

To Accreditation Council  
of the Eurasian Center for Accreditation  
and Quality Assurance in Higher Education and Health Care  
June 12, 2022

**REPORT  
OF THE EXTERNAL EXPERT COMMISSION ON THE RESULTS OF THE  
EVALUATION OF THE EDUCATIONAL PROGRAMME 7R01119 -  
"ANGIOSURGERY (ADULT, CHILDREN'S)" FOR COMPLIANCE WITH  
THE ACCREDITATION STANDARDS FOR POSTGRADUATE  
PROGRAMMES (SPECIALTY OF RESIDENCY)  
IN MEDICAL ORGANIZATIONS OF EDUCATION**

**NEI "Kazakh-Russian Medical University"**

**external expert evaluation period: May 30-31 - June 1, 2022**

**Almaty, 2022**

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## List of symbols and abbreviations

Abbreviation	Designation
RoK	Republic of Kazakhstan
MoH RoK	Ministry of Health of the Republic of Kazakhstan
MES of RoK	Ministry of Education and Science of the Republic of Kazakhstan
GD of RoK	Government Decree of the Republic of Kazakhstan
NEI	Non-State educational institution
ECAQA	Eurasian Center for Accreditation and Quality Assurance in Higher Education and Health Care
SCES	State compulsory standard of education
University	Higher education institution
OHPE	Organization of higher and postgraduate education
SC	Scientific Council
AC	Academic Council
CEP	Educational Programmes Committee
AMP	Administrative and managerial staff
TS	Teaching staff
TCC	Training and Clinical Center
EP	Educational programme
DP&CEP	Department of planning and control of the educational process
CED	Catalog of elective disciplines
CIS	Control measuring instruments
QEP	Quality of the educational process
AC	Attestation Committee
IEPI	Individual Educational Plan
IWRT	Resident independent work under the supervision of a teacher
IWS	Independent work of the student (resident)
EPI	Educational plan
WC	Work Curriculum
TEP	Typical Educational plan
RW	Research work
EEC	External expert commission
NLA	Normative legal acts
AEMC	Ambulance emergency medical care
PMHC	Primary Medical health care
EDM	Emergency and Disaster Medicine
MTB	material and technical base
PD	Profiling Disciplines

### 1. Composition of the external expert commission

In accordance with ECAQA Order No. 19 dated May 20, 2022, an External Expert Commission (hereinafter referred to as EEC) was formed to conduct an external evaluation of the residency educational programme in the specialty 7R01119 – "Angiosurgery (adults, children's)" in the period of May 30-31-June 1, 2022, as follows (Table 1):

**Table 1. Information on the membership of the ECC**

order №	Status as part of EEC	Full name	Academic degree, academic title, position, place of work/place of study, course, specialty
1	chairperson	Kurmanova Almagul Medeubaevna	clinical specialties department of the Higher School of Medicine of the Kazakh National University named after Al-Farabi, leading researcher of JSC "Scientific Center of Obstetrics, Gynecology and Perinatology"
2	Foreign Expert	Zakirova Guzel Zakirovna	candidate of Medical Sciences, Associate Professor of the Department of Ophthalmology of Kazan State Medical University, Ophthalmologist of the Children's Republican Clinical Hospital of the Ministry of Health of the Republic of Tatarstan
3	Academic Expert	Urazova Saltanat Nurgozhayevna	doctor of Medical Sciences, Head of the Department of Family Medicine No.3 of "Medical University of Astana" NJSC
4	Academic Expert	Kauysheva Almagul Amangeldinovna	candidate of Medical Sciences, Vice-Rector for Educational and Scientific Activities of Kazakhstan Medical University "KSPH", Accredited Independent Expert on the Assessment of the Quality of Medical Services, Deputy. Chairperson of the Board of the RPO "Kazakhstan Alliance of Medical Organizations".
5	Academic Expert	Sarsenbayeva Gulzhan Iskendirovna	candidate of Medical Sciences, Doctor of the Department of Cardiac Surgery and Interventional Cardiology of the Scientific Center of Pediatrics and Pediatric Surgery JSC
6	Academic Expert	Bacheva Irina Viktorovna	PhD in Medicine, Associate Professor of the Department of Internal Diseases Head of the educational programme of the residency in Nephrology, including adult, NJSC "Medical University of Karaganda",
7	Academic Expert	Laryushina Elena Mikhailovna	candidate of Medical Sciences, Professor, Head of the Department of Internal Diseases of the Medical University of Karaganda
8	Academic Expert	Sultanova Gulnar Dosnovna	candidate of Medical Sciences, Dean of the Faculties of Dentistry, Pharmacy, Public Health Care and Nursing of NJSC "West Kazakhstan Medical University named after Marat Ospanov"
9	Employers' representative	Nurgaliyev Nurlan Yermekbayevich	Director general of GammaLab Diagnostic Laboratory LLP
10	Resident	Maykenova	Resident of the first year of study in the specialty

	Representative	Arailim Muratkyzy	"Gastroenterology (adult, children's)" of NJSC "Asfendiyarov Kazakh National Medical University".
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The observer for ECAQA is Umarova Makpal Aldibekovna, Head of Accreditation and Monitoring Department.

The work of the ECAQA was carried out in accordance with the Regulation of EEC (Order of the Director General of ECAQA No. 4 dated February 13, 2017).

The EEC report contains an assessment of the educational programme 7R01119 – "Angiosurgery (adults, children's)" for compliance with the Standards of accreditation of postgraduate education programmes (residency specialties) of medical educational organizations and conclusions (hereinafter referred to as Accreditation Standards), recommendations of the EEC on further improvement of approaches and conditions for the implementation of the above-mentioned educational programme and recommendations for the ECAQA Accreditation Council.

## 2. General part of the final report

### 2.1 Presentation of the educational programme of the residency in the specialty 7R01119 – "Angiosurgery (adults, children's)".

The NEI "Kazakh-Russian Medical University" (hereinafter referred to as the University, KRMU) represents the organization of medical education with a private form of ownership, having the necessary material, technical and scientific and educational base, highly qualified pedagogical and scientific personnel. In 2016, the University was accredited by the Independent Kazakhstan Agency for Quality Assurance in Education (certificate of institutional accreditation dated May 31, 2016 IA No.0066, valid from May 31, 2016 to June 01, 2021).

Also in 2021, the University was accredited by the "Eurasian Center for Accreditation and Quality Assurance in Higher Education and Health Care" (certificate of international institutional accreditation dated June 17, 2021 IA00039, valid from June 17, 2021 to June 16, 2026).

6 undergraduate educational programmes, 13 residency educational programmes in the Independent Accreditation and Rating Agency (IAAR) have received specialized accreditation.

The administrative and teaching staff are presented in table 1.

**Table 1. The idea of the university**

Organization name, legal form of ownership, BIN	Non-state educational institution "Kazakh-Russian Medical University", BIN 970240002300
Management body	Attendees
Full name of the chief executive officer	Dzhainakbayev Nurlan Temirbekovich
Created in	1992
Location and contact details	Almaty, str. Abylai Khan 51/53 +7(771)495-60-51, +7(778) 188-54-48 <a href="mailto:info@medkrmu.kz">info@medkrmu.kz</a>
State license for educational activities in the residency (date, number)	No.0137388 dated July 8, 2021
Information on branches, subsidiaries (if any)	no.
Year of implementation of the accredited educational programme (EP)	2021
Duration of training	4 years
Total number of graduates since the beginning of EP implementation	1 resident of the 3rd year of study
Full-time trainers/ Combiners involved in the implementation	39 (84.6%)

A resident in the specialty 7R01119 – "Angiosurgery (adults, children's)" was transferred to the KRMU from JSC "Kazakhstan Medical University of Continuing Education" (hereinafter – KazMUNO) in 2021. The resident is studying for the 3rd year and graduation is planned in 2023.

The University has signed cooperation agreements with 85 medical organizations located in Almaty, Almaty region and the regions of the Republic of Kazakhstan, where a resident of 2 years of study completed specialized disciplines in the current year.

The bases for educational activities in the specialty 7R01119 – "Angiosurgery (adults, children's)" are: National Scientific Center of Surgery named after A.N. Syzganov, "Medical Center-Rakhat" LLP, RSE on the REM "Central City Clinical Hospital" DHC Almaty, "Institute of Surgery" LLP, State Enterprise on the REM "City Clinical Hospital No.7" HCD Almaty. Practising doctors and heads of departments with academic degrees and titles are involved in teaching activities as part-time employees for 0.25-0.5 hours.

The university is staffed by professional personnel who have undergone various scientific and practical trainings and internships in the best world centers.

Training of students is conducted in the state, Russian and English languages. Form of study – full-time, daytime. Over 29 years of activity, the University has trained more than 6,000 specialists successfully working in the practical health care of the Republic of Kazakhstan.

During the training period, the resident is informed about the results of the training by the curators. Currently, there is 1 lecturer with a doctorate in medical sciences. In case of admission of more residents to the KRMU, there is a reserve of teachers in the specialty "Angiosurgery", who will be attracted as clinical mentors and mentors.

Mastering the residency programme in the specialty 7R01119 – "Angiosurgery (adults, children's)" is carried out directly on clinical bases and meets the standards of the educational programme. Practical manipulations the resident carefully practices in educational and clinical center (ECC) of KRMU.

Educational programme 7R01119 – "Angiosurgery (adults, children's)", along with the mastery of clinical skills, provides for the involvement of the resident in the implementation of scientific activities that he performs under the guidance of a mentor from among experienced doctors and under the supervision of the head of the residency, taking into account the personal interests of students.

The disciplines of the educational programme 7R01119 – "Angiosurgery (adults, children's)" include training from the standpoint of evidence-based medicine, management of scientific research and public health. The resident is taught to search for reliable and high-quality information, the ability to differentiate it in terms of value and effectively use it in clinical practice and research work.

This year, 6 international articles were published by the University staff in indexed on international bases with Impact-factor, Web of Science Scopus. When analyzing the scientific activity of the University for 5 years, it should be noted that scientific publication activity in indexed journals was observed in 2021 (12 articles), while in 2022, only 3 articles were published, in 2020 – 6 articles.

Teachers of the department actively cooperate with international foreign universities, scientific centers of the near and far abroad. The University has signed more than 10 Agreements and Memoranda with leading universities and clinics of the world.

## **2.2. Information on previous accreditation**

The accreditation of the educational programme in the specialty 7R01119 – "Angiosurgery (adults, children's)" in the KRMU is carried out for the first time.

## **2.3 Conclusion based on the results of reviewing the report on the self-assessment of the educational programme in the specialty 7R01119 – "Angiosurgery (adults, children's)" for compliance with the Standards of accreditation of postgraduate education programmes (specialty residency) of medical educational organizations and conclusions**



The report on the self-assessment of the educational programme of residency 7R01119 – "Angiosurgery (adults, children's)" (hereinafter – the report) is presented on 44 pages of the main text, annexes on 5 pages, copies or electronic versions of 36 documents (see Appendix 2), as well as documents posted at <https://drive.google.com/drive/my-drive?lfhs=2>, website <https://medkrmu.kz/>

The report is characterized by the completeness of responses to all 9 main accreditation standards and criteria, structured taking into account the recommendations of the Guidelines for the self-assessment of the educational programme provided to the organization of education by the accreditation center - ECAQA, as well as the internal unity of information. The report is accompanied by a cover letter signed by Rector N.T. Dzhainakbayev, which confirms the reliability of quantitative information and information included in the self-assessment report.

The report contains a list of 16 members of the internal self-assessment commission, indicating the responsibility of each employee, information about the representative of the organization responsible for conducting the self-assessment of the educational programme - Zh.A. Imanbayeva, Vice-Rector for Scientific and Clinical Work.

The self-assessment of the educational programme 7R01119 – "Angiosurgery (adults, children's)" was carried out on the basis of the order of the Rector of the University No. 26-02-20 of 25/02 2022 "On the creation of a working group for conducting a specialized self-assessment and writing a report and amending order No. 26.02-50/1 of 01.07.2021 ("In connection with the passage of specialized accreditation of educational programmes in the specialty of doctoral studies and residency").

The report was reviewed by the accreditation expert Sarsenbayeva G.I, the review noted the strengths and areas for improvement, as well as recommendations for additions and changes, which were taken into account in the process of feedback from the university representative and the report on self-assessment was amended accordingly.

All the standards provide real practice of the university for the training of residents in the specialty 7R01119 – "Angiosurgery (adults, children's)", taking into account the beginning of admission of students in 2020, reasoned data, examples of the implementation of the tasks of the educational programme, national and international events, methodological support, confirming compliance with the requirements of accreditation standards. The description in the self-assessment report is sufficiently complete and updated in terms of the number of residents, teachers, administration, information on selection and admission, learning outcomes, results of knowledge and skills assessment, material and technical base of the university and clinical bases, contractual obligations with partners (universities, associations, bases), financial information, plans for development and improvement.

The report is submitted to ECAQA in a completed form, with correction of the data on the above recommendations, written in a competent language, the wording for each standard is clear and understandable and described in accordance with the criterion of standards, tables and contain references in the text and have end-to-end numbering.

The quality of the self-assessment report served as the basis for moving to the next stage of the accreditation procedure, the external assessment. The experts plan to validate the report data, compare the information from the report with the information that will be obtained during the visit to the educational institution, i.e. verification of quantitative and qualitative indicators.

### **3. External expert evaluation assessment**

External expert work in the framework of the evaluation of the educational programme 7R01119 – "Angiosurgery (adults, children's)" was organized in accordance with the Guidelines for the external evaluation of educational organizations and educational programmes of ECAQA (approved by the order of the Director General of the NU "Eurasian Center for Accreditation and Quality Assurance of Education and Health" No.5 dated February 17, 2017) and in accordance with the programme approved on May 20, 2022 by the Director General of ECAQA Sarsenbayeva S.S. and agreed with the Rector of KazRossmeduniversity (hereinafter – KRMU/University) Dzhainakbayev N.T.

The external evaluation is aimed at validating the data of the self-assessment report and verifying the indicators indicating the degree of compliance with the criteria of accreditation standards.

The sequence of the visit within 3 days is presented in detail in the Visit Programme (hereinafter referred to as the Programme), which is contained in the documentation of the accreditation center. The programme is evidence of the implementation of all planned activities within the framework of an external expert evaluation.

To obtain objective information, the EEC members used the following methods and their results:

- interview with management and administrative staff – 17 people in total;
- interviews with residents of 14 people, including angiosurgery -1;
- website study <https://medkrmu.kz/>
- interviewing 18 employees, 8 teachers;
- questionnaires of teachers and residents - 8 and 14, respectively;
- observation of training of residents:
  - ✓ attending a practical lesson on the analysis of a clinical case on the topic "Surgical treatment of a rare congenital heart defect – 4 leaf aortic valve", teacher Dosmailov N.S. Contingent - resident of the group 21-01 2 years of study. Venue: MC Rakhat, microdistrict Zhetysu-3;
  - ✓ practical lesson on the topic "Surgical treatment of critical ischemia of the lower extremities", teacher Trynkin A.V.
- review of resources in the context of meeting accreditation standards: 7 practice/clinical engagement bases visited;
- study of educational and methodological documents in the amount of 38 units both before the visit to the organization and during the visit to the units (the list of studied documents is in Attachment 2).

The staff of the accredited organization ensures the presence of all persons indicated in the visiting programme and according to the lists of interviews and interviews (Table 3).

**Table 3 -Information about the number and category of participants in meetings, interviews, interviews with members of the EEC**

<b>№</b>	<b>Full name</b>	<b>Job Title</b>
<b>Residency Teachers</b>		
1	TRYNKIN ALEXEY VIKTOROVICH	candidate of Medical Sciences, lecturer of the Department of Surgery with a course of anesthesiology and resuscitation
2	Dosmailov Nurzhan Serikbekovich	candidate of Medical Sciences, lecturer of the Department of Surgery with a course of anesthesiology and resuscitation
<b>Student residencies</b>		
1	Tolegenov Madiyar Yertayuly	Resident physician 3 years of study in the specialty "Angiosurgery, including children's"
2	Dzhabbarov Magomedrza Agalar ogly	resident of the 1st year of study in the specialty "Cardiac Surgery, Adult, Pediatric"
<b>Healthcare Practitioners</b>		
1	Baizhigitova Nazipa Begalievna	Deputy Chief Physician for Medical Work of the State Clinical Hospital No.1
2	Alimbetova Mayra Serikovna	Deputy Chief Physician for Medical Work of the State Clinical Hospital on the Right of Economic Management "Almaty Multidisciplinary Clinical Hospital"



3	Zhumataeva Zarina Akhmetovna	Director of MC "Rakhat"
4	Isabekov Nurzhan Amangeldiyevich	Deputy Director of Surgery, CCCH
5	Kunaeva Gulbanu Janabaevna	Deputy Director for Strategic Development of the CCCH
6	Bukumbayeva Damira Dzhurumbayevna	IE "Bukumbayeva"

In the process of visiting the units of the University of Accreditation Experts, the strengths of the organization of education in relation to the accredited educational programme were noted, including:

- the University has a clear Mission, goals and objectives for the implementation of multilevel training of competitive health professionals through the implementation of a competence-oriented model of medical education with the broad involvement of domestic and foreign scientists and the continuous increase of scientific potential;

- for effective work with residents and the implementation of the programme 7R01119 – "Angiosurgery (adults, children's)" KRMU has modern multidisciplinary accredited clinical bases and a strong staff of teachers, which contributes to the full implementation of the Mission.

- there is a high commitment and continuity of students at this university. Since they are studying at the level of college, bachelor's degree, further students seek to continue their studies in the residency in specialized specialties and in the future have the desire to work at the clinical bases of the University.

At the University there are units that are directly related to the educational programme 7R01119 – "Angiosurgery (adults, children's)", which can be noted as the best practice in education. "Medcenter-Rakhat " LLP, the UCC, the library department, the department of distance learning technologies (DLT) were visited. This conclusion is made since the clinical base provides direct training of the resident at the patient's bedside, training on simulations according to the programmes developed by the curator himself, taking into account the peculiarities of the discipline. The resident has the ability to independently perform surgical interventions on vessels and receives a full range of practical skills.

Separately, it should be noted the department of the library fund and the UCC, where there is an opportunity for residents to receive high-quality educational training. Since these units are equipped according to modern standards (book fund, access to international platforms, simulation rooms and simulations, etc.) and trained specialists of teaching staff.

The DLT Department supports the work of all departments of the KRMU and students in a modern digital format. This makes it possible to expand the possibilities of receiving services in an online format. The university has resources for the clinical training of residents: a mobile medical complex (MMC) and mobile devices, which allow to expand the clinical opportunities to improve the level of skills and understanding of medical care in the conditions of emergencies and medicine of disasters that are relevant today.

On the last day of the visit to the organization, a meeting of EEC members was held on the results of the external evaluation. The final discussion of the results of the external evaluation of the educational programme, the study of documents, the results of the interview, questionnaires was held. EEC members started designing the final EEC report. The results of the external evaluation are summarized. Experts individually completed the "Quality profile and criteria for external evaluation of the educational programme 7R01119 – "Angiosurgery (adults, children's)" for compliance with the ECAQA Accreditation Standards". No comments were made by the EEC members.

Recommendations for improving the educational programme were discussed and the Chairperson Kurmanova A.M. held a final open vote on recommendations for the ECAQA Accreditation Council for the accreditation period.

For the work of the EEC, comfortable conditions were created, access to all the necessary information and material resources was organized. The Commission notes the high level of corporate

culture of the university, the high degree of openness of the team in providing information to the members of the EEC. The mobility of employees should be noted if it is necessary to organize visits to clinical bases or to obtain additional information and documentation on the educational programme. There is a principle of teamwork and accessibility between employees of education departments and teaching staff. At the end of the programme of the visit, the chairperson of the EEC for the management and employees of the organization of education announced recommendations on the results of an external assessment within the framework of specialized accreditation.

The expert group notes that the self-assessment report sufficiently reflected the activities of the university in accordance with ECAQA standards and criteria, and voluminous digital and factual material is provided as the evidence base. Interviews with major groups showed that the report compilers fully reflected all the most significant achievements of the university, demonstrating some progress in various spheres of educational activity.

The meeting with the management of the center allowed the team of experts to officially get acquainted with the general characteristics of the organization, the achievements of recent years and prospects for development.

#### **4. Results of the survey.**

An observer from the ECAQA conducted an online survey on the resource in the period 30.05.2022 <https://webanketa.com/>.

##### **The resident survey includes 22 questions.**

In total 12 people (in total 14 residents for the current year) answered.

According to the results of the survey: 75% fully agree with this university as an organization of education, 25% partially. Fully agree 83.3% of respondents, 8.33% partially agree and 8.33% doubt that programme managers and faculty are aware of their learning challenges. Completely (83.3%), partially (8.3%) and doubt the answer (8.3%) with the conditions and equipment of the study rooms, university classrooms. According to 100% (full) office equipment is available for use on the basis of practice. Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes - fully agree 100%. Fully (100%) satisfied with the library collection and resources. All 100% of respondents have access to electronic educational resources.

The organization of clinical training, according to 75% of respondents, fully satisfies them, but 25% - partially. Satisfied completely (91.67%) and partially (8.33%) with the methods of teaching. There is sufficient time for practical training (patient supervision, etc.) – 100% fully agree. Satisfied with the methods of assessing my knowledge and skills – completely agree 91.67%, partially 8.33%. According to 91.67% of residents, teachers regularly use active and interactive teaching methods in classes, and according to 8.33% - sometimes. According to 100% of respondents, teachers constantly provide feedback after completing classes. Fully satisfied that study in higher education 83.33%, partly 16.67% of respondents. The university allows you to improve or acquire the necessary knowledge and skills in the chosen specialty, 91.67% are confident, 8.33% cannot give an answer, 0% would like to believe it, 0% began to doubt it. 100% are fully satisfied with the organization of teaching in the NEI KRMU.

According to 75% of respondents, accreditation is a necessary mechanism for improving educational programmes, but 16.67% believe that it is not necessary to conduct and 8.33% doubt the answer. The work of the EEC was assessed as positive – 91.67% of residents, satisfactory – 8.33%.

**Conclusions:** the respondents expressed partial satisfaction with the learning conditions, assessment of knowledge and skills (8.3%), with the majority completely satisfied with the organization of teaching, the schedule of classes, methods of assessing knowledge and skills, training in this organization of education.

**The teacher survey included 21 questionnaire questions.** In total 14 people (in total in the staff-90) answered, thus pedagogical experience till 5 years – at 7,4%, till 10 years – 28,5%, more than 10 years - 64,9\_%.

100% satisfied with the organization of the educational process. The university observes ethics and subordination completely agree 100%. Completely satisfied with the organization of work and workplace 92.86% of respondents, partially - 7.14%. There is an opportunity for career growth and competence development for teachers in the organization - 100% fully agree.

In this educational institution, teachers have the opportunity to do scientific work and publish the results of research – 100% completely agree. 92,86% of respondents are completely satisfied with work of personnel service, doubt with the answer – 7,14%. The majority of those surveyed have undergone refresher training over the past 5 years. 100% fully agree that they can be implemented as professionals. Unfortunately, 42.86% did not answer the question of whether the university supports the teacher in participating in international and republican events, they applied for payment of travel, business trips, registration fee – 7.14%, for payment of registration fee – 7.14%, and 35.71% did not apply with this to the management or relevant administrative employees of the university. 100% of respondents fully agree that students have free access to patients on the clinical bases of the university and to the resources of the practice bases. 42.86% know about the implementation of social programmes to support teachers, 7.14% used them, 28.57% do not know and 21.43% of respondents are doubtful about their availability. The management and administration systematically listen to the opinion of teachers -92,86%, sometimes -7.14% of the respondents.

Students are taught using a variety of teaching methods, but more often work is done by analyzing situational tasks (88.06%), working in small groups (92.86%), lectures (50%), interactive learning (64.29%), performing abstracts (50%), performing projects, coursework (50%), practical classes in clinical skills at the training and clinical center (50%), oral analysis of the topic of classes (78.57%) oral surveys and analysis of the topic (64.29%), working in small groups (50%)also problem-oriented learning (57.14%), solving tests (71.43%), solving cases (42.86%), less often written completion of tasks (28.57%). Completely according to 92.86% that this questionnaire will be useful for the development of recommendations for improving the university and educational programmes of the residency, 7.14% partially agree with this.

**Conclusions:** the survey showed the presence of a healthy microclimate in the organization, as well as the fact that most of the teachers surveyed were satisfied with the organization of the educational process, the attitude of the management to the teachers of the Institute. At the same time, areas for improvement have been identified: improving the qualifications of teachers in pedagogy, methods of teaching in the residency.

The results of the survey in general demonstrate satisfaction with the educational process, the resources of the clinical base, the competencies of teachers, and also indicate the existence of centralized management of educational programmes.

## **5. Analysis for compliance with accreditation standards based on the results of an external evaluation of the educational programme 7R01119 – "Angiosurgery (adults, children's) "**

### **Standard 1: MISSION AND END OUTCOMES**

#### **Evidence of compliance:**

##### **1.1 Mission statement and deliverables**

It is established that KRMU defined the mission which includes also educational component, and sounds so "innovative, socially directed, practically - the oriented, the internationally recognized university". The mission is organized in accordance with the organization's current management system and quality assurance policy, and is reflected in the Strategic Plan for 2019-2025.

When analyzing the self-assessment report and the visit of the expert commission to the KRMU, the members of the EEC noted that:

-Corporate governance of the KRMU is based on the principles of fairness and honesty, sees its mission in the development and dissemination of ethical, moral norms and values;

- the objectives of the educational programmes correspond to the mission, strategic plan, goals and objectives of the KRMU and regulatory requirements adopted at the national level, the requirements of the SCES;

- during the interview with teachers and residents of the University it became clear that they are well acquainted with the mission, goals, objectives and policy in the field of quality assurance and prospects for the development of the university.

- during the interview with employers of educational programmes, it turned out that they are involved in the implementation of the quality assurance policy of the educational programme;

- during the interview with the management and administrative staff, the existence of a mechanism for monitoring and selecting areas of educational activity was confirmed;

- to improve all areas of the university, including the mission, the NEI "KazRosmeduniversity" introduced a system for collecting and analyzing feedback from consumers through internal and external monitoring. The following departments are involved in the implementation of monitoring – QMS department, EMA, MC, CEP, scientific department, clinical department.

During the implementation of the programme activities, namely, according to the results of an interview with the first head of the organization, members of the advisory body (Academic Council), in interviews with residents and teachers, compliance with the criteria of **standard 1** was established. All participants in the educational process know the mission of the organization, took part in the formation of proposals for the formulation of the mission, while the mission was brought to the attention of potential residents through the website, social networks, information letters to medical organizations. The strategic plan of the organization for 3 years was reviewed, including such areas as the educational programme, the development of the research potential of the university and the integration of science with the clinic, employment, international cooperation, digitalization of the university, an integrated management system, human capital and social responsibility, marketing, the image of the university, which confirms the implementation of the accreditation standard and demonstrates the goals, objectives and prospects of the organization. From interviews with residents, it was established that before the beginning of classes, teachers inform about the mission, work plans of the organization of education, tell where to get the necessary information about the educational programme, teachers, training bases.

This section of Standard 1 is implemented in its entirety. There are no comments.

### **1.2 1.2 Professionalism and professional autonomy**

The NEI "Kazakh-Russian Medical University" (hereinafter referred to as the University, KRMU) represents the organization of medical education with a private form of ownership, having the necessary material, technical and scientific and educational base, highly qualified pedagogical and scientific personnel. Staff autonomy derives from the possibility of internal and external search for candidates for a vacant post. Internal search provides the ability to use the personnel reserve in the first place. Further multilevel system of selection of candidates contributes to the effective selection of personnel by professional, business, moral qualities using modern technologies (Personnel Policy of the NEI "KazRosmeduniversity" (14.10.2019). Experienced employees and mentors working on clinical bases are involved in working with residents.

In 2019, by order of the Rector dated April 17, 2019 No.96, the project programme for the development of a strategic development plan for 2019-2025 was launched, as well as this order determined and approved the composition of four project teams, which included the main stakeholders: students, employers, representatives of practical health care. As a result, the "Strategy of the NEI "Kazakh-Russian Medical University" for 2019-2025" was developed and approved, which was discussed at the Academic Council on December 26, 2019, protocol No.5.

The formation and development of professionalism and professional autonomy is provided for by the results of the residency graduate training, presented in detail in the Academic Policy.

In the formation of the mission of the university, the opinions of all stakeholders – heads of departments and units of the university, faculty, students, graduates, employer organizations, health and education authorities, representatives of the public influence.



The University holds purposeful meetings with employers in the coordination of educational programmes, catalogues of elective disciplines (CED); representatives of employers are members of the Clinical Council of the NEI "KazRosmeduniversity", at the meetings of which issues related to the implementation of the Mission are discussed. This was also proved at the interview of the members of the EEC with employers.

As a result of training, the resident angiosurgeon receives a holistic vision of the doctor's work processes. For example, the resident, under the supervision of a manager / mentor, receives special knowledge, trains practical skills, including work at the MMC. The educational programme provides a list of practical skills, their number and the level of implementation of the learning outcomes, recommended by the SCES.

In the framework of the Bologna process, elements of institutional autonomy have been introduced at the university. To increase the level of autonomy, the University has a General Meeting of Founders.

Assessment of the academic achievements of residents is carried out by various forms of control, which are determined by the university independently. Instrumentation, training methods, and monitoring of residents' achievements, approved at the meeting of the department, are subject to further review and approval by the CEP.

The relationship between the University and the student is regulated by the "Internal Regulations for Students", "Academic Policy" and the agreement for the provision of educational services, which is concluded with each student when enrolling in the University. Resident doctors participate in the evaluation of the educational programme by means of questionnaires, have the opportunity to send their proposals and comments on the organization of the educational process (class schedule, etc.), the curriculum for elective disciplines, the list of elective disciplines, the library fund and other issues directly related to the learning process to the Rector's blog, the Resident Department, the hotline.

### **1.3 Learning outcomes**

During the visit to KRMU, experts stated that residents were informed about their final results from the first day of classes, provided with resources and a practice-oriented educational programme.

Programme 7R01119 – "Angiosurgery (adults, children's)" is compiled in accordance with the requirements of the SCES and the Doctor's Qualification Characteristics. The programme was included in the Republican Register of Educational Programmes. At the same time, elements of institutional autonomy have been introduced in KRMU, i.e. the center independently develops and implements residency programmes, makes syllabuses, IEP, WEPI. In order to successfully implement the training, work is carried out to inform residents about the structure and expected results of the training.

However, when assessing the syllabus of the educational programme 7R01119 – "Angiosurgery (adults, children's)" and when conducting interviews with the PPS and resident, it was noted that there are no topics related to the pathology of pediatric age and the venous vascular system. It is recommended that these sections be included in the curriculum.

### **1.4 Participation in the formulation of the mission and final results**

When forming the programme, its goals, and final results, discussions were held at the level of: student audience, graduates (discussion of opportunities), department employees (discussion in a working group, at a meeting of departments / courses), at A meeting of the CEP (dated 14.05.2020 No.5), at the Academic Council (dated 28.08.2020 No.5) and the Academic Council of the University (dated 12.08.2020 No.5) and was presented at <https://drive.google.com/drive/folders/14HwOLGx9TRQtLU52VaCBZtcVaOjl5FO>.

The following departments are involved in the implementation of monitoring – QMS department, EMA, MC, CEP, scientific department, clinical department. External stakeholders involved in the formulation of the mission and deliverables include: employers (including potential), National socio-professional associations, healthcare organizations. When conducting interviews with employers and graduates of residents, we noted that all stakeholders take an active part in the formulation of the mission, the implementation of the Strategic Plan and the monitoring of the final

results.

Recommendations for the effective implementation of the new educational programme of the residency in the specialty 7R01119 – "Angiosurgery (adults, children's)" were presented at a meeting with the management on 01.06.2022.

***Conclusions of the EEC on the criteria.*** Compliant with 17 standards: full – 17.

***Standard 1: Implemented***

***Recommendations for improvement identified during the external visit:***

## **Standard 2: EDUCATIONAL PROGRAMME**

### **Evidence of compliance:**

#### **2.1 Postgraduate programme framework**

The organization's documents contain work programmes, EMCD, which define the goal, take into account the integration of practical and theoretical components, independent work. Compliance with the SCES and standard requirements has been established. Attending the practical lesson: on the topic "Surgical treatment of critical ischemia of the lower extremities ", the experts received convincing data for 3 hours, that the training is carried out according to the plan, before the beginning of the lesson, residents respond to tests, receive feedback from the teacher, have the opportunity to improve their skills in arterio section and vascular suture not only in the simulation room, but also on patients. The organization ensures compliance with ethical aspects in the implementation of the educational programme, since the experts studied the code of ethics (approved by the protocol of the Academic Council dated April 27, 2019 No.9) and during the interview, the residents replied that they were informed about the content of this document.

When attending a practical lesson on the topic: "Surgical treatment of rare congenital heart disease (4-leaf aortic valve) with an analysis of scientific articles" (3 hours) and talking to residents, experts saw that the organization contributes to the development of practical competencies of residents, the ability to scientifically substantiate patients' clinical data and formulate final recommendations. Residents deepen their theoretical knowledge, develop communication skills and scientific approach in their educational activities. The analysis of educational activities showed that the scientific basis and all the achievements of science in advisory disciplines are taken into account, additions are made to the bibliography of the EP EMCD and syllabuses, and teachers apply them in classes. This indicates compliance with Standard 2 in terms of adapting training to the needs of residents.

#### **2.2 Scientific method**

The structure of the educational programme of the residency 7R01119 – "Angiosurgery (adults, children's)" provides for research and innovation activities. The resident training programme provides for various forms of educational and research work, with some residents being involved in scientific and technical projects carried out by teachers. The implementation of these strategies is provided by a whole range of measures implemented within the framework of the classroom and extracurricular components of the EP when studying both mandatory and elective disciplines.

Each discipline of the programme 7R01119 – "Angiosurgery (adults, children's)" includes training from the standpoint of evidence-based medicine, management of scientific research. The resident acquires the basics of critical evaluation of medical literature in the profiling disciplines. During the visit to the organization and clinical bases, the members of the EEC analyzed the scientific approach to the work of residents and publication activity, understanding the work with the literary review and the formation of theses and reports. It should be noted that the publication activity rate of teaching staff and students is low. The resident does not have sufficient knowledge of the methods of critical evaluation of literature, scientific publications and the application of scientific developments.

#### **2.3 Content of the residency programme**

The educational programme has clearly defined goals and is designed in accordance with the state mandatory standards of specialties. The programme is modular.



Training of residents is carried out on the basis of the WC, the personal participation of the resident is realized at the time of the formation of the Individual Work Curriculum for the entire period of training. The training load corresponds to the capabilities of residents. In the formation of the educational programme 7R01119 – "Angiosurgery (adults, children's)", the following factors were taken into account: the contribution of each discipline to the formation of competencies at a certain level (course), i.e. the responsibility of both specialized and related disciplines for the formation of a competent graduate, the definition of competencies in each discipline. Educational programme of training 7R01119 – "Angiosurgery (adults, children's)" is designed for 280 credits: profile disciplines – 256 credits, a component of choice – 16 credits, interim certification – 6 credits, final certification – 2 credits.

Profiling disciplines are represented by disciplines: General surgery - 25 credits; Thoracic surgery – 25 credits; Cardiac surgery – 25 credits, Angiosurgery in hospital – 181 credits.

The documents provide evidence that the qualifications of residents fully correspond to the level of the National Qualifications Framework.

#### **2.4 Programme structure, content and duration**

The structure of the programme 7R01119 – "Angiosurgery (adults, children's)" is formed from various types of educational, scientific and clinical work, practice that determine the content of education, reflects their ratio, measurement and accounting. The EP is implemented in accordance with the SCES of 2020 and provides the necessary level of training of residents, includes the relevant specialized disciplines. In order to take into account, the interests of employers in the development of educational programmes in the formation of catalogues of elective disciplines, employees of practical health care from other medical organizations take part. The collection of proposals for the CED from employers is based on the principle of feedback, while taking into account the needs of residents. The distribution of disciplines by hours, academic periods is carried out by the CEP and the department of academic work in accordance with the SCES, TEP and the list of components of the choice, agreed with the vice-rector for academic activities.

The content of the academic disciplines of the mandatory component is strictly regulated by the SCES 2020 and is reflected in the standard curricula of the disciplines of the specialty. The division of disciplines by hours and semesters is carried out by the department of academic work. The structure of the educational programme is updated and discussed regularly and approved in the protocols of the Academic and Academic Councils of the University.

When analyzing the presented catalogues of the discipline of the educational programme, it should be noted that there are no topics of the pediatric component in angiosurgery and the issues of diagnosis and treatment of childhood pathology are not sufficiently covered.

#### **2.5 Organization of training**

Equipping clinical bases allows you to effectively implement active methods of training: seminars, webinars, conferences, case studies, problem-based training (PBL); case-based training (CBL), team-based training (TBL); training based on simulation technologies, case studies, medical records, examination of the quality of medical care, patient management, training in a clinic with the participation of a real patient, training in primary health care, attending medical conferences, consultations. There is a modern UCC, DLT, at the university, which allows you to implement a successful programme.

#### **2.6 Relationship between postgraduate medical education and health care**

The presence of clinical bases in the largest multidisciplinary clinics and polyclinics in Almaty and the regions provides residents with the opportunity to master the process of patient management tactics in outpatient settings, continuity between the primary and inpatient levels of care, interaction as part of a multidisciplinary team, assistance in emergency situations. KRMU residents actively participated in mobile points during vaccination against Covid infection. Senior residents, along with their educational activities, have the opportunity to provide medical care in clinics as full-time part-

time employees under the supervision of mentors, which allows them to successfully master practical skills and improve the final learning outcomes.

**Conclusions of the EEC on the criteria.** Compliant with 30 standards: fully - 28, partially – 2.  
*Standard 2: Implemented*

**Recommendations for improvement identified during the external visit:**

- 1) Improving the educational process – the development and implementation of effective innovative technologies in the educational process and the final results of training should be determined taking into account proposals from stakeholders (employers and practical health care);
- 2) Develop quantitative indicators of R&D performance. The scientific component should be included in the thematic plan in the form of completed tasks based on the application of scientific analysis methods;
- 3) Expand the electives of the disciplines, taking into account the pediatric component in angiosurgery.

### **Standard 3: ASSESSMENT OF STUDENTS**

#### **Evidence of compliance:**

##### **3.1 Methods of evaluation**

The policy and procedure for assessing the results of training within the framework of the EP is carried out using criteria developed in accordance with the goals and objectives set for the implementation of the EP and the qualifications assigned within the framework of the current point-rating system for assessing knowledge and monitoring the educational process in accordance with policy, regulatory and internal documents.

The general policy, principles, methods of evaluation of the residents of the educational programme in the specialty 7R01119 – "Angiosurgery (adults, children's)" at the University are reflected in the following internal documents: Academic Policy of the University, Regulations on the current monitoring of academic performance, intermediate and final certification of students at the NEI "KazRosmeduniversity", approved by the Academic Council dated 24.04.2020 No.1 <https://drive.google.com/drive/folders/14HwOLGx9TRQtLU52VaCBZtcVaOjl5FO>.

The form of the midterm and final control is approved by the Academic Council. For testing, a technical specification is drawn up – a matrix of test tasks, which is reflected in the syllabuses. To ensure maximum objectivity and transparency of the evaluation process, the department has developed checklists for conducting current, intermediate and final control of the discipline ( Mini-cEX, CbD, OSCE).

The University uses additional methods for assessing the residents of the educational programme 7R01119 – "Angiosurgery (adults, children's)", such as a portfolio, assessment of scientific activities. Evaluation methods are developed by the department and reflected in the syllabuses approved at the meeting of both the department and the CEP. The portfolio of the resident angiosurgeon was studied, which reflects all the evaluation forms of his educational activities. However, the portfolio does not reflect quantitative control and measurement mechanisms for research activities, as one of the important moments of education.

A study of the control and measurement tools (20 tests, 10 tasks, admission tickets, portfolio, individual plan of the resident) showed that the organization has implemented an appropriate evaluation policy that allows a multifaceted assessment of the educational achievements of residents. The results of students' academic achievements are recorded in the electronic educational journal through the office-recorder system and the AIS Platonus programme, which automatically generates examination sheets, which is confirmed by experts when viewing electronic journals. The electronic training log is filled in accordance with the calendar and thematic plan, in accordance with the schedule and the dates of the current, milestone and final control reflected in the syllabus. The use of the electronic system and the registrar's office contributes to digitalization, transparency of resident

assessment methods.

During the interview, the residents spoke about the forms of assessment, for example, current monitoring is carried out by a teacher/clinical mentor. The forms and content of the current control are determined by the syllabus by discipline and are evaluated on a 100-point scale. They also receive regular feedback from teachers. The system of appealing the results of the assessment is reflected in the document "Academic Policy of the University", which sets out the procedure for filing an appeal. There were no precedents of appeal during the period of work of the organization of education.

During the visit to the organization and during the interview with the staff of the residency department, the commission made sure that there is a documentation system that is transparent and accessible to all teachers and staff, and includes documents such as annual operational plans, annual reports, regulations of departments, contracts with teachers and residents, minutes of Academic Councils, job descriptions of teaching staff and departments, and educational and methodological documentation (work programme, work curricula, syllabuses, journals), evaluation tools (checklists, statements), certificates. A review of the website showed that its pages contain information necessary for residents: information about the Academic Policy of the university, the ultimate goals of training, the directory of residents and information about the passport of the EP and the results of training, which is regularly updated.

It should be noted that the site lacks information about the list of practical skills, the syllabus for 7R01119 – "Angiosurgery (adults, children's)", the schedule of classes, questions on self-control and training tasks are not presented. Also, there are no questions on pediatrics in angiosurgery in the EFF.

According to the survey of residents, it is shown that they are satisfied with the methods of assessing their knowledge and skills – 91.67% of respondents, partially 8.33% and according to 100% of respondents, teachers constantly provide feedback after completing classes.

The assessment of students' educational achievements, as well as the learning outcomes should be compared with the teaching methods and teaching methods used in the disciplines of the educational programme "Angiosurgery, including paediatric".

### **3.2 Relationship between evaluation and training**

The implementation of the educational programme 7R01119 – "Angiosurgery (adults, children's)" in KRMU has been carried out since 2021. It is difficult to assess the results of assessment in dynamics and mechanisms for improving teaching in this specialty, since the resident is planned to graduate in 2023.

However, if we analyze the organization of training and the results of training in other residency programmes, as well as the data on the self-assessment report, the results of interviews with faculty, experts can conclude that the KRMU ensures the implementation of all training technologies: the second stage of the FSA programme using the method of mini-clinical exam, (PBL), (TBL), solving situational problems, the OSCE includes an assessment of all the skills of the future doctor. In the process of mastering the educational programme, the resident is trained using phantoms, simulators, computer programmes, practical work directly with patients, etc. Confirmation of the effectiveness of the education received is based on the results of feedback from the resident – anonymous questionnaire, very acceptable to the resident, fair, adequate to the skills and corresponds to their future specialty.

***The conclusions of the EEC meet the criteria*** of 11 standards: fully - 10, partially – 1.

***Standard 3: Implemented***

***Recommendations for improvement identified during the external visit:***

- 1) Include indicators of the resident's research activity in the educational programme and individual plan of the resident.
- 2) Include methods for assessing knowledge of the paediatric component in the EFF (3.1.3).

## **Standard 4: STUDENTS**

## **Evidence of compliance:**

### **4.1 Admission and Selection Policy**

Admission to the residency for specialty 7R01119 – "Angiosurgery (adults, children's)" is carried out in accordance with the Order of the Ministry of Education and Science of the Republic of Kazakhstan "On approval of the Standard Rules for admission to education in the organization of education, implementing educational programmes of higher and postgraduate education" dated October 31, 2018 No.600, the State Standard Educational Standard of the Republic of Kazakhstan – 2020 and the Rules for admission to the residency of the NEI "Kazakh-Russian Medical University".

Terms and conditions of resident admission are detailed in the Resident Admission Rules for the relevant academic year, based on regulations <https://drive.google.com/drive/folders/14HwOLGx9TRQtLU52VaCBZtcVaOjI5FO>.

Admission of citizens to the residency is carried out on a competitive basis on the basis of the results of entrance examinations. Entrants to the residency take the entrance exam in the specialty. When admitting to the residency, the applicant's personal achievements, the results of research work, etc. are also taken into account.

To receive documents and organize the entrance examinations, an admission commission is created in the NEI "Kazakh-Russian Medical University". The Chairperson of the Admission Commission is the Rector, whose function includes approval of the composition of the Admission, Examination and Appeal Commission.

Admission to the residency with an indication of specialty is announced through the placement of an announcement on the university's website (<http://krmu.edu.kz/rezidentura-3/>, "Admission Commission" - "Residence").

The rules of admission to the residency are regularly revised in the NEI "Kazakh-Russian Medical University" in connection with the introduction of additions and amendments to the current regulatory legal acts of the Republic of Kazakhstan. Changes regarding admission to the residency are reflected in the Academic Policy, in the admission rules. Thus, for example, in 2020, in accordance with the circular letter of the Ministry of Health (Ref. No. 14-02-11/3875-I dated 16.07.2020), the mandatory condition for admission to the residency in 2020 was the availability of a job in medical organizations. Thus, persons working in pharmacovigilance and infectious diseases hospitals, polyclinics and ambulance stations will have priority in competitive selection.

Members of the EEC have studied the website, where the conditions for admission and selection of applicants are described in detail, the entrance exam tickets are considered. It should be noted that there are many questions in the examination questions themselves in narrow specialization, there are no prerequisites for the disciplines.

### **4.2 Number of residents**

The residency programme at KRMU has been implemented since 2010. Currently, in accordance with the State License No. AB0137388 dated June 7, 2010, 42 educational residency programmes are being trained (in accordance with the order of the Minister of Health of the Republic of Kazakhstan dated May 25, 2021 No. KP ДСМ-43 "On approval of the list of medical specialties of residency programmes").

In 2020-2021, 36 people were trained in the residency (state order – 26, LEB – 9, paid – 1); in 2021-2022, 14 residents (state order – 10, LEB – 4, paid – 0).

Recruitment of residents for the specialty 7R01119 – "Angiosurgery (adults, children's)" was carried out for the first time in 2020 (transfer of a resident from "Kazakhstan Medical University of Continuing Education" JSC) (hereinafter – KazMUNO) of the general license for educational activities and the Agreement on the transfer of students of KazMUNO to the NEI "Kazakhstan-Russian Medical University" (hereinafter – KRMU), KRMU, according to the submitted applications, admitted 1 student of the second year of study in the specialty 7R01119 – "Angiosurgery (adults, children's)".

The number of residents according to EP 7R01119 – "Angiosurgery (adults, children's)" per teacher is 1:3 in accordance with the regulations.



When taking into account the number of admissions to the residency, the need for practical health care in medical personnel in the context of specialties, the contingent of students in the residency, the annual expected graduation of specialists, the material, technical and personnel potential of educational organizations are taken into account. When studying the materials provided and the visit to the organization, it should be noted that the quality and quantity of admission of residents in accordance with the regulatory documents and the capabilities of the university and teaching staff should be observed.

It is necessary for the university to further work towards expanding the paid contingent of residents, both domestic and foreign, to popularize about the opportunities and benefits of studying at KRMU among the population.

#### **4.3 Resident support and advice**

In order to implement a competence-oriented model of medical education, the university operates a system of academic advice to residents at the departments. To this end, the resident is assigned a curator who provides the functions of an academic mentor, participates in the formation and implementation of an individual curriculum, manages the educational and scientific activities of the student, assists in employment and a clinical mentor in the medical organization where the resident is trained.

During the interview with Acting Vice-Rector for Educational Work T.A. Sovostyanova, we received information in full on the main directions of how the support of residents is carried out. Thus, the students of the residency have the opportunity to receive legal advice, psychological support from a regular teacher-psychologist. Academic advisory work at the department consists of advising residents during the training and before the examination session by experienced teachers, associate professors, professors. In addition, before the beginning of each semester, the group teacher informs his/her residents about the schedule of his/her work, the time when residents can seek advice on this discipline. Problem situations are discussed at the Residence Department Council.

A student support programme has been developed in accordance with the internal document "Regulations on social support for students", approved in 2019. Students in need of financial support (orphan students and students left without parental care, whose parents with established disabilities of the first and second groups, from large and low-income families) are given discounts to reduce the cost of tuition, etc. There are no students in the residency who need financial support.

The proof is the familiarization of the EEC members with the resources of the university. Thus, information about services is also brought to the attention of residents by corporate mail rezidentura@medkrmu.kz, by chat in the phone, by e-mail at stands in departments, in the Residence Department and through the website of the university [www.medkrmu.kz](http://www.medkrmu.kz), where the rector's blog, an internal information forum and information about the National Helpline for Children and Young People also functions (150). The Career Centre facilitates the employment of graduates. Residents are involved in the work of the University's Student Self-Government \* (<https://krmu.edu.kz/wp-content/uploads/2021/03/Stud.Sovet.pptx>).

As shown by the survey of residents 83.3% of the respondents fully agree, 8.33% partially agree and 8.33% doubt that programme managers and teaching staff are aware of their problems in training. This once again confirms the full implementation of this paragraph of the standard.

#### **4.4 Representation of residents**

When studying the documentation and interviews of residents of the residency programme managers, it was noted that residents actively participate in the implementation of the Mission and the EP by membership in advisory bodies (Scientific Council \Academic Council of the University Academic Council of the Kop and Students together with the university teaching staff have a real opportunity to participate in the evaluation of the EP during direct discussion and approval of work programmes, at the level of developing an individual work curriculum and elective disciplines. (Order for the composition of the KOP No. 26-02-15-n/k dated 28.08.2020). Questionnaire on the Residents' Satisfaction with the educational process is carried out by the direction of the QEP. The results of the survey were discussed at the CEP meeting. When we study the protocols of the CEP, we should note a

sufficient number of students and masters of doctoral students and residents who are members of the collegial bodies of the organization. The CEP for 2021-2022 includes the following residents: Shaikhina D., a resident of the 2nd year of study, Taylykova K. and Tolegen A.- residents of the 3rd year of study.

Residents actively work outside of training in the Council of the Residence Department, where issues of employment, problematic issues of both psychological and educational nature are discussed. This is how the corporate spirit of students is formed.

When studying the protocols of the local ethics committee (LEC), we noted that the members are students or doctoral students, residents are not included. Since one of the important components of training for residents is the research component, it is necessary to include senior students in the LEC.

#### **4.5 Working conditions**

In the implementation of the programme, the university has an approved policy of financing residents both through the receipt of scholarships and by providing opportunities for work in extracurricular time, the application of the resident incentive system and other ways of financing.

The right to combine training with work (no more than 0.5 hours) in areas of activity close to his future specialty in his free time from study with the consent of the supervisor, the head of the department and the head of the residency department.

For residents transferred from other universities, restored, remaining for the second year of study, returned from academic leave, an individual plan is drawn up, on the basis of the WEPI approved for the relevant academic year, taking into account the difference in the curriculum or academic debt. The principles of organizing the educational process using distance learning technologies (DLT) are set out in the Regulation on the organization of training using distance learning technologies, approved by the decision of the AC dated August 29, 2019 No.1. DLT was active during Covid Quarantine when training residents online. And thanks to the system of new technologies, residents received knowledge in full according to the allocated hours. The study load of residents is compiled in accordance with the Law of the Republic of Kazakhstan "On Education", According to the Academic Policy of the University, residents of 7R01119 – "Angiosurgery (adults, children's)", who completed the course programme in full, but did not score the minimum transferable score, in order to increase their average score of academic performance, are given the opportunity to re-examine individual disciplines on a paid basis in the summer semester and retake exams on them (except for the graduation year).

According to the survey, 75% of respondents among residents are completely satisfied with clinical training, and 25% partially have enough time for practical training (patient supervision, etc.) – 100% of residents. This indicates the creation of favorable conditions for obtaining an education in this organization.

***Conclusions of the EEC on the criteria.*** Compliant with 30 standards: fully - 29, partially – 1.

***Standard 4: Implemented***

***Recommendations for improvement identified during the external visit:***

1) The programme of entrance examinations should include questions only in the disciplines of prerequisites and exclude highly specialized topics.

#### **Standard 5: FACULTY**

##### **Evidence of compliance:**

##### **5.1 Recruitment and Selection Policy**

Members of EEC studied the self-assessment report, the questionnaire of faculty members, interviews with residents and heads of departments responsible for personnel policy. The experts got acquainted with the portfolio of TS.

The University has developed and successfully operates a Personnel Policy, which reflects: the selection and admission of employees, the development and activities of employees, the promotion of



employees, etc. Analysis of the quantitative and qualitative composition of the teaching staff, monitoring and evaluation of pedagogical activities are the objects of constant attention on the part of the University management. The University has approved the structure of departments. Order dated 26.08.2020 No. 26-02-14-n.k "On Amendments to the Organizational Structure of the Chairs of the University

The selection of candidates for positions is carried out exclusively on the principles of competitiveness and merit, ensuring equal access to the relevant positions, taking into account the qualifications, professional indicators, as well as experience and approved by the Rector's Order No. 26-02-44-n/k dated November 27, 2020. Competitive selection, in which full-time employees participate, as well as those who have applied for the competition from the outside, is held regularly. Thus, competitive selection is carried out on the basis of the current Regulation on the competitive substitution of positions of faculty and researchers, approved by the order of the rector No. 26-02-44-n/k dated November 27, 2020.

The teaching staff is represented by highly qualified specialists who have scientific achievements, high medical qualifications, are experts in health care and medical education. Thus, in the 2018-2019 academic year, the total number of teaching staff was 608, including 307 full-time teachers and 301 part-time teachers. Doctors of Sciences – 51 people; Candidates of Sciences – 96 people. PhD doctors – 17 people, Masters – 107 people. The average age of the teaching staff is 45 years. In the 2019-2020 academic year, the total number of teaching staff was 646 people, including 361 full-time teachers, 285 part-time teachers. Doctors of Sciences – 54 people; Candidates of Sciences – 168 people. PhD doctors – 17 people, Masters – 123 people. The average age of the teaching staff is 46 years. In the 2020-2021 academic year, the total number of teaching staff was 962, including 655 full-time teachers and 307 part-time teachers. Doctors of Sciences – 103 people; Candidates of Sciences – 279 people. PhD doctors – 26 people, Masters – 214 people. The average age of the teaching staff is 46 years.

In order to verify the data of Standard 5, external experts obtained the opinion of teachers on personnel policy through interviews and questionnaires, which includes that 92.86% of respondents are completely satisfied with the work of the personnel service, doubt with the answer – 7.14%. During the interview, V.I. Verevkina, Head of Personnel Department, described in detail the job descriptions of the teaching staff, the roles of mentors and supervisors, the principles of the teaching staff motivation policy, and the principles of teaching staff admission.

The conversation with Professor A.V. Trynkin, Professor of the Department of Surgery, included such questions as 1. Is there an opportunity for career development and competence development for teachers? 2. Are management and administration systematically listening to teachers' opinions? What are the mechanisms of motivation of teaching staff in educational and scientific activities and allowed experts to learn about approaches to attracting employees of clinical bases for teaching (there are 8 such teachers in total), about the strategy and tactics of recruiting residents, information security of the educational programme, as well as to identify problems in human resource management and development. For example, no quantitative key performance indicators (KPIs) have been introduced among the teaching staff to enable a differentiated approach in determining wages, bonuses and incentives.

Members of the EEC were convinced of the positive assessment of teachers about the personnel policy of the organization. Thus, teachers have the opportunity to engage in scientific work and publish the results of research can be implemented as professionals, that students have free access to patients on the clinical bases of the university and to the resources of the practice bases in 100% of cases according to the questionnaire. Unfortunately, 42.86% did not answer the question of whether the university supports the teacher in participating in international and republican events, they applied for payment of travel, business trips, registration fee – 7.14%, for payment of registration fee – 7.14%, and 35.71% did not apply with this to the management or relevant administrative employees of the university. Therefore, it is necessary for the HR department together with the university administration to develop mechanisms for reimbursement of full or partial participation of employees in international

conferences, which significantly affects the rating of teaching staff and universities in Kazakhstan. According to the questionnaire, the management and administration systematically listen to the opinion of teachers – in 92.86% of cases, sometimes – 7.14%, so it is necessary to voice the above questions at the AC or SCC.

Thus, there is a sufficient number of teachers in KRMU in accordance with the needs of the programme 7R01119 – "Angiosurgery (adults, children's)" for the successful implementation of the educational programme in residency. Teachers meet the qualification requirements:

- have a specialist certificate or a certificate of a specialist with the highest category in angiosurgery,
- the resident mentor is a current angiosurgeon with more than 10 years of experience in the specialty: admits patients in the admission department, attending physician, surgical consultant, conducts expert assessment of medical histories or clinical case, is an operating surgeon,
- the lecturer has the degree of the doctor of medical sciences on specialty "Cardiovascular surgery" and experience of research work (has scientific publications in the peer-reviewed editions and the magazines with non-zero impact factor), developed methodical recommendations, educational and methodical manuals, monographs and textbooks, has experience on development of educational programmes on specialty.

Academic staff in the specialty 7R01119 – "Angiosurgery (adults, children's)" is quite sufficient to conduct qualified training.

## **5.2 Teachers' obligations and development**

The activities of the teaching staff are planned in accordance with the individual plan of the teacher, which is discussed and approved at the departmental meetings of the departments / course participating in the training of residents in the specialty 7R01119 – "Angiosurgery (adults, children's)". The system of professional and pedagogical improvement of the teaching staff of the NEI "KazRosmeduniversity" is carried out by the presence of departments: the School of the teacher, the Institute of postgraduate education, winter and summer schools, which contribute to the formation and development of the competence and potential of the teaching staff.

The professional development programme, implemented in the university's IPE through retraining and advanced training courses, determines the number of students at the rate of 20% of the total number of teaching staff.

Regular monitoring of work and certification of teaching staff is carried out. The University implements mechanisms that guarantee the recognition of all the activities of teachers and employees of the University. This is, of course, effective in raising the status of teaching staff and the role of teaching staff in the implementation of the tasks of the university.

42.86% know about the implementation of social programmes to support teachers, 7.14% used them, 28.57% do not know and 21.43% of respondents are doubtful about their availability. What needs to be taken into account in the work of the human resources department in order to regularly inform the relevant social programmes.

In order to verify the data of Standard 5, during a meeting with the head of the personnel department and during an interview with teachers, experts received an opinion on approaches to the development of teachers' pedagogical competence, motivation to work with residents, the implementation of mentoring, which includes the participation of an academic mentor in the formation and implementation of an individual curriculum, manages the educational and scientific activities of the student, assists in employment.

Experts received answers about the teacher development programme, which is held annually, including one teacher in angiosurgery trained in 2019-2021 at the School of the Teacher. The teacher was trained in teaching methods using new technologies and in testology. The event was funded by the University. The expert checked the teacher's certificates. From April to June 2021, the university conducts advanced training of faculty in the following modules: Testology, Communication Skills, Distance Education Technologies (Order No. 26-02-18-n/k dated 01.04.2021).

Experts found that teachers initiate research topics for residents, stimulate the need for additional training and independent work with literature, medical documentation, help in the

implementation of the scientific approach in clinical practice, develop skills in the compilation of scientific publications (abstracts and articles). At the practical lesson, which was attended by experts, the resident angiosurgeon correctly spoke about the pathology of the arteries of the lower extremities, quoted the results of a literary review of foreign authors, demonstrated analytical skills in relation to patients whom he supervised and observed.

In a survey of a teacher participating in the training of a resident angiosurgeon and a survey of teaching staff, it was found that teachers at the KRMU have the opportunity to engage in scientific work and publish the results of research.

When analyzing this standard, it should be noted that the management of the KRMU seeks to create all conditions for the development of PPPs. There is evidence of regular refresher training for teaching staff. However, more refresher training cycles are conducted in domestic organizations. Foreign refresher courses were held only in anesthesiology and general surgery, so it is recommended to expand the academic mobility of teachers in teaching methods, innovative technologies, the development of teacher skills.

**Conclusions of the EEC on the criteria.** Compliant with 7 standards: fully – 5, partially – 2, non-compliant – 0

**Standard 5: Implemented**

**Recommendations for improvement identified during the external visit:**

- 1) Expand academic mobility of teachers;
- 2) Ensure the development of teachers' pedagogical skills;
- 3) Develop key criteria for evaluating the performance of teachers and clinical mentors.

## **Standard 6: EDUCATIONAL RESOURCES**

### **Evidence of compliance:**

#### **6.1 Logistics and equipment**

The resources of the center, powerful material and technical equipment, professionalism of the staff of the departments (clinical mentors) allow to provide a balance and opportunities for training and recruitment of students. The clinical bases of the university correspond to the specifics of the programme in the specialty "Angiosurgery, including pediatric surgery".

During the visit of the EEC members, it was noted that the university has a good training clinical center (TCC) equipped with modern imitations and trained qualified personnel. Before independently performing manipulations, the resident carefully practices practical skills in the UCC. On the basis of the university, there is a MMC, which allows residents to improve their skills in the conditions of disaster medicine. Automation, in accordance with the credit technology of the organization of the educational process, is carried out with the Platonus information system and the educational information resources of training are based on the Moodle AIS, allowing to conduct the educational process, control, monitoring and transparency of the resident assessment in a remote format.

During the survey, residents answered that office equipment is available on the basis of practice, teachers provide residents with methodological and didactic materials, additional literature to prepare for classes, are fully satisfied with the library fund and resources in 100 cases. This once again confirms that the university provides opportunities for independent training of students (IWS), providing access to educational resources of the library and the Internet, thereby realizing the goals of the EP.

#### **6.2 Clinical bases**

It is known that the University has signed agreements and memoranda of cooperation with 85 medical organizations located in Almaty, Almaty region and regions of the Republic of Kazakhstan and with 11 foreign universities and clinics.

The review of resources showed that they correspond to the goals and objectives of educational activities, for example, clinical bases were visited, including MC "Rakhat" with a total bed capacity of 40. The employees of the organization of education provide collegial and ethical relations with the

medical personnel, the management of the clinical base to achieve the final results of residents. According to angiosurgery, residents have the opportunity to receive education on the basis of the A.N. Syzganov Research Institute with a bed capacity of 206 beds, the State Clinical Hospital No.12 with a bed capacity of 511 beds, where there are specialized specialized units for angiosurgery.

A sufficient number of thematic patients, modern equipment and demonstrates accessibility to students are provided, and employees who simultaneously perform the roles of teachers and mentors provide high-quality training in compliance with ethics and deontology. Before starting the relevant discipline of the educational programme, the resident receives a syllabus from the teacher and knows what skills he must acquire and develop during the training. Since 1 resident is currently studying in this specialty 7R01119 – "Angiosurgery (adults, children's)" and it is difficult to judge the results of the entire educational programme. When interviewing residents, it is shown that the student knows the topics of the syllabus, navigates in the choice of electives. However, the paediatric component in the educational programme is poorly represented.

During visits to clinical bases, where experts conducted a survey of resources, their compliance with training programmes, accessibility for teachers and students, as far as this equipment is modern and meets the needs of students and practical health care. Members of the EEC visited the simulation skills room, where the resident angiosurgeon masters the skills of suturing. An operating theatre was visited, where a resident of the 3rd year conducts operations under the supervision of a mentor. Experts obtained evidence of compliance with Standard 6, as well as validation of the information in the self-assessment report.

In order to validate the implementation of the self-assessment report and to obtain evidence on the quality of the programmes, interviews were conducted with residents in the specialty. The experts asked questions about satisfaction with the training, enough time for patient supervision, work in Damumed with medical documentation, satisfaction with teaching methods and qualifications of teachers, social and moral support for residents in need, participation in the "Journal Clubs", in the Resident Council, Residents are involved in the work of the University's Student Self-Government \* (<https://krmu.edu.kz/wp-content/uploads/2021/03/Stud.Sovet.pptx>).

In general, residents are satisfied with the training, assessment methods, and purposefully entered this organization, as they believe that the organization of education has good resources, image and international relations. 100% of respondents fully agree that students have free access to patients on the clinical bases of the university and to the resources of the practice bases.

Residents showed their commitment to the organization of education, were active in answering questions from external experts, demonstrated their judgment on the organization of training, assessment of their skills, advisory support, opportunities to participate in research, financing, demonstrated a desire to continue studying under the master's and doctoral programmes. Members of the External Expert Commission (EEC) Experts studied the documents of residents (portfolio, results of assessment of residents - checklists, results of questionnaire of residents). The NEI "KazRosmeduniversity" has agreements and memoranda of cooperation with the following higher educational institutions. Equipping clinical bases allows you to effectively implement active methods of training: seminars, webinars, conferences , case studies, problem-based training (PBL); case-based training (CBL), team-based training (TBL); training based on simulation technologies, case studies, medical records, examination of the quality of medical care, patient management, training in a clinic with the participation of a real patient, training in primary health care, attending medical conferences, consultations.

### **6.3 Information technology**

The University Library's collection is also universal in that it consists of documents posted on remote technical facilities. When visiting the library fund, it was established that the university regularly updates the library with resources in the state and English languages, it is possible to work as a resident both on the basis of the library and online. There is access to electronic international databases in 100% of cases of faculty and residents Web of Science - [webofknowledge.com](http://webofknowledge.com), Elsevier – [sciencedirect.com](http://sciencedirect.com), Scopus - [scopus.com](http://scopus.com). The main regulatory and educational



documentation on residency is available at [www.medkrmu.kz](http://www.medkrmu.kz). However, when studying the site, it should be noted that there is insufficient information about the schedule of classes, test training questions, syllabuses and self-control issues.

At the university, information support for the work of residents is carried out through: the media (Facebook, Telegramm, etc.) university website; television monitors in the lobby of educational buildings; boards of official information of the Residence Department and university departments.

There is an information and communication technology room for training in information and communication technology. The test center has 122 computers for conducting midterm and final testing of students' knowledge. Testing is carried out using the application in Platonus AIS.

On March 16, 2020, the Department of Distance Education Technologies (hereinafter referred to as DDET) was established within the university structure to organize and support the educational process using distance education technologies. For effective communication and technical support of students and university teaching staff, the work of the call center of the DLT department was organized.

The assessment of the ECC members during the visits and the survey showed that 100% of the faculty and residents were satisfied with the library fund and information resources. All 100% of respondents have access to electronic educational resources. This clause of the standard is implemented in full.

#### **6.4 Clinical Teams**

The university provides residents with experience in working in a team of resident colleagues and other health care specialists through interaction at clinical bases, clubs and resident councils in solving problematic issues.

According to the EEC questionnaire: residents have sufficient time for practical training (patient supervision, etc.) – in 100% of cases, they are satisfied with the methods of assessing knowledge and skills – fully agree in 91.67%, partially 8.33% of cases. Students of the residency have the opportunity to carry out medical activities at a rate of 0.25 at clinical bases under the supervision of a supervisor. They have the opportunity to lead the patient as a treating doctor, 2 years residents independently carry out small operations on vessels, have a duty schedule, a plan for preparing clinical case studies, according to which educational activities are carried out. The list of skills that are mastered by EP is described in the individual plan and the portfolio of residents.

#### **6.5 Medical Research and Advances**

The main applied scientific direction of the NEI "KazRosmeduniversity" is the development of innovations for implementation in practical health care and the development of competencies among residents. Within the framework of this research project of the University in 2011, together with the "Asar-Bereke" public fund and the "Fund of the First President of the Republic of Kazakhstan", specialized diagnostic medical care is provided to the population of remote regions of the Republic of Kazakhstan using 6 innovative modules of mobile medical complexes to form a single educational, scientific and production complex and to form the basic research competencies necessary for professional activity.

Every year, the University holds a competition of student scientific works dedicated to the "Day of Science". Residents in the specialty 7R01119 – "Angiosurgery (adults, children's)" independently conduct patient supervision, have access to equipment and archived medical records at clinical bases. The department provides residents with appropriate time in the training programme for scientific work. Currently, in the residency 7R01119 – "Angiosurgery (adults, children's)" 1 student, who is not a co-performer of the research, but under the guidance of a supervisor, analyzed the complications of arteries in patients after Covid infection and a publication is being prepared.

According to the university, in 2021, teachers of the Department of Surgery published 12 scientific papers in leading journals of the world, with a high rating index, but in 6 months of 2022, 3 articles were published. This indicates a decrease in the rate of scientific activity of teachers and residents. During the visit to the KRMU, experts found that the educational programme pays little

attention to the scientific component, there are no quantitative indicators of the scientific activity of the resident in the individual plan or portfolio.

### **6.6 Education expertise**

KRMU has developed and implemented a policy on the examination in the field of education and the use of its results in the planning, implementation and evaluation of the educational programme of the residency, which is discussed by university employees and residents within the framework of the CEP. The examination of the quality of the accredited residency educational programme is a mandatory stage of the educational process and is carried out by the following structures of the NEI "KazRosmeduniversity": departments (planning, development, implementation, monitoring, evaluation, revision of the educational programme), Committee of educational programmes (planning, development, monitoring, evaluation of the educational programme), Department of academic work (coordination, control of compliance with the regulatory documents, monitoring, evaluation of the educational programme), Residency Department (implementation, monitoring, approval of the educational programme), Department of strategic development and QMS (coordination, monitoring, evaluation), Academic Council (evaluation and approval of the educational programme), Training Council.

The composition of the collegial advisory bodies (CEP, AC, SC) includes teachers, representatives of professional associations, employers, students. Order No. 26-02-15-n/k of 28.08.2020 on the composition of the CEP) The duties of the examination in the assessment of education and research in the discipline of medical education are assigned to the department of academic work. The examination of the educational programme is carried out for compliance with the SCES, the CED is approved according to the trajectories of training of a specialist, taking into account pre- and post-requisites, evaluates the choice of methods for assessing the results of training of residents. A systematic study and comprehensive evaluation of the educational programme is carried out in order to improve and guarantee the quality of education.

It should be noted that the new educational standards are flexible, providing for the availability of hours of optional components, the possibility of additions and changes to the working curriculum.

The university promotes the development of the interests of employees in the training of teaching staff, the participation of teaching staff in various conferences and seminars on medical education. However, in most cases, R&D is carried out by clinical departments and is devoted to the clinical profile, and scientific research on educational activities and its improvement is not enough.

### **6.7 Training in other institutions**

In order to organize and implement academic mobility, the University has organized a department of academic mobility, which actively works to establish partnerships with Kazakh and foreign universities, pursues a policy for their implementation with educational institutions and organizations of the Republic of Belarus, the Kyrgyz Republic, the Russian Federation, Turkey and France. During the interview with the international department, EEC members were acquainted with the Treaties and Memoranda with 11 countries where it is planned to conduct external academic mobility of faculty and residents. Information on the possibility of studying at foreign clinical and educational bases according to the residents and heads of the resident department is available on the chats of the teaching staff and residents, in the system of student information bases. Due to quarantine measures, academic mobility of teaching staff and residents has sharply decreased over the period 2020-2022. However, training with foreign bases was carried out online. This has allowed continuous improvement of the level of employees and residents.

***Conclusions of the EEC on the criteria.*** Compliant with 21 standards: fully -19, partially -2  
***Standard 6: Implemented***

***Recommendations for improvement identified during the external visit:***

- 1) The educational programme shall include hours for scientific research;



- 2) On the website and in the Moodle system, post and regularly update information for students, including the schedule of classes, educational programme, syllabuses, questions for self-control, training sessions;
- 3) To develop a system for motivating employees to conduct research in the field of medical education

## **Standard 7: PROGRAMME EVALUATION**

### **Evidence of compliance:**

#### **7.1 7.1 Monitoring and evaluation mechanisms**

The policy and procedure for assessing the results of training within the framework of the EP is carried out using criteria developed in accordance with the goals and objectives set for the implementation of the EP and the qualifications assigned within the framework of the current point-rating system for assessing knowledge and monitoring the educational process in accordance with policy, regulatory and internal documents. Within the framework of the general system of monitoring the quality of education, which consists in assessing: the management of the educational programme (the level of teaching staff, the organization of the educational process, the regular assessment of the level of achievement of the goals of the programme, the demand for graduates); the implementation of the educational programme (curriculum, standard programmes of disciplines, methodological and information support, infrastructure, educational technologies, research); the results of the educational programme (interim certification, final certification).

Monitoring and evaluation **of the educational programme** is carried out at all levels, a multilevel approach is used, including the profiling /graduating and related departments, the residency department, the specialized CEP of postgraduate education, the AWD, the Academic Council, the Scientific Council, the Career Center (general monitoring of the quality of educational programmes through a survey of stakeholders (employers, professional associations and students).

The results of stakeholder monitoring and evaluation of the educational programme can be found at <https://drive.google.com/drive/folders/14HwOLGx9TROtLU52VaCBZtcVaOjI5FO>.

One of the important conditions for continuous monitoring and improving the quality of the educational process is its correction on the basis of feedback with the participation of stakeholders. The university systematically collects and analyzes feedback through questionnaires of teachers and students, which are held twice a year during the winter and summer sessions.

Independent monitoring of data on the implementation and achievement of the final learning outcomes (LO) is carried out by independent certification of graduates of EP through the National Center for Independent Examinations (NCIE) and on employer questionnaires. This procedure is carried out annually, after which disciplines are introduced into the catalog of elective disciplines (CED), which allow to strengthen the achievement of the expected final LO.

When surveying residents by members of the EEC, it was noted that in 91.67% of cases, teachers in the classes use active and interactive methods of teaching regularly, and according to 8.33% - sometimes. Fully satisfied that study in higher education 83.33%, partly 16.67% of respondents. The university allows to improve or acquire the necessary knowledge and skills in the chosen specialty confidently 91.67%, can not give an answer 8.33%. Students are taught using a variety of teaching methods, but more often work is done by analyzing situational tasks (88.06%), working in small groups (92.86%), lectures (50%), interactive learning (64.29%), performing abstracts (50%), performing projects, coursework (50%), practical classes in clinical skills at the training and clinical center (50%), oral analysis of the topic of classes (78.57%) oral surveys and analysis of the topic (64.29%), working in small groups (50%) also problem-oriented learning (57.14%), solving tests (71.43%), solving cases (42.86%), less often written completion of tasks (28.57%). All these data will be taken into account for the adjustment of the educational programme. During the interview with the teaching staff, it was noted that the subjects of electives and a list of skills that need to be improved in the process of implementing the EP are regularly discussed with residents.

Thus, the university has developed mechanisms for the approval of educational programmes, providing for the evaluation of programmes at the stages of planning, implementation, analysis.

### **7.2 Feedback from teachers and residents**

The management system of the residency's educational programme involves all stakeholders, including the health sectors, and reflects the responsibility of academic management. This is confirmed by feedback and reviews on the educational programme. The EEC members studied reviews for the educational programme 7R01119 – "Angiosurgery (adults, children's)" from leading specialists in this field of medicine. Employers and practitioners are involved in the discussion of the expected learning outcomes; in the assessment of student learning achievements, educational trajectories. Based on their feedback and recommendations, the key and final competencies of the graduates of the educational programme are formed.

In KRMU, constant work is carried out to determine the satisfaction of internal and external consumers of the university by means of questionnaires. Thus, in the 2020-2021 academic year, 164 people were surveyed. The level of satisfaction with clinical practice is 4 points out of 5. After that, an Action Plan was developed to improve the satisfaction and expectations of university consumers on the basis of the analysis of the survey on the assessment of students' satisfaction with the conditions of study at the university.

During the interview of the EEC with employers, their activity and interest in discussing the admission of residents was noted, depending on the demand in the market of services, the quality of the educational programme, the final results of training and the qualifications of the graduate.

According to the survey of residents of the EEC, 100% of respondents say that teachers constantly provide feedback after completing classes and will recommend this university as an educational organization – fully agree in 75%, partially – 25%.

Resident-centered learning and teaching technologies, which experts saw during the external audit, meet the final learning outcomes and are aimed at the active participation of residents. There is a formal procedure for handling resident appeals and compliance with the Student Honor Code

### **7.3 Results of Residents and Graduates**

The Residence Department collects feedback from students to determine the level of satisfaction with the content of the EP, the organization of the educational process in the form of a questionnaire, monitoring of appeals to the rector's blog, discussion of current issues in the social network. Monitoring students' achievement of learning outcomes plays an important role in the evaluation of the educational programme.

In 2021, the Career Center conducted a sociological study "Satisfaction of employers with graduates of the NEI "KazRosmeduniversity". 30 employers (60% response rate) from 6 oblasts and the city of Almaty were interviewed. The results of the survey of employers on the quality of training of graduates of the NEI "KazRosmeduniversity" for 2021 showed that no employer rated the quality of training as low. 100% of residents are employed in medical organizations at the place of internship.

During the interview with employers, it was noted that graduates of KRMU are employees of their clinic and have positive reviews. It was also noted by the members of the EEC that many residents continue their studies in the master's and doctoral studies at the KRMU, are employees of the teaching staff, auxiliary units (for example, the DLT department).

Admission to the residency for the specialty 7R01119 – "Angiosurgery (adults, children's)" in KRMU will be carried out for the first time, there are no graduates at the moment. It is difficult to assess employment and end results.

### **7.4 Stakeholder Engagement**

The authorized bodies in the field of education and health care (MoH of the Republic of Kazakhstan), representatives of the public, professional organizations, as well as persons and structures responsible for postgraduate education take part in the evaluation and improvement of educational programmes at the university through constant feedback in the form of questionnaires and interviews, participation in various activities of the NEI "KazRosmeduniversity". The programme evaluation process involves all stakeholders (faculty, residents, employers) through representation in the relevant

structures. The work of all structures that ensure the implementation and evaluation of the educational programme is regulated by the University Charter, strategic plan, annual plans and reports of the University, as well as the relevant QMS procedures. The results of the assessment are heard at meetings of collegial bodies.

Analysis of questionnaires is carried out by the direction of monitoring of the QEP, the results of the questionnaire are discussed at meetings of deans / heads of departments of residency and magistracy with faculty and structural units, students.

Interviews with 2 employers were conducted online and 1 offline, and included such questions as: knowledge of the university's mission, participation in the development of the mission and proposals to the strategic plan, participation in the work of advisory bodies, satisfaction with the basic knowledge and skills of residents, participation in the training of residents through mentoring, providing the department and residents with the necessary resources for practical training and formation clinical thinking, about the problems of interaction with departments and universities in general, more than 100% of employed residency graduates, etc. The high degree of interest of employers in the high-quality implementation of the educational programme is shown.

### **7.5 Procedure for Approval of Educational Programmes**

A systematic study and comprehensive evaluation of the educational programme is carried out in order to improve and guarantee the quality of education. The KRMU has established A CEP that organizes activities to improve the educational programme: it forms working groups on the examination and evaluation of working curricula, teaching and evaluation methods, the examination of the CED, the planning of measures to improve the content and process of implementing the educational programme and the Academic Council, which reviews and discusses the quality of educational programmes and approves the educational programme.

Assessment of the educational programme is carried out not only at meetings of the CEP and the Academic Council, but also at meetings of departments where the implementation of plans is checked. This procedure is carried out annually. If it is necessary to make adjustments to improve the EP, the discussion is held at the Academic Council during the academic year.

The process of improving the educational programme is carried out through a specialized CEP, which includes groups of experts on various issues of the educational process. Decisions of collegial bodies are published on the university's website. The results of the discussion of the EP for the CEP are communicated to the faculty of the University. <https://krmu.edu.kz>.

***Conclusions of the EEC on the criteria. Compliant*** with 15 standards: fully – 15.

***Standard 7: Implemented***

***Recommendations for improvement identified during the external visit:***

- 1) Strengthen feedback to graduates, residents and employers to improve the educational programme.

## **Standard 8: GOVERNANCE AND ADMINISTRATION**

### **Evidence of compliance:**

#### **8.1 Management**

Every year, the KRMU develops an operational plan of financial and economic activities in accordance with the Strategic Plan posted on the website and with which the members of the EEC are familiarized in detail. Evidence of the quality of teaching in the specialty 7R01119 – "Angiosurgery (adults, children's)" are the results of the annual final certification of residents (annual report) and the results of training at field clinical bases (reports).

Information support for students is carried out continuously, starting from the provision of information to applicants for educational programmes by admission rules until the provision of information on vacancies in the labor market for graduates. The site of the center provides official presentation of information in order to expand the market of educational services, acquaintance of

students, employees, applicants and employers; as well as providing information to the population and other interested persons about the provided medical, diagnostic, advisory services. There are functioning and constantly updating accounts on Facebook and Instagram.

Members of the EEC were interviewed by the University Management, with employees of the Residency, International Cooperation, Educational Work, Scientific Department and Personnel Department. Evidence has been obtained that the management system is built in accordance with the regulatory documents of the Republic of Kazakhstan, the Charter, the Strategic Development Plan; The organizational, functional and staffing structure corresponds to the mission, goals, objectives and policy in the field of quality assurance of the NSCS. The responsibility of the academic management in relation to the development and management of the educational programme and the desire of the university to achieve high indicators in all types of activities: educational, scientific, therapeutic and educational is determined.

Coordination of the implementation, control and monitoring of the implementation of the programme in the specialty 7R01119 – "Angiosurgery (adults, children's)" is carried out by the Residency Department under the supervision of the Vice-Rector for Clinical Activities. The organization has developed and approved a basic internal document defining the scope of duties and powers of all divisions in relation to the educational programme of the residency, including the obligation to ensure the educational process in full with all necessary information sources and access to network educational resources. This document is guided by the PGE department in the management of the educational programme of the residency.

### **8.2 Academic Leadership**

The organizational, functional and staffing structure is in line with the mission, goals, objectives and policy in the field of quality assurance of education in the KRMU.

Direct management of resident programmes and coordination of resident activities since the existence of the resident programme is carried out by the Resident Department. The organization of the educational process in the NEI "KazRosmeduniversity" is regulated by the working curriculum of the educational programme 7R01119 – "Angiosurgery (adults, children's)", the curriculum and IEP of the resident. Evaluation of the organization of training at the department is carried out through systematic control of the departments by the department.

Training of residents in the specialty 7R01119 – "Angiosurgery (adults, children's)" is carried out at the clinical base of the Department of Surgical Diseases of the KRMU, which includes a department of angiosurgery and teaching staff of the relevant specialty. The resident's clinical mentor and supervisor conducts both practical and theoretical classes in full. This was evidence of the attendance of EEC members in the class on angiosurgery. In terms of research, it is necessary for faculty members to expand scientific publishing activity and presentations of residents at conferences and congresses. The resident has 1 publication for the current year and no conference reports.

The results of the external evaluation showed that the individual plan of the resident should include quantitative indicators of the resident's scientific activity.

### **8.3 Training budget and resource allocation**

Management of financial and economic policy and activities of NEI "KazRosmeduniversity" is the responsibility of the first head of the university – the rector. Financial issues are under the responsibility of the Director of the Department of Financial Work and the Chief Accountant of the University, whose duties and powers are established by the job description and the Regulations on the Department of Financial Work. The budget of KazRosmeduniversity is formed from two sources: the republican budget (state order for training of personnel of higher and postgraduate education, advanced training of medical workers, development of scientific research, transfers) and provision of paid educational services.

According to the documents studied, interviews with employees of the organization and visits to the following subdivisions: DLT, library, UCC, student rooms, conference rooms, mobile medical complexes, it can be seen that the KRMU regularly updates and expands the material and technical base with modern equipment for the implementation of educational programmes; information support



meets the qualification requirements for the implementation of the educational programme, the UCC is updated with simulation dummies classes, equipped with stations where practical skills are practiced in standardized conditions. The majority of surveyed faculty members have undergone professional development at the expense of the organization's budget over the past 5 years. Unfortunately, 42.86% did not answer the question of whether the university supports the teacher in participating in international and republican events, they applied for payment of travel, business trips, registration fee – 7.14%, for payment of registration fee – 7.14%, and 35.71% did not apply with this to the management or relevant administrative employees of the university.

Thus, the KRMU has an effective financial management policy and procedure that ensures the adequacy and transparency of the distribution of financial resources, including aimed at continuous improvement of educational activities.

#### **8.4 Administration and Management**

In KRMU, the management system is built in accordance with the regulatory documents of the Republic of Kazakhstan, the Charter, the Strategic Development Plan; The organizational, functional and staffing structure corresponds to the mission, goals, objectives and policy in the field of quality assurance of the university. The responsibility of academic management in relation to the development and management of the educational programme is determined. The calculation of the pedagogical load of the teaching staff is carried out in accordance with the Standard Rules for the Activities of Higher Education Organizations

KRMU has an official website <https://krmu.edu.kz/>, which is a source of information about the center, management and structural units, supports the mission, goals and objectives, and is effectively used to inform the public about the educational programmes being implemented. In addition to the site, information about the activities of the center is posted on information stands in the administrative building and departments, auxiliary units.

It should be noted that the members of the EEC assessed the importance of the goal of the university in the implementation of the Policy of the Integrated Management System of Educational Services through the introduction of modern Internet technologies. In KRMU, information is protected when working with documentation on residency programmes, including document flow; remote access to the organization's resources is implemented through the introduction of AIS Moodle and Platonus. In September 2020, online classrooms for students and teaching staff were created on the basis of the University, allowing the introduction of modern teaching technologies.

#### **8.5 Requirements and regulations**

Based on the data obtained during the analysis of the Strategic Plan, the Academic Policy, the documents studied on the official website <https://medkrmu.kz/>, on the disk <https://drive.google.com/drive/folders/14HwOLGx9TRQtLU52VaCBZtcVaOj15FO>, interviews with faculty members and heads of structural units responsible for the implementation of the educational programme, it should be noted that the university conducts continuous organizational, coordination and administrative work aimed at achieving the mission and goal; on the basis of joint responsibility for the educational process. In addition, the faculty of the University together with the RCHD of the Ministry of Health of the Republic of Kazakhstan actively participates in the development and implementation of clinical protocols for the diagnosis and treatment of various diseases, which are used in the training of experts.

The interaction of the NEI "Kazakh-Russian Medical University" with the Ministry of Education and Science and the Ministry of Health of the Republic of Kazakhstan on the organization of the educational process in the residency is carried out through the development and implementation of the State Educational Standard for 2020 and is consistent with the priority areas of national legislative and programme documents. For the development of residency programmes, their improvement, representatives of practical healthcare are involved. In order to effectively plan, develop and implement residency programmes, the NEI "Kazakh-Russian Medical University" included representatives of practical health care, residents and teachers of departments involved in the implementation of residency programmes in the advisory bodies (CEP, AC)

This clause of the standard is implemented in full.

**Conclusions of the EEC on the criteria.** Compliant from 15 standards: fully -14, partially -1, non-compliant - 0

**Standard 8: Implemented**

**Recommendations for improvement identified during the external visit:**

- 1) More efficient use of information and communication technologies in the management system (electronic document management, expansion of Platonus AIS capabilities in the residence, digitalization);

## **Standard 9: CONTINUOUS RENEWAL**

### **Evidence of compliance:**

Thus, the KRMU has an effective financial management policy and procedure that ensures the adequacy and transparency of the distribution of financial resources, including aimed at continuous improvement of educational activities.

Continuous assessment of the quality of learning outcomes/competencies, assessment of knowledge and skills, learning environment of the programme and updating of the educational programme on residency and improvement of its implementation practice occur taking into account the knowledge and skills acquired by teachers at training events (seminars, master classes, conferences).

The presence of a large number of clinical bases with a stable financial condition, with modern medical and diagnostic resources, a large number of multidisciplinary beds, qualified personnel resources (both curators and mentors) creates conditions for the implementation of the educational programme 7R01119 – "Angiosurgery (adults, children's)".

It is difficult to compare the assessment of the final results in the process of implementing this programme, improving the qualitative composition of the teaching staff at the present time, since this accreditation is primary.

The organization clearly and precisely presented indicators of improvement in the development directions in the Strategic Plan to 2025. The key indicators of achievement of the final results of improving all areas of the university are detailed by the members of the EEC on the website <https://medkrmu.kz/> and the Strategic Plan itself. There is regular monitoring of indicators by all business units and active participation in the implementation of the Mission and the goals of the organization.

**Conclusions of the EEC on the criteria.** Compliant with 4 standards: fully – 3, partially – 1, non-compliant – 0

**Standard 9: Implemented**

**Recommendations for improvement identified during the external visit:** none

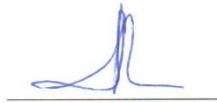










**6. Recommendations for the improvement of the educational programme 7R01119 – "Angiosurgery (adults, children's)"**

- 1) Improving the educational process – the development and implementation of effective innovative technologies in the educational process and the final results of training should be determined taking into account proposals from stakeholders (employers and practical health care);
- 2) Develop quantitative indicators of R&D performance. The scientific component should be included in the thematic plan in the form of tasks based on the application of scientific analysis methods (2.2.4)
- 3) Individually reflect the research activities of the residents (research topic, programme, publications, reports) (Standard 3);
- 4) Include methods for assessing knowledge of the paediatric component in the EFF (3.1.3).
- 5) Include issues of prerequisite disciplines in the entrance examinations and exclude highly specialized topics (4.1.6);
- 6) Expand academic mobility of teachers (standard 5);
- 7) Ensure the development of teachers' pedagogical skills (standard 5);
- 8) Develop key criteria for evaluating the performance of teachers and clinical mentors (5.2).
- 9) The educational programme shall include hours for scientific research (standard 6);
- 10) On the website and in the Moodle system, post and regularly update information for students, including the schedule of classes, the educational programme, syllabuses, questions for self-control, training sessions (6.3.3);
- 11) Develop a system for motivating employees to conduct research in the field of medical education (6.6.3);
- 12) Strengthen feedback to graduates, residents and employers to improve the educational programme (standard 7).
- 13) More efficient use of information and communication technologies in the management system (electronic document management, expansion of Platonus AIS capabilities in the residence, digitalization) (standard 78);

## 7. Recommendation to the ECAQA Accreditation Council

Members of the EEC established the compliance of the educational programme 7R01119 – "Angiosurgery (adults, children's)" with the Accreditation Standards and came to a unanimous opinion to recommend to the ECAQA Accreditation Council to accredit this programme for a period of 5 years.

<b>Председатель Внешней экспертной комиссии</b>	Курманова Алмагуль Медеубаевна	
<b>Зарубежный эксперт</b>	Закирова Гузель Закировна	
<b>Национальный академический эксперт</b>	Кауышева Алмагуль Амангельдиновна	
<b>Национальный академический эксперт</b>	Сарсенбаева Гульжан Искендировна	
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<b>Национальный академический эксперт</b>	Ларюшина Елена Михайловна	
<b>Национальный академический эксперт</b>	Султанова Гулнар Достановна	
<b>Эксперт – представитель работодателей</b>	Нурғалиев Нурлан Ермекбаевич	
<b>Эксперт – представитель резидентов</b>	Майкенова Арайлым Мураткызы	

**Quality profile and criteria for external evaluation of the educational programme  
(generalization)**

Standard	Evaluation Criteria	Number of standards	Evaluation		
			Fully compliant	Partially compliant	Not compliant
1	MISSION AND END OUTCOMES	17	17	-	
2	EDUCATIONAL PROGRAMME	31	29	2	
3	ASSESSMENT OF STUDENTS	11	10	1	
4	STUDENTS	30	29	1	
5	FACULTY	7	5	2	
6	EDUCATIONAL RESOURCES	21	19	2	
7	PROGRAMME EVALUATION	15	15	-	
8	GOVERNANCE AND ADMINISTRATION	15	14	1	
9	CONTINUOUS RENEWAL	4	4		
	<b>Subtotal:</b>	<b>150</b>	<b>141</b>	<b>9</b>	
			<b>150</b>		