

To Accreditation Council  
Of The Eurasian Center for Accreditation  
And Quality Assurance  
In Higher Education and Health Care

**REPORT**  
**EXTERNAL EXPERT COMMISSION**  
**ON THE RESULTS OF THE ASSESSMENT OF THE EDUCATIONAL**  
**PROGRAMME**  
**7R09101 "CARDIOLOGY, INCLUDING CHILDREN"**  
**OF NJSC "Semey Medical University"**  
**FOR ACCREDITATION STANDARDS OF POSTGRADUATE EDUCATION**  
**PROGRAMMES (RESIDENTURE SPECIALTIES) IN MEDICAL**  
**EDUCATION ORGANIZATIONS**

**period of external expert commission: 18.05.-20.05.2021**

**Semey, 2021**

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## LIST OF SYMBOLS AND ABBREVIATIONS:

AMP	Administrative and management personnel
BD (O)	Basic disciplines (training)
GP	General Practitioner
University	Higher educational institution
EKR	East Kazakhstan region
SAC	State Attestation Commission
SCES	State compulsory education standard
GPA	Weighted average assessment of the level of educational achievements of a student in the chosen specialty
DAD	Department of Academic Development
DSHR	Department of Science and Human Resources
DOPs	Direct observation
ECTS	European Credit Transfer and Accumulation System
ECAQA	Eurasian Center for Accreditation and Quality Assurance in Higher Education and Health care
FSA	Final state attestation
IC	Individual curriculum (resident)
ILS	information library system
CVI	Coronavirus infection
COC	Component of choice
CEP	Committee of educational programmes
QED	Catalog of elective disciplines
LMS	learning management system KEYPS
MoH RK	Ministry of Health of the Republic of Kazakhstan
Mini-CEX	Mini Clinical Exam
MES RK	Ministry of Education and Science of the Republic of Kazakhstan
MEO	Medical education organization
MA	Methodical advice
NJSC "SMU"	Non-profit Joint Stock Company "Semey Medical University"
R&D	Research work of a resident
IQAA	Independent Agency for Quality Assurance in Higher Education
SSC	Scientific student circle
STP	Scientific and technical programme
NCIE	National Center for Independent Examination
EP	Educational programme
IA	Intermediate attestation
PBL	Problem- based learning
MD	Major disciplines (training)
PHC	Primary health care
PPP	Faculty
RSE on REM	Republican state enterprise on the right of economic management
WC	Working curricula

CBL	Case-based-learning
NKR	North-Kazakhstan region
QMS	Quality Management System
SOP	Standard operating procedures
IWS	Independent work of students
IWR	Independent work of a resident
SC	Simulation center
IWRT	Independent work of a resident under the supervision of a teacher
TBL	Team-based-learning (training in a team)
TC	Typical curricula
ERWR	Educational and research work of residents
AC	Academic Council
CNM&O	Center for Nuclear Medicine and Oncology
GCC	Graduate Career Center

## **1. Composition of the External Expert Commission**

In accordance with ECAQA Order No. 16 dated April 20, 2021, an External Expert Commission was formed to conduct accreditation of educational programmes for residency specialties of NJSC "Semey Medical University" in the period 18-20.05.2021:



### **Chairperson of the External Expert Commission**

**KUZGIBEKOVA ALMA BOLATOVNA**,  
Candidate of Medical Sciences, Professor of the Department of Childhood Diseases, Karaganda Medical University,  
Honorary Worker of Education of the Republic of Kazakhstan, Accredited independent expert in assessing the quality of medical services.



### **Foreign expert**

**RIPP EVGENY GERMANOVICH**  
Candidate of Medical Sciences, Associate Professor, Head of the Accreditation and Simulation Center of the Institute of Medical Education of the Federal State Budgetary Institution "National Medical Research Center named after V. A. Almazov " of the Ministry of Health of the Russian Federation, Member of the Board of the Russian Society for Simulation Education in Medicine (ROSOMED), Member of the ROSOMED Programme Committee, Instructor of the European Resuscitation Council (ERC)



### **National academic expert**

**ALMAGUL AMANGELDINOVNA KAUYSHEVA**,  
Candidate of Medical Sciences,  
Vice-rector for educational and scientific activities of the Kazakhstan Medical University "HSPH",  
Accredited independent expert in assessing the quality of medical services, Deputy Chairperson of the Board RPO "Kazakhstan Alliance of Medical Organizations".



**National academic expert**  
SHUKIRBEKOVA ALMA  
BORANBEKOVNA,  
Doctor of Pharmaceutical Sciences, Professor,  
Dean of the Faculty of Pharmacy  
NJSC "Astana Medical University"



**National academic expert (online)**  
ISENOVA SAULE SHAIKENOVNA,  
Doctor of Medical Sciences,  
Professor of the Department of Obstetrics and  
Gynecology  
NJSC "Asfendiyarov KazNMU"



**National academic expert**  
ESENKULOVA SAULE ASKEROVNA,  
Doctor of Medical Sciences, Associate  
Professor of the Department of Oncology  
NJSC "Asfendiyarov KazNMU "  
Member of the Association of Oncologists of  
the Republic of Kazakhstan



**National academic expert**  
KUDABAEVA KHATIMIA ILYASOVNA,  
Candidate of Medical Sciences, Professor  
Department of Internal Medicine №1  
NJSC "West Kazakhstan Medical University  
named after Marat Ospanov "



**National academic expert**  
KENZHEGULOVA RAUSHAN  
BAZARGALIEVNA,  
Candidate of Medical Sciences,  
neurology residency instructor of  
Corporate Fund "University Medical Center"



**National academic expert**  
RINAT MUZAFAROV,  
Head of the Department of International  
Cooperation and Public Relations of the  
Republican State Enterprise "Republican  
scientific and practical center of psychiatry,  
psychotherapy and narcology " of MoH RK



**National academic expert**  
SADIEVA ZHANAR ZAMANKHANOVNA,  
anesthesiologist-resuscitator,  
Head of Postgraduate Education Department of  
JSC "South Kazakhstan Medical Academy"



**National academic expert**  
RAKHMANOV ELTAI UTEMURATOVICH,  
PhD  
Deputy Director of Master's Degree in  
Sports Medicine and Rehabilitation of  
Nazarbayev University School of Medicine



**National academic expert**

RAMAZANOVA MANSHUK ANEROVNA,  
Senior Lecturer of the Department public  
health and Health care of  
NJSC "Asfendiyarov KazNMU"



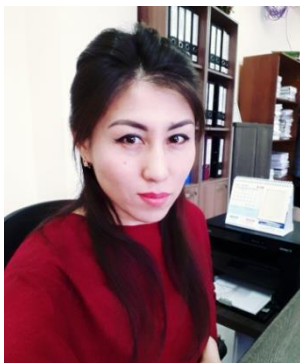
**Expert - employers' representative**

SARSENBINA LYAZZAT KYRYKBAEVNA,  
Candidate of Medical Sciences,  
highest qualification category  
in the specialty: "Public health",  
Chief physician of the MSOPE "CPMSP No.  
12, Semey



**Expert - representative of undergraduates**

MAZANBEKOVA MERUERT  
YERZHANOVNA,  
2nd year undergraduate student in the specialty  
"Pedagogy and Psychology" of the Kazakh  
Humanitarian - Legal Innovative University in  
Semey.



**ECAQA Observer**

UMAROVA MAKPAL ALDIBEKOVNA,  
Head of Accreditation and Monitoring  
Department  
Of "Eurasian Center for Accreditation and  
Quality Assurance in Higher Education and  
Health Care"

tel .: +7 747 5609212, e-mail: [info@ecaqa.org](mailto:info@ecaqa.org)



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

The EEC report contains an assessment of the educational programme of residency in the specialty 7R09101 "Cardiology, including children's" of the NJSC "Semey Medical University" for compliance with the Accreditation Standards for postgraduate education programmes (residency specialties) of medical educational institutions of the ECAQA, recommendations of the EEC on further improving the educational activities of the university in the field of postgraduate education.

## 2. General part of the final report of the EEC

### **2.1 Presentation NJSC "Semey Medical University" and the educational residency programme in the specialty 7R09101 "Cardiology, including children's"**

The university has been leading its history since 1952. since the opening of the Semipalatinsk State Medical Institute. By the Decree of the Government of the Republic of Kazakhstan dated February 19, 2009 No. for №199 the Republican state state enterprise "Semipalatinsk state medical academy" was transformed into the Republican state enterprise on the right of economic management "State medical university of the city of Semey". On February 5, 2019, the university was transformed into a non-profit joint-stock company "Semey Medical University". The mission of the university: "Assistance in improving the health of the population of Kazakhstan through high-quality training of competitive specialists, by integrating the world practice of education, science and clinics."

Training is conducted in the state, Russian and English languages. The form of study is full-time, full-time. Training of students in clinical skills is carried out on the basis of the Department of Simulation Technologies, on its own clinical base - at the University Hospital of the NJSC "SMU".

The mission of the Non-Commercial Joint Stock Company "Semey Medical University" is "Assistance in improving the health of the population of Kazakhstan through high-quality training of competitive specialists, by integrating the world practice of education, science and clinics."

The university implements educational programmes of higher professional education, master's programmes, residency, doctoral studies. The contingent of students is more than 4000. Training is conducted in the state, Russian and English languages. The university has a high status of a research center in the field of medicine, biology, biochemistry, etc. The university is constantly working to expand international cooperation in the fields of science, education and clinics.

Mission of the educational residency programme: High-quality training of competitive adult and pediatric cardiologists for work in both inpatient and outpatient medical organizations.

Clinical base of the department cardiology and interventional arhythmology NJSC "SMU" is an emergency hospital in the city of Semey (emergency hospital in the city of Semey). The base has three departments of cardiology, an intensive care unit, and a department of endovascular surgery. In the educational process, medical and diagnostic rooms of the hospital are actively used. The department also uses the base of the university hospital (UH) of NJSC "SMU", where the cardio-rheumatology department, the department of cardiovascular surgery and the department of the endovascular laboratory are located, where patients are provided with highly specialized medical care. The training of residents of cardiologists of the branch of NJSC "SMU" in Ust-Kamenogorsk is carried out in specialized departments of the East Kazakhstan Regional Hospital, the Consultative and Diagnostic Department (CDO) of the diagnostic center.

The department of internal diseases of the Pavlodar branch of the NJSC "SMU" is located in the Pavlodar regional cardiological center and the specialized clinics of the center are the clinical bases of the department.

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

The educational residency programme (EPR) in the specialty 7R09101 "Cardiology, including children's" has been developed to train students of residency under a state grant and targeted residency since 2015.

### **2.3 Analysis of the self-assessment report of the educational programme of residency in the specialty 7R09101 "Cardiology, including children's"**

Self-assessment report of the educational programme 7R09101 - "Cardiology, including children's» of NJSC "Semey Medical University" is presented on 222 pages and contains 20 annexes according to the relevant standards.

(<https://drive.google.com/drive/folders/1hKirs0RMmWPTvSqcI5vClq2JpdFFUAu>).

The report is characterized by the completeness of answers to all 9 accreditation standards, structuredness taking into account the recommendations of the ECAQA Self-Assessment Guidelines, as well as the internal unity of information provided by the accredited organization about its activities. The report is accompanied by a cover letter signed by the Chairperson of the Board - Rector prof. E.T. Zhunusova confirming the accuracy of the information and data contained in the report.

Self-assessment of the educational programme 7R09101 "Cardiology, including children's" of the Non-profit Joint Stock Company "Semey Medical University") was carried out on the basis of order No. 32 dated January 18, 2021 "On the creation of a Working group for writing a" Self-assessment report "of specialized and primary accreditation for 18 educational programmes of NJSC "Semey Medical University" and No. 56 of January 29, 2021. ", On the additional inclusion in the working group of representatives of practical health care and students from 18.01.2021 №32.

The working group on the preparation of the self-assessment report did some work: the content of the accredited educational programme, the conditions for its implementation, staffing, educational resources were analyzed, the necessary information was collected in accordance with Accreditation standards for postgraduate education programmes (residency specialties) of medical educational institutions (hereinafter referred to as accreditation standards); a thorough analysis, updating and addition of methodological and educational materials was carried out, their content is reflected in the report. The content of the Self-Assessment Report is structured in accordance with the ECAQA Accreditation Standards and includes a description of strengths, areas for improvement for each of the 9 standards.

The database and applications are presented in full, sequentially and there are references to them in the text of the report. The report is written in a competent language, the wording for each standard is clear and understandable, the tables contain references in the text and are consecutively numbered.

### **2.4 General assessment of the educational programme of residency of the specialty 7R09101 "Cardiology, including children's" for compliance with the Standards of accreditation of postgraduate education programmes (specialty residency) of medical educational organizations.**

Based on the analysis of the self-assessment report by external experts, it was found that the content of the self-assessment report is structured in accordance with the ECAQA accreditation standards and the recommendations of the Self-Assessment Guidelines, at the same time, based on the results of the expert commission, recommendations for adjustments were made, which were taken into account by the working group.

The report is written sequentially in compliance with the logic in the description of the standards, the wording for each standard is clear and understandable, the tables contain references in the text and are consecutively numbered. There are links to regulations, model rules, regulations, teaching documents, website pages <https://semeymedicaluniversity.kz/obuchenie/obrazovatelnye-programmy/rezidentura/>

The self-assessment and description was carried out in accordance with the criteria of the ECAQA accreditation standards and the questions formulated in the Self-Assessment Guidelines were answered. All standards show actual practice of NJSC "Semey Medical University" (SMU), for the preparation of residents in the specialty 7R09101 "Cardiology, including children's", well-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. Self-assessment report description is fairly completed and updated in terms of

the number of residents, teachers, administration, information on the selection and admission, the results of training, the results of the assessment of knowledge and skills, the material and technical base of the university and clinical bases, contractual obligations with partners (universities, associations, bases), financial information, development plans and improvement, etc.

Conclusion on each of the 9 accreditation standards includes a description of the strengths and areas for improvement identified in the course of introspection and development prospects for the specialty.

Thus, the self-assessment report of the accredited educational residency programme of Semey Medical University contains objective, detailed, structured information on all activities in accordance with the ECAQA accreditation standards, and the university made appropriate corrections in the report at the expert commission stage.

### 3. Description of external expert commission

External expert work on the assessment of the educational programme of residency 7R09101 "Cardiology, including children's", NJSC "Semey Medical University" was organized in accordance with the Guidelines for the external assessment of educational organizations and educational programmes of ECAQA (approved by the order of the Director general of the "Eurasian Accreditation Center and ensuring the quality of education and health care "No. 5 of February 17, 2017) and according to the programme and schedule approved on May 6, 2021 by the Director General of ECAQA Sarsenbayeva S.S. and agreed with the rector E.T. Zhunusov.

To obtain objective information on the expert assessment of the accredited educational programme, the members of the EEC used the following methods: interviews with management and administrative staff, interviews with residents, observation, study of the website, interviewing employees of various structural units, teachers, questioning teachers and residents, review of resources in the context of fulfilling accreditation standards, studying educational and methodological documents both before the visit to the university and during the visit.

The staff of the NJSC "Semey Medical University" ensured the presence of all persons indicated in the visiting programme, including employees of the specialized department (Table 1).

**Table 1 - Information on the number and category of participants in meetings, interviews, interviews with members of the EEC**

<b>N o.</b>	<b>FULL NAME.</b>	<b>Position, department</b>	<b>Academic degree and title</b>
1	Esimbekova Elmira Iranovna	Head of the Department of Cardiology and Interventional Arrhythmology	Candidate of Medical Sciences, Associate Professor
2	Zhukusheva Sholpan Turgambaevna	Assistant at the Department of Cardiology and Interventional Arrhythmology	Ph.D.
3	Aimagambetova Alfiya Omirbekovna	Assistant at the Department of Cardiology and Interventional Arrhythmology	PhD
4	Abilmazhinova Guzyal Duisenbekovna	Head Department of Internal Diseases PF NJSC "SMU"	Ph.D., acting associate professor

The sequence of the visit within 3 days is detailed in the Visit Programme, which is in the documentation of the accreditation center and in the Attachment to this report.

**The first day of the visit is 05/18/2021.** An interview with the management and key employees of the SMU made it possible to determine the fulfillment of most of the criteria for accreditation

standards 1, 2, 5, 7, 8, 9, namely, to identify approaches in developing the mission of the educational programme and its compliance with the strategic goals of the university, the role and place of postgraduate education in clinical direction in the strategy of the university (plan), mechanisms in determining the appropriate specialty of residency of clinical sites and qualified teachers, guaranteeing the adequacy of educational resources through planning public procurements and concluding agreements with country and international partners (more than 100 contracts). The experts studied in detail the documentation, including the progress and attendance journals, working curricula, syllables, control and measuring instruments, examination sheets.

The experts found that the university strictly adheres to the requirements of regulatory legal acts and SCES in the implementation of educational programmes, and the management systematically monitors this process during internal audits (QMS, mutual control, control of the vice-rector for academic work, reporting, etc.).

The basis for effective management is the SMU Quality Assurance Policy and the "Department Policies" developed at the residency departments, as well as adherence to the Quality Guidelines when documenting the educational process.

Conversation with Deputy Chairperson of the Board for Academic Affairs M.A. Zhanaspaev allowed experts to learn about approaches to attracting employees of clinical bases for teaching residents, about the strategy and tactics of recruiting residents for different specialties, informational provision of postgraduate education, as well as identifying problems in the management and development of human resources, since most of the practicing doctors do not know the teaching methodology.

#### **The second day of the visit is 05/19/2021.**

This day was devoted to visiting clinical sites for the implementation of residency programmes. At clinical sites, experts surveyed the resources of the accredited educational programme, their compliance with the training courses in residency, accessibility for teachers and residents, how modern this equipment is and meets the needs of students and practical health care.

The experts obtained evidence of the fulfillment of accreditation grades 2 and 6, as well as the validation of the information in the self-assessment report of the educational programme.

On the same day, interviews were held with teachers, residents and employers (representatives of practical health care). An interview with graduates was conducted, the experience and authority of the SMU in training residents (since 2007) shows a high percentage of employment (> 90%) of graduates of other residency programmes and their demand by medical organizations in all regions of Kazakhstan.

Interviews with teachers, as providers of the residency programme, showed that there are both successes and problems in the management of the educational programme, depending on the specific clinical base (access of residents to equipment, a sufficient number of thematic patients, time for maintaining medical records, independent work of residents) ... The experts received answers about the teacher training programme, the financing of this training, the availability of certification in teaching methods for teachers.

On the same day, experts studied materials on the admission of residents and the selection of teachers. Residents were interviewed to validate the performance of the self-assessment report data and to obtain evidence of the quality of the programmes. There were 16 residents present (Table 2). The experts asked questions about satisfaction with studying at the university, sufficient time for practical training, supervision of patients and work with medical records, as well as satisfaction with teaching methods and qualifications of teachers. In general, residents are satisfied with the training, assessment methods, and purposefully entered this university, since they believe that the SMU has excellent clinical bases and experience in teaching residents, at the same time, residents would like more independent work with patients, especially prompt assistance and more modern literature, and interactive teaching methods when dealing with complex cases. Residents believe

**Table 2 - Composition of residents participating in the interview.**

<b>No.</b>	<b>FULL NAME.</b>	<b>Specialty, course, (GPA)</b>
1.	Alpyspaeva Ainur Muratkyzy	Cardiology, including children's
2.	Mukhtarkhanova Alma Mukhtarkhankyzy	Cardiology, including children's
3.	Turbergenov Mukhtar Talgatbekuly	Cardiology, including children's
4.	Yelenov Aydos Serikuly	Cardiology, including children's
5.	Omarova Yulia Vladimirovna	Cardiology, including children's
6.	Raeva Asel Miratovna	Cardiology, including children's
7.	Akylbekova Meruert Akylbekovna	Cardiology, including children's
8.	Mukhtarova Saule Rishatovna	Cardiology, including children's
9.	Onischuk Svetlana Vitalievna	Cardiology, including children's
10.	Podgorny Vyacheslav Vyacheslavovich	Cardiology, including children's
11.	Butabaeva Aidana Kuanyshbaevna	Cardiology, including children's
12.	Egeubaeva Raushan Rakhmetollaevna	Cardiology, including children's
13.	Rakhimova Aigerim Beisenovna	Cardiology, including children's
14.	Altynkhanova Aigerim Beiskyzy	Cardiology, including children's
15.	Zere Zeinelgabbasovna Karimova	Cardiology, including children's
16.	Sakenova Erkezhan Kanatbekkyzy	Cardiology, including children's

Residents showed their commitment to the organization of education, were active in answering questions from external experts, demonstrated their judgment on organizing training, assessing their skills, consulting support, opportunities to participate in research and development, funding, etc.). The experts studied the documents of residents (portfolio, results of assessment of residents-checklists, results of a questionnaire survey of residents).

Interview with employers (Table 3) conducted online for all SMU residency study programmes declared for accreditation and included such issues as: knowledge of the university's mission, participation in the development of the mission and proposals in the strategic plan, participation in the work of the SMU advisory bodies, satisfaction with 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 the formation of clinical thinking, about the problems of interaction with departments and universities in general, employment of residency graduates, etc. Employers are interested in finding employment for graduates of residency in their specialty "Cardiology, including children's".

**Table 3 - List of employers who participated in the interview**

<b>No.</b>	<b>FULL NAME.</b>	<b>Position, place of work</b>
1.	Alibaeva Galiya Aytzhanovna	MSE on REM, EMCH city of Semey, deputy director for medical work
2.	Bakaeva Lola Meyramkhanovna	MSE on REM, emergency hospital in Semey, head of the cardiology department No. 1, chief freelance cardiologist in Semey,
3.	Nasymbekov Merhat Rymtaevich	MSE on REM, EMCH, Semey, head of the cardiology department No. 2
4.	Maralbaev Aibol Rollanovich	MSE on REM, emergency hospital in Semey, head of the department of endovascular surgery
5.	Abishov Kuatzzhan Muratovich	MSE on REM "EKRH", deputy director for medical work, endovascular surgeon of the department of endovascular surgery and interventional cardiology

6.	Poltoranina Natalia Andreevna	Chief freelance cardiologist HD EKR, head of outpatient department of the ECP diagnostic center
7.	Abisheva Mayra Nurkasovna	Head Department of Cardiology of Pavlodar Regional Cardiology Center

A review of resources showed that the clinical bases correspond to the goals and objectives of the accredited educational programme in terms of the profile of beds, the number of thematic patients, modern equipment and its availability to all students, and the department staff ensure collegial and ethical relations with the medical staff, the leadership of the clinical base to achieve the final results of the educational programme ... Clinical bases have 7 training rooms, despite the fact that most of the time residents spend at the patient's bedside and in departments. Before starting the corresponding 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.

The main methods of training residents in the specialty "Cardiology, including children's", ensuring the integration of practical and theoretical components in NJSC "SMU" are: supervision of patients, maintaining medical records, work in various departments of medical and preventive organizations, participation in morning medical conferences, on rounds, councils, clinical analyzes. Analysis of case patients, work in small groups, presentation of a clinical case for analysis or a pathological conference, reviewing case histories, participation in scientific and practical conferences and seminars. Participation in role-playing and team games.

The third day of the visit November 20, 2020

Experts have studied the documentation for the Department of Cardiology and Interventional Arrhythmology of the SMU, which confirmed the compliance of accreditation standards (nomenclature of affairs of the department, a plan for 5 years, an annual plan for the 2020-2021 academic year, a journal of the progress of residents, EMCD, feedback questionnaires with residents, teachers, reports on the results of a questionnaire and measures taken, a code of ethics, etc., control and measuring instruments), including documentation (list of elective disciplines).

Then a meeting of the EEC members took place following the results of the external evaluation. A final discussion of the results of external assessment, study of documents, results of interviews, interviews, questionnaires was held. The members of the EEC started to design the final report of the EEC.

A meeting of the EEC members was held. EEC members made generalizations of the results of the external evaluation. The experts individually completed the "Quality profile and the criteria for external assessment of the NIC for compliance with the Accreditation Standards of the ECAQA Medical Education Residency Programme". No comments were made by the EEC members. Recommendations for improving the postgraduate education sector in general and the department implementing the accredited educational programme were discussed. A draft report with recommendations was prepared.

Chairperson of the EEC prof. Kuzgibekova A.B. a final open vote was held on the recommendations for the SMU and a final vote on the recommendations for the ECAQA Accreditation Council. Then the chairperson of the EEC for the management and employees of the educational organization announced recommendations based on the results of an external assessment as part of the accreditation of educational programmes for residency specialties.

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

An observer from ECAQA in 16-18.15.2021 conducted an online survey of residents and teachers of the AMU on the resource [https://webanketa.com/...](https://webanketa.com/)

#### **Results of the survey of bachelor's, master's, residents' and alumni students:**

The total number of responding residents - 158...

Of the total number of respondents, residents prevailed - 79%, further down the list: bachelor students - 9.5%, undergraduates - 7.5%, graduates - 4%.

Will recommend this university as an educational organization - 86% fully agree, partially - 11%. 90% of those surveyed fully agree and 8.5% partially agree that programme managers and teaching staff are aware of their learning problems. Fully (88.5%) and partially (10%) are satisfied with the conditions and equipment of classrooms and classrooms of the university. According to 87% (in full) and 11.5% (in part) office equipment is available for residents at practice bases. Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes - 92% fully agree, partially - 6%. Fully (90.5%) and partially (9%) are satisfied with the library fund and resources. 97% of respondents have access to electronic educational resources, and 3% believe that it is partially.

The organization of clinical training for residents, according to 84.5%, fully satisfies them, and 12.5% partially. There is enough time for practical training (supervision of patients, etc.) - 93.5% fully agree, and 5.5% partially. Satisfied with the methods of assessing my knowledge and skills - 94.5% fully agree, 3.5% partially. In the opinion of 88.5% of teachers in the classroom, they use active and interactive teaching methods regularly, and in the opinion of 9.5% - rarely.

In the opinion of 92% of the respondents, teachers constantly provide feedback after the end of classes, but in the opinion of 5% - sometimes and 0.5% - rarely. 94% are completely satisfied that they are studying at the university, partially 4.5%, disappointed - 1% of the respondents. The university allows you to improve or acquire the necessary knowledge and skills in the chosen specialty of residency, 97.5% are confident, 2.5% would like to believe it. Fully (94.5%) and partially (5.5%) are satisfied with the organization of teaching at the SMU.

According to 87% of respondents, accreditation is a necessary mechanism to improve educational programmes, but 8.5% believe that it is not necessary to carry out and 4% doubt the answer. The work of the EEC was assessed as positive - 97.5%, satisfactory - 0.5%, i.e. majority.

### **Results of the survey of teachers of residency programmes:**

The total number of teachers on the list is 97. The total number of respondents is 67, including those with up to 5 years of experience - 20.9%, up to 10 years - 14.93%, over 10 years - 64.18%. Among the respondents, teachers of Pharmacy (bachelor's degree) - 23.88%, Master's degree in Medicine - 20.9%; Master's Degree in Public Health Management - 7.46%; Masters in other directions - 8.96%; Residencies - 38.81%.

82.09% are fully satisfied with the organization of the educational process, 16.42% are partially satisfied. At the university, ethics and subordination are observed in full agreement 94.03%, in part - 5.97%. 89.55% of respondents are completely satisfied with the organization of work and workplace, partially 8.96%. In the organization there is an opportunity for career growth and development of competence for teachers - 83.58% fully agree, partially - 14.93%.

In this educational organization, teachers have the opportunity to engage in scientific work and publish the results of research work - 77.61% fully agree, partially 14.93%. 68.66% of respondents are fully satisfied with the work of the personnel department, 28.36% are partially satisfied. Most of the respondents underwent advanced training during this year. Only 91.04% fully agree that they can realize themselves as professionals, and 8.96% - partially. Unfortunately, 17.91% did not answer the question of whether the university supports the teacher in participating in international and national events, and 16.42% did not contact the management or the relevant administrative staff of the university with this. The majority of respondents (85.07%) completely agree, and 13.43% partially agree that the discipline that is taught is provided with sufficient resources (audience, equipment). 59.7% do not know about the implementation of social programmes to support teachers and 1.49% of respondents doubt their existence. Management and administration systematically listen to the opinion of teachers - 62.69%, sometimes - 25.37% of respondents. When teaching students, a variety of teaching methods are used, but more often the analysis of situational tasks (88.06%), work in small groups (62.69%), oral questioning and analysis of the topic (64.18% and 71.64%, respectively), also problem-oriented

learning (38.81%), test solving (71.64%), less often cases are compiled and solved (71.64%). 64.18% fully agree that this survey will be useful for developing recommendations for improving the university and residency educational programmes; 28.36% partially agree with this. 7% and 1.49% of respondents doubt their presence. Management and administration systematically listen to the opinion of teachers - 62.69%, sometimes - 25.37% of respondents. When teaching students, a variety of teaching methods are used, but more often the analysis of situational tasks (88.06%), work in small groups (62.69%), oral questioning and analysis of the topic (64.18% and 71.64%, respectively), also problem-oriented learning (38.81%), test solving (71.64%), less often cases are compiled and solved (71.64%). 64.18% fully agree that this survey will be useful for developing recommendations for improving the university and residency educational programmes; 28.36% partially agree with this. 7% and 1.49% of respondents doubt their presence. Management and administration systematically listen to the opinion of teachers - 62.69%, sometimes - 25.37% of respondents. When teaching students, a variety of teaching methods are used, but more often the analysis of situational tasks (88.06%), work in small groups (62.69%), oral questioning and analysis of the topic (64.18% and 71.64%, respectively), also problem-oriented learning (38.81%), test solving (71.64%), less often cases are compiled and solved (71.64%). 64.18% fully agree that this survey will be useful for developing recommendations for improving the university and residency educational programmes; 28.36% partially agree with this. When teaching students, a variety of teaching methods are used, but more often the analysis of situational tasks (88.06%), work in small groups (62.69%), oral questioning and analysis of the topic (64.18% and 71.64%, respectively), also problem-oriented learning (38.81%), test solving (71.64%), less often cases are compiled and solved (71.64%). 64.18% fully agree that this survey will be useful for developing recommendations for improving the university and residency educational programmes; 28.36% partially agree with this. When teaching students, a variety of teaching methods are used, but more often the analysis of situational tasks (88.06%), work in small groups (62.69%), oral questioning and analysis of the topic (64.18% and 71.64%, respectively), also problem-oriented learning (38.81%), test solving (71.64%), less often cases are compiled and solved (71.64%). 64.18% fully agree that this survey will be useful for developing recommendations for improving the university and residency educational programmes; 28.36% partially agree with this.

The results of the questionnaire are presented in the Attachment and, in general, demonstrate the effective management of educational programmes, the positive aspects of training on residency programmes, at the same time, identify areas for improvement (social support programmes for teachers, the availability of leadership and administration for teachers and residents, pedagogical competencies and professional development of teachers) ...

### **Conclusion on the basis of the external evaluation:**

Members of the EEC have carefully studied and assessed the main indicators of the accredited educational programme. The information received by external experts during the study of the self-assessment report, preparation of a written review with recommendations for improvement, implementation of the activities of the SMU visit programme was analyzed. All the information received was compared with the data of the self-assessment report, which made it possible to ensure the accuracy of the information provided by the SMU and supporting documents for compliance with the ECAQA Accreditation Standards.

Despite the fact that the SMU described its best practice on adherence to accreditation standards in the self-assessment report of the educational programme, during the external expert commission, the EEC members studied the main documents (mission, strategic plan until 2023, teaching materials of disciplines, syllables, control and measuring instruments, checklists, portfolios of residents, individual plans of residents for the 2020-2021 academic year, publications of teachers, rules for admission to residency, personnel policy, internal quality assurance system programme, resources for training were viewed directly at the clinical bases of departments (classrooms, office equipment available for residents to work with literature, patient documentation, educational and methodological literature),



which made it possible to identify the compliance of the educational organization with the basic accreditation standards.

When conducting an external examination, the Rules for the training of medical personnel in residency were taken into account (order of the Minister of Health of the Republic of Kazakhstan dated September 18, 2018 No. KP DSM-16), paragraph 13. It was established that clinical bases provide training at all levels of medical care (from PHC to highly specialized). The accredited educational programme has 8 clinical bases, of which 3 were visited by experts. 3. The volume of the study load and treatment and prophylactic work in specialties is determined by the individual work plan of the student of residency (clause 14) for one year and is monitored by monthly reports of the resident in any form. The accounting of completed tasks is drawn up in the form of a portfolio according to the recommendations in the syllabus.

In connection with the new edition of order No. 647 On the approval of state compulsory standards and standard professional training programmes in medical and pharmaceutical specialties dated July 31, 2015 (as amended by the order of the Ministry of Health of the Republic of Kazakhstan dated 02.21.No. KR DSM-12/2020 Chapter 2. Requirements for the content of residency educational programmes with a focus on learning outcomes), there have been changes and additions in the educational programme in relation to the development of the research competence of residents, which must participate in the work of the research team.

In this regard, the experts assessed the involvement of residents in research. The departments carry out proactive R&D in which residents participate through writing reviews, collecting patient data, analyzing the literature and patient examination results, preparing reports and presentations at conferences). Also, in accordance with Article 222 of the Residency of Clause 4 of the Code of the Republic of Kazakhstan on People's Health and the Health care System of July 7, 2020 No. 360-VI ZRK, external experts studied the activities and conducted conversations with mentors of residents, and it was established that each resident was provided with a mentor.

The experts took into account the fact that the accredited educational programme for the current state educational standard is implemented within one academic year, therefore, at this time there is no graduation of students, nevertheless, the entire educational, methodological, personnel and resource base has been assessed for compliance with accreditation standards. Through interviews with teachers and interviews with students, it was possible to determine their direct participation in the development (CEPs, meetings of departments), the assessment of educational programmes (CEP), decision-making on a number of key issues in the choice of clinical sites, topics of electives, participation in the appeal commissions for admission and assessment of residents, development of the content of individual plans of residents and selection of mentors.

At the same time, this substantiated the need for inclusion in post-accreditation monitoring, along with the implementation of the EEC recommendations, an analysis of the implementation of the criteria of Standard 9, an annual report on the contingent of students.

Recommendations for improving activities in the field of implementation of the educational residency programme in the specialty 7R09101 "Cardiology, including children's" for compliance with the Accreditation Standards, developed by the EEC based on the results of the expert assessment, were presented at a meeting with the management on 05/20/2021.

The programme of the 3-day visit of the external expert evaluation of the EEC has been fully completed. On the part of the SMU team, the participation of all persons indicated in the programme is ensured.

Thus, the external assessment and the visit of the EEC members made it possible to verify and validate the data of the self-assessment report of the residency programme in full in accordance with the Regulation on the External Expert Commission, the Guidelines for the external assessment of the medical organization ECAQA education.

For the work of the EEC, comfortable conditions were created, access to all necessary information and material resources of the accredited educational programme was organized. Experts note the high level of corporate culture and discipline of those responsible for the postgraduate

education of the SMU staff, department, staff of clinical bases, a high degree of openness of the team in providing information to members of the EEC.

#### **4. Analysis for compliance with accreditation standards based on the results of an external assessment of the educational programme of residency in the specialty 7R09101 - "Cardiology, including children's" SMU and an overview of the strengths for each standard.**

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

The staff of the department, implementing the residency programme, as the basis of the mission of the educational programme and goals, accepted the mission of the university and informed the interested parties (teachers, employers, residents) about it in order to clearly understand the tasks and strive to meet the needs of practical Health care. The structure of the educational programme, where there is a dominance of practical training, the sufficiency of clinical bases and a mentoring system, allow to strengthen the patient-centered approach in the implementation of patient care and treatment. The university organized training and clinical practice in compliance with safety for all participants in the educational process (safety precautions, use of PPE, instructions before training).

Residency teachers and mentors of CNM&O cardiology and interventional arrhythmology specialists apply a variety of innovations in the learning process, allowing them to develop the basic and special competencies of residents, namely, work at the patient's bed, clinical analyzes, solving situational problems, protecting medical records, training in laboratories.

The experts received convincing data that the university is autonomous in making decisions in the development of an educational programme in terms of the elective component, the current and final assessment policy, including the choice of assessment methods (testing, oral questioning, clinical examination), selection and admission of residents (specialty exam) , personnel policy in relation to teachers under the accredited educational programme, as well as the distribution of resources (classroom fund of clinical bases according to contracts).

The EMCD defines the final learning outcomes in accordance with the qualification requirements for the residency specialty.

The university has developed a Student Ethics Code with which residents are familiarized and work on the development and improvement of communication skills is carried out systematically and integrated into the work programme.

Overall, Standard 1 demonstrates compliance.

##### **Strengths:**

1. NJSC SMU has institutional autonomy to develop and implement policies, especially with regard to the development of educational programmes and the use of dedicated resources for its implementation.
2. Clinical bases located in different regions of Kazakhstan;
3. A clear management structure and strategic planning in postgraduate education in the clinical direction.

**Conclusions of the EEC on the criteria.** Out of 17 standards conform: completely - 17, significantly - 0, partially - 0, do not correspond - 0.

**Standard 1: completed**

##### **Standard 2: EDUCATIONAL PROGRAMMES**

Accredited residency programme in the specialty "Cardiology, including children's " is implemented in accordance with the State Compulsory Standards and Model Professional Curricula for Medical and Pharmaceutical Specialties dated July 31, 2015 (as amended by the order of the Ministry of Health of the Republic of Kazakhstan dated 02.21.No. KR DSM-12/2020Chapter 2. Requirements for the content of residency educational programmes with a focus on learning outcomes) during one academic year and during this period, a lot of work has been done to develop educational and methodological materials, organize a place of training for residents, form the composition of

departments and identify mentors. A model of residents' competencies has been introduced in accordance with the qualification requirements for the specialty. The structure, content and duration of the programme are clearly defined. The mechanism for the development and approval of the residency programme is determined and regulated by the CEP.

Teaching and learning methods are consistent with content and learning outcomes, foster active learning and personal involvement of residents in the provision of health care, develop the ability to take responsibility for their learning process and identify their needs, and promote lifelong learning.

The scientific foundations and methodology of medical research are an integral part of the residency educational process. When forming a catalog of competencies, the team analyzed educational and methodological materials.

The educational programme of the specialty "Cardiology, including children" is based on a competence-based approach, a combination of theoretical knowledge and practical skills, the widespread use of innovative technologies in the educational process during classes. Residency training is carried out taking into account the principles of continuity with basic medical education (bachelor's degree, internship) and continuing medical education in the chosen specialty.

Due to the availability of clinical bases for residents, they spend most of their study time in close contact with patients, medical records, including automated Health care systems. Residents are taught by mentors to work with the latter. When conducting interviews with residents, experts were convinced that the organization of training and work is patient-oriented, at the same time, there is not always a sufficient number of thematic patients, time for theoretical analysis of complex topics and study of literature in modern databases. Clinical training is carried out in the conditions of accredited multidisciplinary clinics in Semey, Pavlodar and Oskemen.

According to the accredited educational programme, mentors in 5 clinics, which carry out their activities in accordance with the Regulation on mentors. No precedents of inequality, lack of ethics or other violations of a gender, cultural or religious nature have been established in the process of external evaluation.

During the examination of the educational programme, it was established that the scientific foundations and methodology of medical research, evidence-based medicine are applied.

Thus, the educational residency programme in the specialty "Cardiology, including children's" demonstrates the integration between education and health care.

**Strengths:**

1 The educational programme complies with the regulatory legal acts in the field of education and health care.

2 The content of the residency programme meets the requirements of the State Educational Standard of the Republic of Kazakhstan and is integrated with TUKMOS (Bashkent University, Turkey)

**Conclusions of the EEC on the criteria.** Out of 31 standards conform: fully -, significantly - 1; partially -, do not correspond - 0.

**Standard 2: completed**

**Recommendations for improvement:**

1. Expand the list of elective disciplines in the specialty.

**Standard 3: ASSESSMENT OF STUDENTS**

The policy and procedure for assessing learning outcomes within the EP is carried out using criteria developed in accordance with the goals and objectives for the implementation of the EP and awarded qualifications within the framework of the current point-rating system for assessing knowledge and monitoring the educational process in accordance with directive, regulatory and internal documents ...Stakeholders are involved in assessing the knowledge of residents through independent examination and other assessment methods. There is an opportunity to improve the methods for assessing residents.

Resident assessment methods vary according to the competency / learning outcomes that the discipline forms. Information about the point-rating system of assessment is posted on the website <https://semeymedicaluniversity.kz/kk/...>

As an additional method for assessing residents, the portfolio is used, which the experts got acquainted with at the departments supervising the residency programmes. Residents are engaged in research work, which must necessarily end with the publication of a scientific article or a report at scientific and practical conferences. The assessment of scientific work also affects the overall assessment of the discipline.

The policy of evaluating residents is formulated in the Regulations on the residency of NJSC "SMU", it defines the general goals and principles of evaluating residents. Resident assessment methods, assessment criteria are described in the Residency Education Programme (<https://semeymedicaluniversity.kz/obuchenie/obrazovatelnye-programmy/>). The resulting final learning outcomes for residents are assessed by the following methods: formative and summative assessment.

The number of exams in each course is regulated by the Standard Curriculum, which is an integral part of the State Educational Standard of the Republic of Kazakhstan 2017, 2020. in the specialties of residency. The results of educational achievements of students are entered into an electronic educational journal through the office-registrar system and the KEYPS programme, which automatically generates examination sheets.

Transparency and accessibility of the assessment policy and procedure is achieved by conducting a computerized exam on an isolated server using electronic checklists. Downloadable test and measurement tools (CISs) are double checked, which improves the quality of the assessment of the resident's knowledge.

The tools for assessing the level of mastering competencies by residency students are:

- I) portfolio of the resident
- II) current, midterm, intermediate control (since 2015), conducted in the form of an integrated exam (testing + oral exam on tickets + mini-clinical exam / situational tasks, etc.);
- ii) residents' report on the implementation of the IEP;
- Iv) an independent examination with the involvement of representatives of practical health care;
- V) final certification of residents, carried out in the form of comprehensive testing and OSCE.

Since 2019-2020, significant changes have taken place at the university in terms of the development of educational programmes. The educational programme 7R09101 "Cardiology, including children's" is composed of three levels: easy, intermediate, high.

All the results of mastering the programme are entered in the ASSUP KEYPS. Each student of the programme sees the specification tables (blueprint) for each topic by logging into the system using a personal login and password. Upon completion of the discipline, students 7R09101 "Cardiology, including children's" pass a summative exam in accordance with the final learning outcomes.

The analysis of key indicators of the training process in residency is recorded in the minutes of the department. The procedure for planning, organizing, monitoring and reviewing assessment methods in the SMU ensures the reliability and validity of these methods. The development of new control and measuring instruments is carried out by teachers through the study of world experience in assessing knowledge in residency, then it is introduced at the department. At the same time, no examples of test validation were presented to the experts.

Thus, this standard is generally implemented at the university.

**Strengths:**

1. Transparency and accessibility of the assessment policy and procedure;
2. Availability of an automated system for assessing checklists.
3. The department strives to improve the quality of care provided by residents during the entire period of training through regular feedback from patients, medical staff, teachers (360 ° questionnaire), FEM, SA (self-assessment).

**Conclusions of the EEC on the criteria.** Out of 11 standards conform: completely - 11, significantly - 0, partially - 0, do not correspond - 0.

**Standard 3: completed**

#### **Standard 4: STUDENTS**

Admission to residency in all EP, including in the specialty - "Cardiology, including children", is carried out in accordance with the Order of the Ministry of Education and Science of the Republic of Kazakhstan "On the approval of the Model rules of admission to training in educational organizations that implement educational programmes of higher and postgraduate education" dated October 31, 2018 No. 600, State Educational Standard of the Republic of Kazakhstan - 2015, 2020 and the Rules for admission to residency at NJSC "SMU" for the current academic year.

The conditions for admitting residents are described in the "Rules for admission to residency" for the corresponding academic year, based on regulatory legal acts. The admission of applicants for residency is carried out on a competitive basis based on the results of entrance examinations. Scientific achievements corresponding to the profile of the chosen specialty are also taken into account.

Strategic partnership with Bashkent University (Turkey) provides a good, efficient learning environment for residents. Residents on academic mobility study at universities both domestically and abroad. To protect the interests of residents, to provide them with assistance in educational, scientific, extracurricular activities, NJSC "SMU" provides various services for the organization of advisory, psychological, social, medical support for students [https://semeymedicaluniversity.kz/studentam/psihologicheskaya-sluzhba/...](https://semeymedicaluniversity.kz/studentam/psihologicheskaya-sluzhba/)

Annually, at the meeting of the Academic Committee, the Residency Admission Policy is submitted for discussion. The composition of the Academic Committee: responsible for the specialties of residency, heads of departments, chairperson of the CEP. Mechanisms for periodic revision of the resident admission policy are carried out on the basis of relevant social and professional data in order to meet the needs of health care, such as an analysis of the need for medical personnel provided by the UZO, the current deficit and surplus by specialty in a given year.

According to the Regulations on residency, approved by the Order of the Minister of Health of the Republic of Kazakhstan dated January 30, 2008 No. 28, "the period of study in residency is counted in the length of service of the doctor and in the length of service in the specialty." The amount of the scholarship for residents studying on the basis of a state grant is 76 thousand tenge from January 2020.

Residency students have the opportunity to work in their free time for 0.25 (in the second, third years of study - 0.5) rates as a doctor in health care organizations, laboratory assistant, teacher-trainee of the department. Residents who have the appropriate specialist certificate have the opportunity to earn extra money.

##### **Strengths:**

1. For students (residents), conditions are provided for the successful development of the EP - an internal microclimate, social guarantees, mentoring, appropriate training resources and support services for residents
2. Active cooperation with the strategic partner "Bashkent University" using the TUKMOS model.
3. During training, residents can work in their free time as a doctor, laboratory assistant, teacher-trainee.

**Conclusions of the EEC on the criteria.** Out of 30 standards: fully - 30, significantly - 0, partially - 0, do not correspond - 0

**Standard 4: completed**

#### **Standard 5: ACADEMIC STAFF / FACULTY**

The information provided by the university on the standard contains a policy for the selection and recruitment of teachers; leaders and mentors (mentors), which determines the required experience; criteria for scientific, educational, pedagogical and clinical achievements, including the balance

between teaching, scientific activities and specialist qualifications; their responsibility; duties of employees. The university, in its policy of selecting teachers, takes into account the mission of the educational programme, the needs of the education system and the needs of the medical care system. The university's personnel policy has been developed. The competitive selection of candidates for the positions of scientific and pedagogical personnel and clinical mentors is carried out on the basis of an analytical generalization of the results of the activities of the applicants.

The teaching staff of the residency in the specialty "Cardiology, including children's" simultaneously performs several types of activities: pedagogical, scientific, methodological, clinical, public. When distributing the teaching load and scheduling teachers, a balance is ensured between teaching and other types of work. The norms of time for calculating the volume of the study load are developed taking into account the distribution of time for classroom hours, for the period of independent work of students under the guidance of a teacher (IWST) and the established amount of workload, depending on the position, the faculty of the department and clinical mentors, observing the principle of the trinity of education, science and practitioners, in accordance with an individual plan, along with academic activities, carry out clinical work and scientific work.

All employees of the department carry out a therapeutic load, in particular, the heads of the department and professors conduct 30 consultations every month, associate professors and assistants supervise (treat) up to 30 patients. In addition, the teaching staff, headed by the head of the department, hold clinical conferences for doctors of the clinical base, as well as hospitals in Semey. Graduate teachers and those with the highest medical category in the specialty review the stories of deceased patients, give an expert opinion on deaths not only in the clinical base, but in the hospitals in Semey and the districts of the East Kazakhstan region.

There is a system of permanent certification of the teaching staff. Teachers, as well as clinical mentors working with resident cardiologists, have the first and highest category, academic titles. Every year, the volume of the teaching load for each teacher is revised downward: if in the 2018-2019 academic year the volume of the teaching load for the assistant was 750 hours, then in the 2019-2020 year it is 700 hours, in the current 2020-2021 academic year - 600 hours.

The ratio of the number of teaching staff and residents in NJSC "SMU" is 3: 1, which corresponds to the order of the Ministry of Education and Science of the Republic of Kazakhstan No. 606 dated October 31, 2018.

**Strengths:**

1. University administration optimizes the balance between teaching, research and health care;
2. The qualifications and potential of teachers correspond to the direction of the educational programme being implemented and the level of their positions.

**Conclusions of the EEC on the criteria.** Out of 7 standards conform: completely - 6, significantly - 1, partially - 0, do not correspond - 0.

**Standard 5: completed**

**Recommendations for improvement:**

1. Seek the opportunity to undergo internships for teaching staff outside of Kazakhstan, including in the context of a strategic partner.

**Standard 6: EDUCATIONAL RESOURCES**

For the implementation of the educational programme 7R09101 "Cardiology, including children's" "NJSC" SMU "has sufficient infrastructure, material and technical base (MTB), information resources and technologies, resources for the clinical training of residents.

The material and technical base of the University includes: lecture halls, study rooms, educational and research laboratories, a library, information technology facilities, premises for the cultural and social sphere.

The University guarantees a sufficient level of available information resources and technologies to ensure effective planning, management and implementation of educational programmes and services, provides teachers and residents with the opportunity to use information and communication

technologies for self-study, patient management, work in the health care system. beds and the profile of departments fully meet the goals and objectives of training resident cardiologists (Attachment 18).

The material and technical base of the Department of Simulation Technologies meets modern requirements, there are high-tech interactive computer dummies, modern tools, equipment, dummies for developing the practical skills of residency students in the training and clinical center.

NJSC "SMU" adequately provides residents of all specialties with appropriate conditions and opportunities for clinical training. Residents are provided with study rooms, dressing rooms, dining rooms. Resident cardiologists have free access to the staff room, treatment rooms, wards of departments, laboratories and other structures of medical institutions. The number of specialized patients at the clinical bases of the department is sufficient for training, there is a variety of nosological forms of diseases, which fully meet the requirements of the educational programme, for training in residency of the specialty "Cardiology, including children's". The presence of clinical sites provides high-quality practical patient-oriented training for residency students. The qualitative composition of full-time teachers and part-time teachers (graduation, the presence of the highest and first category) is sufficient for training resident cardiologists at a sufficiently high level.

Residents have access to external electronic resources: full-text databases of the RMEB, KazNEB, ScienceDirekt, Scopus, EBSCO. To provide the ability to work with various internal and external resources, a Wi-Fi wireless network is also used. Such a solution meets modern requirements for ensuring constant access for students to educational resources of the local network and the Internet.

In the EPR "Cardiology, including children's" provides for the development and application of the principles of scientific methodology and evidence-based medicine by residents, using analytical and critical thinking. In the educational process, the principles of evidence-based medicine are actively used, residents have access to the Cochrane Library, use the data of UpToDate, PubMed.

The university gives residents the opportunity to study within the framework of the academic mobility programme both within the country and abroad. At the same time, the university provides funding for this programme. In addition to academic mobility, residents undergo professional internships in university branches and cities of Kazakhstan. Professional training of residents is expected in Ust-Kamenogorsk, Pavlodar, Nur-Sultan, Almaty, due to the epidemiological situation, academic mobility is suspended.

#### **Strengths:**

1. The qualifications and potential of teachers correspond to the direction of the educational programme being implemented and the level of their positions.
2. A sufficient number of clinical bases providing highly specialized care to the population in Semey, Ust-Kamenogorsk, Pavlodar.
3. Developed information and communication technologies (website of NJSC "SMU", platform "KEYPS", access to the RLMS, KazNEB, ScienceDirekt, Scopus, EBSCO, etc.);

**Conclusions of the EEC on the criteria.** Out of 21 standards conform: fully - 21, significantly - 0, partially - 0, do not correspond - 0

**Standard 6:** completed.

#### **Standard 7: PROGRAMME EVALUATION**

Monitoring of the educational process, educational programmes of the university is carried out on the basis of the Strategy for ensuring the quality of the educational process in NJSC "SMU" dated 23.11.2020 and the Regulation on the procedure for the development, approval and examination of educational programmes in NJSC "SMU" dated 29.03.2019 (<https://semeymedicaluniversity.kz/prepodavatelyam/vnutrennie-normativno-pravovye-akty/>).

Evaluation of educational programmes of residency is carried out taking into account the mission of educational programmes of residency in accordance with the mission and development strategy of the university, aimed at high-quality training of highly specialized, competitive specialists of a new

generation with a high level of professional competence, based on the principles of continuous development and the trinity of education, practice and science.

Responsibility for the selection of the staff of teachers that meet the qualification requirements, the profile of the specialty is assigned to the personnel department. Control over the improvement and development of the competencies of teachers, conducting advanced training of teachers of residency is carried out by the ONPR. Monitoring of educational activities is carried out on the basis of the strategy for ensuring the quality of the educational process of NJSC "SMU", which includes general provisions, a goal describing the monitoring procedures of our university. direction) is drawn up in accordance with the requirements of the State Educational Standard and other regulatory legal acts in the field of education and science. The educational programme includes practical, theoretical and scientific components.

In order to ensure transparency and objectivity in assessing the educational achievements of residents, leading representatives of practical health care are involved in working with residents as mentors. The transparency of the EP assessment process is confirmed by the discussion of issues of the quality of the educational process, reports at the meeting of the AC. Meetings are held monthly with the participation of CEP members, where measures are discussed and approved to improve the quality of syllabuses, CIS and the educational process. The members of the CEP are also residents of the university, which ensures transparency and independence of the assessment;

The department of the clinic has developed questionnaires for clinical mentors, for assessing disciplines, assessing clinical rotation. The dean of SPE reports detailed information based on the results of the questionnaire survey at the Academic Council of the university.

An open dialogue between students, the administration and the teaching staff is achieved through a system of continuous feedback study: a questionnaire on the completion of the discipline, conducted by the departments, the appeal of students to the virtual reception room and Facebook of the rector, deputy chairperson of the Board, deans, focus groups, direct meetings of the management with students. There is a trust box in the main building where students can anonymously submit complaints and suggestions.

Residency trainees can independently choose and propose, orally or in writing, the desired elective disciplines. In NJSC "SMU" the Regulation "On enrollment in elective disciplines" has been developed. The Department annually revises the QED, taking into account the opinions and wishes of resident rheumatologists and employers.

Based on feedback on the work of qualified doctors (which are first discussed at a meeting of the department, then presented at a meeting of the CEP), changes are made to the work programme, which is approved collectively at a meeting of the Academic Committee.

According to the results of the questionnaire (January 2021, QCDME), satisfaction with the implementation of EP among resident cardiologists was 73.3%. Insufficient provision of literature and equipment was named among the problems. In this direction, the specialized department is taking certain steps.

**Strengths:**

1. NJSC SMU has institutional autonomy to develop and implement policies, especially with regard to the development of educational programmes and the use of dedicated resources for its implementation.
2. The educational programme complies with the regulatory legal acts in the field of education and health care.

**Conclusions of the EEC on the criteria.** Out of 15 standards conform: fully - 15, significantly - 0, partially - 0, do not correspond - 0

**Standard 7: completed**

**Standard 8: GOVERNANCE AND ADMINISTRATION**

Responsibility and obligation of the management and employees of NJSC "AMU" are determined by the current legislation of the Republic of Kazakhstan, internal regulations of the



University. In accordance with the Rules for the development of the regulations of the structural unit and job descriptions of employees of the University, regulations on the department were developed and approved, defining the structure, goals, tasks, functions, responsibilities, internal and external interaction of structural units, as well as job descriptions of employees in accordance with the staffing table. Leadership in the system of higher, postgraduate and continuing medical education of the Republic of Kazakhstan, a long history of the existence of the university; high demand for university graduates in the region; innovative approaches of the university management to the introduction of innovative educational technologies are the results of proper management and administration. NJSC "SMU" operates an effective monitoring system of the University, developed in accordance with the recommendations of international standards. The quality assurance programme for management is spelled out in the Guidelines for Quality Assurance in Higher Education at the SMU (<https://semeymedicaluniversity.kz/>).

The university implements international standards and innovative technologies in educational processes. All decisions in NJSC "SMU" in relation to management, finance is made collectively. The basis for the transparency of the management and its decisions is corporate governance. Meetings of the Academic Council and other meetings are broadcast via the social network Facebook.

All internal documents regulating educational activities are posted on the university website in the Teachers section, available through a personal username and password;

In accordance with the mission of the educational programme, in order to maintain the health of the population, residency students annually carry out preventive work among the city's population in polyclinics, carry out diagnostics and carry out educational work on cardiology.

All activities for the implementation of the educational residency programme "Cardiology, including children's" carried out under the direct control of the administration of the university. The chairperson of the board, deputy chairperson for scientific and clinical and academic work constantly monitor the provision of the department with the necessary resources. The administration of the university periodically (once a year) bypasses the departments, talks are held with the teaching staff of the department and residents.

**Strengths:**

1. The presence of a single monitoring programme KEPS with the strategic partner of Bashkent University (Turkey).
2. The University ensures that the programme meets the needs of public health and the provision of medical services

**Conclusions of the EEC on the criteria.** Out of 15 standards conform: fully - 15, significantly - 0, partially - 0, do not correspond - 0

**Standard 8: completed**

**Standard 9: CONTINUOUS RENEWAL**

The SMU development strategy provides for a constant analysis and assessment of the quality system of educational and medical activities of the University through a systematic analysis of the QMS, monitoring feedback from consumers of services to determine the degree of their customer satisfaction and modernization of the communication system at the University. All areas of the University's activities are regulated by corporate documents (Procedures, Regulations, Instructions, Rules of WKSMU, etc.).

The University strives not only to produce high-quality training of specialists and provide opportunities for retraining of personnel for health care in connection with the introduction of new innovative technologies in production, but also tries to achieve the greatest possible customer satisfaction.

The development of the University is based on the principles of improving the QMS, introducing new technologies into the educational process, improving the quality of training for residents in order to respond flexibly to market requirements. The University's management strives to prevent emerging problems and their causes by improving the system of internal control and risk management.

A university development programme is available; sufficient material and technical equipment; sufficient library fund; access to international full-text electronic databases; sufficient funding for educational programmes.

The procedures for regular review and updating of the training process of residents in the NJSC "Semey Medical University" are established by the Regulation on the procedure for the development, approval and examination of educational programmes, as well as the Regulation on the development of modular educational programmes. Regular monitoring, analysis and optimization of EP, carried out on a systematic basis, allow the university to ensure the provision of educational services at the required level.

The main organizational structures providing monitoring, formation, approval and updating of EP at the University are:

- Committees of educational programmes (CEP), responsible for the quality of development, implementation, and updating of the programme;
- The Academic Committee, carrying out an examination of the relevance and competitiveness of the EP, content, resource provision, the level of educational technologies and quality assurance of education.

The supreme governing body of the University is the Academic Council. The description of these governing bodies, composition, responsibility for the organization, coordination, management of the EP is presented in the relevant Regulations: Regulations on the CEP, Regulations on Academic Councils, Regulations on the department (academic department), Regulations on the dean's office (school), as well as job descriptions of employees of structural divisions and departments.

The internal programme for ensuring the quality of the EPD is carried out by the KOPs, the Academic Committee at regular meetings. Structural divisions participate in conducting internal audits according to questionnaires, including the collection of information on the quality of implemented EP. Based on the results of the audits, preventive or corrective actions are taken. The results of the audits are heard at the meetings of the collegial bodies of NJSC "SMU".

The electronic document management system is presented in NJSC "SMU" by the automated information educational platform "Platonus" for residency students. The quality of the educational programme is constantly monitored through internal audit: checking the availability of the EMCD, placement of the EMCD until 2019 in Sirius, since 2020 it has been posted on the Capes platform. All blueprints and learning outcomes are reviewed by the curriculum committee.

An internal management quality assurance programme, including regular audits, is carried out through monitoring through internal audit;

**Strengths:**

1. Availability of a certified quality management system, including regular internal and external reviews and audits;
2. Introduces an integrated teaching method together with teachers of basic disciplines;
3. Implementation of optimal methods for the examination of the quality of control and measuring instruments.

**Conclusions of the EEC on the criteria.** Out of 4 standards conform: completely - 4, significantly - 0, partially - 0, do not correspond - 0.

**Standard 9: completed**

Thus, all 9 accreditation standards have been met, no inconsistencies in the fulfillment of the criteria of each of the basic accreditation standards in the process of analyzing the self-assessment report and conducting the examination as part of the tasks of the external expert commission programme were found.

**6. Recommendations for improving the educational residency programme in the specialty 7R09101 "Cardiology, including children's"**



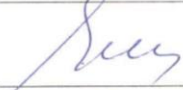






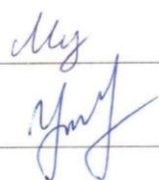
1. Expand the list of elective disciplines in the specialty.

2. Seek opportunities for teachers to undergo internships outside of Kazakhstan, including in the context of a strategic partner.



## 6. Recommendation to the ECAQA Accreditation Council

The EEC members came to a unanimous opinion to recommend the Accreditation Council to accredit educational programme in the specialty 7R09101 "Cardiology, including children's» of NJSC "SMU for a period of 5 years.

<b>Chairperson</b>		KUZGIBEKOVA ALMA BOLATOVNA
<b>Foreign expert</b>		RIPP EVGENY GERMANOVICH
<b>Academic expert</b>		ALMAGUL AMANGELDINOVNA KAUYSHEVA
<b>Academic expert</b>	на 	SHUKIRBEKOVA ALMA BORANBEKOVNA,
<b>Academic expert</b>		ISENOVA SAULE SHAIKENOVNA,
<b>Academic expert</b>		ESENKULOVA SAULE ASKEROVNA,
<b>Academic expert</b>		KUDABAEVA KHATIMIA ILYASOVNA
<b>Academic expert</b>		KENZHEGULOVA RAUSHAN BAZARGALIEVNA
<b>Academic expert</b>		RINAT MUZAFAROV,
<b>Academic expert</b>		SADIEVA ZHANAR ZAMANKHANOVNA
<b>Academic expert</b>		RAKHMANOV ELTAI UTEMURATOVICH, PhD
<b>Academic expert</b>		RAMAZANOVA MANSHUK ANEROVNA
<b>Expert - employers' representative</b>		SARSENBINA LYAZZAT KYRYKBAEVNA
<b>Representative of undergraduates</b>		MAZANBEKOVA MERUERT YERZHANOVNA
<b>ECAQA Observer</b>		UMAROVA MAKPAL ALDIBEKOVNA

**Quality profile and external evaluation criteria (summary)**  
**Of educational programme in the specialty**  
**7R09101 "Cardiology, including children's» of NJSC "SMU"**

Standard	Criteria for evaluation  Number of standards = BS * / SU	TOTAL	Grade			
			Totally coincides	Significantly corresponds	Partially compliant	Does not match
1	MISSION AND END OUTCOMES	17	16	1		
2.	EDUCATIONAL PROGRAMME	31	31			
3.	ASSESSMENT OF STUDENTS	11	11			
4.	STUDENTS	30	30			
5	ACADEMIC STAFF / FACULTY	7	6	1		
6.	EDUCATIONAL RESOURCES	21	20	1		
7.	PROGRAMME EVALUATION	15	15			
8	GOVERNANCE AND ADMINISTRATION	15	15			
9	CONTINUOUS RENEWAL	4	4			
	<b>TOTAL</b>	<b>151</b>	<b>148</b>	<b>3</b>		

## List of documents studied by EEC members within the framework of accreditation

No.	Names of documents	Quantity	Date of approval (if applicable)
1.	Minutes of the meeting No. 1 of 16.10.2020 "School of Young Cardiologist" (SMC) of the Department of Cardiology and Interventional Arrhythmology, NJSC "SMU".	1	-
2.	Publications of residents: 1. Epidemiology and analysis of anthracycline cardiomyopathy in Semey Kozhaiberdieva A.K., Duzikenova Zh.K., Alpysbaeva A.M., Yelenov A. 2. Zhurek ischemialyk auruymen naukastar genindegi polymorphismder mutationalarynyң taldau kersetkisheri Sholpan Turganbaykyzy Zhukusheva, Gulmira Idayatkyzy Seksenalinova, Marzhan Meyirtaevna Ospanova	2	-
3.	Order No. 26 "On the creation of a working group for the implementation of the Healthy Universities project in the NJSC SMU"	1	05/14/2021
4.	Residency educational programme Specialty 7R09101 "Cardiology, including children's".	1	May 22, 2020 Minutes No. 10
5.	Student portfolio	3	-
6.	Individual Resident Plan	3	G-041.08.10.09-2015
7.	An individual teacher's work plan	2	G-041.08.03.42-2020
8.	Resolution of the Government of the Republic of Kazakhstan dated February 28, 2012 No. 266 Rules for the appointment, payment and amount of state scholarships to students in educational institutions.	1	28 February 2012
9.	Rules for the appointment, payment and amount of state scholarships to students in educational institutions, Resolution of the Government of the Republic of Kazakhstan dated February 7, 2008 No. 116.	1	February 7, 2008
10.	"Rights and obligations of a resident" Regulations on residency of NJSC "SMU", according to the Order of the Minister of Health of the Republic of Kazakhstan dated December 21, 2020 No. ҚР DSM-305/2020 (registered with the Ministry of Justice of the Republic of Kazakhstan on December 22, 2020 No. 21856).	1	December 21, 2020
11.	The rules for granting academic leaves on the basis of the Order of the Minister of Education and	1	April 15, 2020

	Science of the Republic of Kazakhstan dated April 15, 2020 No. 144.		
12.	The rules for the transfer and restoration of students by type of educational organization, approved. By order of the Minister of Education and Science of the Republic of Kazakhstan dated January 20, 2015 No. 19 (registered with the Ministry of Justice on February 19, 2015 No. 10297).	1	January 20, 2015
13.	Academic integrity policy of NJSC "SMU" dated 11.11.2019	1	11.11.2019
14.	Regulations on the clinical mentor of the resident of NJSC "SMU" dated 10/14/2020.	1	10/14/2020
15.	Code of ethics for students of NJSC "SMU" dated 01.09.2019	1	09/01/2019
16.	Internal regulations of NJSC "SMU" dated 04.05.2019	1	04.05.2019
17.	Typical rules for admission to training in educational organizations that implement educational programmes of postgraduate education ", order of the Minister of Education and Science of the Republic of Kazakhstan No. 600 dated October 31, 2018 with additions and amendments No. 418 dated September 28, 2020.	1	September 28, 2020
18.	"Regulations on the admission of students to higher and postgraduate education in the NJSC" Semey Medical University "for the current academic year.	1	July 29, 2020
19.	The rule for placing a state order for training medical personnel in residency, developed in accordance with paragraph 4 of Article 222 of the Code of the Republic of Kazakhstan dated July 7, 2020 "On people's health and the health care system".	1	July 7, 2020
20.	Educational residency programme in the specialty 7R09101 "Cardiology, including children's".	1	June 25, 2020
21.	Organization standard provision of cardiological medical care in the republic, order of the Ministry of Health (MoH) and Social Development of the Republic of Kazakhstan (RK) dated June 6, 2016 No. 479.	1	June 6, 2016
22.	State compulsory standard and standard professional curriculum for medical and pharmaceutical specialties, order of the Ministry of Health of the Republic of Kazakhstan No. 647 dated July 31, 2015 with additions and amendments dated February 21, 2020.	1	02/21/2020
23.	Qualification characteristics of a cardiologist, order No. 699 of November 12, 2009.	1	November 12, 2009
24.	Code of the Republic of Kazakhstan "On the health of the people and the health care system."	1	



