

To the Accreditation Council of the  
Eurasian Centre for Accreditation and  
Quality Assurance  
in Higher Education and Health Care  
June 12, 2023

**REPORT  
OF THE EXTERNAL EXPERT COMMISSION  
BASED ON THE RESULTS OF THE EVALUATION OF THE  
EDUCATIONAL PROGRAM  
"OPHTHALMOLOGY, ADULT, CHILDREN"  
KARAGANDA MEDICAL UNIVERSITY NJSC  
FOR COMPLIANCE WITH THE STANDARDS OF ACCREDITATION OF  
POSTGRADUATE EDUCATION PROGRAMS (RESIDENCY  
SPECIALTIES) IN THE MEDICAL EDUCATIONAL ORGANIZATIONS**

**External expert assessment period: May 24-26, 2023**

**Karaganda, 2023**

## TABLE OF CONTENTS

	List of designations and abbreviations	3
1	Composition of the external expert commission	4
2	General part of the final report	5
2.1	Presentation of the Karaganda Medical University NJSC and the educational program in the specialty of the residency "Ophthalmology, adult, children"	5
2.2	Information about previous accreditation	6
2.3	Conclusion based on the results of reviewing the report on the self-assessment of the educational program in the specialty of residency "Ophthalmology, adult, children" for compliance with the Standards of accreditation of postgraduate education programs (specialty residency) of medical educational organizations and conclusions	6
3	Description of the external expert assessment and conclusion	7
4	Analysis of compliance with accreditation standards based on the results of an external evaluation of the educational program in the specialty of the residency "Ophthalmology, adult, children"	9
5	Recommendations for improving the educational program of the residency "Ophthalmology, adult, children"	43
6	Recommendation to the Accreditation Council	34
	Appendix 1. Quality profile and criteria of external evaluation and educational program of residency in the specialty "Ophthalmology, adult, children"	35
	Appendix 2. List of documents studied as part of an external expert assessment	36
	Appendix 3. Organization visit program	37

## LIST OF DESIGNATIONS AND ABBREVIATIONS

AC	Academic Council
AK	Academic Committee
BD	Basic disciplines
SAK	State Attestation Commission
SCMC	State capacity of medical care
SCES	State Compulsory Educational Standard
DAA	Department of Academic Affairs
DLT	Distant learning technology
DSDIC	Department of Strategic Development and International Co-operation
ECAQA	Eurasian Centre for Accreditation and Quality Assurance in Higher Education and Health Care
FSA	Final state certification
IL	Interpretive letter
IEP	Individual Education Plan
OC	Optional Component
KSMU	Karaganda State Medical University
AK	Educational Programs Committee
CED	Catalogue of elective disciplines
MOH	Ministry of Health
MAP	Modular academic programs
MPAD	Modular programs of academic disciplines
MC	Medical Center
KMU NJSC	Karaganda Medical University Non-profit Joint-Stock Company
EP	Educational program
TRA	Tolerance rating assessment
RCMH	Regional Centre of Mental Health
PD	Profile disciplines
HETP	Higher-education teaching personnel
RK	Republic of Kazakhstan
WP	Work programs
WC	Working curriculum
IWR	Independent work of residents
IWRT	Independent work of residents with teachers
MC	Model curriculum
TM	teaching materials
KSMU BS	KSMU Board of Studies
FBS	Faculty Board of Studies
ATF	Advanced Training Faculty
CBL	Clinical based learning
PBL	Problem-Based Learning
TBL	Team- based learning

## 1. Composition of the external expert commission

In accordance with ECAQA Order No. 15 dated November 11, 2023, an External Expert Commission (hereinafter referred to as the EEC) was formed to conduct an external evaluation of the educational program "7R09119– Ophthalmology, adult, children" of the KMU NJSC in the following composition during the period of May 24-26, 2023:

No.	Status as a member of the EEC	Full name	Regalia, position, place of work/place of study, course, specialty
1	Chairman	Kudabaeva Khatimya Ilyasovna	Associate Professor, Candidate of Medical Sciences, Professor of the Department of Internal Diseases No. 1 of the West Kazakhstan Marat Ospanov State Medical University NJSC
2	Foreign expert	Ryzhkin Sergey Alexandrovich	Doctor of Medical Sciences, Head of the Department of Radiotherapy and Radiology named after Academician A.S. Pavlov, Head of the Department of Additional Professional Education of the Russian Medical Academy of Continuous Professional Development (Moscow), Scientific Secretary of the Department of Medical and Biological Sciences of the Academy of Sciences of the Republic of Tatarstan, accredited expert of the Federal Service for Supervision of Education and Science (Rosobrnadzor)
3	Kazakh academic expert	Doshakanova Asel Baidauletovna	Candidate of Medical Sciences, head of the department postgraduate education KRI of eye diseases LLP
4	Representative of employers	Daniyarova Bayan Lashinovna	Deputy Director for Strategic Development of the Regional Clinical Hospital of the Karaganda Region Health Department;
5	Resident Representative	Kurak Aidan	resident of the first year of study in the specialty "Endocrinology adult, children" in Astana Medical University NJSC

The observer from ECAQA is Umarova Makpal Aldibekovna, Head of the Accreditation and Monitoring Department.

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

The EEC report contains an assessment of the educational program "Ophthalmology, adult, children" for compliance with the Standards of accreditation of postgraduate education programs (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 program and recommendations for the ECAQA Accreditation Council.

## 2. General part of the final report

**Presentation of the Karaganda Medical University NJSC and the educational program in the specialty of the residency "Ophthalmology, adult, children"**

Name of the organization, legal form of ownership, BIN	Karaganda Medical University Non-profit Joint-Stock Company
Management body	Ministry of Health of the Republic of Kazakhstan
Full name of the first head	Turmukhambetova Anar Akylbekovna
Date of creation	1950
Location and contact details	Region: Karaganda region Postal code: 100008 City: Karaganda Street: Gogol , 40 Tel.: +7 7212 503930, Fax: +7 7212 518931 E-mail: <a href="mailto:info@qmu.kz">info@qmu.kz</a> website: <a href="http://www.qmu.kz">www.qmu.kz</a>
State license for educational activities in residency (date, number)	KZ32LAA00016018 dated May 6 , 2019
The year of the start of the accredited educational program (EP)	2012
Duration of training	3 years
The total number of graduates since the beginning of the implementation of the EP	47
The number of residents on the EP since the beginning of this year	30 residents
Full-time teachers/ Part-timers involved in the implementation of the EP, including % of the settlement	3 (66.7% of them have an academic degree)

The mission of the educational program in the specialty of the residency "Ophthalmology, adult, children" is based on the Mission of the KMU NJSC: "Training of highly qualified specialists who are able to meet the needs of society in providing medical care to ophthalmological patients, apply and develop advanced innovative technologies in medicine, science and practice, use the achievements of information and communication technologies, strengthen the health of the population. Specialists should be ready to adapt to the changing conditions of the healthcare system at the level of the state and the world community, continue training throughout their lives, and contribute to the development of society." The acquired knowledge, skills and abilities, based on the principle of a patient-centered approach, will allow graduates of the residency to work professionally, both independently and as part of multidisciplinary teams in the conditions of PHC, inpatient departments of multidisciplinary clinics.

The training program in the specialty "Ophthalmology, adult, children" includes the study of the main topical problems of ophthalmology, issues of differential diagnosis, diagnostics and modern methods of treatment according to clinical protocols. The educational program also includes clinical training of a resident under the guidance of a clinical mentor (teacher) and independent work of a resident. Based on the principle of the trinity of education, science and clinic, ophthalmologists will be able to plan, conduct a scientific study with further publication of the results, and transfer their experience to the medical community. All teachers in the specialty of the residency regularly improve their competencies, studying on advanced training cycles, have certificates of a specialist of the highest qualification category in the specialty Ophthalmology. The responsibilities and duties of employees are reflected in the job descriptions.

For the current period, the degree of the department is 66.7%.

Graduates who have completed training under this educational program are 100% employed and successfully work in medical and preventive organizations of Karaganda, Ulytau, Pavlodar regions and other regions of the republic.

## **2.2 Information about previous accreditation**

The primary accreditation of the residency program in the specialty "Ophthalmology, including children's" was carried out by the Independent Kazakhstan Agency for Quality Assurance in Education (IAAR), the validity period of accreditation is September 26, 2016 - September 24, 2021.

## **2.3 Conclusion based on the results of reviewing the report on the self-assessment of the educational program in the specialty of residency "Ophthalmology, adult, children" for compliance with the Standards of accreditation of postgraduate education programs (specialty residency) of medical educational organizations and conclusions**

The report on the self-assessment of the educational program in the specialty 7R09119 "Ophthalmology adult, children" (hereinafter referred to as the report) is presented on 117 pages of the main text, 8 appendices, electronic versions of documents located in the corresponding section at the link <https://drive.google.com/drive/folders/1pdCvvFIzipqSvbyN9b9UVEg5NIvvJdId?usp=sharing>.

The report is characterized by the completeness of responses to all 9 main accreditation standards and criteria, structuring taking into account the recommendations of the Guidelines for conducting a self-assessment of the educational program provided to the educational organization by the accreditation center - ECAQA, as well as internal unity of information. The report is accompanied by a cover letter signed by the head of Turmukhambetova Anar Akylbekovna, Chairman of the Board, Rector, MD, Professor, which confirms the reliability of quantitative information and information included in the self-assessment report.

The report contains a list of 12 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 program - Ernazarova Madina Ainullayevna, Chief Specialist of the Department of Strategic Development and Quality Management.

Self-assessment of the educational program 7R09119 "Ophthalmology adult, children", was carried out on the basis of the order of the head No. 274 of 16.09.2022 "On approval of the composition of the working group on self-assessment of educational programs".

The report was reviewed by Asel Baydauletovna Doshakanova, an accreditation expert, and the reviews noted strengths and areas for improvement, as well as recommendations for additions and changes.

Thus, in the process of feedback from the representative of the educational organization, the experts received answers to the questions that arose and appropriate changes and additions were made to the self-assessment report on the recommendations of the reviewers.

All standards contain the real practice of the Karaganda Medical University NJSC for training residents in the specialty of the program 7R09119 "Ophthalmology adult, children", reasoned data, examples of the implementation of the objectives of the educational program, national and international events, methodological support, confirming compliance with the requirements of accreditation standards. The description in the self-assessment report is quite complete and updated in terms of the number of residents, teachers, administration, information about selection and admission, training results, results of knowledge and skills assessment, the material and technical base of the university and clinical bases, contractual obligations with partners (universities, associations, bases), financial information, development plans and improvement.

The report is presented in the ECAQA in a completed form, with data adjustments according to the above recommendations, written in a competent language, the formulations for each standard are clear and understandable, and described in accordance with the criteria of standards, tables, figures and diagrams contain references in the text and have end-to-end numbering.

The quality of the self–assessment report served as the basis for the transition to the next stage of the accreditation procedure - external evaluation. Experts plan to validate the report data, compare the information from the report with the information that will be received during a visit to an educational organization, i.e., verification of quantitative and qualitative indicators.

### 3. Description of the external expert assessment

External expert work within the framework of the evaluation of the educational program was organized in accordance with the Guidelines for the External evaluation of educational organizations and educational programs of the ECAQA and according to the program approved on May 20, 2022 by the Director General of the ECAQA S.S. Sarsenbayeva and coordinated with the Rector of the KMU NJSC A.A. Turmukhambetova. Dates of the visit to the organization: May 24-26, 2023.

The external evaluation is aimed at validating the data of the self-assessment report and verifying 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 Program (hereinafter referred to as the program), which is located in the documentation of the accreditation center. The program is proof of the implementation of all planned activities within the framework of an external expert assessment.

In order to obtain objective information, the members of the EEC used the following methods and its results:

- interview with management and administrative personnel - 7 people;
- interviews with residents - 84 people, including foreign;
- exploring the website <https://www.qmu.edu.kz/ru>;
- interviewing 21 employees, 35 teachers;
- questioning of teachers and residents - 32 and 63, respectively; monitoring the training of residents: attending a practical lesson on the topic: "Acute attack of glaucoma", teacher - MD, Prof. Yu.A. Shusterov, the contingent of students - 6 residents of the first year of study, the venue is the ophthalmological department of the H.J.Makazhanov Multidisciplinary Hospital SME at the REU, 5/3 Mukanov str.;
- review of resources in the context of the implementation of accreditation standards: visited 2 practice/clinical engagement databases, including: H.J.Makazhanov Multidisciplinary Hospital SME at the REU, 5/3 Mukanov Str., and Eye Microsurgery Center LLP, 30A Nurken Abdirrov Avenue, where training is conducted according to the educational program with the participation of 2 full-time teachers;
- the study of educational and methodological documents in the amount of 37 units, both before the visit to the organization and during the visit to the departments (the list of documents studied attached in Appendix 2).

On the part of the staff of the accredited organization, the presence of all persons specified in the visit program and according to the lists of interview sites and interviews is ensured (Table 1).

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

No.	Position	Quantity
1	Members of the Board of KMU NJSC	2
2	Employees of departments responsible for the admission and employment of graduates	4
3	Heads of educational programs	4
4	Members of the Senate Academic Committee, Commission on Quality Assurance of the Residency School	9
5	Employees of the Department of Human Resources Management and the Center for Simulation and Educational Technologies	3
6	Employees of the Department of Economics and Finance	1

7	Residents	84
8	Higher-education teaching personnel	35
9	Graduates (residency)	39
10	Employers (residency)	23

On the last day of the visit to the organization, a meeting of EEC members was held on the results of an external assessment. The final discussion of the results of the external assessment of the educational program, the study of documents, the results of interviews, interviews, questionnaires was held. The members of the EEC started designing the final report. Generalizations of the results of external assessment are made. Experts have individually filled out the Quality profile and criteria for external evaluation of the educational program "Ophthalmology, adult, children" for compliance with the Standards of ECAQA accreditation. No comments were made by the members of the EEC. Recommendations on improving the educational program were discussed and the Chairman H.I. Kudabayeva held a final open vote on recommendations for the ECAQA Accreditation Council for the accreditation period of 5 years.

Comfortable conditions were created for the work of the EEC, access to all 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.

*When conducting a survey of residents, 88.9% rated the work of the External Expert Commission on Accreditation as positive, and 9.52% as satisfactory. The majority of respondents (85.7%) believe that it is necessary to carry out accreditation of educational organizations or educational programs.*

*According to 90.63% of teachers, the survey conducted by ECAQA is useful for developing recommendations for improving the key areas of activity of an accredited educational organization.*

At the end of the visit program, the Chairman of the EEC announced recommendations for the management and employees of the educational organization based on the results of an external evaluation within the framework of specialized accreditation.

#### **4. Analysis of compliance with accreditation standards based on the results of an external evaluation of the educational program in the specialty of the residency "Ophthalmology, adult, children"**

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

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

###### **1.1 Mission statement and final results**

The mission of the educational program of the residency 7R09119 "Ophthalmology, adult, children" is based on the mission of the Karaganda Medical University NJSC - "Development of society, improvement of health and quality of life of the population of Kazakhstan by achieving excellence in science, education and practice", which was approved on October 22, 2019, order 1 by the decision of the Senate of the KMU NJSC.

The mission of the EP "Ophthalmology, adults, children" is to train highly qualified specialists who are able to meet the needs of society in providing medical care to ophthalmological patients, apply and develop advanced innovative technologies in medicine, science and practice, use the achievements of information and communication technologies, strengthen the health of the population. Specialists should be ready to adapt to the changing conditions of the healthcare system at the level of the state and the world community, continue training throughout their lives, and contribute to the development of society."

The EP and its Mission were discussed at a meeting of the Academic Council of the Karaganda Medical University NJSC on June 26, 2019, 10 ave., in 2020 it was included in the register of the Unified Higher Education Management System (hereinafter referred to as ESUVO)



of MES RK ([http://esuvo.platonus.kz/#/register/education\\_program/application/24212](http://esuvo.platonus.kz/#/register/education_program/application/24212) ) and is accessible to the public and all stakeholders in the health sector.

The study of the documentation showed that the content of the mission of the EP residency "Ophthalmology, adult, children" is based on an analysis of the health needs of society and the system of medical care. The mission was formulated taking into account the existing need for qualified specialists in the field of ophthalmology in the region. The content of the mission and the educational program as a whole were presented to external stakeholders, discussed at an expanded meeting of the department.

The EP is aimed at training a professional ophthalmologist with versatile competencies. The key principle of the EP, which creates conditions for training residents directly at the "patient's bed", a comfortable clinical learning environment in medical organizations for mastering practical skills with the coordinating role of clinical mentors and teaching staff, allowing to instill independence skills; the possibility of training on repetitive ophthalmological skills creates conditions for independence; comorbidity and multimorbidity of patients in ophthalmological practice for the solution of medical and diagnostic issues necessitates team interaction, the organization of consultations, which creates a clinical environment for the development of teamwork skills.

The thematic plan of EP 7R09119 "Ophthalmology, adult, children" includes "CSHI and GVFCM system" and "Medical rehabilitation examination of ophthalmological patients" (included in the CED), which is a kind of response to requests from external stakeholders on problematic health issues.

The study of self-report data and interviews showed that HETP and resident ophthalmologists do not participate in the projects of the KMU either for program-targeted financing or for intra-university grants. The research work of teachers and residents consisted in the publication of initiative articles (in the form of individual clinical cases, epidemiological statistics) in collections and conference materials, domestic publications (Appendix 4).

During the implementation of the program activities, namely, according to the results of an interview with the first head of the organization, members of the advisory body (the Academic Committee of the Senate), 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 educational program, 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, informational letters to medical organizations. The strategic plan of the organization for the period of 5 years (2019-2023) was reviewed, including such areas as "Formation of the KMU as a research university", "Promotion of public health" and "Entry into the 100 best universities in the world", which confirms the implementation of the accreditation standard and demonstrates the goals, objectives and prospects of the organization. From interviews with doctoral students, it was found that before the start of classes, teachers inform about the mission, work plans of the educational organization, tell where to get the necessary information about the educational program, teachers, training bases.

In the process of visiting the departments of the educational organization, experts noted the strengths of the educational organization in relation to the accredited educational program, including: a sufficient number of mono- and multidisciplinary clinics (as clinical bases) with different forms of ownership and with different levels of ophthalmic care (outpatient- inpatient- inpatient).

## **1.2 Professionalism and professional autonomy**

A visit to the clinical base, an open class on the topic: "Acute attack of glaucoma", meetings with teachers and residents allowed us to see that, adhering to a patient-oriented approach in the clinical process, while maintaining the need for assistance, each resident has an individual level of such quality as professionalism. The formation of professionalism is formed on the basis of direct training at the workplace, where residents face clinical situations of various levels of complexity, adopting the experience of senior colleagues, and thereby building their own model of behavior.

In a clinical environment provided by disciplines with a dominant number of credits: "Ophthalmology in hospital, adult", "Ophthalmology in hospital, children"), resident ophthalmologists acquire skills in regulating professional relations and the activities of individual doctors; when providing medical and diagnostic care to patients in hospital and outpatient practice in complex clinical cases, during participation in consultations, during night shifts, at the appointments of an ophthalmologist, residents are in an environment where the freedom of professional decisions of the doctor is ensured; residents in clinical practice are guided by the main provisions of the clinical protocols of the Republic of Kazakhstan, international, European recommendations for certain ophthalmological diseases. In these conditions, the daily clinical practice of residents provides an opportunity to acquire skills in the responsibility and freedom of an ophthalmologist in making professional decisions.

The Regulations on Residency reflect the rights of residents, the implementation of which is facilitated by the department. Ensuring the freedom of expression of a resident on issues of their education, as a rule, is carried out by means of an anonymous questionnaire, which is carried out centrally. The feedback analysis on the satisfaction of learning is reported at the cathedral meeting.

During interviews with residents, it was established that the freedom of practical and research activities is realized through the work of residents, where work in a research project is carried out under the guidance of an employee of the department, subsequent analysis, interpretation of data, and then writing an article or thesis.

The academic policy of KMU NJSC (approved by the decision of the Senate on August 27, 2021, Protocol No. 1) defines the issues of academic mobility of residents/HETP. Students, HETP and employees of KMU NJSC have the right to participate in academic mobility programs in accordance with the current legislation and regulatory legal acts of the Republic of Kazakhstan. The selection of participants in academic mobility programs is carried out within the framework of an open competition procedure in accordance with the principles of equality of opportunities, available merits, abilities and social activities.

Academic mobility is carried out within the framework of memoranda, agreements or cooperation agreements concluded by the educational organization with Kazakh and foreign educational and scientific organizations, on the basis of personal invitations received from educational and scientific organizations, as well as on the own initiative of participants in academic mobility.

*When conducting a survey of 54 residents (on the resource <https://webanketa.com/>), out of 39 questions, a number were devoted to the quality of the educational process and the educational program. It is established that 80.9% of residents will recommend studying at the university to their acquaintances, friends, relatives. And 82.54% of respondents believe that the heads of the educational program and teachers are aware of the problems of students related to learning. To the question "Do you think this educational organization allows you to acquire the necessary knowledge and skills in your chosen specialty?", 96.8% of residents answered positively, 1.6% could not answer this question yet and 1.6% would like to believe it.*

*After interviewing 32 teachers (25 questions of the questionnaire) the following answers were obtained: 93.6% of teachers are satisfied with the organization of labor and workplace in this educational organization, and 6.3% partially agree with this statement. Experts have determined that the organization has a healthy microclimate, since the head is quite accessible to both residents and employees, responds promptly to requests. According to 93.75% of the university teachers have the opportunity to realize themselves as a professional in their specialty. For your information, a total of 32 people were interviewed (a total of 522 in the staff), while 6.25% have teaching experience up to 5 years, 12.5% up to 10 years, and over 10 years – 81%.*

### **1.3 Final learning outcomes**

The final results of the training of residents in the EP "Ophthalmology, adult, children" are aimed at mastering key and professional competencies. The results of the EP training are developed in accordance with the competencies of the KMU NJSC, which are aimed at the formation of a future specialist of both general professional and special competencies. The final

learning outcomes determined on the basis of the Dublin descriptors are aimed at mastering clinical skills in the specialty, communication with patients and colleagues, the formation of professionalism, regulatory and legal literacy, the skill of scientific research, personal and professional growth throughout life.

Educational achievements of residents are evaluated according to the Regulation "On the rating system for evaluating educational achievements of students". The current monitoring of the progress of residents is carried out in order to systematically check the knowledge of students in accordance with the curriculum of disciplines and implies the control of knowledge on the PT and the control of knowledge on the IWRT and IWR. The curriculum of the discipline defines various types of ongoing monitoring of students' progress: oral survey, written control, combined control, presentation of homework, discussions, trainings, round tables, case stages, tests, etc.

The Code of Business Ethics of KMU NJSC (Appendix 8 to the decision of the Board of Directors dated August 24).

Proper attitude to the patient and their relatives among residents is formed in the process of studying specialized disciplines, directly at the workplace - "at the patient's bedside" under the guidance of a clinical mentor. When teaching disciplines to residents, the principle of "patient-centered care" is instilled, aimed at the formation of such competencies as "Communication" and "Professionalism". Monitoring of the achievement of these competencies is carried out when assessing the activities of a resident by a doctor, nursing staff and patients or their legal representatives using the assessment sheet "360°-assessment of a resident", conducted upon completion of the discipline (Appendix 9).

One of the main documents that make it possible to orient each member of the team to achieve common goals, concentrate their initiative, entrepreneurship, streamline their business communication and ensure a favorable moral and psychological climate is the Code of Academic Integrity of the KMU NJSC (OE/1) (The academic policy of the KMU NJSC was approved by the decision of the Senate of the KMU NJSC dated August 27, 2021, Protocol No. 1). The Code defines the basic concepts and principles of academic integrity, establishes the obligations of all participants in the educational process to comply with academic integrity, defines the types of violations of academic integrity and the procedure for taking measures in case of their commission.

One of the main end results of the training is the ability of the resident ophthalmologist to demonstrate effective interaction with the patient, his environment, healthcare professionals as part of interdisciplinary and interprofessional teams in order to achieve the best results for the patient. Ensuring the formation of ethical relations of resident ophthalmologists with doctors in the clinic, teachers, patients and their relatives and compliance with the Code of Academic Integrity in the KMU NJSC (OE/1) is implemented at the University by familiarizing the future specialist with the ethical and humanistic foundations of medicine, disclosure of the content of the internationally recognized ethical standard of medical practice. Compliance with the Code of Honor of Students makes it possible to ensure the moral, intellectual and spiritual development of each resident; protect social rights and freedoms; create a favorable moral and psychological climate in the team. Resident ophthalmologists in various clinical situations with patients, communicating with the patient's relatives and colleagues at medical organizations master the skills of professional behavior with the coordinating role of clinical mentors, the head of the EP, HETP, trying on this competence for future professional activity in the field of cardiology.

The final results of the training presented in the EP specialty 7R09119 "Ophthalmology adult, children" are aimed at the formation of a qualified specialist in the field of ophthalmology, able to work as an ophthalmologist (adult, child) and provide specialized assistance at the consultative and diagnostic, inpatient replacement and inpatient levels.

The final results of training in the specialty of the residency 7R09119 "Ophthalmology adult, children" are formed on the basis of the SCES 2020. When formulating the final learning outcomes, the Key Competencies of the SCES (Appendix – 1.7 of the EP KC 1-6), Levels of proficiency in clinical competencies (PD, DT, E, P, etc.) and Levels of proficiency in practical

skills, manipulations, procedures (1-4) were taken as the basis. Each of these points is prescribed and applied to nosologies (ICD-10) studied in residency in priority specialist training.

For example, KC-1 - (DT - Is able to diagnose and treat patients without the help of a team (teamwork), DTT - Is able to diagnose and treat, working together with a team (team), E - Is able to identify an urgent situation and provide emergency care, P - Is able to apply preventive measures (primary, secondary, tertiary prevention).

Skills of professional behavior; proper behavior and attitude towards patients and their relatives, resident colleagues, teachers, other health care workers (KK-2) are formed on an ongoing basis by conducting conversations, participating in trainings conducted by the staff of the department, 360 degree questionnaires.

Experts have established a clear continuity between the final results of the previous training of residents (prerequisites) and training in residency, and subsequent programs of continuous professional development. The organization has developed 30 programs of additional education, including for the specialty "Ophthalmology for adult, children". Residents are informed about this.

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

All interested parties (university staff, residency graduates, health and education authorities, healthcare organizations, employers, professional medical associations, the public) participate in the formation of the mission and the final results of training in the KMU NJSC, taking into account their proposals.

The mission and final results of the EP training are formulated on the basis of the Standard of organization of ophthalmological care to the population of the Republic of Kazakhstan. Representatives of the main stakeholders are involved in the formulation of the mission of the EP by discussing the draft mission of the EP at the level of: students, at an expanded meeting of the department, the Academic Committee, which includes representatives of employers / representatives of practical healthcare, students and representatives of various clinical specialties.

The University actively cooperates with external stakeholders, master classes, training seminars, scientific and practical conferences, round tables are held. This allows the university to identify the existing advantages and problems of all types of university activities and thereby develop timely action plans to eliminate deficiencies and corrective measures.

*At the same time, when talking with residents and employers, experts did not receive a clear answer to the questions "Do you participate in the formulation of the mission and goals of the organization, the educational program?", "What is the personal contribution of residents to the improvement of the educational program?".*

***Conclusions of the EEC according to the criteria.*** Out of 17 standards (including 10 basic, 7 improvement standards) comply: completely -17.

***Standard 1: completed***

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

## **Standard 2: EDUCATIONAL PROGRAM**

### **Evidence of compliance:**

#### **2.1 Framework parameters of the postgraduate medical education program**

EP "Ophthalmology adult, children" was developed taking into account the modular technology of training and transition to ECTS credits (appendices 10-12) and in accordance with the order of the Minister of Health of the Republic of Kazakhstan dated May 25, 2021 No. KR DSM – 43 "On approval of the list of medical specialties of residency programs".

When drawing up the learning trajectory, the sequence of passing modules / disciplines is observed, taking into account pre- and post-requirements, the content of which is aimed at achieving knowledge, skills and abilities, providing a step-by-step approach to their study. The final results of the residents' training in the desired specialty are formed throughout the entire

educational program, within the framework of the studied disciplines of the module. Residents are informed about the necessary competencies, which are reflected in the educational and methodological complex of disciplines and are available for review on the University's website at the link: <https://qmu.edu.kz/ru/contents/view/314>.

EP provides an opportunity for residents to plan and implement an individual learning trajectory, taking into account the specifics of the chosen specialty. The modules of the educational program are logically structured, consistent, taking into account pre- and post-requirements, and their content is aimed at mastering the key competencies of a resident in this specialty.

For the implementation of the educational program in the specialty "Adult, children's ophthalmology" in the documents of the organization there are TM, where the goal is defined, the integration of practical and theoretical components, independent work is taken into account. Compliance with the SCES and standard requirements has been established.

The standard curriculum provides for 3-year residency training, with a total of 6300 hours (210 credits) and qualification - ophthalmologist, which also meets the requirements of the SCES of the Ministry of Health of the Republic of Kazakhstan No. 647 dated February 21, 2020. The compulsory disciplines/modules reflected in the EP, as well as the university component of choice, are included in the educational program.

Also, as a mandatory requirement, the program includes 4 credits of "Intermediate certification" and 2 credits of "Final certification". In total, the educational program in the specialty 7R09119 "Ophthalmology adult, children" consists of 210 credits.

The achievement of key competencies is achieved by using traditional and active teaching methods, simulation training, research-based learning (RBL), the project method. To acquire deeper knowledge and skills in the specialty, residents study elective disciplines of the component of their choice, directly participate in online conferences, schools, seminars in the specialty with a certificate.

The list of the most common diseases and conditions to be diagnosed and treated by an ophthalmologist, given in the Standard Curriculum for the specialty "Ophthalmology, adult, children" is fully covered by the list of nosologies and conditions that a resident must master according to the program 7R09119 "Ophthalmology, adult, children", developed on the basis of studying the requirements of regulatory documents and the needs of practical healthcare (it has been established that there are disciplines in the thematic plan of the EP, the absence of which was indicated in the self-report review). Attending a practical lesson on the topic "Acute attack of glaucoma", the volume of 30 hours, the experts received convincing data that the training is carried out according to plan, before the start of the lesson, residents answer tests, receive feedback from the teacher, have the opportunity to improve the skill of determining intraocular pressure by Maklakov tonometry, are aware of the main and additional research methods glaucoma, differential diagnosis with other diseases, as well as the principles of first aid to patients with an acute attack of glaucoma.

The organization ensures compliance with ethical aspects in the implementation of the educational program, as experts have studied the code of ethics (24.08.2019) and during the interview, residents replied that they were informed about the contents of this document.

The analysis of educational activities showed that the scientific basis and all the achievements of science in the advising disciplines were taken into account, additions were made to the bibliography of the TM and syllabuses, and teachers apply them in the classroom.

Despite the close relationship of the KMU NJSC with practical healthcare, the mentoring system is described only in the document approved on July 27, 2022 by Protocol No. 7 by the decision of the University Board – "Job description of a clinical mentor". There are 7 mentors (Appendix 7), whose tasks are clinical training of the student, ensuring continuity between medical education and practical training "at the bedside" in real practice.

The procedure for informing residents about their rights and obligations is reflected in the Academic Policy of the National Academy of Sciences, the Regulations on Residency (Protocol No. 18 of 08/23/2022).

This indicates compliance with Standard 2 in terms of adapting training to the needs of residents. Along with the principles of quality and academic integrity, which are described in the document - the Code of Academic Integrity of the KMU NJSC (Academic Policy of the KMU NJSC, approved by the decision of the Senate on August 27, 2021, Protocol No. 1), the anti-plagiarism system is presented in the organization (the Anti-Plagiarism system of the Polish company Plagiat.pl), used on the session.kgmu platform.kz with verification of the resident's written response to the originality in the system "Strikeplagiarism.com" at the final written exam after completing each discipline.

## **2.2 Scientific method**

The EP provides for mandatory mastery of the skills of research activities. The introduction of scientific foundations and methodology of medical research in the EP is carried out on the basis of the Law of the Republic of Kazakhstan "On Science", "Development program of the Karaganda Medical University Non-profit Joint Stock Company for 2019 - 2023", one of the directions of which is leadership in research.

Despite a significant list of research projects conducted at the KMU NJSC both within the framework of program-targeted and grant funding (Appendix 32), over the past 5 years, HETPf and residents studying in the EP "Ophthalmology adult, children" have not participated in any research.

The scientific approach in the organization of training is represented by the study of clinical protocols and principles of treatment of eye diseases from the standpoint of evidence-based medicine and in the course of training, resident ophthalmologists perform tasks to compile individual programs for diagnosis, treatment, rehabilitation in various ophthalmopathology.

When studying the disciplines of the EP within the framework of the IWR, it is planned to train residents in the skills of critical evaluation of literature, articles and scientific data by preparing presentations in accordance with the thematic plan of the discipline, essays on topical problems of diagnosis and treatment of ophthalmological diseases.

During the training, residents present the results of their research activities with presentations at scientific conferences, publications in collections of scientific congresses, and presentations. The results of the research activity of resident ophthalmologists are presented in 7 publications of domestic and foreign publications and were obtained when performing individual initiative works described as clinical cases and statistical data on certain types of ophthalmopathology in the Karaganda region (Appendix 4).

When preparing for IWR classes, when writing essays on topical problems of ophthalmology, residents use data from scientific literature, databases of evidence-based information of a scientific nature (Medline, Cochrane Library, PubMed, Google scholar, etc.), scientometric databases (Scopus, Elsevier).

During the conversation with the residents, the experts learned that they use scientific data in training and know the basics of evidence-based medicine. The teachers said that they teach residents the methods of critical evaluation of literature, articles and scientific data, the application of scientific developments in relation to a certain noology.

*During the survey of residents, it was found that the university has access to the participation of students in research work and 92.06% of people are fully satisfied with this, 6.35% are partially satisfied, 1.59% are not satisfied. Residents should be engaged in research and in response to the questionnaire, 74.6% wrote that they are already engaged in research, 11.11% plan to start, 1.59% are looking for a research topic, 1.59% are not engaged.*

## **2.3 Structure, content and duration of the residency program**

The EP is implemented in accordance with the SCES 2020, 2022. The duration of residency training in the specialty "Ophthalmology adult, children" is 3 years, which is 210 credits (at the rate of 1 credit is equal to 30 academic hours). The EP consists of modules/disciplines of the profile disciplines, as well as a component of choice. The content and scope of academic disciplines of the mandatory component is strictly regulated by the SCES RK and the standard curriculum of the specialty, which is reflected in the EP and WC.

According to the SCES RK, the structure of the EP "Ophthalmology adult, children" is formed from various types of classroom and extracurricular work. The volume of classroom work is 20% of the volume of each discipline, independent clinical work under the guidance of a clinical mentor is 70%, IWR is 10%.

The practical skills of residents are consolidated when performing clinical work within the framework of the IWRT, IWR at the clinical bases of the department, which ensures the integration of the acquired theoretical material of the program with the practical application of the acquired knowledge.

The development of clinical skills and professional attitude to work is facilitated by the participation of residents in the real activities of the doctor: patient supervision at the inpatient level, outpatient appointments, medical conferences, registration of medical documentation, work in medical information systems (IHIS, AIDS), work with regulatory legal acts, duty, preparation of reports, presentations, portfolio formation, providing a clear example of a professional attitude to work in a medical organization and interprofessional communications of specialists of various profiles and levels.

The content of the training program in the specialty of the residency "Ophthalmology adult, children" varies depending on the results of the evaluation of the program, the requirements of legislation, the needs of practical healthcare.

In addition, changes to the EP are made taking into account the needs of employers and practical healthcare, respectively, employers can make changes that affect the introduction of additional disciplines of the component of choice. The catalog of elective disciplines is formed according to the list of disciplines of the component of choice, considered annually at a meeting of the department and approved at a meeting of the Council of SRPD. The number of credits of the elective component (elective disciplines), their ratio to compulsory disciplines are regulated by the MCs of the SCES RK. The general structure, the list of modules/disciplines and the ratio of classroom and extracurricular work, the volume of final certification are reflected in the MC.

The content of work programs and the catalog of elective disciplines reflect the needs of the healthcare system, including in terms of medical insurance and issues of medical and social rehabilitation of ophthalmic patients. At the same time, issues of medical jurisprudence and forensic medicine, knowledge of complementary and alternative medicine, especially in the case of non-standard situations, complex clinical cases, should also be reflected in the EP.

For the successful implementation of the educational program in the specialty "Ophthalmology adult, children", the organization has resources to organize the assessment of practical skills of residents (directly at all clinical bases, where there are all instrumental and laboratory methods of examination of a patient with pathology of the organ of vision, as well as skills of ophthalmoscopy of the fundus on the basis of the center for simulation and educational technologies of the university.

*Teachers provide residents with methodological and didactic materials, additional literature to prepare for classes, in which 90.5% are fully satisfied, 9.52% are partially satisfied.*

*The organization has entered into 4 agreements with medical organizations providing specialized medical care. And to the questionnaire question "Is there enough time for practical training (patient supervision, etc.)", 90.5% of residents answered with full consent, 9.52% partially agree. At the same time, 92.1% of residents claim that after completing classes, the teacher conducts feedback (listens to your opinion, conducts a mini-questionnaire, works on mistakes).*

At the same time, to the question "Do residents' representatives participate in the development of educational programs?", the experts received the following answer: residents are members of the advisory bodies of the university, in particular, the Council of the School of Residency and Professional Development, which discusses, recommends and approves plans for the development of the residency program. *The surveyed residents are fully satisfied with the schedule of training sessions (92.1%).*

## **2.4 Organization of training and the relationship between postgraduate medical education and medical care**

The definition of the clinical base for the training of a resident is carried out in accordance with the studied discipline of the OP in accordance with the Order of the Ministry of Health of the Republic of Kazakhstan dated December 21, 2020 No. KR DSM-304/2020, "On approval of the regulations on the clinical base, the clinic of the organization of education in the field of healthcare, university hospital, residency base, integrated academic medical center and the requirements to them; SCES, the order of the Ministry of Health dated July 4, 2022, No. KR DSM- 63). The choice of a clinical base is based on the availability of the necessary clinical environment for mastering clinical/practical skills in accordance with the program.

Residents studying under the program 7R09119 – "Ophthalmology, adult children" are trained at clinical bases that provide training both in round-the-clock and day hospital conditions, and in outpatient polyclinic conditions (Appendix 2): Multidisciplinary Hospital named after Professor H.Zh. Makazhanov, Eye Microsurgery Center LLP, Glazolik LLP, TENSU LLP. On these clinical bases, residents have the opportunity to carry out practical activities in close cooperation with doctors of related specialties of therapeutic and surgical profile, participate in multidisciplinary consultations, carry out continuity in the management of patients at the hospital level, hospital – polyclinic.

The management of the educational process reflected in the self-assessment report (**standard 2**) and general approaches to management were confirmed when visiting the ophthalmology department of the Multidisciplinary Hospital named after Makazhanov, and conversations with his head/chief freelance ophthalmologist of the Karaganda region D.E. Toksanbayeva.

When attending a practical lesson on the topic "Acute attack of glaucoma", with a volume of 30 hours and a conversation with residents, the experts saw that the organization promotes the development of practical competencies of residents, including on simulation equipment. At the same time, residents deepen their theoretical knowledge, develop communication skills.

The training of residents in the specialty "Ophthalmology, adult, children" is aimed at meeting the needs of practical healthcare, since when analyzing the shortage of specialists in 2022, medical personnel were transferred to private medical structures. Therefore, this organization is specialized in the field of clinical ophthalmology, and provides a lot of opportunities and conditions for qualified training of specialists in this field. Thus, during a conversation with the management of the organization, experts received information about the continuing need for ophthalmologists, especially in children's profile and in rural areas.

*Of the 63\_ anqueted residents, 92.06% answered that teachers use active and interactive teaching methods quite often in the classroom, 6.35% believe that it happens rarely or sometimes.*

**Conclusions of the EEC according to the criteria.** Out of 30 standards (including 22 basic, 8 improvement standards) comply: fully - 28, partially - 2, do not comply - 0.

**Standard 2: completed**

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

- 1) To develop mechanisms for involving resident ophthalmologists in scientific projects of the department and the University
- 2) Introduce the issues of jurisprudence and forensic medicine into the disciplines of the educational program

## **Standard 3: ASSESSMENT OF RESIDENTS**

### **Evidence of compliance:**

#### **3.1 Assessment methods**

When analyzing the documentation, the EEC experts found that the methods of assessing residents at the university for all residency specialties there is a uniform policy for evaluating residents, including in the specialty "7R09119 – Ophthalmology adult, children", the evaluation



policy is reflected in the Regulations on residency, the Academic Policy of the university, the educational program and syllabuses of disciplines. Also, the assessment policy of residents is presented in electronic format on the Platonus platforms and on the official website of the university.

The university has implemented an integrated assessment system that takes into account both formative assessment (FA) and summative assessment (SA), covering theoretical knowledge and practical skills necessary for a future profession. The final assessment of the discipline (FAD) is calculated according to the following formula:  $FAD=FA*0.3+CO*0.7$

Current supervision is carried out by an academic or clinical mentor. The boundary control evaluates the results of training upon completion of the sections of the discipline.

To ensure the objectivity and transparency of the assessment process, checklists have been developed for conducting current, milestone and final control of the discipline (Mini-CEX, OSCE). Also at the department, a portfolio is formed by each resident individually, in which all the achievements of the resident during the residency training are recorded. Portfolio protection is carried out at the end of each academic year to assess the development by a resident of the competencies provided for by the EP, according to the form of the evaluation sheet established at the university ("Portfolio Evaluation Sheet").

Control and measuring instruments are compiled in accordance with the SCES, MC, EP, and syllabus. Forms of control, specification of final control tasks, detailed evaluation criteria, examples of tasks, evaluation sheets are set out in syllabuses. The TP of disciplines/modules is provided to residents in electronic form on the student portal.

All examination material must undergo a review procedure, after which it must be checked for the validity and reliability of the tests. The procedure of this check was demonstrated to the EEC experts by the staff of the registrar's office only in terms of anti-plagiarism.

The study of control and measuring tools (\_10\_tests, \_\_5\_tasks) showed that the organization has implemented a proper evaluation policy that allows a comprehensive assessment of the educational achievements of residents.

During the interview, residents told about the forms of assessment, for example, such as an interview, a mini-clinical exam, an assessment of colleagues and that they are satisfied with everything. They also receive regular feedback from teachers. The system of appeal of evaluation results is reflected in the document – Academic Policy (Protocol No. 1 dated August 27, 21) and there were no appeals during the period of work of the educational organization.

So, to verify the data of **standard 3**, the experts asked questions to the head of the Department of Education and responsible for the EP "Ophthalmology adult, children": the FI is updated annually by 30%.

### **3.2 The relationship between assessment and learning**

During the visit to the KMU NJSC, the members of the EEC confirmed that the methods of assessment of residents are comparable with the methods of teaching and cover the assessment of all the competencies of students, both during practical classes and during exams.

Differentiated assessment methods are used to evaluate various learning outcomes, so theoretical knowledge is mainly evaluated by testing, and practical skills are assessed using evaluation sheets for each section of practical work.

During a conversation with residents in the specialty "Ophthalmology, adult, children", it was found that the achievement of the training results stated in the EP is carried out due to a significant number of thematic patients and a large volume of surgical interventions performed at specialized clinical bases, as well as constant advice from a clinical mentor or teacher. Residents are provided with the necessary access to both patient management and participation in operations, manipulations, to all types of medical documentation, to participate in consultations and clinical reviews with colleagues of related specialties, to work in a multidisciplinary team.

When conducting interviews with 32 teachers regarding assessment methods, experts received convincing information that the assessment method is chosen based on the final learning outcomes defined in syllabuses. Residents also shared their opinion on the timeliness of providing

tests, consulting before exams, the clarity of the entire assessment procedure and its fairness. For example, residents said that a comprehensive assessment of a portfolio, an interview and a practical skill is quite objective.

During the visit to the organization, the management was asked the question: "Are external examiners involved in order to improve the fairness, quality and transparency of the assessment process?". And the following answer was received, ""yes, as a rule, these are the heads of clinical departments or large medical centers".

The experts examined the resources for the organization of the assessment of knowledge and practical skills, namely, CSET.

*The interviewed 26 representatives of employers also pointed out that the training of graduates corresponds to the modern development of medical practice and science, as there is a rapid development and introduction of not only innovative diagnostic methods, but also new pharmacological drugs. Employers said that they themselves participate in the assessment of residents, as they are included in the staff of the FSA examination commission. Employers believe that such skills of residency graduates as emergency care in critical conditions and knowledge of pediatric ophthalmology, they wanted to see the strongest.*

*The conclusions of the YEC according to the criteria correspond to 11 standards (including 7 basic, 4 improvement standards): fully -10, partially – 1, do not comply – 0.*

*Standard 3: completed*

*Recommendations for improvement identified during the external visit:*

- 1) Develop and implement a program to determine the validity and reliability of student assessment methods

## **Standard 4: RESIDENTS**

### **4.1 Admission policy and selection**

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

#### **4.1 Admission policy and selection**

The dean of the School of Residency and Professional Development, V.B. Tashkenbayeva, told about the policy on the admission of residents in the KMU NJSC the procedure for admission (Appendix 25) of citizens to the residency was developed in accordance with the Standard Rules for training in educational organizations implementing educational programs of higher and postgraduate education (order of the Ministry of Education of the Republic of Kazakhstan No. 600 dated October 31, 2018) and the Rules for placing a state order, admission to training and training of medical personnel in residency (Order of the Ministry of Health of the Republic of Kazakhstan No. KR DSM-270/2020 dated December 15, 2020).

In the KMU NJSC admission of students to the residency is carried out on the basis of the Academic Policy of the KMU NJSC, section "Admission rules, student progress, certification", which is reviewed annually. Persons who have mastered the educational programs of higher education and internships are accepted to the residency. Admission of persons entering the KMU NJSC for educational programs in residency is carried out according to their applications on a competitive basis based on the results of the entrance exam. For the period of the entrance examinations to the residency, examination and appeal commissions for specialties are created.

The HETP of the department conducts career guidance work among undergraduate students, interns, practical health professionals and the medical community about the benefits of admission to educational residency programs. Information about the EP in the specialty of residency is available to all interested parties on the university's website.

During the period 2016-2022, 63 residents were accepted for an educational program in the specialty "Ophthalmology adult, children", 61 people successfully completed training. At the same time, 43 people received "excellent" and 18 "good" according to the results of the final exam. Thus, the experts carried out data validation according to **Standard 4.**

Regarding the practice of academic counseling, personal support of residents and the development of not only professional skills, experts interviewed 7 people. Residents are included in such advisory bodies as the Council of the School of Residency and Professional Development of the KMU NJSC. In 2022, this unit included a resident ophthalmologist of 3 years of training - K.A. Muntayeva (Appendix 7).

#### 4.2 Number of residents

The number of resident ophthalmologists accepted corresponds to the possibilities of clinical and practical training of clinical mentors, the maximum permissible load on teaching staff, as well as the material and technical capabilities of the university and clinical bases (Appendix 26). The number of accepted residency trainees is constantly coordinated with the relevant stakeholders, taking into account the need for medical personnel in ophthalmology. The revision is carried out regularly taking into account the needs of the industry and the situation on the labor market. The procedure for determining the number of accepted residency students is regulated by the State Educational Order of the MOH RK, at the expense of medical organizations and LEA

Information on the admission of residents to the EP "Ophthalmology adult, children" for the period of 5 years

Year	2018	2019	2020	2021	2022
Number of residents	11	14	5	20	7

A total of 30 residents are currently studying in the residency program in the EP "Ophthalmology adult, children", of which 7 residents are studying in the first year, 17 residents are in the second year. In the 2022-2023 academic year, 6 residents are expected to graduate.

The selection committee is engaged in collecting and processing applications from potential students and employers, forming a list of students. The admissions Committee is working on the execution of contracts with legal entities and individuals on the educational services provided.

In order to attract applicants – internship graduates, bachelors, the faculty of the department conducts purposeful work with all interested parties. It consists in conducting career guidance work on the profile of the EP and providing information in various ways: posting information on the university's website, advertising articles in the media and social networks

During the conversation of the EEC experts with representatives of the AMP, it was confirmed that data on the demand for ophthalmologists in the personnel are provided to the university by the Regional Health Department and the Department of Science and Human Resources of the Ministry of Health of the Republic of Kazakhstan, published on the university's website. At the end of the collection of applications, the data is processed and presented at a meeting of the Academic Council, at which the admission policy for the current year is approved.

#### 4.3 Support and consultation of residents

Support and counseling in the residency in the EP "Ophthalmology adult, children" is carried out with the direct participation of a teacher or a clinical mentor of the department. Consulting on all issues of the organization of the educational process for the development of compulsory and elective disciplines is carried out by the HETP, the head of the EP, the head of the department,

SRPD. Information about residency training is posted on the official website of the University <http://www.qmu.kz/>, where the rector's virtual reception functions, which allows students to submit their proposals for optimizing management processes. Also, students can send their proposals to deans, vice-rectors and other heads of structural divisions via corporate e-mail. The heads of structural divisions conduct the admission of students in accordance with the admission schedule (information is available on the website).

KMU NJSC has a student service center that provides services to students on the principle of "one window", ensuring accessibility, accountability and transparency in the service sector, the inadmissibility of manifestations of bureaucracy, red tape, corruption. AIDS provides optimization of the work of all participants in the process and electronic document management.

To ensure effective information support for the management of educational activities of the university, the automated information system "platonus" is used, informing students about the issues of conducting the educational process, and also provides the possibility of electronic interaction with the information systems of authorized bodies (ESUVO).

The university has developed a "Regulation on sending students to the KMU NJSC, approved on May 4, 2021, version 2, which also regulates issues related to the financial support of their trips to internships, conferences, forums, cultural events held outside the university. For example, in 2019, 4 resident ophthalmologists were sent to study (within the framework of the concept of academic mobility) at the Kazakh Research Institute of Eye Diseases, Almaty (Appendix 33). Financing of travel expenses is carried out at the expense of the funds provided for by the legislation of the Republic of Kazakhstan and provided for by the University development plan.

The university has a youth work department and a compliance officer for social and personal support of students, which are structural units implementing the state youth policy, civil-patriotic, legal, moral, professional, aesthetic, ethno- and multicultural education of residents.

KMU NJSC has a student support service (psychologists on staff), which carries out psychological adaptation, improvement of communicative competence, prevention of conflicts in practical medical activities, including residents.

Currently, KMU NJSC has 27 clubs that reveal the creative potential of residents, as well as a sports club, which has 20 sections on various sports.

During the conversation with residents, it was revealed that the university provides financial support to residents in need of financial assistance, if necessary, the provision of a dormitory. When interviewing the graduates of the residency, 1 person indicated that during the residency, he lived in a university dormitory.

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

KMU NJSC welcomes the participation of residents in meetings of collegial bodies, where they are official members and express their opinions and suggestions for improvement, which are necessarily taken into account by members of advisory bodies and taken into account when forming the final decision of the meeting. In 2022, the Board of the School of Residency and Professional Development of the KMU NJSC included a resident ophthalmologist of 3rd year of study - K.A. Muntayeva.

Residents have a real opportunity to participate in the organization of the specialty curriculum during the direct discussion of the educational program, at the level of developing an individual curriculum and choosing elective disciplines. Representatives of residents are included in the members of the Council of the SRPD, the SQAC and the Senate.

#### **4.5 Working conditions**

The experts of the EEC confirmed that the students of the residency have the opportunity to work in their free time for 0.5 percent as a doctor in healthcare organizations, a laboratory assistant, a trainee teacher of the department. Residents who have the appropriate specialist certificate have the opportunity to earn extra money.

During the visit to the clinical bases by the experts of the EEC, it was found that resident ophthalmologists have unlimited access to all categories of patients, to all departments, and to all

types of medical equipment. The clinical bases have training rooms for conducting theoretical classes with residents, there is a separate room for changing clothes, for eating, etc.

The EEC experts made sure that for residents (according to the order) transferred from other Universities, reinstated, remaining for a second year of study, returning from academic leave, an individual plan is drawn up, based on the WC approved for the corresponding academic year, taking into account the difference in the curriculum or academic debt.

In order to maintain an optimal balance of time spent by a resident on training and medical care, in KMU NJSC, in accordance with the State Residency Program, a resident's academic day is 9 hours. The duty of residents at the clinical base is one of the types of independent work and is aimed at mastering the tasks of training. Duty planning is reflected in the syllabus of discipline, the number of shifts in an ophthalmological hospital is 4 shifts per month. The resident is released from duty at the clinical base, provided that he has work experience in departments of this type, in case of pregnancy the student is released from night duty.

According to the Resolution of the Government of the Republic of Kazakhstan No. 799 dated October 10, 2022. "Rules of appointment, payments and amounts of state scholarships", Regulations on the procedure for awarding scholarships established by the President of the Republic of Kazakhstan, residents studying on the basis of an educational grant are paid state scholarships in accordance with the procedure established by the Government of the Republic of Kazakhstan.

The distance interaction programs "Zoom", "Teams", "Webex" are actively introduced into the educational process. When analyzing the topics of classes, the teaching staff carried out a lot of work on the transformation of traditional forms of teaching into an electronic learning format: a virtual Padlet board, work in online rooms, Google survey and other innovative technologies.

There were no resident ophthalmologists **who** needed training according to an individual program at the KMU NJSC.

***Conclusions of the EEC according to the criteria.*** Out of 30 standards (including 18 basic, 12 improvement standards) comply: fully - 30.

***Standard 4: completed***

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

## **Standard 5: TEACHERS**

### **Evidence of compliance:**

#### **5.1 Recruitment and selection policy**

According to the Regulations on the personnel policy of the University, the Rules of admission and employment in the KMU NJSC, approved on January 11, 2021, the policy and procedures for the recruitment and admission of teachers, supervisors and clinical mentors (taking into account the experience and qualifications of a specialist) are defined, as well as criteria for scientific, educational, pedagogical and clinical achievements are established.

During the conversation of the EEC experts with representatives of the management staff, it was established that the Rules of competitive replacement of vacant positions (dated 05.04.22) were developed and approved in the KMU NJSC, the composition of the competition commission for the replacement and re-election of vacant positions of the HETP was approved. All information about the upcoming competition to fill vacancies is posted on the university's website and in the city newspaper.". The university takes into account the balance between teaching, scientific research of clinical departments. The developed job descriptions and regulations establish the responsibilities and responsibilities of HETP and clinical mentors. When forming the staff of departments, the ratio of teachers and residents is taken into account, sufficient for effective teaching and learning.

According to the Regulations on Residency, training sessions in the residency are conducted by persons with a doctorate or PhD degree, an academic PhD degree, as well as doctors with a certificate and at least 5 years of experience who correspond to the profile of the discipline taught.

The staff of the Department of Surgical Diseases involved in the implementation of the EP "Ophthalmology adult, children" includes 3 teachers: 1 - Doctor of Medical Sciences, 1 - Candidate of Medical Sciences, 1 - without a degree. KMU NJSC guarantees that the teachers of the residency are practicing specialists in ophthalmology.

All 7 clinical mentors are certified ophthalmologists and carry out clinical activities in large medical organizations in Karaganda.

The results of the research work of the HETP are presented in the form of oral/poster reports at scientific and practical conferences in the Republic of Kazakhstan and abroad (Appendix 29) and publications in international peer-reviewed journals, in domestic scientific publications recommended by the Committee for Quality Assurance in the Field of Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan (Appendix 30).

At the same time, the EEC experts found that there is a shortage of full-time teaching staff involved in the EP "Ophthalmology adult, children", taking into account the absence of part-time teachers (3 teachers per 30 residents, i.e. 1:10 (by order of the Ministry of Education and Science of the Republic of Kazakhstan No. 284, the ratio of HETP to residents should be 1:3).

In order to verify the data of Standard 5, external experts have identified the problem of attracting employees of clinical bases to teaching, despite significant experience in practical healthcare. At the same time, it has been established that the KMU NJSC conducts professional development in pedagogical competencies 1 time in 5 years, both among full-time teaching staff and among clinical mentors, for which funds are invested in the university budget.

*During the survey of teachers, it was found that the majority (93.75%) are completely satisfied with the organization of work and workplace in this educational organization, but 6.25% are partially satisfied. Teachers have the opportunity to engage in scientific work and publish the results of research – 90.63% fully agree, 9.32% partially. Satisfied with the work of the HR service (HR) - 87.5% fully agree, 9.38% partially agree. Satisfied with the salary – 53.13% fully agree, 12.5% partially agree.*

## **5.2 Teacher commitment and development**

Monitoring of the performance of the duties of the teaching staff is carried out by the head of the department, the staff of the School of Residency and Professional Development, the HETP by monitoring the implementation of the individual work plan of teachers, the work plan of the department and the rating assessment of the department and staff, based on the Regulations on the rating of the department and the assessment of the activities of the HETP.

In accordance with the strategic priorities of the university and state programs, the KPIs of the KMU NJSC employees are reviewed and updated annually. Professional development of full-time teachers is carried out 1 time in 5 years, professional development – through training at seminars or master classes, participation in national and international conferences, symposiums, as well as teaching HETP pedagogical technologies (Appendix 29,30). These events are funded by the university.

The expert verified the certificates of teachers on such topics as "Clinical features and diagnosis of dry eye syndrome", "The latest laser technologies in ophthalmology, including children's", etc.

*There is an opportunity for career growth and development of teacher competencies in the organization - 90.63% of the surveyed teachers answered, and 9.32 % of the surveyed teachers partially agree with this. 87.5% were trained in professional development programs during this year, 9.38% over 5 years ago and 3.13% answered "I don't remember when it was."*

*The organization implements programs of social support for teachers - 78.13% of respondents answered that "yes, there are such programs", 3.13% of respondents answered "I have already used it", 3.13% of respondents answered that there are no such programs, and 15.63% of respondents do not know about it.*

**Conclusions of the EEC according to the criteria.** Out of 7 standards (including 5 basic, 2 improvement standards) comply: fully - 6, partially - 1, do not comply – 0.

**Standard 5: completed**

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

- 1) To bring into line the ratio of teachers to the number of resident ophthalmologists

## **Standard 6: EDUCATIONAL RESOURCES**

### **Evidence of compliance:**

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

KMU NJSC has sufficient material and technical base to create all conditions for the training of qualified specialists with the achievement of final results and competencies in the EP "Ophthalmology adult, children". The total area of the main academic buildings of the university is 29160.6 sq.m., the area of dormitories is 30162.9 sq.m. On the territory of the University Clinic, which occupies an area of 2122 sq.m., there are also study rooms in addition to main and auxiliary units.

Lecture halls and auditoriums are equipped with multimedia support, with Internet access and with modern computers.

The library plays a leading role in providing residents with information resources. The total area of the library is 1526 sq. m., the book storage area is 941.6 sq. m. The libraries include: the department of acquisition and bibliography and the department of maintenance of scientific and educational literature. The library's computer park consists of 113 computers, 88 of them are thin clients (TCs), 21 personal computers (PCs) are located in the library's divisions, 4 PCs and 63 TCs are in the electronic resources hall and 25 TCs are in the interactive hall, the entire computer park is connected to the Internet. The Wi-Fi zone is distributed throughout the library. There are 2 scanners installed for users in the electronic resources hall. The interactive hall is equipped with a short-focus projector. For students, there is a Researcher's Hall equipped with 15 computers connected to the Internet, which allows them to have access to all information resources of the university. Service of users in electronic halls is carried out from Monday to Friday from 9 am to 8 pm, on Saturday from 9 am to 6 pm.

The self-report indicates 100% availability of basic and additional literature for the implementation of the educational process in the EP "Ophthalmology adult, children", however, during the visit, professional literature in the state language is represented by the only copy of the textbook translated from Russian.

#### **6.2 Clinical bases**

KMU NJSC for the implementation of the EP "Ophthalmology adult, children" selected and approved 4 medical institutions of urban and regional significance for the training of residents as clinical bases. The joint work of these medical institutions with the medical university is regulated by the concluded agreements on joint activities within the framework of the educational process. Experts have studied scans of cooperation agreements in Appendix 2 to the self-report. Residents have access to all diagnostic rooms and laboratories, with a sufficient number of patients of various severity categories, to provide qualified assistance and develop practical skills using the possibilities of outpatient, inpatient care and night shifts.

The development of practical skills is carried out under the guidance of a clinical mentor, using checklists for their assessment.

Clinical management of the residents' work is carried out by clinical mentors, who are heads of departments or experienced ophthalmologists with more than 5 years of experience in the specialty.

A significant part of the residents of the EP "7R09119 – Ophthalmology adult, children" are employed at clinical bases as resident ophthalmologists at 0.5 rate.

Residents have the opportunity to master skills widely under the guidance of clinical mentors when working in departments during the daytime and during night shifts (4 mandatory

night shifts per month). Residents record and reflect all their achievements in a portfolio, certified by clinical mentors and curators.

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, and the opportunity to participate in research at the university.

### **6.3 Information technology**

The training of resident ophthalmologists takes place in full-time, elements of the distance learning method are used during webinars, some lectures and when participating in conferences.

Unlimited access to the Internet is provided on the territory of the KMU NJSC, its clinical bases, for free use of the necessary web resources and electronic media. Through the KMU NJSC library, residents have permanent access to electronic databases (Cochrane.org, Elsevier, full-text Pubmed, Wiley Library, UpToDate) when searching for up-to-date data, especially when performing scientific work.

When studying, working at clinical bases, residents have access to information systems of medical organizations: IHIS, Medelement (through the password of the head of the department or clinical mentor), filling out medical documentation, appointment sheets, etc., under the supervision of their clinical mentor.

HETP of the department communicate with resident ophthalmologists of all years of study through created work chats in Whatsapp, to solve both work and personal (social) issues.

### **6.4 Clinical teams**

Preparation of residents for teamwork skills and effective interaction with other healthcare professionals includes direct work of residents with employees of paraclinical units, as well as with specialists of other (therapeutic, surgical and pediatric) profile.

Such interdisciplinary interaction (under the guidance of a clinical mentor) was most vividly noted by the experts of the EEC in the Multidisciplinary hospital named after Professor Makazhanov, which, of course, provides residents with sufficient experience working in a team, including with specialists in other areas of healthcare. The interaction of the resident ophthalmologist with other team members is evaluated "360 degrees".

*Students have free access to patients at clinical bases and all conditions for improving their practical skills – 96.8% of teachers fully agree with this, 3.12% of teachers partially agree.*

### **6.5 Medical research and achievements**

The study of clinical cases of patients, medical records, literature data, work in the library enable resident ophthalmologists to analyze, describe and publish their data in national and international scientific publications. The result of 3 years of residency training in the specialty "Ophthalmology adult, children" is the publication of a scientific paper, which is necessarily taken into account when entering the next stage of postgraduate education - doctoral studies. Interviews with the teachers of this EP showed that the obstacles to the activation of research activities are: a significant contingent of resident ophthalmologists, lack of time to maintain medical records, clinical work.

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

The examination of the quality of the implemented educational program is systematic and is carried out in stages. The SCES 2020 is the basis for the EP "Ophthalmology adult, children". The person responsible for the residency in this area draws up an educational program, which, after discussion at the cathedral meeting, is transferred to the Council of the SRPD on for evaluation and examination. After coordination with the Vice-Rector of the National Academy of Sciences for Academic Work, the program is entered into the Register of the MES RK, where, after an independent external examination, the program is used in the educational process.

The KMU NJSC conducts a systematic discussion of the EP at meetings of collegial bodies, updating the EP in connection with the needs of the labor market and taking into account the wishes of stakeholders, systematically receiving and analyzing feedback on the quality of the educational process from all interested parties, planning improvement measures.



Monitoring of the implementation of EP residency programs in the KMU NJSC is carried out on the basis of the principle of collective solidarity of all interested parties: the profile department, SRPD, the Academic Council, residents, representatives of practical healthcare, potential employers and the MOH RK.

Feedback from residents is carried out by determining the degree of satisfaction with the content of the educational program and the organization of the educational process, which are conducted in the form of questionnaires, focus groups, constant monitoring of requests to the dean's blog, vice-rectors for academic work, scientific and clinical work, Chairman of the Board. In addition, SRPD and the career development center collects feedback from graduates of the residency and their employers.

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

The mechanism for implementing the academic mobility program for teaching staff and residents has been developed and approved in the "Regulations on Academic Mobility" (AP KMU NJSC19).

In 2019, 4 resident ophthalmologists (Akhmetov Asylbek Zhalgasovich; Toyymbekova Nazerke Maratovna; Tabriz Kuralai Nurlankyzy; Isatayeva Aigerim Kairatkyzy) of the third year of study were sent to the KazNII of Eye Diseases in the period from February 11, 2019 to February 22, 2019 as part of the implementation of the academic mobility program (Appendix 33).

The academic (internal and external) mobility program in the distance format is also gaining activity among students at the KMU NJSC.

**Conclusions of the EEC according to the criteria.** Out of 21 standards (including 10 basic, 11 improvement standards) comply: fully - 20, partially - 1, do not comply - 0

**Standard 6: completed**

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

- 1) To ensure the purchase, access, translation of professional ophthalmology literature in the state language

## **Standard 7: EVALUATION OF THE EDUCATIONAL PROGRAM**

### **Evidence of compliance:**

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

When analyzing the educational program in the discipline "Ophthalmology adult, children", the experts of the EEC found that in the KMU NJSC monitoring and evaluation of the implementation of the educational program of the residency is carried out on the basis of collective solidarity of all interested parties and university staff. At the stage of planning the educational process in the specialty of residency, the responsibility for checking working curricula for compliance with the requirements of state educational standards, scheduling is assigned to the departments. Responsibility for the selection of teachers who meet the qualification requirements, the profile of the specialty is assigned to the Personnel Management Department. Quality control of the TM and monitoring of educational and methodological documentation of the departments of the residency is carried out by the EPC AE. The simulation educational center is a structural unit responsible for providing and maintaining simulators necessary for practicing the practical skills of residents and at the stage of final certification: according to the EP "Ophthalmology adult, children" - these are simulators for ophthalmoscopy of the fundus.

The Registrar's office registers and stores examination sheets, which are a documentary confirmation of the recognition of educational achievements of residents. A feature of the analysis of the competence formation of the residents of the KMU NJSC is a comprehensive assessment of the resident by the teacher through formative, summative control of the discipline, by the mentor - through portfolio management, control over the development of practical skills and research competencies, by the practical health care - through participation in an independent examination of residents. The competencies of the students of the residency of the EP "Ophthalmology adult, children" of the KMU NJSC are evaluated by current, boundary, intermediate control; control over

the development of practical skills and research competencies; through the analysis of reports, individual development plans of residents (Score 360 °).

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

In order to ensure transparency of the evaluation process and results for management and stakeholders, to identify satisfaction with the quality of training, to identify weaknesses and strengths, a process of collecting feedback from students is carried out in the KMU NJSC.

The results of the survey of residents are discussed at a meeting of the department, the Quality Control Commission, a meeting of the SRPD, followed by a decision on the organization and content of the EP in order to improve it. An annual survey of employers is conducted on their satisfaction with the degree of training of graduates. Based on their feedback and recommendations, the key and final competencies of the graduates of the EP residency are formed. The use of feedback from interested parties has a systematic nature when making changes to the educational program: the list and content of disciplines from the point of view of the competence approach, improvement of teaching methods, the system of final control and assessment of students' knowledge.

In 2021, positive feedback was received from employers on the educational program "Ophthalmology, adult, children".

## **7.3 Results of residents and graduates**

An important role in the evaluation of the educational program is played by the results of the final certification of residents conducted at the testing stage by the National Center for Independent Examination, as well as the results of certification exams conducted by the Committee for Control of Medical and Pharmaceutical Activities of the Ministry of Health and Social Development of the Republic of Kazakhstan. The final state certification of residents in the 2021-2022 academic year was carried out in accordance with the standard of the State residency, according to the following stages: determination of the level of theoretical training in disciplines in the form of testing; certification of practical skills with a standardized patient. The results of these examinations are discussed annually at a meeting of the Academic Council.

The School of Residency and Postgraduate Development, together with the Head of the EP, conducts annual monitoring of the employment of graduates of the residency. The percentage of employment of graduates in the specialty "Ophthalmology adult, children" was 100%. The Department of Strategic Development and Management conducts an annual survey of employers on their satisfaction with the quality of graduate training. SRPD and EP managers receive feedback from students, representatives of practical healthcare in the form of survey results, letters of thanks.

## **7.4 Stakeholder engagement**

Due representation of stakeholders in the assessment of processes and final results of resident training programs is observed in the KMU NJSC. For example, the EPC of postgraduate and additional education includes heads of the department, professors, associate professors, teachers of departments providing the educational process in the relevant specialty, leading specialists in practical health care, employers, representatives of the contingent of students.

Representatives of practical healthcare, employers are mandatory members of the examination commission of the state certification of graduates. Representatives of practical healthcare with extensive work experience are clinical mentors of resident ophthalmologists, which also makes it possible for other interested parties to participate in the implementation of EP 7R09119 "Ophthalmology, adult, children".

The access of interested parties to the results of the evaluation of educational programs is provided by the publication on the website of the National Academy of Sciences of the relevant analytical references, feedback analysis.

## **7.5 Procedure for approving educational programs**

At the stage of EP development, an EP assessment is simultaneously carried out, as it is discussed at meetings of departments, Schools of Medicine, is examined by the Quality Assurance Commission of SRPD and approved at a Board meeting. The University has formed a pool of experts who carry out an examination of educational programs, including at the planning stage,

taking into account the compliance of the SCES and MC, the availability of competencies in the OP and the final learning outcomes that correspond to the mission of the EP, the needs of practical healthcare and international requirements, the content content in accordance with the concept of training; the availability of appropriate resources for implementation of EP (HETP, clinical bases, information resources, classroom fund, etc.)

EP "Ophthalmology adult, children" has passed an external examination in the ESUVO and, after a positive decision of experts, is placed in the register of the Unified Higher Education Management System ([http://esuvo.platonus.kz/#/register/education\\_program](http://esuvo.platonus.kz/#/register/education_program)).

**Conclusions of the EEC according to the criteria.** Out of 15 standards (including 10 basic, 5 improvement standards) comply: fully - 15.

**Standard 7: completed**

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

## **Standard 8: MANAGEMENT AND ADMINISTRATION**

### **Evidence of compliance:**

#### **8.1 Management**

KMU NJSC implements educational programs in accordance with regulatory legal acts approved by the authorized bodies of the Republic of Kazakhstan, as well as internal rules of the organization of the educational process at the university.

The management of the educational program is carried out on the basis of the Regulations on the management of the educational program in the KMU NJSC (September 9, 2020 ave.14, Board meetings). Coordination of the implementation, control and monitoring of the implementation of programs is carried out by the School of Residency and Professional Development under the supervision of the Vice-Rector for Scientific and Clinical Work (the Organizational Structure of October 3, 2022, or. 40 of the Board of Directors).

In accordance with Article 39 of LRK "On education" and the Order of the Minister of Education and Science of the Republic of Kazakhstan dated January 28, 2015 No. 39 "On approval of the types of education documents, forms of state-issued education documents and rules for their registration and issuance, basic requirements for the content of own-sample education documents and rules for their registration and issuance, as well as a certificate form issued to persons who have not completed their education in educational institutions" upon completion of postgraduate training programs and receiving a positive assessment of the final certification, Diploma of the state standard with the award of the qualification of a specialist doctor are issued to students. For the period 2019-2022, 31 people received a certificate of completion of residency in the EP "Ophthalmology adult, children" in the KMU NJSC.

Ensuring the quality of the educational process in the residency is determined by the fulfillment of mandatory requirements for the level of training (SCES, educational programs) and the creation of a system for monitoring the effectiveness of the HETP and the implementation of the resident's IEP. Monitoring of the quality of the educational process is carried out by the School Quality Assurance Commission, heads of educational programs.

#### **8.2 Academic leadership**

The main educational, methodological, scientific and clinical load on the postgraduate training of resident students, i.e. the direct implementation of the EP is carried out by specialized departments. The main goal of the departments is the management of the educational process to ensure the quality of services provided on the basis of a competence-oriented approach, as well as the training of students.

The School of Residency and Professional Development directly manages the educational programs of the residency and coordinates the activities of residents: development and implementation of educational programs, introduction of new educational programs in the specialties of the residency, development and formation of working curricula taking into account the requirements of the SCES, residency educational programs and a catalog of elective

disciplines, recommendations for the recruitment of residents and the selection of teachers for departments that carry out training of residents. The school monitors residents, supports relations with the practical healthcare sector and residency graduates, and interacts with other structural units of the KMU NJSC involved in the implementation and support of residency programs (DAA, SSC, DEF, etc.).

The organization of the educational process is regulated by the working curriculum of the educational program, the schedule of training sessions and the IEP of the resident. Evaluation of the organization of training at the departments is carried out through systematic control of the departments by the School.

*To the questionnaire question "Do university leaders listen to your opinion regarding questions on the educational process, research, clinical work", 84.38% of teachers answered "systematically", 12.5% answered "sometimes", 3.13% of respondents did not answer.*

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

The financing of educational programs depends on the formation of an annual state order. Every year, the Government of the Republic of Kazakhstan approves the state educational order for the training of specialists with higher and postgraduate education, according to which the financing of bachelor's, master's, doctoral and residency programs is determined by types of educational institutions. In accordance with the Order of the Acting Minister of Health of the Republic of Kazakhstan dated January 19, 2021 No. KR DSM-6 "On approval of the methodology for the formation of tuition fees for education programs in the field of healthcare", a financial and economic calculation of the cost of training students is carried out within the framework of the state educational order, the rational use of funds allocated from the republican budget for the training of specialists with medical and pharmaceutical education.

Structural divisions form resource needs, including for the implementation of the educational process, as well as resources for the development of the university and university clinics, based on these needs, a University Development Plan is formed, which is considered by the Management Board and approved by the Board of Directors for 5 years. The Development Plan is adjusted annually depending on changes in the needs of departments and the university.

KMU NJSC manages the budget of the educational residency program "7R09119 – Ophthalmology adult, children" on the principles of transparency, accountability, objectivity and legality. The university fulfills all obligations to pay employees and scholarships for residents, to create the necessary conditions at the bases, to purchase the necessary equipment, consumables, and other resources. This supports the necessary assistance to practical healthcare from the academic environment.

### **8.4 Administration and management**

KMU NJSC has an appropriate AMP and HETP, academic leaders are persons in the management of structural units responsible for decision-making on academic issues.

The organizational management of the EP is carried out by DAA, HRMD, deans of schools and heads of departments. The functions of organizational management include the regulation of the educational process (academic calendar, the number of academic groups, the amount of academic work, the academic load of the TS), the calculation of hours, the formation of a schedule, the development and coordination of the WC, the management of the classroom fund, the contingent of students, the accounting of educational achievements of students, the organization of the admission company.

Operational management of the EP is carried out by: deans, heads of the EP, coordinators of modules of disciplines, heads of departments, teachers. The functions of operational management are the development, implementation, implementation of the EP, the formation of curricula, logistical, educational, methodological and informational support of the educational process, career guidance and work with students. The main structural unit that manages and implements, as well as coordinates the work of other departments of schools participating in the implementation of the EP, is the school.

In order to improve the adaptation of the recruitment and training policy to the changing needs of the university, the management model of the university is regularly improved, and the representation of stakeholders in management structures is also expanded.

The activities of the advisory bodies of the KMU NJSC – the School Council, the Senate, which include academic leaders and representatives of a wide range of stakeholders (employers, representatives of practical healthcare, residents, etc.) make it possible to improve and effectively implement educational programs, ensure effective management, administration.

### **8.5 Requirements and regulations**

The implementation of educational residency programs is carried out in accordance with license no. KZ32LAA00016018 dated May 6, 2019 in the direction 7R091 "Healthcare (medicine)".

The educational program is managed in accordance with the LRK "On Education", the Order of the Minister of Education and Science of the Republic of Kazakhstan No. 595 "On approval of Standard rules for the activities of educational organizations of appropriate types", the Order of the Ministry of Education of the Republic of Kazakhstan No. 600 "On approval of Standard rules for admission to educational organizations implementing educational programs of higher and postgraduate education", by the Order of the Minister of Health of the Republic of Kazakhstan No. KR DSM–249/2020 "On approval of the rules for assessing the knowledge and skills of students, assessing the professional readiness of graduates of educational programs in the field of healthcare and specialists in the field of healthcare", SCES, and is also established by the internal regulatory document of the Academic Policy of the National Academy of Sciences, the Regulations on the Management of the educational Program, the Regulations on Residency.

***Conclusions of the EEC according to the criteria. Out of 15 standards comply (including 8 basic, 7 improvement standards): fully – 15.***

***Standard 8: completed***

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

### **Standard 9: CONTINUOUS IMPROVEMENT**

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

In KMU NJSC, in order to continuously improve the educational process in accordance with the needs of practical healthcare, regular monitoring and updating of the training process of residents is carried out. In 2019, when developing a new YP, the final results and competencies of residents were revised and analyzed, taking into account current trends in the diagnosis and treatment of eye diseases, as well as taking into account aspects of domestic healthcare in general (including issues of GVFMC, CSHI, SMA in the EP).

Test questions and written assignments are updated by 30% annually, taking into account new concepts of diagnosis and treatment, as well as educational literature is updated. The results of monitoring are reported at the meeting of the department, the Council of the SRPD during the monthly discussion of the results of the certification of residents.

The annual updating of syllabuses is based on the achievements of science and practice, which is ensured by the participation of HETP at Congresses, conferences, webinars, as well as monitoring by teachers of new international clinical guidelines for diagnosis and treatment.

To implement the EP "Ophthalmology, adult, children", the list of clinical bases with different forms of ownership and different levels of specialized ophthalmological care is expanding, which corresponds to modern trends in the development of the domestic healthcare system.

***Conclusions of the EEC according to the criteria. Out of 1 standard (including 1 basic) comply: fully - 1.***

***Standard 9: completed***

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

### **Conclusion:**

When conducting an external evaluation of the educational program, it was found that out of 147 standards (including basic standards – 91 and improvement standards – 56), \_\_\_ accreditation standards, including \_91\_ basic standards and \_51\_ improvement standards, demonstrate full compliance. \_5\_ improvement standards are partially fulfilled. Non-compliance with the standards has not been established. The implementation of the improvement standards indicates the compliance of the educational organization with the international consensus in such areas as the mission of the educational program, residents, evaluation of the educational program, management and administration, continuous improvement.

### **5. Recommendations for improving the educational program "Ophthalmology adult, children":**

- 1) To develop mechanisms for involving resident ophthalmologists in scientific projects of the department and the university (Standard 2.2.)
- 2) Introduce issues of jurisprudence and forensic medicine into the disciplines (Standard 2.3.)
- 3) Develop and implement a program to determine the validity and reliability of student assessment methods (Standard 3.1)
- 4) Adjust the ratio of teachers to the number of resident ophthalmologists (Standard 5.1)
- 5) To ensure the purchase, access, translation of professional ophthalmology literature in the state language (Standard 6.1)
- 6)

### **6. Recommendation to the ECAQA Accreditation Council**

The members of the EEC unanimously recommends to Accreditation Council to accredit the educational program **7R09119 "Ophthalmology adult, children"** of **KMU NJSC**, corresponding to Accreditation standards of the education programs of the residency in medical organizations, for a period of 5 years.

#### **Chairman of External Expert Committee**

KUDABAEVA KHATIMYA ILYASOVNA

#### **Foreign expert**

RYZHKIN SERGEY ALEXANDROVICH

#### **Foreign expert**

AFRIKYAN SHUHANIK GEVORKOVNA

#### **Academic expert of Kazakhstan**

URAZOVA SALTANAT NURGOZHAEVNA

#### **Academic expert of Kazakhstan**

SHABDARBAYEVA DARIYA MURATOVNA

#### **Academic expert of Kazakhstan**

RAMAZANOVA RAIGUL MUKHANBETOVNA

#### **Academic expert of Kazakhstan**

ZHUMALINA AKMARAL KANASHEVNA

#### **Academic expert of Kazakhstan**

TULEUTAYEVA RAIKHAN ESENZHANOVNA

#### **Academic expert of Kazakhstan**

BAIGOZHINA ZAURE ALPANOVNA

#### **Academic expert of Kazakhstan**

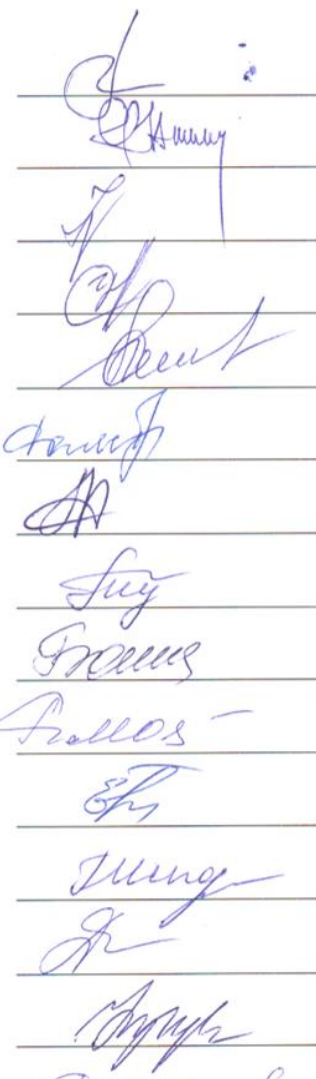
RAMAZANOVA SHOLPAN HAMZAYEVNA

#### **Academic expert of Kazakhstan**

ERALIEVA BIBIKHAN ABDALIYEVNA

#### **Academic expert of Kazakhstan**

ISPOSUNOVA GULNARA AKHMETKAZYEVNA



**Academic expert of Kazakhstan**  
DOSHAKANOVA ASEL BAIDAULETOVNA  
**Academic expert of Kazakhstan**  
DOSANOVA ASEM KALELOVNA  
**Expert – Representative of practical healthcare**  
DANIYAROVA BAYAN LASHINOVNA  
**Expert – Representative of doctoral students**  
ORAZBAY AKNUR DAURENKYZY  
**Expert – Representative of residents**  
KURAK AIDANA ZHANAIDAROVNA

**Appendix 1.**

**Quality profile and criteria for external evaluation of the educational program  
/generalization)**

Standard	Assessment criteria	Number of standards	BS*/IS	Assessment		
				Correspond in full	Correspond partly	Doesn't correspond
1.	<b>MISSION AND END RESULTS</b>	17	10/7	10/7	0	0
2.	<b>EDUCATIONAL PROGRAM</b>	30	22/8	22/6	0/2	0
3.	<b>ASSESSMENT OF RESIDENTS</b>	11	7/4	7/3	0/1	0
4.	<b>RESIDENTS</b>	30	18/12	18/12	0	0
5.	<b>ACADEMIC STAFF/TEACHERS</b>	7	5/2	5/1	0/1	0
6.	<b>EDUCATIONAL RESOURCES</b>	21	10/11	10/10	0/1	0
7.	<b>EVALUATION OF THE EDUCATIONAL PROGRAM</b>	15	10/5	10/5	0	0
8.	<b>MANAGEMENT AND ADMINISTRATION</b>	15	8/7	8/7	0	0
9.	<b>CONTINUOUS IMPROVEMENT</b>	1	1/0	1/0	0	0
		147	91/56	91/51	0/5	0

## Appendix 2

### The list of documents studied by the members of the EEC as part of the external assessment of the residency educational program

No.	Names of documents	Quantity
1.	Regulations on the residency of KMU NJSC	1
2.	Academic policy of KMU NJSC	1
3.	Internal regulations of KMU NJSC	1
4.	Rules of the rating system for assessing students' academic performance	1
5.	Code of Business Ethics of KMU NJSC	1
6.	Regulations on the rating of departments and evaluation of the activities of HETP	1
7.	Agreement on joint activities (with clinical bases)	4
8.	Resident publications	7
9.	Organizational structure of the KMU NJSC	1
10	Operational plan of KMU NJSC for 2022	1
11	Excerpts from the minutes of the meetings of the SRPD Council	5
12	Work program	1
13	Employer reviews	2
14	Silabuses on EP	17
15	Certificates of specialist clinical mentors	7
16	Portfolio assessment sheets, checklists for practical skills, night shifts	1
17	Technical specification of educational equipment	1
18	Catalog of elective disciplines of EP	1
19	Questionnaire "Teacher through the eyes of a student"	1
20	Working curricula	2
21	Rules for admission to training in the residency program of the KMU NJSC	1
22	Personnel policy of KMU NJSC	1
23	Regulation on the employee performance management system of the KMU NJSC	1



24	Labor Code	1
25	Code of Academic Integrity	1
26	Rules for the admission of employees for employment in the KMU NJSC	1
27	Rules of competitive replacement of vacant positions of the KMU NJSC	1
28	Regulations on the competition for the award of the title "The best in the profession of KMU NJSC"	1
29	Documented human resource management procedure	1
30	Job descriptions of employees of KMU NJSC	10