.3.2 concepts and methods fundamental to acquiring and applying clinical science.
- 2.3.3 The medical education institution **should** in the curriculum adjust and modify the contributions of the biomedical sciences, which are necessary for the formation and development of professional competence in the field of medicine

and pharmaceutical practice of a graduate for:

- 2.3.4 scientific, technological and clinical developments;
- 2.3.5 current and anticipated needs of the society and the health care system.

2.4 Behavioural and Social Sciences, Medical Ethics

The medical education institution **must** in the curriculum identify and incorporate the contributions of the:

- 2.4.1 behavioural sciences;
- 2.4.2 social sciences;
- 2.4.3 medical ethics;
- 2.4.4 medical jurisprudence,

that 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.

The medical education institution **should** in the curriculum adjust and modify the contributions of the behavioural and social sciences as well as medical ethics to:

- 2.4.5 scientific, technological and clinical developments;
- 2.4.6 current and anticipated needs of the society and the health care system;
 - 2.4.7 changing demographic and cultural contexts.

2.5 Clinical Sciences and Skills

The medical education institution **must** in the curriculum identify and incorporate the contributions of the clinical sciences to ensure that students:

- 2.5.1 acquire sufficient knowledge and clinical and professional skills to assume appropriate responsibility of activities related to health promotion, disease prevention and patient care after graduation;
- 2.5.2 spend a reasonable part (one third) of the programme in planned contact with patients implying consideration of purpose and frequency sufficient to put their learning into context in relevant clinical / production settings;
 - 2.5.3 experience health promotion and preventive medicine.
- 2.5.4 The medical education institution **must** specify the amount of time spent in training in major clinical/pharmaceutical disciplines.
- 2.5.5 The medical education institution **must** organise clinical training with appropriate attention to patient safety including the supervision of clinical activities conducted by students.

The medical education institution should in the curriculum adjust and

modify the contributions of the clinical sciences to the:

- 2.5.6 scientific, technological and clinical developments;
- 2.5.7 current and anticipated needs of the society and the health care system.
- 2.5.8 The medical education institution **should** ensure that every student has early patient contact gradually including responsibility under supervision for parts of investigations and/or treatment to patients, which could take place in relevant clinical / production settings.
- 2.5.9 The medical education institution **should** structure the different components of clinical skills training according to the stage of the study programme.

2.6 Pharmaceutical Disciplines

The medical education institution **must** in the curriculum define and introduce the achievements of the pharmaceutical disciplines and ensure that students:

2.6.1 acquire sufficient knowledge and skills, including:

- o basic principles of pharmaceutical care to the population;
- o fundamentals of pharmacy economics;
- o processes of marketing management in pharmacy, conducting and analysing market research, pharmaceutical management basics;
- o basic principles of organisation of the production process and manufacture of drugs of extemporaneous and industrial production, herbal remedies, medical and cosmetic, parapharmaceutical and veterinary drugs, dietary supplements and natural products;
- o the basic principles and provisions governing the quality of medicines;
- o the general principles of pharmaceutical analysis, the basic methods and techniques of quality research of medicines;
- o nomenclature of medicinal plant raw materials, issues of procurement of medicinal plants based on botanical characteristics;
- o basic principles of macro- and microscopic, merchandising analysis and standardisation of medicinal plants.
- 2.6.2 The medical education institution **should** ensure that students spend at least one third of the programme in laboratories, industries, to develop professional skills.
- 2.6.3 The medical education institution **must** arrange practical training with appropriate attention to patient safety and consumer of medicines, including supervision of the actions carried out by students in a clinical sites, laboratories and production facilities.
- 2.6.4 The medical education institution should in the curriculum correct and introduce the new achievements of pharmaceutical sciences for scientific,

technological and clinical developments, as well as current and expected needs of the community and the health system.

2.6.5 The medical education institution **should** structure the different components of learning to practical skills in accordance with a specific stage of the educational programme.

2.7 Curriculum Structure, Composition and Duration

2.7.1 The medical education institution **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.

The medical education institution **should** in the curriculum:

- 2.7.2 ensure horizontal integration of associated sciences, disciplines and subjects;
- 2.7.3 ensure vertical integration of the clinical sciences with the basic biomedical and the behavioural and social sciences;
- 2.7.4 describe the interface with complementary medicine, including unorthodox, traditional or alternative practices.

2.8 Programme Management

- 2.8.1 The medical education institution **must** define the structural unit responsible for curriculum which under the governance of the academic leadership has the responsibility and authority for planning and implementing the curriculum including the allocation of the granted resources for planning and implementing methods of teaching and learning, assessment of students and course evaluation to secure its intended educational outcomes
- 2.8.2 The medical education institution **must** in its curriculum committee ensure representation of staff and students.
- 2.8.3 The medical education institution **should** through its curriculum committee plan and implement innovations in the curriculum.
- 2.8.4 The medical education institution **should** in its curriculum committee include representatives of other stakeholders, including other participants in the educational process, representation of teaching hospitals and other clinical facilities, representatives of graduates of the medical HEIs, other health professions, who are involved in the educational process, or other faculties in the HEI.

2.9 Linkage with Medical Practice and the Health Care Sector

2.9.1 The medical education institution **must** ensure operational linkage between the educational programme and the subsequent stages of education (internship, specialisation, CPD/CME) or practice after graduation including the identification of health problems and 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.

The medical education institution **should** ensure that the structural unit responsible for curriculum:

- 2.9.2 seeks input from the environment in which graduates will be expected to work, and modify the programme accordingly;
 - 2.9.3 uses the feedback results to improve the educational programme.

3. STANDARDS «PROGRAMME EVALUATION»

3.1 Mechanisms for Programme Monitoring and Evaluation

The medical education institution must

3.1.1 have a programme of routine curriculum monitoring of processes and outcomes, including the routine collection of data on key aspects of the educational program in order to ensure that the educational process is carried out appropriately, and to identify any areas requiring intervention, and the data collection is a part of the administrative procedures in connection with the admission of students, evaluation of students and completion of training.

The medical education institution **must** establish and apply a mechanism for programme evaluation that:

- 3.1.2 addresses the curriculum and its main components, including a model of the educational programme, structure, content and duration of the educational programme and the use of compulsory and elective units (see Standard "Educational Programme");
 - 3.1.3 addresses student progress;
- 3.1.4 identifies and addresses concerns that include insufficient fulfilment of intended educational outcomes. It would use measures of and information about educational outcomes, including identified weaknesses and problems, as feedback for interventions and plans for corrective action, programme development and curricular improvements.

The medical education institution **should** periodically evaluate the programme by comprehensively addressing:

- 3.1.5 the context of the educational process that includes the organisation and resources as well as the learning environment and culture of the medical education institution;
- 3.1.6 the specific components of the curriculum that include course description, teaching and learning methods, clinical rotations and assessment methods:
 - 3.1.7 a general acquired outcomes to be measured by the results of national

examinations for licensing, benchmarking procedure, international exams, career choice and results of postgraduate training;

3.1.8 its social accountability.

3.2 Teacher and Student Feedback

- 3.2.1 The medical education institution **must** systematically seek, analyse and respond to teacher and student feedback that includes the information about the processes and products of the educational programmes and also the information about malpractice or inappropriate conduct by teachers or students with or without legal consequences.
- 3.2.2 The medical education institution **should** use feedback results for programme development..

3.3 Performance of Students and Graduates

The medical education institution **must** analyse performance of cohorts of students and graduates in relation to:

- 3.3.1 mission and intended educational outcomes, which 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, interviews of students frequently repeating courses, and exit interviews with students who leave the programme.
 - 3.3.2 curriculum;
 - 3.3.3. provision of resources.

The medical education institution **should** analyse performance of cohorts of students in relation to:

- 3.3.4 background and conditions including social, economic and cultural circumstances;
 - 3.3.5 entrance qualifications.

The medical education institution **should** use the analysis of student performance to provide feedback to the committees responsible for:

- 3.3.6 student selection;
- 3.3.7 curriculum planning;
- 3.3.8 student counseling.

3.4 Involvement of Stakeholders

The medical education institution **must** in its programme monitoring and evaluation activities involve:

- 3.4.1 its academic staff and students;
- 3.4.2 its administration and governance.

The medical education institution **should** for other relevant stakeholders including other representatives of academic and administrative staff,

representatives of the community and public, education and health care authorities, professional organisations and postgraduate educators:

- 3.4.3 allow access to results of course and programme evaluation;
- 3.4.4 seek their feedback on the performance of graduates;
- 3.4.5 seek their feedback on the curriculum.

4. STANDARDS «STUDENTS»

4.1 Admission Policy and Selection

The medical education institution must:

- 4.1.1 formulate and implement an admission policy based on principles of objectivity, including a clear statement on the process of selection of students that 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 and need for variations related to diversity of medical practice;
- 4.1.2 have a policy and implement a practice for admission of disabled students in accordance with current national law and regulations;
- 4.1.3 have a policy and implement a practice for transfer of students from other programmes and institutions.

The medical education institution **should**:

- 4.1.4 state the relationship between selection and the mission of the school, the educational programme and desired qualities of graduates;
- 4.1.5 periodically review the admission policy, based on relevant societal and professional data, to comply with the health needs of the community and society including consideration of intake according to gender, ethnicity and language, including the potential need of a special recruitment, admission and induction policy for underprivileged students and minorities;
 - 4.1.6 use a system for appeal of admission decisions.

4.2 Student Intake

- 4.2.1 The medical education institution **must** define the size of student intake and relate it to its capacity at all stages of the programme. Decisions on student intake imply necessary adjustment to national requirements for medical workforce. If the medical education institution does not control student intake, it should demonstrate responsibility by explaining relationships and drawing attention to consequences, e.g. imbalance between intake and teaching capacity of the HEI.
- 4.2.2 The medical education institution should periodically review the size and nature of student intake in consultation with other relevant stakeholders, who are 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 universities and migration of doctors), and regulate it to meet the health needs of the community and society.

4.3 Student Counselling and Support

The medical education institution must:

- 4.3.1 have a system for academic counselling of its student population that includes questions related to choice of electives, residence preparation and career guidance, appointing academic mentors for individual students or small groups of students;
 - 4.3.2 allocate resources for student support;
 - 4.3.3 ensure confidentiality in relation to counselling and support.

The medical education institution **should** provide academic counseling that:

- 4.3.4 is based on monitoring of student progress and address social, financial and personal needs that include support in relation to social and personal problems and events, health problems and financial matters;
 - 4.3.5 includes career guidance and planning.

4.4 Student Representation

- 4.4.1 offer a programme of student support, addressing social, financial and personal needs including support in relation to social and personal problems and events, health problems and financial matters, and would include access to health clinics, immunization programmes and health/disability insurance as well as financial aid services in forms of bursaries, scholarships and loans.
- 4.4.2 The medical education institution **should** encourage and facilitate student activities and student organisations including technical and financial support to student organisations.

5. STANDARDS «ASSESSMENT OF STUDENTS»

5.1 Assessment Methods

The medical education institution **must**:

- 5.1.1 define, state and publish the principles, methods and practices used for assessment of its students, including number of examinations and other tests, balance between written and oral examinations, use of normative and criterion referenced judgments, and use of special types of examinations, e.g. objective structured clinical examinations (OSCE) or mini clinical evaluation exercise (MiniCEX), and define the criteria for setting pass marks, grade boundaries and number of allowed retakes;
 - 5.1.2 ensure that assessments cover knowledge, skills and attitudes;
 - 5.1.3 use a wide range of assessment methods and formats according to their

"assessment utility" that includes a combination of validity, reliability, educational impact, acceptability and efficiency of the assessment methods and formats;

- 5.1.4 ensure that methods and results of assessments avoid conflicts of interest;
- 5.1.5 ensure that assessments are open (available) to scrutiny by external expertise;

The medical education institution **should**:

- 5.1.6 document and evaluate the reliability and validity of assessment methods that require an appropriate quality assurance process of assessment practices;
 - 5.1.7 incorporate new assessment methods where appropriate;
 - 5.1.8 use a system of appeal of assessment results.

5.2 Relation between Assessment and Learning

- 5.2.1 The medical education institution **must** use assessment principles, methods and practices including assessment of student achievement and assessment in all domains: knowledge, skills and attitudes that:
- are clearly compatible with intended educational outcomes and instructional methods;
 - ensure that the intended educational outcomes are met by the students;
 - promote student learning;
- provide an appropriate balance of formative and summative assessment to guide both learning and decisions about academic progress that requires rules of progression and their relationship to the assessment process.

The medical education institution **should**:

- 5.2.2 adjust the number and nature of examinations of curricular elements to encourage both acquisition of the knowledge base and integrated learning and to avoid negative effects on learning and to imply avoiding the need for students to learn and recall excessive amounts of information and curriculum overload:
 - 5.2.3 ensure feedback to students on basis of assessment results.
- **5.3** The medical education institution should focus the renewal process on the development of evaluation principles and methods of conduct and the number of examinations in accordance with changes in the education outcomes and teaching and learning methods.

6. STANDARDS «ACADEMIC STAFF/FACULTY»

6.1 Recruitment and Selection Policy

The medical education institution **must** formulate and implement a staff recruitment and selection policy which:

6.1.1 outlines the type, responsibilities and balance of the academic

staff/faculty of the basic biomedical sciences, the behavioral and social sciences and the clinical sciences required to deliver the curriculum adequately, including the balance between medical and non-medical academic staff, the balance between full-time and part-time academic staff, and balance between academic and nonacademic staff;

- 6.1.2 addresses criteria for scientific, educational and clinical merit, including the balance between teaching, research and service qualifications;
- 6.1.3 specifies and monitors the responsibilities of its academic staff/faculty of the basic biomedical sciences, the behavioral and social sciences and the clinical sciences.

The medical education institution **should** in its policy for staff recruitment and selection take into account criteria such as.:

- 6.1.4 relationship to its mission, including significant local issues that include gender, ethnicity, religion, language and other items of relevance to the school and the curriculum.;
- 6.1.5 economic considerations taking into account institutional conditions for staff funding and efficient use of resources.

6.2 Staff Activity and Staff Development Policy

The medical education institution must formulate and implement a staff activity and development policy which:

- 6.2.1 allows a balance of capacity between teaching, research and service functions that includes provision of protected time for each function, taking into account the needs of the medical school and professional qualifications of the teachers:
- 6.2.2 ensures recognition of meritorious academic activities, with appropriate emphasis on teaching, research and service qualifications and carried out through rewards, promotion and/or remuneration;
- 6.2.3 ensures that clinical service functions and research are used in teaching and learning;
- 6.2.4 ensures sufficient knowledge by individual staff members of the total curriculum that include knowledge about instructional/learning methods and overall curriculum content in other disciplines and subject areas with the purpose of fostering cooperation and integration;
- 6.2.5 includes teacher training, development, support and appraisal, which involves all teachers, not only new teachers, and also includes teachers employed by hospitals and clinics, laboratories, pharmacies, pharmaceutical industries, pharmaceutical companies.

The medical education institution **should**:

- 6.2.6 take into account teacher-student ratios relevant to the various curricular components;
 - 6.2.7 design and implement a staff promotion policy.

7. STANDARDS «EDUCATIONAL RESOURCES»

7.1 Physical Facilities

The medical education institution **must**:

- 7.1.1 have sufficient physical facilities for staff and students to ensure that the curriculum can be delivered adequately;
- 7.1.2 ensure a learning environment, which is safe for staff, students, patients and their carers including provision of necessary information and protection from harmful substances, specimens and organisms, laboratory safety regulations and safety equipment.
- 7.1.3 The medical education institution **should** improve the learning environment by regularly updating and modifying or extending the physical facilities to match developments in educational practices.

7.2 Clinical / Professional Training Resources

The medical education institution **must** ensure necessary resources for giving the students adequate clinical experience, including sufficient:

- 7.2.1 number and categories of patients;
- 7.2.2 clinical training facilities that include hospitals (adequate mix of primary, secondary and tertiary), ambulatory services (including primary care), clinics, primary health care settings, health care centers and other community health care settings as well as centers / laboratories of clinical skills, scientific centers, laboratories, manufacturing, centers for the development of pharmaceutical skills, which allow clinical training, using the capabilities of clinical bases and ensure rotation in the main clinical and basic pharmaceutical disciplines;
 - 7.2.3 supervision of their clinical / industrial practice.
- 7.2.4 The medical education institution should evaluate, adapt and improve the facilities for clinical training to meet the needs of the population it serves which 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.

7.3 Information Technology

7.3.1 The medical education institution **must** formulate and implement a policy which addresses effective use and evaluation of appropriate information and communication technology in the educational programme.

The medical education institution **should** enable teachers and students to use existing and exploit appropriate new information and communication technology for:

- 7.3.2 independent learning;
- 7.3.3 accessing information;

- 7.3.4 managing patients;
- 7.3.5 work in health care system.
- 7.3.6 The medical education institution **should** ensure student access to relevant patient data and health care information systems.

7.4 Medical Research and Scientific Achievements

The medical education institution must:

- 7.4.1 use medical research and scholarship as a basis for the educational curriculum;
- 7.4.2 formulate and implement a policy that fosters the relationship between medical research and education;
 - 7.4.3 describe the research facilities and priorities at the institution.

The medical education institution **should** ensure that interaction between medical research and education:

- 7.4.4 uses medical research as a basis for the curriculum;
- 7.4.5 influences current teaching;
- 7.4.6 encourages and prepares students to engage in medical research and development.

7.5 Educational Expertise

The medical education institution **must**:

7.5.1 have access to educational expertise where required and deal with, processes, practice and problems of medical education and would include medical doctors with research experience in medical education, educational psychologists and sociologists that 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.

The medical education institution **must** formulate and implement a policy on the use of educational expertise:

- 7.5.2 in curriculum development;
- 7.5.3 in development of teaching and assessment methods.

The medical education institution **should**:

- 7.5.4 demonstrate evidence of the use of in-house or external educational expertise in staff development;
- 7.5.5 pay attention to the development of expertise in educational evaluation and in research in the discipline of medical education as a discipline that includes the study of theoretical, practical and social issues in medical education;
 - 7.5.6 allow staff to pursue educational research interest.

7.6 Educational Exchanges

The medical education institution **must** formulate and implement a policy

for:

7.6.1 national and international collaboration with other educational institutions such as schools for public health, dentistry, pharmacy and other faculties of universities;

7.6.2 transfer of educational credits that implies consideration of limits to the proportion of the study programme which can be transferred from other institutions. Transfer of educational credits could be facilitated by establishing agreements on mutual recognition of educational elements and through active programme coordination between medical education institution. It could also be facilitated by use of a transparent system of credit units and by flexible interpretation of course requirement.

The medical education institution **should**:

- 7.6.3 facilitate regional and international exchange of staff (academic, administrative and technical staff) and students by providing appropriate resources;
- 7.6.4 ensure that exchange is purposefully organised, taking into account the needs of staff and students, and respecting ethical principles.

8. STANDARDS «GOVERNANCE AND ADMINISTRATION»

8.1 Governance

8.1.1 The medical education institution **must** define its governance structures and functions including their relationships within the university if the medical education institution is part of or affiliated to a university.

The medical education institution **should** in its governance structures set out the committee structure with defining the lines of responsibility and reflect representation from:

- 8.1.2 academic staff;
- 8.1.3 students.:
- 8.1.4 other relevant stakeholders including representatives of ministries of education and health, the health sector, the health care delivery system and the public.
- 8.1.5 The medical education institution **should** ensure transparency of the work of governance and its decisions which are published in newsletters, web information or disclosure of minutes.

8.2 Academic Leadership

- 8.2.1 The medical education institution **must** describe the responsibilities of its academic leadership for definition and management of the medical educational programme.
- 8.2.2 The medical education institution **should** periodically evaluate its academic leadership in relation to achievement of its mission and intended

educational outcomes.

8.3 Educational Budget and Resource Allocation

The medical education institution **must**:

- 8.3.1 have a clear line of responsibility and authority for resourcing the curriculum, including a dedicated educational budget;
- 8.3.2 allocate the resources necessary for the implementation of the curriculum and distribute the educational resources in relation to educational needs.
- 8.3.3 The financial system of the medical education institution **must** be based on the principals of efficiency, effectiveness, priority, transparency, accountability, and autonomy of all levels of budgeting.

The medical education institution should:

- 8.3.4 have autonomy to direct resources, including teaching staff remuneration, in an appropriate manner in order to achieve its intended educational outcomes;
- 8.3.5 in distribution of resources take into account the developments in medical sciences and the health needs of the society.

8.4 Administrative Staff and Management

The medical education institution **must** have an administrative and professional staff, including their number and composition in accordance with the qualifications, that is appropriate to:

- 8.4.1 ensure the implementation of its educational programme and related activities:
 - 8.4.2 ensure good management and resource deployment.
- 8.4.3 The medical education institution **should** formulate and implement an internal programme for quality assurance including consideration of the need for improvements and review of the management.

8.5 Interaction with Health Sector

- 8.5.1 The medical education institution **must** have constructive interaction with the health and health related sectors of society and government including exchange of information, collaboration, and organisational initiatives that facilitate provision of medical doctors with the qualifications needed by society
- 8.5.2 The medical education institution **should** formalise the collaboration with partners in the health sector that means entering into formal agreements, stating content and forms of collaboration, and/or establishing joint contact and coordination committees as well as joint projects.

9. STANDARDS «CONTINUOUS IMPROVEMENT»

The medical education institution **must** as a dynamic and socially accountable institution:

- 9.1.1 initiate procedures for regularly reviewing and updating the process, structure, content, outcomes/competencies, assessment and learning environment of the programme, document and rectify deficiencies.
 - 9.1.2 rectify documented deficiencies;
 - 9.1.3 allocate resources for continuous improvement.

The medical education institution **should**:

- 9.1.4 base the process of renewal on prospective studies and analyses and on results of local studying and evaluation and the medical education literature;
- 9.1.5 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.

The medical education institution **should** address the following issues in its process of renewal:

- 9.1.6 Adaptation of mission statement and outcomes to the scientific, socioeconomic and cultural development of the society.
- 9.1.7 Modification of the intended educational outcomes of the graduating students in accordance with documented needs of the environment they will enter including clinical skills, public health training and involvement in patient care appropriate to responsibilities encountered upon graduation.
- 9.1.8 Adaptation of the curriculum model and instructional methods to ensure that these are appropriate and relevant and takes into account modern theories in education, methodologies of adults training, principles of active learning.
- 9.1.9 Adjustment of curricular elements and their relationships in keeping with developments in the basic biomedical, clinical, behavioral 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.
- 9.1.10 Development of assessment principles, and the methods and the number of examinations according to changes in intended educational outcomes and instructional methods.
- 9.1.11 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.
- 9.1.12 Adaptation of academic staff recruitment and development policy according to changing needs.

- 9.1.13 Updating of educational resources according to changing needs, i.e. the student intake, size and profile of academic staff, and the educational programme.
 - 9.1.14 Refinement of the process of programme monitoring and evaluation.
- 9.1.15 Development of the organizational 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.

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