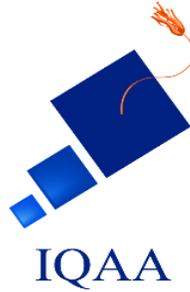# INDEPENDENT AGENCY FOR QUALITY ASSURANCE IN EDUCATION (IQAA)

IQAA

STANDARDS FOR SPECIALIZED (PROGRAMME) ACCREDITATION OF POSTGRADUATE EDUCATION (POSTGRADUATE TRAINING OF DOCTORS IN MEDICAL RESIDENCY PROGRAMMES)

MAIN PROVISIONS

NUR-SULTAN 2020

PREFACE

1   DEVELOPED AND INTRODUCED by the Independent Agency for Quality Assurance in Education (IQAA) with consideration of suggestions and remarks of higher education institutions.

2   APPROVED AND PUT INTO EFFECT by the order of the Independent Kazakh Agency for Quality Assurance in Education (IQAA) dated 01.08.2012 No.4. Partial amendments and additions have been introduced by the order of IQAA dated 25.08.2014, No.7 and 24.08.2015, No.8.

3   HOLDER OF THE ORIGINAL SCRIPT: Independent Kazakh Agency for Quality Assurance in Education (IQAA): 010000, Astana, 20 Dostyk street, office 801, "Saint Petersburg" Business Center, tel./fax: 27-38-20

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INTRODUCTION

Standards for accreditation of postgraduate study programmes on training doctors (residency) have been developed in accordance with the Code "On people's health and the healthcare system"; Laws of the Republic of Kazakhstan "On Education", "On Technical Regulation"; regulations of the Ministry of Healthcare; "International standards of the World Federation for Medical Education to improve the quality of postgraduate medical education", the European standards and guidelines, with the consideration of national and regional needs and priorities of the healthcare system in Kazakhstan.

Postgraduate medical education (residency) is the phase of medical education, during which doctors gain experience after the completion of the basic medical training. In accordance with the Law of the Republic of Kazakhstan "On Education" (No. 319-3 dated 27.07.2007, article 22), the acquirement of the professional training programme (residency) is an obligatory prerequisite for admission to the clinical practice of citizens, who received higher medical education in clinical specialties.

STANDARDS FOR PROGRAMME ACCREDITATION OF POSTGRADUATE EDUCATION (POSTGRADUATE TRAINING OF DOCTORS IN MEDICAL RESIDENCY PROGRAMMES)

General Provisions

1. AREA OF APPLICATION

1.1 These standards are developed in accordance with the Law of the Republic of Kazakhstan "On Education" (article 9-1, paragraph 3) and establish regulatory requirements for the accreditation of postgraduate education programmes and the procedure for its implementation.

1.2 These standards define the main principles and criteria for the programme accreditation.

1.3 These standards are applied during the procedure of programme accreditation in the organizations of education and science, regardless of their status, organizational and legal forms, forms of ownership and subordination.

2. REGULATORY REFERENCES

These standards refer to the following normative regulations:

2.1 Address of the President of the Republic of Kazakhstan Nursultan Nazarbayev to the people of Kazakhstan "Kazakhstan's way - 2050: common aim, common interests, common future" - Astana, January 17, 2014.

2.2 Address of the President of the Republic of Kazakhstan Nursultan Nazarbayev to the people of Kazakhstan "Nurly Zhol - the path to the future" - Astana, November 11, 2014.

2.3 Strategic Plan of Development of Kazakhstan till 2020, approved by the Decree of the President of the Republic of Kazakhstan No. 922 dated February 1, 2010.

2.4 State Programme of Education Development in the Republic of Kazakhstan for 2011-2020, approved by the Decree of the President of the Republic of Kazakhstan No. 1118 dated December 7, 2011.

2.5 Government Resolution No.130 dated February 11, 2011 "Action Plan for 2011-2015 on implementation of the State programme of education development in the Republic of Kazakhstan for 2011-2020".

2.6 The Law of the Republic of Kazakhstan "On Education" dated July 27, 2007 No. 319-III (with amendments and additions as on 21.07.2015).

2.7 The Law of the Republic of Kazakhstan "On Technical Regulation" No. 603-II SAM dated November 9, 2004 (as amended on 16.02.2012).

2.8 Order of the Minister of Education and Science of the Republic of Kazakhstan dated June 2, 2014 No.198 "On amendments and additions to the order of the Minister of Education and Science of RK dated April 20, 2011 No.152 «On approval of rules of the organization of the study process by credit technology of education".

2.9 Standards and guidelines for quality assurance in the European Higher Education Area (ESG) (Revised) (Approved at the Yerevan Conference of Ministers of Education in May 14-15, 2015).

2.10 The ECTS Users' Guide (the European Credit Transfer and Accumulation System) - Publications Office of the European Union, 2015, ISBN 978-92-79-43562-1 (Approved at the Yerevan Conference of Ministers of Education in May 14-15, 2015).

2.11 The State Obligatory Standard of Medical Residency Programmes (approved by the order of the Acting Minister of Health and Social Development of the Republic of Kazakhstan No.647, dated July 31, 2015).

3. TERMS AND DEFINITIONS

3.1 Accreditation of educational institutions - procedure for recognition by the accreditation body the compliance of educational services with established accreditation standards (regulations), with the aim to provide objective information about their quality and confirm the existence of effective mechanisms for their promotion.

3.2 Specialized Accreditation (Programme Accreditation) - assessment of the quality of individual study programmes implemented by the educational institution.

3.3 Analysis - the process of identifying, gathering and preparing data for evaluation of educational objectives of the programme and achieved learning outcomes of students. An effective analysis uses appropriate direct, indirect, quantitative and qualitative parameters, suitable for measurable purposes or results.

3.4 Academic leadership - this concept refers to the administrative officials of the organization, managers responsible for making decisions on academic matters in teaching and learning, on research and service delivery in the system of healthcare, as well as on administration and management.

3.5 Basic biomedical data sciences include Anatomy, Histology, Molecular Biology and Genetics, Biochemistry, Biophysics, Physiology, Pathological Anatomy, Pathological Physiology, Microbiology, Immunology, Pharmacology, and others.

3.6 The overarching framework of qualifications for the European Higher Education Area - the framework of qualifications, designed for higher education institutions in Europe and adopted at the Bergen Conference (2005), covering three consecutive cycles of higher education: the first cycle – Bachelor's degree, the second cycle – Master's degree and the third cycle - Doctoral studies (including a possibility of intermediate qualifications in the national contexts), generic Dublin descriptors for each cycle based on learning outcomes and competences, and credit ranges for the first and second cycles.

3.7 Descriptors of Levels / Qualifications - description of general for the specific level of education intended learning outcomes, that is, knowledge and understanding, ability to apply them in practice, ability to make judgments, and communication skills.

3.8 Distance Learning Technologies (hereinafter - DLT) - learning technologies, implemented with the use of information and telecommunication tools in the mediated (distant) or not fully mediated interaction of students and teaching staff.

3.9 The European Association for Quality Assurance in Higher Education (ENQA) - a pan-European body that disseminates information, promotes the implementation of best practices and innovative approaches in the field of quality assurance in higher education among European quality assurance agencies, public authorities and HEIs.

3.10 The European Association of Institutions in Higher Education (EURASHE) - the European association of higher education institutions that conducts a coherent and transparent policy in the field of higher education in the context of the Bologna reforms and defends the interests of HEIs.

3.11 The European University Association (EUA) - the association at the European university level with the purpose of conducting a constructive and coordinated policy in the field of higher education, ensuring active participation of universities in the Bologna process, providing support to HEIs in the protection of their autonomy, the right to self-governance, academic freedom in conducting educational activity and research.

3.12 The European Credit Transfer and Accumulation System (ECTS) – a student-centred system based on workload of study programmes and a systematic way of describing a study programme by assigning credits to all of its components.

3.13 The European Higher Education Area (EHEA) – the educational area of the Bologna process member states that conduct a coherent and transparent policy in the field of higher education.

3.14 Institutional autonomy includes the appropriate level of independence from the Government and other organizations (regional and local authorities, religious communities, private organizations, professional trade unions and other groups by interests) for independent decision-making on issues such as development of study programmes, admission of residents, selection and enrollment of employees, work conditions, research and resource allocation, etc.

3.15 Informational support - accessible and clearly defined information for students, faculty and staff (website, electronic and hard copy forms) on the policy of the university

in various fields of activities: the study process - curricula, syllabi, informational materials, handbooks on study programmes, catalogues of elective disciplines, and others, the assessment criteria of learning outcomes, information about training courses, cost and order of payment for training, etc.; a reference book with personal data (address, contact numbers and e-mail addresses) of administrative and teaching staff; internal rules; operation of supporting services, etc.

3.16 Quality in higher education - a multi-dimensional characteristic of higher education, covering the relevance of learning outcomes, training processes and institutional frameworks to the purposes and needs of the society, the state and the individual.

3.17 Competence - Based Approach - an approach to the design of learning outcomes based on competences.

3.18 Competence - a dynamic combination of characteristics (pertaining to knowledge and its application, skills, abilities, values and personal qualities), describing the learning outcomes of the study programme, i.e., what is needed to a graduate for an effective professional activity, social activity and personal development, what he/she is obliged to master and demonstrate.

Competence is defined as the specific knowledge, skills, attitudes or behavior. Competence, which corresponds to the postgraduate medical training at the level depending on the chosen medical specialty, includes the following:

• medical knowledge in the field of basic biomedical, clinical, behavioral and social sciences, including the issues of medical ethics and medical law with their application in practices of patient care;

• provision of appropriate, effective and compassionate care to patients; timely treatment of diseases and practices for their prevention;

• communication skills - interpersonal and other communication as a tool for providing efficient contact, communication with patients and their relatives; work in a team with other healthcare professionals, scientific and public communities;

• evaluation and application of new scientific knowledge for the purpose of constant updating and improvement of clinical practices;

• taking the role of the head, instructor (mentor/supervisor) and a teacher in relation to colleagues, medical students and other healthcare professionals;

• applied research potential for introducing the contribution to the development of science and scientific search in the chosen medical field;

• professionalism;

• interest and ability to act as a defender of a patient;

• knowledge of public health and public policy issues in the field of health, state

and national health programmes; knowledge of the main trends in the global system of healthcare, global challenges in the field of public health and healthcare at the present stage.

3.19 Mobility of European students, teaching staff and researchers - a key principle of formation of the European Higher Education Area and the European Research Area, providing multiple opportunities for free movement of European students, teaching staff and researchers in these areas in order to accumulate on a personal level academic and general cultural potential of development of national higher education systems and increase their impact on socio-economic development of their countries.

3.20 Module – a logically built, substantively and methodologically integral part of the educational process within a certain set of expected learning outcomes, expressed in terms of competences and characterized by difficulties in their achieving in credits.

3.21 Modularisation in education – a modular construction of the educational process, structuring the expected results of education and the content of study programmes into separate *modules*, equipped with the characteristics of workload of acquiring them in credits, as well as technologies of learning, teaching, assessment, etc.

3.22 Material and technical base includes lecture halls, classrooms, academic and research laboratories, laboratories of clinical skills, teacher rooms, libraries, informational resources, recreational facilities for residents, adequate classrooms, halls for recreation, transportation, catering for students living in dormitories, storage space for personal belongings of residents, sports facilities, facilities for recreation, and others.

3.23 Medical ethics includes ethical issues in the medical practice – ethical norms for doctor's behavior, decision-making in the tactics of serving a patient in accordance with moral values, ethical side of rights and obligations of medical workers and patients, etc.

3.24 Medical law includes regulative - legal acts regulating the activities of the healthcare system in various aspects of medical practice, including the rules of production and the usage of medicine, as well as the rights and responsibilities of healthcare professionals and patients.

3.25 Continuing Medical Education / Continuing Professional Development CME / CPD includes continuous life-long learning after the basic and postgraduate medical education and all activities, which doctors perform both formally and informally in order to maintain, update, develop and improve their knowledge, skills and attitudes in response to the needs of patients. CPD is a broader concept than CME and includes a continuous development of knowledge and skills in medical practice.

3.26 Lifelong learning - any form of education, vocational or general education at all levels, as well as continued after a break following the prior education.

3.27 Study Programme - the organizational and methodological document, structuring the content and scope of knowledge, forms of organization of the study process, the sequence and periods of mastering courses, modules, diagnostic tools of training success, certification, expected learning outcomes, including the formation of competences leading to attainment of an academic degree.

3.28 Educational Goals of the Programme - a set of expected results of the implementation of a study programme by a certain direction, level and profile of training of specialists with higher education.

3.29 Assessment / Evaluation - an interpretation of the data and evidence collected during the analysis. The assessment/evaluation determines the degree of achievement of the educational objectives of the programme, students' learning outcomes, and leads to decisions and actions regarding the improvement of the programme.

3.30 Policy in the Field of Quality Assurance - the main directions and objectives of the organization in terms of quality, approved by senior management on the basis of a thorough discussion among the staff.
A policy in quality assurance sets the direction of the organization development. In such a document, the organization's leadership publicly defines the basic priorities and values, which it will follow with regard to all its stakeholders (customers, employees, suppliers, society, etc.). This document additionally indicates what the leadership intends to do to implement the stated priorities and values.

3.31 Recognition of an educational qualification - on the one hand, an official confirmation of the value of a foreign educational qualification by the competent authority, on the other hand, the positioning of a holder of a foreign qualification in the system of education or employment of the receiving side to access educational and/or professional activities.

3.32 Diploma Supplement (DS) - a pan-European standardized addition to the official document on higher education, which is used to describe the nature, level, context, content and status of the studies, successfully completed by the holder of the educational qualification.

3.33 Profile of Study - a set of basic common features, characteristics of the study programme, reflecting specific areas of higher education.

3.34 Site Visit of the External Expert Group - a component of the external evaluation, which is a common part of the accreditation process. The external reviewers-experts visit a HEI to check the materials of institution's self-evaluation, to interview faculty members, students, staff and evaluate the quality and effectiveness of services provided, as well as to propose recommendations for their improvement. The result of the site visit is the external review report.

3.35 The Process of Self-evaluation/Self-assessment - the process of internal evaluation conducted by a HEI on the basis of standards and criteria for specialized accreditation, which results in a self-evaluation report.

3.36 Postgraduate medical and pharmaceutical education includes residency, master and doctoral programmes. Postgraduate education is carried out in the residency of higher education institutions and research organizations. Residents pass advanced training in clinical specialties lasting from two to four years, depending on the specialization. The provision on the residency is approved by the authorized body in the field of healthcare.

3.37 The principle of equality means equal attitude towards residents, regardless of their sex, race, religion, socio-economic status, and physical abilities.

3.38 Professionalism implies the state of possessing knowledge, skills, attitudes, moral values and behavior expected by patients and society from individuals during their professional practice, and includes such concepts as the skills for life-long learning, maintainance of the level of competence, informational literacy, ethical behavior, integrity of the personality, honesty, altruism, service to others, adherence to professional code, justice and respect to others.

3.39 Residency is a form of obtaining postgraduate extensive medical education in clinical specialties.

3.40 Learning Outcomes - a set of competences, expressing what a student will know, understand or be able to do upon completion of the learning process.

3.41 A resident is a specialist, who studies on a medical residency study programme.

3.42 Student-Centred Approach in Education - a fundamental principle of the Bologna reforms in higher education, involving a shift of emphasis in the educational process from

teaching (as a main role of teaching staff in "translation" of knowledge) to learning (as an educational activity of students).

3.43 Relevant stakeholders include representatives of other academic and administrative bodies, authorized bodies for education and health care at all levels, medical research organizations, individuals responsible for postgraduate education and continuing professional development, professional organizations, civil society, non-governmental associations and non-governmental organizations (NGOs), patients and others.

3.44 Work Load - a quantitative measure of learning activities of students in ECTS credits, necessary for the successful achievement of the expected learning outcomes.

3.45 Employability - a set of competences, knowledge, abilities/skills, understanding and personal characteristics, which provides graduates with career prospects in their chosen profession and contributes to the development of economy and society.

3.46 Formal, **non-formal and informal education/learning:**
Formal education - acquisition of an approved study programme on the basis of an educational institution.
Non-formal learning - learning, carried out during a planned activity that involves so-called "semi-structured" learning that occurs during daily working situations, containing a training component.
Informal learning – learning resulting from the course of everyday life: at work, in the family, etc.
The European Ministerial Conference in Bergen (2005) recommended to officially recognize the status of non-formal and informal learning.

4. ABBREVIATIONS AND ACRONYMS

The following abbreviations and acronyms are used in these standards:
SOSE – State Obligatory Standards of Education
DET – Distance Educational Technologies
MES RK – Ministry of Education and Science of the Republic of Kazakhstan
MHSD RK – Ministry of Healthcare and Social Development of the Republic of Kazakhstan
R&D – Research and Development Work
IQAA – Independent Kazakh Agency for Quality Assurance in Education
TS – Teaching Staff
SP – Study Programme
RSP – Residency Study Programme

5. GENERAL PROVISIONS

5.1 Accreditation of a study programme is the official expertise carried out by the accreditation agency to define compliance of training in a study programme according to adopted standards and requirements. Accreditation should recognize (or not recognize) that a study programme meets the standards.

5.2 Accreditation is aimed at quality assurance, integrity and reliability of an educational institution by an accredited specialty. It should build trust on the part of prospective students and their parents, the recognition of the validity of gained education by graduates on the part of employers.

5.3 The main objectives of the specialized (programme) accreditation are:
a) to ensure that graduates of accredited study programmes gain qualifications required for practicing a profession;
b) to promote further improvement and continuous progress of the quality of training of students;
c) to support constant innovation in the implementation of study programmes;
d) to pursue transparency of comparable study programmes.

5.4 The subject of specialized (programme) accreditation is independent study programmes of organizations of education and science.

5.5 The focus of specialized accreditation is directed at the content side of the study process: fundamental knowledge, professional knowledge, practical skills, and use of information technologies.

5.6 Accreditation of study programmes evaluates the following: a) availability of clearly defined study programme aims consistent with the mission of the educational institution and the requirements of stakeholders; b) availability of the system used for assessment of the achieved outcomes; c) availability of a system for continuous improvement of study programmes; d) availability of necessary resources to implement the programmes, learning outcomes.

5.7 Specialized (programme) accreditation is carried out using an arsenal of assessment tools, such as assessment of quantitative indicators of the study programme implementation; assessment of a self-control system; questionnaire; assessment of educational process management in the framework of the programme under accreditation; analysis of opportunities (SWOT analysis); assessment of resources (material and technical, human, financial); assessment of the reporting system.

5.8 The procedure of IQAA specialized accreditation is universal for accreditation of any study programme.

6. PRINCIPLES OF SPECIALIZED (PROGRAMME) ACCREDITATION

6.1 Specialized (programme) accreditation is based on the following principles:
a) voluntariness of specialized accreditation procedure, which is held at the request of an educational institution;
b) integrity and transparency of internal and external evaluation, ensuring access to information for the participants of the conducted process of accreditation;
c) the objectivity and independence of the internal and external evaluation;
d) the responsibility of educational institutions: they have a primary responsibility for the quality of higher education;
e) confidentiality: the information submitted is used by the Agency without disclosure to third parties.

6.2 External evaluation of study programmes is conducted independently from any third parties (public authorities, HEIs and non-governmental organizations).

6.3 Public information in the country and abroad on the accredited programmes is carried out by providing information to the Ministry of Education and Science of the Republic of Kazakhstan and publication of the information on the website of the Agency.

7. OBJECTIVES AND FUNCTIONS OF SPECIALIZED (PROGRAMME) ACCREDITATION

7.1 The objectives of specialized (programme) accreditation are:
- quality assurance of the study programme;
- providing support to prospective students in choosing a study programme;
- providing information about the study programme to a wider public;
- establishment of a system of collective self-regulation to maintain the balance between the rights of the study programme on academic freedom and responsibility to the state and society;
- assistance in securing international recognition of Kazakhstani diplomas issued by accredited specialties;
- receiving an independent evaluation of the quality of study programmes and training of specialists by the organization, as well as obtaining recommendations for improvement of its study programmes.

7.2 Functions of the programme accreditation are:
- a highly qualified expertise of quality and content parameters of education;
- disclosure of the educational potential of the programme that guarantees high standards to consumers and investors;
- evaluation of a study programme in terms of its status, determination of the degree of compliance with the programme requirements, established by the accreditation body and professional associations of employers;
- improvement of organization's efficient application of financial and other resources, allocated by the state and society, due to their rational redistribution in favor of the accredited specialities and programmes.

7.3 Programme accreditation allows government bodies to make appropriate decisions to support the study programme and assists employers and organizations to invest in the study programme.

8. STAGES AND PROCEDURES OF SPECIALIZED (PROGRAMME) ACCREDITATION

8.1 Specialized accreditation procedure is developed in accordance with the European standards and guidelines for quality assurance (ESG), leading foreign practice (guides) and national standards.

8.2 The accreditation procedure includes the following stages:

Stage 1

1) An organization of education and science applies to the Agency for accreditation with a brief description of the organization and a study programme;
2) The organization of education and science and the Agency sign a contract on accreditation of the study programme. The contract specifies the rights and obligations of the parties, the cost of the procedure, and terms of conducting the accreditation procedure;
3) The organization of education and science conducts a self-evaluation process, writes a self-evaluation report in accordance with the IQAA standards and criteria;
4) The organization of education and science presents a self-evaluation report not later than 2 months prior to the external review in electronic form and by one hard copy in Kazakh, Russian and English.

Stage 2

5) Regulation of the expert group's work is carried out according to the standards and guidelines for external evaluation, approved by the Agency;

6) The Agency forms a competent group of experts, which consists of representatives of the academic community of Kazakhstan, an employer, a student and an international expert;

7) The composition of the expert group is reported to the applicant 1-2 months prior to an external review. If there arise any suspicions of bias of the reviewers, the organization has the right to refer to the Agency for replacement of the expert, enclosing a written reasoned explanation;

8) The expert group studies the self-evaluation materials, visits the organization and conducts an external review, generates a report on the external evaluation and hands it to the Agency;

9) The external review of the organization is carried out within 2-3 days;

10) External experts form the report and recommendations within no longer than two weeks since the start of the external review, then the chairman or secretary of the expert group sends it to the Agency;

11) IQAA forwards the expert group's report to the organization for elimination of small inaccuracies, if there are any;

12) The organization, if necessary, has the right to make minor adjustments to the final report of the external review in case of any discrepancies, after communication of the changes with the chairman of the expert group within one week after receipt of the report.

Stage 3

13) After studying the self-evaluation materials and the external review report, the Agency prepares a conclusion for the Accreditation Council.

14) The Accreditation Council makes a decision.

9 DECISION MAKING OF THE ACCREDITATION COUNCIL

9.1 Decision making of the Accreditation Council is based on the self-assessment report, the review report of the external experts and the conclusion of the Agency.

9.2 A positive report of the expert group and the conclusion of the Agency are an obligatory prerequisite for a positive decision of the Accreditation Council.

9.3 The decision-making is carried out on the basis of criteria approved by the Accreditation Council.

9.4 The Accreditation Council makes one of the following decisions:
- Accreditation for the full term (5 years);
- Accreditation with a condition for a period of 3 years;

- Denial of accreditation.

9.5 In case of a positive decision of the Accreditation Council on accreditation, IQAA issues to the educational organization a certificate on institutional accreditation for a period of five years.

9.6 In case of accreditation with the condition, in 1-3 years the Agency representatives conduct a revision on the question of eliminating the remarks (site visit to the educational organization). After confirmation of eliminating the remarks, the accreditation validity period is extended to 5 years (in conjunction with the term of accreditation with the condition). The costs of an additional revision shall be covered by the educational organization.

9.7 In case of a positive decision, the decision on accreditation of the organization is forwarded to the Ministry of Education and Science of the Republic of Kazakhstan and is published on the website of the Agency www.iqaa.kz.

9.8 In case of a negative decision, the educational organization can re-apply for accreditation, but not earlier than one year after receiving a negative decision.

10 STANDARDS FOR PROGRAMME ACCREDITATION OF POSTGRADUATE EDUCATION (POSTGRADUATE TRAINING OF DOCTORS IN MEDICAL RESIDENCY PROGRAMMES)

STANDARD 1.
AIMS OF STUDY PROGRAMMES AND POLICY IN THE FIELD OF QUALITY ASSURANCE

1.1 General provisions of the standard

1.1.1 Postgraduate medical education study programmes (residency) should be carried out in accordance with the mission and strategy of development of the organization. They should define the aims of training, competences and skills of a future expert, which residents must acquire during the training within the framework defined by the appropriate competent (authorized) body (Ministry of Healthcare and Social Development) in agreement with professional organizations for medical clinical specialties and should satisfy all stakeholders.

1.1.2 The policy in the field of quality assurance of study programmes as a part of the policy in the field of quality assurance of the organization should have an official status, as well as be accessible to all participants of the educational process and stakeholders.

1.1.3 Policy in the field of quality assurance of study programmes is implemented at all levels of the organization (administration, departments, units) for the development of a quality culture. All staff members, who ensure the implementation of study programmes, including residents, should take part in the development of programmes and take responsibility for their quality.

1.2. Assessment criteria

1.2.1 Compliance of goals with final outcomes of postgraduate medical education (residency), mission, strategic plan, goals and objectives of the organization and satisfaction of the needs of residents to obtain relevant qualifications and competences; the requirements of the Ministry of Healthcare and Social Development.

1.2.2 The reflection of innovative approaches to learning, achievement of broader competencies, support of ongoing commitment to improving the quality of medical care, conduct of research in a selected direction, preparation for further continuing professional education and development throughout life in objectives and tasks to achieve the final results of the RSP.

1.2.3 The procedure for the adoption and approval of policies in the field of quality assurance. Compliance of study programmes with regulatory requirements adopted at the national level and with the requirements of SCSE.

1.2.4 Participation of the administration, faculty and residents in the formation and support of the policy on ensuring the quality of study programmes: the responsibilities of departments, faculties (schools) and other structural units. Participation of external stakeholders in the implementation of policy to ensure the quality of programmes.

1.2.5 The availability of systematic monitoring, performance evaluation, review of policy in the field of quality assurance of study programmes on the basis of information management, depending on changing conditions and environment (labor market, partners, the world).

1.2.6 The degree of interaction between learning, teaching and research in the policy on quality assurance of programmes.

1.2.7 Efficiency and systematic use of evaluation results to improve and adjust the long-term directions of programmes, setting new goals in accordance with changes in environmental conditions.

1.2.8 Measures to maintain academic integrity and academic freedom, protection from any form of intolerance and discrimination against students, faculty or staff.

1.2.9 Anti-corruption policy in the organization as an important element of policy in the field of quality assurance of programmes. Anti-corruption measures, the availability of management, faculty for teachers and residents, flexibility in responding to requests.

1.2.10 The focus of the preparation process of residents to strengthen the professionalism of a doctor, which includes knowledge, skills, attitudes and behavior expected by patients and society, as well as learning skills throughout life, development of competences, information literacy, ethical behavior, personal integrity, honesty, altruism, service to society, adherence to professional codes, justice and respect to others.

1.2.11 SWOT analysis of internal and external environment of the organization (assessment of strengths and weaknesses, threats and opportunities).

STANDARD 2.
DEVELOPMENT, APPROVAL OF STUDY PROGRAMMES AND INFORMATION MANAGEMENT

2. 1 General provisions of the standard

2.1.1 The organization should have rules for the development and approval of residency study programmes, including the process of management, implementation and evaluation of their effectiveness. The organization should conduct monitoring of RSP.

2.1.2 The organization should effectively manage information based on a continuous monitoring, data collection, analysis and the usage of the received information.

2.1.3 Training should be based on personal involvement of residents in the provision of services to patients and the division of responsibilities for the results of these

services within the framework of the active legislation. The training programme should include an integrated practice and theoretical training. Each resident should have a possibility to obtain advice on training.

2.1.4 Training in residency is carried out taking into account the principles of continuity with basic medical education and continuing medical education / development. Training and education of residents should be supervised by a head with a regular evaluation and feedback. With the acquisition of knowledge, skills and experience, it is important to ensure an increasing degree of personal responsibility of residents for their activities (within the law).

2.1.5 A resident must obtain knowledge about the methods of diagnosis and treatment used in the chosen field of specialization according to the latest achievements of science and practice. In order to make clinical decisions, a resident should be guided by the principles of evidence-based medicine.

2.1.6 An RSP should consider achievement of such competencies (knowledge, skills, attitudes and personal qualities) as a professional specialist in his or her field, a defender of health and a healthy lifestyle, a communicator, a team member, a researcher, an administrator and a manager.

2.2 Assessment criteria

2.2.1 Availability of the internal rules on the development and approval of study programmes, compliance with their regulations in the organization.

2.2.2 The usage of technology on modular training and development of modular study programmes.

2.2.3 Compliance of an obligatory part of the content of RSP with requirements of the SCSE of the appropriate level and the model curriculum.

2.2.4 Compliance of the structure and content of working curricula with the model curricula and the catalogue of elective disciplines.

2.2.5 Study and methodological support of study programmes.

2.2.6 The need for study programmes on the part of residents and labor market. The list of disciplines included in the curriculum by the suggestions of employers. Involvement of residents in the process of the development of study programmws.

2.2.7 Consistency of study programmes with the sectoral framework of qualifications and professional standards. Availability of an external review during the approval of the programme.

2.2.8 Availability of a working curriculum for the entire period of study, as well as an individual plan of training in residency based on the model curricula, which requires a personal participation of residents in the provision of services to patients and the division of responsibilities for the results of these services within the framework of the active legislation. The combination of integrated practice and theoretical learning. The availability of consultations on training for each resident. Reflection in the programme on

continuity with basic medical education and continuing medical education / development. The availability of heads, who conduct regular assessments of residents (formative and summative) and provide feedback.

2.2.9 The provision of learning process with scientific foundations and methods used in the field of specialization, as well as evidence-based medicine. The availability of special training courses, including a critical assessment of literature, scientific data and evidence-based medicine, as well as research internship in the RSP.

2.2.10 Availability of practical work in clinics and hospitals, as well as theoretical training in the field of basic biomedical, clinical, behavioral and social sciences in the RSP; clinical decision-making, communication skills, medical ethics, politics in the field of public health, medical law and administrative disciplines required for professional practice in the chosen field of medicine.

2.2.11 Implementation of the training of residents in their workplaces. The usage of abilities of the system of healthcare for preparation of residents. The conduct of residents' training in parallel with the provision of healthcare services.

2.2.12 Policy on the provision of opportunities for individual training in other organizations within or outside the country, consistent with the requirements for the completion of training and transfer of hours (ECTS credits) for training. It is important to support regional and international exchange of students and staff (academic mobility), providing the appropriate resources for this.

2.2.13 Availability of management for RSP. Description of the management structure, responsibility for the organization, coordination, management, assessment of each place for review procedures, coordination and approval of all components of the study programme. Provision of training in the relevant to a chosen field of specialization clinical basis.

2.2.14 The frequency of programme modification based on scientific achievements, and health and social needs. Approaches and methods of the programme evaluation with the purpose of modification. On-going monitoring and periodic review of RSP.

2.2.15 SWOT analysis of internal and external environment of the organization (assessment of strengths and weaknesses, threats and opportunities).

STANDARD 3.
STUDENTS, STUDENT-CENTERED LEARNING, TEACHING AND ASSESSMENT

3.1 General provisions of the standard

3.1.1   A resident is a specialist, who undergoes a medical residency study programme.

3.1.2 Teaching methods, through which the programmes are implemented, should encourage students to play an active role in the learning process.

3.1.3   The organization, which provides residency study programmes, should include an assessment of residents, methods and criteria for examinations.

3.2.4 Methods of assessment should be varied, objective and ensure a proper monitoring of mastering a programme, including through the use of external examiners.

3.2 Assessment criteria

3.2.1 Development of academic load for residents. Completeness of reflection in the individual curricula of all components and elements of the study programme.

3.2.2 The availability of a clear procedure for registration on academic disciplines, the practice of its implementation and compliance.

3.2.3 Assessment of learning outcomes and the level of students' training. The applied system of assessment of knowledge, skills and competences, its compliance with the accepted practice at the national level. Assessment policies and procedures, transparency and accessibility.

3.2.4 Awareness of residents on the criteria used for assessment, exams and other forms of control. Availability of standardized tests or questions on the disciplines of study programmes approved by the organization.

3.2.5 Organization and conduct of clinical examinations at the bedside of patients with the usage of simulation technology, standardized patients, technology of OSCE (objective structured clinical examinations) and other approaches.

3.2.6 Acquisition of study programmes by residents in accordance with regulatory requirements. Organization of residents' independent work. Methods of monitoring its implementation.

3.2.7 The availability of electronic database on academic achievements of every resident, systematic data collection, monitoring and management of information regarding the residents' progress.

3.2.8 The availability of a system of internal monitoring of the quality of residents' knowledge, which includes:

a) the criteria and methods of assessment, their transparency, objectivity and fairness;

b) analysis of achieved learning outcomes, comparison with the expected learning outcomes, making managerial decisions;

c) participation in the examination procedures of more than one teacher;

d) usage of mitigating circumstances in the assessment rules, if any;

e) compliance with the Rules adopted at the national level during the process of assessment.

3.2.9 The organization demonstrates the use of the official procedure of consideration of residents' appeals. The appeals procedure. The possibility of replacing mentors and re-training. Involvement of external examiners.

3.2.10 Compliance with "zero tolerance" principle to any kind of dishonest attitude to learning, teaching and receiving marks.

3.2.11 The results of the interim and final assessment of residents.

3.2.12 Residents' participation in scientific research, availability and effectiveness of international exchanges and internships.

3.2.13 Availability of the policy on integration of clinical activity with medical research. Residents' participation in research projects and programmes. Achievements and mechanisms of incentives.

3.2.14 Regular analysis of achieved learning outcomes in relation to the expected results.

3.2.15 Compliance with the rules of academic transfer, restoration and providing academic leave.

3.2.16 Residents' satisfaction with the quality of educational services (systematic surveys).

3.2.17 Availability of the policy on residents' participation in the development, evaluation of RSP, training conditions at clinical sites and other issues. Mechanisms to encourage residents' participation in the process of decision-making on the improvement of RSP, etc.

3.2.18 SWOT analysis of internal and external environment of the organization (assessment of strengths and weaknesses, threats and opportunities).

STANDARD 4.
ADMISSION OF STUDENTS, PROGRESSION, RECOGNITION AND CERTIFICATION

4.1 General provisions of the standard

4.1.1 Organizations, providing RSP must use approved and published rules, which cover all periods of a student's "life cycle": the conditions for admission, assessment criteria and conditions for the transfer from one year of study to another, the tools for

accimilation, monitoring and management of information on the progress of residents, the receipt of documentation with information regarding the rewarded qualification.

4.1.2 Organizations providing RSP should have a policy on the criteria for selection and admission of residents. If the organization has an institutional autonomy, it should have its own admission policy. Admission policy should be periodically reviewed, taking into account the needs of public health and society.

4.1.3 The number of accepted residents must correspond to the clinical / practical training possibilities, the maximum allowable load of mentors and material and technical capabilities of the organization. The number of admitted residents should be constantly coordinated with relevant stakeholders taking into account the needs for medical personnel in various fields of medicine. The review should be carried out on a regular basis taking into account the needs of the industry and the situation on the labor market.

4.2 Assessment criteria

4.2.1 The availability of the policy on residency admission. The availability of the structure responsible for the admission.

4.2.2 Criteria for applicants enrolled into the residency programme, the frequency of review of admission policies (for organizations with institutional autonomy). The appeals procedure. Restrictions for residency training. Availability of procedures for transfer of students from one organization to another, from one training programme to another.

4.2.3 Reflection of stages of a student's "life cycle": conditions for students' admission, terms and conditions of their training, the rules of different types of testing and certification of learning achievements, techniques and evaluation criteria, obtained qualifications in internal documents of the organization and their availability.

4.2.4. The procedure on determining the number of admitted residents. Consideration of possibilities for clinical / practical training, maximum allowable load of mentors, as well as consideration of material and technical resources. Coordination of the number of admitted residents with relevant stakeholders on the basis of the need for medical personnel in various fields of medicine. The frequency of review.

4.2.5 Statistical indicators for the last 5 years by the number of residents (number of residents studying on grants and on a fee basis, by area of study programme, foreign citizens).

4.2.6 Availability of monitoring of residents' performance and achievements in assessment of learning outcomes.

4.2.7 Availability of statistical data on residents' performance, graduates, with different levels of GPA, the results of graduates' employment, including employment by the acquired specialty after completion of the study programmes; satisfaction of employers with the quality of graduates' level of training, etc.

4.2.8 Implementation of analysis and assessment of the main indicators of learning outcomes:

a) the level of requirements for the competitive selection of applicants;

b) the degree of preparedness of graduates to meet the requirements of SOSE;

c) the degree of demand for graduates in the labor market;

d) reviews of employers.

4.2.9 Provision of residents with documents of the qualification awarded, including the achieved learning outcomes.

4.2.10 Provision of graduates with a Diploma Supplement in accordance with European standards, in the context, level, content and status of training, acquired and successfully completed, taking into account the individual trajectory and the mobility of residents.

4.2.11 Availability of the standardized methods for ongoing monitoring and ensuring the results, in particular, the method of questioning for each discipline by using standardized questionnaires, in which students are encouraged to give their independent assessment.

4.2.12 Availability of standardized methods for on-going monitoring and ensuring the results, in particular, the method of survey in each discipline by using standardized questionnaires, in which residents are offered to give their independent assessment.

4.2.13 Allowing a resident to work in the chosen field of medicine in his or her spare time from study. Terms of medical services and the residents' responsibility in their provision (depending on the year of study).

4.2.14 SWOT analysis of internal and external environment of the organization (assessment of strengths and weaknesses, threats and opportunities).

STANDARD 5.
TEACHING STAFF

5.1 General provisions of the standard

5.1.1 The role of a teacher is critical to high-quality education. Organizations providing RSP must have objective and transparent processes of recruitment, policy on assignment of curators, clinical mentors, professional growth and development of the teaching staff.

5.1.2 The teaching staff should have complete knowledge and understanding of the specifics of taught subjects, necessary skills and experience, including clinical experience for the effective transfer of knowledge to residents.

5.1.3 Organizations, providing RSP carry the primary responsibility for the quality of activities by their staff and provision of favorable conditions for their activities.

5.2   Assessment criteria

5.2.1 Staff policy of the organization, which reflects the institutional procedures regarding the faculty and staff (recruitment, appointment to the position of instructors (mentors / supervisors, managers, career growth, encouragement, reduction, dismissal, rights and responsibilities, job descriptions); its accessibility to the faculty and staff.

5.2.2 Functional responsibilities of the teaching staff with the determination of the ratio of educational functions, medical service functions, etc. The proportion of attracted practitioners for training residents, including volunteers.

5.2.3 Indicators for the qualitative composition of teaching staff, faculty category (regular, part-time) for the last 5 years.

5.2.4 Availability of appropriate experts by the profile of study programmes: compliance with basic education, specialty code of academic degree and rank, career development courses and practical work experience in modern (advanced) enterprises. Organizations should ensure the qualification level of the teaching staff in accordance with their positions, a high level of scientific training in a particular field of knowledge.

5.2.5 The contribution of teachers to the improvement of programmes, determination of educational goals and outcomes, and to the increase of the teaching efficiency.

5.2.6 The degree of involvement of teachers in the internal system of quality assurance.

5.2.7 The results of the systematic assessment of teachers' competences by the administration, assessment of the effectiveness of teaching quality (open classes, mutual visits of classes, surveys of students and colleagues, etc.).

5.2.8 Availability of the system for professional development and promotion of teachers for their high pedagogical skills, scientific achievements and dedication to work.

5.2.9 Publications of the teaching staff in foreign and national research journals, the introduction of research results in the study process. Publications with impact factor, citation of teaching staff's publications.

5.2.10 The usage of innovative teaching methods (TBL, PBL, CBL and others). Methods for evaluating their effectiveness.

5.2.11 Consideration of issues concerning academic honesty of the faculty and administrative staff.

5.2.12 Availability of invited highly-skilled professionals from the leading organizations and industry.

5.2.13 SWOT analysis of internal and external environment of the organization (assessment of strengths and weaknesses, threats and opportunities).

STANDARD 6.
LEARNING RESOURCES AND STUDENT SUPPORT

6.1 General provisions of the standard

6.1.1 Organizations providing RSP should ensure that resources used for the organization of the study process are adequate and meet the requirements of implemented study programmes.

6.1.2. Educational environment: material and technical resources, financing, training and laboratory facilities, clinical databases, library fund, informational equipment should be focused on successful implementation of study programmes.

6.1.3 Financial policy of the organization should focus on maintaining the quality of study programmes. The budget of the organization must be sufficient and fully provide study programmes.

6.2 Assessment criteria

6.2.1 Availability of well-defined institutionalized places for residency training with relevant clinical opportunities (number of patients with nosological forms appropriate for training programmes), including hospitals, organizations of primary healthcare, etc. Availability of contracts with identified places for residency training. Monitoring of places for residency training.

6.2.2 Presence of clinical base, which provides the opportunities to learn team-work skills with colleagues and other professionals in the field of healthcare. Availability of the approach for teaching residents of managerial skills and training of other healthcare professionals to work in a multidisciplinary team.

6.2.3 Availability of modern tools, equipment, classrooms, laboratories, their accessability, serviceability; maintaining and updating of material and laboratory facilities.

6.2.4 A uniform system of library and information services, access to modern databases in the field of fundamental and applied medicine. Availability of the electronic catalogue and electronic library. Availability of fund with educational, methodical, scientific and clinical literature. Provision index.

6.2.5 Availability and condition of the computer park used by residents. Computers provision index. The quantity and quality of computer classes, their intended purpose. Update frequency.

6.2.6 Availability of a policy on the effective use of information and communication technologies in the training programme with the purpose to provide skilled management of patients. Training of instructors and residents to use information and communication technology for self-learning and access to the database and work in the system of healthcare. The availability of the structural unit responsible for this sector.

Availability of the website and portal. The degree of the website filling and its demand. Availability of the Internet and Intranet.

6.2.10 Availability of a single informational management system for students and teachers (for example, on the basis of the web-site) in all study programmes, the availability of Wi-Fi to support learners with the access to Internet in convenient places for residents, faculty and staff. Residents' support in the access to modern electronic databases, including foreign databases (Scopus, Tomson Reuters, etc.).

6.2.11 Creation of opportunities for residents' work with databases of patients and access to the system of healthcare, including the Unified Informational System of Healthcare.

6.2.12 Availability of counseling services for residents. Organization of the service.

6.2.13 Compliance of qualifications of support service staff with the students' interests and needs.

6.2.14 Support of residents with difficulties in studies due to various reasons, as well as support of residents with a desire to acquire more in-depth programme, earning of additional credits during summer semesters, and for academic mobility.

6.2.15 Consideration of the needs of different groups of students (working students, foreign students, as well as students with disabilities).

6.2.16 Constant update and expansion of the material and technical base with modern equipment for study programmes.

6.2.17 Adequate funding of study programmes, both at the expense of budget financing, and revenues from the provision of paid educational services, performing research or other activities that do not contradict the legislation.

6.2.18 Dynamics of funding allocated for the purchase of laboratory equipment, textbooks, periodicals, information resources and computers.

6.2.19 SWOT analysis of internal and external environment of the organization (assessment of strengths and weaknesses, threats and opportunities).

STANDARD 7.
PUBLIC INFORMATION

7.1 General provisions of the standard

7.1.1 Organizations should have full information about study programmes, which must be clear, accurate, objective, relevant and accessible.

7.1.2 Information about study programmes must be useful for residents, as well as for graduates and other stakeholders.

7.2 Assessment criteria

7.2.1 Availability of information about study programmes, forms of presenting such information.

7.2.2 Placement of information about the study programmes at the website, a portal of the organization, informational boards and leaflets.

7.2.3 Availability of information on study programmes for residents (future and current), employers, parents and other stakeholders.

7.2.4 The degree of usefulness of the information about study programmes for future residents - the criteria for selecting them; for current residents - expected learning outcomes; for employers - key and professional competencies of graduates.

7.2.5 Information about awarded degrees and qualifications, learning, teaching and assessment methods, percentages of performance and available opportunities for training of residents for each study programme.

STANDARD 8.
CONTINUOUS MONITORING AND PERIODIC REVIEW OF STUDY PROGRAMMES

8.1 General provisions of the standard

8.1.1 Organizations providing RSP should carry out continuous monitoring and periodic review of their programmes for their constant improvement.

8.1.2 Regular monitoring, analysis and revision of study programmes aimed at ensuring the provision of services at the required level and the creation of a supportive and effective learning environment for residents.

8.1.3 The results of continuous monitoring and periodic review of study programmes should be communicated to all stakeholders.

8.1.4 Organizations should regularly undergo a procedure of external quality assurance (accreditation) of study programmes in accordance with the European standards and guidelines.

8.2 Assessment criteria

8.2.1 Compliance of study programmes and disciplines with changing needs of the labor market, society and employers.

8.2.2 Assessment of residents' workload, promotion and completion of study programmes.

8.2.3 Effectiveness of residents' assessment procedures.

8.2.4 Residents' expectations, needs and satisfaction with the study programmes.

8.2.5 Educational environment and supporting services, and their compliance with the objectives of study programmes.

8.2.6 Evaluation and review of study programmes on a regular basis, attraction of residents and other stakeholders to this process.

8.2.7 Analysis of information about study programmes and adapting them to ensure relevance.

8.2.8 Publication of revised requirements of study programmes in an open access.

8.2.9 Organizations providing RSP must undergo an annual post-accreditation monitoring to assess changes in the internal quality assurance system.

8.2.10 In accordance with the European standards and guidelines and the Law "On Education", organizations must undergo the process of external review - accreditation of study programmes - on a regular basis every five years.

11. PROCEDURE OF DEVELOPMENT, APPROVAL AND VALIDITY PERIOD OF ACCREDITATION STANDARDS

11.1 Amendments and additions to the given standards for specialized accreditation of postgraduate education study programmes are introduced by IQAA in order to further improve and align them with educational policies pursued by the Ministry of Education and Science of the Republic of Kazakhstan, activities of higher education institutions and European standards and guidelines.

11.2 In case of initiationg any changes or additions to the standards and criteria of accreditation, suggestions and comments should be sent to IQAA.

11.3 After the analysis of suggestions and comments conducted by IQAA experts and their approval by the Accreditation Council of IQAA, the Agency has the right to introduce amendments and additions.

11.4 The revised standards and criteria are published in the new edition and presented on the official website of the Agency.