



«АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТИҢ  
ТӘУЕЛСІЗ АГЕНТТІГІ» КЕМ

НУ «НЕЗАВИСИМОЕ АГЕНТСТВО  
АККРЕДИТАЦИИ И РЕЙТИНГА»

INDEPENDENT AGENCY FOR  
ACCREDITATION AND RATING

# REPORT

on the results of the work of the outer expert commission for the evaluation for compliance with the requirements of the standards of primary specialized accreditation of educational programs 7R01150 «Pathological anatomy», 7R01152 «Nuclear medicine», 7R01155 «Pediatric Dentistry», 7R01143 «Angiosurgery for adults, children» NCJSC «Semey Medical University» from «11» to «13» January 2023

**INDEPENDENT AGENCY FOR ACCREDITATION AND RATING**  
*Outer expert commission*

*Addressed to the Accreditation  
advice IAAR*



**REPORT**

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**Semey «13» January 2023**

**(I) LIST OF SYMBOLS AND ABBREVIATIONS**

| <b>Abbreviation</b> | <b>Definition</b>  |
|---------------------|--|
| AS                  | Administrative staff   |
| BS                  | Basic subjects   |
| BME                 | Basic medical education  |
| PRS                 | Point-rating system  |
| Blueprint           | Technical specification of the class topic                             |
| EKR                 | East Kazakhstan region   |
| HEI                 | Higher education institution   |
| EEC                 | External Expert Commission   |
| SAC                 | State Attestation Commission   |
| CDVD                | City Dermatological and Venereological Dispensary                      |
| SCES                | State compulsory educational standard                                  |
| JD                  | Job description  |
| DOPS                | Direct observe of procedural skills                                    |
| UASHE               | Unified accounting system for higher education                         |
| LIS                 | Library information system   |
| FSA                 | Final state attestation  |
| FSE                 | Final state examination  |
| GL                  | Guidance letter  |
| STI                 | Sexually transmitted infections  |
| IRBIS               | Library information system   |
| IMS                 | Integrated management system   |
| RIWP                | Resident Individual Work Plan  |
| CMS                 | Control and measurement system   |
| CQA                 | Committee for Quality Assurance in the Sphere of Education and Science |
| KMIS                | Kazakhstani medical information system                                 |
| Commiitee           | Integrated subject   |
| CEP                 | Committee for educational programs                                     |
| HCI                 | Health care institution  |
| LMS                 | Learning management system KEYPS                                       |
| MH RK               | Ministry of Health of the Republic of Kazakhstan                       |
| LEB                 | Local executive bodies   |
| MES RK              | Ministry of Education and Science of the Republic of Kazakhstan        |
| MEP                 | Modular educational program  |
| MTE                 | Material and technical equipment                                       |
| mini-CEX            | Mini-clinical exam   |
| MSF                 | 360-degree assessment  |
| NCJSC "SMU"         | Non-Commercial Joint-Stock "Semey Medical University"                  |

|               |   |
|---------------|---|
| RW            | Research work   |
| GS            | General subjects  |
| RDD           | Regional Dermatovenerological Dispensary  |
| MEQCO         | Medical Education Quality Control Office  |
| GM            | "General Medicine"  |
| EP            | Educational program   |
| RO            | Registrar's office  |
| ARM           | Access rating mark  |
| OSPE          | Objective structured practical exam   |
| OSCE          | Objective structured clinical exam  |
| PBL           | Project-based learning  |
| CS            | Core subjects   |
| Faculty       | Faculty   |
| PBL           | Project-based learning  |
| CS            | Core subjects   |
| WC            | Work curriculum   |
| REMS          | Republican educational and methodological section                                     |
| CBL           | Case-based- CBL learning  |
| CbD           | Case-based-discussion   |
| CIPP model    | program evaluation model for C-content; I-costs, investments; P-process and P-product |
| MM            | Mass media  |
| QMS           | Quality management system   |
| SSS           | Student scientific society  |
| SU            | Structural unit   |
| SG            | Student government  |
| SP            | Standardized patients   |
| SCORM-packets | International standard for e-learning courses   |
| MC            | Model curriculum  |
| TBL           | Team-based-learning   |
| TUKMOS        | Turkish National Standard of Medical Education  |
| AC            | Academic Council  |
| HA            | Health administration   |
| SPE           | School of Postgraduate Education  |

## **(I) INTRODUCTION**

In accordance with the order of the Director General of IAAR No. 148-22-OD dated October 31, 2022. from January 11 to January 13, 2023, an external expert commission assessed the educational programs implemented at NCJSC "SMU" (Semey) for compliance with the requirements of the standards for specialized accreditation of postgraduate medical education (residency) based on standards WFME/AMSE:

7R01150 PATHOLOGICAL ANATOMY (primary accreditation)

7R01152 NUCLEAR MEDICINE (primary accreditation)

7R01155 PEDIATRIC DENTISTRY (primary accreditation)

7R01143 ANGIOSURGERY FOR ADULTS, CHILDREN (primary accreditation)

7R01142 CLINICAL PHARMACOLOGY

7R01128 EMERGENCY MEDICINE ADULT, CHILDREN

The report of the outer expert commission (OEC) contains an assessment of residency educational programs according to the IAAR standards, recommendations of the OEC for further improvement of educational programs and parameters of the primary specialized profile for the residency cluster 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults and children".

### **The composition of the OEC**

**Expert - Chairman of the OEC IAAR** – Kiseleva Elena Alexandrovna, Doctor of Medical Sciences, Professor, Kemerovo State University of the Ministry of Education and Science of the Russian Federation (Russian Federation, Kemerovo), *On-line participation*;

**Expert IAAR** - Sapargalieva Aigul Dyusekeshovna, Doctor of Medical Sciences, Professor, Kazakh National University named after Al-Farabi (Republic of Kazakhstan, Almaty), *Off-line participation*;

**Expert IAAR** – Vajauskas Donatas, doctor of Medical Sciences, профессор, Lithuanian University of Health Sciences (Republic of Lithuania, Kaunas), *On-line participation*;

**Expert IAAR** – Saduakasova Aigul Bolatovna, Doctor of Medical Sciences, RSE on REM "Hospital of the Medical Center of the Administration of the President of the Republic of Kazakhstan", (Republic of Kazakhstan, Astana), *Off-line participation*.

**Expert IAAR** – Bespaev Abdimazhit Tasibekovich, Doctor of Medical Sciences, Kazakh-Russian Medical University (Republic of Kazakhstan, Almaty), *Off-line participation*;

**Expert IAAR** - Bachinsky Nikolay Georgievich – Doctor of Medical Sciences, Professor, RM "State University of Medicine and Pharmacology named after A.I. Nicolae Testemitanu (Republic of Moldova, Chisinau), *On-line participation*;

**Expert IAAR** - Seidakhmetova Aizat Ashimkhanovna, Candidate of Medical Sciences, JSC "South Kazakhstan Medical Academy" (Republic of Kazakhstan, Shymkent), *On-line participation*;

**Expert - OEC employer IAAR** - Yeseneev Olzhas Brimzhanovich, Master of Business Administration in Healthcare, SM Hospital with a Polyclinic of the Police Department of the North Kazakhstan Region (Republic of Kazakhstan, Petropavlovsk), *On-line participation*;

**Expert – OEC student IAAR** – Amanullaeva Marzhan Serikkyzy, resident of the 2<sup>nd</sup> year of study, Kazakh National Medical University after named S.D. Asfendiyarov (Republic of Kazakhstan, Almaty), *On-line participation*;

**Expert - Студент ВЭК IAAR** – Karimova Erkenaz Dauletkyzy - resident of the 2<sup>nd</sup> year of study of NCJSC "Medical University Karaganda" (Republic of Kazakhstan, Karaganda), *On-line participation*;

**Coordinator IAAR** – Dzhakenova Alisa Satbekovna, Candidate of Medical Sciences, Chairman of Medical Projects of the Agency (Republic of Kazakhstan, Astana), *Off-line participation*.

### **(III) REPRESENTATION OF EDUCATIONAL ORGANIZATION**

Semey Medical University was founded in 1953 (the opening of the Faculty of General Medicine). In 1953, 320 students were enrolled. The university provides educational services for higher, postgraduate and additional education. Training is conducted in the state, Russian and English languages. The contingent of students is more than five thousand people. The form of education is full-time, full-time, distance. Training in clinical skills is carried out on the basis of the Department of Simulation Technologies, in our own university hospital and 138 clinical bases. Foreign students study at the university, their share is almost 20.5% of the total contingent. Currently, the Semey Medical University is the largest university in the North-Eastern region of Kazakhstan and the main supplier of medical personnel for the Abay region, East Kazakhstan and Pavlodar regions. The University annually occupies a leading position in the national rankings of universities in Kazakhstan. Over the years of its existence, university graduates have been successfully working throughout Kazakhstan, as well as near and far abroad. According to the results of the National Ranking of the Leading Universities of Kazakhstan -2022, Semey Medical University took the honorable 1st place among medical universities. According to the results of the national award "ALTYN SHIPAGER", NJSC "MUS" was recognized as one of the best medical universities in the country. The University is the leader among medical universities in Kazakhstan in terms of graduate employment. The share of employed graduates reaches 98%. In total, over the years of its existence, the university has trained more than 25 thousand specialists who successfully work in Kazakhstan, near and far abroad (Pakistan, India, Palestine, Sudan, Morocco, Jordan, Israel, Syria, Russia, Germany, Canada, etc.), which indicates a high level of qualification of trained specialists. International cooperation of the University traditionally continues with Russia, Japan, Turkey, India, Pakistan. International projects are being implemented within the framework of the Erasmus program. This year, in September, an agreement on strategic partnership was signed with the Russian National Research Medical University named after N.I. Pirogov (Russia, Moscow), as well as with Kazan State Medical University.

In the short term, the university sets itself the goal of entering the TOP-700+ universities in developing countries in Europe and Central Asia. To achieve this goal, a modern integrated academic healthcare system was created as a result of the merger of the university with the Research Institute of Radiation Medicine and Ecology (NII RMiE) and the expansion of the network of university clinical bases in the Abay region, East Kazakhstan and Pavlodar regions. The university has passed the institutional accreditation of NAOKO, certificate IA-A No. 01081 dated June 10, 2019 is valid until 2024. The quality management system is certified for compliance with the requirements of ST RK ISO 9001-2016. Certificate of conformity No. KZ.Q.02.0305. C21.007506 dated 12/09/2021 Valid until 12/09/2024

### **(IV) DESCRIPTION OF THE PREVIOUS ACCREDITATION PROCEDURE**

Educational residency programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" are accredited by the Independent Agency for Accreditation and Rating (IAAR) for the first time.

### **(V) DESCRIPTION OF THE OEC VISIT**

The work of the EEC was carried out on the basis of the Program of the visit of the IAAR expert commission as part of the specialized accreditation of educational programs from January 11 to January 13, 2023.

In order to coordinate the work of the OEC, on January 9, 2023, an introductory meeting was held, during which powers were distributed among the members of the commission, the schedule of the visit was specified, and agreement was reached on the choice of examination methods.

In order to obtain objective information on evaluating the activities of the university, the

members of the OEC used such methods as visual inspection, observation, interviewing employees of various structural units, teachers, students, graduates and employers, questioning the teaching staff, students.

Meetings of the OEC with the target groups were held in accordance with the revised program of the visit, in compliance with the established time period. On the part of the University staff, the presence of all persons indicated in the visit program was ensured.

In accordance with the requirements of the standards for obtaining objective information about the quality of educational programs and the entire infrastructure of the university, clarifying the content of self-assessment reports, meetings were held with the rector, deputy chairmen of the board, heads of structural divisions, the dean of the School of Postgraduate Education and the heads of departments responsible for residency programs, teachers departments, students, graduates, employers, interviews and questioning of teachers and students were conducted. A total of 66 people took part in the meetings (table).

Table - Information about employees, students, employers, graduates who took part in meetings with the OEC IAAR

| Category of participants / number |            |                                  |       |     |                                    |          |           |           |
|-----------------------------------|------------|----------------------------------|-------|-----|------------------------------------|----------|-----------|-----------|
| University management             |            | Chairman of structural divisions | Deans | PEP | Heads of EPs, heads of departments | Learners | Employers | Graduates |
| rector                            | pro-rector |                                  |       |     |                                    |          |           |           |
| 1                                 | 4          | 12                               | 1     | 11  | 6                                  | 21       | 4         | 6         |

In accordance with the program of the OEC visit, an online and offline tour of the university was also conducted, during which the following were discovered: Staff and Student Service Center, Library, Registrar's Office, Audio and Video Recording Studio, School of Postgraduate Education, Department of Digital and PR Technologies, Educational and scientific activity. operating center.

In accordance with the accreditation procedure, an on-line survey of teachers and students (residents) was conducted. According to the results of a survey of graduates, in which 20 people took part, it was revealed that 100% (80% very good and 20% good) respondents noted that they satisfy the needs in the educational program, want to ensure the conditional right to further development, requirements, require the active use of special teaching methods in the educational process. All respondents answered that the library has the necessary scientific and educational literature. 5% of respondents consider it difficult to combine teaching and research activities. Satisfied with the answers of many respondents regarding the development of new research programs and motivational approaches. In general, for all questionnaire questions, the vast majority of questionnaire responses are justified and it is generally accepted that this is being actively developed due to the wide distribution and problems for both staff and students.

A survey of 21 residency students was conducted. According to the results of the survey, 100% of respondents are satisfied with the attitudes and responsiveness, the availability of academic counseling, educational materials (100%), the availability of library resources and service quality auditors (85.7% and 95.2%), educational materials (95.2%), clarity of application of disciplinary measures (90.5%), quality of teaching programs (95.2%), teaching methods (87.7%), quality of teaching (95.2%), objectivity and fairness of teaching (95.2%). ), often found in laboratory conditions (85.7%), the speed of drawing attention to interests on interesting process issues (90.5%).

The members of the commission were provided with documents, both on electronic media and in paper form at the request of experts. The work of the external expert commission was properly organized, the documents requested by the OEC members were provided by the university,

collegial relations both on the part of experts and university staff were observed. The conditions for effective work were provided by the host country.

As part of the planned program, recommendations for improving the activities of the university, developed by the OEC based on the results of the examination, were presented at a meeting with the top management of the university and heads of structural divisions of the NCJSC "SMU" on January 13, 2023.

## **(VI) COMPLIANCE WITH SPECIALIZED ACCREDITATION STANDARDS**

### **6.1. MISSION AND RESULTS STANDARD**

#### ***Evidence part***

Non-profit joint stock company "Semey Medical University" operates on the basis of the Charter, local regulations, strategic development plan, developed in accordance with the regulatory and strategic documents adopted in the Republic of Kazakhstan.

The mission of the NCJSC "SMU" is to train outstanding physicians, scientists and health leaders to provide high quality care. The mission was developed and approved by the Academic Council on February 24, 2022. Missions 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" are defined in the Modular educational programs by specialty.

Educational programs are developed in accordance with the Order of the Ministry of Health of the Republic of Kazakhstan dated July 4, 2022 No. KP DSM-63 "On approval of state obligatory standards for levels of education in the field of healthcare" by the staff of the department and undergo examination and approval at meetings of the department, in the CEP of residency, the Academic Committee and the Council directors).

When compiling residency programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children", an indispensable condition is the involvement of not only the staff of the department in the implementation process, but the conditions for the implementation of the EP are taken into account on the part of the School of PDE, the Academic Committee, the Research Department, the Department of the Clinic, and also maintains constant contact with employers, employees of the UG, where all the most important problems in the field of achieving clinical competencies are discussed in an open dialogue.

The goals and objectives of the residency educational program in the specialty 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children", as well as approaches to their achievement are described in the educational strategy of the specialty.

The final learning outcomes are formed on the basis of SCES 2022 and the Tucmos provisions on competencies in the residency of the partner university of the University of Bashkent (Turkey). When formulating the final learning outcomes, the Key Competences of GOSO, the Levels of Proficiency in Clinical Competences (PD, DT, E, P, etc.) and the Levels of Proficiency in Practical Skills, Manipulations, and Procedures were taken as the basis. The final results for each specialty are described in the educational program. Upon completion of the training, the resident must have theoretical knowledge and practical skills in organizing all types of specialized care for patients independently using innovative methods of diagnosis and treatment based on evidence-based medicine.

The policy in the field of quality assurance of residency programs in the specialty 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" were compiled on the basis of the MI Policy adopted on 04.10.2022 and approved by specialists practical health care, was discussed and approved at



meetings of the collegiate bodies of the Committee for Postgraduate Educational Programs (CEP PDE) and the Academic Council, which include representatives of all interested parties.

In the process of preparing the residency program, the staff of the department was primarily guided by the requirements of GOSO-2022 and the professional standard. The residency program 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children's Age", 7R01143 "Angiosurgery for adults and children" provides for the achievement of all key competencies based on the main task - the preparation of a highly qualified specialist.

In accordance with the State Standard of residency in 2015, as well as the Order of the Minister of Education and Science of the Republic of Kazakhstan dated April 20, 2011 No. 152 "On approval of the Rules for organizing the educational process on credit technology of education" (with amendments and additions dated September 23, 2022 No. 79 of the order Minister of Education and Science of the Republic of Kazakhstan) the university has a certain autonomy in the choice of forms of teaching methods and assessment of residents, the procedure for developing the EP, its structure and form; selection of teachers, distribution of resources. At the same time, the specified regulatory legal acts establish certain requirements for the key competencies of the residency, the qualitative composition of the teaching staff, and the procedure for developing programs.

NCJSC "SMU" uses institutional autonomy in the formulation and implementation of the Quality Policy, development of EP, assessment of staff recruitment, research, allocation of extrabudgetary resources. In order to improve the quality of educational services provided, increase motivation for learning, and provide effective feedback, NCJSC "SMU" has defined a policy for the representation of residents in advisory bodies and the appropriate participation of residency students in the development and evaluation of the training program, working conditions and other issues related to them.

Thus, the mission and the final results of the EP training in residency in the specialty 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" are compiled in accordance with the criteria of this standard and contributes to the formation of specialists in these health care sectors.

### ***Analytical part***

Analyzing the compliance of residency programs in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for Adults, Children" with the standards of international primary specialized accreditation in accordance with IAAR standards, it should be noted that the parameters of the "Mission" standard and end results. The mission of the educational program formulated and adopted in the NCJSC "SMU" is based on the existing and future requirements of practical healthcare, society and the state.

Stakeholders took part in the development of the mission, goals of the EP: residents, a clinical mentor who knows the needs of the health of society; Teaching staff directly working in the specialty system of the EP and having certificates in the specialty. Students have the opportunity to influence the formation of the mission, goals of the EP; representatives from residents are included in the collegial advisory bodies of the university: in the CEP for residency (protocol No. 1 of 09/13/22) and representatives of practical healthcare, residents are invited to meetings of the departments. Stakeholders, their involvement in the formulation of the mission and outcomes are presented in the self-report, but the type of input of the main stakeholders is not reflected.

At the meeting with OEC experts, employers and graduates confirmed their knowledge of the mission of the university and EP in the specialty 7R01150 Pathological Anatomy, 7R01152 Nuclear Medicine, 7R01155 Pediatric Dentistry, 7R01143 Adult and Pediatric Angiosurgery, their placement on the website and they themselves partly took part in its formation.

The missions of the residency educational programs comply with the requirements of the State

Educational Standard, the qualification characteristics of specialists. The self-report states that the mission and outcomes of the residents' training have been defined and communicated to all stakeholders, and that the MEP, which spells out the mission, is posted on the website. At NCJSC "SMU" website, in the training section, you can find the MEP, but only the first page of the MEP opens, and the page where the mission and final results are written is not available. For more detailed information of applicants upon admission to residency, it is desirable to more fully cover the mission and final results of the EP on the website of the NCJSC "SMU".

### **Strengths / best practice**

There are no strengths in this standard.

### **OEC recommendations**

To raise awareness of all stakeholders, the management of the University should ensure the availability of the mission and the final learning outcomes for the public (deadline 01.03.2023).

**The conclusions of the OEC according to the criteria: strong positions - 0, satisfactory - 16, suggest improvements - 0, unsatisfactory - 0.**

## **6.2. STANDARD "EDUCATIONAL PROGRAM"**

### ***Evidence part***

Residents are trained in residency programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children", 7R01143 "Angiosurgery for adults, children" are carried out in accordance with state standards of higher and postgraduate education (Order of the Minister of Health of the Republic of Kazakhstan dated July 4, 2022 № ҚР ДСМ-63 "On the approval of state compulsory standards for levels of education in the field of healthcare"), which provide for the requirements for the level of training of persons who have completed educational residency programs in the following competencies: general education, social and personal competencies, economic and organizational managerial competencies, professional competencies, readiness to change social, economic, professional roles, geographic and social mobility. These competencies are mastered by residents in the study of basic and major disciplines, elective disciplines.

Residency EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children", 7R01143 "Angiosurgery for adults, children" is planned, organized and implemented in accordance with the regulatory documents of the Ministry of Education and Science and the Ministry of Health of the Republic of Kazakhstan. The term for mastering the EP residency in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" - 2 years.

In 2022, the development of the EP was carried out in accordance with the Order of the Ministry of Health of the Republic of Kazakhstan dated July 4, 2022 No. ҚР ДСМ-63 "On approval of state compulsory standards for levels of education in the field of healthcare". The departments are developing residency programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children", which are discussed and approved at the meetings of the CEP of the residency and AC.

Educational residency programs are implemented in major disciplines and elective components. The content of the disciplines provided for by the curriculum is determined by the requirements for the results of mastering the educational program. At the same time, the labor intensity of mastering the educational program per year is 70 credits. Accounting for the labor intensity of all types of work is carried out according to the volume of mastered material, measured in academic hours or credits. From the 2019-2020 academic year, 1 credit is equal to 30 hours,

where the volume of classroom work is 20% of the volume of each discipline, independent clinical work under the guidance of a clinical mentor - 65%, SIW - 15%.

Throughout the program, teaching methods such as lectures, clinical walks, curation, situation analysis (CS), clinical case discussion (CbD), direct observation with feedback in real conditions and the DOPS method, discussions, case studies, seminars are used throughout the program. In an interactive mode, analysis of the results of the work of university and interuniversity scientific and practical conferences in order to form and develop their professional skills.

For residency programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children" are developed, discussed at the meetings of the department, all documents included in the EMCD: syllabuses, control and measuring tools, balance of summative and formative assessment.

UMCD is available in the personal account of residents on the Keys platform. In the process of training for residency programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children", 7R01143 "Angiosurgery for adults, children" in related disciplines, a modular system for studying the discipline is used, which provides new approaches for a deeper understanding of the goals and tasks for teaching a particular discipline.

Residents complete a program that allows them to fully master clinical competencies. In the process of learning together with a clinical mentor, the faculty member performs work under the guidance of their mentors.

EP in the specialty 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children" focuses on the knowledge and skills necessary for residents who plan to work in the healthcare system to provide residents with basic skills in the specialty, the necessary knowledge in the field of achieving postgraduate medical education by presenting mandatory requirements for the level of training of students in residency in this specialty.

The EP in the specialty 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children" provides for the requirements for the level of training of persons who have completed educational residency programs in the following competencies: general education, social and personal competencies, economic and organizational and managerial competencies, professional competencies, readiness to change social, economic, professional roles, geographic and social mobility, provided for in the State Educational Standard - 2022 No. KP ДСМ-63.

The performance of the EP is assessed by generally accepted criteria and indicators: average academic performance, results of the final certification, the share of employment of graduates, etc. In addition to passing the external assessment procedure, the department staff annually conducts a SWOT analysis, which helps to modify the EP, taking into account the needs of healthcare and society.

The methodology of medical research is an integral part of the educational process in residency. Residents receive the basics of knowledge while studying basic disciplines, such as biostatistics, evidence-based medicine and research methodology, during which residents learn to create and formulate scientific hypotheses, develop a research protocol, calculate the sample size for a study, justify its relevance, scientific novelty and practical significance.

The structure and content of working curricula 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" correspond to standard curricula; control over the compilation of the RPMS is carried out by the Education Department, the School of Postgraduate Education. The schedule of the educational process is built by years and semesters of study, indicating the period of study by modules, the terms of the final certification for residents 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children".

Transparency of education is achieved with the help of automated information systems, which provide for the possibility of monitoring by residents of grades in an electronic journal, access to the educational and methodological complex of disciplines for use by students, the formation of work plans up to the graduation of students and their subsequent employment.

The content, additions and changes in the EP are carried out at meetings of collegiate bodies - the department and the Committee of Educational Programs (CEP) of the residency, the Academic Committee (AC), which include representatives of practical healthcare, students, teachers and administration staff. Teachers of the NCJSC "SMU" are responsible for the quality preparation of educational programs, COPs are responsible for assessing the quality of educational programs, and the university management for the allocation of resources necessary for its implementation in the implementation of residencies 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry childhood", 7R01143 "Angiosurgery for adults, children".

### ***Analytical part***

Analysis of EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children" showed that the content, volume and sequence of courses and the implementation of educational programs are in accordance with the requirements of the State Compulsory Education Standard, national priorities and demands of practical healthcare represented by employers.

The university and the departments strive to comply with the criteria of accreditation standards, which ensures the continuous development of programs, the programs follow the principles of continuity in the development of competencies, the list of learning outcomes. Training is provided through mentoring, regular assessment and feedback, residents are informed about their rights and obligations, ethical obligations in the programs of EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Adult Angiosurgery, children's".

The teaching and learning methods used in the educational process are focused on active and independent learning of the resident, contributing to the formation of the key competencies of the student. Various structural subdivisions are involved in the implementation of the EP in the residency, united by a common goal - the preparation of a highly qualified specialist in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatric Age", 7R01143 "Angiosurgery for adults, children".

Factors influencing the formation of responsibility and increasing the degree of independence of residents are: an increase in the share of SRR and SRRP in the training program; conclusion of trilateral agreements between a resident, a university, an employer; free access to independent work in health care facilities.

According to the Academic Policy of the teaching staff, the clinical mentor and the resident are jointly and severally responsible for mastering practical skills. Residents are trained at multidisciplinary clinical facilities, where primary health care, specialized and highly specialized medical care is provided in various profiles, which allows residents to master key competencies and practical skills.

When teaching residents 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children", a resident-oriented approach is used, which includes the organization of the educational process using interactive teaching methods, skills development in the center of practical skills, which allows you to activate students with different levels of training and increase motivation for learning. Residents take part in the research work of the department, conduct retro- and prospective studies with participation in the preparation and work of congresses, publication of the results of the work.

The RRPp are designed to meet the needs of the healthcare system and human resources,

which contribute to the gradual deepening of the professional training of residents from course to course, from the role of an observer to a specialist under the guidance of a teacher and a clinical mentor. Regular evaluation and revision of programs with the participation of residents, faculty and other stakeholders. Educational programs in specialties are in demand and contribute to the formation of a professionally competent resident 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children".

It should be noted that NCJSC "SMU" is very well provided with the breadth of training of residents and the necessary depth, which was demonstrated when visiting clinical bases, which are located not only in Semey, but also in the cities of Pavlodar and Ust-Kamenogorsk. Clinical bases have a modern equipped admission department, residents have access to the CMM program. NCJSC "SMU" also uses practice-oriented training for residents, ensures the personal involvement of residents in the provision of medical care and responsibility for patient care, together with mentors from practical healthcare.

In the process of studying materials, meetings with heads of departments, teaching staff, residents, employers, clinical mentors, graduates and visiting clinical sites, we were convinced of the huge role of mentoring in the professional development of residents, integration of training, the formation of key competencies and the acquisition of practical skills.

But it should also be noted that the following factors were not taken into account when forming the EP: the contribution of each discipline to the formation of the final learning outcomes at a certain level (course), i.e. responsibility, both profile disciplines, and disciplines of choice for the formation of a competent graduate.

An analysis of the content of elective components showed a relatively small number of elective disciplines included in the EP, which may be due to the duration of the residency. The possibility of expanding elective disciplines in the light of modern achievements and the needs of practical medicine should be considered.

#### **Strengths / best practice**

1. Ensuring a significant role of mentoring in the professional development of residents, the integration of training, the formation of key competencies and the assimilation of practical skills,
2. Constructive interaction between the department and residents, clinical mentors, employers, alumni, the healthcare sector.

#### **OEC recommendations**

1. The leaders of the EP, in accordance with the requirements for the development of the EP of higher and postgraduate education (Guidelines of the Ministry of Education and Science of the Republic of Kazakhstan dated June 30, 2021), align the learning outcomes, determine the relationship between the achievability of the learning outcomes of the EP and academic disciplines (deadline 01.09.2023)

2. The leaders of the EP are recommended to expand the catalog of elective (optional) disciplines for the formation of an individual educational trajectory for residents 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" (due date 01.09. 2023);

3. In EP 7R01150 "Pathological Anatomy" it is necessary to prescribe the level of complexity of the mastered practical skills that the resident must master in the learning process in accordance with the categories of complexity of morphological material - autopsy, surgical and biopsy (1, 2, 3, 4) to understand progress in the educational process (due date 01.09.2023).

**Conclusions of the EEC according to the criteria: Strong - 2; Satisfactory - 22; Suggest improvements - 1; Unsatisfactory – 0**

### **6.3. STANDARD "POLICY FOR ASSESSMENT OF STUDENTS IN RESIDENCE"**

#### *Evidence part*

NCJSC "SMU" has a unified policy for assessing residents for all residency specialties. In the residency in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children", 7R01143 "Angiosurgery for adults, children", an assessment policy has been introduced, which is reflected in educational programs and syllabuses of disciplines. The resident assessment policy is reflected on the KEYPS electronic platform. The assessment policy is announced in the Regulations on residency, and is also posted on the official website of the university.

To successfully complete the training program, the resident 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" must fulfill the requirements of individual disciplines (the criteria are prescribed in the syllabus), as well as the requirements of the program as a whole.

Residents' knowledge control methods include testing, interviews, passing practical skills, monitoring and evaluation of the educational achievements of residents is carried out in the form of current, intermediate and final control in the discipline being studied.

Midterm control is carried out in 2 stages: control of theoretical knowledge (50%) and practical skills (50%). Information about the criteria and rules for evaluation is reflected in the syllabuses of the disciplines. Methods and forms of assessing the competencies of residents are formulated in the Regulations on residency, approved at a meeting of the AC.

All types of assessment in residency - formative, summative and final certification - cover the theoretical knowledge and practical skills that a resident must master in the course of his studies and necessary for his future profession. To fully master the curriculum in the discipline, the student is required to attend 100% of the discipline's classes. In the case of class attendance less than 100%, the student is not allowed to take the exam, the summer paid semester passes.

The discipline is considered to be mastered if the final grade of the discipline and the summative exam are equal to 50% or more. IAI is calculated from two components: formative assessment and summative assessment. Residents are assessed according to the principles of openness, objectivity and legality. All types of assessments are currently entered into the KEYPS electronic platform, which is accessible and open to any resident. Practical skills are assessed according to checklists, which are also located in KEYPS.

The University uses additional methods for assessing residents 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children", such as a portfolio, evaluation of scientific activities, independent work of a resident.

CRR specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children", 7R01143 "Angiosurgery for adults, children" consists in the fact that residents receive patients, provide primary specialized medical care, fill out KIIS and other documentation (outpatient cards, medical histories, etc.), the clinical mentor evaluates the resident.

Another additional method for evaluating the work of a resident in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children", 7R01143 "Angiosurgery for adults, children" is work on the MEDLOG electronic platform, where the resident fills in the full name of the admitted patient, IIN, date of admission, reason for treatment, manipulations performed (practical skills are being developed). A teacher or a clinical mentor can

open MEDLOG at any time, personally assess the volume and quality of the work done, then the teacher can approve, reject or return a specific case for revision.

Assessment methods are developed by the department and reflected in the educational programs approved at the meeting of the department, CEP of residency 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children's Age", 7R01143 "Angiosurgery for adults, children".

Residents in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" during the entire period of study will form a portfolio that corresponds to the final goals of the program and contains uniform reliable and valid criteria evaluation of the student's activity.

Resident's portfolio 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" consists of the report of the resident; checklists with evaluation of practical activities, seminars, shifts, etc.; characteristics of the curator; information about achievements during the period of study in residency, if any (awards, certificates, conference programs, abstracts of publications, video materials, letters of thanks, patient reviews, etc.).

The CPP contains tasks that require the resident to do daily independent work that forms the student's portfolio, and is the basis for assessing the "self-development" competence.

The report of the resident reflects the discipline and terms of training according to the individual plan, in which division of the medical organization he was trained. Evaluation of seminars, presentations, practical skills, etc. is carried out according to checklists developed by the staff of the department implementing residency programs in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Adult Angiosurgery, children's".

Responsibility for the formation and implementation of policies and the introduction of new assessment methods for 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children", the composition of the relevant committees lies with the Quality Control Department of Medical Education.

General policy for the assessment of residents 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children, including the timing of the assessment, assessment criteria, methods and forms of conduct, are reflected in the syllabus of each discipline, Contracts for paid and gratuitous provision of educational services.

For the report on primary specialized accreditation, the necessary documentation for the implementation of 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" was submitted. The analysis of regulatory intra-university documents, a self-assessment report of the educational program, syllabuses, control and measuring tools, checklists, characteristics of mentors, portfolios of residents, acts on the results of checking the base of control and measuring tools (test tasks, tickets, situational tasks, control questions), examination papers. Interviews were conducted with students, faculty and employers.

### ***Analytical part***

NCJSC "SMU" has formulated and implemented a policy for assessing residents, defined, established and published the principles, goals, methods for assessing residents, which are presented in the internal documents of the university. Control and evaluation of educational achievements of residents is carried out in the form of current, intermediate and final control in the studied disciplines. The credit system of education is used, which provides for a differentiated score-rating assessment of knowledge on a 100-point scale, and there is an appeal procedure in case of

disagreement with the results of exams. Feedback to residents is provided with free access to "KEYPS", which reflects the results of the assessment of residents. Forms, methods and quantity of all types of control are reflected in the syllabuses of the disciplines.

The university has a procedure for documenting, studying assessment methods, analyzing their reliability and validity, but the review of the database of test items is carried out within the departments by teachers, there is no independent examination of the database of test items, the analysis of the validity of CMM is carried out on a small number of students. To assess the knowledge of residents, testing, an oral exam are used, various interactive methods are used, as well as case studies, presentations, tests, situational tasks, regulated discussion, assessment of practical skills using the OSCE method, provided for by curricula and programs. Feedback to residents is provided with free access to information systems, which reflect the results of the assessment of residents. All examination measuring materials also undergo examination, are considered and approved at meetings of departments, AC, SPE. For continuous monitoring of the residency educational program, various types and stages of residency training, the Capes automated information system is used. To assess the achievement of key clinical competencies at the university, there are many types of control. The department practices a weekly Journal club, where residents and assistants discuss the latest published results of world scientific research, followed by discussion and planning for the inclusion of certain competencies in their individual development plans.

Methods for assessing the competencies of residency students are constantly being reviewed, taking into account the opinions of the parties involved. Mandatory types of certification are test control, oral questioning.

In general, according to the Standard, there is: a system for assessing knowledge, skills, abilities and competencies, compliance with accepted practice at the national level; the development of educational programs by residents complies with regulatory requirements; monitoring the achieved learning outcomes; use of AIS "Capes" for daily assessment and monitoring of knowledge, feedback on satisfaction with teaching methods and assessment; use of the procedure of independent certification of residents with the participation of mentors, employers.

An additional set of assessment methods and formats should be used according to their "applicability", which includes a combination of validity, reliability, impact on learning, acceptability and effectiveness of assessment methods and formats in relation to the established learning outcomes.

At the same time, attention should be paid to optimizing the CIS validation system in the specialty. The algorithm of the CMM validation procedure should be more unified and unambiguously interpreted. The procedure for an independent examination of the base of test items for 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children" is recommended.

#### **Strengths / best practice**

There are no strengths in this standard.

#### **OEC recommendations:**

1. Heads of EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" to develop a procedure for documenting the reliability and validity of methods and formats for assessing the achievement of final results (Due date 09/01/2023) ;

2. To implement for the residency program "Pathological Anatomy" at clinical sites (pathological anatomical bureau, pathological and anatomical laboratory) the assignment of a login



and password to a resident pathologist for the entire period of study, which will allow observing the professional growth of a resident in the Damumed system (Due date 01.09.2023) .

**Conclusions of the OEC according to the criteria:** Strong - 0; Satisfactory - 9; Suggest improvements - 1; Unsatisfactory - 0.

#### **6.4. STANDARD "RESIDENTURY STUDENTS"**

##### ***Evidence part***

NCJSC "SMU" conducts the selection of residents in accordance with the order of the Minister of Health of the Republic of Kazakhstan dated December 15, 2020 No. KR DSM - 270/2020 (registered with the Ministry of Justice of the Republic of Kazakhstan on December 15, 2020), the order of the Minister of Education and Science of the Republic of Kazakhstan "On approval of the Model Rules admission to study at educational organizations implementing educational programs of higher and postgraduate education "No. 600 dated October 18, 2018, subject to amendments and additions No. 237 dated June 8, 2020 and" Regulations on the admission of students to higher and postgraduate education in NJSC "Medical Semey University" 2020.

Residency selection is carried out on the principles of honesty, openness and mandatory accounting of knowledge and skills for a particular residency specialty.

Admission to residency 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children" is made on a competitive basis based on the results of entrance exams.

In accordance with the mission of NCJSC "SMU" "Training outstanding doctors, scientists and leaders in the field of Health to provide high-quality medical care", the university implements a policy of admission and selection for residency, focusing on the priorities of the health needs of the East Kazakhstan region in particular and the Republic of Kazakhstan in general and according to the "Regulations on residency of the NCJSC "SMU".

Reception of applicants for residency 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children" is carried out on a competitive basis based on the results of entrance exams. Applicants to residency take an entrance exam in their specialty.

The university has a practice of organizing targeted training in residency. Medical organizations of the East Kazakhstan and Pavlodar regions have the opportunity to send targeted grants to NCJSC "SMU" for the training of specific residents. The SPO organizes a job fair with graduate interns, during which future employers can negotiate with applicants for residency on tuition fees with the condition of subsequent work. When developing the policy and selection process for residency programs 7R01150 Pathological Anatomy, 7R01152 Nuclear Medicine, 7R01155 Pediatric Dentistry, 7R01143 Adult and Pediatric Angiosurgery 7R01150 Pathological Anatomy, 7R01152 Nuclear Medicine, 7R01155 Pediatric Dentistry age”, 7R01143 “Angiosurgery for adults, children” 7R01150 “Pathological anatomy”, 7R01152 “Nuclear medicine”, 7R01155 “Dentistry of children”, 7R01143 “Angiosurgery for adults, children”, the opinion of medical organizations acting as external stakeholders must be taken into account.

The number of residents accepted corresponds to the possibilities of clinical and practical training, as well as the logistical capabilities of the organization. The number of accepted residency students is agreed with stakeholders, taking into account the demand for medical personnel in the regions. Traditionally, the state order in residency is formed according to acutely scarce specialties and health care priorities.

The procedure for the transfer of residency students is carried out in accordance with the

Order of the Minister of Education and Science of the Republic of Kazakhstan dated January 20, 2015 No. 19: "On approval of the Rules for the transfer and restoration of students by type of educational organization." When transferring or reinstating a student from a foreign educational organization, a document on the mastered study programs (academic certificate or transcript) is submitted, as well as a document on completion of the previous level of education, which must go through the nostrification procedure in the Republic of Kazakhstan in the manner prescribed by the Rules for the recognition and nostrification of documents on education".

For admission to residency, the GPA in the bachelor's degree, the overall final grade based on the results of the final state certification of the 7th year, as well as the entrance exam in a test format are taken into account, where: 35% is the sum of the GPA score for the period of study in the bachelor's degree; 35% - overall final assessment of the final state attestation of the 7th year (independent testing+practical part conducted by the NCNE); 30% - an entrance exam in a test format in the volume of the OM program, which includes questions on a profile specialty based on standard programs in higher education disciplines. In case of disputable cases, additional points were taken into account, which are listed in the "Regulations on the admission of students to internship and residency". Residency admissions are upgraded annually for high transparency and objectivity of the examination.

The university has an effective system of work to promote the employment and adaptation in the labor market of residency graduates. Monitoring the employment of graduates is an important part of the quality management system of the university. An important part of this work is the implementation of measures aimed at assessing the need for specialists in various fields, the implementation of measures to adapt young professionals in the production environment, various organizational measures to improve and professional level. The university has information on graduates and students. Measures are being taken to employ graduates after residency. Work is underway to identify vacancies and employ graduates after graduation.

Curators and clinical mentors accompany the resident in the educational process and provide him with advisory assistance in resolving problems related to educational and cognitive activities and personal and professional development. This influences the formation of their professionally significant qualities, contributes to the design and implementation of individual educational routes, thanks to the creation of situations of support and awareness of success in the process of solving academic problems. Residents can always seek advice from the staff of the department, personally to the heads of departments from the first week of training; a fixed mentor accompanies him during the entire period of residency training. Together they make decisions, residents are informed in advance about incidents that are potentially dangerous for him.

Thus, the predominant number of residents are satisfied with the conditions for training created by the university and the department, which is reflected in the results of the survey of residents, where almost the majority rated excellent or good conditions. Thus, according to an anonymous survey, 85.7% of respondents noted the availability for communication of the dean's office staff, 90.5% of students noted the responsiveness of the department's management and manifestations of academic counseling, and 95.2% of residents rated relations with teachers as "excellent". The availability of computer classes and the quality of Internet resources, the quality of training programs were rated "excellent" by more than 90% of residents.

In general, the Department of Legal Support, the Psychological Service, and the student trade union organization work in NCJSC "SMU". A lot of work is being done to provide psychological assistance to all students in the form of, for example, psychological trainings; financial assistance to orphans, as well as students from low-income, large families. The Alma Mater Alumni Association allocates a monthly amount of money to pay for a hot lunch for students from low-income families.

### *Analytical part*

The number of accepted students of residency 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" corresponds to the possibilities of clinical and practical training, the maximum allowable workload for managers, as well as the material and technical capabilities of the organization.

Support for residents in professional orientation and career planning is provided on an ongoing basis by both group facilitators and clinical mentors. Residents work at KIIS and were able to demonstrate their practical skills.

Informatization of the educational process is carried out through the KEYPS system and allows students to remotely access educational and methodological materials, instrumentation, class schedules, select elective disciplines for OP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry childhood", 7R01143 "Angiosurgery for adults, children".

In accordance with the Regulations on Residency and the Policy of Discipline in the Residency of NCJSC "SMU", the responsibility of the resident, his participation and the conditions for the provision of medical services at the clinical site are described in the paragraph "Rights and Obligations of a Resident" of the Regulations on Residency of NCJSC "SMU". According to the said Regulation, the resident is solely responsible for the medical services provided in the departments of the clinical base, mastered by him at the previous level of education (internship, bachelor's degree) in the presence of an appropriate doctor's certificate.

The material and technical base of the university, departments and clinical sites provides residents with the opportunity to successfully master the EP, acquire key competencies for the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" and practical skills to work after graduation.

NCJSC "SMU" and departments, in close cooperation with medical institutions, carry out targeted distribution of residents to clinical bases, employment of residents and provision of advisory assistance to graduates, as well as organize courses to improve the professional level.

Thus, admission to residency 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" is carried out on the basis of clearly developed criteria that are accessible and transparent for applicants with a description of the conditions of study, goals and final results of the EP, as well as future employment opportunities. There are approved methods for current and final monitoring of training, conducting a questionnaire in relation to the disciplines OP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" and the opportunity for residents to give their independent assessment and feedback on the educational program, which helps to increase the attractiveness of the EP, taking into account feedback from stakeholders.

***Strengths / best practice***

There are no strengths in this standard.

***WEC recommendations***

1. The university administration should determine individual mechanisms of social support for the resident in "Pathological Anatomy", within the framework of social, financial and personal needs due to the high risk of infection of the resident during constant work with autopsy, surgical and biopsy material (hepatitis B, C, tuberculosis, HIV etc.), (Deadline until 09/01/2023);

2. The management of the EP to specify the duties of the clinical mentor in terms of the support provided for professional orientation and career planning of the resident (Due date until

09/01/2023);

3. Clinical mentors are recommended to take continuing education cycles in pedagogy to understand modern principles of education (Due date is September 1, 2023);

4. The management of the university is recommended to update the system of academic consulting in the choice of elective disciplines and the formation of an individual educational trajectory, the choice of the direction of residency, further career building (Due date is September 1, 2023).

**The conclusions of the EEC according to the criteria:** strong positions - 0, satisfactory - 17, suggest improvements - 0, unsatisfactory - 0.

## 6.5 STANDARD "TEACHERS"

### Evidence part

The policy of recruitment and selection of academic staff at the university for the implementation of EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" is carried out in accordance with the Regulations on the Department, Regulations on subdivisions and job descriptions with presenting qualification requirements.

The selection and formation of teaching staff takes place at the expense of their own staff through the training of graduates in the field of work and the involvement of employers from among the employees of medical institutions that are clinical bases of the NCJSC "SMU". The clinical work of residents during the training is carried out under the guidance of curators approved by the management of NCJSC "SMU". Curators are appointed from among the teaching staff who have the degree of doctor or candidate of medical sciences, as well as the highest or first qualification category, actively engaged in scientific and practical activities in this industry. Curators of residents and teachers of major disciplines are experienced clinicians, doctors with the highest category, who have the skills of teaching at a university. Since 2019, the Clinical Mentor School has been successfully operating at NJSC ICC, in which practical healthcare workers are trained and instructed, due to the changing requirements of teaching and assessment methods.

Employment of teaching staff at the university is carried out in accordance with the Labor Code of the Republic of Kazakhstan, "Rules for the competitive filling of positions of teaching staff and researchers of universities (Order of the Ministry of Education and Science of the Republic of Kazakhstan No. 2012 No. 230)" and is produced on a competitive basis, the procedure for which is regulated by the Personnel Policy of NJSC "MUS".

The competition for the positions of teaching staff and researchers is carried out on the basis of an analysis of the results of the applicants' activities in one of the forms (questionnaires; expert assessment; testing; interviews; and other forms of testing professional competencies) in the amount of established requirements for each position.

A survey of teaching staff implementing residency programs presented the following results: 80% of respondents noted complete satisfaction with the content of the educational program, 70% rated opportunities for advanced training as "very good", and 75% for career growth opportunities, while the level of academic freedom was 60 % of PPP was rated as "very good" and 30% as "good". Own innovations in the implementation of the EP are confirmed by 70% of respondents, "professional growth" was rated "very good" by 70% of residency teachers.

In accordance with the mission of the EP residency in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children", which is defined in the Educational Strategy for the specialty, the university approved the following teaching staff competencies: effective teaching at a medical university; assessment and examination in a medical university; research management; development of educational programs; communicative; information and communication; language; corporate;

professional.

The ongoing personnel policy in the NCJSC "SMU" allows maintaining a balance between teaching, scientific activities and the qualifications of a specialist, their responsibility, and the duties of employees.

For representatives of practical healthcare involved in the training of residents as mentors, the department provides training seminars where they teach teaching and assessment methods, working with the portal, electronic journal, etc.

The scientific work of the teaching staff is carried out according to the research plan of the university and departments. The teaching staff participates in the implementation of scientific and technological projects and scientific projects under the grant of the Ministry of Health of the Republic of Kazakhstan or the Ministry of Education and Science of the Republic of Kazakhstan.

The level of professional competencies of the teaching staff of the department at NCJSC "SMU" is maintained and developed in the system of continuous training and advanced training. To determine the need for training, NCJSC "SMU" conducts procedures for assessing and attesting personnel, namely: certification is carried out for all employees in accordance with the frequency established in the Regulations on the certification of employees of NCJSC "SMU". Professional development of full-time teachers is carried out once every 5 years, professional development - through training at seminars or master classes with the involvement of foreign experts, also with participation in republican and international conferences, symposiums, etc.

For the teaching staff of the department and the university, training seminars are systematically held on testing methodology, the art of presenting multimedia lectures, interactive teaching methods, the development of an objective structured clinical manuals in three languages, etc. The main document that determines the work of each teacher, containing the planning for the academic year of educational, methodological, innovative, educational, research and other types of work that contribute to the development of various competencies, is an individual development plan of the teacher.

The professional competence of the teaching staff of the department is constantly monitored by the department for personnel policy, the department of clinics and innovative technologies through online questioning of students, mutual visits and attendance at open classes, monitoring the results of exams. The university provides a system of advanced training and incentives for teachers for high pedagogical results and skills, scientific achievements and dedication. The best teachers have the opportunity to improve their skills with foreign partners of the university.

In the work with personnel, various forms of moral and material incentives for teams and individual employees for high quality indicators are provided. One of the main forms is the annual rating of departments and teaching staff, which ensures the transition to differentiated pay. The criteria for sections based on the results of the rating, taking into account feedback from teachers, are reviewed annually. Financial incentives are provided in the following nominations: "Best Department", "Best Head of Department", "Best Professor", "Best Associate Professor, Senior Lecturer", "Best Assistant, Lecturer", "Best Theoretical/Clinical Department for Innovation", "Breakthrough of the Year" and according to the results of the competitions - "Best Lecturer", "Best Video Lecture", "10-100-1000 Brilliant Ideas".

The development of the scientific potential of young scientists of the university is carried out by promoting residents to continue their studies in the magistracy, doctoral studies, as well as promoting their scientific and educational works, providing training opportunities and participating in republican and international scientific and practical conferences, advanced training and international internships through university or through the Ministry of Health of the Republic of Kazakhstan.

### *Analytical part*

The University has developed and implemented a policy for the recruitment and admission of teaching staff, which determines the required experience, criteria for scientific, educational, pedagogical and clinical achievements, including the balance between teaching, scientific activities, qualifications of a specialist, their responsibility, the duty of employees, which is confirmed by documents of the state and local levels: the labor code RK, "Rules for the competitive replacement of positions of teaching staff and university researchers (Order of the Ministry of Education and Science of the Republic of Kazakhstan No. 238 dated 13.07.2009, as amended on 09.06.2011, order of the Ministry of Education and Science of the Republic of Kazakhstan dated 17.02.2012 No. 230)" and is carried out on a competitive basis, the procedure for which is regulated by the Personnel policy of NCJSC "SMU".

The main objectives of the personnel policy are the selection of highly qualified specialists; ensuring professional growth through a system of continuous professional development and professional competence; maintaining the optimal age composition of the departments; providing conditions for the development of EMCD, scientific products; responsibility and balance of teaching staff to adequately ensure the educational program, including the proper balance between teachers of medical and non-medical profiles, as well as between full-time and part-time teachers, whose duties are defined in the relevant documents in accordance with the Regulations on the department, the Regulations on subdivisions and job descriptions with presenting qualification requirements.

The teaching and methodological work of the teaching staff is carried out according to the teaching load (500 and 680 hours), which allows the teaching staff the opportunity to engage in methodological, scientific, clinical work. An analysis of the teaching staff involved in teaching residents showed that teachers have high qualification characteristics in relation to pedagogical and clinical work.

The scientific work of teachers is carried out according to the plans of the scientific work of the departments, which involves residents 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children's Age", 7R01143 "Angiosurgery for adults, children".

In an interview with the teaching staff and when visiting clinical sites in the implementation of the components of EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children", the competence of the teaching staff in working with residents and explaining the importance and the importance of specialties for the health care system.

The information provided by the university and departments on this standard allows us to conclude that the qualitative and quantitative composition of the teaching staff of the EP in the specialty 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" meets the requirements of the standard.

In the training of doctors 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children's Age", 7R01143 "Angiosurgery for Adults, Children" the staff of the department and clinical mentors with extensive pedagogical and clinical experience, who have a scientific degree, are involved.

### **Strengths / best practice**

There are no strengths in this standard.

### **OEC recommendations**

There are no recommendations for this standard.

**The conclusions of the EEC according to the criteria:** strong positions - 0, satisfactory - 5, suggest improvements - 0, unsatisfactory - 0.

## 6.6. STANDARD "EDUCATIONAL RESOURCES"

### *Evidence part*

The implementation of the EP in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children" is carried out on the basis of a sufficient material and technical base that complies with the current rules and regulations, ensuring theoretical and practical classes, the implementation and assimilation of practical, the acquisition of skills in research activities by residents, provided for by the OP. The university and departments have modern computer technical devices in full. Each office, training room is equipped with multimedia stations, which have free access to the Internet. The departments have mini-libraries that have a large amount of foreign literature of recent years for the implementation of 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children".

The university constantly evaluates the availability of various resources. For the successful implementation of educational programs, the Keyps platform is working, and PR and HR services are successfully functioning. NCJSC "SMU" attaches great importance to providing students studying in residency with all the resources necessary to achieve key competencies. So the university has its own clinical base, there are contracts with all the leading clinics of the city, there is access to patients of any profile. NCJSC "SMU" has a rich library, which contains the best textbooks in any field, and entire departments with the Cochrane Library are freely available. Thus, students of residency throughout the course of their studies do not have any problems either with material and technical resources, or with information support, or with access to the library fund and to the right clinic. In the work plan of the department and the report, information is annually provided on the material and technical provision of the TCO department, including taking into account students in internship and residency. At the end of the annual report of the department, a SWOT analysis is mandatory, which also reflects both the needs and opportunities for improving this process.

The university attaches great importance to the availability of databases such as Medline, Cochrane library, Up To Date. A distinctive feature of the university is the presence of a rich library fund, which is updated annually. If necessary, update the procedure for replacing or updating the computer database. There is a clear algorithm of action. The plans and reports of the department contain information on the number of TCOs. A residency student can freely register on educational platforms such as Medscape, Consilium medicum, etc., which allows him to have free access to the latest information related to the learning process. There is access to Up To Date, in the library access to the Cochrane Library. In addition, the student can register for online learning platforms, become a member of international specialized associations. Residential students have full access to the Internet, together with their attending physicians, residents have access to medical records in Damu.med, online consultations and conferences are successfully implemented through the use of Webex Meet, Zoom, Skype.

The broadening of the horizons of the residency trainee occurs through training and work at workplaces in hospitals and polyclinics of the city, where professionals in various fields of medicine work. The agreements concluded by NCJSC "SMU" with the leading medical institutions of the city are aimed at achieving this goal - mutual assistance of education, science and practice.

For the passage of disciplines of related specialties in NJSC "MUS" there are agreements with all clinics of the city. To improve the quality of training for residents of NJSC "IUS", leading specialists from the best clinics in the city are involved as teachers and mentors for residents. This allows you to increase the responsibility of all stakeholders to achieve the goals of the OP. Working within the framework of the trinity of education, science and practice allows each resident to fully and efficiently receive an education that allows him to find a worthy application of his knowledge in practice.

In the process of training, residents of 7R01150 "Pathological Anatomy", 7R01152 "Nuclear

Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" have the opportunity to work with colleagues in different departments both in the clinical base and in other medical facilities, where he can be trained in related disciplines. From the first days, the inculcation of teamwork skills, communication skills, and managerial skills has been practiced.

### ***Analytical part***

Within the framework of the standard "Educational Resources" for EP in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatric Age", 7R01143 "Angiosurgery for adults, children" when visiting departments and clinical bases, analyzing the submitted documentation, material the technical base for the implementation of the process of education and training of doctors is sufficient, meets the requirements of the standard.

In the process of implementing OP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children's Age", 7R01143 "Angiosurgery for adults, children", each resident is provided with free access to work with case histories, clinical documents, information resources, electronic databases hospital systems.

Students have the opportunity to work directly with patients, develop the ability to work in a team, make decisions and provide advice based on working with sources in the specialties 7R01150 Pathological Anatomy, 7R01152 Nuclear Medicine, 7R01155 Pediatric Dentistry, 7R01143 Adult Angiosurgery, children's.

The process of practical training in the EP in the specialty 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children's Age", 7R01143 "Angiosurgery for adults, children" is provided by its conduction in specialized medical institutions under the guidance of experienced clinical mentors, which allows residents to learn practical skills, get acquainted with real work and gain the necessary knowledge and experience for further work.

A daily combination of theoretical and practical classes, as well as the opportunity to consult during independent work with teachers and clinical mentors, will allow residents of the OP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatric Age", 7R01143 "Angiosurgery for adults, children" receive answers to complex clinical situations and questions.

### **Strengths / best practice**

Sufficient allocation of resources to ensure the educational process and continuous improvement.

### **WEC recommendations:**

1. The management of the University should facilitate the international exchange of teachers and residents by providing appropriate resources and expand the possibility of studying in alternative institutions outside the Republic of Kazakhstan (Deadline - 09/01/2024)

**The conclusions of the EEC according to the criteria:** strong positions - 1, satisfactory - 10, suggest improvements - 0, unsatisfactory - 0.

## **6.7. STANDARD "EDUCATIONAL PROGRAM EVALUATION"**

### **Evidence**

Evaluation of EP in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatric Age", 7R01143 "Angiosurgery for adults, children" is carried out taking into account the mission of the residency educational programs, and in accordance with the mission and development strategy of the university, reflected in Policy in the field of quality assurance.



OP residency in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children" are compiled on the basis of the Policy in the field of MI adopted on 04.10.2022 and approved by practical healthcare professionals, discussed and approved at meetings of the collegiate bodies of the Committee for Postgraduate Educational Programs (COP PDO) and the Academic Council, which include representatives of all interested parties.

The composition of the KOP PDO, the Academic Committee, the Clinical Council and the Academic Council at NJSC "IUS" necessarily includes employers, students and may be the main specialists of the city and region who participate in the process of creating and evaluating the EP of residency specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 Pediatric Dentistry, 7R01143 Angiosurgery for adults and children. Their opinion plays a decisive role especially for the formulation of teaching methods and evaluation of residents.

Employers are involved in the intermediate and final certification of graduates. The main external stakeholder is the Ministry of Health, which monitors the educational achievements of residents through the National Independent Examination Center - the process is carried out by external experts.

To monitor and periodically evaluate the EP as an intra-university control, the following are used: attestation of the current progress of students, final attestation, attestation of all types of practice, verification of the state of the methodological support of the educational process, collection and analysis of data on customer satisfaction, internal audits.

Every year OKKMO checks the state of the methodological support of all departments, as a result of which acts of verification are drawn up. The monitoring results are reported at the meeting of the Academic Committee, specific measures are taken for each department.

The control of educational programs provides for the evaluation of curricula, as well as work programs and methodological developments in the context of disciplines. The quality control system in NJSC "MUS" is successfully functioning in accordance with the developed IMS documents: ST RK ISO 9001-2016 "Quality Management System. Requirements".

As a result of the evaluation of the EP, in connection with the requirements of employers, the competencies of the graduate of NJSC "IUS" were revised. The Standard of the University "Competence model of the graduate" has been developed for various specialties. The level of satisfaction of residents and the quality of the educational services provided is determined during meetings with residents and teaching staff on the basis of the developed questionnaire "Student satisfaction with the quality of the educational program", "Questionnaire 360".

Evaluation of the implementation of EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children" is carried out within the framework of the VKK and within the university control when attending classes and lectures, other types of activities of the teaching staff to evaluate methods training and assessing the knowledge of students, as well as monitoring the progress of residents in learning. After internal audits, an audit report is drawn up, which contains comments and recommendations for elimination. After the deadline, the identified problems are reassessed.

In the process of monitoring and evaluating EPs in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children's Age", 7R01143 "Angiosurgery for adults, children", the following components are analyzed: analysis of the provision of the educational process with the necessary resources (clinical base, teaching staff, the composition of clinical mentors, educational literature, classroom fund, equipment, etc.); analysis of the compliance of the curriculum with the requirements of the State Compulsory Standard for Residency in Medical Specialties (GOSO RK 2015, 2020); analysis of the compliance of the content of educational material for residents with the requirements of the State Compulsory Standard for Residency in Medical Specialties, qualification requirements for specialists, professional standards, trends in the

development of science and medicine; analysis of feedback from teachers, residents, employers on the quality of the content of the educational program; assessment of the progress of residents, progress in mastering certain competencies in the programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatric Age", 7R01143 "Angiosurgery for adults, children".

The School of Postgraduate Education monitors the quality control of clinical facilities, material and technical equipment for compliance with the content and quality of training of residents. Bilateral agreements have been concluded with all clinical bases, according to which clinical bases are responsible for the quality of training of future specialists, providing departments with high-quality training facilities, providing access to patients and modern diagnostic equipment.

The list of clinical bases indicates that there are enough resources for the clinical training of residents and that the clinical base meets the needs of the high-quality implementation of the programs 7R01150 Pathological Anatomy, 7R01152 «Nuclear Medicine», 7R01155 «Pediatric Dentistry», 7R01143 «Adult and Pediatric Angiosurgery».

Residents, as one of the stakeholders, participate in monitoring the implementation of residency educational programs. Feedback from residents, in order to determine their level of satisfaction with the content of the educational program, the organization of the educational process, is carried out by specialized departments by means of a questionnaire. During the survey, residents evaluate the educational program and give suggestions for its adjustment.

In the process of monitoring, EPs are regularly studied, evaluated by obtaining feedback from residents, teachers, employers and other stakeholders, and the educational achievements of residents are analyzed. The data obtained are discussed at meetings of departments, academic committees, with heads of structural divisions, with residents.

Evaluation of the content of residency programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children", training and evaluation methods is carried out on the basis of feedback data from representatives of practical healthcare, employers, clinical mentors residents who participate in the development and discussion of expected learning outcomes, in the assessment of actual learning outcomes and in the intermediate certification of residents. Monitoring of the assessment of knowledge and skills of graduates is carried out through an independent final certification of residency graduates. Based on the results of the IGA, an action plan is developed to adjust the educational program: making changes to syllabuses, a list of elective disciplines, a list of references. All interested parties (teaching staff, students, employers) are involved in the program evaluation process through representation in the relevant structures that provide evaluation of the educational program. Teaching and assessment methods used in the implementation of educational programs are formulated and available to all teachers, mentors and residents. Residents are informed about the forms and procedure for assessment.

Information on the quality of educational programs of residency 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children", analysis of employers' surveys, results of the IGA of graduates, information on employment is provided for discussion at department meetings and is used to improve residency programs.

According to the results of a survey conducted by the EEC IAAR, 85-95% of residents rated as "excellent" and "good" the quality of curricula, teaching methods, the speed of response to feedback from teachers regarding the educational process, the quality of teaching, informed support, the quality of examination materials, levels of accessibility and responsiveness of the university management, objectivity of knowledge assessment, objectivity and fairness of teachers.

Analytical part

Based on the requirements of accreditation standards, it should be noted that the monitoring of EPs in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children", taking into account the mission, required learning outcomes, content educational program, assessment of knowledge and skills, educational resources, is carried out in the proper form.

Evaluation of EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children" is carried out taking into account the admission policy, the needs of the healthcare system, the process of implementing the educational program, assessment methods, progress problems and shortcomings. At the same time, the results of feedback on the EP are conducted and studied with the participation of all interested parties (teachers, clinical mentors, residents, employers).

Educational programs in the specialties 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" are approved by the authorized body and are evaluated based on the established criteria for evaluating the EP.

The results of the evaluation of educational programs are used to improve or improve them. Transparency of the evaluation process and results for all stakeholders was ensured. Teachers, residents, employers are provided with access to the results of the evaluation of educational programs. Close interaction with employers at clinical bases and medical institutions has been demonstrated. The demand for residency graduates is reflected in the indicator of 100% employment of graduates.

On the basis of meetings, conversations and interviews of the vice-chairmen of the board in areas of activity, heads of structural divisions, heads of departments, faculty, clinical mentors, residents and employers, it should be noted the proper organization of monitoring and evaluation of educational programs with the participation of all interested parties. At the same time, professional associations could be involved in evaluating and improving the EP. The syllabuses do not spell out the results of learning disciplines and do not reflect the comparability of RO OP with RO disciplines.

Strengths / best practice in the standard "Evaluation of the educational program"

There are no strengths in this standard.

WEC recommendations

Heads of EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children" are recommended to involve specialists from the real health sector in the profile of the educational program to review the methods of assessing students (Due date 01.09.2023 G.);

For a comprehensive assessment of the quality of residency educational programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" and their continuous improvement, it is recommended to involve professional associations in the profile of the educational program (Deadline 01.09. 2023);

Heads of EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" to reflect in syllabuses the comparability of learning outcomes in EP with the results of disciplines (Due date 01.09.2023);

It is recommended to include practitioners and researchers with experience in this field into the procedure for external evaluation of the educational program 7R01152 "Nuclear Medicine" (Kazakh Scientific Institute of Oncology and Radiology, Hospital of the Medical Center of the Administration of the President of the Republic of Kazakhstan, Corporate Fund "UMC") (Deadline 01.09 .2024)

The conclusions of the EEC according to the criteria: strong positions - 0, satisfactory - 4, suggest improvements - 0, unsatisfactory - 0.

## 6.8. STANDARD "MANAGEMENT AND ADMINISTRATION"

### Evidence

The management of the NAO ICC is determined by the approved Organizational Management Structure, which is updated as necessary, which ensures the efficiency of the university as a whole and the implementation of mechanisms for improving the EP. The organizational structure of the NJSC "ICC" (approved by the Decision of the Board of Directors of the NJSC ICC, protocol No. 16 of 01.04.22) is determined in accordance with the mission, goals and objectives, a map of processes, the needs for training personnel with higher and postgraduate medical education.

Management of the residency educational program 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children" is carried out in accordance with the Regulations on the procedure for the development, approval and examination of educational programs of the NAO ICC, approved on March 29, 2019.

The functions of organizational management include the regulation of the educational process (academic calendar, the number of study groups, the amount of study work, the teaching load of teaching staff), the calculation of hours, the formation of a schedule, the development and approval of the RUE, the management of the classroom fund, the contingent of students, accounting for the educational achievements of students.

Operational management of residency programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for Adults, Children" at NAO ICC is carried out by: deans, heads of EPs, heads of departments, teachers. The functions of operational management are the development, implementation, implementation of the EP, the formation of curricula, material, technical, educational, methodological and information support for the educational process, career guidance and work with students.

The School of Postgraduate Education, the heads of the EP, responsible teachers for residency, carries out the main academic management of the EP. The dean of the SPE carries out the direct management of the teaching staff involved in the implementation of the EP. All legal acts regulating the process of preparing a resident and assessing his educational and clinical achievements are available at the departments, are prescribed in the Discipline Policy and published on the website.

The approved residency programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children" were developed by the head of the EP and a working group from among the teaching staff of the departments, clinical mentors and residents. Further, the OP was submitted for discussion at a meeting of the department, the Academic Committee (07/19/2022 Minutes No. 10a) and approved at a meeting of the Board of Directors (07/29/2022, Minutes No. 21). Quality EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children" provide all participants in its implementation: the dean of the School of Professional Education, the Head of the EP, responsible for the discipline, teachers. To ensure the quality assessment of the EP, the Council for Academic Quality was formed and approved, which includes teaching staff, students and representatives of employers. The composition of the Council was approved by the Order of the Rector of the NAO ICC dated November 02, 2022, order No. 419.

The teaching staff and administrative structures of the university have a high degree of academic freedom in the formation and implementation of the EP. Proposals for the content of the EP, elective courses, all changes and additions to the EP and syllabuses of disciplines are discussed at a meeting of the COP residency. Schoolteachers independently determine the forms of conducting classes, teaching methods, methods and forms of evaluating learning outcomes, develop methodological materials to ensure the educational process.

There are a number of regulatory documents regulating residency programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children", based on GOSO, ISO and EFQM standards, which must be performed in strict accordance with the proposed requirements for the EP. In accordance with the "Regulations on the procedure for the development, approval and examination of educational programs of the NAO ICC", the quality of the residency program 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of children's age", 7R01143 "Angiosurgery for adults, children" are provided by the participants of its implementation: the dean of the School, the head of the EP, responsible for disciplines, teachers, residents. Quality assessment of 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children" at the institutional level is provided by the Department of Strategic Development and International Cooperation.

#### Analytical part

The management system of residency programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children" is carried out on the basis of constituent documents, the Charter of the University, the management structure, Regulations on departments and job descriptions. General management of the educational process and control of all aspects of the implementation of accredited residency programs at the university level is carried out by the SPE heads of educational programs, responsible teachers for residency. The dean of the SPE carries out the direct management of the teaching staff involved in the implementation of the EP.

The management of the university and the heads of the residency program 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children", 7R01143 "Angiosurgery for adults, children" are administratively responsible for the quality of the EP.

The dean of the School of Professional Education, the head of the EP and the teaching staff are directly responsible for the organization and effectiveness of the current monitoring of progress and intermediate certification in the disciplines, and systematically monitor the educational achievements of residents. In order to control and improve the quality of the EP, the following are carried out: 1) internal quality assessment procedures (internal audit); 2) external quality assessment procedures: accreditation of residency educational programs for compliance with specialized accreditation standards.

Evaluation of OP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children" is carried out on the basis of monitoring the main indicators of quality and the timing of the implementation of planned activities, monitoring the effectiveness of the processes of internal and external audit of the management system quality.

Thus, the evaluation of the academic leadership is carried out based on the results of the final attestations of students, state attestations, the results of independent attestation of graduates, and the assessment of key indicators of the educational activities of the University Development Program. Assessment of key indicators of the development strategy is carried out at the end of the calendar year. An analysis is being made of the achievement of development indicators, coordination with authorized structural divisions of the Ministry of Health of the Republic of Kazakhstan, approval at a meeting of the Academic Council and the Board of Directors. University staff and other interested parties can find information about the implementation of the development strategy on the website of the university. NJSC "MUS" has organized and operates the School of Clinical Mentor, which trains representatives of practical healthcare, clinical mentors of residents. The work of this school helps to determine the goals and objectives that the clinical mentor faces in the process of preparing a resident. The renewal process at the University is based on the implementation of the mission of OP

7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults, children".

Thus, according to this standard as a whole, it can be stated that the management of the university and the teaching staff of the department are ready for the implementation and continuous improvement of the residency program 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Adult Angiosurgery, children's".

Strengths / best practice

No strengths have been identified for this standard.

WEC recommendations

There are no recommendations for this standard.

The conclusions of the EEC according to the criteria: strong positions - 0, satisfactory - 5, suggest improvements - 0, unsatisfactory - 0.

## **(VII) OVERVIEW OF STRENGTHS/BEST PRACTICE FOR EACH STANDARD**

### **7.1 Mission and Deliverables Standard**

**No strengths have been identified for this standard.**

Standard "Educational program"

Ensuring a significant role of mentoring in the professional development of residents, the integration of training, the formation of key competencies and the acquisition of practical skills,

Constructive interaction between the department and residents, clinical mentors, employers, alumni, the healthcare sector.

### **7.3 Resident Assessment Standard**

No strengths have been identified for this standard.

### **7.4 Standard "Students of residency"**

No strengths have been identified for this standard.

### **7.5 Standard "Teachers"**

No strengths have been identified for this standard.

### **7.6. Standard "Educational Resources"**

Sufficient allocation of resources to ensure the educational process and continuous improvement.

### **7.7 Standard "Evaluation of educational programs"**

No strengths have been identified for this standard.

### **7.8 Management and administration standard**

No strengths have been identified for this standard.

## **(VIII) OVERVIEW OF RECOMMENDATIONS FOR IMPROVING QUALITY**

### **8.1 Mission and Deliverables Standard**

1. To raise the awareness of all stakeholders, the management of the University should ensure the availability of the mission and the final learning outcomes for the public. Deadline March 1, 2023

### **8.2 Standard "Educational program"**

Heads of OP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children", 7R01143 "Angiosurgery for adults, children" compliance with the learning outcomes, determine the relationship between the achievability of the learning outcomes of the EP and academic disciplines (due date 09/01/2023);

The leaders of the EP are recommended to expand the catalog of elective (optional) disciplines for the formation of an individual educational trajectory of residents 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatric Age", 7R01143 "Angiosurgery for adults, children" (due date 01.09.2023 .).

In OP 7R01150 "Pathological anatomy, it is necessary to prescribe the level of complexity of the mastered practical skills that a resident must master in the learning process in accordance with the categories of complexity of morphological material - autopsy, operational and biopsy (1, 2, 3, 4) to understand progress in the educational process ( completion date 09/01/2023).

#### 8.3 Resident Assessment Standard

Heads of EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children" to develop a procedure for documenting the reliability and validity of methods and formats for assessing the achievement of final results (Due date until 09/01/2023);

To implement for the residency program "Pathological Anatomy" at clinical sites (pathological anatomical bureau, palo-anatomical laboratory) the assignment of a login and password to a resident pathologist for the entire period of study, which will allow observing the professional growth of a resident in the Damumed system (Deadline 09/01/2023).

#### 8.4. Standard "Students of residency"

The leadership of the university should determine the individual mechanisms of social support for the resident in "Pathological Anatomy", within the framework of social, financial and personal needs due to the high risk of infection of the resident during constant work with autopsy, surgical and biopsy material (hepatitis B, C, tuberculosis, HIV, etc. .e), (Due date is September 1, 2023);

The management of the EP to specify the duties of the clinical mentor in terms of the support provided for professional orientation and career planning of the resident (Due date until 09/01/2023);

Clinical mentors are recommended to take continuing education cycles in pedagogy to understand modern principles of education (Due date is September 1, 2023);

The management of the university is recommended to update the system of academic consulting in the choice of elective disciplines and the formation of an individual educational trajectory, the choice of the direction of residency, further career building (Due date is September 1, 2023).

#### Standard "Teachers"

There is no recommendation for this standard.

#### 8.6 Standard "Educational Resources"

The management of the University should facilitate the international exchange of teachers and residents by providing appropriate resources and expand the possibility of studying in alternative institutions outside the Republic of Kazakhstan (Due date - 09/01/2024)

#### 8.7 Standard "Evaluation of educational programs"

Heads of EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children" are recommended to involve specialists from the real health sector in the profile of the educational program to review the methods of assessing students (Due date 01.09.2023 G.);

For a comprehensive assessment of the quality of residency educational programs 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143

"Angiosurgery for adults, children" and their continuous improvement, it is recommended to involve professional associations in the profile of the educational program (Deadline 01.09. 2023);

Heads of EP 7R01150 7R01152 "Nuclear Medicine", 7R01155 "Children's Dentistry", 7R01143 "Angiosurgery for adults, children" to reflect in syllabuses the comparability of learning outcomes in EP with the results of disciplines (Due date 01.09.2023);

It is recommended to include practitioners and researchers with experience in this field into the procedure for external evaluation of the educational program 7R01152 "Nuclear Medicine" (Kazakh Scientific Institute of Oncology and Radiology, Hospital of the Medical Center of the Administration of the President of the Republic of Kazakhstan, Corporate Fund "UMC") (Deadline 01.09 .2024)

### **8. 8 Standard "Management and Administration"**

There are no recommendations for this standard.

## **(IX) OVERVIEW OF THE RECOMMENDATION FOR THE DEVELOPMENT OF EDUCATIONAL ORGANIZATION**

During the work of the EEC IAAR, which took place in full-time and remote format, meetings were held with the administration of the University, heads of structural divisions, teaching staff, residents, clinical mentors, employers, documents of the EP, Internet resources were studied, the results of which can be used to judge the process of improvement OP residency EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Pediatrics", 7R01143 "Angiosurgery for adults, children".

The recommendations focus on improving work to bring the learning outcomes of OP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Pediatric Dentistry", 7R01143 "Angiosurgery for adults and children" into line with the learning outcomes of EP 7R01150 "Pathological Anatomy", disciplines, the procedure for documenting the reliability and validity of methods and formats for assessing the achievement of final results, expanding the list of elective disciplines, training teachers with a scientific degree and considering the duration of training in the light of international standards in the specialty.

As a result of accreditation of OP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children's Age", 7R01143 "Angiosurgery for adults, children", 3 strong positions were identified, 87 satisfactory, 3 suggesting improvement and 16 recommendations were made.

## **(X) RECOMMENDATION TO THE ACCREDITATION BOARD**

The members of the EEC came to the unanimous opinion that the educational residency programs EP 7R01150 "Pathological Anatomy", 7R01152 "Nuclear Medicine", 7R01155 "Dentistry of Children", 7R01143 "Angiosurgery for adults, children", implemented by the Non-Profit Joint Stock Company "Semey Medical University", are recommended for accreditation for a period of 5 years.



Appendix 1. Evaluation table "PARAMETERS OF PSA" for residency program  
 OP 7R01150 "Pathological anatomy",  
 7R01152 "Nuclear Medicine",  
 7R01155 Pediatric Dentistry,  
 7R01143 "Angiosurgery for adults, children"

| №<br>п/п  | № | CRITERIA FOR EVALUATION  | Position of the educational organization |              |                     |                |
|---|---|--|--|--------------|---------------------|----------------|
|   |   |  | Strong                                   | Satisfactory | Assumes improvement | Unsatisfactory |
| <b>Standard 1 Mission and Deliverables</b>                  |   |  |  |              |                     |                |
| <b>Definition of the mission of the educational program</b> |   |  |  |              |                     |                |
| 1   | 1 | The medical education organization must define the mission of the residency educational program and widely inform the public and the healthcare sector about the stated mission. |  | +            |                     |                |

|   |   |  |  |   |  |  |
|---|---|--|--|---|--|--|
| 2 | 2 | The medical education organization should determine the mission of the educational program based on consideration of the health needs of society, the needs of the medical care system and, accordingly, other aspects of social responsibility.   |  | + |  |  |
| 3 | 3 | The medical education organization must ensure that the main stakeholders are involved in the development (formulation) of the mission of the educational program.   |  | + |  |  |
| 4 | 4 | The medical education organization must ensure that the mission of the educational program is consistent with the mission of the organization and allows the preparation of a competent researcher at the level of postgraduate medical education. |  | + |  |  |

|   |   |  |  |   |  |  |
|---|---|--|--|---|--|--|
| 5 | 5 | The mission statement should contain goals and an educational strategy to prepare a competent scientist, researcher at the level of postgraduate medical education.  |  | + |  |  |
| 6 | 6 | Mission of the educational program:<br>- should correspond to available resources, opportunities and requirements of the market;<br>- ways to support it should be determined;<br>- access to information about the mission of the educational program for the public should be provided (availability of information on the website of the university). |  | + |  |  |
| 7 | 7 | The mission and goals of the educational program should be discussed at the advisory boards / commissions of the university and approved by the advisory board of the university.  |  | + |  |  |

|                          |   |   |  |   |  |  |
|--------------------------|---|---|--|---|--|--|
| 8                        | 8 | A medical education organization should systematically collect, accumulate and analyze information about its activities in preparation for the implementation of the residency program; conduct an assessment of strengths and weaknesses (SWOT analysis), on the basis of which the leadership of a medical educational organization, together with an advisory board, should determine policy and develop strategic and tactical plans. |  | + |  |  |
| <b>Learning Outcomes</b> |   |   |  |   |  |  |

|    |    |  |  |   |  |  |
|----|----|--|--|---|--|--|
| 9  | 9  | <p>The medical education institution must define the learning outcomes that future residents should achieve as a result of the training program in relation to: their postgraduate achievements in knowledge, skills and thinking; an appropriate basis for their future career in their chosen field of medicine; future roles in the health system; commitment and skills in lifelong learning; the needs and problems of public health, the needs of the health care system and other aspects of social responsibility; professional behaviour.</p> |  | + |  |  |
| 10 | 10 | <p>The medical education organization should determine the final learning outcomes in terms of general and discipline-specific / specialty components that students need to achieve upon completion of the program.</p>  |  | + |  |  |

|    |    |  |  |   |  |  |
|----|----|--|--|---|--|--|
| 11 | 11 | The medical education organization must define the end results of training regarding the appropriate behavior and attitude towards patients and their relatives.   |  | + |  |  |
| 12 | 12 | A medical education organization must have mechanisms to guarantee the proper professional behavior and attitude of residency students to colleagues and other medical personnel, teachers, other healthcare workers, and compliance with the Code of Honor. |  | + |  |  |
| 13 | 13 | The medical education organization must inform the public about the established end results of the residency program in the relevant specialties.  |  | + |  |  |

|   |    |  |  |   |  |  |
|---|----|--|--|---|--|--|
| 14  | 14 | The medical education organization should guarantee the continuity between the final learning outcomes of the programs of basic and postgraduate medical education.                      |  | + |  |  |
| <b>Participation in the formulation of the mission and deliverables</b> |    |  |  |   |  |  |
| 15  | 15 | The medical education organization should determine the mechanisms for involving stakeholders in the formulation of the mission and final learning outcomes for the educational program. |  | + |  |  |

|  |    |  |  |    |  |  |
|--|----|--|--|----|--|--|
| 16   | 16 | The medical education organization should formulate the mission of the educational program and determine the final learning outcomes of the program, taking into account proposals from other interested parties, which are representatives of other medical specialties, patients, society, organizations and authorized health authorities, professional organizations and medical scientific societies. |  | +  |  |  |
| <b><i>TOTAL according to the standard:</i></b>                               |    |  |  | 16 |  |  |
| <b>STANDARD 2 "EDUCATIONAL PROGRAM"</b>                                      |    |  |  |    |  |  |
| <b>Framework parameters of the program of postgraduate medical education</b> |    |  |  |    |  |  |



|    |   |  |   |  |  |  |
|----|---|--|---|--|--|--|
| 17 | 1 | The medical education organization should determine the educational framework parameters based on the established learning outcomes for this program and the qualifications of the resident graduate, develop them in accordance with the required results of the existing basic medical education, and organize the systematic and transparent training.          | + |  |  |  |
| 18 | 2 | The medical education organization must ensure that the content of the residency program complies with the requirements of the State Educational Standard of the Republic of Kazakhstan and ensure the breadth of training of specialists in accordance with the name of the program and the necessary depth of training in the field determined by the specialty. | + |  |  |  |

|    |   |  |   |  |  |  |
|----|---|--|---|--|--|--|
| 19 | 3 | A medical education institution should use practice-oriented training to ensure that residency students are personally involved in the provision of medical care and responsibility for patient care.  | + |  |  |  |
| 20 | 4 | The medical education institution must use appropriate teaching and learning methods and ensure the integration of practice and theory components that include didactic sessions and patient care experience as well as independent and active learning. | + |  |  |  |
| 21 | 5 | The medical education organization must ensure that the training will be carried out in accordance with the principles of equality.  | + |  |  |  |

|    |   |  |   |  |  |  |
|----|---|--|---|--|--|--|
| 22 | 6 | The medical education organization should use a student-centered approach to teaching that encourages, prepares and supports future residency students to take responsibility for their own learning process and demonstrate in their practice.                  | + |  |  |  |
| 23 | 7 | The medical education organization should provide for mechanisms for mentoring, regular assessment and feedback, informing about the program and the rights and obligations of future residency students, and also include obligations on ethics in the program. | + |  |  |  |
| 24 | 8 | The medical education organization should provide mechanisms for increasing the independence and responsibility of residency students regarding their knowledge, skills and experience development.  | + |  |  |  |

|                          |    |  |   |  |  |  |
|--------------------------|----|--|---|--|--|--|
| 25                       | 9  | The medical education institution should recognize gender, cultural and religious differences and prepare future residency students for appropriate relationships with patients.   | + |  |  |  |
| <b>scientific method</b> |    |  |   |  |  |  |
| 26                       | 10 | The medical education organization must implement the scientific foundations and methodology of medical research, including clinical research.   | + |  |  |  |
| 27                       | 11 | The medical education organization must ensure that future residency students are able to use scientific evidence, study and know evidence-based medicine through wide access to relevant clinical/practical experience based on the relevant profile in the chosen field of medicine. | + |  |  |  |

|                        |    |  |   |  |  |  |
|------------------------|----|--|---|--|--|--|
| 28                     | 12 | The medical education organization should provide for the teaching and learning of a critical assessment of literature, articles and scientific data, the application of scientific developments.  | + |  |  |  |
| <b>Program content</b> |    |  |   |  |  |  |
| 29                     | 13 | The medical education institution should include in the training program clinical work and the relevant theory or practice of basic biomedical, clinical, behavioral and social sciences, preventive medicine, clinical decision making, communication skills, medical ethics, public health, medical jurisprudence and forensic medicine, managerial disciplines, patient safety, responsibility for one's own health, knowledge of complementary and alternative medicine. | + |  |  |  |

|    |    |   |   |  |  |  |
|----|----|---|---|--|--|--|
| 30 | 14 | The medical education organization must organize educational programs with due attention to patient safety and autonomy.  | + |  |  |  |
| 31 | 15 | A medical education organization should ensure in the educational program the development of knowledge, skills and professional attitudes corresponding to the various roles of a doctor, such as a practicing doctor or medical expert, communicator, employee and team member, leader / manager or administrator, advocate for the interests and health of the patient, scientist / researcher. | + |  |  |  |
| 32 | 16 | The medical education organization should provide mechanisms for adjusting and changing the content to the changing conditions and needs of the medical care system.  | + |  |  |  |

**Program structure, content and duration**

|  |    |   |   |  |  |  |
|--|----|---|---|--|--|--|
| 33                                     | 17 | <p>The medical education organization must describe the general structure, composition and duration of the educational program, clearly establish the mandatory and optional components, integrate practice and theory, take into account the requirements of national legislation and provide an adequate representation of how local, national or regional health care systems are oriented to the needs of providing medical care to the population.</p> | + |  |  |  |
| 34                                     | 18 | <p>A medical education institution should, when deciding on the duration of a program, take into account the required learning outcomes of postgraduate medical education in relation to the chosen field of medicine, the requirements for fulfilling the different roles of certified professionals in the health sector, possible alternatives for using time-based training.</p>  | + |  |  |  |
| <p><b>Organization of training</b></p> |    |   |   |  |  |  |

|    |    |   |  |   |  |  |
|----|----|---|--|---|--|--|
| 35 | 19 | The medical education organization must define the responsibility and authority for organizing, coordinating, managing and evaluating each training/clinical site and educational process.  |  | + |  |  |
| 36 | 20 | The medical education institution should guarantee clinical training in the conditions of multidisciplinary clinics and mechanisms for coordinating training on the basis of these clinics so that future residency students acquire adequate training in various aspects of the chosen field of medicine.                                  |  | + |  |  |
| 37 | 21 | The medical education organization should guarantee training in the conditions of various clinical bases, which are characterized by the profile of clinics, various categories of patients, the level of medical care (primary medical care, specialized medical care, highly specialized medical care), hospitals and outpatient clinics. |  | + |  |  |
| 38 | 22 | When planning an educational program, a medical education organization must observe due representation of employees, residency students and other relevant stakeholders.  |  | + |  |  |



|   |    |  |          |           |          |  |
|---|----|--|----------|-----------|----------|--|
| 39  | 23 | A medical education organization should have access to the resources necessary for planning and implementing teaching methods, assessing students, and innovating the training program.  |          | +         |          |  |
| <b>Relationship between postgraduate medical education and health care delivery</b> |    |  |          |           |          |  |
| 40  | 24 | The medical education institution should describe and acknowledge the role of mentoring in professional development, ensure integration between training and health care delivery (training in the workplace), ensure that training is complementary and consistent with health care requirements.   |          |           | +        |  |
| 41  | 25 | The medical education organization should effectively organize the use of the capabilities of the health care system or the provision of medical care for the purposes of education, which involves the use of the opportunities of various clinical sites, patient problems and clinical problems for the purposes of education, and at the same time, complying with the requirements for the provision of medical care. |          | +         |          |  |
|   |    | <b><i>TOTAL according to the standard:</i></b>   | <b>2</b> | <b>22</b> | <b>1</b> |  |
| <b>Standard 3 "POLICY FOR ASSESSMENT OF STUDENTS IN THE RESIDENCE"</b>              |    |  |          |           |          |  |
| <b>Assessment Methods</b>   |    |  |          |           |          |  |
| 42  | 1  | The medical education institution should formulate and implement a residency student assessment policy that includes principles, objectives, methods and practices for assessing residency students, including specialist qualification examinations, and ensure that the assessment covers knowledge, skills and professional behavior and attitude.  |          |           | +        |  |

|   |   |  |  |   |  |  |
|---|---|--|--|---|--|--|
| 43  | 2 | The medical education organization should use an additional set of assessment methods and formats in accordance with their "applicability", which includes a combination of validity, reliability, impact on learning, acceptability and effectiveness of assessment methods and formats in relation to the established learning outcomes. |  | + |  |  |
| 44  | 3 | The medical education organization must formulate criteria for passing exams or other types of assessment, including the number of allowed retakes.  |  | + |  |  |
| 45  | 4 | The medical education organization must study and document the reliability, validity, and fairness of assessment methods.  |  | + |  |  |
| 46  | 5 | A medical education organization should use a system of appealing the results of an assessment based on the principles of fairness and through compliance with the legal process.  |  | + |  |  |
| 47  | 6 | The medical education organization should facilitate the involvement of external examiners, introduce new assessment methods, if necessary.  |  | + |  |  |
| 48  | 7 | The medical education organization should keep a record of the various types and stages of training in an educational journal or protocols.  |  | + |  |  |
| <b>Relationship between assessment and learning</b> |   |  |  |   |  |  |
| 49  | 8 | The medical education organization should use assessment principles, methods and practices that are compatible with established learning outcomes and learning methods.  |  | + |  |  |

|  |    |  |          |   |          |  |
|--|----|--|----------|---|----------|--|
| 50                                       | 9  | A medical education organization should have mechanisms for providing timely, specific, constructive and fair feedback to future residency students based on the results of assessing their knowledge and skills.  |          | + |          |  |
| 51                                       | 10 | The medical education organization should use the principles, methods and practices of assessment that promote integrated learning and involvement in practical clinical work, provide interprofessional learning.   |          | + |          |  |
|  |    | <b><i>TOTAL according to the standard:</i></b>   | <b>0</b> | 9 | <b>1</b> |  |
| <b>STANDARD 4 "RESIDENTURY STUDENTS"</b> |    |  |          |   |          |  |
| <b>Admission policy and selection</b>    |    |  |          |   |          |  |
| 52                                       | 1  | The medical education organization should consider the relationship between the mission of the university, the educational program and the selection of residency students.  |          | + |          |  |
| 53                                       | 2  | The medical education organization must ensure a balance between the existing potential and opportunities for training and recruitment of residency students.  |          | + |          |  |
| 54                                       | 3  | The medical education institution must formulate and implement a policy on the criteria and process for selecting students, including the admission of students of residency with disabilities, requiring the necessary conditions and equipment in accordance with national laws and regulations, and take into account the safety of doctors and patients. |          | + |          |  |

|                           |   |   |  |   |  |  |
|---------------------------|---|---|--|---|--|--|
| 55                        | 4 | The medical education organization must formulate and implement a policy for the transfer of residency students from other national or international programs.  |  | + |  |  |
| 56                        | 5 | The medical education organization must guarantee a high level of understanding of the biomedical sciences, achieved at a basic level before the start of postgraduate education.                                     |  | + |  |  |
| 57                        | 6 | The medical education organization must guarantee the transparency of the selection procedure and equal access to postgraduate education.   |  | + |  |  |
| 58                        | 7 | The medical education organization should consider, as part of its selection procedure, the specific abilities of applicants in order to enhance the outcome of the learning process in the chosen field of medicine. |  | + |  |  |
| 59                        | 8 | The medical education organization should develop an appeal procedure against the decision of the selection committee.  |  | + |  |  |
| 60                        | 9 | Medical education organization should provide mechanisms for periodic review of admission policy, based on relevant social and professional data, in order to meet the health needs of society.                       |  | + |  |  |
| <b>Number of students</b> |   |   |  |   |  |  |

|  |    |  |  |   |   |  |
|--|----|--|--|---|---|--|
| 61   | 10 | The medical education organization should establish the number of residency students that corresponds to the possibilities of clinical / practical training, the potential of clinical mentoring and other available resources, national and regional human resources needs in accordance with the chosen field of medicine, and if the medical education organization does not independently determine the enrollment of students, then Demonstrate responsibility by explaining the relationship with the competent authorities and highlighting the implications of admissions decisions, such as imbalances between recruitment and existing capacity and training facilities and resources. |  | + |   |  |
| 62   | 11 | The medical education institution should have available information on the health needs of the community, which includes consideration of a balanced recruitment according to the gender, ethnic and social characteristics of the population, including the potential need for a special policy for the recruitment and admission of their groups of small peoples and doctors from rural areas.  |  | + |   |  |
| 63   | 12 | The medical education organization should determine the number of residency students through consultation with stakeholders.   |  | + |   |  |
| <b>Support and advice for residency students</b> |    |  |  |   |   |  |
| 64   | 13 | A medical education organization must have a system of academic counseling for future residency students.  |  |   | + |  |
| 65   | 14 | A medical education organization should have mechanisms to support residency students focused on social, financial and personal needs, allocating appropriate resources for social and personal support.   |  | + |   |  |

|   |    |   |  |    |   |  |
|---|----|---|--|----|---|--|
| 66  | 15 | The medical education institution must guarantee the confidentiality of counseling and support provided and provide support for career guidance and career planning.  |  | +  |   |  |
| 67  | 16 | The medical education organization should provide support in the event of a professional crisis and problem situations.   |  | +  |   |  |
| <b>Representation of residency students</b> |    |   |  |    |   |  |
| 68  | 17 | The medical education organization should develop and implement a policy for the representation of residency students, including the formulation of the mission and learning outcomes, participation in the development of the training program, planning working conditions, evaluation of the training program, and management of the training program.   |  | +  |   |  |
|   |    | TOTAL according to the standard:  |  | 16 | 1 |  |
| <b>STANDARD 5 "TEACHERS"</b>                |    |   |  |    |   |  |
| 69  | 1  | A medical education organization should develop and implement a policy for the recruitment and admission of teachers, supervisors and mentors, which defines the required experience, criteria for scientific, educational, pedagogical and clinical achievements, including the balance between teaching, scientific activities and specialist qualifications, their responsibilities, duties of employees and, in particular the balance between teaching, research and medical care. |  | +  |   |  |
| 70  | 2  | The medical education organization must take into account the mission of the educational program, the needs of the education system and the needs of the medical care system in its selection policy.   |  | +  |   |  |

|    |   |  |  |   |  |  |
|----|---|--|--|---|--|--|
| 71 | 3 | The medical education organization should, in the development and implementation of personnel policy, determine the responsibility of all doctors as part of their professional duties for participation in postgraduate education based on practice, reward them for their participation in postgraduate training of specialists, ensure that teachers are practitioners in their respective fields, guarantee that teachers in sub-specialties are appointed only for a certain period of study in accordance with the specifics of the training program and their qualifications. |  | + |  |  |
| 72 | 4 | The medical education organization must ensure that teachers have enough time for teaching, mentoring and learning, provide a program for the development of teachers and mentors, and ensure periodic evaluation of the performance of teachers and mentors.  |  | + |  |  |
| 73 | 5 | When developing and implementing a personnel policy, a medical education organization should include in the employee development program and support for teachers their training and further professional development of both professional and pedagogical qualifications; evaluate and recognize the dignity of academic activities as teachers, mentors; determine the ratio between the number of teachers who have received recognition and the number of residency students, guaranteeing their individual relationship and monitoring the achievements of residency students.  |  | + |  |  |
|    |   | <b><i>TOTAL according to the standard:</i></b>   |  | 5 |  |  |

**STANDARD 6 "EDUCATIONAL RESOURCES"**

**Logistics & Equipment**

|                               |   |   |   |   |  |  |
|-------------------------------|---|---|---|---|--|--|
| 74                            | 1 | A medical education organization should provide residency students with a base and opportunities for practical and theoretical training, access to the latest professional literature and sources, adequate information and communication technologies and equipment for teaching practical skills, a safe environment for self-directed learning.                    |   | + |  |  |
| <b>Клинические базы</b>       |   |   |   |   |  |  |
| 75                            | 2 | The medical education institution must select and approve training bases and ensure access to appropriate clinical/practical training bases, a sufficient number of patients, appropriate patients and information on patients with various problems to achieve training goals, including the use of both inpatient and outpatient care opportunities. , and on duty. | + |   |  |  |
| 76                            | 3 | When choosing a learning environment and clinical base, a medical education organization should ensure that the curriculum includes issues of health promotion and disease prevention, training in other relevant clinics/institutions and PHC.   |   | + |  |  |
| 77                            | 4 | A medical education organization should develop and implement a quality control system for clinical bases and other educational resources, material and technical equipment, including visits to training bases or other established procedures.  |   | + |  |  |
| <b>Information Technology</b> |   |   |   |   |  |  |



|                                       |    |   |  |   |  |  |
|---------------------------------------|----|---|--|---|--|--|
| 78                                    | 5  | A medical education organization must guarantee access to web and electronic media and use information and communication technologies effectively, in an ethical manner, as an integrated part of the educational program.  |  | + |  |  |
| <b>Medical Research and Advances</b>  |    |   |  |   |  |  |
| 79                                    | 6  | The medical education organization must provide information on the research base and priority areas in the field of scientific research of the medical education organization   |  | + |  |  |
| 80                                    | 7  | The medical education organization should provide for future residency students the appropriate time in the training program for conducting scientific research.  |  | + |  |  |
| 81                                    | 8  | A medical education organization should be given access to equipment for conducting scientific research and ongoing scientific activities at the training bases.  |  | + |  |  |
| <b>Training in other institutions</b> |    |   |  |   |  |  |
| 82                                    | 9  | The medical education organization must develop and implement an accessibility policy for future residency students and provide them with training opportunities in alternative institutions within or outside the country. |  | + |  |  |
| 83                                    | 10 | A medical education organization should create a system for transferring and offsetting learning outcomes through active coordination of programs between teaching institutions and the use of academic credits.            |  | + |  |  |

|  |    |   |          |   |  |  |
|--|----|---|----------|---|--|--|
| 84   | 11 | The medical education organization should develop relationships with relevant national and international bodies in order to facilitate the exchange and mutual recognition of learning elements.  |          | + |  |  |
|  |    | <b><i>TOTAL according to the standard:</i></b>  | <b>1</b> | 9 |  |  |
| <b>STANDARD 7 "EVALUATION OF EDUCATIONAL PROGRAMS»</b> |    |   |          |   |  |  |
| 85   | 1  | A medical education organization should have mechanisms for monitoring the educational program, taking into account the mission, the required learning outcomes, the content of the educational program, the assessment of knowledge and skills, and educational resources. |          | + |  |  |
| 86   | 2  | The medical education organization should evaluate the program in relation to the admission policy for residency students and the needs of the education and healthcare system in medical personnel.  |          | + |  |  |
| 87   | 3  | The medical education organization must guarantee the participation of stakeholders in the evaluation of the program.   |          | + |  |  |
| 88   | 4  | The medical education organization should provide mechanisms for ensuring the transparency of the process and results of the evaluation of the educational program for management and all interested parties.   |          | + |  |  |
|  |    | <b><i>TOTAL according to the standard:</i></b>  |          | 4 |  |  |
| <b>Standard 8 "MANAGEMENT AND ADMINISTRATION"</b>      |    |   |          |   |  |  |

|  |   |  |  |   |  |  |
|--|---|--|--|---|--|--|
| 89   | 1 | The medical education organization must determine the structural unit responsible for educational programs and the achievement of the final learning outcomes.   |  | + |  |  |
| 90   | 2 | The structural unit responsible for educational programs should have the authority to plan and implement the educational program, including the allocation of allocated resources for planning and implementing teaching and learning methods, assessing residency students, evaluating the educational program and courses of study.                    |  | + |  |  |
| 91   | 3 | The medical education organization should define the responsibilities and responsibilities of the management/employees for postgraduate medical education.   |  | + |  |  |
| 92   | 4 | The medical education institution should develop a management quality assurance program, including regular reviews.  |  | + |  |  |
| 93   | 5 | A medical education organization should have a clear set of responsibilities and powers to provide educational programs with resources, including a target budget for training, should allocate the resources necessary for the implementation and implementation of the training program and distribute educational resources in accordance with needs. |  | + |  |  |
| <b><i>TOTAL according to the standard:</i></b> |   |  |  | 5 |  |  |
| <b><i>TOTAL:</i></b>                           |   |  |  |   |  |  |