



«АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТИҢ  
ТӘУЕЛСІЗ АГЕНТТІГІ» КЕМ

НУ «НЕЗАВИСИМОЕ АГЕНТСТВО  
АККРЕДИТАЦИИ И РЕЙТИНГА»

INDEPENDENT AGENCY FOR  
ACCREDITATION AND RATING



WORLD FEDERATION FOR  
MEDICAL EDUCATION

## STANDARDS

OF PROGRAM ACCREDITATION  
OF HIGHER EDUCATION ORGANIZATIONS

EDUCATIONAL PROGRAMME FOR THE SPECIALTY

560001 Medical business

560002 Pediatrics



Astana 2016



Independent agency for  
accreditation and rating

**STANDARDS  
OF PROGRAM ACCREDITATION  
OF HIGHER EDUCATION ORGANIZATIONS**

**EDUCATIONAL PROGRAMME FOR THE SPECIALTY  
560001 Medical business  
560002 Pediatrics**

**GENERAL PROVISIONS**

**Astana city 2016**

## **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 October 17, 2016 no. 39-16-1-OD.

**3.** This standard implements the norms of the Law of the Kyrgyz Republic "On Education" as of April 30, 2003 No. 92.

**4. INITIALLY INTRODUCED**

This standard cannot be fully or partially reproduced, replicated and distributed without permission of the non-profit institution "Independent Agency for Accreditation and Rating".

## CONTENT

<b>GENERAL PROVISIONS .....</b>	<b>4</b>
<b>STANDARDS OF ACCREDITATION .....</b>	<b>11</b>
<b>STANDARD 1 “MISSION AND FINAL OUTCOMES” .....</b>	<b>11</b>
<b>STANDARD 2 “EDUCATIONAL PROGRAM” .....</b>	<b>13</b>
<b>STANDARD 3 “EVALUATION OF STUDENTS” .....</b>	<b>16</b>
<b>STANDARD 4 “STUDENTS” .....</b>	<b>17</b>
<b>STANDARD 5 “ACADEMIC STAFF/TEACHERS” .....</b>	<b>19</b>
<b>STANDARD 6 "EDUCATIONAL RESOURCES" .....</b>	<b>20</b>
<b>STANDARD 7 “EVALUATION OF AN EDUCATIONAL PROGRAM”.....</b>	<b>22</b>
<b>STANDARD 8 “MANAGEMENT AND ADMINISTRATION” .....</b>	<b>24</b>
<b>STANDARD 9 “CONTINUOUS IMPROVEMENT” .....</b>	<b>25</b>
<b>BIBLIOGRAPHY .....</b>	<b>27</b>

# STANDARDS OF PROGRAM ACCREDITATION

## General provisions

### 1 Applicable scope

This standard determines the regulatory requirements to the general provisions of standards of the program accreditation of the educational program on the specialty “**Medical business**”, “**Pediatrics**” of medical educational organizations.

This standard is used during the accreditation procedure of educational program on the specialties “**Medical business**”, “**Pediatrics**” of a medical educational organization regardless of its status, legal corporate form, institutional subordination and form of ownership.

This standard may also be used:

- a) by a medical educational organization for the internal self-assessment and external evaluation of the educational program;
- b) for the development of relevant regulatory documentation.

### 2 Regulatory references

This standard contains references to the following regulatory documents:

2.1. The Law of the Kyrgyz Republic “On Education” as of April 30, 2003, No. 92.

2.2 The concept of development of education in the Kyrgyz Republic until 2020, approved by decree of the Government of the Kyrgyz Republic as of March 23, 2012 No. 201.

2.3 The strategy for the development of education in the Kyrgyz Republic for 2012–2020, approved by decree of the Government of the Kyrgyz Republic as of March 23, 2012 No. 201.

2.4 Resolution of the Government of the Kyrgyz Republic as of September 29, 2015 No. 670 “On approval of acts on independent accreditation in the education system of the Kyrgyz Republic”.

### 3 Terms and definitions

This standard applies the terms and definitions in accordance with the Laws of the Kyrgyz Republic "On Education", International standards of the World Federation of Medical Education to improve the quality of basic medical education (WFME, University of Copenhagen, 2012) ,the following terms and definitions are set in these Standards:

3.1 Accreditation - a procedure by an accreditation agency to evaluate the quality level of an educational organization as a whole or its individual educational programs, during which it is recognized that the educational organization or educational program meets certain criteria and standards;

3.2 Accreditation agency - a non-governmental, non-profit organization registered in accordance with the procedure established by law, the main purpose of which is the accreditation of educational organizations and educational programs;

3.3 Program accreditation - a procedure for assessing the compliance of individual programs of an educational organization with certain criteria and standards;

3.4 Standards (regulations) of accreditation - documents of accrediting body, establishing requirements to the accreditation procedure;

3.5 Educational program - educational content of a specific level, direction or specialty;

3.6 Competencies - written statements describing the level of knowledge, skills and values, which are acquired by students who have completed the educational program;

3.7 Competence - the integrated ability of a person to independently apply various elements of knowledge and skills in a certain situation (educational, personal and professional);

3.8 SWOT-analysis - analysis of strengths and weaknesses, problems and opportunities of the organization, abbreviation of English words:

S (strengths) - strengths

W (weaknesses) - weaknesses

O (opportunities) - favorable opportunities

T (threats) - threats.

#### **4 Designations and abbreviations**

In this standard, abbreviations are used in accordance with the regulatory documents specified in item 2.

In addition, the following designations and abbreviations are used in this standard:

- HEI - higher education institution;
- MH KR – Ministry of Health of the Kyrgyz Republic;
- MES KR – Ministry of Education and Science of the Kyrgyz Republic;
- KR – Kyrgyz Republic;
- CPD - continuous professional development;
- CME - continuous medical education;
- SRI– scientific research institute;
- OSCE – objective structured clinical examination;
- TS – teaching staff;
- MM – mass media;
- SED –state educational standard.

#### **5 General provisions**

5.1 Program accreditation is carried out on the basis of this standard General provisions; standard “Mission and final outcomes”; standard “Educational

program;; standard “Evaluation of students”; standard “Students”; standard “Academic staff/Teachers”; standard “Educational Resources”; standard “Evaluation of an educational program”; standard “Management and Administration”; standard “Continuous improvement”. Standards of program accreditation of medical educational organization are developed on the basis of the International Standards of the World Federation of Medical Education on improving the quality of basic medical education with the introduction of national features of the healthcare and medical education and they are developed in accordance with the recommendations of international consultants.

5.2 There are the following forms of accreditation:

1) by structure

5.2.1 institutional accreditation;

5.2.2 program accreditation;

2) by territorial recognition

5.2.3 national accreditation;

5.2.4 international accreditation.

5.3 The decision on accreditation is made by the Accreditation Council.

5.4 The Accreditation Council is composed of representatives from the MES KR, MH KR, medical educational organizations, scientific organizations, health organizations, professional associations, employers, the public, students and international experts.

## **6 The main objectives of implementing the standards of program accreditation**

6.1 The main objectives of the implementation of standards of specialized accreditation are:

6.1.1 introduction of the accreditation model, harmonized with international practice of quality assurance of education;

6.1.2 assessment of the quality of vocational and educational programs to improve the competitiveness of the national higher education system;

6.1.3 encouragement of the development of quality of culture in higher education institutions;

6.1.4 promotion of advancement and continuous improvement of the quality of educational programs of medical educational organizations in accordance with the requirements of a rapidly changing external environment;

6.1.5 accounting and protection of the interests of the society and the rights of consumers by providing reliable information about the quality of educational programs;

6.1.6 use of innovation and research;

6.1.7 public announcement and distribution of information on the results of the accreditation of the educational program on the specialties “Medical business”, “Pediatrics” of medical educational organization;

## **7 Principles for the formation of standards for program accreditation**

7.1 The presented standards for ensuring the quality of educational programs

of higher professional education are based on the following principles:

7.1.1 voluntariness - the procedure for the accreditation of educational programs is carried out on a voluntary basis;

7.1.2 honesty and transparency - internal and external evaluation is conducted in an extremely honest and transparent manner, ensuring the availability of information for all participants in the ongoing accreditation process;

7.1.3 objectivity and independence - internal and external evaluation is carried out objectively, regardless of third parties (state bodies, university administrations and public opinion) and the obtained results;

7.1.4 responsibility of medical institutions of education - primary responsibility for the quality of higher education rests with medical educational organizations;

7.1.5 confidentiality - the information provided by higher education institutions is used by the accreditation body in confidence;

7.2 The external evaluation is conducted independently from third parties (state bodies, medical educational organizations and public organizations).

7.3 Information awareness of the country public and abroad about accredited educational programs is carried out in the mass media, incl. The presentation of information on the website of the accreditation body.

## **8 Stages and procedures for the implementation of program accreditation**

8.1 University applies for program accreditation with copies of constitutive and authorization documents.

8.2 Consideration by IAAR of the application of medical educational organization.

8.3 The decision of IAAR to start the program accreditation procedure. Conclusion of an agreement between the agency and the university on program accreditation.

8.4 The management of the educational organization and IAAR organizes training to clarify the criteria and procedure of program accreditation to internal experts of medical educational organization at special seminars on the theory, methodology and technology of program accreditation process.

8.5 Conducting self-assessment by medical educational organization in accordance with the requirements established by IAAR, and sending a self-assessment report (in Russian and English) to IAAR in electronic version and in the amount of 1 copy on paper for each language.

8.6 Based on the analysis of the report on the educational programs of the university, IAAR is entitled to make the following decisions:

- to develop recommendations on the need to refine self-assessment materials;
- to conduct an external expert evaluation by the external expert commission of the agency;



- to postpone accreditation due to the inability to carry out the program accreditation procedure because of inconsistency of the self-assessment report with the criteria of these standards.

8.7 In case of continuing accreditation, IAAR forms an external expert commission, which is approved by the Director of IAAR to conduct an assessment of the university. It includes representatives of the academic community, employers and students of the Kyrgyz Republic, as well as foreign experts.

8.8 In the case of continuing accreditation, IAAR coordinates with a medical educational organization the timing of program accreditation and the visit program of the EEC.

8.9 The duration of the visit of the commission is 3-5 days. During the visit, the university creates conditions for the work of the EEC in accordance with the Service Agreement:

- provides an electronic and paper version of the self-assessment report for each member of the commission;
- provides the necessary office equipment to the members of the EEC;
- organizes an inspection of infrastructure and resources, meetings, questionnaires, interviews and other types of the EEP work in accordance with the EEP visit programme;
- provides the requested information;
- organizes photo and video shoot of the EEC work;
- prepares a video for the meeting of the Accreditation Council of IAAR containing a brief description of the medical educational organization and information on the visit of the external expert commission.

8.10 At the end of the visit, the external expert commission prepares a report on the evaluation of educational programs and a presentation on the progress of the EEC visit.

8.11. The report contains a description of the visit of the EEC, a brief assessment of the compliance of educational programs in the context of the criteria of IAAR standards, recommendations to the university for improving performance and quality assurance, recommendations to the Accreditation Council. Recommendations to the Accreditation Council contain information on the status of the educational program and the recommended period of accreditation.

8.12 The EEC report, including recommendations, is developed by the EEC members collectively.

8.13 The basis for the decision making on program accreditation of the Accreditation Council is the EEC report on the evaluation of educational programs and the report on the self-evaluation of educational programs of educational organizations.

8.14 The Chairman of the external expert commission speaks to the Accreditation Council on the results of the visit of the external expert commission. If there is an objective reason, the Director of IAAR appoints a member of the external expert commission to participate with the report at the meeting of the Accreditation Council. The replacement of the Chairman of the external expert commission is executed by the order of the Director of IAAR.

8.15 The exclusive competence of the Accreditation Council of IAAR includes decision making on accreditation or refusal to accredit the educational program of a higher educational institution. The composition of the Accreditation Council is determined in accordance with the Regulations on its activities. The meeting is held in the presence of a quorum. The Accreditation Council has the right to make an informed decision that does not comply with the recommendations of the external expert commission.

Accreditation Council makes decisions

- to accredit:

- 1 year – in compliance with the criteria as a whole, but with some drawbacks and opportunities for improvement;

- 3 years - with positive results in general, but with some minor drawbacks and opportunities for improvement;

- 5 years - with positive results in general.

- not to accredit.

Upon the expiration of the accreditation of the educational program for a period of **5 years** and with the successful completion of post-accreditation monitoring of the educational program, the educational organization is entitled to apply for re-accreditation. In case of re-accreditation of the educational program and with positive results, the educational organization has the right to apply for a period of **7 years**.

8.16 IAAR sends an official letter with the results of the decision and a certificate of program accreditation of educational programs signed by the Director of IAAR to the educational organization. Next, the decision on the accreditation of the EP is sent to the MES KR and is posted on the IAAR website. Also the report of the external expert commission is posted on the website.

After receiving a certificate of accreditation of the educational program, the educational organization places a self-assessment report on its website.

8.17. In case if the Accreditation Council makes a negative decision, IAAR sends a letter to the educational organization with the decision made.

8.18 The educational organization in the prescribed manner in accordance with the Service Agreement and the Regulation on the Commission for the Review of Appeals and Complaints may appeal to IAAR on the decision of the Accreditation Council. In case of doubt about the competence of the external expert commission and representatives of the Agency, or a gross violation committed by members of the external expert commission, the educational organization may send a complaint to IAAR.

## **9 Follow-up procedures**

9.1 In case of a positive decision made by the Accreditation Council of IAAR, the educational organization provides IAAR with a Plan of measures to improve and refine quality in the framework of recommendations of an external expert commission (hereinafter - Plan), which is signed by the head and sealed by IAAR, and also Service Agreement is concluded with IAAR. The Agreement and Plan are the basis for post-accreditation monitoring.

9.2 In accordance with the Regulations on the procedure for post-accreditation monitoring of educational organizations and (or) educational programs, accredited educational organizations shall prepare interim reports in accordance with the Plan. Interim reports are sent to IAAR before the expected date of post-accreditation monitoring.

9.3. Post-accreditation monitoring of the EP is carried out as follows:

Validity of the accreditation certificate	3 years	5 years	7 years
Interim report submission frequency	Once in 1.5 years	Twice every two years	Three times every two years

9.4. In the event of non-compliance with the Plan and the requirements put forward by IAAR in relation to HEI, as well as the lack of information about changes made at university, the Accreditation Council has the right to take one of the following decisions:

- temporarily suspend the accreditation status of the educational program;
- withdraw the accreditation of educational program of the educational organization, which may entail the cancellation of all previously achieved accreditation results.

9.5 In case of failure of the educational organization to conduct post-accreditation monitoring, expressed in not signing the Service Agreement with IAAR, according to item 9.4 the Accreditation Council of IAAR has the right to decide on the termination and revocation of the accreditation status.

9.6 In case of early termination and revocation of accreditation, the educational organization has no right to apply for accreditation to IAAR within one year from the date of the decision to revoke the accreditation of the educational organization.

## **10 Procedure for introducing amendments and additions to accreditation standards**

10.1 Amendments and additions are made to the current accreditation standard in order to further improve it.

10.2 Amendments and additions to the standard are made by an accreditation body.

10.3 In the event of initiating amendments and additions to the current standard by educational organizations and other interested organizations, proposals and comments are sent to the accreditation body.

10.4 The accreditation body studies and examines the proposals and comments received from the initiators for their validity and appropriateness.

10.5 Amendments and additions to the current accreditation standard after their endorsement are approved by an order of the Director of the accreditation body in a new edition with amendments or in the form of a brochure-leaflet to the valid standard.

## STANDARDS OF ACCREDITATION

### STANDARD 1 “MISSION AND FINAL OUTCOMES”

#### 1.1 Mission statement

1.1.1 Medical educational organization **shall** determine the *mission* and bring it to the attention of the stakeholders and **the healthcare sector**.

1.1.2 The mission statement **shall** contain **objectives and an educational strategy** that will allow to train a qualified doctor at the level of **undergraduate medical education**.

1.1.3 with an appropriate basis for further career in any field of medicine, including all types of medical practice, **administrative medicine** and scientific research in medicine.

1.1.4 being able to fulfill the role and function of a doctor **in accordance with the requirements of the healthcare sector**.

1.1.5 prepared for **postgraduate** education, **including internship, residency, specialization**.

1.1.6 with a commitment to lifelong learning, including professional responsibility to support the level of knowledge and skills through performance assessment, auditing, learning from your own practice and recognized activities in the *CDP / CME*.

1.1.7 Medical educational organization **shall** ensure that the stated mission includes *the problems of public health*, the needs of the system of medical care and other aspects of *social responsibility*.

1.1.8 Medical educational organization shall have a strategic development plan that complies with the stated mission, objectives of medical educational organization and approved by the advisory council of the university.

1.1.9 Medical educational organization shall systematically collect, accumulate and analyze information about its activities; to assess the strengths and weaknesses of the university (SWOT-analysis), on the basis of which the university administration together with the advisory council of the university shall determine a policy and develop strategic and tactical plans.

1.1.10 The mission and objectives of medical educational organization shall correspond to the available resources, opportunities of medical educational organization, market requirements and ways to support them, and access to information about the mission, the objectives of medical educational organization for the public (availability of information in the media, on the university website) shall be defined, the mission and objectives of medical educational organization are approved at the advisory council of the university.

1.1.11 Medical educational organization **should** ensure that the mission includes advances in medical research in the biomedical, clinical, behavioral and social sciences.

1.1.12 Medical educational organization **should** ensure that the mission includes the aspects of global health and reflects major international health issues.

## **1.2 Participation in the mission formulation**

1.2.1 Medical educational organization **shall** ensure that *key stakeholders* are involved in the development of the mission.

1.2.2 Medical educational organization **should** ensure that the stated mission is based on the opinions/suggestions of other *relevant stakeholders*.

## **1.3 Institutional autonomy and academic freedom**

Medical educational organization **shall** have *institutional autonomy* for the development and implementation of the policy for which the faculty and administration are responsible for, especially in relation to:

1.3.1 development of an educational program;

1.3.2 use of allocated resources necessary for the implementation of the educational program.

Medical educational organization **should** guarantee *academic freedom* to its employees and students:

1.3.3 in relation to *the existing educational program, which will be allowed to rely on different points of view in the description and analysis of questions on medicine*;

1.3.4 in ability to use the results of new research to improve the study of specific disciplines/issues without expanding the educational program.

## **1.4 Final learning outcomes**

Medical educational organization **shall** determine the expected *learning outcomes* that students have to show upon completion, regarding:

1.4.1 their achievements at a basic level in terms of knowledge, skills and attitudes;

1.4.2 an appropriate basis for a future career in any field of medicine;

1.4.3 their future roles in the healthcare sector;

1.4.4 their subsequent postgraduate training;

1.4.5 their commitment to lifelong learning;

1.4.6 medical and sanitary needs of public health, healthcare system needs and other aspects of social responsibility.

1.4.7 Medical educational organization **shall** ensure that student fulfills his obligations towards doctors, teachers, patients and their relatives in accordance with the Code of Conduct.

Medical educational organization **should**:

1.4.8 identify and coordinate the interconnection of the final learning outcomes required on completion with those that required in postgraduate studies;

1.4.9 determine the results of the involvement of students in conducting research in the field of medicine;

1.4.10 pay attention to the outcomes associated with global health.

## STANDARD 2 “EDUCATIONAL PROGRAM”

### 2.1 Model of educational program and teaching methods

2.1.1 Medical educational organization **shall** determine *the model of the educational program including an integrated model based on disciplines, organ systems, clinical problems and diseases, a model based on modules or a spiral design.*

2.1.2 Medical educational organization **shall** determine *the methods of teaching and learning.*

2.1.3 Medical educational organization **shall** ensure that the educational program develops the ability of students to learn throughout life.

2.1.4 Medical educational organization **shall** ensure that the educational program is implemented in accordance with *the principles of equality.*

2.1.5 Medical educational organization **should** use the educational program and methods of teaching and learning *based on modern principles of education, which stimulate, prepare and support students and provide students with responsibility for their learning process.*

### 2.2 Scientific method

Throughout the entire academic program, medical educational organization should teach students:

2.2.1 principles of scientific methodology, including methods of analytical and critical thinking;

2.2.2 scientific methods of research in medicine;

2.2.3 evidence-based medicine, which requires *the appropriate competence of teachers and will be a mandatory part of the educational program and involve medical students in conducting or participating in small research projects.*

2.2.4 Medical educational organization **should** include in the educational program *elements of basic or applied research that include compulsory or elective analytical and experimental research, thereby facilitating participation in the scientific development of medicine as professionals and colleagues.*

### 2.3 Basic biomedical disciplines

Medical educational organization **shall** in the educational program determine and include:

2.3.1 achievements of *basic biomedical sciences* to form students' understanding of scientific knowledge;

2.3.2 concepts and methods that are fundamental to the acquisition and application of clinical scientific knowledge.

Medical educational organization **should** in the educational program adjust and introduce new achievements of biomedical sciences for:

2.3.3 scientific, technological and clinical developments;

2.3.4 current and expected needs of society and the healthcare system.

## **2.4 Behavioral and social sciences and medical ethics**

Medical educational organization **shall** determine and include in the educational program the achievements of:

2.4.1 *behavioral sciences*;

2.4.2 *social sciences*;

2.4.3 *medical ethics*;

2.4.4 *medical law*,

*which will provide knowledge, concepts, methods, skills and attitudes necessary to understand the socio-economic, demographic and cultural conditions of the causes, distribution and consequences of medical health problems, as well as knowledge about the national healthcare system and patient rights, which will contribute to the analysis of public health problems, effective communication, clinical decision making and ethical practice.*

Medical educational organization **should** adjust and introduce new achievements in *behavioral and social sciences* and also *medical ethics* for:

2.4.5 scientific, technological and clinical developments;

2.4.6 current and expected needs of society and the healthcare system;

2.4.7 changing demographic and cultural conditions.

## **2.5 Clinical sciences and skills**

Medical educational organization **shall** in the educational program define and implement the achievements of *clinical sciences* and ensure that students:

2.5.1 acquire sufficient knowledge and *clinical and professional skills* in order to assume *appropriate responsibilities, including activities related to health promotion, disease prevention and patient care*;

2.5.2 conduct *a reasonable part (one third) of the program in planned contact with patients, including consideration of the goal, the appropriate number and their sufficiency for training in the relevant clinical bases*;

2.5.3 carry out work on health promotion and prevention.

2.5.4 Medical educational organization **shall** establish a certain amount of time for training of *the main clinical disciplines, including internal diseases, surgery, psychiatry, general medical practice (family medicine), obstetrics and gynecology, pediatrics*.

2.5.5 Medical educational organization **shall** organize clinical training with appropriate attention to *patient safety, including monitoring the activities performed by the student in the clinical environment*.

Medical educational organization **should** in the educational program adjust and introduce new clinical science achievements for:

2.5.6 scientific, technological and clinical developments;

2.5.7 current and expected needs of society and the healthcare system.

2.5.8 *Medical educational organization should ensure that each student has an early contact with real patients, including his gradual participation in assisting the patient, including responsibility for examining and/or treating the patient under supervision, which is carried out in appropriate clinical bases.*

---

2.5.9 Medical educational organization **should** structure the various components of *clinical skills* in accordance with the specific stage of the academic program.

## **2.6 Structure of the educational program, content and duration**

2.6.1 Medical educational organization **shall** give a description of the content, scope and sequence of courses and other elements of the educational program in order to ensure compliance with the appropriate relation between the basic biomedical, behavioral and social and clinical disciplines.

Medical educational organization **should** in the educational program:

2.6.2 provide horizontal integration of related sciences and disciplines;

2.6.3 provide *vertical integration* of clinical sciences with basic biomedical and behavioral and social sciences;

2.6.4 provide the possibility of electoral content (electives) and determine the balance between *the compulsory and elective* part of the educational program, *including a combination of compulsory elements and electives or special components optionally*;

2.6.5 determine *the relation with complementary medicine, including non-traditional, traditional or alternative practice*.

## **2.7 Program management**

2.7.1 Medical educational organization **shall** determine the structural unit responsible for the educational programs, which, under the direction of the academic management, which is responsible and *has the authority* to plan and implement the educational program, *including the allocation of given resources for planning and implementing teaching and learning methods, students' assessment and evaluation of the educational program and training courses* in order to achieve the final learning outcomes.

2.7.2 Medical educational organization **shall** guarantee representation from teachers and students in the structural unit responsible for educational programs.

2.7.3 Medical educational organization **should**, through the structural unit responsible for educational programs, plan and implement innovations in the educational program.

2.7.4 Medical educational organization **should include** representatives *from other relevant stakeholders*, in the structure of medical educational organization responsible for educational programs, *including other participants in the educational process, representatives from clinical sites, graduates of medical educational organization, healthcare professionals involved in the academic process or others teachers from a university faculty*.

## **2.8 Connection to medical practice and healthcare system**

2.8.1 Medical educational organization **shall** provide *an operational connection* between the educational program and the subsequent stages of vocational training (internship, specialization, CPD / CME) or practice that the student will begin after graduation, *including the definition of health problems and*



*the definition of the required learning outcomes, a clear definition and description of the elements educational programs and their relation at various stages of training and practice, with due regard to local, national, regional and the global conditions, and also feedback to/from the healthcare sector and the participation of teachers and students in team work of specialists in delivery of health care.*

Medical educational organization **should** ensure that the structural unit responsible for the educational program:

2.8.2 take into account the particularity of conditions in which graduates will have to work and accordingly modify the educational program;

2.8.3 consider the modification of the educational program based on feedback from the public and society as a whole.

### **STANDARD 3 “EVALUATION OF STUDENTS”**

#### **3.1 Evaluation methods**

Medical educational organization **shall**:

3.1.1 identify, approve and publish *the principles, methods and practice used to assess students, including number of examinations and other tests, balance between written and oral examinations, use of criteria-based assessment and reasoning methods, special examinations (OSCE or mini-clinical exam), as well as to establish the criteria for determining the passing scores, grades and the number of allowed retakes.*

3.1.2 ensure that the assessment covers knowledge, skills and attitudes.

3.1.3 use a wide range of assessment methods and formats depending on their “*utility evaluation*”, which includes a combination of validity, reliability, impact on learning, acceptability and effectiveness of methods and format of assessment.

3.1.4 ensure that assessment methods and results avoid conflicts of interest;

3.1.5 ensure that the evaluation process and methods are open (available) to expertise by external experts.

Medical educational organization **should**:

3.1.6 *document and evaluate the reliability and validity of evaluation methods, which requires an appropriate process to ensure the quality of existing evaluation practices;*

3.1.7 introduce new assessment methods in accordance with the need;

3.1.8 use the system to appeal the results of the evaluation.

#### **3.2 The interconnection between assessment and learning process**

Medical educational organization **shall** use the principles, methods and practice of assessment, including the educational achievements of students and the assessment of knowledge, skills, professional values of relationships that:

3.2.1 clearly comparable with teaching methods, teaching, and final learning outcomes;

3.2.2 ensure that students achieve final learning outcomes;

3.2.3 encourage learning;

3.2.4 provide an appropriate balance between formative and summative assessment to manage study process and *evaluate the student's academic progress, which requires the establishment of rules for assessing progress and their relation to the evaluation process.*

Medical educational organization **should:**

3.2.5 *regulate the number and nature of examinations of the various elements of the educational program in order to facilitate the acquisition of knowledge and integrated learning, and to avoid negative effect on the learning process and eliminate the need to study excessive amounts of information and overload of the educational program;*

3.2.6 guarantee the provision of feedback to learners based on the results of the assessment.

## STANDARD 4 “STUDENTS”

### 4.1 Admission and selection policy

Medical educational organization **shall:**

4.1.1 *define and implement an admission policy, including a clearly established provision on the student selection process which includes justification and methods of selection, such as secondary school results, other relevant academic experience, other entrance examinations and interviews, assessment of motivation to be a doctor, including changes in needs related to diversity of medical practice.*

4.1.2 *have a policy and introduce the practice of admission of students with disabilities in accordance with the laws, legal and regulatory documents of the country in force.*

4.1.3 *have a policy and implement the practice of transferring students from other programs and medical educational organizations.*

Medical educational organization **should:**

4.1.4 *establish a connection between the selection of students and the mission of the medical education organization, the educational program and the expected quality of graduates;*

4.1.5 *periodically review admission policy based on the relevant data from the public and professionals in order to meet the health needs of the population and society as a whole, including consideration of the recruitment of students based on their gender, ethnicity and language, and the potential need for a special admission policy for students from low-income families and national minorities;*

4.1.6 *use the system to appeal decisions on admission.*

### 4.2 Student recruitment

4.2.1 Medical educational organization **shall** determine the number of students enrolled in accordance with the material and technical resources and capabilities at all stages of education and training, and the decision to recruit students implies the need to regulate national requirements for human resources of healthcare, in case when medical education organizations do not control the

number of students being recruited, they should demonstrate their obligations by explaining all the relations, paying attention to the consequences of the decisions made (imbalance between enrollment and the material and technical, academic potential of medical educational organization/university).

4.2.2 Medical educational organization **should** periodically review the number and contingent of students enrolled in consultation with *relevant stakeholders responsible for planning and developing human resources in the healthcare sector, with experts and organizations on the global aspects of human healthcare resources (such as insufficient and uneven distribution of human resources of healthcare, migration of doctors, opening of new medical universities)* and regulate in order to meet the health needs of the population and society as a whole.

### **4.3 Student counseling and support**

Medical educational organization **shall**:

4.3.1 have a system of *academic counseling* for its students, *which includes issues related to the selection of elective disciplines, preparation for residency training, career planning, the appointment of academic mentors (tutors) for individual students or small groups of students;*

4.3.2 offer a student support program that addresses *social, financial and personal needs, including support for social and personal events, health and financial issues, access to health care, immunization programs and health insurance, as well as financial assistance services in the form of material assistance, scholarships and credits;*

4.3.3 allocate resources to support students;

4.3.4 ensure confidentiality regarding counseling and support;

Medical educational organization **should** provide counseling that:

4.3.5 based on monitoring student progress and addressing students' social and personal needs, including academic support, support for personal problems and situations, health problems, financial issues;

4.3.6 include counseling and career planning.

### **4.4 Representation of students**

4.4.1 Medical educational organization **shall** define and implement *a policy of students' representation and their proper participation* in the development, management and evaluation of the educational program, as well as other issues relevant to students, which includes *student self-government, participation of students in faculty and university councils, other relevant bodies, in public activities and local healthcare projects.*

4.4.2 Medical educational organization **should** *provide assistance and support to student activities, student organizations, including the provision of technical and financial support to students' organizations.*

## STANDARD 5 “ACADEMIC STAFF/TEACHERS”

### 5.1 Selection and recruitment policy

Medical educational organization **shall** determine and implement *a policy of selection and admission of employees*, which:

5.1.1 determines their category, responsibility and *balance of academic staff/teachers* of basic biomedical subjects, behavioral and social sciences, and clinical sciences for an adequate implementation of the educational program, including the proper correlation between medical and non-medical teachers, teachers working full-time and part-time and the balance between academic and non-academic staff;

5.1.2 contains criteria on the scientific, pedagogical, and clinical merits of applicants, including the proper correlation between pedagogical, scientific, and clinical qualifications;

5.1.3 identifies and monitors the responsibilities of academic staff/teachers of basic biomedical sciences, behavioral and social sciences and clinical sciences.

Medical educational organization **should** in its policy on the selection and recruitment of staff to consider such criteria as:

5.1.4 related to its mission, *the importance of local conditions, including gender, nationality, religion, language and other conditions related to medical educational organization and educational program*;

5.1.5 *economic opportunities that take into account the institutional environment for financing employees and efficient use of resources*;

### 5.2 Development policy and staff activity

Medical educational organization **shall** determine and implement the policy of the activities and development of employees, which:

5.2.1 allows to maintain *a balance* between *teaching, scientific and service functions*, which include the establishment of *time for each type of activity, taking into account the needs of medical educational organization and professional qualifications of teachers*;

5.2.2 guarantees *recognition of the merit of academic activity*, with a corresponding emphasis on pedagogical, research and clinical qualifications, and which *is carried out in the form of awards, promotion and/or remuneration*;

5.2.3 ensures that clinical activities and research are used in teaching and learning;

5.2.4 guarantees *the adequacy of knowledge by each employee of the educational program, which includes knowledge of teaching/learning methods and the general content of the educational program and other disciplines, and subject areas in order to stimulate cooperation and integration*;

5.2.5 *includes training, development, support of teachers' activities, which involves all teachers, not only newly recruited, but also teachers drawn from hospitals, clinics*.

Medical educational organization **should**:

5.2.6 consider the ratio of “teacher-student” depending on the various components of the educational program;

5.2.7 develop and implement policy to promote employees.

## STANDARD 6 "EDUCATIONAL RESOURCES"

### 6.1 Material and technical base

Medical educational organization **shall**:

6.1.1 have a sufficient *material and technical base* for teachers and students to ensure the adequate fulfillment of the goals and objectives of the educational program;

6.1.2 provide *a safe environment* for staff, students, patients, and includes providing the necessary information and *protection from harmful substances, microorganisms, compliance with safety regulations in the laboratory and in the use of equipment*;

6.1.3 Medical educational organization **should** improve the learning environment of students by regular updating, expanding and strengthening the material and technical base, which shall correspond to the development in the practice of teaching.

### 6.2 Clinical training resources

Medical educational organization **shall** provide the necessary resources for students to acquire adequate clinical experience, including sufficient:

6.2.1 number and category of patients;

6.2.2 the number and categories *of clinical sites, which include clinics (primary, specialized and highly specialized care), outpatient services (including primary healthcare), primary healthcare facilities, health centers and other public healthcare facilities, and also laboratories of clinical skills/centers that allow to conduct clinical training, using the capabilities of clinical bases and provide rotation in the main clinical disciplines*;

6.2.3 observation of clinical practice of students.

6.2.4 Medical educational organization **should** study and evaluate, adapt and improve resources for clinical training to meet the needs of the population served, which will include relevance and quality for clinical training programs regarding clinical sites, equipment, number and category of patients and clinical practice, observation as a supervisor and administration.

### 6.3 Information technology

6.3.1 Medical educational organization **shall** define and implement a policy that is aimed at the effective use and evaluation of relevant information and communication technologies in the educational program.

Medical educational organization **should** provide opportunities for teachers and students to use information and communication technologies:

6.3.2 for self-study;

6.3.3 access to information;

6.3.4 management of patients;

6.3.5 work in the healthcare system.

6.3.6 Medical educational organization **should** ensure that students have access to relevant patient data and healthcare information systems.

#### **6.4 Research in the field of medicine and scientific achievements**

Medical educational organization **shall**:

6.4.1 have *research activities in the field of medicine and scientific achievements* as the basis for the educational program;

6.4.2 identify and implement policy that promote the correlation between research and education;

6.4.3 provide information on the research base and priority areas in the field of scientific research of medical educational organization.

Medical educational organization **should** ensure that the interconnection between research and education:

6.4.4 is taken into account in teaching;

6.4.5 encourages and prepares students to participate in research in the field of medicine and its development.

#### **6.5 Expert expertise in the field of education**

Medical educational organization **shall**:

6.5.1 have access to educational expertise, where necessary, and conduct an expert expertise that studies the processes, practices and problems of medical education and can involve doctors with experience in research in medical education, psychologists and sociologists in the field of education, which is provided by the department of medical education development at university or by bringing in experts from other national and international institutions.

Medical educational organization **shall** determine and implement a policy on the use of expertise in the field of education:

6.5.2 in the development of an educational program;

6.5.3 in the development of teaching methods and assessment of knowledge and skills.

Medical educational organization **should**:

6.5.4 provide evidence of the use of internal or external expertise in medical education field to develop the potential of employees;

6.5.5 pay due attention to the development of *expertise in educational evaluation and research in medical education as a discipline, including the study of theoretical, practical and social issues in medical education*;

6.5.6 promote the aspiration and interests of staff in conducting research in medical education.

#### **6.6 Exchange in the field of education**

Medical educational organization **shall** define and implement *a policy for*:

6.6.1 cooperation at national and international levels *with other medical universities, schools of public healthcare and other university departments*;

6.6.2 *transfer and mutual offset of educational loans, which includes consideration of the limits of the educational program, which can be transferred*

*from other educational organizations and which can be facilitated by the conclusion of agreements on mutual recognition of elements of educational program, and active coordination of programs between universities and the use of a transparent system of credit units and flexible demands of the courses.*

Medical educational organization **should**:

6.6.3 facilitate regional and international staff exchanges (academic, administrative and teaching staff) and students with appropriate resources;

6.6.4 ensure that the exchange is organized in accordance with the objectives, taking into account the needs of employees, students, and in compliance with ethical principles.

## **STANDARD 7 “EVALUATION OF AN EDUCATIONAL PROGRAM”**

### **7.1 Mechanisms for program monitoring and evaluation**

Medical educational organization **shall**

7.1.1 have a program for monitoring processes and results, including *routine data collection on key aspects of the educational program in order to ensure that the educational process is carried out appropriately, and to identify any areas that require interventions, and data collection is part of the administrative procedures in connection with student enrollment, student assessment and completion of training.*

Medical educational organization **shall** establish and apply mechanisms for the academic program assessment that:

7.1.2 are directed to the educational program and its main components, including the model of the educational program, the structure, content and duration of the educational program, the use of compulsory and elective components (*standard “Educational program”*);

7.1.3 aimed at the student's progress;

7.1.4 *identify and consider problems that include the lack of achievement of expected learning outcomes, and will involve the process of gathering information on final learning outcomes, including identified deficiencies and problems, and used as feedback for activities and corrective action plans to improve the educational program and curriculum disciplines.*

Medical educational organization **should** periodically conduct a comprehensive evaluation of the educational program, aimed at:

7.1.5 *the context of the educational process, which includes the organization and resources, the learning environment and the culture of medical education organization;*

7.1.6 *special components of the educational program, which include a description of the discipline and methods of teaching and learning, clinical rotations and assessment methods;*

7.1.7 *general outcomes that will be measured by national licensing exams, benchmarking procedures, international examinations, career choices and results of postgraduate studies;*

7.1.8 its social responsibility.

## **7.2 Teacher and student feedback**

7.2.1 Medical educational organization **shall** systematically collect, analyze and provide *feedback to the teachers and students, which includes information on the process and products of the educational program, and also includes information about unfair practices or inappropriate behavior of teachers or students with and/or legal consequences.*

7.2.2 Medical educational organization **should** use feedback results to improve the educational program.

## **7.3 Academic achievements of students and graduates**

Medical educational organization **shall analyze** the educational achievements of *students and graduates* in relation to:

7.3.1 its mission and learning outcomes of the educational program, *which includes information on the average duration of studies, grades, the frequency of passing and failures in examinations, cases of successful completion and expulsion, reports of students on the conditions of teaching in completed courses, the time spent to study areas of interest, including optional components, as well as interviews with students of repeated courses, and interviews with students who leave the educational program;*

7.3.2 educational program;

7.3.3. provision of resources.

Medical educational organization **should** analyze the academic achievements of students regarding:

7.3.4 *their previous experience and conditions, including social, economic, cultural conditions;*

7.3.5 the level of training at the time of admission to medical educational organization.

Medical educational organization **should** use the analysis of students' educational achievements to provide feedback to the structural units responsible for

7.3.6 student selection;

7.3.7 planning of the educational program;

7.3.8 student consultation.

## **7.4 Involvement of stakeholders**

Medical educational organization **should**, in its monitoring program and evaluation activities of the educational program, involve:

7.4.1 teaching staff and students;

7.4.2 its administration and management.

Medical educational organization **should** *for other stakeholders, including other representatives of academic and administrative staff, members of the public, authorized education and healthcare authorities, professional organizations, as well as those who are responsible for post-graduate education:*



- 7.4.3 provide access to the evaluation results of the educational program;
- 7.4.4 collect and study feedback from them on clinical practice of graduates;
- 7.4.5 collect and study feedback from graduates on the educational program.

## **STANDARD 8 “MANAGEMENT AND ADMINISTRATION”**

### **8.1 Management**

8.1.1 Medical educational organization **shall** determine the management structures and functions, including their *relations with the university, if medical educational organization is a part or a branch of the university*.

Medical educational organization **should** in their management structures determine *the structural units with the establishment of the responsibility of each structural unit* and include in their composition:

8.1.2 representatives of academic staff;

8.1.3 students;

8.1.4 *other stakeholders* including representatives of the ministry of education and healthcare, the health sector and the public.

8.1.5 The structural unit responsible for educational programs **should** ensure the transparency of the management system and the decisions made, which are published in bulletins, posted on the website of the university, included in the protocols for familiarization and execution.

### **8.2 Academic management**

8.2.1 Medical educational organization **shall** clearly define the responsibility of *academic management* in the development and management of the educational program.

8.2.2 Medical educational organization **should** periodically evaluate academic management regarding the achievement of its mission and the final learning outcomes.

### **8.3 Training budget and allocation of resources**

Medical educational organization **should:**

8.3.1 have a clear set of responsibilities and authority for providing the educational program with resources, including a targeted training budget;

8.3.2 provide resources necessary for the implementation of the educational program and allocate educational resources in accordance with their needs.

8.3.3 The system of financing medical educational organization shall be based on the principles of efficiency, effectiveness, priority, transparency, responsibility, differentiation and independence of all levels of budgets.

Medical educational organization **should:**

8.3.4 provide sufficient autonomy in the allocation of resources, including decent remuneration of teachers in order to achieve the final learning outcomes;

8.3.5 in the allocation of resources, to take into account scientific achievements in the field of medicine and the problems of public health and their

needs.

#### **8.4 Administrative staff and management**

Medical educational organization **shall** have *the appropriate administrative and academic staff*, including their *number and composition in accordance with the qualifications* in order to:

8.4.1 ensure the implementation of the educational program and relevant types of activities;

8.4.2 guarantee proper management and allocation of resources.

8.4.3 Medical educational organization **should** develop and implement an internal quality assurance management program, including consideration of needs for improvement, and conduct regular management review and analysis.

#### **8.5 Interaction with the healthcare sector**

8.5.1 Medical educational organization **shall** have *a constructive interaction with the healthcare sector, with related healthcare sectors of society and government, including the exchange of information, cooperation and initiatives of the organization, which contributes to the provision of qualified doctors in accordance with the needs of society.*

8.5.2 Medical educational organization **should** give *the official status to cooperation with partners in the healthcare sector, which includes the conclusion of formal agreements with the definition of the content and forms of cooperation and/or concluding a joint contract and establishment of a coordinating committee, and conduction of joint activities.*

### **STANDARD 9 “CONTINUOUS IMPROVEMENT”**

Medical educational organization **shall** as a dynamic and socially responsible institution:

9.1.1 initiate procedures for regular review;

9.1.2 revise the structure and functions;

9.1.3 allocate resources for continuous improvement.

Medical educational organization **should:**

9.1.4 base the update process on prospective studies and analyzes, and on the results of own research, evaluation, and medical education literature;

9.1.5 ensure that the process of renewal and restructuring leads to a revision of its policy and practices in accordance with previous experience, current activities and future prospects; guide the update process to the following questions.

9.1.6 Adaptation of the position of the mission and final outcomes to the scientific, socio-economic and cultural development of society.

9.1.7 Modification of graduates' final learning outcomes in accordance with the documented needs of the postgraduate training environment, including clinical skills, training in public health issues and participation in the process of providing medical care to patients in accordance with the duties assigned to graduates after graduation.

9.1.8 Adaptation of the model of the educational program and methodological approaches to ensure that they are relevant and take into account modern theories in education, the methodology of adult education, the principles of active learning.

9.1.9 The adjustment of the elements of the educational program and their interrelation in accordance with achievements in the biomedical, behavioral, social and clinical sciences, with changes in the demographic situation and the health status/morbidity structure of the population and socio-economic and cultural conditions, and the adjustment process will ensure the inclusion of new relevant knowledge, concepts and methods, and the elimination of obsolete.

9.1.10 Development of evaluation principles, methods of conducting and the number of examinations in accordance with changes in the final learning outcomes and teaching and learning methods.

9.1.11 Adaptation of student recruitment policy and student selection methods bearing in mind changing expectations and circumstances, needs for human resources, changes in the pre-university education system and the needs of the educational program.

9.1.12 Adaptation of recruitment policy and the formation of academic staff in accordance with changing needs.

9.1.13 Updating educational resources to meet changing needs, such as enrollment, number and profile of academic staff, educational program.

9.1.14 Improvement the process of monitoring and evaluation of the educational program.

9.1.15 Improvement of the organizational structure and management principles to ensure effective operations in a changing circumstances and needs, and, in the long term, to meet the interests of various groups of stakeholders.

## Bibliography

- [1] Law of the Kyrgyz Republic “On Education” dated April 30, 2003 No. 92 (as amended on January 16, 2015 No. 15)
- [2] The concept of development of education in the Kyrgyz Republic until 2020, approved by the Decree of the Government of the Kyrgyz Republic dated March 23, 2012 No. 201.
- [3] The strategy of education development in the Kyrgyz Republic for 2012–2020, approved by Decree of the Government of the Kyrgyz Republic dated March 23, 2012 No. 201.
- [4] Resolution of the Government of the Kyrgyz Republic of September 29, 2015 No. 670 “On approval of acts on independent accreditation in the education system of the Kyrgyz Republic”.
- [5] MacCarrick G. (2011) A practical guide to using the World Federation for Medical Education standards. WFME 2: educational program. *Ir. J Med Sci.* (2010) 179 (4):489–491. E-Pub 2010 Sep 17 (Received 10.10.2011 from Springer).
- [6] World Federation for Medical Education (2012) Basic Medical Education WFME Global Standards for Quality Improvement. WFME Office, University of Copenhagen, Denmark. (The 2012 Revision)
- [7] WHO/WFME (2005) Guidelines for Accreditation of Basic Medical Education. Geneva/Copenhagen, 2005.
- [8] World Federation for Medical Education (2007) Global Standards for Quality Improvement in Medical Education. European Specifications For Basic and Postgraduate Medical Education and Continuing Professional Development. MEDINE Quality Assurance Task Force, WFME Office, University of Copenhagen, Denmark.
- [9] World Federation for Medical Education (2005) Promotion of Accreditation of Basic Medical Education A Program within the Framework of the WHO/WFME Strategic Partnership to Improve Medical Education. WFME Office, the Panum Institute Faculty of Health Sciences, University of Copenhagen, 2005.
- [10] World Federation for Medical Education (1998) International standards in medical education: assessment and accreditation of medical schools' - educational programs. A WFME position paper. The Executive Council, the World Federation for Medical Education. *Med Educ.* 1998 Sep.; 32(5):549-58.